

**From:** [Finer, Neil](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Das, Abhik](#); [Zaterka-Baxter, Kristin](#)  
**Subject:** RE: HOT TOPICS presentation 2007  
**Date:** Monday, December 31, 2007 6:47:17 PM  
**Attachments:** [HOT TOPICS presentation rev NF Dec 31 2007.doc](#)

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Hi Rose  
Here are my changes  
Let me know what you think  
All the best for the New Year to all  
Be well  
Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Monday, December 31, 2007 11:41 AM  
To: Finer, Neil  
Cc: Das, Abhik; Zaterka-Baxter, Kristin  
Subject: HOT TOPICS presentation 2007

Neil

In followup to the presentation at Hot Topics, NICHD requests that we have some type of document available for the IRB's at our sites as the information presented at Hot Topics is relevant to the SUPPORT Study. We may be asked by sites, families and staff the impact of the information presented on the study. I have developed a very brief description and would like input. Most sites have to report relevant findings to their IRBs during the course of clinical trials, so this document would ultimately need to go to the site IRBs. Please comment freely - the subcommittee should then provide input into the document prior to final approval. I don't think that anyone on the subcommittee was present at the presentation. We can also add to the document that the information on NEC and PDA has not yet been peer reviewed or published except in the hot topics slide book.

Thanks  
Rose  
<<HOT TOPICS presentation 2007.doc>>

Re: Hot Topics in Neonatology Presentation, December 4, 2007 "Oxygen control: not easy but worth the effort!" by Dr. Jay Goldsmith

A recent presentation at Hot Topics in Neonatology addressed the issue of oxygen saturation in the neonatal ICU. The presentation reviewed recent experience in the Pediatrix nurseries with target saturations set at 83-93% for infants  $\leq 28$  weeks. The presenter concludes that lower oxygen saturation targets can reduce oxygen induced injury (ROP and BPD) without increasing neurodevelopmental disability. There is concern that lower oxygen saturation targets will increase the incidence of PDA and NEC (based on 1-2 years discharge diagnosis information from an administrative billing database).

Are these findings relevant to the saturation targets being studied in the SUPPORT Trial?

1. Children in the SUPPORT Trial are randomly assigned to saturation targets of 85-89% or 91-95%. We have not purposely targeted SpO<sub>2</sub>s of as low as 83% but are monitoring the actual SpO<sub>2</sub>s achieved for as long as the infants requires supplemental oxygen.
2. The study is being monitored for adherence to oxygen saturation levels with oximetry downloads. This is the only current study of its design that retains the actual SpO<sub>2</sub> values – this information was not available from the Pediatrix data base. That study was based on targeted, SpO<sub>2</sub> values, not actual values and these can be very different as we know from our current SpO<sub>2</sub> data
3. The study is being monitored by the DSMC for safety and efficacy outcomes. In addition, the Data Coordinating Center is following adverse events cumulatively for the trial.

~~It is our conclusion that concerns regarding~~ We believe that the SUPPORT trial will provide highly relevant information regarding the actual SpO<sub>2</sub> values and the occurrence and severity of a number of neonatal conditions, including increases in NEC and PDA, are being currently monitored for the study.



**From:** Shankaran, Seetha  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; ae5357@wayne.edu; Sood, Beena; s\_shankaran@wayne.edu  
**Cc:** mgantz@rti.org; du2744@wayne.edu  
**Subject:** RE: SUPPORT  
**Date:** Saturday, December 22, 2007 12:46:41 AM

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Thanks Becky  
Seetha

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From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Fri 12/21/2007 10:08 AM  
To: ae5357@wayne.edu; Sood, Beena; s\_shankaran@wayne.edu  
Cc: mgantz@rti.org; du2744@wayne.edu  
Subject: Re: SUPPORT

Great  
Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Rebecca Bara <ae5357@wayne.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Sood, Beena <bsood@med.wayne.edu>; Seetha Shankaran <s\_shankaran@wayne.edu>  
Cc: Gantz, Marie <mgantz@rti.org>; du2744@wayne.edu <du2744@wayne.edu>  
Sent: Fri Dec 21 10:01:57 2007  
Subject: Re: SUPPORT

Hi Rose,

These are the same children we've been tracking and are still in contact with...

Patient (b) (6)'s most recent exam was on 10-12-07, the data has been keyed but the child has not yet met final eye outcome. Clinically the child is due for next eye exam in January. 55 weeks PMA was (b) (6)

Patient (b) (6) most recent exam was on 9-24-07, the data has been keyed, Stage 0 zone unable to determine, ou. Clinically the child is due for next eye exam in January. 55 weeks PMA was (b) (6)

Thanks, Merry Christmas!  
Becky

----- Original message -----

>Date: Fri, 21 Dec 2007 08:42:24 -0500  
>From: "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
>Subject: SUPPORT  
>To: "Sood, Beena" <bsood@med.wayne.edu>, "Seetha Shankaran" <s\_shankaran@wayne.edu>, "Rebecca Bara" <ae5357@wayne.edu>

>Cc: "Gantz, Marie" <mgantz@rti.org>

>

> Hi,

>

> We are missing a few primary outcome data items for  
> SUPPORT as listed below. Thanks for the commitment  
> to this trial.

>

>

>

> Rose

>

> CENTER NETWORK ROP\_message

> 50 weeks PMA has been reached and  
> final ROP exam status has not been  
> reported on the SUPP10 for either

> 5 (b) (6) eye.

> 50 weeks PMA has been reached and  
> final ROP exam status has not been  
> reported on the SUPP10 for either

> 5 (b) (6) eye.

>

>

>

>

>

> Rosemary D. Higgins, M.D.

>

> Program Scientist for the Neonatal Research Network

>

> Pregnancy and Perinatology Branch

>

> Center for Developmental Biology and Perinatal  
> Medicine

>

> NICHD, NIH

>

> 6100 Executive Blvd., Room 4B03B

>

> MSC 7510

>

> Bethesda, MD 20892

>

> (For overnight delivery, use Rockville, MD 20852)

>

> 301-435-7909

>

> 301-496-3790 (FAX)

>

> higginsr@mail.nih.gov

>

>

This message and any files transmitted with it may contain information that is privileged, confidential and exempt from disclosure. It is intended for use only by the person to whom it is addressed. If you have received this in error, please (1) do not forward or use this information in any way, (2) delete or destroy this message and its attachments and (3) please contact me immediately.

**From:** [Monica Collins](mailto:Monica.Collins)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins.Rosemary@NIH.NICHD)  
**Subject:** RE: SUPPORT  
**Date:** Friday, December 21, 2007 3:37:29 PM

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Well, go back to the first answer--may be doing a home visit. I am so used to getting the ROP question that I didn't read it all the way through.

Monica

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Fri 12/21/2007 1:51 PM  
**To:** Monica Collins  
**Subject:** FW: SUPPORT

See below – this child's FU, not ROP info was missing.

Rose

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**From:** Gantz, Marie [<mailto:mgantz@rti.org>]  
**Sent:** Friday, December 21, 2007 2:50 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT

If the question is about infant (b) (6) we do have final ROP status on that infant. The infant was not on the list for missing ROP but for missing FU forms. Does that clear things up? To answer Monica's question, we do count two consecutive exams in zone 3 as a positive outcome.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
[mgantz@rti.org](mailto:mgantz@rti.org)  
828-254-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Friday, December 21, 2007 2:18 PM  
**To:** Gantz, Marie  
**Subject:** FW: SUPPORT

Can you tell me why this one shows up on the ROP incomplete list if the baby has had 2 exams in zone 3?

---

**From:** Monica Collins [<mailto:MCollins@peds.uab.edu>]  
**Sent:** Friday, December 21, 2007 2:16 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT

Yes, both exams are in the computer database. Maybe there are other sites like ours and another round of completed data should be looked at.

Monica

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Fri 12/21/2007 1:04 PM  
**To:** Monica Collins  
**Cc:** Gantz, Marie  
**Subject:** RE: SUPPORT

I think you are correct, did both zone 3 exams get sent to the data center?  
Thanks  
Rose

---

**From:** Monica Collins [mailto:MCollins@peds.uab.edu]  
**Sent:** Friday, December 21, 2007 1:57 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT

Rose,  
Vivien and I found that we have 2 zone 3 exams on this child before discharge. I think we will be changing his outcome to favorable. (Didn't we change the criteria from fully vascularized to 2 zone 3 exams after these first few babies?)  
Moncia

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Fri 12/21/2007 12:39 PM  
**To:** Monica Collins; wacarlo@uab.edu; Vivien Phillips; Shirley Cosby; Myriam Peralta, M.D.  
**Cc:** mgantz@rti.org  
**Subject:** Re: SUPPORT

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Monica Collins <MCollins@peds.uab.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu <wacarlo@uab.edu>; Vivien Phillips <VPhillips@peds.uab.edu>; Shirley Cosby <SCosby@peds.uab.edu>; Myriam Peralta, M.D. <MPeralta@peds.uab.edu>  
Cc: Gantz, Marie <mgantz@rti.org>  
Sent: Fri Dec 21 13:18:30 2007  
Subject: RE: SUPPORT

Still working on this--may be making a home visit.  
Monica

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Fri 12/21/2007 7:53 AM  
To: wacarlo@uab.edu; Monica Collins; Vivien Phillips; Shirley Cosby; Myriam Peralta, M.D.  
Cc: Gantz, Marie  
Subject: SUPPORT

Hi,

We are missing a few primary outcome data items for SUPPORT as listed below. Thanks for the commitment to this trial. This is truly amazing given the number of children you have recruited into the trial - OUTSTANDING!!!!

Rose

CENTER

NETWORK

FU\_message

16

(b) (6)

FU window has closed but NF05 and NF09a are not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Wilson, Leslie Dawn  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Poindexter, Brenda B  
**Cc:** Gantz, Marie  
**Subject:** RE: SUPPORT  
**Date:** Friday, December 21, 2007 9:56:06 AM

---

See below—thank you

*Leslie Dawn Wilson, RN, BSN*  
**Research Manager**  
**Neonatal Network Coordinator**  
**Riley Hospital RR 208**  
**ldw@iupui.edu (e-mail)**  
**699 West Dr**  
**Indianapolis, IN 46202**  
**317.274.8255 (phone)**  
**317.274.8963 (fax)**  
**317.312.(b) (6) (pager)**

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, December 21, 2007 8:47 AM  
**To:** Poindexter, Brenda B; Wilson, Leslie Dawn  
**Cc:** Gantz, Marie  
**Subject:** SUPPORT

Hi,  
We are missing a few primary outcome data items for SUPPORT as listed below. Thanks for the commitment to this trial.

Rose

CENTER NETWORK ROP\_message

12	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. Entered in computer thru 10/13-only one zone 3 so far.
12	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.—Entered in computer thru 11/21-only one zone 3 so far.

E-mail has gone out requesting info on any outstanding visits.

Thank you-leslie

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

From: [Monica Konstantino](#)  
To: [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
Subject: Re: SUPPORT  
Date: Friday, December 21, 2007 9:39:59 AM

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Higgins, Rosemary (NIH/NICHD) [E] wrote:

Hi,  
We are missing a few primary outcome data items for SUPPORT as listed below. Thanks for the commitment to this trial.

Rose  
CENTER NETWORK ROP\_message  
13 (b) (6) No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

Hi Rose, there were two eye exams entered in November that the baby had at the transfer hospital with the exam results showing no ROP, I spoke to Mom at the end of November and she said that she needed to make a followup appointment for December so she asked that we call her back in January.  
Monica

**From:** Wally Carlo, M.D.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; mcollins@peds.uab.edu; Vivien Phillips; Shirley Cosby; Myriam Peralta, M.D.  
**Cc:** Gantz, Marie  
**Subject:** RE: SUPPORT  
**Date:** Friday, December 21, 2007 9:20:03 AM

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Rose.

We will work promptly on it.

Wally

-----Original Message-----

From: "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
To: "wacarlo@uab.edu" <wacarlo@uab.edu>; "mcollins@peds.uab.edu" <mcollins@peds.uab.edu>; "Vivien Phillips" <VPhillips@peds.uab.edu>; "Shirley Cosby" <SCosby@peds.uab.edu>; "Myriam Peralta, M.D." <MPeralta@peds.uab.edu>  
Cc: "Gantz, Marie" <mgantz@rti.org>  
Sent: 12/21/2007 7:53 AM  
Subject: SUPPORT

Hi,

We are missing a few primary outcome data items for SUPPORT as listed below. Thanks for the commitment to this trial. This is truly amazing given the number of children you have recruited into the trial - OUTSTANDING!!!!

Rose

CENTER

NETWORK

FU\_message

16

(b) (6)

FU window has closed but NF05 and NF09a are not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch



**Center for Developmental Biology and Perinatal Medicine**

**NICHD, NIH**

**6100 Executive Blvd., Room 4B03B**

**MSC 7510**

**Bethesda, MD 20892**

**(For overnight delivery, use Rockville, MD 20852)**

**301-435-7909**

**301-496-3790 (FAX)**

**[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)**

**From:** [Gantz, Marie](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Cc:** [Das, Abhik](#)  
**Subject:** Missing outcomes for SUPPORT  
**Date:** Thursday, December 20, 2007 6:07:18 PM  
**Attachments:** [Infants with missing outcomes 12-20-07.xls](#)

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Rose,

Attached is the list of SUPPORT infants with missing outcomes this month.

I hope you enjoy the holidays and have a very happy new year!

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
[mgantz@rti.org](mailto:mgantz@rti.org)  
828-254-6255

CENTER	NETWORK	ROP_message
3	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
5	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
5	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
9	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
9	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
11	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
11	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
12	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
12	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.
13	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	SUPP10 records have been entered for prior to study status, but SUPP09 Question C1 indicates that no exam for ROP was performed.
19	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
19	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
19	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
19	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
19	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
19	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
19	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
19	(b) (6)	Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
19	(b) (6)	Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
19	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
19	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
22	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.
22	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
24	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
24	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

**From:** Walsh, Michele  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Altitude adjustment for oxygen  
**Date:** Wednesday, December 19, 2007 1:38:54 PM

---

Can't we just write the memo- which I will do again.  
And discuss by email? Conference calls seem to have become very, very frequent. Or could we discuss at the SUPPORT committee meeting Jan 10-11?  
Don't mean to be a pain- but the work is far eclipsing the 10% effort that we are funded for. Hard to do all when we are on service in the NICU.  
Regards, Michele

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tue 12/18/2007 2:42 PM  
**To:** mcw3@cwru.edu  
**Cc:** Webb, Robin E.  
**Subject:** Altitude adjustment for oxygen

Michele  
The technical memo had never gotten issued for the correction for altitude for oxygen dependency. Are you available:  
January 4 between 1-3 PM ET?  
let us know  
Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

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**From:** [Ronald N. Goldberg](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Re: FW: BITSEA AND SUPPORT FU  
**Date:** Thursday, December 13, 2007 8:49:06 AM

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< than 27wks only  
ron

Ronald N. Goldberg, M.D.  
Shaad-McBryde Professor of Pediatrics  
Chief, Neonatal-Perinatal Medicine  
Box 3179  
Duke University Medical Center  
Durham, NC 27710  
Phone: 919-681-6037  
Fax: 919-681-6065  
email: [goldb008@mc.duke.edu](mailto:goldb008@mc.duke.edu)

"Higgins, Rosemary (NIH/NICHD) [E]"  
<[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)>

12/12/2007 01:16 PM

To undisclosed-recipients;;  
cc  
Subject FW: BITSEA AND SUPPORT FU

I am missing several votes on the BITSEA. Please send a response ASAP.  
Thanks  
Rose

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**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Wednesday, November 14, 2007 10:13 AM  
**To:** ([rohls@unm.edu](mailto:rohls@unm.edu)); Abbot Laptook ([alaptook@WIHRI.org](mailto:alaptook@WIHRI.org)); 'Abhik Das'; Ambal ([ambal@uab.edu](mailto:ambal@uab.edu)); Av Fanaroff ([aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu)); Brad Yoder ([Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu)); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [[kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org)]); Michael Cotten ([cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu)); 'Michelle Walsh'; 'MIckey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald GOLdberg'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; 'Newman, Jamie'; Zaterka-Baxter, Kristin  
**Subject:** BITSEA AND SUPPORT FU

Hi,  
I need a vote as to whether or not folks would like to administer the BITSEA on all FU infants (including trial infants) as opposed to generic FU infants (< 27 weeks) to avoid confusion with SUPPORT FU infants (and other trial infants in the future).

**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_\_\_\_**

**BITSEA ON < 27 week INFANTS ONLY \_\_\_xxxxxx\_\_\_\_\_**

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Krisa Van Meurs](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Re: FW: BITSEA AND SUPPORT FU  
**Date:** Wednesday, December 12, 2007 6:58:13 PM

---

Sorry, I'm late with this vote.

< 27 weeks.

Krisa

I am missing several votes on the BITSEA. Please send a response ASAP.

Thanks

Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Wednesday, November 14, 2007 10:13 AM  
**To:** (rohls@unm.edu); Abbot Laptook (alaptook@WIHRI.org); 'Abhik Das'; Ambal (ambal@uab.edu); Av Fanaroff (aaf2@po.cwru.edu); Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); Michael Cotten (cotte010@mc.duke.edu); 'Michelle Walsh'; 'MIckey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald GOLDBERG'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; 'Newman, Jamie'; Zaterka-Baxter, Kristin  
**Subject:** BITSEA AND SUPPORT FU

Hi,

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**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_\_\_\_**

## **BITSEA ON < 27 week INFANTS ONLY \_\_\_\_\_**

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

--

Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine and Lucile Salter Packard Children's Hospital  
750 Welch Road, Suite 315 - Palo Alto, CA 94304  
tel (650) 723-5711 | fax (650) 725-8351



**From:** Kurt Schibler  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: BITSEA AND SUPPORT FU  
**Date:** Wednesday, December 12, 2007 2:45:11 PM

---

Hi Rose,  
We would prefer doing BITSEA on ALL Infants.  
Thanks,  
Kurt

Kurt Schibler, MD  
Associate Professor of Pediatrics  
Division of Neonatology  
Cincinnati Children's Hospital Medical Center  
3333 Burnet Avenue  
Cincinnati, Ohio 45229  
USA  
TEL: 513-872-3007  
PAGER: 513-736-(b)  
E-mail: [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org)

On 12/12/07 1:16 PM, "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> wrote:

I am missing several votes on the BITSEA. Please send a response ASAP.  
Thanks  
Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Wednesday, November 14, 2007 10:13 AM  
**To:** (rohls@unm.edu); Abbot Laptook (alaptook@WIHRI.org); 'Abhik Das'; Ambal (ambal@uab.edu); Av Fanaroff (aaf2@po.cwru.edu); Brad Yoder (Bradleyyoder@hsc.utah.edu); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); Michael Cotten (cotte010@mc.duke.edu); 'Michelle Walsh'; 'Mickey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald GOLDBERG'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; 'Newman, Jamie'; Zaterka-Baxter, Kristin  
**Subject:** BITSEA AND SUPPORT FU

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**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_\_\_\_**

**BITSEA ON < 27 week INFANTS ONLY \_\_\_\_\_**

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine  
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301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Das, Abhik  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: BITSEA AND SUPPORT FU  
**Date:** Wednesday, December 12, 2007 1:18:24 PM

---

Not sure I have responded to this, but I favor the latter option (generic FU only).

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, December 12, 2007 1:17 PM  
**Subject:** FW: BITSEA AND SUPPORT FU

I am missing several votes on the BITSEA. Please send a response ASAP.

Thanks  
Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Wednesday, November 14, 2007 10:13 AM  
**To:** (rohls@unm.edu); Abbot Laptook (alaptook@WIHRI.org); 'Abhik Das'; Ambal (ambal@uab.edu); Av Fanaroff (aaf2@po.cwru.edu); Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); Michael Cotten (cotte010@mc.duke.edu); 'Michelle Walsh'; 'Mickey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald GOLDBERG'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; 'Newman, Jamie'; Zaterka-Baxter, Kristin  
**Subject:** BITSEA AND SUPPORT FU

Hi,

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**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_\_\_\_**

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Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
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301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Finer, Neil](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: Later today  
**Date:** Tuesday, December 11, 2007 1:25:27 PM

---

I don't think I saw this.  
Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Tuesday, December 11, 2007 8:00 AM  
**To:** Finer, Neil  
**Subject:** RE: Later today

Thanks – I will call you

Also, did you get a copy of the Potential secondary to SUPPORT (from Duke) looking at urinary gastrin releasing peptide and BPD?  
Rose

---

**From:** Finer, Neil [<mailto:nfiner@ucsd.edu>]  
**Sent:** Tuesday, December 11, 2007 10:51 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Later today

Hi Rose  
I hope all goes well  
Please call me at 619 405 (b) (6)  
Be well  
Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Tuesday, December 11, 2007 6:41 AM  
**To:** Finer, Neil  
**Subject:** Later today

Neil  
Can you let me know the best way to contact you later today (6-7 ET, 3-4 PT) after I know the results of the SUPPORT DSMC meeting?  
Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
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301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Zaterka-Baxter, Kristin  
**To:** Gordon Avery; rib6j@hscmail.mcc.virginia.edu; coleason@u.washington.edu; Willinger, Marian (NIH/NICHD) [E]; Clemons, Traci (NIH/NICHD); mikeross@ucla.edu; kant@unc.edu; merran.thomson@ic.ac.uk; mcallen@jhmi.edu; Gail, Dorothy (NIH/NHLBI) [E]; Blaisdell, Carol (NIH/NHLBI) [E]  
**Cc:** Das, Abhik; Poole, W. Kenneth; bprice@obgyn.humc.edu; milhil@u.washington.edu; meganhb@u.washington.edu; Cunningham, Meg; Gantz, Marie; Munoz, Breda; alaptook@WIHRI.org; Neil Finer; Tyson, Jon E; Pedroza, Claudia; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** REMINDER: NICHD NRN DSMC SUPPORT and Late Hypothermia Trial Review 12/11/07  
**Date:** Tuesday, December 11, 2007 9:46:28 AM

---

Dear All,

This is a reminder for today's NICHD NRN DSMC teleconference from 3:00 to 6:00 p.m. (EST). All review and new study materials have been distributed; please let me know if you need any of them again, I'm happy to send them on. The call information is also listed below as well as in the previously sent agenda.

Conference call information:  
Dial toll free (US): 1-866-674 (b) (6)  
Conference code (b) (6)

Dial toll free (International):  
United Kingdom Dial-In #: (b) (6)  
India Dial-In #: (b) (6)

Thanks,  
Kris

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Tuesday, December 04, 2007 5:20 PM  
**To:** 'Gordon Avery'; 'rjb6j@hscmail.mcc.virginia.edu'; 'cgleason@u.washington.edu'; [SCRN] Willinger, Marian; 'tclemons@emmes.com'; 'mikeross@ucla.edu'; 'kant@unc.edu'; 'merran.thomson@ic.ac.uk'; 'mcallen@jhmi.edu'; 'GailD@nih.gov'; 'blaisdellcj@nhlbi.nih.gov'  
**Cc:** Das, Abhik; Poole, W. Kenneth; 'bprice@obgyn.humc.edu'; 'milhil@u.washington.edu'; 'meganhb@u.washington.edu'; Cunningham, Meg; Gantz, Marie; Munoz, Breda  
**Subject:** NICHD NRN DSMC SUPPORT and Late Hypothermia Trial Review 12/11/07

Hi all,  
Please find attached the teleconference agenda and current IRB roster for the NICHD NRN DSMC meeting scheduled for 12/11/07. Please note we have a new committee member; we would like to take this opportunity to welcome Dr. Blaisdell to the committee.

In addition, please find the interim analysis report for the SUPPORT study at 50% status. Please note the Late Hypothermia study protocol was sent on 11/28/07 for review during this meeting; please let me know if you would like another copy of that protocol sent as well.

Thanks and please let me know if you have any questions,  
Kris

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Wednesday, November 28, 2007 10:49 AM  
**To:** 'Gordon Avery'; 'rjb6j@hscmail.mcc.virginia.edu'; 'cgleason@u.washington.edu'; [SCRN] Willinger, Marian; 'tclemons@emmes.com'; 'mikeross@ucla.edu'; 'kant@unc.edu'; 'merran.thomson@ic.ac.uk'; 'mcallen@jhmi.edu'; 'GailD@nih.gov'  
**Cc:** Das, Abhik; Poole, W. Kenneth; 'bprice@obgyn.humc.edu'; 'milhil@u.washington.edu'; 'meganhb@u.washington.edu'; 'Higgins, Rosemary (NIH/NICHD) [E]'; 'alaptook@WIHRI.org'; Cunningham, Meg

**Subject:** NICHD NRN DSMC Late Hypothermia Trial Review 12/11/07  
**Importance:** High

Dear all,

Please find attached a revised version of the protocol titled below. Please note all revised sections are highlighted in yellow (deleted text have been stricken through). This version supersedes the previous version sent 11/13/07; my apologies for any inconvenience.

Thanks and please let me know if you have any questions,  
Kris

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Tuesday, November 13, 2007 5:23 PM  
**To:** 'Gordon Avery'; 'rjb6j@hscmail.mcc.virginia.edu'; 'cgleaseon@u.washington.edu'; [SCRN] Willinger, Marian; 'tclemons@emmes.com'; 'mikeross@ucla.edu'; 'kant@unc.edu'; 'merran.thomson@ic.ac.uk'; 'mcallen@jhmi.edu'; 'GailD@nih.gov'  
**Cc:** Das, Abhik; Poole, W. Kenneth; 'bprice@obgyn.humc.edu'; 'milhil@u.washington.edu'; 'meganhb@u.washington.edu'; 'Higgins, Rosemary (NIH/NICHD) [E]'; 'alaptook@WIHRI.org'; Cunningham, Meg  
**Subject:** RE: NICHD NRN DSMC Support Trial Review 12/11/07

Hi all,

Please find attached the protocol for the new NRN Study titled "Evaluation of Systemic Hypothermia Initiated After 6 Hours of Age in Infants = 36 Weeks Gestation with Hypoxic-Ischemic Encephalopathy: A Bayesian Evaluation". In addition, please also find attached an article regarding the issues of sample size for rare conditions as background information for your review of this study prior to the next DSMC teleconference on December 11, 2007 from 3:00 pm to 6:00 pm (EST).

Please note the conference agenda and NRN Support Study interim analysis report at 50% status will be sent one week prior to the meeting (i.e., on or before Tuesday Dec. 4<sup>th</sup>) for your review.

Thanks and please let me know if you have any questions.  
Kris

*Kris Zaterka-Baxter  
Statistics and Epidemiology Division  
RTI International  
3040 Cornwallis Road  
P.O. Box 12194  
RTP, NC 27709-2194 USA  
(tel) 919-485-7750  
(fax) 919.485.7762  
[kzaterka@rti.org](mailto:kzaterka@rti.org)  
[www.rti.org](http://www.rti.org)*

*Federal Express/UPS/DHL Shipping Address:  
4426 South Miami Blvd  
Durham, NC 27703 USA*

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Monday, September 17, 2007 3:27 PM

**To:** Zaterka-Baxter, Kristin; 'Gordon Avery'; 'rjb6j@hscmail.mcc.virginia.edu'; 'cgleason@u.washington.edu'; [SCRN] Willinger, Marian; 'tclemons@emmes.com'; 'mikeross@ucla.edu'; 'kant@unc.edu'; 'merran.thomson@ic.ac.uk'; 'mcallen@jhmi.edu'; 'GailD@nih.gov'  
**Cc:** Das, Abhik; Gantz, Marie; Poole, W. Kenneth; Auman, Jeanette O.; 'bprice@obgyn.humc.edu'; 'milhil@u.washington.edu'; 'meganhb@u.washington.edu'  
**Subject:** NICHD NRN DSMC Support Trial Review 12/11/07

Hi all,

We have scheduled the next NICHD NRN DSMC conference call for **Tuesday December 11, 2007 from 3:00 pm to 6:00 pm (EST)**. This call will be to:

1. Review the Support Trial Interim analysis at 50% infant status (3:00 – 5:00 pm EST)
2. Review a new NRN Study titled "*Evaluation of Systemic Hypothermia Initiated After 6 Hours of Age in Infants = 36 Weeks Gestation with Hypoxic-Ischemic Encephalopathy: A Bayesian Evaluation*" (5:00 – 6:00 pm EST)

The meeting agenda and **new** study materials will be distributed mid November and the Support Trial safety report will be distributed one week prior to the conference call.

Thanks and please let me know if you have any questions at all.

Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Tuesday, September 11, 2007 12:45 PM  
**To:** 'Gordon Avery'; 'rjb6j@hscmail.mcc.virginia.edu'; 'cgleason@u.washington.edu'; [SCRN] Willinger, Marian; 'tclemons@emmes.com'; 'mikeross@ucla.edu'; 'kant@unc.edu'; 'merran.thomson@ic.ac.uk'; 'mcallen@jhmi.edu'; 'GailD@nih.gov'  
**Cc:** Das, Abhik; Gantz, Marie; Poole, W. Kenneth; Auman, Jeanette O.; 'bprice@obgyn.humc.edu'; 'milhil@u.washington.edu'  
**Subject:** RE: NICHD NRN Support DSMC Review at 50%

Hi all,

Based on the previous request for availability, we've narrowed down a few dates to conduct a 2 – 3 hour teleconference for the next review of the Support trials interim analyses. Please let me know your availability for these dates.

**November 2007:**

Tuesday 11/06/07  
Wednesday 11/07/07

Tuesday 11/13/07

**December 2007:**

Tuesday 12/11/07  
Friday 12/14/07

Please let me know if you have any questions.

Thanks,  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Monday, June 18, 2007 2:23 PM  
**To:** 'Gordon Avery'; rjb6j@hscmail.mcc.virginia.edu; cgleason@u.washington.edu; [SCRN] Willinger, Marian; tclemons@emmes.com; mikeross@ucla.edu; kant@unc.edu; merran.thomson@ic.ac.uk; mcallen@jhmi.edu; GailD@nih.gov  
**Cc:** Das, Abhik; Gantz, Marie; Poole, W. Kenneth; Auman, Jeanette O.  
**Subject:** NICHD NRN Support DSMC Review at 50%

Dear DSMC Members,

We estimate that the NICHD NRN SUPPORT study will meet 50% accrual status sometime between mid October 2007 and mid December 2007. We would like query for your availability between these dates to meet by teleconference for review of the study data as planned per protocol. Please send me your availability.

Thanks, and please let me know if you have any questions.

Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org



**From:** [Finer, Neil](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: Hot Topics  
**Date:** Thursday, December 06, 2007 10:26:44 PM

---

Hi Rose  
619 543 3812  
Thanks  
Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Thursday, December 06, 2007 1:41 PM  
To: Finer, Neil  
Subject: RE: Hot Topics

Can you tell me what fax number to use??  
Thanks  
Rose

-----Original Message-----

From: Finer, Neil [<mailto:nfiner@ucsd.edu>]  
Sent: Thursday, December 06, 2007 4:32 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE: Hot Topics

Hi Rose  
If you could send me any information, that would be great.  
Thanks  
Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Thursday, December 06, 2007 11:30 AM  
To: Finer, Neil  
Subject: Re: Hot Topics

Neil  
I was at Hot Topics and heard the presentation. I have forwarded it to Abhik and Marie. Do you have access to the book distributed at Hot Topics? If not, we could fax you a copy of the slides.  
Let me know

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Finer, Neil <nfiner@ucsd.edu>  
To: Edmund Hey <shey@easynet.co.uk>  
Cc: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Thu Dec 06 10:26:11 2007  
Subject: RE: Hot Topics

Hi Edmund

The DSMB is meeting this month and I am sure that they will look at this - as I will be copying this to Rose. Since they are all at Hot Topics, I'm sure that the seed has been planted. The incidences of these 2 disorders is so different, almost 5- 8 x times less for NEC vs ROP to my estimate, this will be very difficult to evaluate until the numbers are very large. All the more reason for the NeoPROM evaluation. We are not aware of any such trends at this time in SUPPORT for either of the areas you mentioned. I will keep you posted as I learn more.

Be well

Neil

Neil N. Finer, M.D.

Professor of Pediatrics

Director, Division of Neonatal-Perinatal Medicine

UC San Diego School of Medicine

UC San Diego Medical Center, Hillcrest

402 Dickinson St., MPF 1-140

San Diego, CA 92103-8774

Telephone: 619.543-3759

Facsimile: 619.543.3812

---

From: Edmund Hey [<mailto:shey@easynet.co.uk>]  
Sent: Thursday, December 06, 2007 3:09 AM  
To: Finer, Neil  
Subject: Hot Topics

Neil,

Thank Wade for answering my last supplementary question so promptly. I have just heard that much of the gossip at Hot Topics last week was prompted by anecdotal stories about the 'fact' that although restricting exposure has reduced the incidence of ROP needing surgery it has doubled the incidence of NEC requiring surgery. This is just the sort of thing that can cause a flap when such trends are seen over time in an uncontrolled observational study, so I said that I would check that your DSMB would have seen data on this. Leaving aside any question as to what they should do if they did find such a trend, can I confirm that this is something they are in a position to monitor? Does the same go for surgery for PDA (something I did not see listed as one of the Support trial secondary outcomes)? I just need a brief answer in order to calm speculation down.

E

**From:** Zaterka-Baxter, Kristin  
**To:** Tyson, Jon E; Pedroza, Claudia  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** FW: DSMC Agenda for the SUPPORT and Late Hypothermia teleconference 12/11/07  
**Date:** Wednesday, December 05, 2007 10:46:32 AM  
**Attachments:** DSMC AGENDA20071211.doc

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Hi,

Please find attached the agenda for the next DSMC meeting to review both the SUPPORT interim analysis as well and Late Hypothermia Study. Dr. Laptook will present the Late Hypothermia study around 5:00 p.m. Dr. Higgins asked that I forward this to you to ask if you both might be available during this time in case the committee has any questions about the study. If you are available, please also join the call at 5:00 p.m (EST) or if you provide me with your contact numbers, I can call (or email) you if indeed there are any questions.

Thanks,  
Kris

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Tuesday, December 04, 2007 5:01 PM  
**To:** 'Higgins, Rosemary (NIH/NICHD) [E]'; 'alaptook@WIHRI.org'; Neil Finer  
**Cc:** Das, Abhik  
**Subject:** DSMC Agenda for the SUPPORT and Late Hypothermia teleconference 12/11/07

Hi all,

Please find attached the agenda for the DSMC review of the studies listed above to be held on 12/11/07 from 3:00 to 6:00 p.m. via teleconference.

Rose, if you could possibly be available just in case during these three hours that would be wonderful; if that's ok, we'll call/email you if there is anything requested.

Neil, we have scheduled the Support study review from 3:00 to 5:00 p.m. with discussion of the interim analysis to begin around 3:50; if possible could you please be available between 3:30 and 5:00 in case the committee has any questions?

Abbot, we have you scheduled from 5:00 to 5:20 p.m. for a presentation of the Late Hypothermia study; if possible could you please be available a bit before hand if the Support review finishes earlier; I can either call you or send you an email if that is indeed the case. Otherwise, the call in numbers are listed on the agenda.

Thanks and please let me know if you have any questions.  
Kris

*Kris Zaterka-Baxter  
Statistics and Epidemiology Division  
RTI International  
3040 Cornwallis Road  
P.O. Box 12194  
RTP, NC 27709-2194 USA  
(tel) 919-485-7750  
(fax) 919.485.7762  
[kzaterka@rti.org](mailto:kzaterka@rti.org)  
[www.rti.org](http://www.rti.org)*

**Federal Express/UPS/DHL Shipping Address:**  
**4426 South Miami Blvd**  
**Durham, NC 27703 USA**

## NICHD Neonatal Research Network

### Data Safety and Monitoring Committee (DSMC)

1. The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (The SUPPORT Trial)
2. Evaluation of Systemic Hypothermia Initiated after 6 Hours of Age in Infants  $\geq$  36 Weeks Gestation with Hypoxic-Ischemic Encephalopathy: A Bayesian Evaluation (6-24 hour Hypothermia)

The DSMC conference call to review the second interim analyses results for the *SUPPORT Trial* will be held on Tuesday December 11, 2007. The conference call will start at 3:00 PM and will finish by 6:00 PM (EST).

The last hour of the conference call will be reserved for a presentation and review of the new *6-24 hour Hypothermia Trial* that the Network plans to conduct in the near future. Below is the agenda and participant list for this meeting.

Conference call information:

Dial toll free (US): 1-866-674-(b) (6)

Dial toll free (International): United Kingdom Dial-In #: (b) (6)

India Dial-In #: (b) (6)

Conference code: (b) (6)

### AGENDA

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#### SESSION 1

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#### *The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (The SUPPORT Trial)*

3:00 – 3:10	Introductions	Dr. Avery
3:10 - 3:20	Presentation of the SUPPORT Trial	Dr. Das and Dr. Gantz
3:20 – 3:50	Presentation of SUPPORT Interim Monitoring Data	Dr. Das and Dr. Gantz
3:50 – 4:30	Discussion of Presentation	DSMC
4:30 – 5:00	Final Discussions and Recommendations for the SUPPORT Trial	DSMC

#### Participants (Session 1):

Gordon Avery, MD (*DSMC Chair*)  
Christine A. Gleason, MD  
Traci Clemons, Ph.D.  
Merran A. Thomson, MD  
Carol J. Blaisdell, M.D.  
Marie Gantz, PhD (RTI)

Robert J. Boyle, MD  
Marian Willinger, PhD  
Michael G. Ross, M.D., M.P.H.  
Marilee C. Allen, MD  
Abhik Das, PhD (RTI)  
Kris Zaterka-Baxter, RN (RTI)

---

## SESSION 2

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### ***Evaluation of Systemic Hypothermia Initiated After 6 Hours of Age in Infants $\geq$ 36 Weeks Gestation with Hypoxic-Ischemic Encephalopathy: A Bayesian Evaluation (6-24 hour Hypothermia)***

5:00 – 5:20	Presentation of the 6-24 hour Hypothermia Trial	Dr. Laptook (Study PI)
5:20 – 5:40	Discussion of Presentation	DSMC
5:40 – 6:00	Final Discussions and Recommendations for the 6-24 hour Hypothermia Trial	DSMC
6:00	Meeting Adjourned	

#### Participants (Session 2):

Gordon Avery, MD (*DSMC Chair*)

Christine A. Gleason, MD

Traci Clemons, Ph.D.

Abhik Das, PhD (RTI)

Kris Zaterka-Baxter, RN (RTI)

Robert J. Boyle, MD

Marian Willinger, PhD

Michael G. Ross, M.D., M.P.H.

Breda Munoz, PhD (RTI)

Abbot Laptook, MD (*Study PI; Open session presentation*)

*Dr. Rosemary Higgins, NICHD Program Scientist available upon request*

**From:** Rich, Wade  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT  
**Date:** Friday, November 30, 2007 4:03:43 PM

---

FU items:

(b) (6) NF05 was completed on March 23, 2007.

(b) (6) were seen at another site

(b) (6) Completed.

Wade

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, November 28, 2007 9:38 AM  
**To:** Finer, Neil; Rich, Wade; Fuller, Martha; Vaucher, Yvonne  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT

Hi,

Can you let me know if you have enough oximeters for UCSD and Sharp??

We are missing a few outcomes for SUPPORT. Let us know how you are doing. Thanks for all the effort!

Rose

CENTER	NETWORK	ROP_message
22	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.
22	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
22	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
22	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
22	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
CENTER	NETWORK	FU_message
22	(b) (6)	FU window has closed but NF05 is not completed
22	(b) (6)	FU window has closed but NF05 and NF09 are not completed
22	(b) (6)	FU window has closed but NF05 and NF09 are not completed
22	(b) (6)	FU marked as complete (per NF10/SF10) but NF05 is not marked as complete

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov



**From:** Bridge, Renee  
**To:** Rich, Wade; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT  
**Date:** Friday, November 30, 2007 2:32:58 PM

---

Hi, Hope you had a nice Thanksgiving. I have entered a few of our patients (b) (6) and (b) (6) as lost to follow up. The others, I still have hope of contacting the doctors for ROP follow up. I will continue to work on this list. I apologize for continuing this so long.

Renee Bridge, UCSD

-----Original Message-----

**From:** Rich, Wade  
**Sent:** Wed 11/28/2007 9:42 AM  
**To:** Bridge, Renee  
**Subject:** FW: SUPPORT

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, November 28, 2007 9:38 AM  
**To:** Finer, Neil; Rich, Wade; Fuller, Martha; Vaucher, Yvonne  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT

Hi,

Can you let me know if you have enough oximeters for UCSD and Sharp??

We are missing a few outcomes for SUPPORT. Let us know how you are doing. Thanks for all the effort!  
Rose

CENTER

NETWORK

ROP\_message

22

(b) (6)

No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.

22

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

22

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

22

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

22

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

FU\_message

22

(b) (6)

FU window has closed but NF05 is not completed

22

(b) (6)

FU window has closed but NF05 and NF09 are not completed

22

(b) (6)

FU window has closed but NF05 and NF09 are not completed

22

(b) (6)

FU marked as complete (per NF10/SF10) but NF05 is not marked as complete

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Angelita Hensman  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Abbot Laptook; Betty\_Vohr@brown.edu  
**Subject:** RE: SUPPORT  
**Date:** Friday, November 30, 2007 1:14:42 PM

Marie,

The lowest zone should be 3 on the left eye as well per the form. I checked the DMS and it was entered as 2. I have changed it and you should get it with the next transmission.

Thanks  
Angelita

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, November 30, 2007 1:05 PM  
**To:** Angelita Hensman; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Abbot Laptook; Betty\_Vohr@brown.edu  
**Subject:** RE: SUPPORT

For infant (b) (6), the final status for the right eye was entered on 7/13/07, however final status for the left eye has not been reported. For the right eye, there were two consecutive exams in which the lowest zone of any vessels was 3. For the left eye, the lowest zone of any vessels was 3 only for the last exam entered; before that the lowest zone was 2. I hope that helps clear things up.

Marie

**Marie Gantz, Ph.D.**  
**Research Statistician**  
**RTI International**  
**mgantz@rti.org**  
**331 354 4255**

**From:** Angelita Hensman [mailto:AHensman@WIHL.org]  
**Sent:** Friday, November 30, 2007 12:54 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Gantz, Marie; Abbot Laptook; Betty\_Vohr@brown.edu  
**Subject:** RE: SUPPORT

Responses to ROP queries.....

(b) (6) Next appointment scheduled for Feb/08  
Next appointment scheduled for Dec/07  
Not sure why this baby show's up. Favorable status was entered on 07/13/07.  
Did not keep ophthal appointment -No answer at parents/last pedi appointment 10/26/07- Will keep trying....  
Next appointment scheduled for Feb/08  
Favorable outcome entered today (11/30)

Angelita

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higgins@mail.nih.gov]  
**Sent:** Wednesday, November 28, 2007 12:21 PM  
**To:** Abbot Laptook; Betty\_Vohr@brown.edu; Angelita Hensman  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT

Hi,

We are missing a few outcomes for SUPPORT. Let us know how you are doing. Thanks for all the effort!

Rose

CENTER	NETWORK	ROP_message
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
CENTER	NETWORK	BPD_message
14	(b) (6)	Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered (Note: NG03 not yet entered)
FOLLOWUP		
14	(b) (6)	FU window has closed but NF05 and NF09 are not completed
14	(b) (6)	FU window has closed but NF05 and NF09 are not completed
14	(b) (6)	FU window has closed but NF05 and NF09 are not completed
14	(b) (6)	FU window has closed but NF05 and NF09 are not completed
14	(b) (6)	FU window has closed but NF05 and NF09 are not completed
14	(b) (6)	FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
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6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Katherine A Foy  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Cotten, Mike; Ronald N Goldberg; golds005@mc.duke.edu; Lorenza Laureti; Gantz, Marie  
**Subject:** Re: SUPPORT  
**Date:** Friday, November 30, 2007 1:37:12 PM

---

Kathy A. and I are looking up the kids. We will let you know when we have them done.

Thank you,

Kathy Foy  
Clinical Research Nurse  
Duke University Health Systems  
Neonatology  
668-3360 office  
970- (b) (6) pager

"Higgins,  
Rosemary  
(NIH/NICHD) [E]" To  
<higginsr@mail.nih.gov> "Ronald N Goldberg"  
<goldb008@mc.duke.edu>,  
<golds005@mc.duke.edu>, "Cotten,  
11/28/2007 12:26 PM Mike" <cotte010@mc.duke.edu>,  
"Katherine A Foy"  
<foy00004@mc.duke.edu>, "Lorenza  
Laureti"  
<Lorenza.Laureti@sigmatau.com>  
cc  
"Gantz, Marie" <mgantz@rti.org>,  
"Das, Abhik" <adas@rti.org>  
Subject  
SUPPORT

Hi,  
We are missing a few outcomes for SUPPORT. Let us know how you are doing.  
Thanks for all the effort!  
Rose

CENTER NETWORK ROP\_message

19 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

19 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

19 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

19 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

19 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

19 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

19 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

19 (b) (6) Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that  
all ROP exams have been entered.

19 (b) (6) Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that  
all ROP exams have been entered.

19 (b) (6) No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

19 (b) (6) No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

CENTER NETWORK FU\_message

19 (b) (6) FU window has closed but NF05 and NF09 are not completed

19 (b) (6) FU window has closed but NF05 and NF09 are not completed

19 (b) (6) FU window has closed but NF05 and NF09 are not completed

19 (b) (6) FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
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301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Zaterka-Baxter, Kristin  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Kristi Watterberg; M.D. Wally Carlo; Neil Finer; Michele Walsh  
**Cc:** Michele Walsh; Gantz, Marie; Conra Lacy; Julie Rohr  
**Subject:** RE: one more support query  
**Date:** Friday, November 30, 2007 11:40:34 AM

---

Hi all,

I don't believe discussions were ever finalized so a memo was never distributed.

Thanks,

Kris

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, November 30, 2007 11:37 AM  
**To:** Kristi Watterberg; M.D. Wally Carlo; Zaterka-Baxter, Kristin; Neil Finer; Michele Walsh  
**Cc:** Michele Walsh; Gantz, Marie; Conra Lacy; Julie Rohr  
**Subject:** RE: one more support query

This was done for the physiologic definition of BPD so should be under that link on the web page

Thanks  
Rose

---

**From:** Kristi Watterberg [mailto:KWatterberg@salud.unm.edu]  
**Sent:** Friday, November 30, 2007 11:32 AM  
**To:** M.D. Wally Carlo; Kristin Zaterka-Baxter; Neil Finer; Michele Walsh  
**Cc:** Michele Walsh; Higgins, Rosemary (NIH/NICHD) [E]; Marie Gantz; Conra Lacy; Julie Rohr  
**Subject:** RE: one more support query

Michele, I'm sorry to be so dense, but neither Connie nor I can find that technical memo on the website under SUPPORT or BPD. We do have Brad's proposal to correct for altitude, but don't see that it was adopted. The last e-mail I have from him was in May of this year, where the plan was to move it to the SUPPORT subcommittee for discussion.

Neil, I agree that for SUPPORT, since we're entering the actual supplemental oxygen given, data can be analyzed both ways at the end of the study.

Of our six thus far eligible babies in SUPPORT, 1 was actually on room air at 36 weeks. Of our GDB babies <1000g, 31% of survivors did NOT have dx of BPD.



Kristi

>>> "Walsh, Michele" <Michele.Walsh@UHhospitals.org> 11/29/2007 5:10 PM >>>

Please see the technical memo which was developed to

address this issue for NM and Utah who are at altitude.

This provided an adjustment for the altitude, and criteria for the challenge.

*Michele Walsh*

phone: 216-844-3759

---

**From:** Finer, Neil [mailto:nfiner@ucsd.edu]

**Sent:** Thursday, November 29, 2007 5:38 PM

**To:** Kristi Watterberg; Kristin Zaterka-Baxter; Conra Lacy; Wally Carlo, M.D.

**Cc:** Rosemary (NIH/NICHD) Higgins; Marie Gantz; Julie Rohr; Michele Walsh

**Subject:** RE: one more support query

Hi Kristi

I believe that you are correct in that no specific recommendations were made regarding the use of an  $FiO_2 < .25$  at altitude. We understand that you may consider this infant as a room air equivalent and we wanted the actual  $FiO_2$  reported as you have done.

Practically the question is whether an infant at altitude on  $< .25$  is considered on Room Air and thus does not need the physiologic challenge and could have the study oximeter removed. I believe that we felt that we would like these infants challenged to see these results.

We felt that the study itself would provide some useful information for such infants and that we could alter the definitions for such infants upon analysis, and that we would recommend the continued of the study oximeter till they are on RA. However, the practical question is whether any of you infants are in RA at your site before discharge.

Neil

Neil N. Finer, M.D.

Professor of Pediatrics

Director, Division of Neonatal-Perinatal Medicine

UC San Diego School of Medicine

UC San Diego Medical Center, Hillcrest

402 Dickinson St., MPF 1-140

San Diego, CA 92103-8774

Telephone: 619.543-3759

Facsimile: 619.543.3812

---

**From:** Kristi Watterberg [mailto:KWatterberg@salud.unm.edu]  
**Sent:** Thursday, November 29, 2007 10:23 AM  
**To:** Kristin Zaterka-Baxter; Conra Lacy  
**Cc:** Rosemary (NIH/NICHD) Higgins; Marie Gantz; Julie Rohr; Finer, Neil  
**Subject:** RE: one more support query

Hi, Kris (et al). From our reading of the manual, any supplemental oxygen would be considered "on support". This case highlights the question of deciding how to handle the centers at altitude, since an FiO2 of 0.22 or 0.23 at a mile high would certainly equate to room air at sea level.

Rose and Neil, I know this has been discussed at steering committee meetings, but I don't recall that any specific exemptions or adjustments for altitude were adopted - is this also your recollection? For my previous study, we analyzed data both with and without adjustment for altitude, where any FiO2  $\leq$  0.25 at our center and at Colorado were adjusted to room air, and it didn't affect the differences between study groups. Since this trial is also randomized, perhaps adjustment is unnecessary.

Kristi

>>> Conra Lacy 11/29/2007 11:06 AM >>>

Kris,

It appears that the data are correctly entered. These babies were actually on 0.031 and 0.062 liters per minute for several days. Admittedly, that is a very tiny amount of oxygen. We don't find anything in the MOP that defines an oxygen amount below which the baby is considered to be no longer "on support."

If we apply the graphs from the Physiologic Definition of BPD study, the "effective FiO2" would have been 22% for baby (b) (6) and 23% for baby # (b) (6). That does not, to my knowledge, take into account the altitude effect. I have included Dr. Watterberg on this e-mail so she can, if you wish, make a clinical judgment as to whether this tiny amount of oxygen constitutes support.

Is that what you need?

Thanks,  
Connie

>>> "Zaterka-Baxter, Kristin" <kzaterka@rti.org> 11/29/2007 10:45 AM >>>

Thanks Connie,

The date was 7/6/07 and the data came from SUPP11.

Much appreciated !

Kris

-----Original Message-----

From: Conra Lacy [mailto:CBackstrom@salud.unm.edu]

Sent: Thursday, November 29, 2007 12:09 PM

To: Zaterka-Baxter, Kristin

Cc: Julie Rohr

Subject: Re: one more support query

Kris,

These 2 values sound like a typographical error. They were probably actually 0.31 and 0.62, which would have been considered "on support." If you can let us know the dates of those values we can check and see if they were entered incorrectly.

Thanks,

Connie

>>> "Zaterka-Baxter, Kristin" <kzaterka@rti.org> 11/29/2007 9:49 AM >>>

Hi Connie,

We've got one more question about the (b) (6) case you helped us with yesterday; would you mind please letting us know whether the these two infants (IDs (b) (6) ) who were on supplemental oxygen by NC at flow of .031 or .063 were considered "on support?"

Thanks again,

Kris

Kris Zaterka-Baxter

Statistics and Epidemiology Division

RTI International

3040 Cornwallis Road

P.O. Box 12194

RTP, NC 27709-2194 USA

(tel) 919-485-7750

(fax) 919.485.7762

[kzaterka@rti.org](mailto:kzaterka@rti.org) <<mailto:kzaterka@rti.org>>

[www.rti.org](http://www.rti.org) <<http://www.rti.org>>

Federal Express/UPS/DHL Shipping Address:

4426 South Miami Blvd

Durham, NC 27703 USA

Conra (Connie) Backstrom Lacy  
University of New Mexico  
Pediatric Research Nurse Manager  
(505) 272-0367

pager (505) 951-**(b) (6)**  
fax (505) 272-6845  
[cbackstrom@salud.unm.edu](mailto:cbackstrom@salud.unm.edu)

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**From:** Shankaran, Seetha  
**To:** Phelps, Dale; Sood, Beena  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT OUTCOMES  
**Date:** Thursday, November 29, 2007 2:31:57 PM

---

Dale

I disagree with your statements. Our ophthalmologists' request the exams after this time period because they are confident of their exams. We were eliminated from the CRYO\_ROP because of our very low rates. I am not aware of any lawsuit against the ophthalmologists' here at Wayne Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436  
Fax 313-745-5867

Email [sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)

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-----Original Message-----

From: Phelps, Dale [[mailto:Dale\\_Phelps@URMC.Rochester.edu](mailto:Dale_Phelps@URMC.Rochester.edu)]  
Sent: Thursday, November 29, 2007 11:00 AM  
To: Shankaran, Seetha; Sood, Beena  
Cc: [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)  
Subject: RE: SUPPORT OUTCOMES

Thank you Rose,

Seetha and Beena,  
This is a personal note for you:

The ophthalmologists at your center have chosen to completely believe their examinations that vessels really are in zone III the first time they observe this. They are content to consider the baby 'safe' from ROP and wait months for the follow up exam checking for refractive error.

It is possible that in your center, this may be safe. However, in the STOP-ROP and in the CRYO-ROP studies, about 12% of the time, infants seen in zone III one time were back in zone II the next time, and sometimes with ROP that had not been 'expected' because they had already

been observed in zone III once.

This is the reason that for high risk (youngest and smallest) we recommend two consecutive examinations (two in a row) in zone III before 'relaxing' to a longer interval between examinations. Unless you have really good follow up data to know that your particular population is safe based on one examination in zone III, I would think you may be at some medico-legal risk.

The SUPPORT study does not mandate the intervals for repeat examinations, but please note that all SUPPORT enrollees are at high risk because of gestation.

It might be worth discussing this issue with your ophthalmologists. On the other hand, they may tell you that this is not their usual practice, but it is just that in these 2 cases you now have that they have examined the baby many times and know that he really is in zone III, almost completely mature and that is why they allowed a long period before the follow up for refraction.

I'm happy to discuss this.

Dale

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, November 29, 2007 9:25 AM  
To: Shankaran, Seetha; Rebecca Bara; Sood, Beena  
Cc: Gantz, Marie; Das, Abhik; "Neil\_Finer" <; Phelps, Dale  
Subject: RE: SUPPORT OUTCOMES

The October SC meeting minutes state:

The SUPPORT subcommittee reviewed coding infants as permanently missing if no results are available after 55 weeks PMA and at Follow-up o Please see Tech Memo SUPP 11 regarding this change.  
o Dr. Finer also stressed that we need to encourage follow-up - Post cards, phone calls, monthly RTI reminders, calls to ophthalmologist and the use of social workers.

Also, SUPPORT TECHNICAL MEMO 11 reiterates this in more detail.

The issue with two of the three children from your site is that their results are STILL PENDING AND NOT PERMANENTLY LOST.

Therefore, they will continue to appear on the print out. We don't have final outcome data on these two children as of yet and anticipate that we will get it (as opposed to children who never kept appointments for eye FU such that that outcome is permanently lost). RTI keeps them as "missing" unless you tell us they are lost (which is not what we want to do in this case as they have appointments scheduled and they are not PERMANENTLY missing).

Hope this helps, thanks for your attention to this issue.

Rose

-----Original Message-----

From: Shankaran, Seetha [mailto:[sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)]  
Sent: Thursday, November 29, 2007 7:32 AM  
To: Rebecca Bara; Higgins, Rosemary (NIH/NICHD) [E]; Sood, Beena  
Cc: Gantz, Marie; Das, Abhik; "Neil\_Finer" <>; Phelps, Dale  
Subject: RE: SUPPORT OUTCOMES

Hi all, especially Dale and Neil

I thought that at last PI meeting we had decided that we will come to closure on the status at 55 weeks PMA (after the super data presented by Dale re most infants come to stability, and don't worsen after 55 weeks PMA) and that we could update status after 55 weeks PMA if the SUPPORT infant had more exams and when we got the "final" report. Maybe I misinterpreted this?

Let me know

Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

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Sent: Wednesday, November 28, 2007 4:13 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Shankaran, Seetha; Sood, Beena  
Cc: Gantz, Marie; Das, Abhik  
Subject: Re: SUPPORT OUTCOMES

Hi all,

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Patient (b) (6)'s last eye exam was on (b) (6) and the child expired two weeks later (at (b) (6) weeks PMA), these data were previously keyed but the SUPP10 is being updated today to reflect 'not lost at 55 weeks PMA' as the data system has been updated to incorporate that revision.

Thanks,  
Becky

----- Original message -----

>Date: Tue, 27 Nov 2007 14:53:18 -0500  
>From: "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
>Subject: SUPPORT OUTCOMES  
>To: "Shankaran, Seetha" <sshankar@med.wayne.edu>, "Sood, Beena"  
><bsood@med.wayne.edu>, <ae5357@wayne.edu>  
>Cc: "Gantz, Marie" <mgantz@rti.org>, "Das, Abhik" <adas@rti.org>

>

> Hi,

>

> We are missing a few outcomes fro SUPPORT. Let us  
> know how you are doing. Thanks for all the effort!

> Rose

>

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> Rosemary D. Higgins, M.D.

> Program Scientist for the Neonatal Research Network

> Pregnancy and Perinatology Branch

> Center for Developmental Biology and Perinatal  
> Medicine

> NICHD, NIH



- > 6100 Executive Blvd., Room 4B03B
- >
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- > Bethesda, MD 20892
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**To:** Higgins, Rosemary (NIH/NICHD) [E]; Rebecca Bara; Sood, Beena  
**Cc:** Gantz, Marie; Das, Abhik; "Neil Finer" <; Phelps, Dale  
**Subject:** RE: SUPPORT OUTCOMES  
**Date:** Thursday, November 29, 2007 2:28:14 PM

---

Rose  
So we are back to doing what we are doing and we will keep track of memos from RTI that these are missing  
Thanks  
Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

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To: Rebecca Bara; Higgins, Rosemary (NIH/NICHD) [E]; Sood, Beena  
Cc: Gantz, Marie; Das, Abhik; "Neil\_Finer" <; Phelps, Dale  
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Let me know

Seetha

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Wayne State University School of Medicine  
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From: Rebecca Bara [mailto:[ae5357@wayne.edu](mailto:ae5357@wayne.edu)]

Sent: Wednesday, November 28, 2007 4:13 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Shankaran, Seetha; Sood, Beena  
Cc: Gantz, Marie; Das, Abhik  
Subject: Re: SUPPORT OUTCOMES

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Patient (b) (6) last eye exam was on 7-30-07 and the child expired two weeks later (at (b) (6) weeks PMA), these data were previously keyed but the SUPP10 is being updated today to reflect 'not lost at 55 weeks PMA' as the data system has been updated to incorporate that revision.

Thanks,  
Becky

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>Date: Tue, 27 Nov 2007 14:53:18 -0500  
>From: "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
>Subject: SUPPORT OUTCOMES  
>To: "Shankaran, Seetha" <sshankar@med.wayne.edu>, "Sood, Beena"  
><bsood@med.wayne.edu>, <ae5357@wayne.edu>  
>Cc: "Gantz, Marie" <mgantz@rti.org>, "Das, Abhik" <adas@rti.org>

>

> Hi,

>

> We are missing a few outcomes fro SUPPORT. Let us  
> know how you are doing. Thanks for all the effort!

> Rose

>

> CENTER NETWORK ROP\_message

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> status has not been obtained. Please  
> confirm that all ROP exams have been

> 5 (b) (6) entered.

>

>

>

>

>  
> Rosemary D. Higgins, M.D.  
>  
> Program Scientist for the Neonatal Research Network  
>  
> Pregnancy and Perinatology Branch  
>  
> Center for Developmental Biology and Perinatal  
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**From:** Monica Konstantine  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SUPPORT OUTCOMES  
**Date:** Wednesday, November 28, 2007 4:44:12 PM

---

Higgins, Rosemary (NIH/NICHD) [E] wrote:

Hi,  
We are missing a few outcomes fro SUPPORT. Let us know how you are doing. Thanks for all the effort!

Rose

CENTER	NETWORK	ROP_message
13	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
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301-496-3790 (FAX)  
higginsr@mail.nih.gov

Hi Rose, we have 2 eye exam results done while baby was in the hospital; we entered those today. The baby has no ROP and is in fact at home doing beautifully according to mom. She needs to make him an eye appointment for his 6 month followup, we will followup on those results. thanks,  
Monica

From: Bonnie Sinar  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: FW: SUPPORT OUTCOMES  
Date: Wednesday, November 28, 2007 3:51:41 PM

---

(b) (6) - ROP -baby is being followed outside our system, but I am making efforts to obtain the data.  
Bonnie

Hi All- I will ask Bonnie to respond to the ROP info for (b) (6)

BPD outcomes for:

(b) (6) chart is being completed now- and will be entered for next transmission BUT infant was on supplemental O2 by nasal cannula her effective oxygen was 27% and her saturations were not majority >96% so she did not qualify for challenge.

(b) (6) - sorry info was missing and will be entered- however -infant was in RA on no support and did not require challenge.

Hope this is what you need.....NN

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, November 27, 2007 2:47 PM  
To: mcw3@cwru.edu; Nancy Newman at Case  
Cc: Gantz, Marie; Das, Abhik  
Subject: SUPPORT OUTCOMES

Hi,

We are missing a few outcomes fro SUPPORT. Let us know how you are doing. Thanks for all the effort! This is terrific given the number of subjects your site has enrolled!!!

Rose

CENTER	NETWORK	ROP_message
3	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
CENTER	NETWORK	BPD_message
3	(b) (6)	Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered (Note: NG03 not yet entered)
3	(b) (6)	Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is missing

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
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higginsr@mail.nih.gov

**From:** Wally Carlo, M.D.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT  
**Date:** Wednesday, November 28, 2007 1:17:33 PM

---

Rose:

Thanks a lot. I am glad you recognize our efforts. Our nurses are screening and meeting with parents 7 days a week, at least twice a day. They are doing a great job.

THANKS.  
wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, November 28, 2007 12:00 PM  
**To:** Vivien Phillips; Wally Carlo, M.D.; Monica Collins; Myriam Peralta, M.D.  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: SUPPORT

Thanks for following up on this and THANKS AGAIN TO ALABAMA for the terrific recruitment, follow up and data entry!!!

---

**From:** Vivien Phillips [mailto:VPhillips@peds.uab.edu]  
**Sent:** Wednesday, November 28, 2007 12:46 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; Monica Collins; Myriam Peralta, M.D.  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: SUPPORT

Child is scheduled to come on Friday, 11/30, after several months of tracking. This family has been non compliant on child's previous appointments but they're more likely to show up this week due to DHR involvement.  
Vivien

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, November 28, 2007 11:24 AM  
**To:** Wally Carlo, M.D.; Monica Collins; Vivien Phillips; Myriam Peralta, M.D.  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** SUPPORT

CENTER	NETWORK	FU_message
16	(b) (6)	FU window has closed but NF05 and NF09 are not completed

Hi,  
We are missing a few outcomes for SUPPORT. Let us know how you are doing. THIS IS OUTSTANDING CONSIDERING YOUR OVERALL RECRUITMENT!!!! Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.  
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**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: SUPPORT  
**Date:** Wednesday, November 28, 2007 1:12:18 PM

---

Rose:  
THANKS a lot.

UAB Team:

Thanks for your effective effort and dedication.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
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**From:** Mackinnon, Brenda  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Frantz, Ivan; Nylen, Ellen  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: SUPPORT  
**Date:** Wednesday, November 28, 2007 12:59:51 PM

---

Hi Rose,

This subject was transferred out today, records will be reviewed, forms completed and entered tomorrow and transmitted next Tuesday.

Thanks,  
Brenda

Brenda MacKinnon, RNC, NRN Coordinator  
Newborn Medicine, Floating 2, Box 44  
Tufts-NEMC Floating Hospital for Children  
750 Washington Street  
Boston, MA 02111

Phone: 617-636-1218  
Fax: 617-636-1456  
bmackinnon@tufts-nemc.org

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, November 28, 2007 12:49 PM  
**To:** Frantz, Ivan; Mackinnon, Brenda  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT

Hi,

We are missing a few outcomes for SUPPORT. Let us know how you are doing. Thanks for all the effort!

Rose

CENTER	NETWORK	BPD_message
23	(b) (6)	Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered (Note: NG03 not yet entered)

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: SF01 vs NF01 for Support babies with BW >1000g and <401g  
**Date:** Monday, November 26, 2007 3:20:49 PM

---

I have 8 responses so far. Need them from:

- Case
- Cincinnati
- Brown
- Stanford
- Alabama
- Duke
- Iowa
- New Mexico
- RTI

---

Stephanie Wilson Archer  
[Neonatal Research Network](#)  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
[archerst@mail.nih.gov](mailto:archerst@mail.nih.gov)

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Monday, November 26, 2007 3:17 PM  
**To:** Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** FW: SF01 vs NF01 for Support babies with BW >1000g and <401g

How are we doing on the BITSEA vote?

---

**From:** Das, Abhik [<mailto:adas@rti.org>]  
**Sent:** Monday, November 26, 2007 3:13 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: SF01 vs NF01 for Support babies with BW >1000g and <401g

FYI

---

**From:** Auman, Jeanette O.  
**Sent:** Monday, November 26, 2007 3:11 PM  
**To:** 'Joanne Williams'  
**Cc:** Das, Abhik; Newman, Jamie  
**Subject:** RE: SF01 vs NF01 for Support babies with BW >1000g and <401g

Hi Joanne,

As far as I've been made aware no formal decision has been made about whether or not the BITSEA will be done for these patients. I will forward that question to other staff members who may have more information on the matter.

However, you are correct. All three infants have window dates in 2008 or 2009 and therefore will be assigned follow-up numbers and their data forms will be entered into the Follow-up data management system.

Thanks!  
Jenny

---

**From:** Joanne Williams [mailto:joanne.williams@yale.edu]  
**Sent:** Monday, November 26, 2007 3:02 PM  
**To:** Auman, Jeanette O.  
**Subject:** Re: SF01 vs NF01 for Support babies with BW >1000g and <401g

Hi Jennie,

If I understand you correctly:

The three children that Yale has enrolled in SUPPORT follow-up (GDB # (b) (6) ) who are all >27 weeks as well as >1000 gms birthweight will be :

1. assigned follow-up #s
2. when they are seen for 18 month follow-up we will do a complete GDB follow-up visit with the BITSEA also.

Is that correct?

Thanks,  
Joanne

At 01:16 PM 11/26/2007, you wrote:

Because of the new Follow-up criteria effective for patients with a Follow-up window start date of January 1, 2008 all patients randomized and enrolled in the Support trial are eligible for Follow-up regardless of birth weight. As you know prior to this change, patients in Support with a birth weight > 1000g were keyed into the Support data management system. There has been much discussion about whether or not we will continue doing this, but it has been decided that we will not.

**To be consistent with the new follow-up guidelines, from this point on, Support follow-up should be keyed using the regular 18 month data management system (NF00, NF01, NF03, etc.).** However, if the Centers have already entered an SF01 for a patient in the Support DMS, we will NOT expect you to re-key the information into the Follow-up DMS. It can remain in the Support system.

If you have any questions or comments about this, please contact me via email ([joa@rti.org](mailto:joa@rti.org)) or phone (919-237-1213).

Thanks,  
Jenny

*Jeanette Auman*  
*Programmer/Analyst III*  
*(919) 237-1213*  
*joa@rti.org*

The information contained in this message may be privileged and confidential. If you are NOT the intended recipient, please notify the sender immediately with a copy to [hipaa.security@yale.edu](mailto:hipaa.security@yale.edu) and destroy this message.

**From:** Rich, Wade  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: (b) (6)  
**Date:** Monday, November 26, 2007 12:06:42 PM

---

I am awaiting PI opinion. I think not.  
w

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, November 26, 2007 8:55 AM  
**To:** Rich, Wade  
**Subject:** Re: (b) (6)

Was this study related??

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Rich, Wade <wrich@ucsd.edu>  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin <kzaterka@rti.org>  
**Sent:** Mon Nov 26 11:45:18 2007  
**Subject:** (b) (6)

Rose,

Just a note to let you know subject (b) (6) of the SUPPORT trial died (b) (6). MedWatch is pending getting everyone back to work to discuss final outcome data. Baby was withdrawn due to a severe coagulopathy, renal problems, HUS, etc.  
Wade

Wade Rich, BSHS,RRT,CCRC  
Clinical Research Coordinator  
Division of Neonatology  
UCSD Medical Center  
200 W Arbor Dr  
San Diego, CA 92103-8774  
619-543-5375  
pgr 290 (b) (6)

**From:** [Gantz, Marie](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Das, Abhik](#)  
**Subject:** Missing outcomes for SUPPORT  
**Date:** Wednesday, November 21, 2007 2:47:51 PM  
**Attachments:** [Infants with missing outcomes 11-21-07.xls](#)

---

Rose,

Attached is this month's list of infants missing SUPPORT outcomes. Please note that the 4 infants at Miami who had missing ROP outcomes last month are still included on this list. It was determined through conversations between RTI and Dale that it made the most sense to let the center enter the outcomes as missing using the new questions on SUPP10. Jenny is currently working on getting those questions into the DMS. I will send Miami a note to let them know.

Thanks, and have a great Thanksgiving.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
[mgantz@rti.org](mailto:mgantz@rti.org)  
828-251-6255



CENTER NETWORK

(b) (6)

ROP\_message

3 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
5 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
5 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
5 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
9 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
9 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
11 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
11 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
12 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
12 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
12 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.  
13 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 The infant has died, however the 50 weeks PMA has been reached and the final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 SUPP10 records have been entered for prior to study status, but SUPP09 Question C1 indicates that no exam for ROP was performed.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
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19 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
19 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
22 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

22  
24  
24  
25

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

**From:** Kennedy, Kathleen A  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: BITSEA AND SUPPORT FU  
**Date:** Tuesday, November 20, 2007 5:25:29 PM

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, November 14, 2007 9:13 AM  
**To:** rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald GOLDBERG; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson, Jon E  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Newman, Jamie; Zaterka-Baxter, Kristin  
**Subject:** BITSEA AND SUPPORT FU

Hi,

I need a vote as to whether or not folks would like to administer the BITSEA on all FU infants (including trial infants) as opposed to generic FU infants (< 27 weeks) to avoid confusion with SUPPORT FU infants (and other trial infants in the future).

**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_\_\_\_**

**BITSEA ON < 27 week INFANTS ONLY \_\_x\_\_ (discussed with P Evans)**

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Pablo Sanchez](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Roy Heyne](#)  
**Subject:** Re: BITSEA AND SUPPORT FU  
**Date:** Monday, November 19, 2007 5:01:49 PM

---

Rose--all infants--pablo

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)> 11/14/07 9:13 AM >>>

Hi,

I need a vote as to whether or not folks would like to administer the BITSEA on all FU infants (including trial infants) as opposed to generic FU infants (< 27 weeks) to avoid confusion with SUPPORT FU infants (and other trial infants in the future).

**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_xxx\_\_**

**BITSEA ON < 27 week INFANTS ONLY \_\_\_\_\_**

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Poindexter, Brenda B](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: BITSEA AND SUPPORT FU  
**Date:** Monday, November 19, 2007 9:20:55 AM

---

Vote below for Indiana University - Brenda

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, November 14, 2007 10:13 AM  
**To:** rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Poindexter, Brenda B; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald GOLDBERG; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail)  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Newman, Jamie; Zaterka-Baxter, Kristin  
**Subject:** BITSEA AND SUPPORT FU

Hi,

I need a vote as to whether or not folks would like to administer the BITSEA on all FU infants (including trial infants) as opposed to generic FU infants (< 27 weeks) to avoid confusion with SUPPORT FU infants (and other trial infants in the future).

**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_\_\_\_**

**BITSEA ON < 27 week INFANTS ONLY \_\_X\_\_**

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: BITSEA AND SUPPORT FU  
**Date:** Monday, November 19, 2007 8:42:53 AM

---

So Richard means he doesn't want to BITSEA at all, right?

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Friday, November 16, 2007 5:06 PM  
To: Archer, Stephanie (NIH/NICHD) [E]  
Subject: Fw: BITSEA AND SUPPORT FU

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Richard Ehrenkranz <richard.ehrenkranz@yale.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Fri Nov 16 17:04:15 2007  
Subject: Re: BITSEA AND SUPPORT FU

Rose:

I am inclined to vote No since I do not believe that these data have ever been reported.

Richard

Higgins, Rosemary (NIH/NICHD) [E] wrote:

>  
> Hi,  
>  
> I need a vote as to whether or not folks would like to administer the  
> BITSEA on all FU infants (including trial infants) as opposed to  
> generic FU infants (< 27 weeks) to avoid confusion with SUPPORT FU  
> infants (and other trial infants in the future).  
>  
>  
>  
> \*Please respond by November 19:\*>  
> \*\*  
>  
> \*BITSEA ON ALL INFANTS \_\_\_\_\_\*

>  
> \* \*  
>  
> \*BITSEA\*\* ON\*\* < 27 week INFANTS ONLY \_\_\_\_\_ \*  
>  
>  
>  
> Rosemary D. Higgins, M.D.  
>  
> Program Scientist for the Neonatal Research Network  
>  
> Pregnancy and Perinatology Branch  
>  
> Center for Developmental Biology and Perinatal Medicine  
>  
> NICHD, NIH  
>  
> 6100 Executive Blvd., Room 4B03B  
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> MSC 7510  
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> Bethesda, MD 20892  
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> (For overnight delivery, use Rockville, MD 20852)  
>  
> 301-435-7909  
>  
> 301-496-3790 (FAX)  
>  
> higginsr@mail.nih.gov <<mailto:higginsr@mail.nih.gov>>  
>  
>  
>

--  
Richard A. Ehrenkranz, MD  
Department of Pediatrics  
Yale University School of Medicine  
333 Cedar Street  
PO Box 208064  
New Haven, CT 06520-8064  
tele: 203-688-2320  
fax: 203-688-5426

The information contained in this email may be privileged and confidential. If you are the intended recipient, you must maintain this message in a secure and confidential manner. If you are not the intended recipient, please notify the sender immediately and destroy this message. Thank you.

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**To:** Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** FW: BITSEA AND SUPPORT FU  
**Date:** Thursday, November 15, 2007 3:02:00 PM

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---

**From:** Roger Faix [mailto:Roger.Faix@hsc.utah.edu]  
**Sent:** Thursday, November 15, 2007 1:22 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: BITSEA AND SUPPORT FU

I vote for BITSEA on all infants.

Roger

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wed 11/14/2007 8:13 AM  
**To:** rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley Yoder; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald GOLdberg; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail)  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Newman, Jamie; Zaterka-Baxter, Kristin  
**Subject:** BITSEA AND SUPPORT FU

Hi,

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**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_\_\_\_**

**BITSEA ON < 27 week INFANTS ONLY \_\_\_\_\_**

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
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301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)



**From:** [Barbara Stoll](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Cc:** [Ira Adams-Chapman](#)  
**Subject:** Re: BITSEA AND SUPPORT FU  
**Date:** Wednesday, November 14, 2007 9:07:20 PM

---

BITSEA on all infants-- vote from Ira  
BJS

Barbara J. Stoll, MD  
George W. Brumley, Jr., Professor and Chair, Department of Pediatrics  
Medical Director, Children's Healthcare of Atlanta at Egleston  
2015 Uppergate Dr  
Atlanta GA 30022  
Office: 404-727-2456 Fax: 404-727-5737  
[barbara\\_stoll@oz.ped.emory.edu](mailto:barbara_stoll@oz.ped.emory.edu)

This message is for the designated recipient only and may contain privileged or confidential information.  
If you have received it in error, please notify the sender immediately and delete the original.

**From:** Shankaran, Seetha  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Pappas, Athina  
**Subject:** RE: BITSEA AND SUPPORT FU  
**Date:** Wednesday, November 14, 2007 4:26:23 PM

---

Rose

Okay, my vote with input from Athina too is yes for all participants  
Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436  
Fax 313-745-5867

Email [sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)

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---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)]  
**Sent:** Wednesday, November 14, 2007 2:02 PM  
**To:** Shankaran, Seetha; rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald Goldberg; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail)  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Newman, Jamie; Zaterka-Baxter, Kristin  
**Subject:** RE: BITSEA AND SUPPORT FU

Yes, there is one (abstract attached):

Peralta-Carcelen, M for the NICHD Neonatal Research Network. Socio-Emotional and Competence Problems of Extreme Low Birth Weight Children. (Presented, to the Society for Pediatric Research, San Francisco, CA, April 29-May 2, 2006)

---

**From:** Shankaran, Seetha [mailto:[sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)]  
**Sent:** Wednesday, November 14, 2007 1:40 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar

(E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; MIckey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald GOLdberg; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail)  
**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Newman, Jamie; Zaterka-Baxter, Kristin  
**Subject:** RE: BITSEA AND SUPPORT FU

Rose

Have there been any abstracts or publications using this instrument?

Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436

Fax 313-745-5867

Email sshankar@med.wayne.edu

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---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]

**Sent:** Wednesday, November 14, 2007 10:13 AM

**To:** rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; MIckey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald GOLdberg; Shankaran, Seetha; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail)

**Cc:** Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Newman, Jamie; Zaterka-Baxter, Kristin

**Subject:** BITSEA AND SUPPORT FU

Hi,

I need a vote as to whether or not folks would like to administer the BITSEA on all FU infants (including trial infants) as opposed to generic FU infants (< 27 weeks) to avoid confusion with SUPPORT FU infants (and other trial infants in the future).

**Please respond by November 19:**

**BITSEA ON ALL INFANTS \_\_\_\_\_**

**BITSEA ON < 27 week INFANTS ONLY \_\_\_\_\_**

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Das, Abhik  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT Follow-up Technical Memo  
**Date:** Wednesday, November 14, 2007 9:47:07 AM

---

Did this happen? Some sites seem to be clamoring for a decision on whether to do the BITSEA for Support FU subjects come 1/1/08.

Thanks

Abhik

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, October 31, 2007 9:47 AM  
**To:** Das, Abhik  
**Subject:** RE: SUPPORT Follow-up Technical Memo

I guess I should send it for vote!  
Rose

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Wednesday, October 31, 2007 9:46 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: SUPPORT Follow-up Technical Memo

Was there any closure on this issue?

Thanks

Abhik

---

**From:** Das, Abhik  
**Sent:** Monday, October 29, 2007 4:42 PM  
**To:** 'Higgins, Rosemary (NIH/NICHD) [E]'  
**Subject:** RE: SUPPORT Follow-up Technical Memo

Good point; cant think of a paper that used one; a few abstracts did though. Perhaps the FU group should (I almost hate to suggest it!) discuss this.

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, October 29, 2007 4:40 PM  
**To:** Das, Abhik  
**Subject:** RE: SUPPORT Follow-up Technical Memo

Probably true, but do we really do anything with the data??  
Should we remove it altogether??

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Monday, October 29, 2007 4:39 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT Follow-up Technical Memo

Rose:

I wonder if it would just be less confusing for the sites to do the BITSEA for all follow up visits starting 1/1/2008 rather than sort out who needs one and who does not.

Thanks

Abhik

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, October 29, 2007 1:15 PM  
**To:** Newman, Jamie  
**Cc:** Auman, Jeanette O.; Gantz, Marie; Das, Abhik; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT Follow-up Technical Memo

It seems that after Jan 1, patients < 27 weeks will have the BITSEA

---

**From:** Newman, Jamie [mailto:newman@rti.org]  
**Sent:** Monday, October 29, 2007 11:59 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Auman, Jeanette O.; Gantz, Marie; Das, Abhik; Zaterka-Baxter, Kristin  
**Subject:** SUPPORT Follow-up Technical Memo

Rose,

As you requested, I have started a technical memo to clarify the NF01 vs SF01 distinction with the Jan 1, 2008 inclusion criteria. However, I forgot to confirm how you wanted to handle the BITSEA.

The SUPPORT Follow-up Technical Memo #1 distributed on 3/8/06 indicated that the BITSEA (NF13) will NOT be done for SUPPORT patients unless they are enrolled in GDB follow-up. So, since all SUPPORT patients will meet the January 1, 2008 Follow-up Study inclusion criteria (because they are enrolled in SUPPORT) does this mean that all SUPPORT patients will have the BITSEA at follow-up? Before patients ineligible for the Follow-up study (>1000g) were not receiving the BITSEA.

To recap our discussion,

- There will be no need for the distinction between NF forms and SF forms after January 1, 2008. All patients enrolled in SUPPORT will be followed up at 18 months using the NF forms.
- SF forms recently entered into the DE system will not need to be re-entered using NF forms.

I am including Jenny and Marie in case there are programming or statistical issues that we need to consider.

Thanks, Jamie

Jamie E. Newman, MPH  
Statistics and Epidemiology  
RTI International

Telephone: (919) 485-5719  
Fax: (919) 485-7762  
newman@rti.org

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** MedWatch | Houston, (b) (6) SUPPORT  
**Date:** Thursday, November 08, 2007 10:14:15 AM

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Another medwatch today from Houston:

Not thought to be study related.

25 5/7 week 545g female consented for SUPPORT prior to delivery. Delivered by emergency C-section due to abruptio placenta. Apgar score @ 1 min was 6; @ 5 min was 7. The infant was randomized to standard of care (intubation and surfactant) and these procedures were performed without difficulties. In the nursery blood culture was drawn and antibiotics started. The infant had a prenatal ultrasound that showed possible renal and cardiac abnormalities. A cardiac echo was performed on DOB (b) (6) and a renal ultrasound was performed on DOL 2. The echo confirmed a large VSD, small PDA, a PFO, and pulmonary hypertension. The renal ultrasound found a small left kidney. The infant was able to wean off the ventilator and on DOL 2 was extubated to CPAP. Antibiotics were discontinued with negative cultures at 48 hours. On DOL 3, the infant required re-intubation for apnea. On DOL 4, infant was lethargic and developed hypotension. Dopamine was started, a sepsis work up done and antibiotics started. The infant's platelet count was also drastically decreased, as well as the hematocrit and the DIC screen was abnormal. Blood products to correct these problems were given. During the day the infant required increased respiratory support. Dobutamine was started and antibiotics were changed for better coverage. A HUS was performed which was negative. That evening the infant's BP became undetectable. The infant received vigorous resuscitation efforts which included numerous blood products and epinephrine infusions; however, continued to deteriorate. The infant coded and received compressions. After discussions with the family it was determined to be futile to continue and when the infant's heart rate dropped again support was discontinued. Time of death was 0225 on (b) (6). The doctors stated cause of death due to extreme prematurity, pulmonary hypertension, and cardio-respiratory failure. Autopsy noted an acute subarachnoid hemorrhage.

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov



**From:** Finer, Neil  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Jan 10-11 SC meeting  
**Date:** Friday, November 02, 2007 10:58:03 AM

---

Hi Rose

Unrelated to SUPPORT [REDACTED]

I will probably not travel in January and thus we can schedule the meeting when it works best for you. Any time after 11:00AM is good for me. My preference is 11:00AM, 8:00PT. I will also make sure that I am available Dec 11 if the need arises. The protocol issue raise by Kristi and the nature of the discussions is troublesome considering the detail with which these issues were discussed before being finalized into the protocol. I will discuss with the coordinators.

Hope (b) (6) [REDACTED]

Be well

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, November 02, 2007 6:53 AM  
**To:** Finer, Neil  
**Cc:** Cunningham, Meg  
**Subject:** Jan 10-11 SC meeting

Hi Neil,

I hope your week is improving after unrelated to SUPPORT [REDACTED]

We are starting the schedule draft for the Jan 10-11 SC meeting and wanted your time preferences on the schedule for a SUPPORT subcommittee meeting and the update to the SC. Also, the DSMC meeting is scheduled for 3 PM ET on December 11. Barring nothing unforeseen, 1 hour is probably ok for the subcommittee meeting. Let me know when you would like it scheduled.

Regards,

Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**To:** Gantz, Marie; adas@rti.org  
**Subject:** FW: SUPPORT  
**Date:** Friday, November 02, 2007 9:04:00 AM

---

-----Original Message-----

From: Rebecca Bara [mailto:ae5357@wayne.edu]  
Sent: Friday, November 02, 2007 8:51 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: bsood@med.wayne.edu  
Subject: Re: SUPPORT

Hi Rose,

I know Beena has already replied, but I've added a little more information...

Patient (b) (6)'s most recent exam was on 10-12-07, the data has been keyed but the child has not yet met final eye outcome. Clinically the child is due for next eye exam in January. 55 weeks PMA was (b) (6)

Patient (b) (6) most recent exam was on 9-24-07, the data has been keyed, Stage 0 zone unable to determine, ou. Clinically the child is due for next eye exam in January. 55 weeks PMA was (b) (6)

Patient (b) (6) last eye exam was on 7-30-07 and the child expired two weeks later (b) (6) weeks PMA), these data have been keyed.

No further data will be keyed on these patients until the data management system is updated to reflect the October revision incorporating final acute status at 55 weeks PMA.

Thanks,  
Becky

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----- Original message -----

>Date: Mon, 29 Oct 2007 16:38:29 -0400  
>From: "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
>Subject: SUPPORT  
>To: "Sood, Beena" <bsood@med.wayne.edu>, "Shankaran, Seetha" <sshankar@med.wayne.edu>, <ae5357@wayne.edu>, <crosman@med.wayne.edu>  
>Cc: "Das, Abhik" <adas@rti.org>, "Gantz, Marie" <mgantz@rti.org>  
>  
> HI,  
>  
> We are missing a few SUPPORT primary outcomes.  
> Please let us know how you are doing.  
>  
>  
>

- > Thanks for all the effort!!
- > Rose
- >
- > CENTER NETWORK ROP\_message
- >     50 weeks PMA has been reached and
- >     final ROP exam status has not been
- >     reported on the SUPP10 for either
- > 5 (b) (6) eye.
- >     50 weeks PMA has been reached and
- >     final ROP exam status has not been
- >     reported on the SUPP10 for either
- > 5 (b) (6) eye.
- >     Infant died more than a week after
- >     the last ROP exam and final ROP
- >     status has not been obtained. Please
- >     confirm that all ROP exams have been
- > 5 (b) (6) entered.
- >
- >
- >
- >
- >
- > Rosemary D. Higgins, M.D.
- >
- > Program Scientist for the Neonatal Research Network
- >
- > Pregnancy and Perinatology Branch
- >
- > Center for Developmental Biology and Perinatal
- > Medicine
- >
- > NICHD, NIH
- >
- > 6100 Executive Blvd., Room 4B03B
- >
- > MSC 7510
- >
- > Bethesda, MD 20892
- >
- > (For overnight delivery, use Rockville, MD 20852)
- >
- > 301-435-7909
- >
- > 301-496-3790 (FAX)
- >
- > higginsr@mail.nih.gov
- >
- >

**From:** [Wally Carlo, M.D.](#)  
**To:** [Finer, Neil](#); [Kristi Watterberg](#); [Michele Walsh](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [M.D. Wally Carlo](#); [Michele Walsh](#)  
**Cc:** [Julie Rohr](#); [Rich, Wade](#)  
**Subject:** RE: support question  
**Date:** Thursday, November 01, 2007 11:08:20 PM

---

I think that the discrepancy may be that it is not a violation if an extubation occurs but it is a violation if it does not occur when all criteria are met.

Wally

-----Original Message-----

**From:** "Finer, Neil" <[nfiner@ucsd.edu](mailto:nfiner@ucsd.edu)>  
**To:** "Kristi Watterberg" <[KWatterberg@salud.unm.edu](mailto:KWatterberg@salud.unm.edu)>; "Michele Walsh" <[mcw3@cwru.edu](mailto:mcw3@cwru.edu)>; "Rosemary (NIH/NICHD) [E] Higgins" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)>; "M.D. Wally Carlo" <[WCarlo@peds.uab.edu](mailto:WCarlo@peds.uab.edu)>; "Michele Walsh" <[Michele.Walsh@UHhospitals.org](mailto:Michele.Walsh@UHhospitals.org)>  
**Cc:** "Julie Rohr" <[JRohr@salud.unm.edu](mailto:JRohr@salud.unm.edu)>; "Rich, Wade" <[wrich@ucsd.edu](mailto:wrich@ucsd.edu)>  
**Sent:** 11/1/2007 8:39 PM  
**Subject:** RE: support question

Hello Everyone

There is one proper approach and only one manual. I will raise this question on the next coordinators call and see if there are many interpretations.

Neil

---

**From:** Kristi Watterberg [<mailto:KWatterberg@salud.unm.edu>]  
**Sent:** Thursday, November 01, 2007 4:02 PM  
**To:** Michele Walsh; Rosemary (NIH/NICHD) [E] Higgins; M.D. Wally Carlo; Finer, Neil; Michele Walsh  
**Cc:** Julie Rohr; Rich, Wade  
**Subject:** RE: support question

So there are different interpretations of this even between Neil, Wally and Michele - which suggests to me that different centers are also probably interpreting this differently and proceeding differently. If they think that they are operating within the protocol, they would not file a protocol violation and you therefore will not know this.

So - how to proceed? ask the coordinators what's happening at their centers? send out a clarification?

Kristi

>>> "Finer, Neil" <nfiner@ucsd.edu> 10/31/2007 11:51 PM >>>

Hi Everyone

Sorry to be late into this exchange - I have spent the last 12 hours **unrelated to SUPPORT**. I was not copied on the first email and so I have tried to review the discussion.

I have copied the entire section from the Protocol below:

Extubation:

An intubated Surfactant-Control infant will continue to receive mechanical ventilation until extubation criteria are satisfied, but MUST have Extubation attempted within 24 hours of fulfilling ALL of the following criteria documented on a single blood gas.

- \* PaCO<sub>2</sub> < 50 torr and pH > 7.30 (arterial or capillary samples)
- \* An FiO<sub>2</sub> 35 with a SpO<sub>2</sub> > 88% using the study pulse oximeters with
- \* A mean airway pressure (MAP) < 8 cm H<sub>2</sub>O, ventilator rate < 20 bpm, an amplitude < 2X MAP if on high frequency ventilation (HFO)
- \* Hemodynamically stable (Defined as an infant with clinically acceptable blood pressure and perfusion in the opinion of the clinical team - such an infant may be receiving inotropic / vasopressor agents, but should not require ongoing volume infusions to stabilize the circulation and the doses of any continuously infused medications for circulatory stabilization should not have increased within 1 hour of any planned extubation).
- \* Absence of clinically significant PDA (Defined as bounding pulses, audible murmur and Echo confirmation of L-R shunting with increased LA/Ao size)

These criteria will continue in effect for a minimum of 14 days for all infants.

Failure to attempt to extubate an infant meeting all of the above criteria, or extubation prior to reaching criteria, will be recorded as a study protocol violation unless extenuating circumstances are noted.

The protocol was written so that the Control infants would receive the ventilator care that was considered the standard for the NRN at the time we wrote this. In addition, we did not want there to be creep among the

Control infants with the more permissive approach taken for the CPAP infants, and thus after much discussion the "MUST have all criteria" was agreed to.

Thus for extubation a Control infant must meet all the criteria, and if extubated without these, there should be a protocol violation registered.

The good news is that most Control infants who meet the blood gas criteria usually have no difficulty meeting the other criteria. The bad news I suppose is that as a group we may have moved to accept higher PaCO<sub>2</sub>s and earlier extubation in some units. We did not want these infants with PaCO<sub>2</sub>'s > 50 or when on FiO<sub>2</sub> > 35% to be extubated till they were better.

This may represent a problem, but I have not noted an excess of such violations which believe the coordinators would file, but that may not be so.

I would not want to change this protocol at this late stage.

Please let me know if this will be a problem. Also please include me if you have any protocol questions.

Neil

---

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Wednesday, October 31, 2007 8:06 AM  
To: Kristi Watterberg; Michele Walsh; M.D. Wally Carlo; Finer, Neil; Michele Walsh  
Cc: Julie Rohr  
Subject: RE: support question

If they meet all criteria, they MUST have an attempt at extubation. If they meet some criteria, they MAY have an attempt.

I should have inserted MUST in front of "have"

Thanks

Rose

---

From: Kristi Watterberg [<mailto:KWatterberg@salud.unm.edu>]  
Sent: Wednesday, October 31, 2007 11:04 AM  
To: Michele Walsh; Higgins, Rosemary (NIH/NICHD) [E]; M.D. Wally Carlo;

Neil\_Finer >; Michele Walsh  
Cc: Julie Rohr  
Subject: RE: support question

Wally, Michele's and Rose's responses were different. Michele agrees with the MAY part; Rose said "bottom line (I think) is that the control arm baby has to meet all of the criteria on a single blood gas to have the extubation attempt within 24 hours".

I'm happy with the MAY interpretation - Rose, do you agree? Kristi

>>> "Wally Carlo, M.D." <WCarlo@peds.uab.edu> 10/31/2007 8:35 AM >>>  
I agree with Michele's and Rose' interpretation. These are reflective of the distinctions we tried to make between MUST AND MAY.

Wally

-----Original Message-----

From: "Walsh, Michele" <Michele.Walsh@UHhospitals.org>  
To: "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>; "Kristi Watterberg" <KWatterberg@salud.unm.edu>; "Michele Walsh" <mcw3@cwru.edu>; "Neil\_Finer >" <nfiner@ucsd.edu>; "Wally\_Carlo\_M.D. >" <WCarlo@peds.uab.edu>  
Cc: "Julie Rohr" <JRohr@salud.unm.edu>  
Sent: 10/31/2007 9:03 AM  
Subject: RE: support question

My read is slightly different. I think this was the situation of "must extubate" and "may extubate". You must extubate within 24 h if all criteria are satisfied on a single blood gas.

You may extubate earlier if this is your centers practice. Lets see what the masters say.

Michele Walsh  
phone: 216-844-3759

---

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Wednesday, October 31, 2007 8:46 AM  
To: Kristi Watterberg; Michele Walsh  
Cc: Julie Rohr  
Subject: RE: support question

Here is the excerpt from the protocol:  
An intubated Surfactant-Control infant will continue to receive mechanical ventilation

until extubation criteria are satisfied, but MUST have Extubation attempted within 24

hours of fulfilling ALL of the following criteria documented on a single blood gas.

\* PaCO<sub>2</sub> < 50 torr and pH > 7.30 (arterial or capillary samples)

\* An FiO<sub>2</sub> = 35 with a SpO<sub>2</sub> = 88% using the study pulse oximeters with

\* A mean airway pressure (MAP) < 8 cm H<sub>2</sub>O, ventilator rate < 20 bpm, an amplitude < 2X MAP if on high frequency ventilation (HFO)

\* Hemodynamically stable (Defined as an infant with clinically acceptable blood

pressure and perfusion in the opinion of the clinical team - such an infant may

be receiving inotropic / vasopressor agents, but should not require ongoing

volume infusions to stabilize the circulation and the doses of any continuously

infused medications for circulatory stabilization should not have increased within

1 hour of any planned extubation).

\* Absence of clinically significant PDA (Defined as bounding pulses, audible

murmur and Echo confirmation of L-R shunting with increased LA/Ao size

These criteria will continue in effect for a minimum of 14 days for all infants.

Failure to attempt to extubate an infant meeting all of the above criteria, or extubation

prior to reaching criteria, will be recorded as a study protocol violation unless

extenuating circumstances are noted.

So, bottom line (I think) is that the control arm baby has to meet all of the criteria on a single blood gas to have the extubation attempt within 24 hours. Can you give us a little more detail about the specific case??

Thanks

Rose



---

From: Kristi Watterberg [mailto:[KWatterberg@salud.unm.edu](mailto:KWatterberg@salud.unm.edu)]  
Sent: Tuesday, October 30, 2007 4:44 PM  
To: Michele Walsh  
Cc: Higgins, Rosemary (NIH/NICHD) [E]; Julie Rohr  
Subject: support question

Hi, Michele. SUPPORT question for you: it is quite clear from the protocol/MOP that if a control arm baby meets ALL criteria for extubation it is a protocol violation if you don't try extubation within 24 hours. However, it is unclear to us whether the baby has to meet ALL those criteria in order to be able to attempt extubation.

The only thing I can find is under protocol violations, where it says it will be a protocol violation to extubate one of those babies if he/she " does not meet any of the extubation criteria" (my underline). From that, we are interpreting that it is not a protocol violation to extubate a control arm baby who meets some but not all of those criteria.

Is this your interpretation, also?

Thanks, Kristi

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From: Gantz, Marie  
To: Phelos, Dale; REverett@med.miami.edu; SDuara@med.miami.edu  
Cc: Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]; Auran, Jeanette O.  
Subject: RE: SUPPORT  
Date: Thursday, November 01, 2007 5:12:58 PM

Dale,

Please see the information below regarding four infants whose ROP status is missing at Miami. Should we mark them as excused?

Thanks,  
Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
351-8256

From: Everett-Thomas, Ruth [mailto:REverett@med.miami.edu]  
Sent: Thursday, November 01, 2007 4:38 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Duara, Shahnaz; Bauer, Charles R  
Subject: RE: SUPPORT

I have reviewed my records for the data listed below and the first four babies' data can not be completed with the hospital records only (did not reach status with available information from hospital) and they did not return to the eye clinic for follow-up services so I am not sure how to complete the forms (no other data exist regarding their ROP exams). Also the fifth baby expired in the hospital and there is no more ROP data to complete his SUPP10 Form and I have reviewed the manual and I am not sure how to complete the form once the baby expire and has not yet reached status.

The other two babies' data are related to follow-up: Infant (b) (6) was seen in follow-up and the NF09 forms are complete with the old Bailey forms. The Bailey III was not completed on this infant.

Infant (b) (6) is locally and we are in touch with the mom but have not been able to successfully see the baby. She has been scheduled several times but did not show up due to work related issues. (b) (6) and works in an extreme specialized area which is in great demand and therefore can not regulate her days off effectively (we asked if someone else could bring the child but she preferred herself). I think she is on the schedule again for this month (November).

Thanks Ruth!

Ruth Everett-Thomas, RN, MSN  
Patient Safety Nurse  
UM-JMCH Center for Patient Safety  
Department of Anesthesiology  
1611 NW 12th Avenue  
Institute 4th Floor  
Miami, FL 33136  
(305) 585-8364 (Main Number)  
(305) 585-1465 (Direct Line)  
(305) 585-1475 (Fax Number)

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, October 29, 2007 4:40 PM  
To: Duara, Shahnaz; Everett-Thomas, Ruth; Bauer, Charles R  
Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT

Hi,  
We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!

Rose

CENTER	NETWORK	ROP_message
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
CENTER	NETWORK	FU_message
8	(b) (6)	FU marked as complete (per NF10/SF10) but NF09 is not completed
8	(b) (6)	FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Duara, Shahnaz  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Rhebs, Dale  
**Cc:** Bauer, Charles R; Everett-Thomas, Ruth  
**Subject:** RE: SUPPORT  
**Date:** Thursday, November 01, 2007 4:54:15 PM

Hi Rose and Dale,

We are looking for guidance here – how do we complete status forms on pending babies, who never returned to clinic (n=4)?  
How about a baby who dies before ever having an eye exam (n=1)?  
How about a baby who, erroneously, never had a Bayley III performed (n=1)?

The final baby we will continue to chase down.

Thanks  
Shahnaz

---

**From:** Everett-Thomas, Ruth  
**Sent:** Thursday, November 01, 2007 4:38 PM  
**To:** 'Higgins, Rosemary (NIH/NICHD) [E]'  
**Cc:** Duara, Shahnaz; Bauer, Charles R  
**Subject:** RE: SUPPORT

I have reviewed my records for the data listed below and the first four babies' data can not be completed with the hospital records only (did not reach status with available information from hospital) and they did not return to the eye clinic for follow-up services so I am not sure how to complete the forms (no other data exist regarding their ROP exams). Also the fifth baby expired in the hospital and there is no more ROP data to complete his SUPP10 Form and I have reviewed the manual and I am not sure how to complete the form once the baby expire and has not yet reached status.

The other two babies' data are related to follow-up: Infant (b) (6) was seen in follow-up and the NF09 forms are complete with the old Baley forms. The Baley III was not completed on this infant.

Infant (b) (6) locally and we are in touch with the mom but have not been able to successfully see the baby. She has been scheduled several times but did not show up due to work related issues (b) (6) and works in an extreme specialized area which is in great demand and therefore can not regulate her days off effectively (we asked if someone else could bring the child but she preferred herself). I think she is on the schedule again for this month (November).

Thanks Ruth!

*Ruth Everett-Thomas, RN, MSN  
Patient Safety Nurse  
UM-JMHL Center for Patient Safety  
Department of Anesthesiology  
1611 NW 12th Avenue  
Institute 4th Floor  
Miami, FL 33136  
(305) 585-8364 (Main Number)  
(305) 585-1465 (Direct Line)  
(305) 585-1475 (Fax Number)*

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, October 29, 2007 4:40 PM  
**To:** Duara, Shahnaz; Everett-Thomas, Ruth; Bauer, Charles R  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT

Hi,  
We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!

CENTER	NETWORK	ROP_message
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
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CENTER	NETWORK	FU_message
8	(b) (6)	FU marked as complete (per NF10/SF10) but NF09 is not completed
8	(b) (6)	FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
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Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

From: Gantz, Marie  
To: Higgins, Rosemary (NIH/NICHD) [E]; Auman, Jeanette O.  
Cc: Das, Abhik  
Subject: RE: SUPPORT  
Date: Thursday, November 01, 2007 4:52:59 PM

I will forward the ROP information to Dale, and I will note in my reminder program that there is no additional ROP data on the infant who died.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
336-254-4255

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, November 01, 2007 4:41 PM  
To: Auman, Jeanette O.; Gantz, Marie  
Cc: Das, Abhik  
Subject: FW: SUPPORT

What forms should be completed and does Dale sign off on the missing outcomes as "incomplete" but relieve from reminders?  
Thanks  
Rose

From: Everett-Thomas, Ruth [mailto:REverett@med.miami.edu]  
Sent: Thursday, November 01, 2007 4:38 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Duara, Shahnaz; Bauer, Charles R  
Subject: RE: SUPPORT

I have reviewed my records for the data listed below and the first four babies' data can not be completed with the hospital records only (did not reach status with available information from hospital) and they did not return to the eye clinic for follow-up services so I am not sure how to complete the forms (no other data exist regarding their ROP exams). Also the fifth baby expired in the hospital and there is no more ROP data to complete his SUPP10 Form and I have reviewed the manual and I am not sure how to complete the form once the baby expires and has not yet reached status.

The other two babies' data are related to follow-up: Infant (b) (6) was seen in follow-up and the NF09 forms are complete with the old Bailey forms. The Bailey III was not completed on this infant.

Infant (b) (6) is locally and we are in touch with the mom but have not been able to successfully see the baby. She has been scheduled several times but did not show up due to work related issues (b) (6) and works in an extreme specialized area which is in great demand and therefore can not regulate her days off effectively (we asked if someone else could bring the child but she preferred herself). I think she is on the schedule again for this month (November).

Thanks Ruth!

Ruth Everett-Thomas, R.N., M.S.N.  
Patient Safety Nurse  
UM-JMHC Center for Patient Safety  
Department of Anesthesiology  
1611 NW 12th Avenue  
Institute 4th Floor  
Miami, FL 33136  
(305) 585-8364 (Main Number)  
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(305) 585-1475 (Fax Number)

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, October 29, 2007 4:40 PM  
To: Duara, Shahnaz; Everett-Thomas, Ruth; Bauer, Charles R  
Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT

Hi,  
We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!

Rose

CENTER	NETWORK	ROP_message
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
CENTER	NETWORK	FU_message
8	(b) (6)	FU marked as complete (per NF10/SF10) but NF09 is not completed
8	(b) (6)	FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Bethany Ball  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** mgantz@rti.org; adas@rti.org; srhinz@stanford.edu; vanmeurs@leland.stanford.edu  
**Subject:** Re: SUPPORT  
**Date:** Wednesday, October 31, 2007 5:34:32 PM

---

Hi,  
We're going to mark (b) (6) as lost to follow-up in the DMS. We haven't given up yet but Susan is getting a litigious vibe from the mom so we're going to let the dust settle a bit.

As for the ROP, I am off to the ophthalmologists office to pick up the exams.

HH,  
Beth

HI,

We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!

Rose

**CENTER**

**NETWORK**

**ROP\_message**

15

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

**CENTER**

**NETWORK**

**FU\_message**

15

(b) (6)

FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

From: Walsh, Michele  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE: SUPPORT  
Date: Tuesday, October 30, 2007 1:10:21 PM

For BPD kid- I looks like it was a premature query as babe is not discharged yet. To avoid nuisance queries- RTI may need to tie the trigger to discharge.

Michele Walsh  
phone: 216-844-3759

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, October 30, 2007 1:08 PM  
To: Bonnie Siner  
Cc: nancy newman; Walsh, Michele; Marie Gantz; Abhik Das  
Subject: RE: SUPPORT

Thanks so much!!  
Rose

From: Bonnie Siner [mailto:bs5@case.edu]  
Sent: Tuesday, October 30, 2007 12:46 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: 'nancy newman'; Walsh, Michele'  
Subject: RE: SUPPORT

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, October 29, 2007 4:36 PM  
To: mcw3@cwru.edu; nxs5@cwru.edu; Bonnie Siner; (b) (6)  
Cc: Gantz, Marie; Das, Abhik  
Subject: SUPPORT

Hi,  
We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!  
Rose

CENTER	NETWORK	ROP_message Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered. No further exams prior to death.
3	(b) (6)	
3	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. Baby is being followed outside our system. We are attempting to get the information.
CENTER	NETWORK	BPD_message Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered (Note: NG03 not yet entered) Child not d/c'd yet – data collection not completed.
3	(b) (6)	
CENTER	NETWORK	FU_message FU window has closed but NF05 and NF09 are not completed. LTFU forms completed.
3	(b) (6)	

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**From:** Monica Konstantine  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Batty, Heidi  
**Subject:** Re: SUPPORT  
**Date:** Tuesday, October 30, 2007 12:33:29 PM

---

Higgins, Rosemary (NIH/NICHD) [E] wrote:

Hi,  
We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!

Rose

CENTER	NETWORK	ROP_message
13	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
13	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
13	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
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301-496-3790 (FAX)  
higginsr@mail.nih.gov

We received the final eye exam results on the twins (b) (6). final outcome is no ROP, mature vessels bilaterally. This should be entered this week as well as baby (b) (6) just went home this past week and will have his eye exams to date entered/ transmitted as well.  
Monica



**From:** Evans, Patricia W  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Kennedy, Kathleen A; Morris, Brenda H; Tyson, Jon E; McDavid, Georgia E  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: SUPPORT  
**Date:** Tuesday, October 30, 2007 11:29:25 AM

---

I've forwarded this on to our Bayley examiners. We will get the form to you ASAP.

Patricia W. Evans, MD  
Assistant Professor of Pediatrics, Division of Neonatology  
The University of Texas Medical School at Houston  
713-500-5311 (office)  
713-500-5794 (fax)  
Patricia.W.Evans@uth.tmc.edu <<mailto:Patricia.W.Evans@uth.tmc.edu>> (e-mail)

---

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Mon 10/29/2007 3:51 PM  
To: Kennedy, Kathleen A; Morris, Brenda H; Evans, Patricia W; Tyson, Jon E; McDavid, Georgia E  
Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT

Hi,

We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!  
Rose

CENTER

NETWORK

ROP\_message

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

Infant died, however 50 weeks PMA was reached and final ROP exam status has not been reported on the SUPP10 for either eye. Please confirm that all ROP exams have been entered.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

FU\_message

18

(b) (6)

FU marked as complete (per NF10/SF10) but NF09 is not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

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[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**To:** Johnson, Karen; Bell, Edward  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: SUPPORT  
**Date:** Tuesday, October 30, 2007 10:11:00 AM

---

Thanks  
Rose

---

**From:** Johnson, Karen [mailto:karen-johnson@uiowa.edu]  
**Sent:** Tuesday, October 30, 2007 9:10 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Bell, Edward  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: SUPPORT

Rose,  
[REDACTED] was seen last month and I expect to get his med record soon -- he should have reached status at this check.  
[REDACTED] are not showing up for appointments. We're still trying.  
Karen

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, October 29, 2007 3:59 PM  
**To:** Bell, Edward; Johnson, Karen  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT

Hi,  
We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!

Rose

CENTER	NETWORK	ROP_message
24	[REDACTED]	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
24	[REDACTED]	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
24	[REDACTED]	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
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(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Pablo Sanchez  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Nancy Miller  
**Cc:** ALICIA GUZMAN  
**Subject:** Re: SUPPORT  
**Date:** Monday, October 29, 2007 8:31:04 PM

---

was taxi service offered? I am glad to pay for this--it's not a problem --and I really prefer to do it rather than hope that they make the next appointment--pablo

>>> Nancy Miller 10/29/07 4:20 PM >>>

Rose,  
This baby was scheduled to come in today for ophthalmology but father was unable to bring the baby. He is rescheduled for 2/28/08.  
Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-404B  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206-(b)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 10/29/2007 3:36 PM >>>  
HI,

We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!  
Rose

CENTER

NETWORK

ROP\_message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Wally Carlo, M.D.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Monica Collins; Shirley Cosby; Vivien Phillips; Claire Roane  
**Subject:** RE: SUPPORT  
**Date:** Monday, October 29, 2007 5:36:22 PM

---

Rose:

Thanks a lot.

We have a great team of research nurses. I will pass on your message to them.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 [REDACTED]

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, October 29, 2007 4:01 PM  
**To:** Wally Carlo, M.D.  
**Subject:** RE: SUPPORT

Wally

It is truly amazing how complete the Alabama primary outcomes are!!!  
Rose

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Monday, October 29, 2007 4:51 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; Myriam Peralta, M.D.; Vivien Phillips; Shirley Cosby; Monica Collins  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: SUPPORT

Rose:

Thanks for the reminder.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 [REDACTED]

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, October 29, 2007 3:50 PM  
**To:** wacarlo@uab.edu; Myriam Peralta, M.D.; Vivien Phillips; Shirley Cosby; Monica Collins  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT

Hi,

We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

AMAZING CONSIDERING HOW MANY YOU HAVE ENROLLED!!!!!!

Thanks for all the effort!!

Rose

CENTER	NETWORK	ROP_message
16	[REDACTED]	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
CENTER	NETWORK	FU_message
16	[REDACTED]	FU window has closed but NF05 and NF09 are not completed
16	[REDACTED]	FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

From: Ellen Hale  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: Re: SUPPORT  
Date: Monday, October 29, 2007 5:24:10 PM

---

Rose,  
I will follow-up on these on Wednesday.  
Thanks for the reminder,  
Ellen

"Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> writes:  
Hi

We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

;

THANKS FOR THE REMINDER!  
ROSE

CENTER NETWORK ROP\_message

9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER NETWORK EU\_message

9 (b) (6) EU window has closed. BU, NE05 and NE09 are not completed

;

;

Rosemary D. Higgins, M.D.

Principal Scientist for the Neuroimaging Research Network

Principal Scientist, Neuroimaging Branch

Center for Developmental Biology and Perinatal Medicine

NICHD/NIH

5100 Executive Blvd, Room 4B03B

MSC 07610

Bethesda, MD 20892

(For questions, please use Rockville # MC20892)

301-435-7909

301-496-3790 (FAX)

rhiggins@mail.nih.gov

;



From: Wilson, Leslie Dawn  
To: Higgins, Rosemary (NIH/NICHD) [E]; Poindexter, Brenda B  
Cc: Das, Abhik; Gantz, Marie  
Subject: RE: SUPPORT  
Date: Monday, October 29, 2007 5:13:50 PM

---

(b) (6) -has been entered  
(b) (6) -info has been requested from hospital infant transferred to and we are awaiting data

Thank you-

*Leslie Dawn Wilson, RN, BSN*  
Research Manager  
Neonatal Network Coordinator  
Riley Hospital RR 208  
ldw@iupui.edu (e-mail)  
699 West Dr  
Indianapolis, IN 46202  
317.274.8255 (phone)  
317.274.8963 (fax)  
317.312.(b) (6) (pager)

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higgins@mail.nih.gov]  
Sent: Monday, October 29, 2007 4:45 PM  
To: Poindexter, Brenda B; Wilson, Leslie Dawn  
Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT

Hi,  
We are missing a few SUPPORT primary outcomes. Please let us know how you are doing.

Thanks for all the effort!!

Rose

CENTER	NETWORK	ROP_message
12	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
12	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
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MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higgins@mail.nih.gov

**From:** Walsh, Michele  
**To:** Abbot Laptook; Higgins, Rosemary (NIH/NICHD) [E]; Bradley.yoder@hsc.utah.edu; nfiner@ucsd.edu; wcarlo@peds.uab.edu; mcw3@case.edu; Roger.Faix@hsc.utah.edu; kurt.schibler@cchmc.org; adas@rti.org; nxs5@case.edu; mgantz@rti.org; poo@rti.org  
**Cc:** kzaterka@rti.org; petrie@rti.org  
**Subject:** RE: OWL  
**Date:** Wednesday, October 24, 2007 11:06:37 AM

---

It is not a practice at our site to keep the sats high, and I am not aware with any evidence to support the practice. On the contrary, if one believes that NEC is related to generation of free radicals, then hyperoxia could worsen the practice. I agree with Abbots comments- I think the trial is the ideal way to answer the question that the nurses are posing.  
Michele

---

**From:** Abbot Laptook [mailto:ALaptook@WIHRI.org]  
**Sent:** Wed 10/24/2007 9:02 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Bradley.yoder@hsc.utah.edu; nfiner@ucsd.edu; wcarlo@peds.uab.edu; mcw3@case.edu; Roger.Faix@hsc.utah.edu; kurt.schibler@cchmc.org; adas@rti.org; nxs5@case.edu; mgantz@rti.org; poo@rti.org  
**Cc:** kzaterka@rti.org; petrie@rti.org  
**Subject:** RE: OWL

Brad

This issue was raised by our surgeons last year with a support infant who had NEC. When we finally discussed the issue face to face the surgeons acknowledged that there was no basis for maintaining oxygen saturations >95% other than the notion of improved gut oxygenation. We raised the same concerns that Neil raised and the surgeons backed off. It was also helpful to point out to the surgeons that NEC is a secondary outcome and it would be important to see if there are any trends in incidence of NEC as a function of group assignment. AL

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, October 23, 2007 8:00 PM  
**To:** Bradley.yoder@hsc.utah.edu; nfiner@ucsd.edu; wcarlo@peds.uab.edu; mcw3@case.edu; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; adas@rti.org; nxs5@case.edu; mgantz@rti.org; poo@rti.org  
**Cc:** kzaterka@rti.org; petrie@rti.org  
**Subject:** Re: OWL

I don't think we have not encountered this concern so far in SUPPORT. I don't believe there is much data on oxygen saturation and targets for NEC. There should also be a balance between oxygen saturation for "gut perfusion" and for minimizing oxygen exposure to the lungs (as I would guess that most of these children are on the ventilator) to avoid or lessen BPD.  
Bottom line - lack of data - hopefully SUPPORT will provide some data for optimal management, but was not powered for NEC and oxygen targets.

Hope this helps!  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Bradley Yoder <Bradley.Yoder@hsc.utah.edu>  
To: Finer, Neil <nfiner@ucsd.edu>; Higgins, Rosemary (NIH/NICHD) [E];  
Wally Carlo, M.D. <WCarlo@peds.uab.edu>; Michele Walsh <mcw3@case.edu>;  
Roger Faix <Roger.Faix@hsc.utah.edu>; Abbot Laptook  
<ALaptook@wihri.org>; kurt.schibler@cchmc.org <kurt.schibler@cchmc.org>;  
Das, Abhik <adas@rti.org>; Nancy Newman <nxs5@case.edu>; Gantz, Marie  
<mgantz@rti.org>; Poole, W. Kenneth <poo@rti.org>  
Cc: Zaterka-Baxter, Kristin <kzaterka@rti.org>; Petrie, Carolyn  
<petrie@rti.org>  
Sent: Tue Oct 23 18:55:15 2007  
Subject: RE: OWL

In regards to "OWL", we have had several nurses at PCMC question whether the SUPPORT babies should stay on the study monitor when they have developed NEC. As PCMC is the surgical NICU for our center, any baby born at the other 2 facilities who develops NEC is transferred there. Needless to say, the nurses at PCMC only see the "bad" SUPPORT babies, never the ones who are doing well.

Nonetheless, the "standard" for NEC care per the nursing staff appears to be to keep the SAT's on the high end (> 90%) to "optimize" gut oxygen delivery. They are concerned that infants in the low SAT range of the SUPPORT study may be receiving suboptimal management of their NEC.

Is this a concern at other sites? Is this increased SAT approach for NEC babies considered "SOC" at other sites?

Any comments, suggestions are welcomed.

Brad

-----Original Message-----

From: Finer, Neil [<mailto:nfiner@ucsd.edu>]  
Sent: Monday, October 22, 2007 11:55 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; Michele Walsh;  
Bradley Yoder; Roger Faix; Abbot Laptook; kurt.schibler@cchmc.org; Das,  
Abhik; Nancy Newman; Gantz, Marie; Poole, W. Kenneth  
Cc: Zaterka-Baxter, Kristin; Petrie, Carolyn  
Subject: FW: OWL

Hello Everyone

Attached are the documents describing OWL and a Presentation that includes the materials presented at the Steering Committee (OWL Guidelines Oct 2007).

We believe that this material should be sent to all sites to be used for in-service for maintaining SpO2 limits.

Please let Rose and me know if you are in agreement, and if so I will ask Rose to circulate.

Thanks

Neil

Neil N. Finer, M.D.

Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine UC San Diego School of  
Medicine UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

-----Original Message-----

From: Finer, Neil  
Sent: Friday, October 19, 2007 10:04 AM  
To: 'Michele.Walsh@UHhospitals.org'; 'Wally Carlo, M.D.'  
Cc: Rich, Wade; 'Higgins, Rosemary (NIH/NICHD) [E]'  
Subject: FW: OWL

Hi Wally and Michele.

I have expanded a Power Point extracting info from the manual which is, in fact OWL based as OWL Guidelines Oct 2007. This also includes the DSMC data and our current performance Please review.

I would propose that we send the sites all of the above so that they can use the information to develop locally appropriate in-services.

Let me know if you agree or would only want to send parts of these.

Sending this out will help us to stay compliant with the DSMCs requests.

Thanks

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine UC San Diego School of  
Medicine UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

-----Original Message-----

From: Wally Carlo, M.D. [<mailto:WCarlo@peds.uab.edu>]  
Sent: Wednesday, October 17, 2007 9:17 AM  
To: Finer, Neil; Michele.Walsh@UHhospitals.org  
Subject: FW: OWL

Hi Michele, Rose, and Neil:

I am enclosing the OWL material, some of which we could modify and combine with the material we have for an in-service/refresher.

We can put a draft together starting with what we have in the MOO if you think we should have standard material made available to the sites in case they want to use it.

Let me know.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham

Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
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Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b)

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Federal and Ohio law protect patient medical information, including psychiatric disorders, (H.I.V) test results, A.I.Ds-related conditions, alcohol, and/or drug dependence or abuse disclosed in this email. Federal regulation (42 CFR Part 2) and Ohio Revised Code section 5122.31 and 3701.243 prohibit disclosure of this information without the specific written consent of the person to whom it pertains, or as otherwise permitted by law.

**From:** [Betty Vohr](#)  
**To:** [Vivien Phillips](#); [mgfuller@ucsd.edu](#)  
**Cc:** [wrich@ucsd.edu](#); [yvaucher@ucsd.edu](#); [Myriam Peralta, M.D.](#); [Wally Carlo, M.D.](#); [Monica Collins](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: 18 month SUPPORT Follow up in DC  
**Date:** Tuesday, October 23, 2007 9:31:37 AM

---

I agree. Your group should get the " Annual Above and Beyond Award"

---

**From:** Vivien Phillips [mailto:[VPhillips@peds.uab.edu](mailto:VPhillips@peds.uab.edu)]  
**Sent:** Monday, October 22, 2007 6:19 PM  
**To:** [mgfuller@ucsd.edu](#)  
**Cc:** [wrich@ucsd.edu](#); [yvaucher@ucsd.edu](#); [Myriam Peralta, M.D.](#); [Wally Carlo, M.D.](#); [Monica Collins](#); [higginsr@mail.nih.gov](#); [Betty Vohr](#)  
**Subject:** 18 month SUPPORT Follow up in DC

Martha,

I apologize for not acknowledging your contribution when Betty Vohr mentioned this follow up visit to the group during our annual meeting. We want to thank you again for your assistance and willingness to administer the Bayley III test to one of our network child who had moved to Washington, DC. Due to the family's unexpected circumstances, it was unusual to test a child late in the evening, but with your perseverance in keeping this child attentive and awake, the testing was completed. This child barely made it through the neuroexam because it was past her bedtime. What a night to remember....we'll do anything for follow up, right?

It was good seeing you again! Till next time!

*Vivien Phillips, RN, BSN*  
*Research Nurse Coordinator*  
*Division of Neonatology*  
*University of Alabama at Birmingham*  
*Office: (205) 934-5771*  
*Pager: (205) 934-(b) (6)*  
*Fax: (205) 934-3100*  
*Email: [vphillips@peds.uab.edu](mailto:vphillips@peds.uab.edu)*

**From:** [Finer, Neil](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: OWL  
**Date:** Monday, October 22, 2007 2:35:55 PM

---

Hi Rose

We were just circulating documents about OWL. I would let the sites choose from the available material. They can use the contract in the Manual of this one, or none if they so choose. If you feel this is confusing, then remove the additional one.

Thanks  
Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Monday, October 22, 2007 10:06 AM  
To: Finer, Neil  
Subject: FW: OWL

Neil - see note below.

This is somewhat different -  
Your thoughts??  
Thank  
Rose

---

From: Zaterka-Baxter, Kristin [<mailto:kzaterka@rti.org>]  
Sent: Mon 10/22/2007 12:57 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Cunningham, Meg  
Subject: FW: OWL

Hi Rose,

Meg sent this email to me FYI and I had a question about the contract attached - this is different that the contract we have in Appendix F (also attached) currently in the Support manual - should I update and send out with the other revisions? I don't think the other documents were in the MOP; they're just for the clinical staff correct?

Thanks,  
Kris

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, October 22, 2007 11:04 AM  
To: Cunningham, Meg  
Cc: Das, Abhik  
Subject: Fw: OWL

Meg

Can you send the attached files to the steering committee and coordinators for a SUPPORT update with their nursery staffs?

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Finer, Neil <nfiner@ucsd.edu>  
To: Michele.Walsh@UHhospitals.org <Michele.Walsh@UHhospitals.org>; Wally Carlo, M.D. <WCarlo@peds.uab.edu>  
Cc: Rich, Wade <wrich@ucsd.edu>; Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Fri Oct 19 13:03:58 2007  
Subject: FW: OWL

Hi Wally and Michele.

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Please review.

I would propose that we send the sites all of the above so that they can use the information to develop locally appropriate in-services.

Let me know if you agree or would only want to send parts of these.

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Thanks

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
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UC San Diego Medical Center, Hillcrest  
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San Diego, CA 92103-8774  
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Facsimile: 619.543.3812

-----Original Message-----

From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
Sent: Wednesday, October 17, 2007 9:17 AM  
To: Finer, Neil; Michele.Walsh@UHhospitals.org  
Subject: FW: OWL

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Let me know.

wally

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**From:** [Finer, Neil](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Wally Carlo, M.D.](#); [Michele Walsh](#); [Bradley Yoder](#); [Roger Faix](#); [Abbot Laptook](#); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [Das, Abhik](#); [Nancy Newman](#); [Gantz, Marie](#); [Poole, W. Kenneth](#)  
**Cc:** [Zaterka-Baxter, Kristin](#); [Petrie, Carolyn](#)  
**Subject:** FW: OWL  
**Date:** Monday, October 22, 2007 12:59:12 PM  
**Attachments:** [OXYGEN WITH LOVEf.ppt](#)  
[OXYGEN WITH LOVE WORKSHEET.doc](#)  
[SEYMOUR.doc](#)  
[OXYGEN WITH LOVEcontract.doc](#)  
[Potentially Better Practice Concept.doc](#)  
[blankowl.xls](#)  
[OWL\\_SUMMARY.doc](#)  
[owl shift 1.xls](#)  
[OWL Guidelines Oct 2007.ppt](#)

---

Hello Everyone

Attached are the documents describing OWL and a Presentation that includes the materials presented at the Steering Committee (OWL Guidelines Oct 2007).

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Please let Rose and me know if you are in agreement, and if so I will ask Rose to circulate.

Thanks

Neil

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San Diego, CA 92103-8774  
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-----Original Message-----

From: Finer, Neil  
Sent: Friday, October 19, 2007 10:04 AM  
To: 'Michele.Walsh@UHhospitals.org'; 'Wally Carlo, M.D.'  
Cc: Rich, Wade; 'Higgins, Rosemary (NIH/NICHD) [E]'  
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Neil

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Professor of Pediatrics

Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
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From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
Sent: Wednesday, October 17, 2007 9:17 AM  
To: Finer, Neil; Michele.Walsh@UHhospitals.org  
Subject: FW: OWL

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We can put a draft together starting with what we have in the MOO if you think we should have standard material made available to the sites in case they want to use it.

Let me know.

wally

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Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
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Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

Oxygen  
With  
Love



# Oxygen saturation targeting to decrease oxygen's toxic effects

**– Brought to you by the Ochsner  
Vermont Oxford Respiratory  
Group**

# OXYGEN TARGETING

- -used to decrease the risk of ROP and the need for interventional surgery; as well as other side effects of oxygen toxicity.

**This is not a study!**

**It is a change in the way  
we Practice**



# Why?

- A recent multicenter study showed that 30% of infants with ROP that reached threshold and received surgery, had unfavorable vision as long as 10 years out
- We need to not only reduce the incidence of the need for surgery but decrease the number of infants that reach threshold disease

# GOALS

- Decrease the incidence of ROP
- Decrease the need for interventional surgery
- Decrease total days on the ventilator
- Decrease the total days in oxygen
- Decrease length of Hospital stay

# PLAN

- All admits 500-1500gms
- Oxygen or ventilator dependent
- Pulse oximeter alarms to be set at 80-95 with the goal being to keep saturations greater than 85 but less than 93

# *Active participation required*

- **Physicians**
- **NNP's**
- **Nurses**
- **Respiratory Therapists**

# Education

- Dr. Goldsmith will meet with the NNP's, Nurses, and Respiratory therapists to educate them on the relationship between oxygen and ROP
- Flip chart
- Bedside education by the VO Respiratory group
- Introduction of the contract to the NICU employees.

# Statement of Understanding and Agreement

- Each NICU staff member will be expected to sign a contract with the unit. It outlines the policy, the reason for it , and at the end, each will sign stating that they have read the information, understand it, and agree to comply with the plan.

# How will we monitor our progress?

- At risk infants will be identified on admit, an order written, and their bed labeled with an OWL ICON.
- Once a shift the Charge nurse will walk through the unit at a previously undetermined time and document the actual saturation reading on each at risk infant
- If the infant is not within parameters she will document why
- The data will be collected and compliance reported to the NICU staff weekly.

# Compliance?

- Saturations within the desired range-initiated in the delivery room
- Minimize abrupt Fio<sub>2</sub> changes
- Prevent large swings in the O<sub>2</sub> saturations
- Avoid periods of O<sub>2</sub> saturation greater than 95%.



# Goal

- Compliance at least 80% of the time.

# How long do we follow them?

- Saturations will be documented each shift as long as the infant is oxygen or ventilator dependent, and weighs 500-1500 gms.
- After 1500 gms we will continue to monitor the infant for ROP, need for surgery, time on ventilator, time in oxygen, and length of stay.

# After we reach 80% compliance

- We start collecting data on all of our long term goals
- Each year we will compare them to our baseline year.

# Saturation Parameters will vary in other groups

- PPHN
- ECMO
- CDH
- Term infants
- The NNP's will order specific oxygen saturation parameters for each infant
- If the infant is an OWL candidate an order will be written to initiate this protocol, but remember to initiate saturation targeting at delivery if the baby is 1500gms or less.

# Chow study

## Results:

- Decreased ROP 3 and 4 from 12.5% (1997) to 2.5% (2001)
- Decrease need for laser surgery from 4.5% (1997) to 0 in 1999-2001.
- Compared results to Vermont Oxford Network data(430 NICU's)

- **The following slide shows the studies results compared to VON data. It compares the rate of Stage 3 and 4 ROP.**

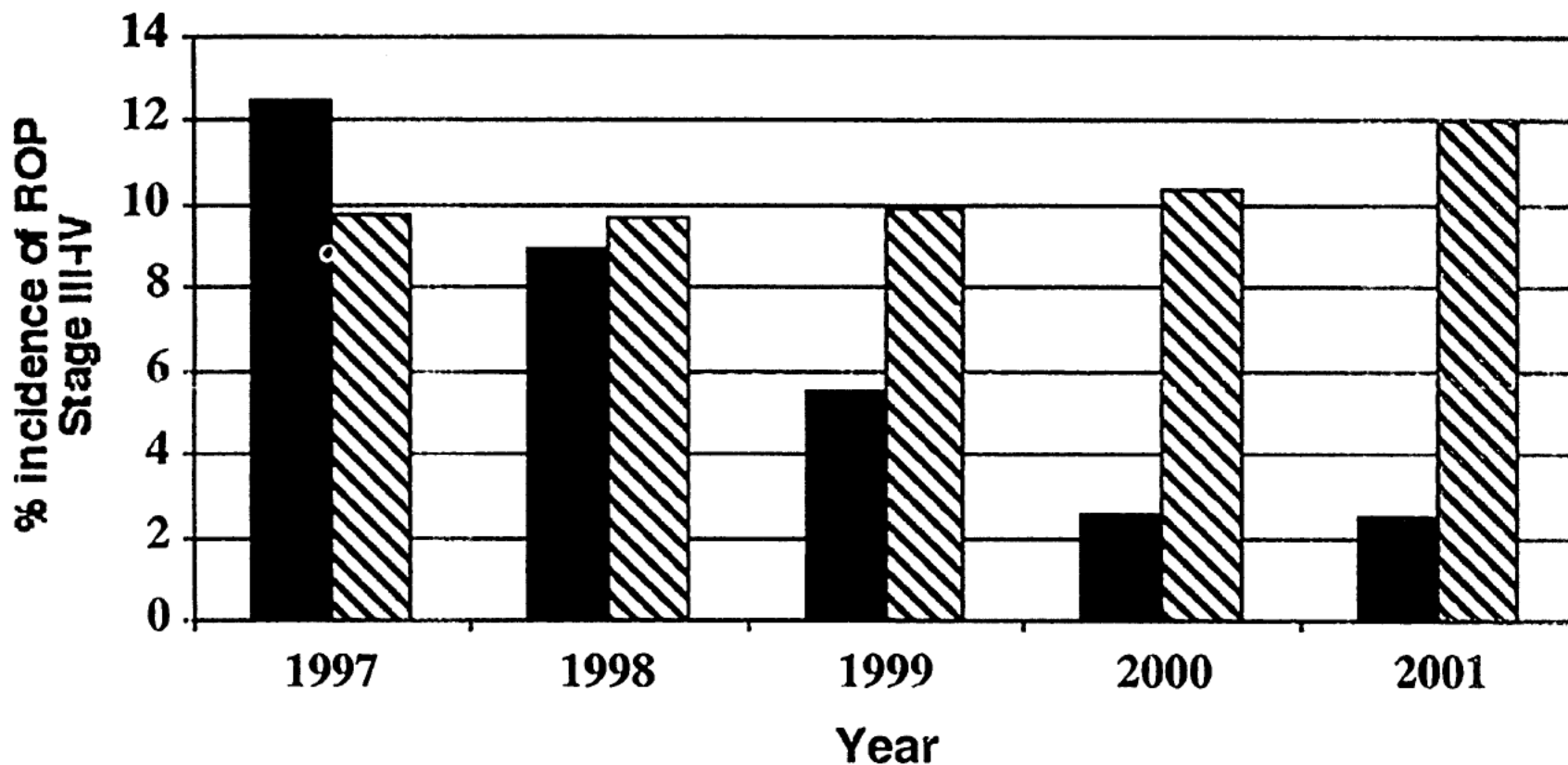
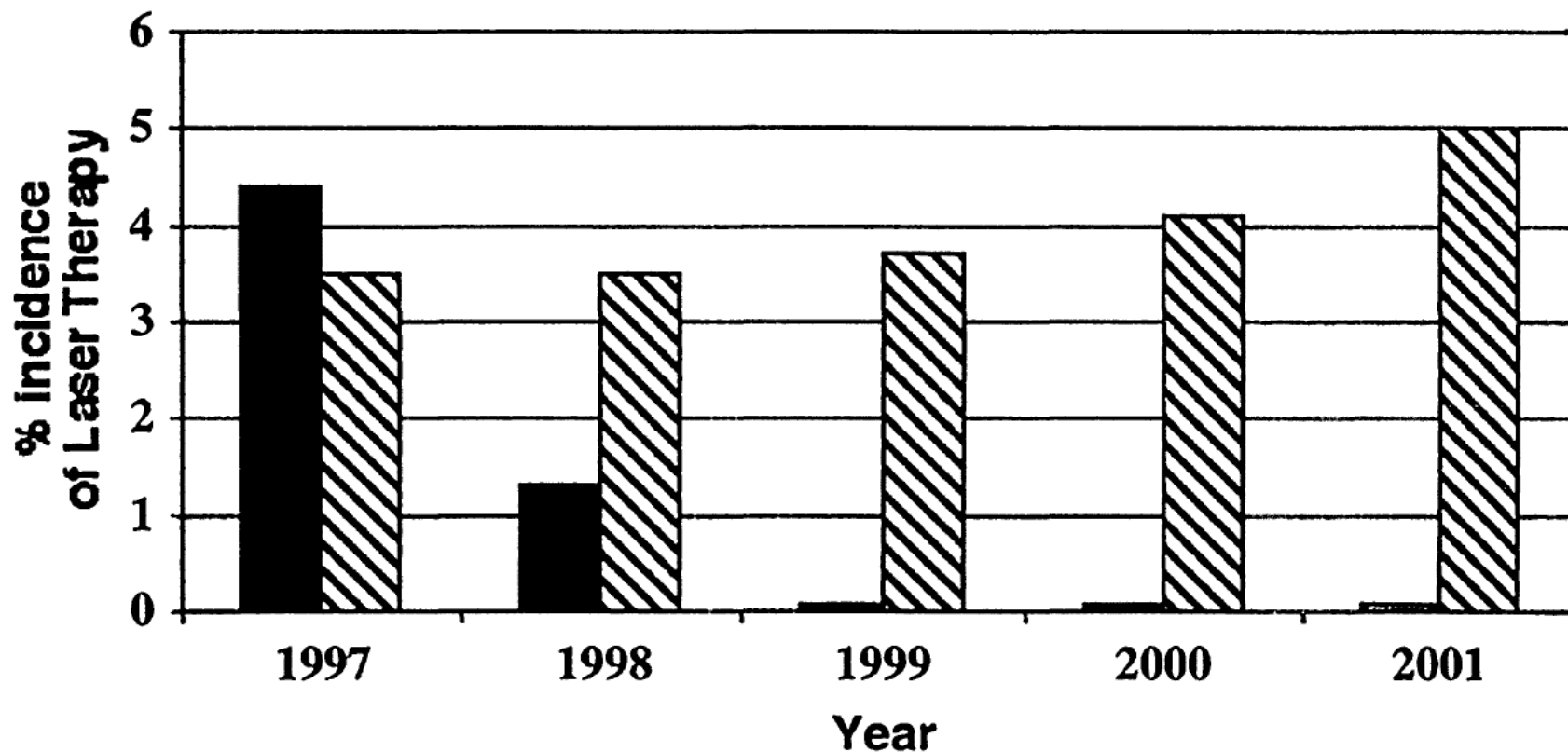


Fig 2. Incidence of ROP stages 3 to 4 for infants with birth weight of 500 to 1500 g at CSMC (■) and VON (▨) for the years 1997 to 2001. (Rates are calculated as described in "Methods.")

- **The next slide shows the same comparison but of Lazer/Cryosurgery.**





**Fig 5.** Incidence of ROP laser therapy for infants with birth weight of 500 to 1500 g and born at CSMC (■) and in the VON (▨) for 1997 to 2001.

# What did we find at OCF?

- From 8/01 to 8/02
- 89 infants 1500gms or less
- 21 deaths/15 inborn
- 3 were short stay
- Of the remaining 65, 16 required interventional surgery (24.6%)
- 4 had stage 3 or 4 disease and did not require surgery
- 10 went home on O2(one is still here)
- 4 of those 10 required interventional surgery

# OCF compared to VON

- Our ROP Lazer/Cryo surgery rate for the year 01-02 was 24.6% as compared to the national average of 5%.
- We have a lot of work to do to improve these numbers which in turn improves the eye sight of the infants that we care for.

# Evidence

4 separate oxygen targeting studies have been completed to date. All 4 showed decreases in the degree of ROP as well as almost eliminating the need for interventional surgery.

# What do we do?

- We can be excited about the possibility of what we can do for our patients by intervening when needed to keep their oxygen saturations at levels that minimize their risk of ROP.

# The CONTRACT

- This is an explanation of what we are targeting, when to make changes and when to notify the MD/NNP of significant changes in the need for O2.
- It is an **NICU policy**.

# **OXYGEN WITH LOVE WORKSHEET**

Name \_\_\_\_\_

Clinic Number \_\_\_\_\_

Gestational Age \_\_\_\_\_

Birth Weight \_\_\_\_\_

Birth Date \_\_\_\_\_

Admit Weight \_\_\_\_\_

Admit Age \_\_\_\_\_

Days on the ventilator \_\_\_\_\_

Days on CPAP \_\_\_\_\_

Hospital days \_\_\_\_\_

Worst ROP \_\_\_\_\_

Surgical Intervention \_\_\_\_\_

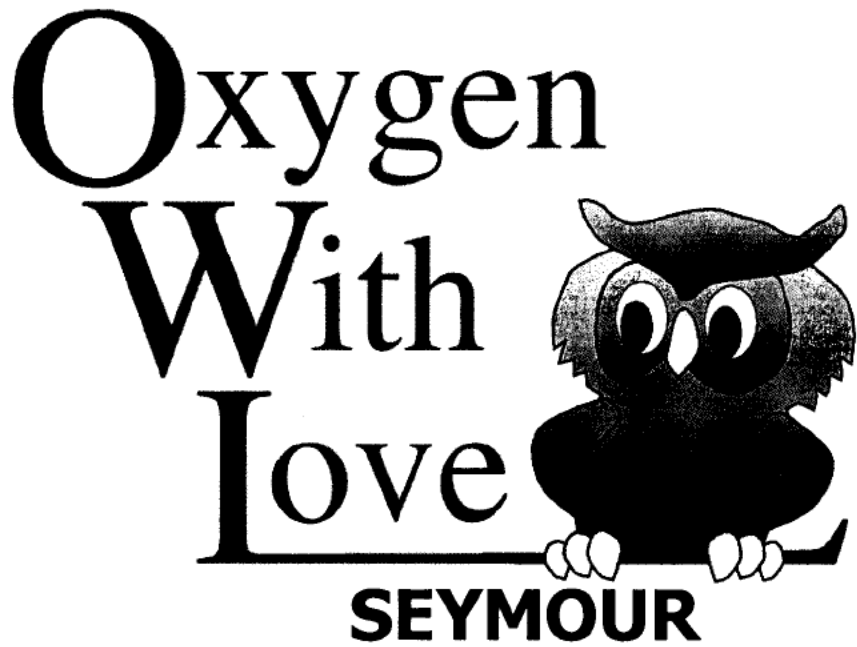
Birth Place \_\_\_\_\_

Apgars \_\_\_\_\_

Steroids \_\_\_\_\_

Comments \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_





## **OXYGEN WITH LOVE**

### **Management of Oxygen Concentrations and Oxygen Saturations in the VLBW Infant In the OCF NICU**

**OBJECTIVE:** To avoid hyperoxia and high/low swings in oxygen saturations in the Very Low Birth Weight (VLBW) infant. (<1500g)

1. Initiate the protocol with the admission of each infant weighing 1500 gms or less.
2. No VLBW infant will be subject at any time to repeated swings in the amount of O<sub>2</sub> being delivered in response to the saturation readings outside the acceptable range.

#### **STATEMENTS OF PRACTICE:**

- a. Oxygen should be used as a drug with potentially toxic side effects. Too much can be as damaging as too little. There is no evidence that VLBW infants need saturations in the 95-100% range and these levels are potentially dangerous. It is also significant that repeatedly alternating episodes of hypoxia and hyperoxia can cause significant alterations in the vascular tone of VLBW infants

- b. Saturation alarms: be sure to make the appropriate response in dealing with an alarm
  - Is the pulse wave appropriate?
  - Is there artifact interference?
  - Assess the infant's respiratory effort and heart rate.
  - How low and how long? Has the saturation been down low enough for long enough to warrant an increase in  $F_{iO_2}$
- c. Alarm settings: The alarms should be set at 80-95. They should be changed only with an order. The alarms should not be disabled at any time
- d. Weaning  $F_{iO_2}$  and oxygen saturation levels:
  - Wean by 2-5% at a time if the saturation is on the high side. (>93%) Return to baseline within 10 minutes.
  - Weaning should be done as fast as necessary to avoid extended periods of Hyperoxia. (But not faster than 2-5% at a time)
  - Avoid weaning in increments >5% at a time; this could result in hypoxia, which would then lead to increasing the  $F_{iO_2}$  again.
- e. Increasing the  $F_{iO_2}$ :
  - When an increase is needed in the  $F_{iO_2}$ , the person making the change should stay with the infant until it has reached a stable saturation level.
  - An MD/NNP must be notified for any sustained need for an increase in  $F_{iO_2}$  greater than 10% from the previously stable  $F_{iO_2}$ .
- f. During and after procedures:
  - $F_{iO_2}$  should not be routinely increased prior to a procedure. Respond appropriately to the needs of

the infant based on the saturations as well as the length and type of procedure.

- Monitor the infant after suctioning the ETT until the baby returns to a stable baseline.
  - Consider that other settings (rate, PIP, CDP) may need to be changed for a prolonged procedure.
- f. Spontaneous oxygen desaturations:
- The Nurse and the Respiratory therapist should work together to assess both the infant and the ventilator and/or oxygen delivery systems.
  - Decide together whether an MD/NNP needs to be notified for intervention other than increased FIO<sub>2</sub>
- g. Apnea:
- Choose the appropriate response based on the exam of the infant; increased respiratory rate, increase the approved parameters, use tactile stimulation, or in severe cases manual ventilation.
  - If the baby does not return to the previously stable baseline (same FIO<sub>2</sub>) within 10 minutes, the MD/NNP should be notified.

## **SUMMARY:**

**BASELINE FOR THE VLBW INFANT (birth weight <1500 g)**

1. Set oxygen saturation monitor alarm limits at 80-95%.
2. Do not "TITRATE" FiO<sub>2</sub> (risky to create extreme ups and downs in the infants saturations.) Allow baby to fluctuate within the desired saturation parameters, making small movements up and down on FiO<sub>2</sub> as needed.
3. Based on assessment wean actively by 2-5% for saturations on the high side of parameters
4. Never increase the FiO<sub>2</sub> without first assessing the baby.

5. If the need for increased FiO<sub>2</sub> is sustained, the MD/NNP must be notified.
6. Document saturation levels and oxygen requirements clearly (as per unit policy)
7. When altering the oxygen being delivered stay with the infant until the saturations have stabilized within an acceptable range

---

Sign below and return to PCC'S or James O'Connor

**OXYGEN WITH LOVE** (management of inspired oxygen concentrations and saturations in the VLBW infant)

I certify that I have read and understand the above practice plan, and I agree to follow this protocol when working with VLBW infants in the Ochsner Clinic Foundation NICU.

---

PRINT NAME

---

SIGNATURE

---

DATE

Adapted form the policy prepared by Augusto Sola, MD, Published in *Pediatrics* (February 2003);111:339

## Potentially Better Practice Concept: Worksheet

**Topic Area:** Respiratory

**Potentially Better Practice:** Oxygen Targeting to avoid hyperoxia in infants at risk for retinopathy of prematurity and chronic lung disease.

**Rationale:** Controlled reduced oxygen dosing may decrease the incidence of retinopathy of prematurity and chronic lung disease.

### Classifying the strength and quality of the evidence:

1. Strong evidence from at least one systemic review of multiple well designed randomized controlled trials.
2. Evidence from a well-designed non-experimental study preferably from more than one center or research group.
3. Opinions of respected authorities, based on clinical evidence, descriptive studies or reports of expert committees.

### Pertinent References:

1. The STOP-ROP Multicenter Study Group, *Pediatric*, 2000: 105: 295. Supplemental Therapeutic Oxygen for Prethreshold Retinopathy of Prematurity (STOP-ROP), Randomized, Controlled Trial, I Primary Outcomes
2. Horbar, Clark, and Lucey, *Pediatrics*: 1980:66:848: The Newborn Oxygram: Automated Processing of Transcutaneous Data
3. Long, Philip, and Lucey: *Pediatrics*, 1980:65:203, Excessive Handling as a Cause of Hypoxemia
4. Chow et al, *Pediatrics*: 2003, 111:339. Can Changes in Clinical Practice decrease the Incidence of Severe Retinopathy of Prematurity in Very Low Birth Weight Infants.
5. Tin et al, *Arch Dis Child, Fetal Neonatal Ed*: 2001: 84:F106. Pulse Oximetry, severe Retinopathy, and outcome at one year in babies of less than 28 weeks gestation
6. Schulze et al, *J Pediatrics*:1995: 126: 777. Effect of the arterial oxygenation level on cardiac output, oxygen extraction, and oxygen consumption in low birth weight infants receiving mechanical ventilation.

7. Askie et al, Pediatric Research: 2002; 51:378A The effect of differing oxygen saturation targeting ranges on long term growth and development of extremely preterm, oxygen dependent infants: The Boost Trial
8. ReLi Study: Unpublished work product of NICUQ 2000 ReLi Group.

**Potential Benefits:**

1. Reduction in ROP rates (measured by decreased Stage 3 and 4 disease, as well as decreased need for interventional surgery).
2. Reduction in Chronic lung disease (measured by decreased need for oxygen at 36 weeks PMA, decreased length of days in oxygen, and decreased length of hospital stay).

**Potential Risks and costs:**

1. Unrecognized system problems related to change in practice
  - Resistance to change-large effect on general practice techniques
  - Need for education on the varying requirements of Oxygen levels for the varying types of infants
  - False positives and response times
  - O2 Saturation Monitoring devices
2. Potential for poor growth, feeding intolerance, decreased physical activity, and decreased alertness in infants with established lung disease
3. Change in sleep patterns
3. Increased frequency of alarm rates leading to decreased compliance from staff.
4. No increase in costs, monitoring system already in place.
5. Increased mortality or morbidity from hypoxia.

**How does the concept become operational?:**

- Review the important parameters for oxygen saturation management for at risk babies.
- Develop goals for parameters of oxygen saturations.

- Establish an ICON to identify each infant at risk (**Oxygen With**



Love)

- Develop a tool for monitoring compliance
- Educate the staff
- Do random walk through every 12 hours and document saturation level on at risk infants.
- Initiate plan and study compliance rate on a monthly basis

**Person submitting this information:**

Name: Margaret A. Thibodeaux

Institution: Ochsner Clinic Foundation





### Oxygen With Love Worksheet-1st year

	NAME	CL#	GEST	Birth Wt	Birth Dt	Ad Dt	Ad Wt	Ad. age	Vent	CPAP	O2	H. days	worst ROP	Surg	Birth PL	Apgars	steroids	Misc
48																		
49																		
50																		
51																		
52																		
53																		
54																		
56																		
57																		
58																		
59																		
63																		
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75																		
76																		
77																		
78																		
79																		
55																		
60																		
61																		
72																		
62																		
65																		
69																		
80																		

0 0

### Oxygen With Love Worksheet-2nd Year

	NAME	CL#	GEST	Birth Wt	Birth Dt	Ad Dt	Ad Wt	Ad. age	Vent	CPAP	O2	H. days	worst ROP	Surg	Birth PL	Apgars	steroids	Misc
1																		
1																		
2																		
3																		
4																		
5																		





## **CONTRACT SUMMARY:**

### **BASELINE FOR THE VLBW INFANT (birth weight 500-1500 g)**

1. Set oxygen saturation monitor alarm limits at 80-95%.
  2. Goal of saturations to be 85-93%.
  3. Do not "TITRATE" FiO<sub>2</sub> (risky to create extreme ups and downs in the infant's saturations.) Allow baby to fluctuate within the desired saturation parameters, making small movements up and down on FiO<sub>2</sub> as needed.
  
  4. Based on assessment, wean actively by 2-5% for saturations on the high side of parameters
  5. Never increase the FiO<sub>2</sub> without first assessing the baby.
  6. If the need for increased FiO<sub>2</sub> is sustained, the MD/NNP must be notified.
  7. Document saturation levels and oxygen requirements clearly (as per unit policy)
- When altering the oxygen being delivered stay with the infant until the saturations have stabilized within an acceptable range



## **6. Review of Oximeter Downloads**

- **Through Feb 06 we were 11% > 96%, and then 9.3% for first 14 days and 20% and 12% after 14 days - since then we are higher especially for first 14 days. After 14 days we are not as bad. Need to try a little harder in first 14 days**
- **At present we are somewhat higher for SpO2 > 96% at 17%, for < 84% at 7%**
- **There has been a slow creep of > 96% over the past year**

## Taken from DSMC Report 2005 - Corrected RTI Analyses

Further analyses including only infants on Oxygen at all 3 data points for a given day ( first 14 days of life)

( Subsequent RTI Analyses - Dec 5, 2005 )

<b>Range Assigned</b>	<b>High target (91-95)</b>	<b>Low target (85-89)</b>
<b>&lt; 84%</b>	<b>6.2%</b>	<b>13.5%</b>
<b>&gt; 96%</b>	<b>14.1%</b>	<b>9.4%</b>

# **Oxygen Administration Guidelines**

## **Adapted from OWL**

- **See Statements of Practice Section** of this incredibly informative manual!!

**SUPPORT Manual of Operations**

**Revised June 27, 2005**

**Updated January 25, 2006**

**Revised March 7, 2006**

**Revised March 23, 2006**

**Appendix F**



# **Oxygen Administration Guidelines**

## **Adapted from OWL**

**OBJECTIVE: To avoid hyperoxia and high/low swings in oxygen saturations in the infant <28 wk GA while receiving supplemental oxygen.**

- 1. Initiate the protocol with the admission of each infant with GA less than 28 weeks at birth.**
- 2. No infant will be subject at any time to repeated swings in the amount of O<sub>2</sub> being delivered in response to the saturation readings outside the acceptable range.**

# STATEMENTS OF PRACTICE: OWL Protocol

- a. Oxygen is a drug with potentially toxic side effects. Too much can be
- as damaging as too little. There is no evidence that <28 week infants need saturations in the 95-100% range (while receiving supplemental
  - oxygen) and these levels are potentially dangerous. Alternating episodes of hypoxia and hyperoxia can cause significant alterations in the vascular tone of <28 week infants.

# STATEMENTS OF PRACTICE: OWL Protocol

## b. Saturation alarms:

### 1. Assess the validity of the alarm:

- Is the pulse wave appropriate?
- Is there artifact interference?
- Has the saturation been down low enough for long enough to warrant an increase in FiO<sub>2</sub>?
- (see Desaturation Management Guidelines)

# STATEMENTS OF PRACTICE: OWL Protocol

- c. Alarm settings: The alarms should be set at 84% and 96%. Note that
- Masimo alarms go off at the set value. Thus, these alarm settings are equivalent to alarms commonly set at 85% and 95% on other pulse oximeters. *The alarms should not be disabled at any time while receiving supplemental oxygen*

# STATEMENTS OF PRACTICE: OWL Protocol

d. Weaning FiO<sub>2</sub> and oxygen saturation levels:

- Wean by 2-5% if the saturation is high (>95%).
- Weaning should be done as fast as necessary to avoid extended periods of hyperoxia. (But not faster than 2-5% at a time)
- Avoid weaning in increments >5% at a time; this could result in hypoxia, which would then lead to increasing the FiO<sub>2</sub> again.

# STATEMENTS OF PRACTICE: OWL Protocol

- e. Increasing the FiO<sub>2</sub> and saturation levels:
- Increase the FiO<sub>2</sub> by 2-5% if the saturation is low (<85%).
  - When an increase is needed in the FiO<sub>2</sub>, the person making the change should stay with the infant until the infant has reached a stable saturation level.
  - MD/NNP must be notified for any sustained need for an increase in FiO<sub>2</sub> greater than 10% from the previously stable FiO<sub>2</sub>.

# STATEMENTS OF PRACTICE: OWL Protocol

## f. During and after procedures:

- FiO<sub>2</sub> should not be routinely increased prior to a procedure.
- Individual infants may require modest increases (5-10%) if they tolerate handling poorly. Respond appropriately to the needs of the infant based on the saturations as well as the length and type of procedure.
- Monitor the infant after suctioning the ETT until the baby
- returns to their previously stable baseline.
- Consider that other settings (rate, PIP, PEEP) may need to be changed for a prolonged procedure.

# STATEMENTS OF PRACTICE: OWL Protocol

## g. Spontaneous oxygen desaturations:

- Assess both the infant and the ventilator and/or oxygen delivery systems.

## h. Apnea:

- Choose the appropriate response based on assessment of the infant; increase respiratory rate, increase the approved parameters, tactile stimulation, or in severe cases manual ventilation.
- If the baby does not return to the previously stable baseline (same FiO<sub>2</sub>) within 10 minutes, the MD/NNP should be notified.



**SUPPORT  
SATURATION RANGE  
GOAL 85-95%  
IF BABY IS OUT OF RANGE**

<b>SaO<sub>2</sub> is</b>	<b>Wait</b>	<b>Adjust FiO<sub>2</sub> by</b>
80-85 or 95-99	1 min.	2%
70-80 or 100	1 min.	2-5%
<70	30 sec.	5%

# **Oxygen Administration Guidelines**

## **Adapted from OWL**

- 1. Set oxygen saturation monitor alarm limits at 84 and 96%.**
- 2. Allow baby to fluctuate within the desired saturation parameters, making small movements up and down on FiO<sub>2</sub> as needed.**
- 3. Based on assessment, wean actively by 2-5% for saturations on the high side of parameters.**
- 4. Never increase the FiO<sub>2</sub> without first assessing the baby.**

# **Oxygen Administration Guidelines**

## **Adapted from OWL**

- 5. If the need for increased  $FiO_2$  is sustained, the MD/NNP should be notified.**
- 6. Document saturation levels and oxygen requirements clearly (as per unit policy).**
- 7. When altering the oxygen being delivered stay with the infant until the saturations have stabilized within an acceptable range.**

**From:** Zaterka-Baxter, Kristin  
**To:** [StatEpi] Neonatal Statisticians; [StatEpi] Neonatal Programmers  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Emory Support monitoring trip  
**Date:** Monday, October 22, 2007 9:05:34 AM

---

Hi all,  
I'll be leaving for a Support study monitoring trip today at about 1:30 and will be gone until Wednesday evening. I will be in Atlanta at Emory and should have email access. Please call my cell if you need anything at all (919-414 (b) (6)) or contact Meg Cunningham while I'm away ([mcunningham@rti.org](mailto:mcunningham@rti.org); X27837).

Thanks,  
Kris

Kris Zaterka-Baxter  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
[kzaterka@rti.org](mailto:kzaterka@rti.org)

**From:** [Gantz, Marie](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Cc:** [Das, Abhik](#)  
**Subject:** Missing SUPPORT outcomes  
**Date:** Friday, October 19, 2007 1:24:37 PM  
**Attachments:** [Infants with missing outcomes 10-18-07.xls](#)

---

Hi Rose,

Attached is the list of infants missing SUPPORT outcomes this month.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
[mgantz@rti.org](mailto:mgantz@rti.org)  
828-254-6255

CENTER NETWORK ROP\_message

3 (b) (6) Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
3 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
4 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.  
5 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
5 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
5 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
6 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
9 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
9 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
11 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
11 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
12 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
12 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.  
13 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
13 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
13 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
15 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
16 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 Infant died, however 50 weeks PMA was reached and final ROP exam status has not been reported on the SUPP10 for either eye. Please confirm that all ROP exams have been entered.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
19 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
19 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
22 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
22 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
23 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
24 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

24  
24  
26

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

**From:** [Einer, Neil](#)  
**To:** [Zaterka-Baxter, Kristin](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Rich, Wade](#)  
**Date:** Tuesday, October 16, 2007 6:34:04 AM  
**Attachments:** [SUPPORT Subcommittee Report Meeting Oct15 07.ppt](#)

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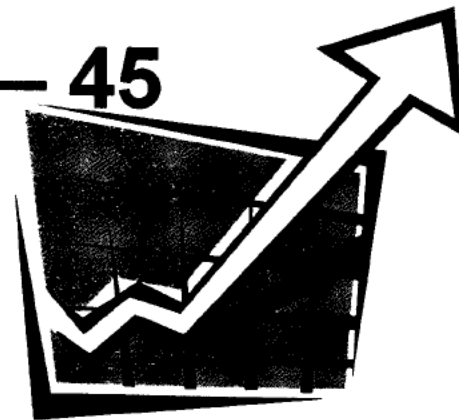
Hi Kris  
Here is my report  
Thanks  
Neil



# **SUPPORT Subcommittee Report – Meeting October 15 2007**

## **1. Review of Enrollments to date:**

- As of most current information - 815 infants enrolled representing 62% of total**
- This rate has been some what improved- averaging 35 month over past 6 months**
- May is the best month to date – 45 enrolled!!**



# **SUPPORT Subcommittee**

## **2. Review of Serious Adverse Events**

- All such events apart from air leaks in the first 14 days are occurring at less than the baseline rates, and the air leaks are only marginally increased for the larger strata by 0.3%.**
- The incidence of compressions and pulmonary hemorrhages down most**
- These are NOT between randomized groups!!**

### 3. Review Protocol Violations



#### **Commonest:**

- 1. Failure to use Study Oximeter when required**
  - 2. Use of HiFlow NC**
- Newer centers not using study oximeters when indicated**
  - This accounts for largest category Centers 24, 25 26 range from 19% to 38%.**
  - The next highest is 15 and 13% and all others are < 10%**

# Protocol Deviations

- **At last meeting we had agreed that > 25% perhaps as a high target and target review at time of site review**
- **Center 25 uses HiFlow NC and this accounts for most of their deviations = 27% of 62%.**
- **Encourage Centers to review their experience**



## **4. ROP Outcomes**

**Reviewed coding infants as Permanently missing if no results available after 55 weeks PMA and at Follow-up**

**See Tech Memo SUPP 11**

**Need to encourage follow-up – Post cards, phone calls, monthly RTI reminders, calls to ophthal, use of social workers**

**Try to get as many ROP final diagnosis before 55 weeks!!**

## **5. Definition of Airleak**

- **The Subcommittee met and decided that moving forward we would provide as Air Leak the following:**
- **Pneumothorax**
- **PIE**
- **Pneumopericardium**
- **Definitions in 5. Chapter 13, Serious Adverse Experience, Form SUPP08 (page 13-1 and 13-2). Revised form SUPP08 enclosed (version date 10/15/07) 13.2 Adverse Event Form (SUPP08)**

## **6. Review of Oximeter Downloads**

- **Through Feb 06 we were 11% > 96%, and then 9.3% for first 14 days and 20% and 12% after 14 days - since then we are higher especially for first 14 days. After 14 days we are not as bad. Need to try a little harder in first 14 days**
- **At present we are somewhat higher for SpO2 > 96% at 17%, for < 84% at 7%**
- **There has been a slow creep of > 96% over the past year**

# Taken from DSMC Report 2005 - Corrected RTI Analyses

Further analyses including only infants on Oxygen at all 3 data points for a given day ( first 14 days of life)

( Subsequent RTI Analyses - Dec 5, 2005 )

<b>Range Assigned</b>	<b>High target (91-95)</b>	<b>Low target (85-89)</b>
<b>&lt; 84%</b>	<b>6.2%</b>	<b>13.5%</b>
<b>&gt; 96%</b>	<b>14.1%</b>	<b>9.4%</b>



# **Oxygen Administration Guidelines**

## **Adapted from OWL**

- **See Statements of Practice Section** of this incredibly informative manual!!

**SUPPORT Manual of Operations**

**Revised June 27, 2005**

**Updated January 25, 2006**

**Revised March 7, 2006**

**Revised March 23, 2006**

**Appendix F**

# **Oxygen Administration Guidelines**

## **Adapted from OWL**

**OBJECTIVE: To avoid hyperoxia and high/low swings in oxygen saturations in the infant <28 wk GA while receiving supplemental oxygen.**

- 1. Initiate the protocol with the admission of each infant with GA less than 28 weeks at birth.**
- 2. No infant will be subject at any time to repeated swings in the amount of O<sub>2</sub> being delivered in response to the saturation readings outside the acceptable range.**

**SUPPORT  
SATURATION RANGE  
GOAL 85-95%  
IF BABY IS OUT OF RANGE**

<b>SaO<sub>2</sub> is</b>	<b>Wait</b>	<b>Adjust FiO<sub>2</sub> by</b>
80-85 or 95-99	1 min.	2%
70-80 or 100	1 min.	2-5%
<70	30 sec.	5%

# **Oxygen Administration Guidelines**

## **Adapted from OWL**

- 1. Set oxygen saturation monitor alarm limits at 84 and 96%.**
- 2. Allow baby to fluctuate within the desired saturation parameters, making small movements up and down on FiO<sub>2</sub> as needed.**
- 3. Based on assessment, wean actively by 2-5% for saturations on the high side of parameters.**
- 4. Never increase the FiO<sub>2</sub> without first assessing the baby.**

# **Oxygen Administration Guidelines**

## **Adapted from OWL**

- 5. If the need for increased FiO<sub>2</sub> is sustained, the MD/NNP should be notified.**
- 6. Document saturation levels and oxygen requirements clearly (as per unit policy).**
- 7. When altering the oxygen being delivered stay with the infant until the saturations have stabilized within an acceptable range.**

## 7. MRI Secondary – S Hintz



- Enrollment/MRI central reading update
  - 295 patients have been enrolled
    - 35-42 week neuroimaging *including MRI* is complete for ~214 patients
      - 23 patients died before late neuroimaging
- MRI central reading: approximately 150 have been read or are in process with central reader.

## **8. Breathing Outcomes: Tim Stevens**

**Enrollment = 456 consented by Sept 28, 2007,  
represents almost 60% of SUPPORT**

**From April 1 – Sept 26 = 177 additional patients  
consented**

**Questionnaire follow-up good - 95% completed  
at 18-22 months for 121 infants**

**58% of parents of infants in 18-22 month  
window have completed the full series of 4  
questionnaires**

**69% have full completion among infants > 18-  
22 months**

# **SUPPORT Subcommittee Secondaries**

## **9. Antenatal Consent – W Rich**

- 7 sites completed**
- 823 Women have been screened and delivered in the study window since study began**

## **10. Growth – 383 enrolled**

**Will obtain a more detailed report at next Meeting**



# Individual Patient Meta Analysis for SpO2 Targets for ELBW



- Lisa Askie submitted grant for funding
- We have responded to critiques
- I am confident that this will go ahead
- We are the lead trial and will be complete probably 2 years before any other
- UK just began enrolling 22 months after approval



# **SUPPORT Subcommittee SUMMARY**



- **Study now > 60% complete**
- **At 35/month, last 6 month level, we will need 15 more months**
- **Secondaries are enrolling at reasonable rates and will be very informative**
- **We should target PAS 2009 – but this is very optimistic at current rates as we will need at least 5 months after last infant is enrolled, probably more for ROP!!**

# **SUPPORT Subcommittee SUMMARY**

- **Thanks to all the Coordinators for their incredible work for this trial!!**
- **My personal thanks to many of you who have been so kind and thoughtful during the past months**
- **Safe Travels!**



**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Kris Zaterka-Baxter  
**Subject:** Re: SUPPORT 04-(b) (6)  
**Date:** Friday, October 12, 2007 3:16:28 PM

---

Kris and Rose,

They took this baby off the vent (b) (6) and he died at 23:00. It was not study related. He had a left and right cerebellar bleed. MedWatch is pending.

Thanks,

Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-404B  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206 (b) (6)

**From:** Neil Finer  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; Michele Walsh; Bradley Yoder; Roger Faix; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Nancy Newman; Gantz, Marie; Poole, W. Kenneth  
**Cc:** Petrie, Carolyn; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT materials  
**Date:** Friday, October 12, 2007 1:54:35 AM  
**Attachments:** All Centers pct in range through Sep07.rtf

---

More Goodies from Marie – Oximeter data  
Neil

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**From:** Neil Finer  
**Sent:** Thursday, October 11, 2007 2:55 PM  
**To:** Neil Finer; 'Higgins, Rosemary (NIH/NICHD) [E]'; 'Wally Carlo, M.D.'; 'Michele Walsh'; 'Bradley Yoder'; 'Roger Faix'; 'Abbot Laptook'; 'kurt.schibler@cchmc.org'; 'Das, Abhik'; 'Nancy Newman'; 'Gantz, Marie'; 'Poole, W. Kenneth'  
**Cc:** 'Petrie, Carolyn'; 'Zaterka-Baxter, Kristin'  
**Subject:** RE: SUPPORT materials

Here are Updates for the Breathing Outcomes and MRI secondaries.  
Safe travels  
Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

---

**From:** Neil Finer  
**Sent:** Thursday, October 11, 2007 9:11 AM  
**To:** Neil Finer; 'Higgins, Rosemary (NIH/NICHD) [E]'; 'Wally Carlo, M.D.'; 'Michele Walsh'; 'Bradley Yoder'; 'Roger Faix'; 'Abbot Laptook'; 'kurt.schibler@cchmc.org'; 'Das, Abhik'; 'Nancy Newman'; 'Gantz, Marie'; 'Poole, W. Kenneth'  
**Cc:** 'Petrie, Carolyn'; 'Zaterka-Baxter, Kristin'  
**Subject:** FW: SUPPORT materials

Hi Everyone  
Here is an agenda for next weeks meeting, and the updates from Marie ( Thanks Marie)

#### Agenda - Support Subcommittee Meeting / Steering Committee Meeting

1. Review Enrollments to date, adverse events, and protocol deviations (Currently 815 per August > 60% of total, slightly >2/center/mo for 2007)
1. Discuss Eye follow-up and the 55 day rule
4. Review status of Secondaries-  
MRI

Breathing Outcomes  
Nutrition  
Antenatal consent

5. Discuss Prospective Meta Analysis

6. Other Issues

Please let me know if there are additional issues you would like added to the agenda

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

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**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
Jul07-Sep07	Days of life 1-14	All centers	11419	32.8	7.6	75.3	17.1
		Center 3	861	37.8	7.2	67.3	25.5
		Center 5	1495	21.0	5.5	61.2	33.3
		Center 11	1055	31.7	9.9	75.5	14.7
		Center 12	890	21.8	10.5	77.6	11.8
		Center 14	634	48.1	4.7	85.0	10.2
		Center 16	1008	37.0	8.1	81.5	10.4
		Center 23	1895	35.2	5.4	72.1	22.5
		Center 25	1471	33.6	6.8	81.9	11.3
	Day 15 to 36 wks	All centers	40117	25.0	11.5	65.4	23.1
		Center 3	5731	23.9	17.7	60.5	21.7
		Center 5	6272	24.3	7.7	64.5	27.8
		Center 9 site A	2293	22.3	13.7	63.5	22.8
		Center 9 site B	3389	29.8	13.3	71.8	14.9
		Center 11	3262	28.3	10.2	64.6	25.2
		Center 12	4373	23.3	10.4	65.0	24.6
		Center 14	692	37.3	7.2	71.8	21.0
		Center 16	889	21.8	14.3	67.5	18.2
		Center 23	4442	17.2	9.4	55.2	35.3
		Center 25	4256	26.8	10.9	71.8	17.3
Apr07-Jun07	Days of life 1-14	All centers	15386	34.1	8.9	76.6	14.5
		Center 3	1553	27.3	14.5	74.4	11.1
		Center 4	822	45.7	7.0	84.2	8.9
		Center 5	1225	31.4	9.0	69.9	21.1
		Center 9 site A	1061	31.1	11.6	74.2	14.3
		Center 9 site B	1048	53.7	5.8	87.1	7.1
		Center 11	1493	29.0	10.3	69.5	20.1
		Center 12	1773	30.4	9.1	73.6	17.3
		Center 14	1382	41.5	7.0	80.3	12.8

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

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**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
		Center 16	1428	40.5	8.0	86.1	5.8
		Center 23	701	25.9	5.2	76.1	18.8
		Center 26	1127	18.3	6.9	69.7	23.4
	Day 15 to 36 wks	All centers	51768	28.5	12.2	66.0	21.8
		Center 3	4261	23.1	21.6	61.5	16.9
		Center 4	2571	23.9	13.0	71.1	15.9
		Center 5	5156	28.1	14.7	64.9	20.4
		Center 9 site A	2392	21.3	14.4	64.9	20.8
		Center 9 site B	3605	43.6	12.1	77.4	10.5
		Center 11	3740	22.4	10.6	56.9	32.6
		Center 12	6509	25.2	9.5	55.9	34.6
		Center 13	3165	26.9	12.7	71.1	16.2
		Center 14	8919	30.7	12.6	71.5	16.0
		Center 15	574	34.8	9.1	70.2	20.7
		Center 16	1538	47.4	5.7	84.9	9.4
		Center 23	2897	21.1	6.2	58.9	35.0
		Center 26	2014	27.8	7.7	57.4	34.9
Jan07-Mar07	Days of life 1-14	All centers	16572	35.4	8.4	78.3	13.3
		Center 3	1035	31.2	11.0	73.6	15.4
		Center 4	1363	34.8	7.2	82.1	10.6
		Center 5	824	33.6	11.3	68.9	19.7
		Center 11	1300	27.6	9.0	74.5	16.5
		Center 12	996	35.1	5.4	79.4	15.2
		Center 13	1265	34.9	4.7	81.3	14.0
		Center 14	2049	36.4	7.7	84.2	8.1
		Center 15	1259	33.7	7.2	78.6	14.2
		Center 16	2259	45.2	9.8	81.0	9.2
		Center 23	906	35.3	6.1	72.8	21.1
		Center 24	1008	45.0	6.8	75.8	17.4
	Day 15 to 36 wks	All centers	52749	28.0	12.3	68.9	18.7

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period



**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
		Center 3	4656	27.1	18.0	62.3	19.6
		Center 4	3884	30.6	9.5	73.9	16.6
		Center 5	2472	29.8	16.6	62.5	21.0
		Center 9 site A	2194	20.0	14.6	61.0	24.5
		Center 11	2232	28.0	10.4	71.9	17.7
		Center 12	7802	21.2	13.5	69.0	17.5
		Center 13	4975	26.0	7.2	72.2	20.6
		Center 14	5426	31.2	12.8	75.8	11.4
		Center 15	3579	33.8	8.5	68.7	22.8
		Center 16	3096	30.8	14.3	70.3	15.4
		Center 23	2027	20.1	9.4	65.9	24.7
		Center 24	3246	21.2	17.4	62.5	20.1
Oct06-Dec06	Days of life 1-14	All centers	11290	35.1	8.2	77.7	14.1
		Center 3	667	34.5	7.9	72.2	19.9
		Center 9 site A	756	31.7	9.8	74.0	16.1
		Center 11	897	39.5	5.3	68.6	26.1
		Center 12	935	22.0	6.8	74.5	18.7
		Center 14	779	32.8	7.4	85.8	6.8
		Center 15	600	47.5	5.2	77.9	16.9
		Center 16	1830	38.5	9.0	84.3	6.7
		Center 18	1454	27.7	8.4	71.8	19.8
		Center 25	898	56.0	5.0	83.7	11.3
	Day 15 to 36 wks	All centers	38572	28.0	11.8	68.1	20.1
		Center 3	1295	26.7	14.4	63.2	22.4
		Center 4	2726	28.1	11.4	69.6	19.0
		Center 11	3266	31.3	7.1	63.0	29.9
		Center 12	3089	29.8	5.3	61.7	33.0
		Center 14	2750	30.5	8.8	71.8	19.4
		Center 16	4673	22.3	14.3	69.7	16.0
		Center 18	5389	23.3	17.9	64.8	17.3
		Center 25	6299	39.2	9.4	76.6	14.0

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
Mar06-Sept06	Days of life 1-14	All centers	21664	38.8	8.1	79.8	12.1
		Center 3	3439	45.3	7.7	81.7	10.6
		Center 4	1644	41.8	6.5	84.6	8.9
		Center 9 site A	980	37.0	9.5	72.0	18.6
		Center 11	1522	29.3	11.4	66.9	21.7
		Center 12	1942	35.8	6.8	80.1	13.1
		Center 14	2589	40.2	8.5	80.5	10.9
		Center 16	3838	42.8	7.5	85.0	7.6
		Center 18	2994	33.5	9.3	76.6	14.1
		Center 19	688	26.7	6.7	79.1	14.2
		Center 25	579	39.5	7.2	85.1	7.7
	Day 15 to 36 wks	All centers	67368	29.8	13.1	68.6	18.4
		Center 3	13699	34.1	15.1	69.5	15.3
		Center 4	4512	31.7	11.6	71.6	16.8
		Center 9 site A	3260	38.1	9.7	72.4	17.9
		Center 9 site B	1546	27.9	12.2	72.6	15.2
		Center 11	2649	28.2	14.4	59.3	26.2
		Center 12	7825	23.0	10.9	66.8	22.3
		Center 14	8846	30.0	11.8	71.4	16.8
		Center 16	9242	32.5	11.4	69.1	19.5
		Center 18	10009	23.9	16.5	66.6	16.9
Through Feb06	Days of life 1-14	All centers	26494	37.8	9.3	79.3	11.3
		Center 3	1886	28.9	14.9	77.2	7.9
		Center 8	1448	29.6	6.6	73.3	20.1
		Center 9 site A	1920	36.1	12.2	76.9	11.0
		Center 11	1947	36.9	9.3	75.6	15.1
		Center 12	1848	46.7	6.2	82.5	11.3
		Center 14	3171	38.4	8.8	83.1	8.1
		Center 16	5580	42.6	9.4	81.4	9.2

**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
		Center 18	1509	31.2	10.2	77.0	12.9
		Center 20	1860	30.8	7.5	74.1	18.4
		Center 21	958	39.1	9.0	85.3	5.6
		Center 22	3363	39.9	8.7	79.5	11.8
	Day 15 to 36 wks	All centers	136360	26.4	12.3	67.7	20.0
		Center 3	15229	19.9	17.1	64.8	18.1
		Center 4	5686	20.6	7.4	64.9	27.7
		Center 8	4802	17.3	8.5	58.1	33.4
		Center 9 site A	10780	26.7	13.5	66.6	19.8
		Center 11	10209	27.5	10.3	67.1	22.7
		Center 12	9532	33.3	10.0	72.9	17.0
		Center 14	19113	25.5	11.8	70.3	17.9
		Center 16	16900	30.8	12.3	71.7	16.0
		Center 18	11637	26.4	17.3	66.4	16.4
		Center 19	1517	29.1	8.2	72.7	19.1
		Center 20	9055	20.5	11.6	63.2	25.2
		Center 21	2450	27.4	17.8	70.3	11.9
		Center 22	17811	29.8	10.1	67.4	22.5

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu; Wade Rich  
**Cc:** Cunningham, Meg  
**Subject:** RE: SUPPORT materials  
**Date:** Thursday, October 11, 2007 6:34:34 PM  
**Attachments:** All Centers pct in range through Sep07.rtf

---

Attached is the pulse oximeter data update for SUPPORT.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, October 10, 2007 4:13 PM  
**To:** Gantz, Marie; nfiner@ucsd.edu; Wade Rich  
**Cc:** Cunningham, Meg  
**Subject:** RE: SUPPORT materials

Thanks  
Just forward them over and we can get them copied.

Rose

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Wednesday, October 10, 2007 4:11 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu; Wade Rich  
**Cc:** Cunningham, Meg  
**Subject:** RE: SUPPORT materials

I am working on the handouts right now. The enrollment, AE and protocol deviation reports will be sent to Neil this afternoon. The pulse oximeter reports will be sent either today or tomorrow.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, October 10, 2007 4:09 PM  
**To:** nfiner@ucsd.edu; Wade Rich; Gantz, Marie  
**Cc:** Cunningham, Meg  
**Subject:** SUPPORT materials

Hi,  
Do we have any handouts for the SUPPORT Subcommittee meeting?  
Thanks

Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

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**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
Jul07-Sep07	Days of life 1-14	All centers	11419	32.8	7.6	75.3	17.1
		Center 3	861	37.8	7.2	67.3	25.5
		Center 5	1495	21.0	5.5	61.2	33.3
		Center 11	1055	31.7	9.9	75.5	14.7
		Center 12	890	21.8	10.5	77.6	11.8
		Center 14	634	48.1	4.7	85.0	10.2
		Center 16	1008	37.0	8.1	81.5	10.4
		Center 23	1895	35.2	5.4	72.1	22.5
		Center 25	1471	33.6	6.8	81.9	11.3
	Day 15 to 36 wks	All centers	40117	25.0	11.5	65.4	23.1
		Center 3	5731	23.9	17.7	60.5	21.7
		Center 5	6272	24.3	7.7	64.5	27.8
		Center 9 site A	2293	22.3	13.7	63.5	22.8
		Center 9 site B	3389	29.8	13.3	71.8	14.9
		Center 11	3262	28.3	10.2	64.6	25.2
		Center 12	4373	23.3	10.4	65.0	24.6
		Center 14	692	37.3	7.2	71.8	21.0
		Center 16	889	21.8	14.3	67.5	18.2
		Center 23	4442	17.2	9.4	55.2	35.3
		Center 25	4256	26.8	10.9	71.8	17.3
Apr07-Jun07	Days of life 1-14	All centers	15386	34.1	8.9	76.6	14.5
		Center 3	1553	27.3	14.5	74.4	11.1
		Center 4	822	45.7	7.0	84.2	8.9
		Center 5	1225	31.4	9.0	69.9	21.1
		Center 9 site A	1061	31.1	11.6	74.2	14.3
		Center 9 site B	1048	53.7	5.8	87.1	7.1
		Center 11	1493	29.0	10.3	69.5	20.1
		Center 12	1773	30.4	9.1	73.6	17.3
		Center 14	1382	41.5	7.0	80.3	12.8

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
		Center 16	1428	40.5	8.0	86.1	5.8
		Center 23	701	25.9	5.2	76.1	18.8
		Center 26	1127	18.3	6.9	69.7	23.4
	Day 15 to 36 wks	All centers	51768	28.5	12.2	66.0	21.8
		Center 3	4261	23.1	21.6	61.5	16.9
		Center 4	2571	23.9	13.0	71.1	15.9
		Center 5	5156	28.1	14.7	64.9	20.4
		Center 9 site A	2392	21.3	14.4	64.9	20.8
		Center 9 site B	3605	43.6	12.1	77.4	10.5
		Center 11	3740	22.4	10.6	56.9	32.6
		Center 12	6509	25.2	9.5	55.9	34.6
		Center 13	3165	26.9	12.7	71.1	16.2
		Center 14	8919	30.7	12.6	71.5	16.0
		Center 15	574	34.8	9.1	70.2	20.7
		Center 16	1538	47.4	5.7	84.9	9.4
		Center 23	2897	21.1	6.2	58.9	35.0
		Center 26	2014	27.8	7.7	57.4	34.9
Jan07-Mar07	Days of life 1-14	All centers	16572	35.4	8.4	78.3	13.3
		Center 3	1035	31.2	11.0	73.6	15.4
		Center 4	1363	34.8	7.2	82.1	10.6
		Center 5	824	33.6	11.3	68.9	19.7
		Center 11	1300	27.6	9.0	74.5	16.5
		Center 12	996	35.1	5.4	79.4	15.2
		Center 13	1265	34.9	4.7	81.3	14.0
		Center 14	2049	36.4	7.7	84.2	8.1
		Center 15	1259	33.7	7.2	78.6	14.2
		Center 16	2259	45.2	9.8	81.0	9.2
		Center 23	906	35.3	6.1	72.8	21.1
		Center 24	1008	45.0	6.8	75.8	17.4
	Day 15 to 36 wks	All centers	52749	28.0	12.3	68.9	18.7

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

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**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >98
		Center 3	4656	27.1	18.0	62.3	19.6
		Center 4	3884	30.6	9.5	73.9	16.6
		Center 5	2472	29.8	16.6	62.5	21.0
		Center 9 site A	2194	20.0	14.6	61.0	24.5
		Center 11	2232	28.0	10.4	71.9	17.7
		Center 12	7802	21.2	13.5	69.0	17.5
		Center 13	4975	26.0	7.2	72.2	20.6
		Center 14	5426	31.2	12.8	75.8	11.4
		Center 15	3579	33.8	8.5	68.7	22.8
		Center 16	3096	30.8	14.3	70.3	15.4
		Center 23	2027	20.1	9.4	65.9	24.7
		Center 24	3246	21.2	17.4	62.5	20.1
Oct06-Dec06	Days of life 1-14	All centers	11290	35.1	8.2	77.7	14.1
		Center 3	667	34.5	7.9	72.2	19.9
		Center 9 site A	756	31.7	9.8	74.0	16.1
		Center 11	897	39.5	5.3	68.6	26.1
		Center 12	935	22.0	6.8	74.5	18.7
		Center 14	779	32.8	7.4	85.8	6.8
		Center 15	600	47.5	5.2	77.9	16.9
		Center 16	1830	38.5	9.0	84.3	6.7
		Center 18	1454	27.7	8.4	71.8	19.8
		Center 25	898	56.0	5.0	83.7	11.3
	Day 15 to 36 wks	All centers	38572	28.0	11.8	68.1	20.1
		Center 3	1295	26.7	14.4	63.2	22.4
		Center 4	2726	28.1	11.4	69.6	19.0
		Center 11	3266	31.3	7.1	63.0	29.9
		Center 12	3089	29.8	5.3	61.7	33.0
		Center 14	2750	30.5	8.8	71.8	19.4
		Center 16	4673	22.3	14.3	69.7	16.0
		Center 18	5389	23.3	17.9	64.8	17.3
		Center 25	6299	39.2	9.4	76.6	14.0

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period



**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH SEPTEMBER 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 10/10/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target			
				88-92	<84	84-96	>96
Mar06-Sept06	Days of life 1-14	All centers	21664	38.8	8.1	79.8	12.1
		Center 3	3439	45.3	7.7	81.7	10.6
		Center 4	1644	41.8	6.5	84.6	8.9
		Center 9 site A	980	37.0	9.5	72.0	18.6
		Center 11	1522	29.3	11.4	66.9	21.7
		Center 12	1942	35.8	6.8	80.1	13.1
		Center 14	2589	40.2	8.5	80.5	10.9
		Center 16	3838	42.8	7.5	85.0	7.6
		Center 18	2994	33.5	9.3	76.6	14.1
		Center 19	688	26.7	6.7	79.1	14.2
		Center 25	579	39.5	7.2	85.1	7.7
	Day 15 to 36 wks	All centers	67368	29.8	13.1	68.6	18.4
		Center 3	13699	34.1	15.1	69.5	15.3
		Center 4	4512	31.7	11.6	71.6	16.8
		Center 9 site A	3260	38.1	9.7	72.4	17.9
		Center 9 site B	1546	27.9	12.2	72.6	15.2
		Center 11	2649	28.2	14.4	59.3	26.2
		Center 12	7825	23.0	10.9	66.8	22.3
		Center 14	8846	30.0	11.8	71.4	16.8
		Center 16	9242	32.5	11.4	69.1	19.5
		Center 18	10009	23.9	16.5	66.6	16.9
Through Feb06	Days of life 1-14	All centers	26494	37.8	9.3	79.3	11.3
		Center 3	1886	28.9	14.9	77.2	7.9
		Center 8	1448	29.6	6.6	73.3	20.1
		Center 9 site A	1920	36.1	12.2	76.9	11.0
		Center 11	1947	36.9	9.3	75.6	15.1
		Center 12	1848	46.7	6.2	82.5	11.3
		Center 14	3171	38.4	8.8	83.1	8.1
		Center 16	5580	42.6	9.4	81.4	9.2

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
		Center 18	1509	31.2	10.2	77.0	12.9
		Center 20	1860	30.8	7.5	74.1	18.4
		Center 21	958	39.1	9.0	85.3	5.6
		Center 22	3363	39.9	8.7	79.5	11.8
	Day 15 to 36 wks	All centers	136360	26.4	12.3	67.7	20.0
		Center 3	15229	19.9	17.1	64.8	18.1
		Center 4	5686	20.6	7.4	64.9	27.7
		Center 8	4802	17.3	8.5	58.1	33.4
		Center 9 site A	10780	26.7	13.5	66.6	19.8
		Center 11	10209	27.5	10.3	67.1	22.7
		Center 12	9532	33.3	10.0	72.9	17.0
		Center 14	19113	25.5	11.8	70.3	17.9
		Center 16	16900	30.8	12.3	71.7	16.0
		Center 18	11637	26.4	17.3	66.4	16.4
		Center 19	1517	29.1	8.2	72.7	19.1
		Center 20	9055	20.5	11.6	63.2	25.2
		Center 21	2450	27.4	17.8	70.3	11.9
		Center 22	17811	29.8	10.1	67.4	22.5

**From:** Neil Finer  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; Michele Walsh; Bradley Yoder; Roger Faix; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Nancy Newman; Gantz, Marie; Poole, W. Kenneth  
**Cc:** Petrie, Carolyn; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT materials  
**Date:** Thursday, October 11, 2007 5:58:26 PM  
**Attachments:** Breathing Outcomes Update-10-15.doc  
October2007UpdateHINTZ.doc

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Here are Updates for the Breathing Outcomes and MRI secondaries.  
Safe travels  
Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

---

**From:** Neil Finer  
**Sent:** Thursday, October 11, 2007 9:11 AM  
**To:** Neil Finer; 'Higgins, Rosemary (NIH/NICHD) [E]'; 'Wally Carlo, M.D.'; 'Michele Walsh'; 'Bradley Yoder'; 'Roger Faix'; 'Abbot Laptook'; 'kurt.schibler@cchmc.org'; 'Das, Abhik'; 'Nancy Newman'; 'Gantz, Marie'; 'Poole, W. Kenneth'  
**Cc:** 'Petrie, Carolyn'; 'Zaterka-Baxter, Kristin'  
**Subject:** FW: SUPPORT materials

Hi Everyone  
Here is an agenda for next weeks meeting, and the updates from Marie ( Thanks Marie)

Agenda - Support Subcommittee Meeting / Steering Committee Meeting

1. Review Enrollments to date, adverse events, and protocol deviations (Currently 815 per August > 60% of total, slightly >2/center/mo for 2007)
  
1. Discuss Eye follow-up and the 55 day rule
  
4. Review status of Secondaries-  
MRI  
Breathing Outcomes  
Nutrition  
Antenatal consent
  
5. Discuss Prospective Meta Analysis
6. Other Issues

Please let me know if there are additional issues you would like added to the agenda  
Neil

Neil N. Finer, M.D.

**Professor of Pediatrics**  
**Director, Division of Neonatal-Perinatal Medicine**  
**UC San Diego School of Medicine**  
**UC San Diego Medical Center, Hillcrest**  
**402 Dickinson St., MPF 1-140**  
**San Diego, CA 92103-8774**  
**Telephone: 619.543-3759**  
**Facsimile: 619.543.3812**

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## Breathing Outcomes Update

October 15, 2007

Tim Stevens

### Summary:

Enrollment for The Breathing Outcomes Study continues to go well. In the period April 1 – September 26<sup>th</sup>, 177 additional patients were consented into Breathing Outcomes (Enrollment Table Below). Because Breathing Outcomes began enrollment after the SUPPORT Trial began, the proportion of patients in the SUPPORT trial with consent to participate in the Breathing Outcomes Study was initially low. However, since November 30, 2006, the proportion of patients randomized into SUPPORT that have consented to Breathing Outcomes has risen from 42% to 59%. Since November last year, 59 babies were randomized in SUPPORT but did not consent to Breathing Outcomes; this number reflects those infants who died or withdrew from the study before Breathing Outcomes consent was obtained.

The questionnaire follow up rate is very good at each of the 4 time points, ranging from 84.8% - 95.3% (Table 1b). At 18-22 months follow up (age at primary outcome), over 95% of eligible infants completed the questionnaire. Of patients who have passed through or are currently in the 18-22 month window, 57.9% of patients have completed the full series of 4 questionnaires. Of the 127 infants who have passed through the 18-22 month window, 69% have completed all 4 questionnaires (number not shown in table). High praise is given to Case Western, Cincinnati, Brown, Alabama and San Diego for having completed 10 or more 18 – 22 month questionnaires.

### Breathing Outcomes Enrollment November 30, 2006 - September 26, 2007

#### Enrollment

#### Breathing Outcomes

From SUPPORT start date to:

	Follow up		Discharge			
	Expected	Consent	Form	6 month	12 month	18 month
30-Nov-06	327	188	186	120	75	0
31-Mar-07	416	279	276	161	121	29
<u>26-Sep-07</u>		<u>456</u>	<u>402</u>	<u>277</u>	<u>173</u>	<u>121</u>
<b>Interval Difference</b>						
Apr - Sep		177	126	116	52	92

#### SUPPORT

#### SUPPORT

#### Breathing Outcomes

From SUPPORT start date to:	SUPPORT			Breathing Outcomes	
	Screened	Eligible	Randomized	Consent	SUPPORT Patients Enrolled in Breathing Outcomes (%)
30-Nov-06	1043	879	450	188	42
31-Mar-07	1378	1175	585	279	48
31-Aug-07	1894	1680	775	456	59

Breathing Outcomes Protocol

Table 1b - Data as of 9/26/07  
 Number and Percent of Questionnaires Completed at Each Point in Time  
 By Center

Center Name	SUPF00 Consent Granted <sup>1</sup>	SUPF01 Baseline Complete <sup>2</sup>		SUPF02 6 Month Complete <sup>3</sup>		SUPF02 12 Month Complete <sup>4</sup>		SUPF03 18-22 Month Complete <sup>5</sup>		Complete Series & Entered 18 Month Window <sup>6</sup>
	Number	Number	%	Number	%	Number	%	Number	%	% (count)
Case Western Univ	42	42	100.00%	34	97.14%	26	100.00%	15	88.24%	88.24% (15/17)
Univ. of Texas (D)	32	32	100.00%	19	95.00%	8	72.73%	5	83.33%	55.56% (5/9)
Wayne State Univ	11	11	100.00%	6	100.00%	4	100.00%	0	NA	NA (0/0)
Univ. of Miami	11	11	100.00%	11	100.00%	9	81.82%	8	88.89%	72.73% (8/11)
Emory University	28	28	100.00%	20	95.24%	15	100.00%	6	100.00%	75.00% (6/8)
Univ. of Cincinnati	36	36	100.00%	19	73.08%	12	92.31%	11	100.00%	30.77% (4/13)
Indiana Univ.	25	18	72.00%	8	50.00%	5	45.45%	9	100.00%	0.00% (0/9)
Yale University	17	17	100.00%	5	100.00%	2	100.00%	1	100.00%	100.00% (1/1)
Brown University	54	53	98.15%	28	82.35%	19	95.00%	10	83.33%	50.00% (8/16)
Stanford University	8	5	62.50%	1	100.00%	1	100.00%	1	100.00%	100.00% (1/1)
Univ. of Alabama	63	61	96.83%	45	97.83%	15	100.00%	14	100.00%	85.71% (12/14)
Univ. of Texas (H)	30	27	90.00%	27	100.00%	13	100.00%	7	100.00%	62.50% (5/8)
Duke University	8	5	62.50%	6	75.00%	6	85.71%	5	100.00%	42.86% (3/7)
Wake Forest	9	6	66.67%	9	100.00%	9	100.00%	5	100.00%	22.22% (2/9)
Children's (NY)	5	5	100.00%	5	100.00%	5	100.00%	2	100.00%	50.00% (2/4)
Univ. of Calif. At San Diego	25	18	72.00%	25	100.00%	24	96.00%	22	100.00%	64.00% (16/25)
Tufts NEMC	28	13	46.43%	2	66.67%	0	NA	0	NA	NA (0/0)
University of Iowa	9	3	33.33%	1	100.00%	0	NA	0	NA	NA (0/0)
University of Utah	10	7	70.00%	6	85.71%	0	NA	0	NA	NA (0/0)
University of NM	5	4	80.00%	0	NA	0	NA	0	NA	NA (0/0)
<b>TOTAL</b>	<b>456</b>	<b>402</b>	<b>84.81%</b>	<b>277</b>	<b>90.52%</b>	<b>173</b>	<b>92.02%</b>	<b>121</b>	<b>95.28%</b>	<b>57.89% (88/152)</b>

*Breathing Outcomes Protocol*

*Table 1b - Data as of 9/26/07  
Number and Percent of Questionnaires Completed at Each Point in Time  
By Center*

**Footnotes**

<sup>1</sup> Column 1 "SUPF00 Consent Granted" - A simple count of the number of infants in each Center for which consent has been granted.

<sup>2</sup> Columns 2 and 3 "SUPF01 Baseline Complete" - The number of infants in each Center for which consent has been granted, have an answer to the question on form SUPF01 "Was the interview conducted," and have a Baseline interview status of "Complete." The denominator for the "%" column includes infants for which consent has been granted.

<sup>3</sup> Columns 4 and 5 "SUPF02 6 Month Complete" - The number of infants in each Center for which consent has been granted, have an answer to the question on form SUPF02 "Was the interview conducted," and have a 6 Month interview status of "Complete." The denominator for the "%" column includes infants for which consent has been granted and have a 6 Month interview status of "Complete" or "Out of Window."

<sup>4</sup> Columns 6 and 7 "SUPF02 12 Month Complete" - The number of infants in each Center for which consent has been granted, have an answer to the question on form SUPF02 "Was the interview conducted," and have a 12 Month interview status of "Complete." The denominator for the "%" column includes infants for which consent has been granted and have a 12 Month interview status of "Complete" or "Out of Window."

<sup>5</sup> Columns 8 and 9 "SUPF03 18-22 Month Complete" - The number of infants in each Center for which consent has been granted, have an answer to the question on form SUPF03 "Was the interview conducted," and have a 18-22 Month interview status of "Complete." The denominator for the "%" column includes infants for which consent has been granted and have a 18-22 Month interview status of "Complete" or "Out of Window."

<sup>6</sup> Column 10 "Complete Series & Entered 18 Month Window" - The numerator is the number of infants in each Center for which consent has been granted, have an answer to the questions on forms SUPF01, SUPF02 (6 Month), SUPF02 (12 Month), and SUPF03 "Was the interview conducted," and have a interview status of "Complete" for all 4 stages (Baseline, 6 Month, 12 Month, and 18-22 Month). The denominator is the number of infants for which consent has been granted and who have an 18-22 interview status of "Complete," "Due," "Overdue," or "Out of Window" (i.e., all infants who have entered the window).

1) Enrollment/MRI central reading update

- Per monthly report and additional routine data query from RTI
  - **295 patients** have been enrolled
    - 35-42 week neuroimaging *including MRI* is complete for **~214 patients**
      - 43 patients died before MRI
      - 23 with MRI01 not yet complete – window not reached
      - 15 with other issues (
- MRI central reading: rolling reading ongoing –
  - **More than 150 MRI's** have been received by RTI, and have either been read or are in process with central reader (Pat Barnes). Great job!

2) Issues with MRI's

- Quality of the images continues to be **excellent**. Congratulations and thanks to coordinators, site radiologists and technologists!
- Call or email me with any issues or concerns from you, your radiologists or technologists – I will find an answer or do my best to find someone who *can* answer you.
- If you have concerns about your images (i.e., new sequences, new magnet, etc.), let me know - Kris at RTI can flag them and send them to me for “ASAP” review by Dr. Barnes, and we will get back to you by email re: quality and addressing any issues

3) Tracking enrollment/sending CUS and MRI's to RTI

- THANK YOU to all the coordinators who are keying the FIRST PART of the MRI01 form as soon as they can.
- Please remember send copies of CUS and MRI routinely to RTI (every 2-3 months depending on volume of enrollment).

4) Please call or email with questions, comments, and suggestions

Susan Hintz  
650-723-5711 (office)  
Email: [srhintz@stanford.edu](mailto:srhintz@stanford.edu)

**THANKS TO ALL THE SITES FOR THEIR HARD WORK ON THIS STUDY!**



**From:** [Susan Hintz](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** update for SUPPORT neuroimaging secondary  
**Date:** Thursday, October 11, 2007 5:00:48 PM

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Update for the SC meeting. Can you make copies? Also, I did some quick calculations - even if we only get 50% enrollment in the secondary for the rest of SUPPORT, and assuming an 80% survival (which is actually low), we could have 400 patients with full neuroimaging data in the cohort!

thanks

me

--

Susan R. Hintz, M.D., M.S. Epi  
Associate Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351

**From:** [Wally Carlo, M.D.](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Neil, Finer](#)  
**Subject:** RE: SUPPORT materials  
**Date:** Thursday, October 11, 2007 2:04:17 PM

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GREAT job!!!

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, October 11, 2007 12:09 PM  
**To:** Neil Finer; Wally Carlo, M.D.; Michele Walsh; Bradley Yoder; Roger Faix; Abbot Lptook; kurt.schibler@cchmc.org; Das, Abhik; Nancy Newman; Gantz, Marie; Poole, W. Kenneth  
**Cc:** Petrie, Carolyn; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT materials

Here is the breathing outcomes update. I expect to have an update on the MRI secondary by tomorrow and will email it to folks.

Have a safe trip!  
Roes

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**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Thursday, October 11, 2007 12:11 PM  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; Michele Walsh; Bradley Yoder; Roger Faix; Abbot Lptook; kurt.schibler@cchmc.org; Das, Abhik; Nancy Newman; Gantz, Marie; Poole, W. Kenneth  
**Cc:** Petrie, Carolyn; Zaterka-Baxter, Kristin  
**Subject:** FW: SUPPORT materials

Hi Everyone

Here is an agenda for next weeks meeting, and the updates from Marie ( Thanks Marie)

Agenda - Support Subcommittee Meeting / Steering Committee Meeting

1. Review Enrollments to date, adverse events, and protocol deviations (Currently 815 per August > 60% of total, slightly >2/center/mo for 2007)
  
1. Discuss Eye follow-up and the 55 day rule
  
4. Review status of Secondaries-

**MRI**  
**Breathing Outcomes**  
**Nutrition**  
**Antenatal consent**

5. **Discuss Prospective Meta Analysis**

6. **Other Issues**

Please let me know if there are additional issues you would like added to the agenda

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

---

**From:** [Neil Finer](#)  
**To:** [Neil Finer](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Wally Carlo, M.D.](#); [Michele Walsh](#); [Bradley Yoder](#); [Roger Faix](#); [Abbot Laptook](#); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [Das, Abhik](#); [Nancy Newman](#); [Gantz, Marie](#); [Poole, W. Kenneth](#)  
**Cc:** [Petrie, Carolyn](#); [Zaterka-Baxter, Kristin](#)  
**Subject:** FW: SUPPORT materials  
**Date:** Thursday, October 11, 2007 12:15:59 PM  
**Attachments:** [SUPPORT Adverse Events 10-04-07.doc](#)  
[SUPPORT Enrollment 10-04-2007.doc](#)  
[SUPPORT Protocol Deviations - old vs new 10-04-07.doc](#)  
[SUPPORT Protocol Deviations by center - old vs new 10-04-07.doc](#)

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Hi Everyone

Here is an agenda for next weeks meeting, and the updates from Marie ( Thanks Marie)

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MRI  
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5. Discuss Prospective Meta Analysis
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Please let me know if there are additional issues you would like added to the agenda  
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---

**Percent of SUPPORT infants with selected adverse events as of October 4, 2007\***

Type of adverse event	All infants	24-25 wks	26-27 wks
Chest compressions/epinephrine in DR	5.7	8.6	3.6
Air leak	8.0	10.3	6.4
Pulmonary hemorrhage	6.0	9.3	3.8
Severe IVH (grades III-IV)	14.2	19.6	10.6

Note: Table includes SUPPORT infants who are still hospitalized and at risk for additional AEs

**Percent of GDB infants with selected adverse events and range across NRN centers\*  
(Includes infants born at NRN centers at 24-27 weeks GA in 2002-2004)**

Type of adverse event	All infants		24-25 wks		26-27 wks	
	Percent	Range	Percent	Range	Percent	Range
Chest compressions/epinephrine in DR	11.2	3.2 - 31.8	13.9	2.8 - 42.1	9.1	3.2 - 23.2
Air leak	8.2	1.9 - 16.1	11.0	2.9 - 20.6	6.1	1.1 - 13.0
Pulmonary hemorrhage	9.0	3.4 - 29.3	12.3	2.5 - 32.0	6.5	1.1 - 26.9
Severe IVH (grades III-IV)	16.9	8.4 - 26.4	24.2	14.0 - 38.9	11.7	2.3 - 20.8

\*Denominator for chest compressions is number of infants with delivery room information (SUPP03/NG02), denominator for air leak and pulmonary hemorrhage is number of infants with NICU data (NG03), denominator for severe IVH is number of infants with head ultrasound (SUPP09/NG03).

## SUPPORT Enrollment as of October 4, 2007

### Total Enrolled

	N	% of total (1310)
Enrolled	815	62%

### Enrollment by Center

Center	<Apr-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Total
3	57	2	0	6	4	1	1	71
4	33	1	6	2	1	0	1	44
5	13	2	4	3	4	1	3	30
8	17	0	0	0	0	0	0	17
9	39	5	5	1	3	4	0	57
11	41	1	5	4	1	8	2	62
12	31	1	4	4	2	5	0	47
13	16	1	1	1	0	1	0	20
14	60	6	1	1	0	6	4	78
15	18	1	2	3	0	1	5	30
16	92	4	5	0	2	0	5	108
18	49	0	1	1	2	1	4	58
19	28	1	3	4	2	1	2	41
20	9	0	0	0	0	0	0	9
21	8	0	0	0	0	0	0	8
22	50	0	0	1	2	0	0	53
23	16	1	3	8	5	2	2	37
24	9	1	0	1	0	0	0	11
25	13	0	2	0	2	5	4	26
26	1	2	3	0	1	1	0	8
<b>Total</b>	600	29	45	40	31	37	33	815
<b>Centers</b>		17	17	17	17	17	17	
<b>Avg/center</b>		1.7	2.6	2.4	1.8	2.2	1.9	

### Months Needed to Complete Enrollment

Average enrolled per center per month	Number of months needed
2	15
2.5	12
3	10

## SUPPORT Trial Protocol Deviations Reported January 1, 2006 – October 4, 2007

Type of protocol deviation	Number
CPAP not initiated if required by protocol	3
Surfactant not given in the first hour	10
Oximeter not started within 2 hours	11
Infant placed on study oximeter for incorrect treatment	9
Failure to use study oximeter at times required by protocol	42
Non-study (unmasked) oximeter used at same time as study oximeter	4
Mechanical ventilation initiated for other than study criteria	2
NSIMV initiated in infant not previously intubated	3
Extubation (excluding unplanned) for other than study criteria	7
Failure to extubate CPAP infant if all criteria met	2
Failure to extubate surfactant infant if all criteria met	1
High flow nasal cannula used within first 14 days of life	21
Infant received postnatal steroids in first 21 days of life	16
Head ultrasound done outside 4-21 day window	0
Consent errors	3
Randomization errors	12
Other	7
<b>Total</b>	<b>153</b>

Type of protocol deviation (some categories collapsed)	Number
Assigned arm not implemented within required amount of time	24
Infant placed on study oximeter for incorrect treatment	9
Failure to use study oximeter at times required by protocol	42
Non-study (unmasked) oximeter used at same time as study oximeter	4
Mechanical ventilation initiated for other than study criteria	2
NSIMV initiated in infant not previously intubated	3
Extubation (excluding unplanned) for other than study criteria	7
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Infant received postnatal steroids in first 21 days of life	16
Head ultrasound done outside 4-21 day window	0
Consent errors	3
Randomization errors	12
Other	7
<b>Total</b>	<b>153</b>

## SUPPORT Trial Protocol Deviations Reported Through December 31, 2005

Type of protocol deviation	Number
CPAP not initiated if required by protocol	0
Surfactant not given in the first hour	5
Oximeter not started within 2 hours	4
Infant placed on study oximeter for incorrect treatment	3
Failure to use study oximeter at times required by protocol	13
Non-study (unmasked) oximeter used at same time as study oximeter	1
Mechanical ventilation initiated for other than study criteria	0
NSIMV initiated in infant not previously intubated	2
Extubation (excluding unplanned) for other than study criteria	2
Failure to extubate CPAP infant if all criteria met	3
Failure to extubate surfactant infant if all criteria met	1
High flow nasal cannula used within first 14 days of life	5
Infant received postnatal steroids in first 21 days of life	3
Head ultrasound done outside 4-21 day window	1
Consent errors	0
Randomization errors	4
Other	1
<b>Total</b>	<b>48</b>

Type of protocol deviation (some categories collapsed)	Number
Assigned arm not implemented within required amount of time	9
Infant placed on study oximeter for incorrect treatment	3
Failure to use study oximeter at times required by protocol	13
Non-study (unmasked) oximeter used at same time as study oximeter	1
Mechanical ventilation initiated for other than study criteria	0
NSIMV initiated in infant not previously intubated	2
Extubation (excluding unplanned) for other than study criteria	2
Failure to extubate infant if all criteria met	4
High flow nasal cannula used within first 14 days of life	5
Infant received postnatal steroids in first 21 days of life	3
Head ultrasound done outside 4-21 day window	1
Consent errors	0
Randomization errors	4
Other	1
<b>Total</b>	<b>48</b>



**SUPPORT Trial Protocol Deviations, by Center, January 1, 2006 – October 4, 2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol			1								1	1									3
Surfactant not given in the first hour	1	2				3		1	1		1									1	10
Oximeter not started within 2 hours	1	1				1	2			1		1					2	1	1		11
Infant placed on study oximeter for incorrect treatment	1		1	1		1					3		1				1				9
Failure to use study oximeter at times required by protocol	2	5	4		2	3		1	4		5		2				3	3	5	3	42
Non-study (unmasked) oximeter used at same time as study ox.						2	1													1	4
Mechanical ventilation initiated for other than study criteria																	2				2
NSIMV initiated in infant not previously intubated	1										2										3
Extubation (excluding unplanned) for other than study criteria						3			4												7
Failure to extubate CPAP infant if all criteria met										2											2
Failure to extubate surfactant infant if all criteria met						1															1
High flow nasal cannula used within first 14 days of life					2	3	1		6			1						1	7		21
Infant received postnatal steroids in first 21 days of life								1	4		3	6				1	1				16
Head ultrasound done outside 4-21 day window																					0
Consent errors		1										2									3
Randomization errors			1		3	1						1	1			1	4				12
Other					2				2	2										1	7
<b>Total</b>	<b>6</b>	<b>9</b>	<b>7</b>	<b>1</b>	<b>9</b>	<b>18</b>	<b>4</b>	<b>3</b>	<b>21</b>	<b>5</b>	<b>15</b>	<b>12</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>13</b>	<b>5</b>	<b>16</b>	<b>3</b>	<b>153</b>

**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center, January 1, 2006 – October 4, 2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol			3%								1%	3%									0%
Surfactant not given in the first hour	2%	6%				7%		5%	2%		1%								4%		2%
Oximeter not started within 2 hours	2%	3%				2%	5%			4%		3%					5%	9%	4%		2%
Infant placed on study oximeter for incorrect treatment	2%		3%			2%					4%		4%				3%				1%
Failure to use study oximeter at times required by protocol	4%	15%	13%		5%	7%		5%	7%		7%		8%				8%	27%	19%	38%	7%
Non-study (unmasked) oximeter used at same time as study ox.						5%	3%												4%		1%
Mechanical ventilation initiated for other than study criteria																	5%				0%
NSIMV initiated in infant not previously intubated	2%										3%										1%
Extubation (excluding unplanned) for other than study criteria						7%			7%												1%
Failure to extubate CPAP infant if all criteria met										7%											1%
Failure to extubate surfactant infant if all criteria met						2%															0%
High flow nasal cannula used within first 14 days of life					5%	7%	3%		11%			3%						9%	27%		3%
Infant received postnatal steroids in first 21 days of life								5%	7%		4%	15%				8%	3%				2%
Head ultrasound done outside 4-21 day window																					0%
Consent errors		3%										5%									0%
Randomization errors			3%		7%	2%						3%	4%			8%	11%				2%
Other					5%				4%	7%										4%	1%
Total protocol deviations	13%	26%	23%		20%	42%	11%	16%	38%	18%	21%	31%	15%		0%	17%	35%	45%	62%	38%	27%
Total number of infants enrolled	47	34	30	0	44	43	37	19	56	28	70	39	26	0	1	12	37	11	26	8	568

**SUPPORT Trial Protocol Deviations, by Center, Through December 31, 2005**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol																					0
Surfactant not given in the first hour	2					2	1														5
Oximeter not started within 2 hours						1					3										4
Infant placed on study oximeter for incorrect treatment	1										2										3
Failure to use study oximeter at times required by protocol	3					2			4		2	1		1							13
Non-study (unmasked) oximeter used at same time as study ox.															1						1
Mechanical ventilation initiated for other than study criteria																					0
NSIMV initiated in infant not previously intubated		1									1										2
Extubation (excluding unplanned) for other than study criteria											1				1						2
Failure to extubate CPAP infant if all criteria met		1														2					3
Failure to extubate surfactant infant if all criteria met						1															1
High flow nasal cannula used within first 14 days of life						3			1								1				5
Infant received postnatal steroids in first 21 days of life																3					3
Head ultrasound done outside 4-21 day window											1										1
Consent errors																					0
Randomization errors		2													2						4
Other						1															1
<b>Total</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>



**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center, Through December 31, 2005**

Type of protocol deviation	Center																				Total	
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26		
CPAP not initiated if required by protocol																						0%
Surfactant not given in the first hour	8%					11%	10%															2%
Oximeter not started within 2 hours						5%					8%											1%
Infant placed on study oximeter for incorrect treatment	4%										5%											1%
Failure to use study oximeter at times required by protocol	13%					11%			18%		5%	5%		11%								6%
Non-study (unmasked) oximeter used at same time as study ox.															14%							1%
Mechanical ventilation initiated for other than study criteria																						0%
NSIMV initiated in infant not previously intubated		10%									3%											1%
Extubation (excluding unplanned) for other than study criteria											3%				14%							1%
Failure to extubate CPAP infant if all criteria met		10%														5%						1%
Failure to extubate surfactant infant if all criteria met						5%																0%
High flow nasal cannula used within first 14 days of life						16%			5%								2%					3%
Infant received postnatal steroids in first 21 days of life																7%						2%
Head ultrasound done outside 4-21 day window											3%											0%
Consent errors																						0%
Randomization errors		20%													22%							2%
Other						5%																1%
Total protocol deviations	25%	40%		0%	0%	53%	10%	0%	23%	0%	26%	5%	0%	33%	29%	15%						22%
Total number of infants enrolled	24	10	0	17	13	19	10	1	22	2	38	19	15	9	7	41	0	0	0	0	0	247

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu; Wade Rich  
**Cc:** Cunningham, Meg; Das, Abhik  
**Subject:** RE: SUPPORT materials  
**Date:** Wednesday, October 10, 2007 5:26:27 PM  
**Attachments:** [SUPPORT Adverse Events 10-04-07.doc](#)  
[SUPPORT Enrollment 10-04-2007.doc](#)  
[SUPPORT Protocol Deviations - old vs new 10-04-07.doc](#)  
[SUPPORT Protocol Deviations by center - old vs new 10-04-07.doc](#)

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Hi Neil,

Attached are the enrollment, adverse event, and protocol deviation updates for SUPPORT. The pulse ox data is currently processing, and I will aim to get you that report tomorrow.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, October 10, 2007 4:13 PM  
**To:** Gantz, Marie; nfiner@ucsd.edu; Wade Rich  
**Cc:** Cunningham, Meg  
**Subject:** RE: SUPPORT materials

Thanks  
Just forward them over and we can get them copied.

Rose

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Wednesday, October 10, 2007 4:11 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu; Wade Rich  
**Cc:** Cunningham, Meg  
**Subject:** RE: SUPPORT materials

I am working on the handouts right now. The enrollment, AE and protocol deviation reports will be sent to Neil this afternoon. The pulse oximeter reports will be sent either today or tomorrow.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, October 10, 2007 4:09 PM  
**To:** nfiner@ucsd.edu; Wade Rich; Gantz, Marie  
**Cc:** Cunningham, Meg

**Subject:** SUPPORT materials

Hi,

Do we have any handouts for the SUPPORT Subcommittee meeting?

Thanks

Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**Percent of SUPPORT infants with selected adverse events as of October 4, 2007\***

Type of adverse event	All infants	24-25 wks	26-27 wks
Chest compressions/epinephrine in DR	5.7	8.6	3.6
Air leak	8.0	10.3	6.4
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Severe IVH (grades III-IV)	14.2	19.6	10.6

Note: Table includes SUPPORT infants who are still hospitalized and at risk for additional AEs

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(Includes infants born at NRN centers at 24-27 weeks GA in 2002-2004)**

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	Percent	Range	Percent	Range	Percent	Range
Chest compressions/epinephrine in DR	11.2	3.2 - 31.8	13.9	2.8 - 42.1	9.1	3.2 - 23.2
Air leak	8.2	1.9 - 16.1	11.0	2.9 - 20.6	6.1	1.1 - 13.0
Pulmonary hemorrhage	9.0	3.4 - 29.3	12.3	2.5 - 32.0	6.5	1.1 - 26.9
Severe IVH (grades III-IV)	16.9	8.4 - 26.4	24.2	14.0 - 38.9	11.7	2.3 - 20.8

\*Denominator for chest compressions is number of infants with delivery room information (SUPP03/NG02), denominator for air leak and pulmonary hemorrhage is number of infants with NICU data (NG03), denominator for severe IVH is number of infants with head ultrasound (SUPP09/NG03).

## SUPPORT Enrollment as of October 4, 2007

### Total Enrolled

	N	% of total (1310)
Enrolled	815	62%

### Enrollment by Center

Center	<Apr-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Total
3	57	2	0	6	4	1	1	71
4	33	1	6	2	1	0	1	44
5	13	2	4	3	4	1	3	30
8	17	0	0	0	0	0	0	17
9	39	5	5	1	3	4	0	57
11	41	1	5	4	1	8	2	62
12	31	1	4	4	2	5	0	47
13	16	1	1	1	0	1	0	20
14	60	6	1	1	0	6	4	78
15	18	1	2	3	0	1	5	30
16	92	4	5	0	2	0	5	108
18	49	0	1	1	2	1	4	58
19	28	1	3	4	2	1	2	41
20	9	0	0	0	0	0	0	9
21	8	0	0	0	0	0	0	8
22	50	0	0	1	2	0	0	53
23	16	1	3	8	5	2	2	37
24	9	1	0	1	0	0	0	11
25	13	0	2	0	2	5	4	26
26	1	2	3	0	1	1	0	8
<b>Total</b>	<b>600</b>	<b>29</b>	<b>45</b>	<b>40</b>	<b>31</b>	<b>37</b>	<b>33</b>	<b>815</b>
<b>Centers</b>		<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	
<b>Avg/center</b>		<b>1.7</b>	<b>2.6</b>	<b>2.4</b>	<b>1.8</b>	<b>2.2</b>	<b>1.9</b>	

### Months Needed to Complete Enrollment

Average enrolled per center per month	Number of months needed
2	15
2.5	12
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### SUPPORT Trial Protocol Deviations Reported January 1, 2006 – October 4, 2007

Type of protocol deviation	Number
CPAP not initiated if required by protocol	3
Surfactant not given in the first hour	10
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Head ultrasound done outside 4-21 day window	0
Consent errors	3
Randomization errors	12
Other	7
<b>Total</b>	<b>153</b>

## SUPPORT Trial Protocol Deviations Reported Through December 31, 2005

Type of protocol deviation	Number
CPAP not initiated if required by protocol	0
Surfactant not given in the first hour	5
Oximeter not started within 2 hours	4
Infant placed on study oximeter for incorrect treatment	3
Failure to use study oximeter at times required by protocol	13
Non-study (unmasked) oximeter used at same time as study oximeter	1
Mechanical ventilation initiated for other than study criteria	0
NSIMV initiated in infant not previously intubated	2
Extubation (excluding unplanned) for other than study criteria	2
Failure to extubate CPAP infant if all criteria met	3
Failure to extubate surfactant infant if all criteria met	1
High flow nasal cannula used within first 14 days of life	5
Infant received postnatal steroids in first 21 days of life	3
Head ultrasound done outside 4-21 day window	1
Consent errors	0
Randomization errors	4
Other	1
<b>Total</b>	<b>48</b>

Type of protocol deviation (some categories collapsed)	Number
Assigned arm not implemented within required amount of time	9
Infant placed on study oximeter for incorrect treatment	3
Failure to use study oximeter at times required by protocol	13
Non-study (unmasked) oximeter used at same time as study oximeter	1
Mechanical ventilation initiated for other than study criteria	0
NSIMV initiated in infant not previously intubated	2
Extubation (excluding unplanned) for other than study criteria	2
Failure to extubate infant if all criteria met	4
High flow nasal cannula used within first 14 days of life	5
Infant received postnatal steroids in first 21 days of life	3
Head ultrasound done outside 4-21 day window	1
Consent errors	0
Randomization errors	4
Other	1
<b>Total</b>	<b>48</b>

**SUPPORT Trial Protocol Deviations, by Center, January 1, 2006 – October 4, 2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol			1							1	1										3
Surfactant not given in the first hour	1	2				3		1	1		1								1		10
Oximeter not started within 2 hours	1	1				1	2			1		1					2	1	1		11
Infant placed on study oximeter for incorrect treatment	1		1	1		1				3		1					1				9
Failure to use study oximeter at times required by protocol	2	5	4		2	3		1	4	5		2					3	3	5	3	42
Non-study (unmasked) oximeter used at same time as study ox.						2	1												1		4
Mechanical ventilation initiated for other than study criteria																	2				2
NSIMV initiated in infant not previously intubated	1									2											3
Extubation (excluding unplanned) for other than study criteria						3			4												7
Failure to extubate CPAP infant if all criteria met										2											2
Failure to extubate surfactant infant if all criteria met						1															1
High flow nasal cannula used within first 14 days of life					2	3	1		6			1						1	7		21
Infant received postnatal steroids in first 21 days of life								1	4		3	6				1	1				16
Head ultrasound done outside 4-21 day window																					0
Consent errors		1										2									3
Randomization errors			1		3	1						1	1			1	4				12
Other					2				2	2											7
<b>Total</b>	<b>6</b>	<b>9</b>	<b>7</b>	<b>1</b>	<b>9</b>	<b>18</b>	<b>4</b>	<b>3</b>	<b>21</b>	<b>5</b>	<b>15</b>	<b>12</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>13</b>	<b>5</b>	<b>16</b>	<b>3</b>	<b>153</b>

**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center, January 1, 2006 – October 4, 2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol			3%								1%	3%									0%
Surfactant not given in the first hour	2%	6%				7%		5%	2%		1%								4%		2%
Oximeter not started within 2 hours	2%	3%				2%	5%			4%		3%					5%	9%	4%		2%
Infant placed on study oximeter for incorrect treatment	2%		3%			2%					4%		4%				3%				1%
Failure to use study oximeter at times required by protocol	4%	15%	13%		5%	7%		5%	7%		7%		8%				8%	27%	19%	38%	7%
Non-study (unmasked) oximeter used at same time as study ox.						5%	3%												4%		1%
Mechanical ventilation initiated for other than study criteria																	5%				0%
NSIMV initiated in infant not previously intubated	2%										3%										1%
Extubation (excluding unplanned) for other than study criteria						7%			7%												1%
Failure to extubate CPAP infant if all criteria met										7%											1%
Failure to extubate surfactant infant if all criteria met						2%															0%
High flow nasal cannula used within first 14 days of life					5%	7%	3%		11%			3%						9%	27%		3%
Infant received postnatal steroids in first 21 days of life								5%	7%		4%	15%				8%	3%				2%
Head ultrasound done outside 4-21 day window																					0%
Consent errors		3%										5%									0%
Randomization errors			3%		7%	2%						3%	4%			8%	11%				2%
Other					5%				4%	7%									4%		1%
<b>Total protocol deviations</b>	<b>13%</b>	<b>26%</b>	<b>23%</b>		<b>20%</b>	<b>42%</b>	<b>11%</b>	<b>16%</b>	<b>38%</b>	<b>18%</b>	<b>21%</b>	<b>31%</b>	<b>15%</b>		<b>0%</b>	<b>17%</b>	<b>35%</b>	<b>45%</b>	<b>62%</b>	<b>38%</b>	<b>27%</b>
<b>Total number of infants enrolled</b>	<b>47</b>	<b>34</b>	<b>30</b>	<b>0</b>	<b>44</b>	<b>43</b>	<b>37</b>	<b>19</b>	<b>56</b>	<b>28</b>	<b>70</b>	<b>39</b>	<b>26</b>	<b>0</b>	<b>1</b>	<b>12</b>	<b>37</b>	<b>11</b>	<b>26</b>	<b>8</b>	<b>568</b>

**SUPPORT Trial Protocol Deviations, by Center, Through December 31, 2005**

Type of protocol deviation	Center																				Total	
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26		
CPAP not initiated if required by protocol																						0
Surfactant not given in the first hour	2					2	1															5
Oximeter not started within 2 hours						1					3											4
Infant placed on study oximeter for incorrect treatment	1										2											3
Failure to use study oximeter at times required by protocol	3					2	2		4		2	1		1								18
Non-study (unmasked) oximeter used at same time as study ox.															1							1
Mechanical ventilation initiated for other than study criteria																						0
NSIMV initiated in infant not previously intubated		1									1											2
Extubation (excluding unplanned) for other than study criteria											1				1							2
Failure to extubate CPAP infant if all criteria met		1														2						3
Failure to extubate surfactant infant if all criteria met						1																1
High flow nasal cannula used within first 14 days of life						3			1							1						5
Infant received postnatal steroids in first 21 days of life																3						3
Head ultrasound done outside 4-21 day window											1											1
Consent errors																						0
Randomization errors		2													2							4
Other																						0
<b>Total</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>	



**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center, Through December 31, 2005**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol																					0%
Surfactant not given in the first hour	8%					11%	10%														2%
Oximeter not started within 2 hours						5%					8%										1%
Infant placed on study oximeter for incorrect treatment	4%										5%										1%
Failure to use study oximeter at times required by protocol	13%					11%			18%		5%	5%		11%							6%
Non-study (unmasked) oximeter used at same time as study ox.															14%						1%
Mechanical ventilation initiated for other than study criteria																					0%
NSIMV initiated in infant not previously intubated		10%									3%										1%
Extubation (excluding unplanned) for other than study criteria											3%				14%						1%
Failure to extubate CPAP infant if all criteria met		10%														5%					1%
Failure to extubate surfactant infant if all criteria met						5%															0%
High flow nasal cannula used within first 14 days of life						16%			5%							2%					3%
Infant received postnatal steroids in first 21 days of life																7%					2%
Head ultrasound done outside 4-21 day window											3%										0%
Consent errors																					0%
Randomization errors		20%													22%						2%
Other																					1%
<b>Total protocol deviations</b>	<b>25%</b>	<b>40%</b>		<b>0%</b>	<b>0%</b>	<b>53%</b>	<b>10%</b>	<b>0%</b>	<b>23%</b>	<b>0%</b>	<b>26%</b>	<b>5%</b>	<b>0%</b>	<b>33%</b>	<b>29%</b>	<b>15%</b>					<b>22%</b>
<b>Total number of infants enrolled</b>	<b>24</b>	<b>10</b>	<b>0</b>	<b>17</b>	<b>13</b>	<b>19</b>	<b>10</b>	<b>1</b>	<b>22</b>	<b>12</b>	<b>38</b>	<b>19</b>	<b>15</b>	<b>9</b>	<b>7</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>247</b>

**From:** [Neil Finer](#)  
**To:** [Bell, Edward](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Wade Rich](#)  
**Subject:** RE: Satellite Network sites  
**Date:** Monday, October 08, 2007 12:45:25 PM

---

Hello Ed

Sharp is a private hospital with no formal university affiliation

Our arrangement with them is handled through our Contracts and Grant department. We have agreed to pay Sharp on a per patient basis and transfer the agreed capitation amounts as per the NRN budget rules for SUPPORT. We had originally insisted that in order to be a participant with us, Sharp had to agree to fund one full time Research Nurse for the 5 year period.

We transfer the capitation funds to them as per enrollments, and we actually partially paid for an additional research nurse beyond the capitation dollars owed them.

I and Wade are not sure if there is a more formal contract with Sharp, and they indicate to which fund they want payments sent.

Hope this helps

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

---

**From:** Bell, Edward [mailto:[edward-bell@uiowa.edu](mailto:edward-bell@uiowa.edu)]  
**Sent:** Monday, October 08, 2007 7:38 AM  
**To:** Neil Finer  
**Cc:** [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)  
**Subject:** Satellite Network sites

Neil,

We are looking at adding a satellite site to help our Network enrollment. It would be a NICU in a private hospital with which the university has no formal relationship. Is this similar to Sharp for you? If so, would you be willing to share the contract that covers the affiliation as it relates to Network participation? If not the whole contract, can you at least tell me what aspects are covered.

Many thanks,

Ed

**From:** Susan Hintz  
**To:** kristin.zaterka  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Fed Exing you SUPPORT MRI's completed  
**Date:** Friday, October 05, 2007 5:02:49 PM

---

Hi,

I am also Fed Exing you back some completed SUPPORT MRI's (5 from Center 23 - the ones I requested you send quick so we could make sure the 3T magnet images looked same/good, etc.), along with the completed scoring forms as usual. The tracking number for that is: 8605 0430 3622. Do you have more to send me for the SUPPORT MRI project?

Also - Rose or Kris - Can I use the RTI Fed Ex number with all the SUPPORT back and forth sending? I thought that the cost of that was somehow included in the bottom line budget for the SUPPORT secondary. It is just getting a bit expensive for me to shoulder that Fed Ex cost alone, and it is a bit difficult to un-entangle the fed ex costs from the SUPPORT MRI project from all the rest of our division Fed Ex expenses.

Let me know,

Thanks

Susan

--

Susan R. Hintz, M.D., M.S. Epi  
Associate Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351



**From:** Neil Finer  
**To:** Wade Rich; Georgia.E.McDavid@uth.tmc.edu  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: new SUPPORT  
**Date:** Thursday, September 27, 2007 2:34:10 PM

---

Hi Georgia

Thanks for the questions. I agree with Wade about a Control/Surf who would need intubation for surf, and could then be extubated if they meet criteria.

I would believe that any infant who is randomized to CPAP should get CPAP in the DR and if on admission they are deemed well enough to wean the CPAP could be discontinued.

I suppose that in view of the fact that the protocol does not have any criteria for requiring CPAP or not using CPAP, that we should at least give the CPAP in the DR till they can be evaluated in the NICU. I would file a protocol deviation with the explanation that the infant was deemed to be too well to have any intervention.

I fully understand the decision for this infant.

Did this child continue to do well and never require CPAP?

Be well

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

---

**From:** Wade Rich  
**Sent:** Thursday, September 27, 2007 7:16 AM  
**To:** Neil Finer  
**Subject:** FW: new SUPPORT

Hi Neil,

I know the answer to part 2, which is yes, an Early Surf infant must be intubated in the first hour. Part one is a little less clear. I would worry that when the kid fails later, you do not know if he would have done better with a hit of CPAP in the DR. But I personally would not call it a deviation.

Your thoughts?

wade

---

**From:** Mcdavid, Georgia E [mailto:Georgia.E.McDavid@uth.tmc.edu]  
**Sent:** Thursday, September 27, 2007 6:42 AM  
**To:** Wade Rich  
**Subject:** new SUPPORT

Hi Wade,

We had a new SUPPORT infant that was randomized to CPAP prior to birth and after delivery did not need any support. He is sitting in our unit on RA. Should they have started CPAP despite the fact the infant did not need it? Other than a protocol deviation, what do we need to do? This has not happened to us before. Usually our kids have required intubation. What if the infant is randomized to intubation and clearly does not require it? Same thing?

Thanks,  
Georgia

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: MISSING SUPPORT OUTCOMES  
**Date:** Tuesday, September 25, 2007 4:06:38 PM

---

I will be transmitting them today.  
Nancy

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 9/25/2007 1:45 PM >>>  
Were 74421 and 74441 transmitted to RTI?

Thanks for looking into this

Rose

-----Original Message-----

From: Nancy Miller [mailto:Nancy.Miller@UTSouthwestern.edu]  
Sent: Tuesday, September 25, 2007 2:42 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: JANET MORGAN; Pablo Sanchez  
Subject: Re: MISSING SUPPORT OUTCOMES

Rose,  
(b) (6) has an ophthalmology appt. scheduled for 10/29/07  
(b) (6) are fully vascularized.  
Janet will let you know about (b) (6)  
Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-404B  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206(b) (6)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
9/21/2007 9:10 AM >>>  
Hi,

We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!  
Rose

CENTER  
NETWORK

ROP\_message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

FU\_message

4

(b) (6)

FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** JANET MORGAN  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: MISSING SUPPORT OUTCOMES  
**Date:** Tuesday, September 25, 2007 2:49:32 PM

---

the patient (b) (6) has been done and it should be in the computer, I did it last week, will re-check on Wednesday when I go over .

janet

>>> Nancy Miller 09/25/07 1:42 PM >>>

Rose,

(b) (6) has an ophthalmology appt. scheduled for 10/29/07

(b) (6) are fully vascularized.

Janet will let you know about (b) (6)

Thanks,

Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-404B  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206 (b) (6)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 9/21/2007 9:10 AM >>>

Hi,

We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!

Rose

CENTER

NETWORK

ROP\_message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

FU\_message

4

(b) (6)

FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Katherine A Foy  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: MIssing SUPPORT OUTCOMES  
**Date:** Tuesday, September 25, 2007 11:13:36 AM

---

I am working on these SUPPORT outcomes and will let you know when I have finished. Do you want me to reply below or just enter what I can into the data base. Let me know if I can help with anything else.

Thank you,  
Kathy Foy  
Clinical Research Nurse  
Duke University Health Systems  
Neonatology  
668-3360 office  
970 (b) (6) pager

"Higgins,  
Rosemary  
(NIH/NICHD) [E]" To  
<higginsr@mail.nih.gov> <foy00004@mc.duke.edu>, "Ronald N  
Goldberg" <goldb008@mc.duke.edu>,  
"Michael Cotten"  
09/21/2007 11:03 AM <cotte010@mc.duke.edu>,  
<golds005@mc.duke.edu>,  
<lohme001@mc.duke.edu>  
cc  
<adas@rti.org>, <mgantz@rti.org>  
Subject  
MIssing SUPPORT OUTCOMES

Hi,  
We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!  
Rose

|-----+----->  
|CENTER |NETWORK |  
|-----+----->  
>-----|

|ROP\_message |

>----->  
|----->  
|19 (b) (6) |  
|----->  
>----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. |  
>----->

|----->  
|19 (b) (6) |  
|----->  
>----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. |  
>----->

|----->  
|19 (b) (6) |  
|----->  
>----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. |  
>----->

|----->  
|19 (b) (6) |  
|----->  
>----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. |  
>----->

|----->  
|19 (b) (6) |  
|----->  
>----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye. |  
>----->

|----->  
|19 (b) (6) |  
|----->  
>----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. |  
>----->

|----->  
|19 (b) (6) |  
|----->  
>----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. |  
>----->

|----->  
|19 (b) (6) |  
|----->  
>----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. |  
>----->



>----->  
|-----+----->  
|19 (b) (6) |  
|-----+----->

>----->  
|50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. |

>-----+----->  
|19 (b) (6) |  
|-----+----->

>----->  
|Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams |  
|have been entered. |

>-----+----->  
|19 (b) (6) |  
|-----+----->

>----->  
|No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has |  
|been reached. |

>-----+----->  
|19 (b) (6) |  
|-----+----->

>----->  
|No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early. |

>-----+----->  
|CENTER |NETWORK |  
|-----+----->

>----->  
|BPD\_message |

>-----+----->  
|19 (b) (6) |  
|-----+----->

>----->  
|PHY01 is expected based on NG07 but has not been entered |

>-----+----->  
|19 (b) (6) |  
|-----+----->

>----->  
|Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot has not been entered |

>-----+----->  
|CENTER |NETWORK |  
|-----+----->

>----->  
|FU\_message |

>-----+----->

|19 (b) (6) |  
|-----+----->  
>-----|  
|FU window has closed but NF05 and NF09 are not completed |  
>-----|

|19 (b) (6) |  
|-----+----->  
>-----|  
|FU marked as complete (per NF10/SF10) but NF09 is not completed |  
>-----|

|19 (b) (6) |  
|-----+----->  
>-----|  
|FU window has closed but NF05 and NF09 are not completed |  
>-----|

|19 (b) (6) |  
|-----+----->  
>-----|  
|FU marked as complete (per NF10/SF10) but NF09 is not completed |  
>-----|

|19 (b) (6) |  
|-----+----->  
>-----|  
|FU marked as complete (per NF10/SF10) but NF05 and NF09 are not  
completed |  
>-----|

|19 (b) (6) |  
|-----+----->  
>-----|  
|FU marked as complete (per NF10/SF10) but NF09 is not completed |  
>-----|

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Gantz, Marie  
**To:** Phelps, Dale; JRohr@salud.unm.edu; cbackstrom@salud.unm.edu; kwatterberg@salud.unm.edu  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Zaterka-Baxter, Kristin; Das, Abhik; Auman, Jeanette O.  
**Subject:** FW: SUPPORT OUTCOMES  
**Date:** Tuesday, September 25, 2007 10:07:39 AM

---

Hi Dale,

I am forwarding your request for information to the folks at UNM.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Friday, September 21, 2007 6:59 PM  
**To:** Gantz, Marie; Zaterka-Baxter, Kristin; higginsr@mail.nih.gov  
**Subject:** Re: SUPPORT OUTCOMES

Protocol requires two consecutive exams in Zone III, or fully vascularized, or. Hmmmm, I don't have the MOP with me on this trip. I will have to check when I get home. Maybe there is also "unequivocally regressing in zone III", but I don't think so.

Is this exam you report the only exam done? Then for sure it's not final.  
Could you send me the SUPP10 form?  
I will be back at work Tues.

Dale

----- Original Message -----

**From:** Gantz, Marie <mgantz@rti.org>  
**To:** Phelps, Dale  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E] <higginsr@mail.nih.gov>; Das, Abhik <adas@rti.org>; Auman, Jeanette O. <joa@rti.org>  
**Sent:** Fri Sep 21 13:37:46 2007  
**Subject:** FW: SUPPORT OUTCOMES

Hi Dale,

Please see the information below regarding ROP status of an infant at UNM. Would you consider this information adequate to conclude that the infant had a favorable ROP outcome?

Thanks,

Marie

Marie Gantz, Ph.D.

Research Statistician

RTI International

mgantz@rti.org

828-254-6255

---

From: Julie Rohr [mailto:JRohr@salud.unm.edu]  
Sent: Friday, September 21, 2007 1:07 PM  
To: Rosemary (NIH/NICHD) [E] Higgins; Conra Lacy; Kristi Watterberg  
Cc: Das, Abhik; Gantz, Marie  
Subject: Re: SUPPORT OUTCOMES

Hello,

To respond to your query:

The last eye exam was done on 6/25/07. This information was entered on the SUPP10 and sent. In addition to the coding on the form that was on the SUPP10, the ophthalmologist wrote on the patient record:

"ROP resolved (stage I zone III) - not at risk anymore-may D/C ROP screen---faint demarc line periph zone III-will not progress".

I have found no evidence of additional eye exams.

I have been unable to find anywhere on the SUPP10 form to indicate this information.

Julie

Julie Rohr MSN RNC  
Nurse/Clinical Trials Coordinator  
Department of Pediatrics

UNM Hospital  
2211 Lomas Blvd NE  
Albuquerque, NM 87106  
(505) 272-0363

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 9/21/2007 9:07 am >>>

Hi,

We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!  
Rose

CENTER

NETWORK

ROP\_message

26

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

From: Ellen Hsieh  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: Re: SUPPORT MISSING OUTCOMES  
Date: Monday, September 24, 2007 3:34:38 PM

---

Rose,  
We are making progress.

(b) (6) Seen 8/20/07 with regressed ROP in zone 2. This child is to be seen again in 6 months—next appointment date is in December.

(b) (6) This child is from south Georgia near the Florida line and very near to where there were fires during the spring and early summer. This child remains very fragile and at the time of the scheduled visit she was still on oxygen. Mom said that she could not bring her out of the house in the smoky conditions for such an extended trip. We had smoke up here as well and we had code red alert for our air quality. We rescheduled her for 10/8 and the good news is the child was off oxygen last I heard and of course there is no smoke.

Thanks again for helping us stay on track.  
Ellen

"Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> writes:  
Hi

We are awaiting the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!  
Rose

CENTER NETWORK ROP\_message

9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER NETWORK FU\_message

9 (b) (6) FU window has closed but NE05 and NE09 are not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7808

301-496-3790 (FAX)

higginsr@mail.nih.gov

**From:** Sood, Beena  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Shankaran, Seetha; ae5357@wayne.edu  
**Cc:** adas@rti.org; mgantz@rti.org  
**Subject:** RE: MISSING SUPPORT OUTCOMES  
**Date:** Sunday, September 23, 2007 6:17:06 AM

---

It seems both these patients have not kept their outpatient appointments - we will try to get them in

(b) (6) - saw (b) (6) 8/31/07 and is stage 0, zone 2. I spoke to (b) (6) and he will have his office staff follow up with the family since she has no appointment scheduled. He said he should have seen her back in office 4 weeks from last appointment.

(b) (6) - has not been seen as an outpatient since discharge. Her appointment at CHM is scheduled for 9/24/07.

Thanks  
Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Fri 9/21/2007 10:11 AM  
To: Sood, Beena; Shankaran, Seetha; ae5357@wayne.edu  
Cc: adas@rti.org; mgantz@rti.org  
Subject: MISSING SUPPORT OUTCOMES

Hi,

We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!  
Rose

CENTER

NETWORK

ROP\_message

5

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

5

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)



**From:** Monica Konstantino  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: MISSING SUPPORT OUTCOMES  
**Date:** Friday, September 21, 2007 2:01:46 PM

---

Higgins, Rosemary (NIH/NICHD) [E] wrote:

Hi,  
We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!

Rose

CENTER	NETWORK	ROP_message
13	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
13	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
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6100 Executive Blvd., Room 4B03B  
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301-496-3790 (FAX)  
higginsr@mail.nih.gov

Hi Rose, I emailed the research nurse at our second site to have her look into the ROP exam on the twins. I will keep you posted. thanks,  
Monica

**From:** [Auman, Jeannette O.](mailto:Auman, Jeannette O.)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins, Rosemary (NIH/NICHD) [E])  
**Cc:** [Auman, Jeannette O.](mailto:Auman, Jeannette O.)  
**Subject:** RE: SUPPORT OUTCOMES  
**Date:** Friday, September 21, 2007 1:12:55 PM

---

Sure, I'll put it in the system as excused and let Marie know the outcome if she doesn't already.

Thanks,  
Jenny

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Friday, September 21, 2007 1:08 PM  
**To:** Auman, Jeannette O.  
**Subject:** FW: SUPPORT OUTCOMES

Can you help us on this?  
Thanks  
Rose

---

**From:** Julie Rohr [<mailto:JRohr@salud.unm.edu>]  
**Sent:** Friday, September 21, 2007 1:07 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Conra Lacy; Kristi Watterberg  
**Cc:** [adas@rti.org](mailto:adas@rti.org); [mgantz@rti.org](mailto:mgantz@rti.org)  
**Subject:** Re: SUPPORT OUTCOMES

Hello,  
To respond to your query:  
The last eye exam was done on 6/25/07. This information was entered on the SUPP10 and sent. In addition to the coding on the form that was on the SUPP10, the ophthalmologist wrote on the patient record:  
"ROP resolved (stage I zone III) - not at risk anymore-may D/C ROP screen---faint demarc line periph zone III-will not progress".  
I have found no evidence of additional eye exams.  
I have been unable to find anywhere on the SUPP10 form to indicate this information.  
Julie

Julie Rohr MSN RNC  
Nurse/Clinical Trials Coordinator  
Department of Pediatrics  
UNM Hospital  
2211 Lomas Blvd NE  
Albuquerque, NM 87106  
(505) 272-0363

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)> 9/21/2007 9:07 am >>>  
Hi,

We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!  
Rose

CENTER	NETWORK	ROP_message
26		50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
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(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

From: Evans, Patricia W  
To: Higgins, Rosemary (NIH/NICHD) [E]; Kennedy, Kathleen A; McDevitt, Georgia E; Morris, Brenda H  
Cc: adas@rli.org; moads@rli.org; Green, Charles  
Subject: RE: Missing SUPPORT OUTCOMES  
Date: Friday, September 21, 2007 1:02:51 PM

The 3 babies have been seen and Bayleys have been done. The scores need to be calculated and/or entered which we will do ASAP.

Thanks,

Patricia W. Evans, MD  
Assistant Professor of Pediatrics, Division of Neonatology  
The University of Texas Medical School at Houston  
713-500-5311 (office)  
713-500-5794 (fax)  
[Patricia.W.Evans@uth.tmc.edu](mailto:Patricia.W.Evans@uth.tmc.edu) (e-mail)

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higgins@mail.nih.gov]  
Sent: Friday, September 21, 2007 9:57 AM  
To: Kennedy, Kathleen A; McDevitt, Georgia E; Morris, Brenda H; Evans, Patricia W  
Cc: adas@rli.org; moads@rli.org  
Subject: Missing SUPPORT OUTCOMES

Hi,  
We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!

Rose

CENTER	NETWORK	ROP_message
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	The infant has died, however 50 weeks PMA was reached and the final ROP exam status has not been reported on the SUPP10 for either eye. Please confirm that all ROP exams have been entered.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
CENTER	NETWORK	BPD_message
18	(b) (6)	Infant has been discharged and was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered
CENTER	NETWORK	FU_message
18	(b) (6)	FU window has closed but NF05 and NF09 are not completed
18	(b) (6)	FU marked as complete (per NF10/SF10) but NF09 is not completed
18	(b) (6)	FU marked as complete (per NF10/SF10) but NF09 is not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higgins@mail.nih.gov](mailto:higgins@mail.nih.gov)

**From:** [Johnson, Yvette R](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Draft Manuscript submission-BPD Outcomes Over Time  
**Date:** Friday, September 21, 2007 12:13:59 PM  
**Attachments:** [BPD outcomes-changes overtime manuscript.doc](#)

---

Rose,

I have attached a draft copy of the BPD and Outcomes manuscript for submission to the manuscript subcommittee. This has been reviewed by Drs. Shankaran and Kazzi. I will also need a listing of the follow-up PI's for that time period to add to the acknowledgements.

Thanks,

Yvette Johnson

<<BPD outcomes-changes overtime manuscript.doc>>

***Developmental Outcomes Among BPD Infants with and without Home Oxygen:***

***Changes Over Time***

**Yvette R. Johnson, M.D., MPH, Seetha Shankaran, M.D., S. Nadya J. Kazzi, M.D., MPH, Bing Liu, MS., Kenneth Pool, Ph.D., for the National Institute of Child Health and Human Development Neonatal Research Network.**

**Abstract**

**Introduction**

Bronchopulmonary dysplasia (BPD) is a serious morbidity among premature infants. Those who survive to NICU discharge with BPD are at greater risk for long-term neurodevelopmental impairment. Studies have demonstrated that BPD is a significant predictor of mental, psychomotor, and language delay (Short 2003, Singer 1997, Gregoire 1998, Gray 2004). The need for supplemental home oxygen among infants with BPD is a marker of severity of illness and has been associated with a greater risk of neurodevelopmental impairment (Vohr 2000, Robertson Pediatrics 1992, 89:365-372). In the post surfactant era improved survival of VLBW infants was associated with an increased risk of BPD (Hack and Fanaroff, Early Human Development 1999, Hintz Pediatrics 2005) and adverse neurodevelopmental outcomes (Hack Pediatrics 1996; Lemons Pediatrics 2001, Lorenz Arch Ped Adol Med 1998, Emsley Arch Dis Child Fetal and Neonatal Ed 1998, Hack and Fanaroff 1999).

Studies that evaluated the neurodevelopmental outcomes among VLBW infants with BPD included infants in birth cohorts from the 1980's and 1990's. During this time period, postnatal steroids were widely used for BPD among VLBW infants. In a report

from the NICHD Neonatal Network (Vohr 2004), postnatal steroid use for BPD among network centers ranged from 27%-65% and the frequency of use reported in the Canadian Neonatal Network was 25% (Lee Peds 2000). However, the short-term improvement in pulmonary function that followed postnatal steroid use was associated with a significant increased risk of long-term neurodevelopmental impairment (Doyle 2000, Barrington 2001, Yeh 1998, Shinwell 2000, Stark 2001). Review of the follow-up data by experts convened in an NICHD Consensus Conference led to the committee's recommendation that use of postnatal corticosteroids be limited to exceptional clinical circumstances (AAP Committee on fetus and Newborn, 2002). As a result, administration of postnatal steroids for BPD has declined significantly in recent years (Wilson-Costello 2007). This decline together with improvements in neonatal care may have resulted in improved neurodevelopmental outcomes among VLBW infants with BPD. Moreover, few studies have examined the longitudinal trajectory of neurodevelopmental outcomes over time in a large cohort of VLBW infants with BPD. Assessment of such outcomes at preschool age is crucial in order to identify infants who may need special education services.

The objective of this study was to evaluate the neurodevelopmental outcomes at 18-22 months and 28-30 months postmenstrual age among extremely low birth weight infants 501-1000 grams with BPD who were discharged home with and without supplemental oxygen and were compared to infants without BPD born at one of the NICHD Neonatal Network sites. The trajectory of outcomes between 18- 30 months corrected age among those infants was also examined.

## **METHODS**

### **Study Population**

The 15 academic centers that comprised the National Institutes of Child Health and Human Development (NICHD) Neonatal Research Network (NRN) participated in this study between October 1999 and August 2001. Infants 401-1000 grams at birth were enrolled. The study population was assembled from a cohort of infants previously enrolled within the first 72 hours of life in an NRN network multicenter, randomized clinical trial to determine the efficacy and safety of parenteral glutamine supplementation in extremely low birth weight infants (BW  $\leq$ 1000 grams) (Poindexter 2004). Infants excluded from the original study included those with major congenital anomalies, congenital TORCH infections, had a terminal illness and infants or for whom a decision had been made not to provide full support. The institutional review board at each center approved the study protocol, and written informed consent was obtained from each patient.

This secondary analysis was designed as a prospective longitudinal cohort study to evaluate the neurodevelopmental outcomes of infants with Bronchopulmonary Dysplasia (BPD) compared to those without BPD at the time of NICU discharge. BPD was defined as a requirement for supplemental oxygen at 36 weeks' postmenstrual age together with radiographic pulmonary changes. The study population for the secondary analysis included all infants in the original cohort who survived to NICU discharge, were enrolled in the NRN follow-up program, and completed neurodevelopmental follow-up assessment at both 18 and 30 months corrected age. The only additional exclusion for the secondary study included infants with congenital pulmonary disease. Three study groups were assigned; **group 1** comprised BPD infants requiring home oxygen, **group 2**

comprised BPD infants not requiring home oxygen, and **group 3** comprised ELBW infants discharged without a diagnosis of BPD.

### **Follow-up Assessment/ Variable Definitions**

Prior to discharge from the NICU, families of study patients were approached for consent to participate in the NRN follow-up program at each site. The study patients were enrolled for follow-up at two developmental time periods, 18-22 months and 28-32 months corrected age. Follow-up at 18-22 months was considered standard of care at 12 sites and informed consent for that visit was not obtained. The follow-up evaluation included a comprehensive developmental assessment, a standardized neurological assessment, as well as an evaluation of gross motor functional performance.

The developmental assessment included the Bayley Scales of Infant Development-II mental and motor scales with derivation of mental developmental index (MDI) and psychomotor developmental index (PDI) scores. The assessment was administered by certified examiners who were trained to reliability by 1 of 4 study Gold Standard psychologists with high inter-examiner reliability on the Bayley and previous formal training in test administration. Each Bayley tester was certified for administration of the Bayley by successful completion of 2-videotaped demonstrations of accurate performance and scoring as determined by 1 of the 4 Gold Standard psychologists. Certification was renewed annually for all testers. Bayley scores of  $100 \pm 15$  represent the mean  $\pm 1$  standard deviation (SD), a score of  $<70$  is 2 SD's below the mean.

The standardized neurologic examinations were based on the Amiel-Tison neurologic assessment (Amiel-Tison C. Neuromotor Status. In: Taeusch HW, Yogman MW, eds. *Follow-up Management of the High-Risk Infant*. Boston, MS: Little, Brown &



Company; 1987:115-126.). Cerebral palsy (CP) was defined as motor impairments that present as a non-progressive central nervous system disorder characterized by abnormal muscle tone in at least one extremity and abnormal control of movement and posture. The neurologic examinations were performed by experienced certified examiners who were trained to reliability in the examination procedure in a 2-day “hands-on” workshop. Structured interviews were performed to obtain social and economic status information (Hollingshead AB. *Four Factor Index of Social Status*. New Haven, CT: Yale University Press; 1975) and a detailed interim medical history, including data on hearing and vision status. All definitions, protocols, and procedures are contained in a manual of operations (Vohr 2000, Peds 105:1216).

The gross motor function (GMFCS) level was determined based on the GMFCS Classification System developed by Palisano et al (Palisano R, et al. Development and Reliability of a System to Classify Gross Motor Function in Children with Cerebral Palsy. *Dev Med Child Neurol*. 1997; 39:214-223). The GMFCS classification system is a 5 level classification system with emphasis on truncal tone and independent walking. Higher levels are associated with more functional limitations. This classification places primary emphasis on a child’s functional achievements rather than on their limitations, and focuses on ordinary performance (not best capacity) in the home or community setting, and does not include judgments regarding prognosis. For this analysis, study patients were classified as “Normal”, “Moderate” or “Severe” functional impairment; **“Normal”**= GMFCS level 0 (no impairment) or level 1 (infants move in and out of sitting and floor sit with both hands free, creep or crawl on hands and knees, pull to stand and take steps holding onto furniture); **“Moderate”**= GMFCS level 2 (infants maintain

floor sitting, but may need to use their hands for support to maintain balance, pull to stand, and take steps holding onto furniture); “Severe”= GMFCS level 3 (infants maintain floor sitting when the lower back is supported, roll and creep forward on their stomachs) or level 4 (infants have head control but trunk support is required for floor sitting, roll supine, and may roll prone) or level 5 (physical impairments limit voluntary control of movements, unable to maintain antigravity head and trunk postures in prone and sitting, require assistance to roll).

### **Outcomes**

The primary outcome, neurodevelopmental impairment (NDI), was assessed at 18-22 months and 28-32 months corrected age in the three study cohorts. NDI was defined as Mental Developmental Index (MDI) <70 or Psychomotor Developmental Index (PDI) <70 based on the Bayley Scales of Infant Development-II, or moderate to severe cerebral palsy (CP), or blindness in both eyes, or hearing impairment requiring amplification in both ears. The secondary outcomes included the trajectory of developmental outcome scores from 18 to 30 months corrected age. This was obtained by comparing the differences in the mean MDI, mean PDI, and the proportion of infants with normal GMFCS, moderate GMFCS, and severe GMFCS at both 18 and 30 months corrected age.

### **Statistical Analysis/independent and dependent variables**

Descriptive statistics were presented as mean, standard deviation, and proportions to describe sample characteristics comparing the 3 study groups (BPD on home oxygen, BPD without home oxygen, and no BPD). The student t-test and ANOVA were used to make comparisons between each BPD group with those without BPD and among all three

study groups at both study periods. The paired comparison t-test was used for continuous outcome measures and the Chi-square test was used for categorical outcome measures. General linear modeling for continuous variables and logistic regression for categorical variables were used to detect differences among groups at 18 and 30 months corrected age after controlling for important confounders. The primary outcome variable was neurodevelopmental impairment. The covariates used in the model known to be associated with increased neurodevelopmental morbidity included gender, maternal age, race, birth weight (in 100 gram increments), marital status, SES based on the Hollingshead score, anthropometric measures (weight, length, and head circumference), antenatal and postnatal steroid exposure, outborn status, Apgar score <5 at 5 minutes, late onset sepsis, duration of mechanical ventilation, SGA birth, length of hospital stay, cystic PVL, severe IVH (grade 3 or 4), living arrangement (with 1 or more biological parent, foster care or a chronic care facility), and birth center. To evaluate the trend in developmental scores from 18 to 30 months corrected age, the Bhapkar test was used for categorical outcome measures and the paired t-test for continuous outcome measures. All data were analyzed at the Research Triangle Institute data coordinating center.

## **RESULTS**

### **Study Population**

Among the 1,433 infants who were enrolled in the Glutamine Randomized Controlled Trial, 251 died before NICU discharge leaving 1,182 infants who survived to NICU discharge (82%). Figure 1 outlines the tracking of infants at the 18 and 30-months follow-up visits, along with the final study cohort who completed follow-up at both 18 and 30 months corrected age. Among the infants without BPD, 9 died prior to the 18-

month visit and 1 before the 30-month visit. In this same group, 62 were lost to follow-up before 18 months and 17 lost to follow up before 30 months. In addition, 5 infants did not complete the 30-month visit. Thus, 383 infants comprised the final study cohort without BPD who was evaluated at both 18 and 30 months. Among those infants with BPD, 13 died before the 18-month visit and 5 died before 30 months. In the BPD cohort, 59 were lost to follow up before 18 months and 6 lost to follow up before 30 months. In addition, 8 infants did not complete the 30-month visit. Thus, 348 infants comprised the final study cohort with BPD (193 on home oxygen and 155 not on home oxygen) who also completed follow-up at 18 and 30-months. In addition, among the study infants who were seen at both 18 and 30 months, 90 had missing MDI and 90 had missing PDI data, the remaining 86 were missing other key data points needed to complete the primary outcome analysis; these 266 infants were not included in the final analysis.

### **Center Variation in BPD Frequency**

The frequency of BPD with and without home oxygen across study centers showed considerable variation as shown in figure 2. The percentage of infants, across all centers, with BPD and discharged on home oxygen therapy ranged from 1%-66% and the infants with BPD without home oxygen ranged from 4%-52%. In addition, the percentage of infants without BPD ranged from 17%-95%. The criteria used for discharge on home oxygen varied among centers. A uniform set of discharge criteria for home oxygen use was not implemented across the entire Network.

### **Population Characteristics**

Infants with BPD who required home oxygen therapy were significantly more likely to be Caucasian, had a lower birth weight and birth length, gestational age, a higher

exposure to postnatal steroids (PNS), longer duration of mechanical ventilation (MV) and length of hospital stay compared to BPD infants without home oxygen and infants without BPD. Infants with BPD compared to infants without BPD were less likely to be born to women with PIH, more likely to have smaller weight (SGA) and head circumference (HC) at birth, and to develop late-onset sepsis. They were also less likely to be born to women with PIH.

### **Neonatal Morbidities and Developmental Outcomes**

Table 2 describes the clinical morbidities and developmental outcomes at 18-22 months (18-month visit) and 28-32 months (30-month visit) corrected age. There were no significant differences among study groups in the proportion of infants with an MDI <70 at the 18-month follow-up visit. However, infants with BPD who were discharged on home oxygen were significantly more likely to have a PDI <70 at 18 months compared to BPD infants not on home oxygen and infants without BPD (28% vs. 24% and 11%; overall P=0.001) and at 30-months (39% vs. 23% and 22%; overall P <0.001). Similarly, infants with BPD receiving home oxygen therapy were also more likely to have an MDI <70 at 30-months compared to BPD infants not on home oxygen and infants without BPD (32% vs. 24% and 17%; overall P= 0.002). The frequency of moderate-severe CP at 18 months was greater among BPD infants on home oxygen (21% vs. 17% and 8%; overall P=0.06), but not at 30-months (18% vs. 14% and 9%; P=0.10). The frequency of blindness in both eyes was not significantly different among groups at 18 or 30-months. However, at the 30-month visit deafness in both ears occurred more frequently among BPD infants who were discharged on home oxygen compared to the other 2 study groups (7% vs. 3% and 2%; overall P=0.04). The mean MDI and PDI based on the BSID-II at 18

and 30-months are represented in figure 3. Infants with BPD regardless of the need for home oxygen had significantly lower mean MDI and PDI compared to infants without BPD at both 18 and 30-months. Comparisons of the mean MDI and PDI scores among the 2 BPD groups (home O<sub>2</sub> vs. no home O<sub>2</sub>) were not significantly different except at 30-months; BPD infants with home oxygen had significantly lower mean PDI scores compared to BPD infants not on home oxygen ( $79 \pm 23$  vs.  $80 \pm 19$ ,  $P=0.03$ ).

The proportion of infants with moderate to severe impairment of gross motor function (%GMFCS), and neurodevelopmental impairment (%NDI) at 18 and 30-months are shown in figure 4. Overall, the proportion of infants with moderate-severe GMFCS was significantly higher for both BPD groups compared to those without BPD at 18 and 30-months corrected age (29% vs. 14%;  $P=0.002$  at 18-months and 20% vs. 11%;  $P=0.01$  at 30-months). The proportion of infants with NDI at 18-months was higher in both BPD groups compared to no BPD (44% vs. 31%;  $P=0.16$ ). However, this difference was not significant. In contrast, at 30-months corrected age, BPD infants were significantly more likely to have NDI compared to those without BPD (39% vs. 33%;  $P=0.002$ ), and infants with BPD who were discharged on home O<sub>2</sub> were significantly more likely to have NDI at 30-months compared to BPD infants not on home O<sub>2</sub> (49% vs. 40%;  $P=0.02$ ).

### **Trajectory of Developmental Outcomes Over Time**

The trajectory of developmental outcomes, that is the difference in the mean MDI and PDI scores, %GMFCS (normal, moderate, and severe), and %NDI, from 18 to 30-months were evaluated. The trajectory of developmental scores for all study groups demonstrated a trend toward higher mean MDI and PDI, and percent with normal

GMFCS from 18 to 30-months corrected age. The difference in the mean MDI score for the study cohort overall was  $2.1 \pm 13.6$  points ( $P=0.0001$ ). However, for each study cohort the differences varied as follows: BPD +home O<sub>2</sub>= $3.7 \pm 12$  ( $P < 0.0001$ ); BPD -home O<sub>2</sub>= $2.3 \pm 13.5$  ( $P=0.05$ ); and no BPD=  $1.2 \pm 14$  ( $P=0.11$ ). The differences in the mean PDI scores for the entire study cohort, BPD +home O<sub>2</sub> and BPD -home O<sub>2</sub> were not significantly different. However, the change in the mean PDI score for the group without BPD was significant ( $\Delta$ mean= $2.4 \pm 18$ ;  $P=0.02$ ). The change in the proportion of infants with NDI from 18 to 30-month for the entire cohort combined, as well as within each study cohort was not statistically significant. However, among infants with BPD regardless of the need for home oxygen, the proportion of infants with a normal GMFCS increased significantly from 18 to 30-months (BPD +home O<sub>2</sub>: 69% to 77%;  $P=0.01$ , BPD -home O<sub>2</sub>: 74% to 84%;  $P=0.001$ ). Among the ELBW infants without BPD, the difference in the proportion with normal GMFCS was not significant (86% to 89%;  $P=0.06$ ).

### **Predictors of mental and psychomotor impairment and cerebral palsy at 18 and 30-months corrected age**

Our findings demonstrate that the significant predictors of severe mental impairment (MDI <70) at 18 months corrected age included low SES (OR= 2.1, 95% CI 1.1, 4.0), postnatal steroid use (OR= 2.0, 1.3, 3.1), and length <10<sup>th</sup> percentile (OR=1.8, 1.1, 3.0). At 30 months corrected age, low SES (OR=3.5, 1.5, 8.4), head circumference <10<sup>th</sup> percentile (OR= 2.3, 1.4, 3.8), and male gender (OR= 1.7, 1.1, 2.6) were significant predictors of MDI <70. Predictors of severe psychomotor impairment (PDI <70) included length <10<sup>th</sup> percentile at both 18 months (OR= 4.3, 2.4, 7.5) and 30 months (OR= 2.3,

1.4, 3.9) corrected age, medium SES level (OR= 3.5, 1.5, 7.9) and head circumference <10<sup>th</sup> percentile (OR= 2.6, 1.5, 4.4) were significant at 18 months corrected age only. Predictors of cerebral palsy at both 18 months and 30 months corrected age was head circumference <10<sup>th</sup> percentile, OR= 2.7 (1.5, 4.9) and 2.7 (1.5, 4.7) at 18 and 30 months corrected age respectively.

### **Predictors of Neurodevelopmental Impairment at 18 and 30-months corrected age**

The significant predictors of NDI at 18-months, after controlling for important confounders, are shown in figure 5 for all ELBW infants; The significant predictors included SES (medium) by Hollingshead score (OR=2.6, 95% CI= 1.4, 4.9), length <10<sup>th</sup> percentile (OR= 2.2, 1.4,3.7) and head circumference <10<sup>th</sup> percentile (OR=2.2, 1.4, 3.4), Apgar score <5 at 5 minutes (OR= 2.1, 1.1, 4.0), and male gender (OR= 1.6, 1.1, 2.2).

The significant predictors of NDI at 30-months are shown in figure 6; these included low SES (OR=1.8, 1.0, 3.3), length <10<sup>th</sup> percentile (OR= 1.7, 1.1, 2.9) and head circumference <10<sup>th</sup> percentile (OR= 1.9, 1.2, 3.0), male gender (OR= 1.6, 1.1, 2.3), and the need for home oxygen among infants with BPD (OR= 1.6, 1.0, 2.7).

### **Discussion**

The findings from this investigation demonstrate that BPD remains a significant risk factor for adverse developmental outcomes, especially among those infants who require home oxygen therapy. Extremely low birth weight infants with BPD have significant developmental delay compared to premature infants without BPD. However, overtime their developmental trajectory improved between 18-months and 30-months corrected age. The results from this investigation show that cognitive and motor delay, as well as functional motor impairment was disproportionately higher ELBW infants with



BPD compared to those without BPD. Infants with BPD who require home oxygen at discharge are at significantly greater risk of impaired motor development at 18-months corrected age, and neurodevelopmental impairment by 30-months corrected age compared to ELBW infants with BPD not requiring home oxygen, as well as infants without BPD. Thus, the need for home oxygen at discharge among infants with BPD is a marker of long-term risk of adverse developmental outcomes. Our findings also demonstrate that although the developmental trajectory of ELBW infants with BPD continue to lag behind their counterparts without BPD, improvement in their cognitive, motor and functional scores was demonstrated between 18-months and 30-months corrected age. These findings suggest that the developmental trajectory of high-risk premature infants with BPD is not static; these infants manifest improvement in their developmental progression over time despite early biological risk factors. The significant trend toward normal gross motor function is an important and clinically meaningful finding as this reflects the infants' best performance with regard to motor abilities, as well as their ability to manipulate their environment. This would result in a better quality of life.

We also demonstrated significant predictors of neurodevelopmental impairment such as home oxygen requirement among infants with BPD and postnatal steroid use for lung disease. In addition, sociodemographic factors such as low socioeconomic status, as measured by the Hollingshead score is a significant risk factor for poor developmental outcomes. Our findings demonstrated the significant impact of growth restriction on long-term developmental outcomes. In this cohort, length, head circumference below the 10<sup>th</sup> percentile are significant predictors of MDI <70, PDI <70 and NDI <70 at both 18

and 30 months' corrected age. The independent effect of growth delay on neurodevelopmental outcomes among ELBW infants has been shown in a recent NICHD Neonatal Research Network study evaluating in-hospital growth velocity and developmental outcomes at 18-22 months' corrected age (Ehrenkranz 2006).

The strengths of our study include the inclusion of a large cohort of ELBW infants from multiple academic centers, despite the center variation in clinical practice, we were able to demonstrate significant trends in the developmental outcomes overtime for the entire cohort. This has important implications for counseling families regarding the long-term prognosis for their high-risk premature infant. We speculate that as the decline in the use of postnatal steroids continues, the prognosis for more favorable neurodevelopmental outcomes infants born premature will continue to improve. It will be prudent for follow-up investigators to continue to monitor the long-term impact on neurodevelopmental outcomes of new therapies in neonatology for this vulnerable population of infants. Other strengths of this study include a comprehensive systematic follow-up evaluation of all infants with the use of uniform clinical definitions and standardized assessment tools by certified examiners. This reduces the variation in reporting primary outcomes and more meaningful comparisons with current and future studies.

The improved developmental outcomes observed in this cohort are consistent with recent reports by Wilson-Costello 2007 who compared neonatal therapies and neurodevelopmental outcomes of extremely low birth weight infants born in three time periods, period I: 1990-1999, period II: 1982-1989, and period III: 2000-2002. These investigators demonstrated an improvement in survival without impairment (49% to

68%) over the three periods, as well as a decline in the frequency of cerebral palsy (13% to 5%) and neurodevelopmental impairment (35% to 23%). These investigators ascribed the improved neurodevelopmental outcomes to factors such as a decline in the use of postnatal steroids, increased use of antenatal steroids, cesarean section birth, and decreased frequency of late-onset sepsis over the three time periods. The decline in postnatal steroid use demonstrated in that study was important as previous studies have demonstrated a significant association with increased rates of cerebral palsy and neurodevelopmental impairment (Yeh 2004, Baud 2004, Short 2003, Barrington 2001). Our study was not designed to evaluate outcomes relative to changes in postnatal steroids. However, this study cohort was born during a period when the NICHD consensus conference was convened to address the multitude of studies linking postnatal steroid use to developmental impairment. This ultimately led to the statement from the AAP Committee on Fetus and Newborn placing a moratorium on the judicious use of postnatal steroids for BPD (American Academy of Pediatrics, Committee on Fetus and Newborn; Canadian Pediatric Society, Fetus and Newborn Committee. Pediatrics 2002). During this time period, practice changes leading to a reduction in the use of postnatal steroids among neonatologists and others were implemented. Our findings demonstrated significantly less frequent use of postnatal steroids among infants with BPD without home oxygen; these infants also demonstrated greater gains in their developmental trajectory compared to infants with BPD requiring home oxygen.

There remain many factors that need to be considered that influence developmental outcomes in this high-risk population. However, the impact of the infants' psychosocial environment has been under appreciated. Recent studies have clearly

demonstrated that among low-risk very low birth weight infants regardless of socioeconomic status, the quality of the care giving environment and style of parenting significantly impacts the developmental trajectory of VLBW premature infants (Smith 2006). These environmental influences may also lessen the impact of biological risks and perinatal complications known to be associated with prematurity and developmental outcomes (Smith 2006). An enriched environment comprised of healthy parent-infant interactions including responsive parenting significantly blunts the negative effects of perinatal risk factors associated with prematurity; this results in neurodevelopmental outcomes that mirror healthy term infants once these infants reach pre-school age. Although, we would not anticipate these dramatic results among very high-risk extremely low birth weight infants as perinatal morbidities would overwhelmingly affect long-term outcomes. However, the studies that demonstrate significant positive effects of responsive parenting on developmental outcomes do suggest that consistently high levels of responsive parenting can lessen the negative effects of perinatal morbidities. Although our study did not explore the range of environmental influences on outcomes, further investigation of key psychosocial factors such as parenting, socioeconomic factors, maternal stress and depression require additional exploration. Identification of important modifiable environmental risk factors will be critical to designing intervention strategies to continue the improvements in developmental outcomes in vulnerable high-risk infants.

One of the limitations of this study is that the NICHD Neonatal Research Network study sites did not, in this birth cohort, have uniform criteria for evaluating the need for oxygen at discharge. Thus, the criteria establishing the need for home oxygen may have varied significantly among the study sites, and may not in all cases reflect the

infants' severity of illness. Another potential limitation is that the study cohort was originally assembled and enrolled for another NRN randomized clinical trial, and may not be fully representative of the population, diminishing its generalizability to all ELBW infants. However, the three comparison groups were comparable in their baseline characteristics and the frequency of neonatal complications and interventions were similar to those reported by other investigators (Poindexter 2004). Finally, the use of a clinical definition for BPD rather than a physiologic definition reported in more recent NRN studies (Walsh 2004) may have overestimated the frequency of BPD in this cohort.

The encouraging findings from this investigation along with other recent studies are that the long-term neurodevelopmental outcomes of high-risk premature infants, once thought to be stagnant over the last decade despite gains in obstetric and neonatal care, are now demonstrating significant improvement. The recent progress in developmental outcomes can certainly be ascribed to many factors including changes in clinical practice as demonstrated by a significant reduction in postnatal steroid use, increased antenatal steroid use, attempts to reduce late onset infection in this vulnerable population, along with promising new therapies.

Changes in clinical practices that are proven to be harmful can mitigate the long-term developmental risk. However, addressing sociodemographic factors that impact long-term outcomes remains a more difficult challenge. Further investigation of the modifiable environmental risk factors, both biological and psychosocial, that contribute to better neurodevelopmental outcomes and buffer the perinatal risk factors that contribute to increased risk of neurodevelopmental impairment is urgently needed. The significant effects of environmental influences after discharge from the NICU to home

such as responsive parenting, maternal attachment, maternal psychopathology, socioeconomic factors, and barriers to intensive follow-up care are areas for further investigation. The major challenge over the next decade will be to identify interventions implemented prior to discharge home and after discharge that will improve the developmental outcomes of all premature infants, specifically those at greatest risk.

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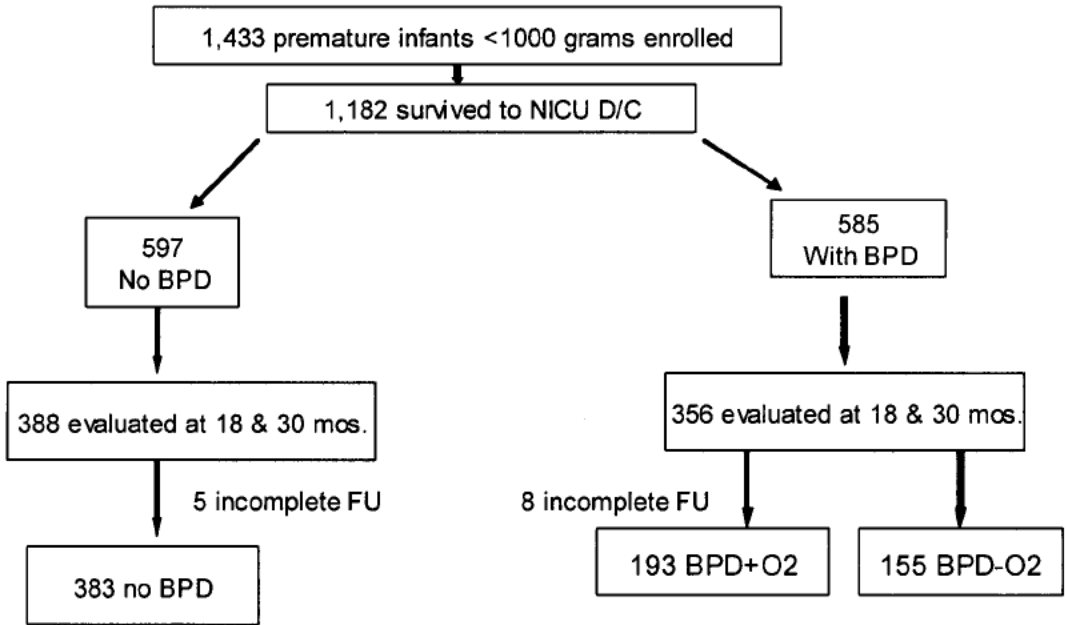
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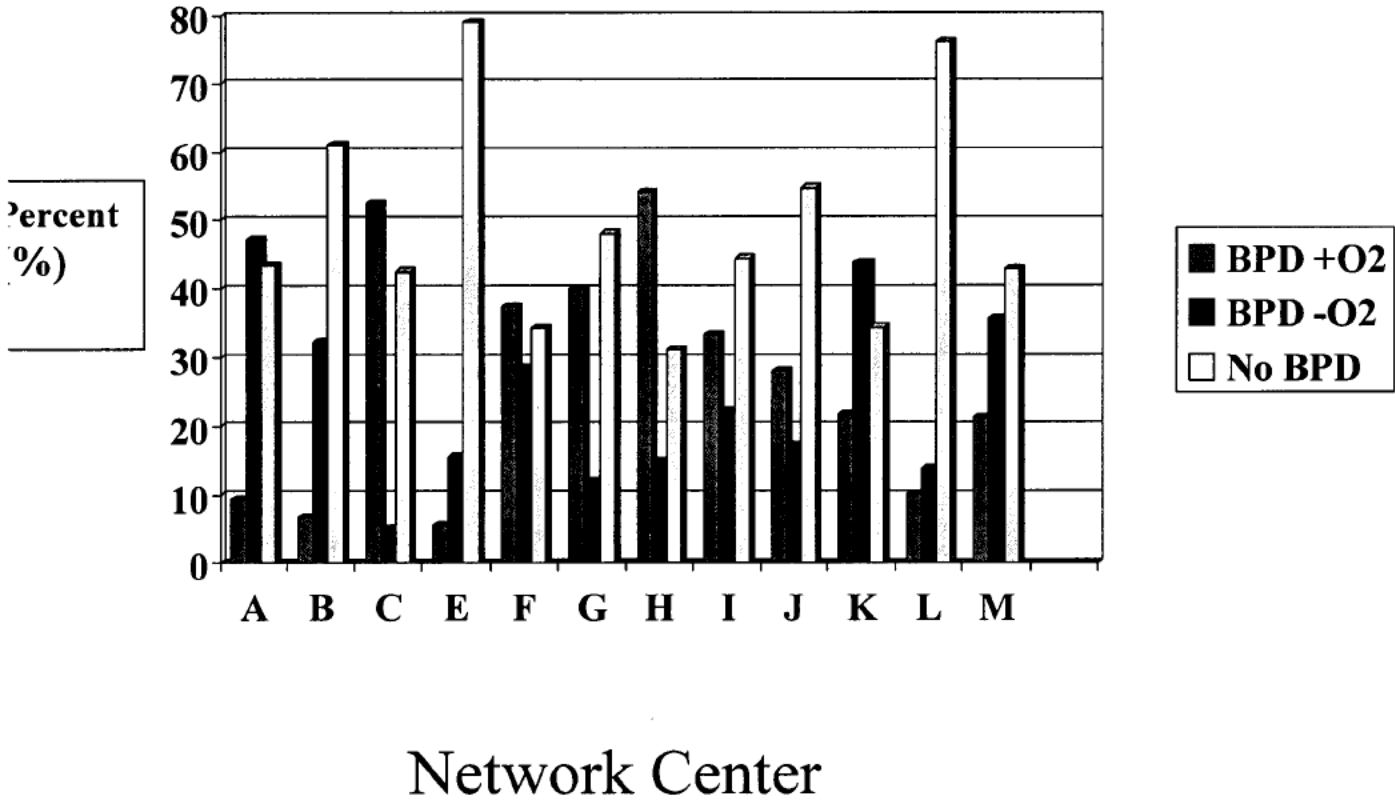
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# Figure 1. Tracking and Follow-up of Study Patients



**Figure 2. NICHD Neonatal Research Network Center Variation in BPD Frequency**



**Figure 2. NICHD Neonatal Research Network Center Variation in BPD Frequency**

The Y-axis represents the proportion of infants with BPD ( $\pm$ home oxygen) and those without BPD and the X-axis represents an alphabetical listing of NICHD Neonatal Network centers.

**Table 1. Baseline Maternal and Neonatal Characteristics Among Infants With and Without BPD**

	BPD +Home O2 (N=193)	BPD -Home O2 (N=155)	No BPD (N=383)
<b>Maternal</b>			
Age (years)	28±7.0	27.4±6.9	27.3±6.8
Gravida (median)	2.0	3.0	2.0
Parity (median)	2.0	2.0	2.0
Race			
Black	84 (44%)	68 (44%)	182 (48%)
White	93 (48%)	58 (37%)**	144 (38%)*
Hispanic	12 (6%)	26 (17%)	52 (14%)
Other	4 (2%)	3 (2%)	5 (1%)
<HS education	41 (23%)	40 (27%)	103 (27%)
Marital status (single)	94 (49%)	70 (45%)	168 (44%)
Income <20K	64 (35%)	65 (42%)	160 (42%)
Prenatal care	180 (93%)	146 (94%)	357 (93%)
PROM >18 hrs.	51 (27%)	45 (30%)	91 (%)
PIH	42 (22%)	38 (25%)	118 (31%)*
Diabetes	5 (3%)	7 (5%)	13 (3%)
ANS	159 (82%)	128 (83%)	315 (82%)
Intrapartum antibiotics	132 (68%)	119 (77%)	264 (69%)

**Neonatal**

BW (g)	748 ±120	774 ±127**	813 ±124*
Birth Length (cm)	32 ± 2.1	33 ±2.4**	34 ±2.2*
Birth HC (cm)	23 ±1.5	23 ±1.6	24 ±1.7*
GA (wk)	25 ±1.5	26 ±1.9**	27 ±1.9*
Male gender	94 (49%)	82 (53%)	151 (39%)*
SGA	23 (12%)	18 (12%)	70 (18%)*
PNS	125 (65%)	66 (43%)**	57 (15%)*
Duration MV (d)	42 ±29	33 ±23 **	13 ±15*
LOS (mean)	124 ±61	110 ±16**	28 ±29*
Severe IVH (grade 3-4)	26 (13%)	27 (17%)	40 (11%)
PVL	5 (3%)	2 (1%)	6 (2%)
Late sepsis	90 (47%)	75 (48%)	128 (33%)*
Severe ROP	178 (92%)	150 (97%)	355 (93%)
NEC	13 (7%)	18 (12%)	28 (7%)

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**Table 1. Abbreviations:** HS, high school; PROM, prolonged rupture of membranes; PIH, pregnancy induced hypertension; ANS, antenatal steroids; BW, birth weight; HC, head circumference; GA, gestational age; SGA, small for gestational age; PNS, postnatal steroids; MV, mechanical ventilation; LOS, length of hospital stay; IVH, intraventricular hemorrhage; PVL, periventricular leukomalacia; ROP, retinopathy of prematurity; NEC, necrotizing enterocolitis.

Values represent mean  $\pm$ SD, median, or number (%) of infants.

\*P <0.05 for overall comparison across all 3 study groups

\*\*P <0.05 for comparison of 2 groups, BPD +home O<sub>2</sub> vs. BPD -home O<sub>2</sub>.

**Table 2. Clinical and Developmental Outcome at 18-22 Months (18-month visit) and 28-32 Months (30-month visit) Corrected Age**

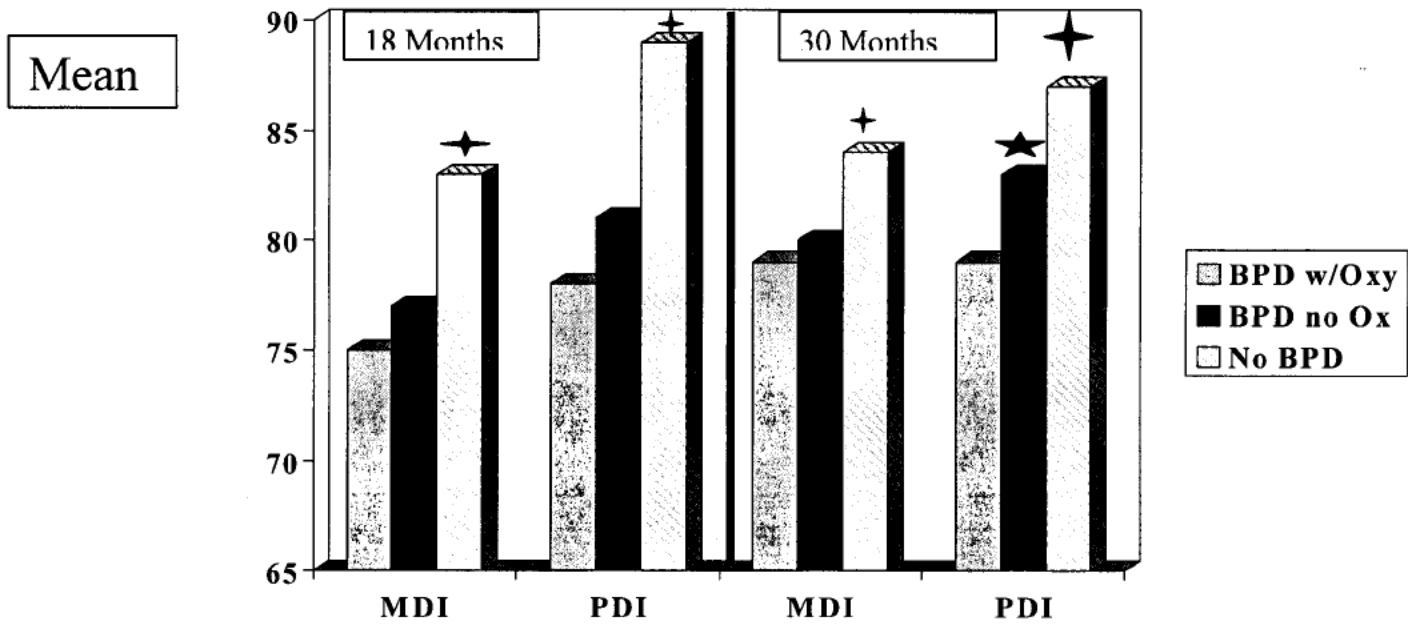
<b>18-Months</b>	BPD +Home O <sub>2</sub>	BPD -Home O <sub>2</sub>	No BPD	<b>30-Months</b>	BPD +Home O <sub>2</sub>	BPD -Home O <sub>2</sub>	No BPD
MDI < 70	68 (38%)	54 (36%)	85 (24%)		56 (32%)	32 (24%)**	61 (17%)*
PDI < 70	51 (28%)	34(24%)**	41(11%)*		67 (39%)	28 (23%)**	76 (22%)*
Moderate Severe CP	39 (21%)	26 (17%)	33 (9%)		34 (18%)	21 (14%)	37 (10%)
Blindness	2 (1%)	0	0		2 (1%)	1 (0.7%)	0
Deafness	8 (4%)	2 (1%)	5 (1.3%)		13 (7%)	4 (3%)**	7 (2%)*

**Table 2: Clinical and Developmental Outcome at 18-22 Months (18-month visit) and 28-32 Months (30-month visit) Corrected Age**

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Abbreviations: MDI, Mental Developmental Index, PDI, Psychomotor Developmental Index; CP, Cerebral Palsy.  
\*Overall P value<0.05 for comparisons across all 3 study groups  
\*\*P <0.05 for 2 group comparisons (BPD + Home O2 vs. BPD – Home O2)

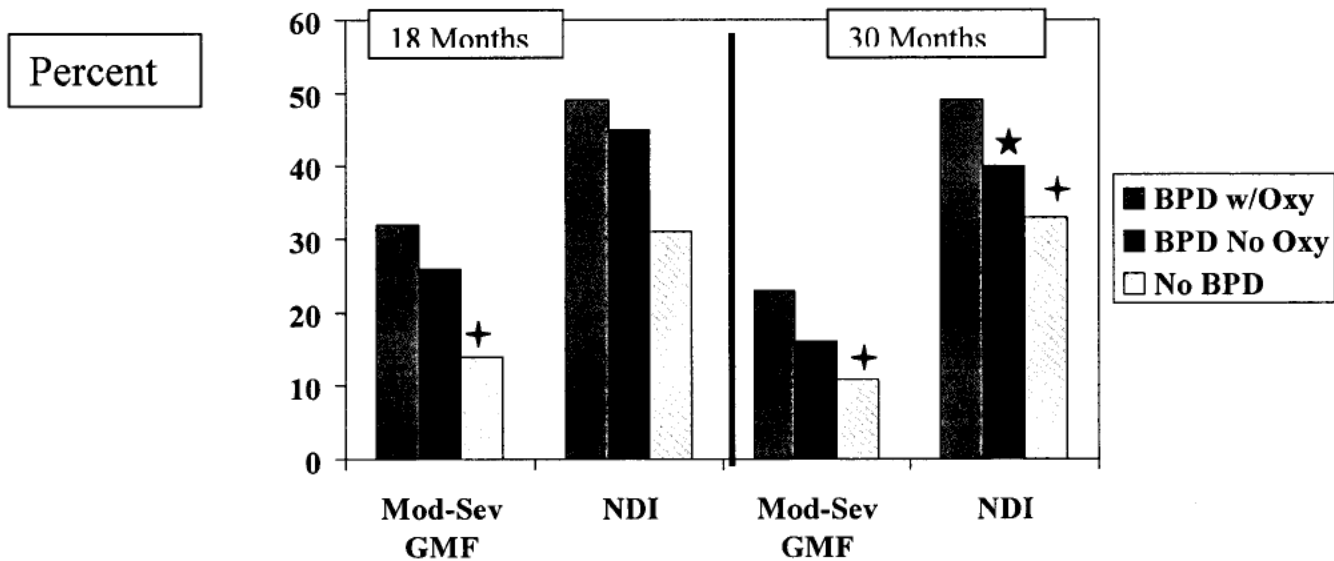
**Figure 3. Mean BSID-II Scores at 18 and 30 Months**



✦ P <0.05: overall significance across 3 study groups

★ P <0.05: paired t-test for comparison between 2 BPD groups

**Figure 4. Developmental Outcomes (GMFCS and NDI) at 18 and 30 Months Corrected Age**



✦ P <0.05: overall significance across 3 study groups  
 ★ P <0.05: paired t-test for comparison between 2 BPD groups

**Table 3. Trends in SGA Status Overtime**

	BPD +Home O2	BPD -Home O2	No BPD
Birth	23 (12%)	18 (12%)	70 (1%)*
18- Months	84 (44%)	66 (43%)	166 (43%)
30-Months	67 (35%)	51 (33%)	115 (30%)

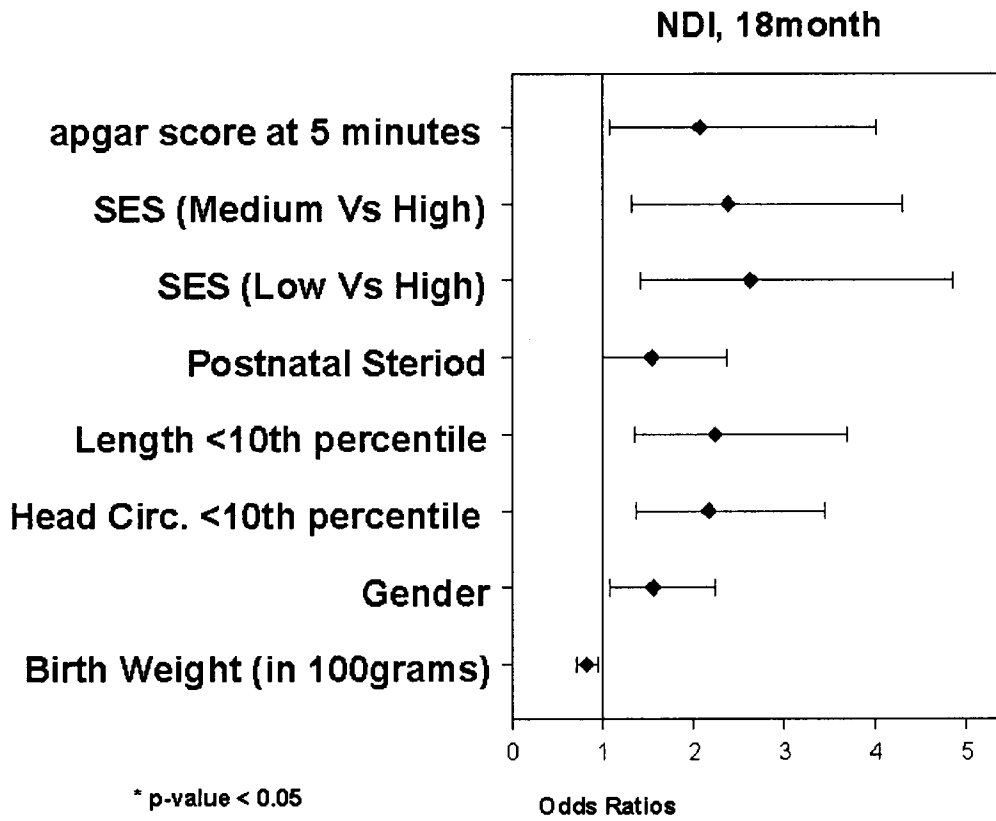
**Table 3: Trends in SGA Status Overtime**

---

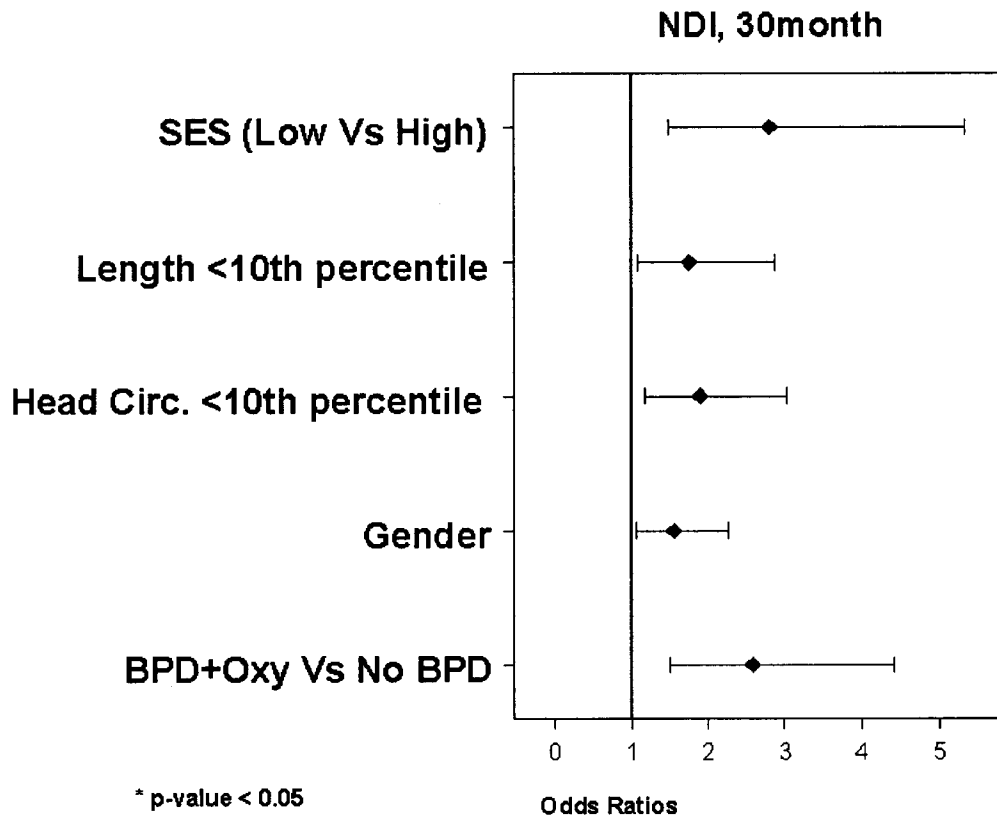
**Abbreviations:** SGA; Small For Gestational Age (<10<sup>th</sup> Percentile for Weight).  
\*P value <0.05 for overall comparisons across all 3 study groups

**Figure 5:** Predictors of Neurodevelopmental Impairment (NDI) at 18-months corrected gestational age based on Logistic Regression analysis.





**Figure 6:** Predictors of Neurodevelopmental Impairment (NDI) at 30-months corrected gestational age based on Logistic Regression analysis.



From: Gantz, Marie  
To: Walsh, Michele; Higgins, Rosemary (NIH/NICHD) [E]; mcw3@case.edu; nancy.newman  
Cc: Das, Abhik  
Subject: RE: SUPPORT OUTCOMES  
Date: Friday, September 21, 2007 11:46:54 AM

True, the primary outcome is known, but since ROP alone is a secondary outcome we want to make sure we have all eye exams entered even for infants who die.

Thanks,  
Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
13-24425

From: Walsh, Michele [mailto:Michele.Walsh@UHhospitals.org]  
Sent: Friday, September 21, 2007 11:45 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]; mcw3@case.edu; nancy.newman  
Cc: Das, Abhik; Gantz, Marie  
Subject: RE: SUPPORT OUTCOMES

Number 2 does not make sense to me:  
if the baby died then the final outcome is known.  
We are tracking the others.

Michele Walsh  
phone: 216-844-3759

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, September 21, 2007 10:09 AM  
To: mcw3@case.edu; nancy.newman  
Cc: adas@rti.org; Gantz, Marie  
Subject: SUPPORT OUTCOMES

Hi,  
We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!

Rose

CENTER	NETWORK	ROP_message
3	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
3	(b) (6)	infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
3	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7908  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

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From: Duara, Shahnaz  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE: SUPPORT OUTCOMES  
Date: Friday, September 21, 2007 11:37:47 AM

---

Hi Ruth,

Thanks for starting the HeLP in-services yesterday – Karina was very nervous before the event.

What about these babies? Who in RTI have you been dealing with? Scott? What is the status? I recall you saying that you have completed everything from our end but that for some reason RTI is not seeing SUPP 10 for either eye - is that correct?

SD

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, September 21, 2007 10:15 AM  
To: Duara, Shahnaz; Bauer, Charles R; Everett-Thomas, Ruth  
Cc: mgantz@rti.org; adas@rti.org  
Subject: SUPPORT OUTCOMES

Hi,

We are missing the following outcomes for the SUPPORT Study. Let us know how you are doing.

Thanks for all the effort!

Rose

CENTER	NETWORK	ROP_message
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
CENTER	NETWORK	FU_message
8	(b) (6)	FU marked as complete (per NF10/SF10) but NF09 is not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** [Gantz, Marie](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Das, Abhik](#)  
**Subject:** SUPPORT missing outcomes  
**Date:** Wednesday, September 19, 2007 1:31:34 PM  
**Attachments:** [Infants with missing outcomes 09-19-07.xls](#)

---

Rose,

Attached is the list of infants who are missing SUPPORT outcomes this month.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
[mgantz@rti.org](mailto:mgantz@rti.org)  
828-251-6255



(b) (6)

22  
22  
24  
24  
24  
24  
26

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.



**From:** Neil Finer  
**To:** Zaterka-Baxter, Kristin; Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich  
**Cc:** Das, Abhik; Auman, Jeanette O.  
**Subject:** RE: Subject withdrawal  
**Date:** Tuesday, September 18, 2007 2:42:32 PM

---

Hi Kris  
This request is to withdraw all data.  
Thanks  
Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

-----Original Message-----

From: Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
Sent: Tuesday, September 18, 2007 11:40 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich  
Cc: Neil Finer; Das, Abhik; Auman, Jeanette O.  
Subject: RE: Subject withdrawal

Hi,  
Did this parent withdraw and request no further data be collected or did they request to have all data removed - just want to make sure before we delete the case.  
Thanks,  
Kris

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, September 18, 2007 2:37 PM  
To: Wade Rich  
Cc: Neil Finer; Zaterka-Baxter, Kristin; Das, Abhik; Auman, Jeanette O.  
Subject: RE: Subject withdrawal

This is fine. I have copied RTI so they can also remove the patient.

Thanks  
Rose

-----Original Message-----

From: Wade Rich [mailto:wrich@ucsd.edu]  
Sent: Tuesday, September 18, 2007 2:37 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Neil Finer  
Subject: Subject withdrawal

Rose,  
Per the request of the mother, please remove subject (b) (6) from the SUPPORT trial. The letter of request I

have includes the subjects name. Should I forward it to you anyway?

Thank you,

Wade

Wade Rich, BSHS,RRT,CCRC  
Clinical Research Coordinator  
Division of Neonatology  
UCSD Medical Center  
200 W Arbor Dr  
San Diego, CA 92103-8774  
619-543-5375  
pgr 290 (b) (6)

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; ellen\_hale@oz.ped.emory.edu  
**Cc:** Zaterka-Baxter, Kristin; Auman, Jeanette O.  
**Subject:** RE: Fwd: SUPPORT OUTCOMES  
**Date:** Friday, September 14, 2007 1:30:10 PM

---

Kris is still working on the form change so that centers can code the acute ROP outcome as permanently missing. In the meantime, I will add infant (b) (6) to our list of exclusions and Emory will no longer receive ROP reminders for this child.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Friday, September 14, 2007 1:10 PM  
To: Gantz, Marie; ellen\_hale@oz.ped.emory.edu  
Subject: Fw: Fwd: SUPPORT OUTCOMES  
Importance: High

Marie - how should they code the first child?

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Ellen Hale <Ellen.Hale@oz.ped.emory.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Fri Sep 14 12:50:36 2007  
Subject: Fwd: SUPPORT OUTCOMES

Rose,  
Have some more information (see below),  
Ellen

----- Original Message -----

We are missing some SUPPORT outcomes - please let us know how you are doing. Thanks for the continued commitment to this trial!!  
Rose

CENTER

NETWORK

ROP\_Message

9

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

This is the one seen at 18 months follow-up and no report from Opth.  
Per f/u visit eyes are ok. What are we to do?

9

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Seen 8/20 and eyes mature

9

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Seen 9/13 and eyes mature

9

(b) (6)

No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

Have entered all forms and last exam was zone 2 and no ROP

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov) <<mailto:higginsr@mail.nih.gov>>

**From:** [Tate, Patti L](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [petrie@rti.org](mailto:petrie@rti.org)  
**Subject:** death, Support Study  
**Date:** Thursday, September 13, 2007 4:57:15 PM

---

Subject # (b) (6) expired within 7 hours after birth due to extreme prematurity and sepsis. Patient had no respiratory effort at birth and continued to decline rapidly despite fluid boluses, ventilatory support, and pressors.

Death isn't related to the study. HSC-MS-04-415 PI: Brenda Morris, MD

Have a great day Patti

**From:** Zaterka-Baxter, Kristin  
**To:** Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT and INS-1  
**Date:** Wednesday, September 12, 2007 8:32:04 AM

---

I can add/send out this as well as explain that the IND is not an issue of you'd like?  
Thanks

Kris

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Tuesday, September 11, 2007 5:38 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin  
**Subject:** SUPPORT and INS-1

Hi Rose,

In order not to seem to be second guessing a memo that has gone out already, maybe we can keep this reasoning ready in case of a question? If there are no questions, I will bring it up at the Oct. meeting.

1. Participation in INS-1 will not affect the outcome of a SUPPORT infant (BPD, survival or ROP)
2. Participation in SUPPORT will not affect the PK single dose outcome of an INS-1 infant (changing oxygen saturation, or changing DR management)

Dale

## Dale

Dale L. Phelps, MD  
Professor of Pediatrics  
University of Rochester School of Medicine and Dentistry  
Division of Neonatology, Pediatrics, Box 651  
601 Elmwood Ave  
Rochester, NY 14642

(585) 275-2972  
FAX (585) 461-3614

**From:** [Rosman, Carolyn](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]; du2744@wayne.edu](#); [Bara, Rebecca](#); [Sood, Beena](#)  
**Subject:** FW: SUPPORT OUTCOMES  
**Date:** Monday, September 10, 2007 12:11:18 PM

---

Hi Dr. Higgins,

You had sent an email to Dr. Sood in late August regarding several issues about 3 of our network patients. Dr. Sood then asked Betty and I to check on these concerns and this is the response we sent to her. I am forwarding this response per Dr. Sood's request.

Hopefully, you have the info you need. If there is anything we did not address please let me know and I will look further into the matter.

Thank you,

Carolyn Rosman, B.S.N., R.N.  
Clinical Co-Coordinator  
NICHD Neonatal Research Network  
Hutzel Women's Hospital  
2 Hudson Room 2924  
3980 John R Road  
Detroit, MI 48201

Phone: 313-993-7216

Fax: 313-993-0198

Pager: # (b) (6)

Email: [crosman@med.wayne.edu](mailto:crosman@med.wayne.edu) <<mailto:crosman@med.wayne.edu>>

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---

**From:** Sood, Beena  
**Sent:** Thu 8/30/2007 6:19 PM  
**To:** Elizabeth Billian  
**Cc:** Rosman, Carolyn  
**Subject:** RE: SUPPORT OUTCOMES

Thanks - I will respond to Dr Higgins after talking to you tomorrow

Beena

---

**From:** Elizabeth Billian [<mailto:du2744@wayne.edu>]  
**Sent:** Thu 8/30/2007 4:35 PM  
**To:** Sood, Beena



Cc: Rosman, Carolyn  
Subject: SUPPORT OUTCOMES

Hi Beena,

Carolyn and I investigated these and here are the results:

(b) (6) eye exam on 6/12/07 showed stage 0, zone 3 and the MD noted that mature retina bilaterally. I'll check with Kathy if she can F5 somewhere on the form to note that.

(b) (6) had an eye appt 6/14/07(no show), rescheduled 7/13/07 (in hospital receiving shunt)and now re-scheduled for 9/24/07 at CHM. I will call CHM after that date to check if exam done.

(b) (6)-this baby expired recently; NG03 and 07 will be entered tomorrow.

Betty

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**From:** [Brenda Poindexter](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [ldw@iupui.edu](mailto:ldw@iupui.edu)  
**Cc:** [Zaterka-Baxter, Kristin](#); [Abhik Das](#)  
**Subject:** Re: SUPPORT medwatch  
**Date:** Wednesday, September 05, 2007 3:19:53 PM

---

Yes – I think that the proposed form would accurately capture the clinical course of this infant – she actually had PIE on two different occasions – so I guess the only question would be whether the form would permit us to enter the individual dates for when PIE was diagnosed – in other words, she developed PIE – had some resolution on the jet – and then had PIE recur shortly before her demise. Let me know if you have other questions as I did review her chart to sign off on the medwatch. Brenda

Brenda and Leslie –

I got the SUPPORT medwatch on network # (b) (6) and noticed that the infant had PIE. Can you look at the attached form (not yet posted on the website) and tell me if it is ok for PIE given this infant's clinical course? We are trying to capture air leak (not just pneumothorax) and want to make sure we have the bugs worked out.

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Martha Fuller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Wade Rich; Yvonne Vaucher  
**Cc:** "Marie Gantz"  
**Subject:** RE: MISSING SUPPORT OUTCOMES  
**Date:** Wednesday, September 05, 2007 12:06:25 PM

Hi, (b) (6) was lost (moved and mom never responded to any calls or letters). I thought we had completed form(s) to that effect. Will check our files.  
Martha

Martha G. Fuller, RN, MSN  
Pediatric Nurse Practitioner  
UCSD Infant Special Care Follow-up Program  
(619) 543-3771

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higgins@mail.nih.gov]  
**Sent:** Thursday, August 30, 2007 9:23 AM  
**To:** Neil Finer; Wade Rich; Martha G. Fuller; Yvonne Vaucher (Yvonne Vaucher)  
**Cc:** Marie Gantz  
**Subject:** MISSING SUPPORT OUTCOMES  
**Importance:** High

We are missing some SUPPORT outcomes – please let us know how you are doing. Thanks for the continued commitment to this trial!!

Rose

CENTER	NETWORK	ROP_Message
22	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.
22	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
22	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
CENTER	NETWORK	FU_message
22	(b) (6)	FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higgins@mail.nih.gov

**From:** Vivien Phillips  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Monica Collins; Wally Carlo, M.D.  
**Subject:** RE: SUPPORT OUTCOMES  
**Date:** Tuesday, September 04, 2007 6:32:54 PM

---

(b) (6) - baby missed follow up eye appt on 8/10/07 and contacted mother to reschedule appt.  
(b) (6) - final ROP status entered today before transmission.

Vivien

---

**From:** Monica Collins  
**Sent:** Thursday, August 30, 2007 1:41 PM  
**To:** Vivien Phillips  
**Subject:** FW: SUPPORT OUTCOMES  
**Importance:** High

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, August 30, 2007 11:17 AM  
**To:** wacarlo@usab.edu; Monica Collins  
**Cc:** Marie Gantz  
**Subject:** SUPPORT OUTCOMES  
**Importance:** High

We are missing some SUPPORT outcomes - please let us know how you are doing. Thanks for the continued commitment to this trial!!

Rose

CENTER	NETWORK	ROP_Message
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

### AMAZING GIVEN UAB's RECRUITMENT!!!

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
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301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

From: Ellen Hale  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: Re: SUPPORT OUTCOMES  
Date: Tuesday, September 04, 2007 3:35:18 PM

Rose,

(b) (6) I am trying yet again to get this exam--mom said she took the child for the exam. We saw the child at 18 months and eyes ok.  
(b) (6) Seen 8/20 and mature.  
(b) (6) Mom says they have appt. tomorrow and she will go. . . will give you the follow up.  
(b) (6) Exams in NICU and need to be entered in computer. Last exam regressing ROP, stage 2. Have a call in to the doctor's office to get follow-up.

Thanks for the reminders and I will give you a follow up later in week,  
ellen

"Higgins, Rosemary (NIH/NICHD) [E]" <higgins@mail.nih.gov> writes:  
We are missing some SUPPORT outcomes-- please let us know how you are doing. Thanks for the continued commitment to this trial!!  
R064

CENTER NETWORK ROP\_Message

9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
9 (b) (6) No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD/NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

higgins@mail.nih.gov

**From:** Evans, Patricia W  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Kennedy, Kathleen A; Tyson, Jon E; Morris, Brenda H; Mcdavid, Georgia E  
**Cc:** Marie Gantz  
**Subject:** RE: MISSING SUPPORT OUTCOMES  
**Date:** Tuesday, September 04, 2007 1:24:03 PM

---

We just evaluated (b) (6) today. We'll have the data in shortly.

Thank you,

Patricia W. Evans, MD  
Assistant Professor of Pediatrics, Division of Neonatology  
The University of Texas Medical School at Houston  
713-500-5311 (office)  
713-500-5794 (fax)  
Patricia.W.Evans@uth.tmc.edu <<mailto:Patricia.W.Evans@uth.tmc.edu>> (e-mail)

---

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Thu 8/30/2007 11:19 AM  
To: Kennedy, Kathleen A; Tyson, Jon E; Evans, Patricia W; Morris, Brenda H; Mcdavid, Georgia E  
Cc: Marie Gantz  
Subject: MISSING SUPPORT OUTCOMES

We are missing some SUPPORT outcomes - please let us know how you are doing. Thanks for the continued commitment to this trial!!

Rose

CENTER

NETWORK

ROP\_Message

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

The infant has died, however 50 weeks PMA was reached and final ROP exam status has not been reported on the SUPP10 for either eye. Please confirm that all ROP exams have been entered.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

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18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

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18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

BPD\_message

18

(b) (6)

Infant has been discharged and was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered

CENTER

NETWORK

FU\_message

18

(b) (6)

FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)



**From:** Mackinnon, Brenda  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Frantz, Ivan  
**Cc:** Marie Gantz  
**Subject:** RE: MISSING SUPPORT OUTCOMES  
**Date:** Friday, August 31, 2007 6:30:31 AM

---

Hi Rose,  
The final outcome was entered into the data last week or the week before. The subject finally reached endpoint!  
Brenda

-----Original Message-----  
**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, August 30, 2007 12:26 PM  
**To:** Frantz, Ivan; Mackinnon, Brenda  
**Cc:** Marie Gantz  
**Subject:** MISSING SUPPORT OUTCOMES  
**Importance:** High

We are missing some SUPPORT outcomes -- please let us know how you are doing. Thanks for the continued commitment to this trial!  
Rose

CENTER	NETWORK	ROP_Message
23	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
bhiggins@mail.nih.gov

**From:** [Kathy J Auten](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Michael Cotten](#); [goldb008@mc.duke.edu](mailto:goldb008@mc.duke.edu); [Ricki F Goldstein](#); [lohme001@mc.duke.edu](mailto:lohme001@mc.duke.edu); [Marie Gantz](#)  
**Subject:** Re: SUPPORT OUTCOMES  
**Date:** Thursday, August 30, 2007 3:19:03 PM

---

I just received new eye exam reports on several kids who were seen in the community, and we are completing those incomplete records per guidelines discussed at the last NRN meeting. Have a good weekend!

Kathy

Kathy J. Auten, MSHS  
Project Manager  
NICHD Neonatal Research Network Trials  
Duke University Medical Center  
Box 3179  
Bell Building, Room 141  
Durham, NC 27710 USA  
919-681-5859 tel  
919-681-4868 fax  
[kathy.auten@duke.edu](mailto:kathy.auten@duke.edu)

"Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)> wrote on 08/30/2007 12:21:48 PM:

> We are missing some SUPPORT outcomes - please let us know how you  
> are doing. Thanks for the continued commitment to this trial!!  
> Rose  
>  
> CENTER  
>  
> NETWORK  
>  
> ROP\_Message  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>

> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for the left eye.  
>  
> 19  
>  
> (b) (6)  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
> No SUPP10 records have been entered even though SUPP09 Question C1  
> indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
>  
> 19  
>  
> (b) (6)  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
> Infant died more than a week after the last ROP exam and final ROP  
> status has not been obtained. Please confirm that all ROP exams have  
> been entered.  
>  
> 19  
>  
> (b) (6)  
> No SUPP10 records have been entered even though SUPP09 Question C1  
> indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
>  
> 19  
>  
> (b) (6)  
> No SUPP10 forms have been entered though 50 weeks PMA has been  
> reached and the infant did not die early.  
>  
> CENTER  
>  
> NETWORK  
>  
> BFD\_message  
>  
> 19  
>

> (b) (6)  
>  
> PHY01 is expected based on NG07 but has not been entered  
>  
> 19  
>  
> (b) (6)  
> Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week  
> snapshot is missing  
>  
> 19  
>  
> (b) (6)  
> Infant has been discharged and was hospitalized at 36 weeks (per  
> NG03) but NG07 36 week snapshot is not entered  
>  
> CENTER  
>  
> NETWORK  
>  
> FU\_message  
>  
> 19  
>  
> (b) (6)  
>  
> FU window has closed but NF05 and NF09 are not completed  
>  
> 19  
>  
> (b) (6)  
>  
> FU window has closed but NF05 and NF09 are not completed  
>  
> 19  
>  
> (b) (6)  
>  
> FU marked as complete (per NF10/SF10) but NF05 and NF09 are not completed  
>  
> 19  
>  
> (b) (6)  
>  
> FU window has closed but NF05 and NF09 are not completed  
>  
> 19  
>  
> (b) (6)  
>  
> FU marked as complete (per NF10/SF10) but NF09 is not completed  
>  
>  
>  
> Rosemary D. Higgins, M.D.  
> Program Scientist for the Neonatal Research Network  
> Pregnancy and Perinatology Branch  
> Center for Developmental Biology and Perinatal Medicine  
> NICHD, NIH  
> 6100 Executive Blvd., Room 4B03B  
> MSC 7510  
> Bethesda, MD 20892

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- > (For overnight delivery, use Rockville, MD 20852)
- > 301-435-7909
- > 301-496-3790 (FAX)
- > higginsr@mail.nih.gov
- >

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Melissa Leps; Pablo Sanchez  
**Cc:** Marie Gantz  
**Subject:** Re: SUPPORT OUTCOMES  
**Date:** Thursday, August 30, 2007 12:31:38 PM

---

Rose,

All of the ROP patients with missing data were contacted this week and are scheduled for ophthalmology. As soon as the reports are received they will be keyed.

All of the GDB data is now keyed and transmitted for (b) (6)

Thanks,

Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-404B  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206-(b) (6)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 8/30/2007 11:08 AM >>>

We are missing some SUPPORT outcomes - please let us know how you are doing. Thanks for the continued commitment to this trial!!

Rose

CENTER

NETWORK

ROP\_Message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

BPD\_message

4

(b) (6)

Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered (Note: NG03 not yet entered)

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Neil Finer (nfiner@ucsd.edu)"; "Wade Rich (wrich@ucsd.edu)"; Higgins, Rosemary (NIH/NICHD) [E]; "Abhik Das (adas@rti.org)"; "Zaterka-Baxter, Kristin"; "Roger Faix (Roger.Faix@hsc.utah.edu)"; "Brad Yoder (bradley.yoder@hsc.utah.edu)"; "Karen A. Osborne (karen.osborne@hsc.utah.edu)"; "Kimberlee Weaver-Lewis (kimberlee.weaverlewis@intermountainmail.org)"  
**Subject:** Utah | SUPPORT Recruitment Call notes  
**Date:** Tuesday, August 28, 2007 3:09:00 PM  
**Attachments:** Utah\_recruitment\_telcon\_notes\_08-23-07.doc

---

Attached are my notes from the SUPPORT Recruitment call with Utah.

Please let me know if I captured everything accurately (including all of the participants' names).

Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov



## TELECONFERENCE NOTES

---

### **SUPPORT Recruitment Call University of Utah August 23, 2007**

Present: Neil Finer, UCSD; Wade Rich, USCD; Roger Faix, Utah; Brad Yoder, Utah; Karen Osborne, Utah; Kimberlee Weaver-Lewis, Utah; Abhik Das, RTI; Kris Zaterka-Baxter, RTI; Rose Higgins, NICHD; Stephanie Archer, NICHD

#### **Recruitment**

- GDB eligible babies seemed to be low in the July monthly report, which may be due to data entry problems at one hospital – they have 5 more than are showing up on the monthly report. But there did seem to be a decrease in the number of eligible mothers in the past month.
- No general public distrust of research that would impede recruitment.
- Most of the mothers need to discuss the study with the fathers before consenting, which can mean that some deliver before they consent. A few mothers are not medically in a condition to consent.
- Staffing. Had some problems a few months ago with research nursing staff turnover, but they have been fully staffed since June. Recruitment seems to have picked up since then.

#### **Process**

- Coordinator looks at the delivery board every morning to check for potentially eligible mothers-to-be that came in overnight. She then meets with the patients to discuss the study and get consent.
- Dr. Faix and/or Dr. Yoder then try to meet with the mother/parents also, which seems to help in getting consent
- Secondary study consent. No real issue with this, as the Utah consent forms cover the primary and all secondary studies in one form. This does not seem to impact the number of mothers consenting for the primary study – they are more concerned with the primary study issues than with any of the secondary study issues.
- Weekend coverage. The charge nurse is responsible for recruiting on the weekends.
  - ACTION ITEM: Karen will make sure the charge nurses know that they can page Drs. Faix and Yoder on the weekends, as needed.

#### **Implementation**

- Previously had some issue in getting staff not to replace the study oximeters with other units, but that seems to have been resolved.

#### **Action Items**

1. Karen will make sure the weekend charge nurses know that they can page Drs. Faix and Yoder on the weekends, as needed.

**From:** Ellen Hale  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SAE for SUPPORT  
**Date:** Tuesday, August 28, 2007 3:04:15 PM

---

This is the one I faxed (b) (6) She is still with us.  
Ellen

"Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> writes:

Was this the one you faxed??

Thanks

Rose

---

**From:** Ellen Hale [mailto:Ellen.Hale@oz.ped.emory.edu]  
**Sent:** Thursday, August 23, 2007 2:36 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SAE for SUPPORT

Rose

She was born on (b) (6). Randomized to control and was intubated and given surf. at birth. Late 1948 she had bloody secretions from ETT and transillumination + for pneumothorax. I will fax complete report and cc to Kris. Do you want me to email the summary to you since you are out of the office?

Ellen

**From:** [Gantz, Marie](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Cc:** [Das, Abhik](#)  
**Subject:** SUPPORT missing outcome report  
**Date:** Friday, August 24, 2007 11:25:53 AM  
**Attachments:** [Infants with missing outcomes 08-22-07.xls](#)

---

Hi Rose,

Attached is the list of infants with missing SUPPORT outcomes for this month.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
[mgantz@rti.org](mailto:mgantz@rti.org)  
828-254-6255

CENTER NETWORK

(b) (6)

ROP\_Message

4 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.  
4 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
4 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
5 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
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9 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
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9 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
9 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
9 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
11 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
11 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
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14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
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14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.  
15 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.  
16 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
16 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
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18 The infant has died, however 50 weeks PMA was reached and final ROP exam status has not been reported on the SUPP10 for either eye. Please confirm that all ROP exams have been entered.  
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18 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.  
18 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
18 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
22 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
23 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

24  
24  
24

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Missing\_ROP

Page 3

pk

**From:** CATHY A. GRISBY  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu; wrich@ucsd.edu  
**Cc:** balexanba@hotmail.com; kurt.schibler@cchmc.org; Gantz, Marie; Poole, W. Kenneth; Kristin Zaterka-Baxter  
**Subject:** RE: an IMPORTANT randomization question  
**Date:** Thursday, August 23, 2007 4:31:03 PM

---

THANK YOU ALL VERY MUCH FOR GETTING BACK TO ME SO QUICKLY! The bedside stuff is taken care of and, thanks to Kris giving me some pointers on how best to handle the paperwork/data entry side, that will get handled as well.

Again, thank you for your quick response.

We've been busy--9 SUPPORT babies enrolled so far this month!!!!!!! (that deserves lots of exclamation points)

Cathy

--- Original message ---

>Date: Thu, 23 Aug 2007 09:01:37 -0400  
>From: "Das, Abhik" <adas@rti.org>  
>Subject: RE: an IMPORTANT randomization question  
>To: "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>, <grisbyca@email.uc.edu>, <nfiner@ucsd.edu>, <wrigh@ucsd.edu>  
>Cc: (b) (6) <[REDACTED]>, <kurt.schibler@cchmc.org>, "Gantz, Marie" <mgantz@rti.org>, "Poole, W. Kenneth" <poo@rti.org>

>  
>Normally, we would say that subjects should remain in the group they  
>were inadvertently randomized to, and the analysis would be based on  
>intent to treat. However, here we have promised the parents (presumably  
>through the consent process) that all babies will be in the same arm; so  
>here I would go with the first card pulled and fill out the necessary  
>protocol deviation forms.

>  
>Thanks

>  
>Abhik

>  
>-----Original Message-----

>From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
>Sent: Thursday, August 23, 2007 8:52 AM  
>To: grisbyca@email.uc.edu; nfiner@ucsd.edu; wrich@ucsd.edu; Das, Abhik  
>Cc: (b) (6) <[REDACTED]>; kurt.schibler@cchmc.org  
>Subject: Re: an IMPORTANT randomization question

>  
>The protocol says we will randomize them the same way. We need to have  
>them on the same oximeter- I defer to Abhik as to "first card pulled" or  
>"majority rules"

>  
>Once the oximeter is decided, a protocol deviation form should be filled  
>out.

>  
>Thanks and great to get 3 more!!

>-----  
>Sent from my BlackBerry Wireless Handheld

>  
>

>----- Original Message -----

>From: CATHY A. GRISBY <grisbyca@email.uc.edu>  
>To: nfiner@ucsd.edu <nfiner@ucsd.edu>; Higgins, Rosemary (NIH/NICHD)

>[E]; Wade Rich <wrich@ucsd.edu>  
>Cc: Barb (b) (6); Kurt Schibler  
><Kurt.Schibler@cchmc.org>  
>Sent: Thu Aug 23 08:46:58 2007  
>Subject: an IMPORTANT randomization question  
>  
>Hi,  
>  
>We (b) (6) born last night and randomized into the SUPPORT trial.  
>Yippee! However, the RRT pulled one card for each baby. (b) (6) wound up  
>with Early CPAP but they do not have the same oximeter assignment. What  
>should I do?  
>  
>1. Document this and maintain the assignments  
>  
>2. Place (b) (6) the same oximeter as determined by the first card  
>pulled  
>  
>3. Place (b) (6) the same oximeter by majority--(b) (6)  
>  
>Oh, yeah, good morning!  
>  
>Thanks,  
>  
>Cathy  
>



**From:** Neil Finer  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]; grisbyca@email.uc.edu; Wade Rich  
**Cc:** balexanba@hotmail.com; kurt.schibler@cchmc.org; Gantz, Marie; Poole, W. Kenneth  
**Subject:** RE: an IMPORTANT randomization question  
**Date:** Thursday, August 23, 2007 11:13:41 AM

---

Oh and Great work!!!!!!!!!!!!

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

-----Original Message-----

From: Das, Abhik [mailto:adas@rti.org]  
Sent: Thursday, August 23, 2007 6:02 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]; grisbyca@email.uc.edu; Neil Finer; Wade Rich  
Cc: (b) (6); kurt.schibler@cchmc.org; Gantz, Marie; Poole, W. Kenneth  
Subject: RE: an IMPORTANT randomization question

Normally, we would say that subjects should remain in the group they were inadvertently randomized to, and the analysis would be based on intent to treat. However, here we have promised the parents (presumably through the consent process) that all babies will be in the same arm; so here I would go with the first card pulled and fill out the necessary protocol deviation forms.

Thanks

Abhik

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, August 23, 2007 8:52 AM  
To: grisbyca@email.uc.edu; nfiner@ucsd.edu; wrich@ucsd.edu; Das, Abhik  
Cc: (b) (6); kurt.schibler@cchmc.org  
Subject: Re: an IMPORTANT randomization question

The protocol says we will randomize them the same way. We need to have them on the same oximeter- I defer to Abhik as to "first card pulled" or "majority rules"

Once the oximeter is decided, a protocol deviation form should be filled out.

Thanks and great to get 3 more!!

---

Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: CATHY A. GRISBY <grisbyca@email.uc.edu>

To: nfiner@ucsd.edu <nfiner@ucsd.edu>; Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich <wrich@ucsd.edu>

Cc: Barb (b) (6) >; Kurt Schibler <Kurt.Schibler@cchmc.org>

Sent: Thu Aug 23 08:46:58 2007

Subject: an IMPORTANT randomization question

Hi,

We (b) (6) born last night and randomized into the SUPPORT trial. Yippee! However, the RRT pulled one card for each baby. (b) (6) wound up with Early CPAP but they do not have the same oximeter assignment. What should I do?

1. Document this and maintain the assignments
2. Place (b) (6) the same oximeter as determined by the first card pulled
3. Place (b) (6) the same oximeter by majority--(b) (6)

Oh, yeah, good morning!

Thanks,

Cathy

**From:** Neil Finer  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]; grisbyca@email.uc.edu; Wade Rich  
**Cc:** balexanba@hotmail.com; kurt.schibler@cchmc.org; Gantz, Marie; Poole, W. Kenneth  
**Subject:** RE: an IMPORTANT randomization question  
**Date:** Thursday, August 23, 2007 11:08:56 AM

---

Hi Cathy  
I agree with Abhik.  
Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
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Facsimile: 619.543.3812

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From: Das, Abhik [mailto:adas@rti.org]  
Sent: Thursday, August 23, 2007 6:02 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]; grisbyca@email.uc.edu; Neil Finer; Wade Rich  
Cc: (b) (6); kurt.schibler@cchmc.org; Gantz, Marie; Poole, W. Kenneth  
Subject: RE: an IMPORTANT randomization question

Normally, we would say that subjects should remain in the group they were inadvertently randomized to, and the analysis would be based on intent to treat. However, here we have promised the parents (presumably through the consent process) that all babies will be in the same arm; so here I would go with the first card pulled and fill out the necessary protocol deviation forms.

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To: grisbyca@email.uc.edu; nfiner@ucsd.edu; wrich@ucsd.edu; Das, Abhik  
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Subject: Re: an IMPORTANT randomization question

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Once the oximeter is decided, a protocol deviation form should be filled out.

Thanks and great to get 3 more!!

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Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: CATHY A. GRISBY <grisbyca@email.uc.edu>

To: nfiner@ucsd.edu <nfiner@ucsd.edu>; Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich <wrich@ucsd.edu>

Cc: Barb (b) (6) Kurt Schibler <Kurt.Schibler@cchmc.org>

Sent: Thu Aug 23 08:46:58 2007

Subject: an IMPORTANT randomization question

Hi,

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1. Document this and maintain the assignments
2. Place (b) (6) on the same oximeter as determined by the first card pulled
3. Place (b) (6) the same oximeter by majority--(b) (6)

Oh, yeah, good morning!

Thanks,

Cathy

**From:** Ellen Hale  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Susie Buchter; Anthony Piazza  
**Subject:** SAE for SUPPORT  
**Date:** Thursday, August 23, 2007 10:40:34 AM

---

Dear Rose,

I will be sending a medwatch and summary of events for one of our SUPPORT babies this afternoon.

This is (b) (6) who is a (b) (6) week little girl who weighed 380 grams at birth. She has had a very bad last couple of days with pulmonary hemorrhage and pneumothorax---not attributable to SUPPORT Study.

Ellen

**From:** Neil Finer  
**To:** [Webb, Robin E.](mailto:Webb,Robin.E.); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins,Rosemary); [Das, Abhik](mailto:Das,Abhik); [Archer, Stephanie \(NIH/NICHD\) \[E\]](mailto:Archer,Stephanie); [Roger Faix](mailto:Roger.Faix); [Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu); [Zaterka-Baxter, Kristin](mailto:Zaterka-Baxter,Kristin); [karen.osborne@hsc.utah.edu](mailto:karen.osborne@hsc.utah.edu)  
**Cc:** [Fernando Martinez](mailto:Fernando.Martinez)  
**Subject:** RE: SUPPORT CALL WITH UTAH  
**Date:** Wednesday, August 22, 2007 9:24:10 AM

---

Many thanks for accommodating my schedule  
Neil

---

**From:** Webb, Robin E. [<mailto:rwebb@rti.org>]  
**Sent:** Wednesday, August 22, 2007 12:11 AM  
**To:** Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Neil Finer; Archer, Stephanie (NIH/NICHD) [E]; Roger Faix; [Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu); [Zaterka-Baxter, Kristin](mailto:Zaterka-Baxter,Kristin); [karen.osborne@hsc.utah.edu](mailto:karen.osborne@hsc.utah.edu)  
**Cc:** Fernando Martinez  
**Subject:** RE: SUPPORT CALL WITH UTAH

The time for this call has been changed to 1pm ET.

Thanks,  
Robin

---

**From:** Webb, Robin E.  
**Sent:** Tuesday, August 21, 2007 3:32 PM  
**To:** Webb, Robin E.; 'Higgins, Rosemary (NIH/NICHD) [E]'; Das, Abhik; 'nfiner@ucsd.edu'; 'Archer, Stephanie (NIH/NICHD) [E]'; 'Roger Faix'; 'Bradley.Yoder@hsc.utah.edu'; 'Zaterka-Baxter, Kristin'; 'karen.osborne@hsc.utah.edu'  
**Cc:** 'fmartinez@ucsd.edu'  
**Subject:** SUPPORT CALL WITH UTAH

The call to discuss strategies to optimize SUPPORT recruitment has been scheduled for:

**Friday, 8/24**  
**1:00pm ET**

Dial:  
Outside the USA  
1-203-310 (b)  
or  
Within the USA  
866-675 (b)

Then, enter Participant Passcode:  
(b) #

**From:** [Webb, Robin E.](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: SUPPORT CALL WITH UTAH  
**Date:** Tuesday, August 21, 2007 4:47:22 PM

---

Looks like that's ok with everyone. Do you want to start at 12:30 or 1?

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, August 21, 2007 3:46 PM  
**To:** Webb, Robin E.  
**Subject:** FW: SUPPORT CALL WITH UTAH

Can you move this?

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Tuesday, August 21, 2007 3:45 PM  
**To:** Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Archer, Stephanie (NIH/NICHD) [E]; Roger Faix; Bradley.Yoder@hsc.utah.edu; Zaterka-Baxter, Kristin; karen.osborne@hsc.utah.edu  
**Cc:** Fernando Martinez  
**Subject:** RE: SUPPORT CALL WITH UTAH

Hi Everyone

I have an 8:00 AM PT meeting that was scheduled yesterday afternoon for Friday. Can this call be held at 12:30 or 1:00PM ET on Friday?

Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

---

**From:** Webb, Robin E. [mailto:rwebb@rti.org]  
**Sent:** Tuesday, August 21, 2007 12:32 PM  
**To:** Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Neil Finer; Archer, Stephanie (NIH/NICHD) [E]; Roger Faix; Bradley.Yoder@hsc.utah.edu; Zaterka-Baxter, Kristin; karen.osborne@hsc.utah.edu  
**Cc:** Fernando Martinez  
**Subject:** SUPPORT CALL WITH UTAH

The call to discuss strategies to optimize SUPPORT recruitment has been scheduled for:

**Friday, 8/24**  
**11:30am ET**

Dial:  
Outside the USA  
1-203-310-(b) (6)  
or  
Within the USA

866-675-(b) (6)

Then, enter Participant Passcode:

(b) (6) ■



**From:** Angelita Hensman  
**To:** Zaterka-Baxter, Kristin  
**Cc:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]; Abbot Laptook; Auman, Jeanette O.  
**Subject:** Infant randomized to Support Study in error/Not consented.  
**Date:** Tuesday, August 21, 2007 12:26:38 PM

---

Hi Kris,

Just following up on my phone call to you with an e-mail regarding randomization (b) (6)  
This randomization number will need to be removed from the data set for this study.

We had a crash c-section last evening on a mom who was sent up to the OR directly from Triage. Unfortunately due to a whole series of miscommunications ( the RT did not have time to check the list of consented moms) the baby was randomized into the Support study but was not consented prior to delivery.

One of the fellows wanted the patient in her placenta study and this got passed on to the RT who assumed they meant the patient was consented for the SUPPORT study. The baby was removed from the study p.o and is not in the SUPPORT study. We have completed Occurrence Screens which will be sent to our hospital Risk Management Department internally. I have been in touch with the IRB and Abbot will be sending in a "Report of a Problem" to them within 10 days.

The baby will be on the screening log as not consented for GDB. On the SUPP02 I can complete the consent not requested item and the randomization section. Not sure if the system will let me enter the randomization information if we say the baby is not consented. Will need to get Jenny's feedback on that. We will not have any forms other than the SUPP01 SUPP02 and GDB on this patient.

Angelita

**From:** [Monica Collins](#)  
**To:** [Susan Hintz](#); [Wally Carlo, M.D.](#)  
**Cc:** [neil finer](#); [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Subject:** RE: MRI  
**Date:** Friday, August 17, 2007 6:15:11 PM

---

Dr. Hintz,

Some of the ultrasounds that you are speaking of are the older ones that were done prior to the implemented changes in which all sequences have been done. From this point forward, all should have those sequences done with the exception of our very first baby, (we are still trying to get this MRI downloaded from the computer)  
Monica

-----Original Message-----

**From:** Susan Hintz [<mailto:srhintz@stanford.edu>]  
**Sent:** Friday, August 17, 2007 10:58 AM  
**To:** Wally Carlo, M.D.  
**Cc:** Monica Collins; [neil finer](#); [higginsr@mail.nih.gov](#)  
**Subject:** MRI

Hi Wally and Monica,

Thank you again for your incredible work on getting patients enrolled in the Neuroimaging secondary to SUPPORT. We are continuing our MRI rolling reading, and it seems that some sequences are not being done consistently - specifically, the T2 and GRE sequences. I know we had email correspondence on this a couple of months ago, so perhaps the problem is now fixed. Unfortunately, I looked at the last batch that Dr. Barnes read, and some - but NOT ALL - are still missing those sequences. Let me emphasize that some of the MRI's have ALL of the required sequences, so as I said maybe the problem is fixed now. Could you check with your neuro MRI tech and neuroradiologist ASAP about this? Since your site is enrolling so very well, I just want to make sure that there are no problems -

Thanks again! And please let me know if we can help.

Susan

--

Susan R. Hintz, M.D., M.S. Epi  
Associate Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351

**From:** Zaterka-Baxter, Kristin  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Utah's Support enrollment info  
**Date:** Friday, August 17, 2007 3:40:29 PM

---

Hi Rose,  
Jenny looked at Utah's data for Support, please see the following:

Both site 'A' and site 'B' are participating for Utah.  
The first patient in Support for Site 'A' was born on 8/31/2006  
The first patient in Support for Site 'B' was born on 9/2/2006.

When looking at the GDB patients eligible for Support at Utah and comparing them to the Support data they've keyed, I see a very obvious chunk of missing Support data for Site B that were born within specific dates. It looks like from 11/2006 through 4/2007 any eligible GDB patients at Site number B for Utah were either not screened for Support or their forms were not keyed. That's about 21 patients from my quick look out of a total of ~84 eligible for Support per the GDB for the entire Center. Other than that chunk, they've almost screened every eligible GDB patients in Support

Jenny looked at the numbers but did not run a report; is this something you would like us to do prior to the call?

Thanks,  
Kris

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT  
**Date:** Friday, August 17, 2007 1:27:03 PM

---

Hi Rose  
Pick a time and I will be available  
Neil

Neil N. Finer, M.D.  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
UC San Diego School of Medicine  
UC San Diego Medical Center, Hillcrest  
402 Dickinson St., MPF 1-140  
San Diego, CA 92103-8774  
Telephone: 619.543-3759  
Facsimile: 619.543.3812

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, August 17, 2007 8:39 AM  
**To:** Neil Finer  
**Subject:** FW: SUPPORT

Neil  
I will have Robin set up a conference with Utah for SUPPORT recruitment. Could you give me some idea of when you would be able to join, if possible?  
Thanks  
Rose

---

**From:** Karen Osborne RN [mailto:Karen.Osborne@hsc.utah.edu]  
**Sent:** Friday, August 17, 2007 11:06 AM  
**To:** Roger Faix; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Bradley Yoder  
**Subject:** RE: SUPPORT

How's this for timing; we've enrolled 5 patients in the past week!

Karen

---

**From:** Roger Faix  
**Sent:** Friday, August 17, 2007 6:53 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Karen Osborne RN; Bradley Yoder  
**Subject:** RE: SUPPORT

Hi Rose! I'm out of town right now, but will back in Salt Lake for the work week beginning 8/20. We appreciate the interest and assistance and look forward to any/all suggestions. I will ask Karen Osborne (our senior nurse coordinator) to start letting folks know and thinking about times.

Roger

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]

**Sent:** Thu 8/16/2007 11:29 AM  
**To:** Roger Faix  
**Subject:** SUPPORT

Roger

I would like to set up a call with you and appropriate staff at your site to see if we could strategize to increase SUPPORT recruitment at Utah. We have done these calls with several sites and have found them helpful. We can have Neil and RTI participate. Let me know if this is ok and we can set up a time. We are trying to get sites to have a percent randomized/eligible GDB population of 25 percent.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

**From:** [Auman, Jeanette O.](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Zaterka-Baxter, Kristin](#)  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Friday, August 17, 2007 8:16:34 AM  
**Attachments:** [SuppROPtrack.rtf](#)

---

How's this? Did I remove the appropriate columns?

Thanks,  
Jenny

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Thursday, August 16, 2007 3:44 PM  
**To:** Auman, Jeanette O.; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT ROP OUTCOMES

Take 'em out  
Thanks  
Rose

---

**From:** Auman, Jeanette O. [<mailto:joa@rti.org>]  
**Sent:** Thursday, August 16, 2007 3:41 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT ROP OUTCOMES

Scott programmed the table to show the information he was reviewing for the missing ROP outcome tracking list. No one requested the outcomes, he put them in because they seemed like pertinent information. I can take them out if you'd like.

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Thursday, August 16, 2007 2:38 PM  
**To:** Zaterka-Baxter, Kristin; Auman, Jeanette O.  
**Subject:** SUPPORT ROP OUTCOMES

Did we mean to have favorable and unfavorable in the monthly report??  
I can't remember the history.  
Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

Monthly Report for the Period Ending 07/31/07

Table 1.9F

Support Trial ROP Exam Tracking by Center

CENTER	Num Enrolled for the Center	Num Surviving to 31 wks GA or 4 wks of life	Num Examined at all	Num final in both eyes	Num final in only one eye	Num non-final cases excused	Num Pending final status	Num Pending final status at least 50 wks PMA
03	69	62	54	49	.	2	12	.
04	43	34	28	24	1	.	10	1
05	27	22	17	8	.	.	14	1
08	17	17	17	12	.	.	5	5
09	56	48	41	32	.	1	15	4
11	53	43	37	26	1	5	13	4
12	42	34	30	25	.	2	10	.
13	19	19	17	15	.	.	4	.
14	70	62	60	49	3	3	10	4
15	24	19	20	15	.	1	4	.
16	103	79	78	67	.	1	12	2
18	53	42	40	25	1	2	18	13
19	36	26	23	8	1	2	19	13
20	9	9	9	9	.	.	.	.
21	8	6	6	6	.	.	.	.
22	53	41	39	33	.	2	8	3
23	33	28	23	11	.	.	17	1
24	11	10	9	5	.	.	5	1
25	17	13	8	8	.	.	4	.

Monthly Report for the Period Ending 07/31/07

Table 1.9F

Support Trial ROP Exam Tracking by Center

CENTER	Num Enrolled for the Center	Num Surviving to 31 wks GA or 4 wks of life	Num Examined at all	Num final in both eyes	Num final in only one eye	Num non-final cases excused	Num Pending final status	Num Pending final status at least 50 wks PMA
26	7	5	4	1	.	.	4	.



**From:** [Auman, Jeanette O.](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Zaterka-Baxter, Kristin](#)  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Thursday, August 16, 2007 3:45:07 PM

---

Will do!

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Thursday, August 16, 2007 3:44 PM  
**To:** Auman, Jeanette O.; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT ROP OUTCOMES

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Thanks  
Rose

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**To:** Higgins, Rosemary (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT ROP OUTCOMES

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Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Zaterka-Baxter, Kristin  
**To:** [nxs5@cwru.edu](mailto:nxs5@cwru.edu); [Nancy.Miller@UTSouthwestern.edu](mailto:Nancy.Miller@UTSouthwestern.edu); [melissa.leps@utsouthwestern.edu](mailto:melissa.leps@utsouthwestern.edu); [ae5357@wayne.edu](mailto:ae5357@wayne.edu); [crozman@med.wayne.edu](mailto:crozman@med.wayne.edu); [ellen\\_hale@oz.ped.emory.edu](mailto:ellen_hale@oz.ped.emory.edu); [grisbyca@email.uc.edu](mailto:grisbyca@email.uc.edu); [ldw@iupui.edu](mailto:ldw@iupui.edu); [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); [ahensman@wihri.org](mailto:ahensman@wihri.org); [mbball@leland.stanford.edu](mailto:mbball@leland.stanford.edu); [mcollins@peds.uab.edu](mailto:mcollins@peds.uab.edu); [Georgia.F.McDavid@uth.tmc.edu](mailto:Georgia.F.McDavid@uth.tmc.edu); [auten002@mc.duke.edu](mailto:auten002@mc.duke.edu); [bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org); [karen-johnson@uiowa.edu](mailto:karen-johnson@uiowa.edu); [karen.osborne@hsc.utah.edu](mailto:karen.osborne@hsc.utah.edu); [CBackstrom@salud.unm.edu](mailto:CBackstrom@salud.unm.edu)  
**Cc:** Wade Rich; Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer  
**Subject:** FW: SUPPORT Call  
**Date:** Thursday, August 16, 2007 2:02:17 PM  
**Attachments:** SUPP08Adverse Event20070814.doc

---

Hi all,  
Please see below per Wades request on the conference call.  
Thanks,  
Kris

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Thursday, August 16, 2007 1:58 PM  
**To:** 'Wade Rich'; 'Neil Finer'  
**Cc:** [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)  
**Subject:** FW: SUPPORT Call

All on the committee call have reviewed and agree with these changes; Nancy Newman has sent definitions for the MOP and we're working on them.

Thanks,  
Kris

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Tuesday, August 14, 2007 3:31 PM  
**To:** 'Neil Finer'; Webb, Robin E.; [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov); Das, Abhik; [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [mcw3@cwru.edu](mailto:mcw3@cwru.edu); [wcarlo@peds.uab.edu](mailto:wcarlo@peds.uab.edu); [Roger.Faix@hsc.utah.edu](mailto:Roger.Faix@hsc.utah.edu); [Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu); Gantz, Marie; [nxs5@cwru.edu](mailto:nxs5@cwru.edu); Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** [archerst@mail.nih.gov](mailto:archerst@mail.nih.gov); Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Please see revised SAE form attached with mode of ventilation taken from the SUPP11  
Thanks

Kris

---

**From:** Neil Finer [<mailto:nfiner@ucsd.edu>]  
**Sent:** Tuesday, August 14, 2007 2:53 PM  
**To:** Zaterka-Baxter, Kristin; Webb, Robin E.; [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov); Das, Abhik; [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [mcw3@cwru.edu](mailto:mcw3@cwru.edu); [wcarlo@peds.uab.edu](mailto:wcarlo@peds.uab.edu); [Roger.Faix@hsc.utah.edu](mailto:Roger.Faix@hsc.utah.edu); [Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu); Gantz, Marie; [nxs5@cwru.edu](mailto:nxs5@cwru.edu); Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** [archerst@mail.nih.gov](mailto:archerst@mail.nih.gov); Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Hi Kris  
We need to have the mode of the most proximate form of ventilatory support for each occurrence.  
Thanks

Neil

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Tuesday, August 14, 2007 11:50 AM  
**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Neil Finer; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Hi all,  
Please see the drafted form attached

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Cunningham, Meg  
**Sent:** Monday, August 13, 2007 3:22 PM  
**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'archerst@mail.nih.gov'  
**Subject:** FW: SUPPORT Call

Reminder for tomorrow's call.

---

**From:** Webb, Robin E.  
**Sent:** Thursday, July 26, 2007 3:42 PM  
**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'msumner@peds.uab.edu'; 'fmartinez@ucsd.edu'  
**Subject:** RE: SUPPORT Call

The SUPPORT call to discuss air leak definition has been scheduled for:

**Tuesday, 8/14**  
**2:00pm ET**

Dial:  
Outside the USA  
**1-203-310-(b) (6)**  
or  
Within the USA  
**866-675-(b) (6)**

Then, enter Participant Passcode:

**(b) (6)** #

NICU Network	<b>The <u>S</u>urfactant <u>P</u>ositive Airway Pressure and <u>P</u>ulse <u>O</u>ximetry <u>T</u>rial                  in Extremely Low Birth Weight Infants                  Adverse Event Form             </b>	SUPP08 Rel 2.0 March 10, 2005 Revised November 1, 2006 Revised August 14, 2007				
Center: _____	Site No: _____	Network No: _____	Birth No: _____	Mother's Initials: _____	Report No. _____	Page 1 of 1

Complete this form for any randomized infant who experienced one or more of the following adverse events during the initial 14 days of life. This form will be keyed at the sites.

ADVERSE EVENT		DATE OF ONSET (mm/dd/yyyy)	ATTRIBUTABLE TO SUPPORT STUDY 0 = No 1 = Not likely 2 = Possibly 3 = Probably	COMMENTS
1. Air leak	(Code Y/N)	(If yes, Mode)*	If yes, record each date of onset	
a. Pneumothorax	Y N	_____	____/____/____	_____
b. PIE	Y N	_____	____/____/____	_____
c. Pneumopericardium	Y N	_____	____/____/____	_____
2. Need for chest compressions and/or epinephrine in the delivery room			____/____/____	_____
3. The occurrence of severe IVH (grades III-IV)			____/____/____	_____
4. Pulmonary Hemorrhage			____/____/____	_____
5. Nasal breakdown requiring discontinuation of nasal prongs			____/____/____	_____
6. Death		Date of Death	____/____/____	_____
7. Other (Specify)			____/____/____	_____

\*Code most proximate mode of ventilatory support for each occurrence.

1= HFV	2= CV	3= Nasal SIMV	4= CPAP	5= NC	6=Hood	7= No Support
--------	-------	---------------	---------	-------	--------	---------------

Initials of Person Completing this Form: \_\_\_\_\_

**From:** [Zaterka-Baxter, Kristin](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Auman, Jeanette O.](#)  
**Subject:** FW: Latest Support randomization table  
**Date:** Thursday, August 16, 2007 12:36:49 PM  
**Attachments:** [MainSUPPLRand.rtf](#)  
**Importance:** High

---

Hi Rose, Jenny ran the numbers for support all randomizations as of today.

Thanks,  
Kris

Monthly Report for the Period Ending 08/16/07

Table 1.9A

Number of Infants Randomized in the SUPPORT Trial  
 Status of Enrollment by Center

Clinical Center	Eligible GDB	Number Screened	Number Eligible	Number Randomized	Percent Random (Rand/Elig)	Percent GDB Random (Rand/Elig GDB)	Consent Granted (Not Random)	Not-Randomized			
								Parent Unavailable	Parent Refused Consent	Consent Not Request	M.D. Refused Consent
3:Case Western Univ.	115	119	113	69	61.06%	60.00%	6	2	16	20	0
4:Univ. of Texas (D)	94	100	69	43	62.32%	45.74%	2	0	10	13	0
5:Wayne State Univ.	106	108	104	26	25.00%	24.53%	1	4	34	39	0
8:Univ. of Miami	83	33	32	17	53.13%	20.48%	2	2	9	2	0
9:Emory University	140	123	113	56	49.56%	40.00%	1	7	21	28	0
11:Univ. of Cincinnati	228	219	206	53	25.73%	23.25%	4	54	71	23	1
12:Indiana Univ.	141	150	123	42	34.15%	29.79%	1	8	27	44	1
13:Yale University	104	95	83	19	22.89%	18.27%	1	28	14	21	0
14:Brown University	162	162	125	70	56.00%	43.21%	2	2	22	26	3
15:Stanford University	74	55	53	24	45.28%	32.43%	2	10	13	4	0
16:Univ. of Alabama	237	143	137	103	75.18%	43.46%	7	2	19	6	0
18:Univ. of Texas (H)	169	77	75	53	70.67%	31.36%	5	1	6	10	0
19:Duke University	113	96	89	35	39.33%	30.97%	2	1	39	11	1
20:Wake Forest	62	20	20	9	45.00%	14.52%	0	1	5	5	0
21:Children's (NY)	32	29	8	8	100.00%	25.00%	0	0	0	0	0
22:UCSD	109	104	86	53	61.63%	48.62%	0	12	12	9	0
23:Tufts University	51	50	49	33	67.35%	64.71%	0	0	11	5	0
24:U.Iowa	37	39	34	11	32.35%	29.73%	1	0	10	12	0

(All Forms Completed between 11/01/04 and 08/16/07 - Table Produced on 08/16/07)

The table is generated from the NG02, SUPP01 and SUPP02.

Eligible GDB patients are those keyed in the NG02 (inborn and GA of 24 0/6 & 27 6/7) with a birth date after the first

Support patient keyed for sites at each Center and not born on or between dates of Support study suspension 11/23/2005 and 2/5/2006.

Monthly Report for the Period Ending 08/16/07

Table 1.9A

Number of Infants Randomized in the SUPPORT Trial  
 Status of Enrollment by Center

Clinical Center	Eligible GDB	Number Screened	Number Eligible	Number Randomized	Percent Random (Rand/Elig)	Percent GDB Random (Rand/Elig GDB)	Consent Granted (Not Random)	_Not-Randomized_			
								Parent Unavailable	Parent Refused Consent	Consent Not Request	M.D. Refused Consent
25:U. Utah	81	61	55	17	30.91%	20.99%	1	4	15	18	0
26:U.New Mexico	21	23	19	7	36.84%	33.33%	0	1	5	6	0
	<b>2159</b>	<b>1806</b>	<b>1593</b>	<b>748</b>	<b>46.96%</b>	<b>34.65%</b>	<b>38</b>	<b>139</b>	<b>359</b>	<b>302</b>	<b>6</b>

(All Forms Completed between 11/01/04 and 08/16/07 - Table Produced on 08/16/07)

The table is generated from the NG02, SUPP01 and SUPP02.

Eligible GDB patients are those keyed in the NG02 (inborn and GA of 24 0/6 & 27 6/7) with a birth date after the first

Support patient keyed for sites at each Center and not born on or between dates of Support study suspension 11/23/2005 and 2/5/2006.

**From:** Zaterka-Baxter, Kristin  
**To:** [nancy.newman](mailto:nancy.newman); [Neil.Finer](mailto:Neil.Finer); [Webb, Robin E.](mailto:Webb.Robin.E); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins.Rosemary); [Das, Abhik](mailto:Das.Abhik); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [mcw3@cwru.edu](mailto:mcw3@cwru.edu); [wcarlo@peds.uab.edu](mailto:wcarlo@peds.uab.edu); [Roger.Faix@hsc.utah.edu](mailto:Roger.Faix@hsc.utah.edu); [Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu); [Gantz, Marie](mailto:Gantz.Marie); [nxs5@cwru.edu](mailto:nxs5@cwru.edu); [Wade Rich](mailto:Wade.Rich); [Gantz, Marie](mailto:Gantz.Marie); [Poole, W. Kenneth](mailto:Poole.W.Kenneth)  
**Cc:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](mailto:Archer.Stephanie); [Cunningham, Meg](mailto:Cunningham.Meg)  
**Subject:** RE: SUPPORT Call  
**Date:** Wednesday, August 15, 2007 10:13:43 AM

---

Together please; that would be great!  
Thanks,  
Kris

---

**From:** [nancy.newman \[mailto:nxs5@case.edu\]](mailto:nancy.newman)  
**Sent:** Wednesday, August 15, 2007 10:11 AM  
**To:** Zaterka-Baxter, Kristin; 'Neil.Finer'; [Webb, Robin E.](mailto:Webb.Robin.E); [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov); [Das, Abhik](mailto:Das.Abhik); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [mcw3@cwru.edu](mailto:mcw3@cwru.edu); [wcarlo@peds.uab.edu](mailto:wcarlo@peds.uab.edu); [Roger.Faix@hsc.utah.edu](mailto:Roger.Faix@hsc.utah.edu); [Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu); [Gantz, Marie](mailto:Gantz.Marie); [nxs5@cwru.edu](mailto:nxs5@cwru.edu); 'Wade Rich'; [Gantz, Marie](mailto:Gantz.Marie); [Poole, W. Kenneth](mailto:Poole.W.Kenneth)  
**Cc:** [archerst@mail.nih.gov](mailto:archerst@mail.nih.gov); [Cunningham, Meg](mailto:Cunningham.Meg)  
**Subject:** RE: SUPPORT Call

Hi- I think the form looks good. Kris- are you going to draft the MOP definitions? Or would you like me to work on it or with you?.....Nancy

---

**From:** Zaterka-Baxter, Kristin [<mailto:kzaterka@rti.org>]  
**Sent:** Tuesday, August 14, 2007 3:31 PM  
**To:** [Neil.Finer](mailto:Neil.Finer); [Webb, Robin E.](mailto:Webb.Robin.E); [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov); [Das, Abhik](mailto:Das.Abhik); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [mcw3@cwru.edu](mailto:mcw3@cwru.edu); [wcarlo@peds.uab.edu](mailto:wcarlo@peds.uab.edu); [Roger.Faix@hsc.utah.edu](mailto:Roger.Faix@hsc.utah.edu); [Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu); [Gantz, Marie](mailto:Gantz.Marie); [nxs5@cwru.edu](mailto:nxs5@cwru.edu); [Wade Rich](mailto:Wade.Rich); [Gantz, Marie](mailto:Gantz.Marie); [Poole, W. Kenneth](mailto:Poole.W.Kenneth)  
**Cc:** [archerst@mail.nih.gov](mailto:archerst@mail.nih.gov); [Cunningham, Meg](mailto:Cunningham.Meg)  
**Subject:** RE: SUPPORT Call

Please see revised SAE form attached with mode of ventilation taken from the SUPP11  
Thanks

Kris

---

**From:** [Neil.Finer \[mailto:nfiner@ucsd.edu\]](mailto:Neil.Finer)  
**Sent:** Tuesday, August 14, 2007 2:53 PM  
**To:** Zaterka-Baxter, Kristin; [Webb, Robin E.](mailto:Webb.Robin.E); [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov); [Das, Abhik](mailto:Das.Abhik); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [mcw3@cwru.edu](mailto:mcw3@cwru.edu); [wcarlo@peds.uab.edu](mailto:wcarlo@peds.uab.edu); [Roger.Faix@hsc.utah.edu](mailto:Roger.Faix@hsc.utah.edu); [Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu); [Gantz, Marie](mailto:Gantz.Marie); [nxs5@cwru.edu](mailto:nxs5@cwru.edu); [Wade Rich](mailto:Wade.Rich); [Gantz, Marie](mailto:Gantz.Marie); [Poole, W. Kenneth](mailto:Poole.W.Kenneth)  
**Cc:** [archerst@mail.nih.gov](mailto:archerst@mail.nih.gov); [Cunningham, Meg](mailto:Cunningham.Meg)  
**Subject:** RE: SUPPORT Call

Hi Kris  
We need to have the mode of the most proximate form of ventilatory support for each occurrence.  
Thanks  
Neil

---

**From:** Zaterka-Baxter, Kristin [<mailto:kzaterka@rti.org>]



**Sent:** Tuesday, August 14, 2007 11:50 AM

**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Neil Finer; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth

**Cc:** archerst@mail.nih.gov; Cunningham, Meg

**Subject:** RE: SUPPORT Call

Hi all,

Please see the drafted form attached

Kris Zaterka-Baxter, RN, CCRP

RTI International

4426 South Miami Blvd.

Durham, NC 27703

Telephone: (919) 485-7750

Fax: (919) 485-7762

kzaterka@rti.org

---

**From:** Cunningham, Meg

**Sent:** Monday, August 13, 2007 3:22 PM

**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth

**Cc:** 'archerst@mail.nih.gov'

**Subject:** FW: SUPPORT Call

Reminder for tomorrow's call.

---

**From:** Webb, Robin E.

**Sent:** Thursday, July 26, 2007 3:42 PM

**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth

**Cc:** 'msumner@peds.uab.edu'; 'fmartinez@ucsd.edu'

**Subject:** RE: SUPPORT Call

The SUPPORT call to discuss air leak definition has been scheduled for:

**Tuesday, 8/14**

**2:00pm ET**

Dial:

Outside the USA

1-203-310-(b) (6)

or

Within the USA

866-675-(b) (6)

Then, enter Participant Passcode:

█#

**From:** Abbot Laptook  
**To:** Zaterka-Baxter, Kristin; Neil Finer; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; kurt.schibler@cchmc.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg  
**Subject:** RE: SUPPORT Call  
**Date:** Tuesday, August 14, 2007 7:36:22 PM

---

Looks good to me. AL

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Tuesday, August 14, 2007 3:31 PM  
**To:** Neil Finer; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; Abbot Laptook; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
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Please see revised SAE form attached with mode of ventilation taken from the SUPP11  
Thanks

Kris

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**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Hi Kris

We need to have the mode of the most proximate form of ventilatory support for each occurrence.

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Neil

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**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Hi all,

Please see the drafted form attached

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750

Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Cunningham, Meg  
**Sent:** Monday, August 13, 2007 3:22 PM  
**To:** Webb, Robin E.; 'higginsr@mail.nih.gov'; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'archerst@mail.nih.gov'  
**Subject:** FW: SUPPORT Call

Reminder for tomorrow's call.

---

**From:** Webb, Robin E.  
**Sent:** Thursday, July 26, 2007 3:42 PM  
**To:** Webb, Robin E.; 'higginsr@mail.nih.gov'; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'msummer@peds.uab.edu'; 'fmartinez@ucsd.edu'  
**Subject:** RE: SUPPORT Call

The SUPPORT call to discuss air leak definition has been scheduled for:

**Tuesday, 8/14**  
**2:00pm ET**

Dial:  
Outside the USA  
1-203-310 (b) (6)  
or  
Within the USA  
866-675 (b) (6)

Then, enter Participant Passcode:

██████████#

This e-mail and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or taking of any action in reliance on the information contained in this e-mail is prohibited. If you have received this e-mail in error, please notify sender by reply e-mail and delete this message and any attachment(s) immediately. Thank you for your consideration in this matter.

**From:** Neil Finer  
**To:** Gantz, Marie; Zaterka-Baxter, Kristin; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; nxs5@cwru.edu; Wade Rich; Poole, W. Kenneth  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg  
**Subject:** RE: SUPPORT Call  
**Date:** Tuesday, August 14, 2007 5:54:16 PM

---

Not to my reckoning  
Thanks Marie

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Tuesday, August 14, 2007 12:34 PM  
**To:** Zaterka-Baxter, Kristin; Neil Finer; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; nxs5@cwru.edu; Wade Rich; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Is there any need to collect the flow rate if the mode of support is NC?

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Tuesday, August 14, 2007 3:31 PM  
**To:** 'Neil Finer'; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

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Thanks

Kris

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Tuesday, August 14, 2007 2:53 PM  
**To:** Zaterka-Baxter, Kristin; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Hi Kris  
We need to have the mode of the most proximate form of ventilatory support for each occurrence.  
Thanks

Neil

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Tuesday, August 14, 2007 11:50 AM  
**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Neil Finer; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Hi all,  
Please see the drafted form attached

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

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**Sent:** Monday, August 13, 2007 3:22 PM  
**To:** Webb, Robin E.; 'higginsr@mail.nih.gov'; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'archerst@mail.nih.gov'  
**Subject:** FW: SUPPORT Call

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**Cc:** 'msumner@peds.uab.edu'; 'fmartinez@ucsd.edu'  
**Subject:** RE: SUPPORT Call

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Outside the USA  
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or  
Within the USA  
866-675 (b) (6)

Then, enter Participant Passcode:  
(b) (6)

**From:** Wally Carlo, M.D.  
**To:** Gantz, Marie; Zaterka-Baxter, Kristin; Neil Finer; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; nxs5@cwru.edu; Wade Rich; Poole, W. Kenneth  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg  
**Subject:** RE: SUPPORT Call  
**Date:** Tuesday, August 14, 2007 3:43:36 PM

---

Looks good. I would not collect the flow rate.  
wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b)

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Tuesday, August 14, 2007 2:34 PM  
**To:** Zaterka-Baxter, Kristin; Neil Finer; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; Wally Carlo, M.D.; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; nxs5@cwru.edu; Wade Rich; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

Is there any need to collect the flow rate if the mode of support is NC?

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
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828-254-4255

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**To:** 'Neil Finer'; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

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Thanks

Kris

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**Sent:** Tuesday, August 14, 2007 2:53 PM  
**To:** Zaterka-Baxter, Kristin; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
**Subject:** RE: SUPPORT Call

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We need to have the mode of the most proximate form of ventilatory support for each occurrence.  
Thanks  
Neil

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**Sent:** Tuesday, August 14, 2007 11:50 AM  
**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Neil Finer; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** archerst@mail.nih.gov; Cunningham, Meg  
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Fax: (919) 485-7762  
kzaterka@rti.org

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**Sent:** Monday, August 13, 2007 3:22 PM  
**To:** Webb, Robin E.; 'higginsr@mail.nih.gov'; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'archerst@mail.nih.gov'  
**Subject:** FW: SUPPORT Call

Reminder for tomorrow's call.

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**Sent:** Thursday, July 26, 2007 3:42 PM  
**To:** Webb, Robin E.; 'higginsr@mail.nih.gov'; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'msummer@peds.uab.edu'; 'fmartinez@ucsd.edu'  
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or

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Then, enter Participant Passcode:

(b) (6) #



**From:** Zaterka-Baxter, Kristin  
**To:** Neil Finer; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg  
**Subject:** RE: SUPPORT Call  
**Date:** Tuesday, August 14, 2007 3:31:09 PM  
**Attachments:** SUPP08Adverse\_Event20070814.doc

---

Please see revised SAE form attached with mode of ventilation taken from the SUPP11

Thanks

Kris

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Tuesday, August 14, 2007 2:53 PM  
**To:** Zaterka-Baxter, Kristin; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
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**Sent:** Tuesday, August 14, 2007 11:50 AM  
**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Neil Finer; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
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kzaterka@rti.org

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**Cc:** 'msumner@peds.uab.edu'; 'fmartinez@ucsd.edu'

**Subject:** RE: SUPPORT Call

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Outside the USA

1-203-310-██████

or

Within the USA

866-675-██████

Then, enter Participant Passcode:

██████#

NICU Network	<b>The <u>S</u>urfactant <u>P</u>ositive Airway Pressure and <u>P</u>ulse <u>O</u>ximetry <u>T</u>rial                  in Extremely Low Birth Weight Infants                  Adverse Event Form             </b>	SUPP08 Rel 2.0 March 10, 2005 Revised November 1, 2006 Revised August 14, 2007				
Center: _____	Site No: _____	Network No: _____	Birth No: _____	Mother's Initials: _____	Report No. _____	Page 1 of 1

Complete this form for any randomized infant who experienced one or more of the following adverse events during the initial 14 days of life.  
 This form will be keyed at the sites.

ADVERSE EVENT		DATE of ONSET (mm/dd/yyyy)	ATTRIBUTABLE TO SUPPORT STUDY 0 = No 1 = Not likely 2 = Possibly 3 = Probably	COMMENTS
1. Air leak	(Code Y/N)	(If yes, Mode)*	If yes, record each date of onset	
a. Pneumothorax	Y N	_____	____/____/____	_____
b. PIE	Y N	_____	____/____/____	_____
c. Pneumopericardium	Y N	_____	____/____/____	_____
2. Need for chest compressions and/or epinephrine in the delivery room			____/____/____	
3. The occurrence of severe IVH (grades III-IV)			____/____/____	
4. Pulmonary Hemorrhage			____/____/____	
5. Nasal breakdown requiring discontinuation of nasal prongs			____/____/____	
6. Death		Date of Death	____/____/____	
7. Other (Specify)			____/____/____	

\*Code most proximate mode of ventilatory support for each occurrence.

1= HFV	2= CV	3= Nasal SIMV	4= CPAP	5= NC	6=Hood	7= No Support
--------	-------	---------------	---------	-------	--------	---------------

Initials of Person Completing this Form: \_\_\_\_\_

**From:** Zaterka-Baxter, Kristin  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; nxs5@cwru.edu  
**Subject:** RE: SUPPORT Call  
**Date:** Tuesday, August 14, 2007 2:58:23 PM

---

Ok; coming up.....

Thanks,

Kris

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Tuesday, August 14, 2007 2:53 PM  
**To:** Zaterka-Baxter, Kristin; Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; Wade Rich; Gantz, Marie; Poole, W. Kenneth  
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**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg  
**Subject:** RE: SUPPORT Call  
**Date:** Tuesday, August 14, 2007 2:50:29 PM  
**Attachments:** SUPP08Adverse Event20070814.doc

---

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Please see the drafted form attached

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RTI International  
4426 South Miami Blvd.  
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**From:** Webb, Robin E.  
**Sent:** Thursday, July 26, 2007 3:42 PM  
**To:** Webb, Robin E.; 'higginsr@mail.nih.gov'; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'l.sumner@peds.uab.edu'; 'fmartinez@ucsd.edu'  
**Subject:** RE: SUPPORT Call

The SUPPORT call to discuss air leak definition has been scheduled for:

**Tuesday, 8/14**  
**2:00 pm ET**

Dial:  
Outside the USA  
1-202-310-(b) (6)  
or  
Within the USA  
866-275-(b) (6)

Then, enter Participant Passcode:

(b) (6)

NICU Network

**The Surfactant Positive Airway Pressure and Pulse Oximetry Trial  
in Extremely Low Birth Weight Infants  
Adverse Event Form**

SUPP08 Rel 2.0  
March 10, 2005  
Revised November 1, 2006

Center: \_\_\_\_\_ Site No: \_\_\_\_\_ Network No: \_\_\_\_\_ Birth No: \_\_\_\_\_ Mother's Initials: \_\_\_\_\_ Report No. \_\_\_\_\_ Page 1 of 1

Complete this form for any randomized infant who experienced one or more of the following adverse events during the initial 14 days of life.  
This form will be keyed at the sites.

ADVERSE EVENT		DATE OF ONSET (mm/dd/yyyy)	ATTRIBUTABLE TO SUPPORT STUDY 0 = No 1 = Not likely 2 = Possibly 3 = Probably	COMMENTS
1. Air leak a. Pneumothorax b. PIE c. Pneumopericardium	Y N Y N Y N	If yes, record each date of onset ____/____/_____ ____/____/_____ ____/____/_____	_____ _____ _____	_____ _____ _____
2. Need for chest compressions and/or epinephrine in the delivery room		____/____/_____	_____	
3. The occurrence of severe IVH (grades III-IV)		____/____/_____	_____	
4. Pulmonary Hemorrhage		____/____/_____	_____	
5. Nasal breakdown requiring discontinuation of nasal prongs		____/____/_____	_____	
6. Death		Date of Death ____/____/_____	_____	
7. Other (Specify) _____ _____ _____		____/____/_____	_____	

Initials of Person Completing this Form: \_\_\_\_\_

**From:** Zaterka-Baxter, Kristin  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: Air Leak - Supp08  
**Date:** Tuesday, August 14, 2007 2:23:55 PM

---

See bolded below

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Wednesday, June 20, 2007 3:54 PM  
**To:** Zaterka-Baxter, Kristin  
**Cc:** Wade Rich; Shirley Cosby; Nancy Newman; Neil Finer  
**Subject:** RE: Air Leak - Supp08

Kris:

It is interesting that GDB has no definition. Do we know if PIE and other air leaks (besides pneumothorax) have been included in the GDB data?

Do we know if PIE has been included so far in the data collected for SUPPORT?

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Wednesday, June 20, 2007 2:32 PM  
**To:** Wally Carlo, M.D.  
**Cc:** Wade Rich; Shirley Cosby; Nancy Newman; Neil Finer  
**Subject:** FW: Air Leak - Supp08

Hi Dr. Carlo,

The definition below is not from the GDB; there is no definition of airleak in either Support or GDB. **The definition below came from the Merck manual.** Please let me know if we should clarify this definition in a memo to the sites.

Thanks,  
Kris

Kris Zaterka-Baxter



RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Wednesday, June 20, 2007 2:32 PM  
**To:** Zaterka-Baxter, Kristin  
**Subject:** FW: Air Leak - Supp08

Use the GDB definition.  
wade

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Wednesday, June 20, 2007 11:25 AM  
**To:** Wade Rich  
**Subject:** RE: Air Leak - Supp08

Sorry. Use the GDB definition which is what Kris used.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

---

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Wednesday, June 20, 2007 12:34 PM  
**To:** Wally Carlo, M.D.  
**Subject:** RE: Air Leak - Supp08

There was not definition. Do you mean we decided to use the full scope definition Kris lists below?  
wade

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Wednesday, June 20, 2007 10:28 AM  
**To:** Wade Rich  
**Subject:** RE: Air Leak - Supp08

Hi Wade:

I think we discussed exactly what you say but decided not to change the definition of air leaks.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

---

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Wednesday, June 20, 2007 11:58 AM  
**To:** Wally Carlo, M.D.  
**Subject:** FW: Air Leak - Supp08

Hi Wally,

Neil is away. Didn't we discuss this and decide we were not going to report PIE, but only pneumothoraces for this form?  
wade

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Thursday, June 14, 2007 9:32 AM  
**To:** Wade Rich  
**Subject:** Air Leak - Supp08

When reporting 'Air Leak' on the Supp08, would this always be considered pneumothorax or does it also take into account **pulmonary interstitial emphysema, pneumomediastinum, pneumopericardium, pneumoperitoneum, and subcutaneous emphysema (i.e., air leak syndromes)** as far as reporting status on the NG03?

Thanks,  
Kris

**From:** [Cunningham, Meg](#)  
**To:** [Webb, Robin E.](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Das, Abhik](#); [kurt.schibler@cchmc.org](#); [alaptook@WIHRI.org](#); [mcw3@cwru.edu](#); [wcarlo@peds.uab.edu](#); [Roger.Faix@hsc.utah.edu](#); [nfiner@ucsd.edu](#); [Bradley.Yoder@hsc.utah.edu](#); [Gantz, Marie](#); [nxs5@cwru.edu](#); [wrich@ucsd.edu](#); [Zaterka-Baxter, Kristin](#); [Gantz, Marie](#); [Poole, W. Kenneth](#)  
**Cc:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**Subject:** FW: SUPPORT Call  
**Date:** Monday, August 13, 2007 3:21:34 PM

---

Reminder for tomorrow's call.

---

**From:** Webb, Robin E.  
**Sent:** Thursday, July 26, 2007 3:42 PM  
**To:** Webb, Robin E.; 'higginsr@mail.nih.gov'; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'msumner@peds.uab.edu'; 'fmartinez@ucsd.edu'  
**Subject:** RE: SUPPORT Call

The SUPPORT call to discuss air leak definition has been scheduled for:

**Tuesday, 8/14**  
**2:00pm ET**

Dial:  
Outside the USA  
**1-203-310(b) (6)**  
or  
Within the USA  
**866-675(b) (6)**

Then, enter Participant Passcode:  
**(b) (6)**

**From:** [Cunningham, Meg](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Subject:** RE: SUPPORT Call  
**Date:** Monday, August 13, 2007 3:17:32 PM

---

OK! Can Neil be included on the reminder email?

Also, I will be on the SUPPORT call, but won't be on the call following SUPPORT, I have an MLS call then.

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, August 13, 2007 3:16 PM  
**To:** Cunningham, Meg  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT Call

NO,  
We need to get this done as airleak is a hot issue – you can send out the reminder.

Rose

---

**From:** Cunningham, Meg [mailto:mcunningham@rti.org]  
**Sent:** Monday, August 13, 2007 3:12 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** FW: SUPPORT Call

Rose-

Are we cancelling this call due to Neil's absence, I haven't heard anything?

Also, I am at home working right now (b) (6)  
(b) (6) feel free to call my cell phone 301-806-(b) (6)

---

**From:** Webb, Robin E.  
**Sent:** Thursday, July 26, 2007 3:42 PM  
**To:** Webb, Robin E.; 'higginsr@mail.nih.gov'; Das, Abhik; 'kurt.schibler@cchmc.org'; 'alaptook@WIHRI.org'; 'mcw3@cwru.edu'; 'wcarlo@peds.uab.edu'; 'Roger.Faix@hsc.utah.edu'; 'nfiner@ucsd.edu'; 'Bradley.Yoder@hsc.utah.edu'; Gantz, Marie; 'nxs5@cwru.edu'; 'wrich@ucsd.edu'; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** 'msumner@peds.uab.edu'; 'fmartinez@ucsd.edu'  
**Subject:** RE: SUPPORT Call

The SUPPORT call to discuss air leak definition has been scheduled for:

**Tuesday, 8/14**  
**2:00pm ET**

Dial:  
Outside the USA  
1-203-310-(b) (6)  
or  
Within the USA

866-675 (b) (6)

Then, enter Participant Passcode:

(b) (6)

From: Gantz, Marie  
To: Angelita Hensman; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Das, Abhik; Betty\_Vohr@brown.edu; Lucy Noel; Abbot Laptook  
Subject: RE: SUPPORT DATA  
Date: Monday, August 13, 2007 2:45:11 PM

Hi Angelita,

Regarding the missing BPD outcome message for the infant whose NG03 is not yet entered: RTI and Rose discussed this issue last month and Rose's suggestion was that we still include the message "in case data entry is lagging." I did change the text of the message so that you would know that we realize the NG03 is not yet entered. Hopefully this message will serve to keep the infant on your radar screen so that we can get the outcome as soon as we can. Let me know if you have any questions.

Thanks,  
Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
704-544-8252

From: Angelita Hensman [mailto:AHensman@WIHL.org]  
Sent: Wednesday, August 08, 2007 2:31 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Das, Abhik; Gantz, Marie; Betty\_Vohr@brown.edu; Lucy Noel; Abbot Laptook  
Subject: RE: SUPPORT DATA

- (b) (6) Next appointment scheduled for 02/08
- (b) (6) Status reached. Form will be entered on Friday.
- (b) (6) Next appointment on 09/21/07
- (b) (6) No appointment scheduled as of today. Research nurse called the home and left a message for the parents to call with the name of the ophthalmologist.
- (b) (6) Next appointment scheduled for 12/03/07.

(b) (6) This information will never be available BEFORE the NGO3 is entered. Can the edit be written to request this information only if it is still missing AFTER the NGO3 has been entered?

(b) (6) F/U home visit done on 08/06/07 per Lucy Noel. Forms will be entered as soon as we receive them.

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, July 30, 2007 4:52 PM  
To: Abbot Laptook; Betty\_Vohr@brown.edu; Angelita Hensman; Lucy Noel  
Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT DATA

Hi  
Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks  
Rose

CENTER	NETWORK	ROP_Message
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
CENTER	NETWORK	BPD_message
14	(b) (6)	Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered (Note: NG03 not yet entered)
CENTER	NETWORK	FU_message
14	(b) (6)	FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Das, Abhik  
**To:** Higgins, Rosemary (NIH/NICHHD) [E]  
**Cc:** Gantz, Marie  
**Subject:** RE: SUPPORT ROP QA suggestion  
**Date:** Friday, August 10, 2007 10:06:34 AM

---

Yes; I am having Marie take a look at this to see how much of this we can get easily and what is involved in getting the rest. I don't see a particular need to present such detailed information to the DSMC necessarily (they seemed to be happy with what we gave them last time), but, as you say, it would be good to have this anyway, and they may ask for it if they see anything 'interesting'!

Thanks

Abhik

---

**From:** Higgins, Rosemary (NIH/NICHHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, August 10, 2007 10:00 AM  
**To:** Das, Abhik  
**Subject:** FW: SUPPORT ROP QA suggestion

Abhik

The tables that Marie generates have some of this information – do you see a need to provide more for the upcoming DSMC?  
also, all of the items that Dale mentions are important in describing the natural history of ROP (which Kathleen and her had decided to work on for a secondary to the main trial).

Thanks  
Rose

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Friday, August 10, 2007 9:30 AM  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHHD) [E]  
**Cc:** Zaterka-Baxter, Kristin  
**Subject:** SUPPORT ROP QA suggestion

Hi all,

One of the fun ideas I've had while struggling with the ROP outcome form is that at the end of the study we will have a really nice set of data on which we can say: of those infants who do not have a completed ROP outcome at the time of reaching 'status' (on the GDB), how many go on to reach criteria for ROP surgical intervention? [manuscript idea, but may merge with K. Kennedy's idea to do an incidence of ROP paper]

I got to thinking that the DSMC may wish to know this. I would propose a table as shown below to be able to fill in these sentences:

"Among the enrolled infants who survived to receive ROP examinations, x% were incomplete (x% died or x% lost before final outcome). Of the remaining, xx reached final ROP outcome before status, xx% after discharge home, xx% after back-transfer, and x% after 120 days but remaining hospitalized."

To fill this in for the DSMC, look at all infants who were enrolled in SUPPORT at to the time of 'lock' for the report of interest, and who have reached status:

They should all fall into one of the categories below at status (death/transfer/discharge up to 120 days). From these, we could prepare the table needed for data quality and fill in the sentence above.

- \_\_\_ Enrolled
- \_\_\_ Too soon for ROP outcome
- \_\_\_ Died before ROP outcome
  
- \_\_\_ Remaining who should have outcomes
  - \_\_\_ ROP outcome final at status [ xxx favorable, xx unfavorable]
  - \_\_\_ ROP outcome not final at status
    - \_\_\_ ROP outcome reached after discharge home [ xxx favorable, xx unfavorable]
    - \_\_\_ ROP outcome reached after transfer [ xxx favorable, xx unfavorable]

This would permit these sentences to be filled in {see at end):

1.0 Death

- 1.1 Died before any eye exam
- 1.2 Died after 1<sup>st</sup> eye exam, but ROP status not final
- 1.3 Died after ROP status final

2.0 Transferred

- 2.1 Transferred before any eye exam and no follow up
- 2.2 Transferred after 1<sup>st</sup> eye exam, but ROP status never final
- 2.3 Transferred after ROP status final
- 2.4 Transferred before eye exam or after 1<sup>st</sup> exam and ROP follow up completed
- 2.5 Transferred before eye exam and incomplete ROP outcome

3.0 Discharged home

- 3.1 Discharged before any eye exam and ROP status never final
- 3.2 Discharged after 1<sup>st</sup> eye exam, but ROP status never final
- 3.3 Discharged after ROP status final
- 3.4 Discharged before eye exam or after 1<sup>st</sup> exam and ROP follow up status final

4.0 Remains in hospital after 120 days

- 4.1 NG05 completed
  - 4.1.1 ROP status complete on NG05, but was not complete on NG03
  - 4.1.2 ROP status incomplete - died
  - 4.1.3 ROP status incomplete - other
  - 4.1.4 ROP status was complete on NG03
- 4.2 NG05 not completed
  - 4.2.1 ROP status complete after 120 days
  - 4.2.2 ROP status incomplete - died
  - 4.2.3 ROP status incomplete - other
  - 4.2.4 ROP status complete by 120 days

5.0 Other

{So I would fill the sentences with the data from this table as follows:

"Among the enrolled infants who survived to receive ROP examinations [enrolled minus those too young yet, minus died before exam 1.1],  
xx% were incomplete (x% died [1.2 & 4.1.2 & 4.2.2] or x% [2.1 & 2.2 & 2.5 & 3.1 & 3.2 & 4.1.3 & 4.2.3]  
lost before final outcome).

Of the remaining, xx reached final ROP outcome before status [1.3 & 2.3 & 3.3 & 4.1.4 & 4.2.4], xx% [3.4]  
after discharge home, xx% [2.4] after back-transfer, and x% [4.1.1 & 4.2.1] after 120 days but remaining  
hospitalized." }



PS: Kris: and Jeanne if the team decides to go forward with this: As I worked this out, it got more complicated than I thought it would. There may be a logical flaw in there, and so you will want to vet it carefully, as you always do.

PPS: This should also go to Neil Finer and maybe the full subcommittee, but I did not want to send it this week.

## **Dale**

Dale L. Phelps, MD  
Professor of Pediatrics  
University of Rochester School of Medicine and Dentistry  
Division of Neonatology, Pediatrics, Box 651  
601 Elmwood Ave  
Rochester, NY 14642

(585) 275-2972  
FAX (585) 461-3614

**From:** [Zaterka-Baxter, Kristin](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Support Medwatch  
**Date:** Thursday, August 09, 2007 5:36:04 PM  
**Attachments:** (b) (6).pdf

---

Hi Rose,  
Not sure if Karen faxed this Medwatch to you as well, it wasn't listed on the fax.  
Thanks,  
Kris

AUG-08-2007 WED 12:00 AM

LD NEWBORN ICU

P.2  
P.001

NICU Network      The **Surfactant Positive Airway Pressure and Pulse Oximetry**      SUPP06A Rel 1.0  
**Trial in Extremely Low Birth Weight Infants**      January 4, 2005  
 MEDWATCH FORM

Center: 25      Site No: [redacted]      Network: (b) (6)      Birth No: 2      Mother's initials: M-J      Page 1 of 1

SEND TO RTI AND NICHD WITHIN 24 HOURS

# MEDWATCH

THE FDA MEDICAL DEVICE REPORTING PROGRAM

For **VOLUNTARY** reporting by health professionals of adverse events and product problems

FD-302 (Rev. 11/18/03) For Medical Devices (Form 10/03)

Page 1 of 1

**A. Patient information**

1. Patient name or ID: (b) (6)      2. Age at time of event: (b) (6)      3. Sex:  male      4. Weight: 2800 gms

**B. Adverse event or product problem**

1.  Adverse event       Product problem (e.g., defect/malfunction)

2. **OTC/Device associated to adverse event** (check all that apply):  
 (b) (6)       disability  
 required information to prevent potential injury/damage       occupational anomaly  
 tie-breaking       required information to prevent potential injury/damage  
 hospitalization - initial or prolonged       other:

3. Date of event: (b) (6)      4. Date of this report: (b) (6)

5. Description:  
 Severe pulmonary hemorrhage, with down from support despite many respiratory efforts + blood products given. Grade II @ ICH.

6. Relevant test/lab/diagnostic data, including dates:  
 Cranial ultrasound (b) (6)  
 echo 8/10/07  
 coagulation profile (b) (6)  
 chest xray (b) (6)  
 transillumination (b) (6)

7. Other relevant history, including preexisting medical conditions (e.g., allergies, renal, pregnancy, smoking and alcohol use, mechanical ventilation, etc.):  
 24 1/2 week premature, IUGR, Twin "B", required HFV O<sub>2</sub> support.

**C. Suspect medication(s)**

1. Name (give labeled strength & manufacturer, if known):  
 #1 \_\_\_\_\_  
 #2 \_\_\_\_\_

2. Dose, frequency, & route used:  
 #1 \_\_\_\_\_  
 #2 \_\_\_\_\_

3. If therapy critical (if relevant, give duration) (include previous attempt):  
 #1 \_\_\_\_\_  
 #2 \_\_\_\_\_

4. Disposition for use (prevention):  
 #1 \_\_\_\_\_  
 #2 \_\_\_\_\_

5. Events related to use stopped or does not recur:  
 #1  yes  no  unsure  
 #2  yes  no  unsure

6. If event recurred after reintroduction:  
 #1  yes  no  unsure  
 #2  yes  no  unsure

7. NDC # (for product problems only):  
 #1 \_\_\_\_\_  
 #2 \_\_\_\_\_

8. Concomitant medical products and therapy dates (include treatment of event)

**D. Suspect medical device**

1. Brand name: \_\_\_\_\_

2. Type of device: \_\_\_\_\_

3. Manufacturer name & address: \_\_\_\_\_

4. Operator of device:  
 health professional  
 lay user/patient  
 other: \_\_\_\_\_

5. Expiration date (if applicable): \_\_\_\_\_

6. Serial #: \_\_\_\_\_

7. If implanted, give date of implantation: \_\_\_\_\_

8. If not implanted, give date of use: \_\_\_\_\_

9. Device available for evaluation? (Do not send to FDA)  
 yes       no       retained by manufacturer on \_\_\_\_\_ (date)

10. Concomitant medical products and therapy dates (include treatment of event)

**E. Reporter (see confidentiality section on back)**

1. Name & address:  
 Karena Strong  
 8th Ave + C St.  
 NICU  
 SEC, UT - 84143

2. Health professional? & Occupation:  
 yes       no      Research Nurse

3. If you do NOT want your identity disclosed to the manufacturer, place an "X" in this box:

4. Also reported to:  
 manufacturer  
 user/patient  
 consumer



Mail to: MEDWATCH, 6000 Fishers Lane, Rockville, MD 20855-3787  
 or FAX to: 1-800-FDA-0178

Submission of a report does not constitute an admission that medical personnel or the product caused or contributed to the event.

**From:** [Wally Carlo, M.D.](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Vivien Phillips](#); [Wally Carlo, M.D.](#)  
**Cc:** [Monica Collins](#)  
**Subject:** RE: SUPPORT DATA  
**Date:** Thursday, August 02, 2007 9:51:01 AM

---

Vivien.

Thanks a lot.

Wally

-----Original Message-----

From: "Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)>  
To: "Vivien Phillips" <[VPhillips@peds.uab.edu](mailto:VPhillips@peds.uab.edu)>; "Wally Carlo, M.D." <[WCarlo@peds.uab.edu](mailto:WCarlo@peds.uab.edu)>  
Cc: "Monica Collins" <[MCollins@peds.uab.edu](mailto:MCollins@peds.uab.edu)>  
Sent: 8/2/2007 8:47 AM  
Subject: RE: SUPPORT DATA

Terrific

Thanks

Rose

---

From: Vivien Phillips [<mailto:VPhillips@peds.uab.edu>]  
Sent: Wednesday, August 01, 2007 7:07 PM  
To: Wally Carlo, M.D.; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Monica Collins  
Subject: RE: SUPPORT DATA

(b) (6) final ROP status has been entered in the computer. Results for (b) (6) will be faxed and as soon as I get it, information will be entered.

Vivien

---

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Monday, July 30, 2007 3:55 PM  
To: [wacarlo@uab.edu](mailto:wacarlo@uab.edu); Monica Collins

Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT DATA

Hi

Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks

Rose

CENTER

NETWORK

ROP\_Message

16

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

16

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Julie Rohr  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Coora Lacy; Kristi Watterberg  
**Cc:** Alvik Das; Marc Ganz  
**Subject:** Re: MISSING SUPPORT OUTCOME  
**Date:** Wednesday, August 01, 2007 4:56:26 PM

---

I have his outpatient visit with the information.  
I will have our data entry person enter the info.  
Julie

Julie Rohr MSN RNC  
Nurse/Clinical Trials Coordinator  
Department of Pediatrics  
UNM Hospital  
2211 Lomas Blvd NE  
Albuquerque, NM 87106  
(505) 272-0363

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 7/30/2007 3:02 pm >>>  
Hi  
Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks

Rose

CENTER	NETWORK	ROP_Message
26		50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Evans, Patricia W  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Kennedy, Kathleen A; Morris, Brenda H; Tyson, Jon E  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: SUPPORT DATA  
**Date:** Wednesday, August 01, 2007 3:11:36 PM

---

(b) (6) is a patient we saw at 2-weeks after discharge and have not seen since. We are currently going through our tracking algorithm to bring her in for an evaluation. I will let you know once we're able to schedule and see her.

All the best,

Patricia W. Evans, MD  
Assistant Professor of Pediatrics, Division of Neonatology  
The University of Texas Medical School at Houston  
713-500-5311 (office)  
713-500-5794 (fax)  
Patricia.W.Evans@uth.tmc.edu <<mailto:Patricia.W.Evans@uth.tmc.edu>> (e-mail)

---

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Mon 7/30/2007 3:57 PM  
To: Kennedy, Kathleen A; Morris, Brenda H; Tyson, Jon E; Evans, Patricia W  
Cc: Gantz, Marie; Das, Abhik  
Subject: SUPPORT DATA

Hi

Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks

Rose

CENTER

NETWORK

ROP\_Message

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18



(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

The infant has died, however the 50 weeks PMA has been reached and the final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

18

(b) (6)

No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

18

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

BPD\_message

18

(b) (6)

Infant has been discharged and was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered

CENTER

NETWORK

FU\_message

18

(b) (6)

FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Pablo Sanchez  
**Subject:** Re: SUPPORT DATA  
**Date:** Wednesday, August 01, 2007 12:37:09 PM

---

Rose,  
I have an update on (b) (6) I was missing the last eye exam from the website but got the results from Roy Heyne. I'll key that in and transmit. That will make final status on that one. Follow up referred (b) (6) to the eye clinic after the last visit.  
Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206-(b) (6)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 7/30/2007 3:45 PM >>>  
Hi

Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks

Rose

CENTER

NETWORK

ROP\_Message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

BPD\_message

4

(b) (6)

Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered (Note: NG03 not yet entered)

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

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MSC 7510

Bethesda, MD 20892

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Bethany Ball  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT DATA  
**Date:** Tuesday, July 31, 2007 4:15:11 PM

---

You're welcome. Too bad I didn't spell pursue correctly!

Thanks

Rose

---

**From:** Bethany Ball [mailto:mbball@stanford.edu]  
**Sent:** Tuesday, July 31, 2007 4:06 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** vanmeurs@leland.stanford.edu; srhintz@stanford.edu; mgantz@rti.org; adas@rti.org  
**Subject:** Re: SUPPORT DATA

Hi

Listed below are missing SUPPORT outcomes. Let us know how you are doing.  
responses below in red-MBB

Thanks

Rose

**CENTER**

**NETWORK**

**ROP\_Message**

15

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

data have been keyed and will be transmitted

15

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

data have been keyed and will be transmitted

15

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

data have been keyed and will be transmitted

15

(b) (6)

No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

Patient is being followed outside our facility. Data will be obtained and keyed after 50 weeks PMA (b) (6)

CENTER

NETWORK

FU\_message

15

(b) (6)

FU window has closed but NF05 and NF09 are not completed Mother is currently refusing follow-up. We will continue to persue the issue. Dr Hintz is conducting the negotiations.

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)



**From:** Gantz, Marie  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Auman, Jeanette O.; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPP10 data  
**Date:** Tuesday, July 31, 2007 11:46:25 AM

---

Not to belabor this situation, but should we also ask her to recheck the infants that changed from a three to a four? It seems odd to me that this change was made for 8 patients.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

---

**From:** Das, Abhik  
**Sent:** Tuesday, July 31, 2007 11:41 AM  
**To:** 'Higgins, Rosemary (NIH/NICHD) [E]'  
**Cc:** Auman, Jeanette O.; Gantz, Marie; Zaterka-Baxter, Kristin  
**Subject:** FW: SUPP10 data

There you have it!

---

**From:** Everett, Ruth [mailto:REverett@med.miami.edu]  
**Sent:** Tuesday, July 31, 2007 11:32 AM  
**To:** Das, Abhik  
**Cc:** Duara, Shahnaz  
**Subject:** RE: SUPP10 data

Yes, they are I rechecked these two infants and there was a keying error, they were never seen again by the Ophthalmologist post hospital discharge and the only results should be the last exam in the hospital which was the zone two, I will correct this today and it will go out in this transmission. Again thanks for bringing this to my attention, Ruth!

-----Original Message-----

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Tuesday, July 31, 2007 9:54 AM  
**To:** Everett, Ruth  
**Cc:** Shahnaz Duara; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: SUPP10 data

Ruth:

It is some what unusual to have a change from two to four. Did you get any more information on these cases? If there is an interpretation issue, perhaps Dr. Dale Phelps, the trial's designated expert on ROP, may be able to help if the clinical records are made available (without personal identifiers, of course).

Thanks

Abhik

---

**From:** Auman, Jeanette O.  
**Sent:** Friday, July 13, 2007 5:09 PM  
**To:** Gantz, Marie; Das, Abhik; Zaterka-Baxter, Kristin  
**Subject:** FW: SUPP10 data

FYI...

**From:** Everett, Ruth [mailto:REverett@med.miami.edu]  
**Sent:** Friday, July 13, 2007 2:04 PM  
**To:** Auman, Jeanette O.  
**Subject:** RE: SUPP10 data

I re viewed the last exam that was done in the outpatient clinic, and I also asked the Opthamologist to review that exam as well and she gave me the interpretation that the infants had reached maturity. I will also check the two infants again that was changed from two to four to make absolutely sure this is correct from the eye clinic physician who is the same as the in-house Opthamologist, again thanks for your help, Ruth!

-----Original Message-----

**From:** Auman, Jeanette O. [mailto:joa@rti.org]  
**Sent:** Friday, July 13, 2007 12:33 PM  
**To:** Everett, Ruth  
**Cc:** Gantz, Marie; Zaterka-Baxter, Kristin; Das, Abhik  
**Subject:** SUPP10 data

Hi Ruth,

I have a question about the last SUPP10 exams of the seven patients that were recently changed in the Support data management system at your Center. I'm seeing that both the "Right-lowest zone of any vessels" and the "Left-lowest zone of any vessels" were all changed from a code of either '2' or '3' to a code of '4' for all 7 patients. Did your review of the patients' last eye exams show that the data enter was incorrect? Or did you receive new exam information that showed the lowest zone being '4'? If the answer is that there was a new exam, we expect that a new SUPP10 would be keyed for that infant with a new exam number.

So, for example Network ID (b) (6), the last exam keyed for this patient was 04 and dated 09/28/2005. If you receive a new exam for this patient, whoever is keying would go to the data management system, click the Add New Exam button after selecting the SUPP10 to key, then would type '5' and a new form will appear for keying the new exam.

I'm attaching the Change log information for these changes, so you can see what happened to the data.

Change Log								
Center	Network	Report Number	Date Time	Question on SUPP10	Old Value	New Value	Comment	By
08	(b) (6)	04	7/3/2007 2:57:00 PM	Q.A Right lowest zone	3	4	correction	LHOBSON
08	(b) (6)	04	7/3/2007 2:56:46 PM	Q.A Left lowest zone	3	4	correction	LHOBSON
08	(b) (6)	03	7/3/2007 2:59:47 PM	Q.A Left lowest zone	2	4	correction	LHOBSON
08	(b) (6)	03	7/3/2007 3:00:14 PM	Q.A Right lowest zone	2	4	correction	LHOBSON
08	(b) (6)	08	7/3/2007 3:01:43 PM	Q.A Left lowest zone	3	4	correction	LHOBSON
08	(b) (6)	08	7/3/2007 3:01:54	Q.A Right lowest zone	3	4	correction	LHOBSON

	(b) (6)		PM				
08		06	7/3/2007 3:02:46 PM	Q.A Right lowest zone	2	4	correction LHOBSON
08		06	7/3/2007 3:02:53 PM	Q. A Left lowest zone	2	4	correction LHOBSON
08		05	7/3/2007 3:03:41 PM	Q.A Right lowest zone	3	4	correction LHOBSON
08		05	7/3/2007 3:03:33 PM	Q. A Left lowest zone	3	4	correction LHOBSON
08		06	7/3/2007 3:04:33 PM	Q.A Right lowest zone	3	4	correction LHOBSON
08		06	7/3/2007 3:04:24 PM	Q. A Left lowest zone	3	4	correction LHOBSON
08		06	7/3/2007 3:05:44 PM	Q. A Left lowest zone	3	4	correction LHOBSON
08		06	7/3/2007 3:05:56 PM	Q.A Right lowest zone	3	4	correction LHOBSON
08		05	7/3/2007 3:06:27 PM	Q. A Left lowest zone	3	4	correction LHOBSON
08		05	7/3/2007 3:07:42 PM	Q.A Right lowest zone	3	4	correction LHOBSON
08		04	7/3/2007 3:08:49 PM	Q. A Left lowest zone	3	4	correction LHOBSON
08		04	7/3/2007 3:08:59 PM	Q.A Right lowest zone	3	4	correction LHOBSON
08		06	7/3/2007 3:10:56 PM	Q.A Right lowest zone	3	4	correction LHOBSON
08		06	7/3/2007 3:10:46 PM	Q. A Left lowest zone	3	4	correction LHOBSON

If you could let us know what happened, we'd appreciate it!  
Jenny

*Jeanette Auman*  
Programmer/Analyst III  
(919) 237-1213  
joa@rti.org

From: Ellen Hale  
To: Higgins, Rosemary (NIN/NICHD) FE; Das, Abhik; Gantz, Marie  
Subject: Fwd: SUPPORT DATA  
Date: Tuesday, July 31, 2007 11:13:55 AM  
Attachments: Attach.html

---

Rose,

Thanks for the reminders, they help me stay up to date.  
See comments about our 3 children below.

Thanks,  
Ellen

CENTER NETWORK ROP\_Message

9 (b) (6) This is the child who the mom says was seen in oph. office but she cannot or will not produce copy of exam (oph. office does not know family). Child was seen at 18 month visit and has no apparent vision problems. Have asked Dale to excuse.

9 (b) (6) This is the child that we emailed the scanned eye exam to you and Dale. Oph. note "Regressed ROP: vascularization arrested in zone 2: f/u 8 months. This child has an appointment to be seen by oph. in August.

9 (b) (6) This mom rescheduled the first oph. appointment and did not keep the second one. I just spoke with this mother. This child has been in the hospital 3 times since discharge from the NICU in (b) (6). She will call the oph. office today to make an appointment.

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

higginsr@mail.nih.gov

Hi

Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks

Rose

<b>CENTER</b>	<b>NETWORK</b>	<b>ROP_Message</b>
9	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
9	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
9	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

From: Lucy Noel  
To: Higgins, Rosemary (NIH/NICHD) [E]; Abbot Laptook; Betty\_Vohr@brown.edu; Angelita Hensman  
Cc: Das, Abhik; Gantz, Marie  
Subject: RE: SUPPORT DATA  
Date: Tuesday, July 31, 2007 10:40:42 AM

Will look into this. Thanks.

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higgins@mail.nih.gov]  
Sent: Monday, July 30, 2007 4:52 PM  
To: Abbot Laptook; Betty\_Vohr@brown.edu; Angelita Hensman; Lucy Noel  
Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT DATA

Hi  
Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks  
Rose

CENTER	NETWORK	ROP_Message
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
CENTER	NETWORK	BPD_message
14	(b) (6)	Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered (Note: NG03 not yet entered)
CENTER	NETWORK	FU_message
14	(b) (6)	FU window has closed but NF05 and NF09 are not completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

From: Wilson, Leslie Dawn  
To: Higgins, Rosemary (NIH/NICHD) [E]; Poindexter, Brenda B  
Cc: Das, Abhik; Martha G. Fuller  
Subject: RE: SUPPORT DATA  
Date: Tuesday, July 31, 2007 9:41:08 AM

---

(b) (6) -All ROP exams have been entered.  
(b) (6) -ROP exams entered-there is possibly one still outstanding and we are awaiting that result.

Thank you-leslie

Leslie Dawn Wilson, RN, BSN  
Research Manager  
Neonatal Network Coordinator  
Riley Hospital RR 208  
ldw@iupui.edu (e-mail)  
699 West Dr  
Indianapolis, IN 46202  
317.274.8255 (phone)  
317.274.8963 (fax)  
317.317.(b) (6) (pager)

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, July 30, 2007 4:51 PM  
To: Poindexter, Brenda B; Wilson, Leslie Dawn  
Cc: Das, Abhik; Martha G. Fuller  
Subject: SUPPORT DATA

Hi  
Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks  
Rose

CENTER	NETWORK	ROP_Message
12	(b) (6)	Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
12	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3700 (FAX)  
higginsr@mail.nih.gov

**From:** Gantz, Marie  
**To:** Sood, Beena; Higgins, Rosemary (NIH/NICHD) [E]; Shankaran, Seetha; Becky bara; Rosman, Carolyn  
**Cc:** Das, Abhik; Elizabeth Billian  
**Subject:** RE: SUPPORT ROP outcomes  
**Date:** Tuesday, July 31, 2007 9:08:13 AM

---

Thanks, Beena. When the entries for those last two exams are transmitted to RTI this week, the child will be recognized as having reached final ROP status.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Monday, July 30, 2007 6:36 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Shankaran, Seetha; Becky bara; Rosman, Carolyn  
Cc: Gantz, Marie; Das, Abhik; Elizabeth Billian  
Subject: RE: SUPPORT ROP outcomes

Dr Higgins,  
Carolyn looked into this - this is her response:

"the query regarding Patient (b) (6) : This patient has had exams on the 13th and the 20th. The form was keyed to RTI recently, on the 25th of July. There were 2 consecutive exams with lowest zone 3, meaning that is the final outcome. "

Let me know if this is still incomplete

Thanks  
Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Mon 7/30/2007 4:46 PM  
To: Shankaran, Seetha; Sood, Beena; Becky bara  
Cc: Gantz, Marie; Das, Abhik  
Subject:

Hi

Listed below are missing SUPPORT outcomes. Let us know how you are doing.



Thanks

Rose

CENTER

NETWORK

ROP\_Message

5

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Wally Carlo, M.D.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Monica Collins; Vivien Phillips  
**Subject:** RE: SUPPORT DATA  
**Date:** Tuesday, July 31, 2007 9:01:35 AM

---

Rose:

We will work on it.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, July 30, 2007 3:55 PM  
**To:** wcarlo@uab.edu; Monica Collins  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT DATA

Hi  
Listed below are missing SUPPORT outcomes. Let us know how you are doing.

Thanks  
Rose

CENTER	NETWORK	ROP_Message
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** [Kathy J Auten](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Das, Abhik; cotte010@mc.duke.edu](#); [Ronald GOLdberg; golds005@mc.duke.edu](#); [lohme001@mc.duke.edu](#); [Gantz, Marie](#)  
**Subject:** Re: SUPPORT DATA  
**Date:** Monday, July 30, 2007 5:47:41 PM

---

We have several more reports to enter. The new fields are helpful, Rose.  
Kathy

Kathy J. Auten, MSHS  
Project Manager  
NICHD Neonatal Research Network Trials  
Duke University Medical Center  
Box 3179  
Bell Building, Room 141  
Durham, NC 27710 USA  
919-681-5859 tel  
919-681-4868 fax  
[kathy.auten@duke.edu](mailto:kathy.auten@duke.edu)

"Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)> wrote on 07/30/2007 04:58:47 PM:

> Hi  
> Listed below are missing SUPPORT outcomes. Let us know how you are doing.

>  
> Thanks  
> Rose  
>  
> CENTER  
>  
> NETWORK  
>  
> ROP\_Message

> 19

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

> 19

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

> 19

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

> 19

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.

>

> 19

>

> (b) (6)

> No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.

>

> 19  
>  
> (b) (6)  
> No SUPP10 records have been entered even though SUPP09 Question C1  
> indicates that an exam for ROP was performed.  
>  
> 19  
>  
> (b) (6)  
> No SUPP10 forms have been entered though 50 weeks PMA has been  
> reached and the infant did not die early.  
>  
> CENTER  
>  
> NETWORK  
>  
> BPD\_message  
>  
> 19  
>  
> (b) (6)  
>  
> PHY01 is expected based on NG07 but has not been entered  
>  
> 19  
>  
> (b) (6)  
> Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week  
> snapshot is missing  
>  
> 19  
>  
> (b) (6)  
> Infant has been discharged and was hospitalized at 36 weeks (per  
> NG03) but NG07 36 week snapshot is not entered  
>  
> CENTER  
>  
> NETWORK  
>  
> FU\_message  
>  
> 19  
>  
> (b) (6)  
>  
> FU window has closed but NF05 and NF09 are not completed  
>  
> 19  
>  
> (b) (6)  
>  
> FU marked as complete (per NF10/SF10) but NF05 and NF09 are not completed  
>  
>  
>  
> Rosemary D. Higgins, M.D.  
> Program Scientist for the Neonatal Research Network  
> Pregnancy and Perinatology Branch  
> Center for Developmental Biology and Perinatal Medicine  
> NICHD, NIH  
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- > MSC 7510
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- > 301-435-7909
- > 301-496-3790 (FAX)
- > [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)
- >

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik  
**Subject:** Missing outcomes for July  
**Date:** Thursday, July 26, 2007 4:54:32 PM  
**Attachments:** Infants with missing outcomes 07-25-07.xls

---

Hi Rose,

Attached is the monthly list of infants with missing SUPPORT outcomes.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255





**From:** Walsh, Michele  
**To:** Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; nfiner@ucsd.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; wrich@ucsd.edu; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** msumner@peds.uab.edu; fmartinez@ucsd.edu  
**Subject:** RE: SUPPORT Call  
**Date:** Thursday, July 26, 2007 4:38:03 PM

---

I will be on a plane and not able to join the call.  
I will send my comments to Rose.  
Michele

---

**From:** Webb, Robin E. [mailto:rwebb@rti.org]  
**Sent:** Thursday, July 26, 2007 3:42 PM  
**To:** Webb, Robin E.; higginsr@mail.nih.gov; Das, Abhik; kurt.schibler@cchmc.org; alaptook@WIHRI.org; mcw3@cwru.edu; wcarlo@peds.uab.edu; Roger.Faix@hsc.utah.edu; nfiner@ucsd.edu; Bradley.Yoder@hsc.utah.edu; Gantz, Marie; nxs5@cwru.edu; wrich@ucsd.edu; Zaterka-Baxter, Kristin; Gantz, Marie; Poole, W. Kenneth  
**Cc:** msumner@peds.uab.edu; fmartinez@ucsd.edu  
**Subject:** RE: SUPPORT Call

The SUPPORT call to discuss air leak definition has been scheduled for:

**Tuesday, 8/14**  
**2:00pm ET**

Dial:  
Outside the USA  
1-203-310-(b) (6)  
or  
Within the USA  
866-675-(b) (6)

Then, enter Participant Passcode:  
(b) (6)

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**From:** Walsh, Michele  
**To:** Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** RE: Support study definition of air leak  
**Date:** Tuesday, June 26, 2007 3:04:05 PM

---

I also am concerned: we just had a babe on the CPAP arm who had a very large pneumomediastinum- I think this could have been potentially study related due to delayed surfactant. I believe that ptx, pneumomediastinum and PIE should be included. I agree with excluding ptx that is related to thoracic surgery. Michele

---

**From:** Roger Faix [mailto:Roger.Faix@hsc.utah.edu]  
**Sent:** Tuesday, June 26, 2007 11:37 AM  
**To:** Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** RE: Support study definition of air leak

Hi All!

I'm not so certain I agree with this determination. Given the potential lethality, I would suggest also including PIE and pneumopericardium (granted that there is some subjectivity re: PIE) as items to be tracked by the DSMB. I think this bears further discussion.

Roger

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Friday, June 22, 2007 9:46 AM  
**To:** wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; Roger Faix; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** Support study definition of air leak

Hi all,

I'm sending this note (below and bolded) at Roses' request so that the subcommittee can review and discuss the suggested definition of air leak in the Support study manual. Currently, there is no definition; in the GDB, we ask about and define pneumothoraces only (as described below). Please circulate any comments to all members of the subcommittee.

Pneumothorax definition (page 4-4 of the GDB study manual):

*"...Pneumothorax is a collection of air in the pleural space where a lucency is identified in the pleural space with displacement of the lung away from the chest wall. Do not include a pneumothorax resulting from a thoracotomy during surgery (e.g. PDA ligation)".*

Thanks,

Kris

-----Original Message-----  
From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, June 22, 2007 2:57 AM  
To: nfiner@ucsd.edu; wcarlo@peds.uab.edu; SCosby@peds.uab.edu; Zaterka-Baxter, Kristin  
Cc: wrich@ucsd.edu; nxs5@cwru.edu  
Subject: Re: Air Leak - Supp08

Kris - can you send us the definition from the MOP and also circulate to the subcommittee with Neil's comments??

My email is only inermittently working.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Neil Finer <nfiner@ucsd.edu>  
To: Wally Carlo, M.D. <WCarlo@peds.uab.edu>; Shirley Cosby <SCosby@peds.uab.edu>; Zaterka-Baxter, Kristin <kzaterka@rti.org>; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Wade Rich <wrich@ucsd.edu>; Nancy Newman <nxs5@cwru.edu>  
Sent: Thu Jun 21 01:03:44 2007  
Subject: RE: Air Leak - Supp08

**Hi Everyone**

**I believe that we previously agreed to use pneumothoraces for SUPPORT as one of the prospective adverse events that we would follow. The death due to PIE should be reported as such, but this would not be counted as a pneumothorax.**

**Rose, can we circulate this issue to the committee and ask if everyone is OK with just the recording of pneumothoraces?**

**Thanks**

**Neil**

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Federal and Ohio law protect patient medical information, including psychiatric disorders, (H.I.V) test results, A.I.Ds-related conditions, alcohol, and/or drug dependence or abuse disclosed in this email. Federal regulation (42 CFR Part 2) and Ohio Revised Code section 5122.31 and 3701.243 prohibit disclosure of this information without the specific written consent of the person to whom it pertains, or as otherwise permitted by law.

**From:** [Webb, Robin E.](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: Support call  
**Date:** Thursday, July 26, 2007 11:06:51 AM

---

I'll have to get more dates for the SUPPORT call, so it may go into September. Will that be too late?

Who do you need for the probiotics call?

Thanks,  
Robin

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, July 25, 2007 4:31 PM  
**To:** Webb, Robin E.  
**Subject:** RE: Support call

SUPPORT \_ Neil, Michele, Wally, Brad or Roger, Kurt and Abbot (plus me and Abhik) - this is a hot issue  
Rose

-----Original Message-----

**From:** Webb, Robin E. [<mailto:rwebb@rti.org>]  
**Sent:** Wednesday, July 25, 2007 4:23 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Support call

Hi Rose,

Who do you need on these calls?

Thanks,  
Robin

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Friday, July 20, 2007 11:24 AM  
**To:** Webb, Robin E.  
**Cc:** Das, Abhik; Cunningham, Meg  
**Subject:** Support call

Robin

Can you set up a SUPPORT call to discuss air leak definition?

Probiotics also needs a call to discuss the Ang secondary proposal.

Also, ED Bell has been left off of some of the emails for probiotics - do you have him on the list?

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

**From:** [Das, Abhik](#)  
**To:** [Neil Finer](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Frantz, Ivan](#)  
**Cc:** [Wade Rich](#)  
**Subject:** RE: Support  
**Date:** Thursday, July 26, 2007 9:00:49 AM

---

Sounds reasonable. When the follow up window for this baby opens (assuming survival), you may want to mark it as permanently missing to avoid getting edits from us. Also, I gather this baby cannot be enrolled into Tim's secondary on breathing outcomes.

Thanks

Abhik

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Wednesday, July 25, 2007 5:42 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Frantz, Ivan  
**Cc:** Das, Abhik; Wade Rich  
**Subject:** RE: Support

Hi Ivan

I agree with Rose – I would rather enroll and lose the not enroll and presume that we would lose track. We would still almost certainly have the primary outcomes. This would be a long flight to Africa and that would probably necessitate waiting for this infant to be at least 40+ weeks PCA, and most of us would recommend waiting longer > 44-48 wks at a minimum

Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, July 25, 2007 11:42 AM  
**To:** Frantz, Ivan  
**Cc:** Neil Finer; Das, Abhik; Wade Rich  
**Subject:** RE: Support

Ivan

The protocol addresses inclusion criteria (for which this child would appear to qualify) as long as we can get primary outcome – BPD and ROP (The ROP may be tough if they leave the country without reaching "status"). Long term FU (18-22 months) is a secondary outcome for which this child would be lost (though info may be garnered on a lost to FU form).

If you think you will have the BPD/ROP outcomes, I would suggest enrolling the child.

Let me know if you want to discuss further.

Thanks

Rose

---

**From:** Frantz, Ivan [mailto:IFrantz@tufts-nemc.org]  
**Sent:** Wednesday, July 25, 2007 2:16 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Support

We have a mother 27 4/7 weeks who will likely consent to Support should she deliver, but who will almost certainly be lost to follow-up (current plans are to move back to Africa a few months post partum). Should we enroll her?

**From:** Neil Finer  
**To:** Wally Carlo, M.D.; Michele Walsh; Bradley Yoder; Roger Faix; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Nancy Newman; Gantz, Marie; Poole, W. Kenneth  
**Cc:** Petrie, Carolyn; Zaterka-Baxter, Kristin; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: SUPPORT protocol deviations  
**Date:** Monday, July 23, 2007 3:35:05 PM  
**Attachments:** SUPPORT Protocol Deviations by center - old vs new 07-23-07.doc  
SUPPORT Protocol Deviations - old vs new 7-23-07.doc  
SUPPORT Subcommittee Report Meeting July 19 07.ppt

---

Hello Everyone

Please find attached the Protocol deviations comparing our first year with current activity and my Subcommittee report.

Neil

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Monday, July 23, 2007 11:38 AM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** SUPPORT protocol deviations

Hi Neil,

As requested at the SC meeting, attached are the protocol deviations for SUPPORT, broken down by "before" and "after" trial stoppage. For convenience, I used December 31, 2005 as the cut-off date. Let me know if you would like any additional information.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

**SUPPORT Trial Protocol Deviations, by Center, Through December 31, 2005**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol																					0
Surfactant not given in the first hour	2					2	1														5
Oximeter not started within 2 hours						1					3										4
Infant placed on study oximeter for incorrect treatment	1										2										3
Failure to use study oximeter at times required by protocol	3					2			4		2	1		1							13
Non-study (unmasked) oximeter used at same time as study ox.															1						1
Mechanical ventilation initiated for other than study criteria																					0
NSIMV initiated in infant not previously intubated		1									1										2
Extubation (excluding unplanned) for other than study criteria											1				1						2
Failure to extubate CPAP infant if all criteria met		1														2					3
Failure to extubate surfactant infant if all criteria met						1															1
High flow nasal cannula used within first 14 days of life						3			1							1					5
Infant received postnatal steroids in first 21 days of life																3					3
Head ultrasound done outside 4-21 day window											1										1
Consent errors																					0
Randomization errors		2													2						4
Other						1															1
<b>Total</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>

**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center, Through December 31, 2005**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol																					0%
Surfactant not given in the first hour	8%					11%	10%														2%
Oximeter not started within 2 hours						5%					8%										1%
Infant placed on study oximeter for incorrect treatment	4%										5%										1%
Failure to use study oximeter at times required by protocol	13%					11%			18%		5%	5%		11%							6%
Non-study (unmasked) oximeter used at same time as study ox.															14%						1%
Mechanical ventilation initiated for other than study criteria																					0%
NSIMV initiated in infant not previously intubated		10%									3%										1%
Extubation (excluding unplanned) for other than study criteria											3%				14%						1%
Failure to extubate CPAP infant if all criteria met		10%														5%					1%
Failure to extubate surfactant infant if all criteria met						5%															0%
High flow nasal cannula used within first 14 days of life						16%			5%							2%					3%
Infant received postnatal steroids in first 21 days of life																7%					2%
Head ultrasound done outside 4-21 day window											3%										0%
Consent errors																					0%
Randomization errors		20%													22%						2%
Other						5%															0%
<b>Total protocol deviations</b>	<b>25%</b>	<b>40%</b>		<b>0%</b>	<b>0%</b>	<b>53%</b>	<b>10%</b>	<b>0%</b>	<b>23%</b>	<b>0%</b>	<b>26%</b>	<b>5%</b>	<b>0%</b>	<b>33%</b>	<b>29%</b>	<b>15%</b>					<b>22%</b>
<b>Total number of infants enrolled</b>	<b>24</b>	<b>10</b>	<b>0</b>	<b>17</b>	<b>13</b>	<b>19</b>	<b>10</b>	<b>1</b>	<b>22</b>	<b>2</b>	<b>38</b>	<b>19</b>	<b>15</b>	<b>9</b>	<b>7</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>247</b>



**SUPPORT Trial Protocol Deviations, by Center, January 1, 2006 – July 11, 2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol			1								1										2
Surfactant not given in the first hour	1	2				3		1	1		1										9
Oximeter not started within 2 hours	1	1								1		1						2			6
Infant placed on study oximeter for incorrect treatment			1	1							3										5
Failure to use study oximeter at times required by protocol	2	5	2		2	2			3		4		2					1	1	2	26
Non-study (unmasked) oximeter used at same time as study ox.						2	1													1	4
Mechanical ventilation initiated for other than study criteria																		2			2
NSIMV initiated in infant not previously intubated	1										2										3
Extubation (excluding unplanned) for other than study criteria						3			3												6
Failure to extubate CPAP infant if all criteria met										2											2
Failure to extubate surfactant infant if all criteria met						1															1
High flow nasal cannula used within first 14 days of life					1	3			5			1								6	16
Infant received postnatal steroids in first 21 days of life									4		3	1				1	1				10
Head ultrasound done outside 4-21 day window																					0
Consent errors		1										2									3
Randomization errors			1		3							1	1					2			8
Other									2	2											5
<b>Total</b>	<b>5</b>	<b>9</b>	<b>5</b>	<b>1</b>	<b>7</b>	<b>14</b>	<b>1</b>	<b>1</b>	<b>18</b>	<b>5</b>	<b>14</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>108</b>

**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center, January 1, 2006 – July 11, 2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol			4%								2%										0%
Surfactant not given in the first hour	2%	6%				9%		6%	2%		2%										2%
Oximeter not started within 2 hours	2%	3%								5%		3%					8%				1%
Infant placed on study oximeter for incorrect treatment			4%								5%										1%
Failure to use study oximeter at times required by protocol	5%	16%	8%		5%	6%			7%		6%		13%				4%	10%	13%		6%
Non-study (unmasked) oximeter used at same time as study ox.						6%	4%												7%		1%
Mechanical ventilation initiated for other than study criteria																	8%				0%
NSIMV initiated in infant not previously intubated	2%										3%										1%
Extubation (excluding unplanned) for other than study criteria						9%			7%												1%
Failure to extubate CPAP infant if all criteria met										9%											1%
Failure to extubate surfactant infant if all criteria met						3%															0%
High flow nasal cannula used within first 14 days of life					3%	9%			11%			3%								40%	3%
Infant received postnatal steroids in first 21 days of life									9%		5%	3%				10%	4%				2%
Head ultrasound done outside 4-21 day window																					0%
Consent errors		3%										6%									0%
Randomization errors			4%		8%								3%	7%				8%			2%
Other					1%				4%	3%											1%
<b>Total protocol deviations</b>	<b>12%</b>	<b>28%</b>	<b>19%</b>		<b>18%</b>	<b>44%</b>	<b>4%</b>	<b>6%</b>	<b>39%</b>	<b>23%</b>	<b>22%</b>	<b>19%</b>	<b>20%</b>		<b>0%</b>	<b>10%</b>	<b>31%</b>	<b>10%</b>	<b>60%</b>	<b>0%</b>	<b>23%</b>
<b>Total number of infants enrolled</b>	<b>41</b>	<b>32</b>	<b>26</b>	<b>0</b>	<b>39</b>	<b>32</b>	<b>27</b>	<b>18</b>	<b>46</b>	<b>22</b>	<b>63</b>	<b>31</b>	<b>15</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>26</b>	<b>10</b>	<b>15</b>	<b>6</b>	<b>460</b>

### SUPPORT Trial Protocol Deviations Reported Through December 31, 2005

Type of protocol deviation	Number
CPAP not initiated if required by protocol	0
Surfactant not given in the first hour	5
Oximeter not started within 2 hours	4
Infant placed on study oximeter for incorrect treatment	3
Failure to use study oximeter at times required by protocol	13
Non-study (unmasked) oximeter used at same time as study oximeter	1
Mechanical ventilation initiated for other than study criteria	0
NSIMV initiated in infant not previously intubated	2
Extubation (excluding unplanned) for other than study criteria	2
Failure to extubate CPAP infant if all criteria met	3
Failure to extubate surfactant infant if all criteria met	1
High flow nasal cannula used within first 14 days of life	5
Infant received postnatal steroids in first 21 days of life	3
Head ultrasound done outside 4-21 day window	1
Consent errors	0
Randomization errors	4
Other	1
<b>Total</b>	<b>48</b>

Type of protocol deviation (some categories collapsed)	Number
Assigned arm not implemented within required amount of time	9
Infant placed on study oximeter for incorrect treatment	3
Failure to use study oximeter at times required by protocol	13
Non-study (unmasked) oximeter used at same time as study oximeter	1
Mechanical ventilation initiated for other than study criteria	0
NSIMV initiated in infant not previously intubated	2
Extubation (excluding unplanned) for other than study criteria	2
Failure to extubate infant if all criteria met	4
High flow nasal cannula used within first 14 days of life	5
Infant received postnatal steroids in first 21 days of life	3
Head ultrasound done outside 4-21 day window	1
Consent errors	0
Randomization errors	4
Other	1
<b>Total</b>	<b>48</b>

**SUPPORT Trial Protocol Deviations Reported January 1, 2006 – July 11, 2007**

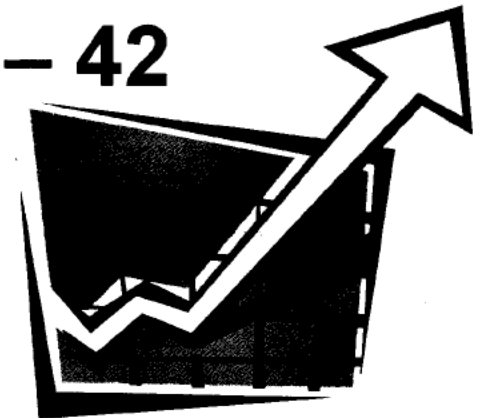
<b>Type of protocol deviation</b>	<b>Number</b>
CPAP not initiated if required by protocol	2
Surfactant not given in the first hour	9
Oximeter not started within 2 hours	6
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Infant received postnatal steroids in first 21 days of life	10
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Consent errors	3
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Other	5
<b>Total</b>	<b>108</b>

<b>Type of protocol deviation (some categories collapsed)</b>	<b>Number</b>
Assigned arm not implemented within required amount of time	17
Infant placed on study oximeter for incorrect treatment	5
Failure to use study oximeter at times required by protocol	26
Non-study (unmasked) oximeter used at same time as study oximeter	4
Mechanical ventilation initiated for other than study criteria	2
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# **SUPPORT Subcommittee Report – Meeting July 19**

## **1. Review of Enrollments to date:**

- As of most current information - 707 infants enrolled representing 54% of total**
- This rate has been some what improved**
- May is the best month to date – 42 enrolled!!**



# **SUPPORT Subcommittee**

## **2. Review of Serious Adverse Events**

- All such events apart from air leaks in the first 14 days are occurring at less than the baseline rates, and the air leaks are only marginally increased for the larger strata by 0.5%.**

## **3. Review Protocol Violations**



### **Commonest:**

- 1. Failure to use Study Oximeter when required**
- 2. Use of HiFlow NC**
- 3. Surfactant not given within first hour**
- 4. Steroids for CLD within first 21 days**

**Range of Violations is from 5% to 45% of infants**

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**Consider 25% perhaps as a high target and review at time of site review**

## 4. ROP Outcomes

Reviewed the need to obtain eye final diagnosis for primary outcome – Threshold or Surgery

Currently unfavorable diagnosis takes 53 weeks to cover most infants

We may be missing up to 10%, and probably 2% for final diagnosis of primary outcome

Discussed coding infants as Permanently missing if no results available after 55 weeks PMA

Need to encourage follow-up – Post cards, phone calls, monthly RTI reminders, calls to ophthal, use of social workers



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- Use of Avastin – VEGF Inhibitor
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- Difficult to track its use.
- We should probably try to code use but Avastin is used after Primary Outcome is reached (We think!)
- Try to determine if this used at a Center near you!

## 6. Definition of Airleak

- Currently Airleak = Pneumothorax
- However sites are finding infants with PIE and poor outcomes and this outcome may be increased in one arm vs another
- NRN previously decided to only include pneumothorax as airleak
- We need to reconsider for SUPPORT

# Should Airleak = Pneumothorax?

## YES

- ✓ This is what we have been doing
- ✓ This is what NRN has been doing
- ✓ Changing means potentially looking back
- ✓ Means considering Pneumomediastinum and Pneumopericardium and PIE

## NO

- ✓ We are missing PIE and other types of airleaks and their potential significance
- ✓ No other similar study has collected such data
- ✓ Could we do it going forward and not go back?
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# Should Airleak = Pneumothorax?

- If we change, should we have central readership?
- Wow – another Secondary!!!
- We tried to resolve but with existing differences I would suggest that the SUPPORT Subcommittee meet and develop solution



## 7. MRI Secondary – S Hintz



### Site participation update

- **All 14 sites participating now have IRB consent have successfully enrolled**
  - 9 sites using separate consent, 5 sites using embedded consent
- **Enrollment/MRI central reading update**
- **All enrollment data now being obtained only from monthly report – no separate site queries being sent**
  - 237 patients have been enrolled
    - 35-42 week neuroimaging *including MRI* is complete for ~162 patients
      - 36 patients died before late neuroimaging
- **MRI central reading: approximately 92 have been read or are in process with central reader.**

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- **PDA clips and brain MRI's (attachments):**
  - **Stanford policy: wait 6 weeks after cardiac surgery – probably *conservative***
  - **We routinely obtain MRI's on preemies at near-term, and neonates after complex repairs without incident**
- **Call or email me with any issues or concerns from you, your radiologists or technologists**
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- **Drs. Nehal Parikh and Pon Narayana (Houston) are working on an ancillary proposal for adding automated volumetric sequences to current MRI sequences**
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- **Please remember send copies of CUS and MRI routinely to RTI (every 2-3 months depending on volume of enrollment).**



# **SUPPORT Subcommittee Secondaries**

**8. Pulmonary Outcomes –Enrollments  
are going well –no issues – No Tim!!!**

## **9. Growth Secondary**

- Discussion about using length board**
- If not measured with board – no measurement**
- Data collection unclear as to the number of hours per day on designated days – Will need technical bulletin**

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## **10. Antenatal Consent – W Rich**

- Clarified that each site to enter 50 women who are screened and deliver in the window**
- At the end of the study we will have approached 6000 women**

# Individual Patient Meta Analysis for SpO2 Targets for ELBW



- Lisa Askie submitted grant for funding
- We have responded to critiques
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# **SUPPORT Subcommittee SUMMARY**



- **Study now > halfway complete**
- **At 30/month we will need 20 more months**
- **Secondaries are enrolling at reasonable rates and will be very informative**

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- **Thanks to all the Coordinators for their incredible work for this trial!!**
- **Lets get the paper(s) published before you need to renew!!**
- **Safe Travels!**



**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Thanks  
**Date:** Friday, July 20, 2007 2:46:51 PM

---

Hi Rose

Sounds like you have yourself some interesting issues. (b) (6)

(b) (6)

Thanks for you continued support

Be well

Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]

Sent: Friday, July 20, 2007 10:44 AM

To: Neil Finer

Subject: Thanks

Neil -

Thanks for your continued commitment to the SUPPORT Trial. I truly appreciate all of your efforts!!

(b) (6)

Take care

Rose

-----  
Sent from my BlackBerry Wireless Handheld

**From:** [Neil Finer](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Zaterka-Baxter, Kristin](#); [Wade Rich](#)  
**Date:** Friday, July 20, 2007 12:06:32 AM  
**Attachments:** [SUPPORT Subcommittee Report Meeting July 19 07.ppt](#)

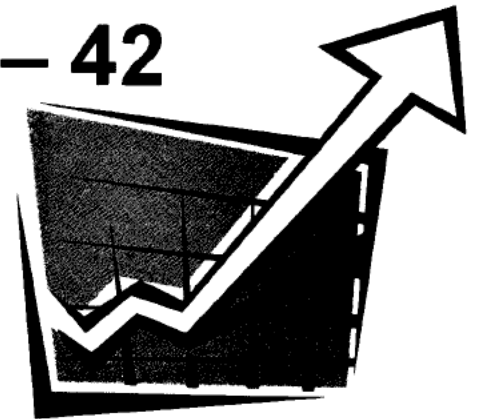
---

Hi Rose and Kris  
Here is my report for tomorrow morning  
Talk to you at 8:00AM PT  
Neil

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**From:** Navarrete, Cristina  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT updates  
**Date:** Wednesday, July 18, 2007 12:53:06 PM  
**Attachments:** length\_board.doc

---

Hello Dr. Higgins!

As per Dr. Finer's agenda, I am to review the use of the length board. Please find attached a copy of the length board brochure for distribution to the centers who might need it.

Thank you.

Cristina

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Mon 7/16/2007 9:50 AM  
To: Duara, Shahnaz; Navarrete, Cristina; Susan Hintz; Timothy\_Stevens@URMC.Rochester.edu  
Subject: FW: SUPPORT updates

Support meets at 5 PM ET on July 19 - can you call in at 866-675-(b) (6) with passcode (b) (6) to join the meeting?  
Let me know

Thanks  
Rose

---

From: Neil Finer [mailto:nfiner@ucsd.edu]  
Sent: Saturday, July 14, 2007 2:42 AM  
To: Abbot Laptook; Walsh, Michele; Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
Cc: Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Phelps, Dale  
Subject: FW: SUPPORT updates

Hi Everyone

Here is a revised agenda for the Steering committee along with some new information from Marie with more to follow regarding the oximeters data.

1. Review Enrollments to date
2. Review Adverse Events, and Protocol Deviations
3. Discuss Eye follow-up and the need for intermediate eye outcome - ie 1 year Dale Phelps
4. Discuss the use of Avastin for infants requiring Laser surgery - Dale Phelps
5. Issues from Coordinators Call

Discuss definition of Airleak for SUPPORT trial Pneumothorax versus Any airleak?? Currently only pneumothorax!

Clarification of Steroid Dose issue from Coordinators Call

4. Review status of Secondaries-

MRI - Susan Hintz Discuss safety of MRIs in infants with PDA ligation with clips

Breathing Outcomes - Tim Stevens

Nutrition - Christine Navarette Discuss the use of the legth Board

Antenatal consent -Wade Rich

5. Discuss Prospective Meta Analysis

6. Other Issues

Let me know if you wish to add any other items

Neil

---

From: Gantz, Marie [<mailto:mgantz@rti.org>]  
Sent: Friday, July 13, 2007 7:26 AM  
To: Neil Finer  
Cc: Das, Abhik  
Subject: SUPPORT updates

Hi Neil,

Attached are updated reports on SUPPORT enrollment, adverse events, and protocol deviations. The enrollment report incorporates the revisions suggested by the subcommittee at the last SC meeting. James is working on processing the latest pulse ox data, and I will get you a new pulse ox report before the SC meeting. Please let me know if there is anything else you need.

Marie

Marie Gantz, Ph.D.

Research Statistician

RTI International

[mgantz@rti.org](mailto:mgantz@rti.org)

828-254-6255

# O'Leary LengthBoards™



Measure with  
precision

Patent # Des. 308, 643

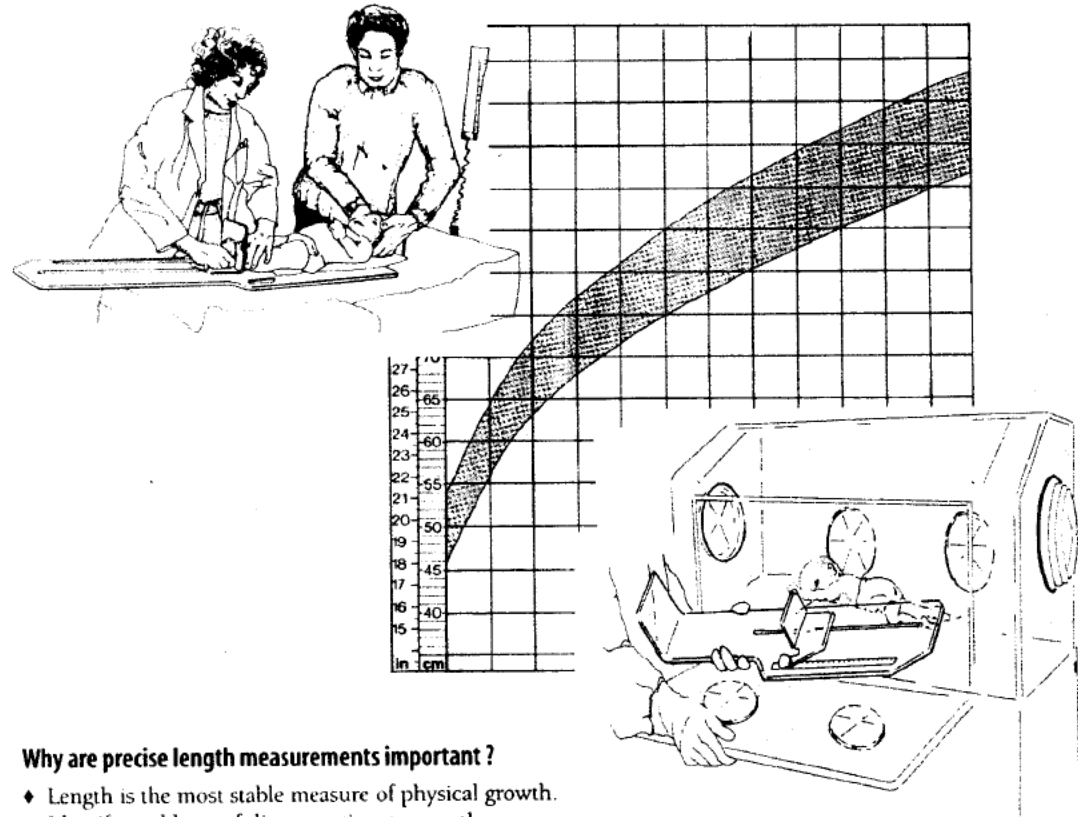


**Ellard  
Instrumentation Ltd.**

14253 169th Dr. SE, Suite 685 • Monroe, WA 98272  
Tel: (360) 805-5406 • Fax: (360) 805-2877 • (800) Ellard-1  
E-mail: [info@ellardinstrumentation.com](mailto:info@ellardinstrumentation.com)  
Web Page: [www.ellardinstrumentation.com](http://www.ellardinstrumentation.com)

## O'Leary LengthBoards™

Each LengthBoard™ is designed with a stationary, 90° angle head piece and comes complete with removable, sliding, 90° angle foot piece. The foot piece with built-in magnifier provides accurate reading of recumbant measurement. The O'Leary LengthBoards™ are available in three sizes and are approved by the California Child Health and Development Program, Washington State WIC programs, and Children's Hospital Network. The O'Leary LengthBoard™ is currently being used in studies sponsored by Wyeth-Ayerst Research, Abbott Laboratories, and National Institute of Health. Adult stature and recumbent LengthBoards are also available. The foot piece is removable for easy cleaning. All surfaces can be quickly cleaned with mild disinfectant. LengthBoards are made of clear acrylic.



### Why are precise length measurements important ?

- ◆ Length is the most stable measure of physical growth.
- ◆ Identify problems of disproportionate growth.
- ◆ Important indicator of nutritional status.

### Quality that makes a difference

- ◆ Design meets international standard for anthropometric equipment.
- ◆ Validity of each LengthBoard™ carefully tested by manufacturer. Quality and durability guaranteed.
- ◆ Individually crafted with detailed finishing. Made of sturdy, light-weight, clear acrylic.

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached  
**Date:** Tuesday, July 17, 2007 3:12:37 PM

---

I agree  
Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, July 17, 2007 10:23 AM  
**To:** Neil Finer; Das, Abhik; Walsh, Michele; Wally Carlo, M.D.; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Nancy Newman; Wade Rich; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]; Wade Rich; Poole, W. Kenneth  
**Subject:** RE: Age at which ROP status is reached

Hi,  
The DSMC monitors the trial for NICHD. They would have access to primary and secondary outcomes as defined by the protocol as well as pertinent safety information such as AE's. Further, they may ask for additional analyses either related to study safety or study efficacy endpoints. The decision to halt a trial for either safety or efficacy is made by the Director of NICHD following DSMC recommendation.

This clearly warrants more discussion at the subcommittee meeting on Thursday.

Thanks  
Rose

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Tuesday, July 17, 2007 1:04 PM  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]; Walsh, Michele; Wally Carlo, M.D.; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Nancy Newman; Wade Rich; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]; Wade Rich; Poole, W. Kenneth  
**Subject:** RE: Age at which ROP status is reached

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Thanks  
Neil

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**Sent:** Tuesday, July 17, 2007 7:18 AM  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; Walsh, Michele; Wally Carlo, M.D.; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Nancy Newman; Wade Rich; Gantz, Marie  
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**Subject:** RE: Age at which ROP status is reached

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**Sent:** Tuesday, July 17, 2007 10:06 AM

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**Subject:** RE: Age at which ROP status is reached

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Please weigh in on this.

Thanks for bringing this up.

Rose

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**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached

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wally

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Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
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Rose

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**To:** 'wacarlo@uab.edu'; mcw3@case.edu; Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Roger Faix'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); 'Abbot Lptook'; Das, Abhik; Nancy Newman; Wade Rich; 'Neil Finer'; Gantz, Marie  
**Cc:** 'Cunningham, Meg'; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** FW: Age at which ROP status is reached

ROP information for SUPPORT subcommittee

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Friday, July 13, 2007 10:51 PM  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik  
**Subject:** RE: Age at which ROP status is reached

Thanks Marie  
Rose, can you forward this to the subcommittee?  
Thanks  
Neil

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**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, July 13, 2007 12:06 PM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** Age at which ROP status is reached

Hi Neil,



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Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

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Federal and Ohio law protect patient medical information, including psychiatric\_disorders, (H.I.V) test results, A.I.Ds-related conditions, alcohol, and/or drug\_dependence or abuse disclosed in this email. Federal regulation (42 CFR Part 2) and Ohio Revised Code section 5122.31 and 3701.243 prohibit disclosure of this information without the specific written consent of the person to whom it pertains, or as otherwise permitted by law.

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**To:** Das, Abhik; Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; Walsh, Michele; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Nancy Newman; Wade Rich; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]; Wade Rich; Poole, W. Kenneth  
**Subject:** RE: Age at which ROP status is reached  
**Date:** Tuesday, July 17, 2007 2:18:20 PM

---

I think it is important that the DSMC look at all the outcomes listed as a thorough review is going to be most helpful to the trial and to us.

wally

Wally Carlo, M.D.  
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**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; Walsh, Michele; Wally Carlo, M.D.; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Nancy Newman; Wade Rich; Gantz, Marie  
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**Subject:** RE: Age at which ROP status is reached

Neil:

DSMCs usually look at all important outcomes that could be potentially impacted by the intervention; it would be difficult for them to fulfill their mandate otherwise. The critical distinction for the primary outcome is that statistical interim testing for efficacy is done only for the primary outcome and secondary outcomes are typically not used to examine efficacy.

Thanks

Abhik

---

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ROP information for SUPPORT subcommittee

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**Sent:** Friday, July 13, 2007 10:51 PM  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
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Marie

Marie Gantz, Ph.D.  
Research Statistician  
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828-254-6255

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**From:** Neil Finer  
**To:** Walsh, Michele  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich  
**Subject:** RE: Age at which ROP status is reached  
**Date:** Tuesday, July 17, 2007 12:59:30 PM

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Michele

I agree with your concern but I am frankly nervous about the DSMC looking at anything but safety. They totally missed the boat when looking at the oximetry data, and if they believe that the DR intubation rates are higher than we predicted etc, I'm worried that they will conclude that we should stop. I am going to ask Wade and Rose if they could discuss the actual site monitoring visits of which some have been conducted and see if there is a concern that the protocol for CPAP is not being followed.

Do you feel at your center that infants randomized to CPAP are being intubated outside of the accepted indications ie resuscitation need?

We don't see this – I suspect because most of these resuscitations are videotaped for our QA and subsequently reviewed.

In our reviews this is not happening.

Let's discuss on Thursday.

Neil

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**Sent:** Tuesday, July 17, 2007 9:25 AM  
**To:** Neil Finer  
**Subject:** RE: Age at which ROP status is reached

Neil: I agree with you about the general aspect of intubation- na dnot wanting to give more info to the DSMC.

**However**, I have just been looking at the Glutamine data:

we had some centers who NEVER achieved the goal of 3 grams/kg/day of protein by day 3-5.

So- did we really test the intervention? Compliance was not monitored in the Glutamine study.

To me it is an issue of protocol compliance if you have 0% on DR CPAP.

We should expect 50% intubation in the lower strata. So could the data center just look and identify a center if the CPAP rate is < ?25% (or some other arbitrary number much lower than 50%).

Regarding secondary outcomes- I think it is a very good question:

DSMC should not be looking at any secondary outcomes.

Michele

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]

**Sent:** Tuesday, July 17, 2007 6:04 AM

**To:** Walsh, Michele; Wally Carlo, M.D.; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie

**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]

**Subject:** RE: Age at which ROP status is reached

The following information (as secondary outcomes) are provided to the DSMC:

A decreased Mortality/NDI at 18-22 months corrected age.

- A decreased frequency of endotracheal intubation before 10 minutes of age
- A decrease of the total duration of mechanical ventilation during the entire NICU stay
- A decreased incidence of surfactant treatment
- A decreased incidence of air leaks on admission and overall
- A decreased duration of intubation
- A decreased duration of mechanical ventilation
- A decreased duration of oxygen supplementation
- A decreased duration of the percentage of pulse oximetry values > 90%
- A decreased incidence of blindness of at least one eye at 18-22 month follow-up
- A decrease in the percentage of infants who receive postnatal steroids to prevent or treat BPD
- A decreased incidence of BPD at 36 weeks using the physiologic definition of BPD
- A decreased incidence of ROP or Stage 3 ROP
- A decreased incidence of necrotizing enterocolitis (NEC)
- A decreased incidence of IVH and severe IVH
- A decreased incidence of periventricular leukomalacia
- A decreased incidence of neurodevelopmental impairment at 18-22 month follow-up
- A decreased incidence of cerebral palsy at 18-22 month follow-up

Intubation prior to 10 minutes of age and surfactant are looked at by the DSMC. If they are intubated after 10 minutes of age from the CPAP arm, this may need a further look. We need to refer this to the DSMC if we think it is an issue. This information is available in summary form to the investigators (if the power to detect a difference is fading, the DSMC [not the pi's] need to make a recommendation).

Please weigh in on this.

Thanks for bringing this up.



Rose

---

**From:** Walsh, Michele [mailto:Michele.Walsh@UHhospitals.org]  
**Sent:** Monday, July 16, 2007 5:02 PM  
**To:** Wally Carlo, M.D.; Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached

I agree- this is a problem.

Another similar potential problem: Wally I think you have raised the issue before, but I wonder if we should consider again, whether we need a report to see how many babes leave the DR on the assigned ventilation arm. If all babies are intubated instead of CPAP, the power to detect a difference may disappear.

Michele

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Monday, July 16, 2007 4:30 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached

This is almost 10% of the babies enrolled. We need to consider options to address this important issue.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, July 16, 2007 3:07 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached

Here is the blinded attachment  
Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]

**Sent:** Monday, July 16, 2007 3:36 PM  
**To:** 'wacarlo@uab.edu'; mcw3@case.edu; Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Roger Faix'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); 'Abbot Laptook'; Das, Abhik; Nancy Newman; Wade Rich; 'Neil Finer'; Gantz, Marie  
**Cc:** 'Cunningham, Meg'; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** FW: Age at which ROP status is reached

ROP information for SUPPORT subcommittee

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Friday, July 13, 2007 10:51 PM  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik  
**Subject:** RE: Age at which ROP status is reached

Thanks Marie  
Rose, can you forward this to the subcommittee?  
Thanks  
Neil

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, July 13, 2007 12:06 PM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** Age at which ROP status is reached

Hi Neil,

Here is an updated version of the document describing the ages at which SUPPORT infants reach final ROP status. I thought it might be useful for the subcommittee to see if you plan to discuss the length of time that the ROP outcome will be followed. I apologize, but there was a typo in the previous version of the table I sent you on 5/30/07. For infants with a favorable ROP outcome, 95% reach final status by 64 weeks PMA, not 91 weeks as reported in that table (91 weeks was actually the 99th percentile).

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
328-254-6255

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**From:** Zaterka-Baxter, Kristin  
**To:** Mackinnon, Brenda; Johnson, Karen  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** Support Transfer Case (MRI 2\* and FU)  
**Date:** Tuesday, July 17, 2007 12:47:39 PM

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Hi Brenda and Karen,

Karen, Brenda has a Support baby who was delivered while the parents were on vacation; the infant has since been transferred back to Minnesota with the parents and will soon be discharged. The parents are very willing to continue with the MRI secondary study and FU at Iowa (dad's parents are from/live in Iowa). The window for MRI is between 07/19 to 09/26. I've discussed with Rose who said Tufts would receive the data credit and Iowa financial credit for the MRI. If this all sounds good to you both, there are a couple of things that need to be in place:

1. Both sites should at least notify their IRB about this case and follow their guidelines
2. The parents will need to be contacted by Brenda or asked to contact Karen to discuss logistics
3. The parents will need to sign a release of medical information from both centers (or what's required per institutional guidelines)
4. Data for the MRI secondary will need to be sent from Iowa to Tufts to be entered in the DMS
5. FU can be entered at Iowa (different ID number and consent)

Please send the patient Network ID to the data center so we can note this case after all has been set up.

Thanks and please let me know if you have any questions.  
Kris

RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

**From:** Neil Finer  
**To:** Walsh, Michele; Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]; Wade Rich  
**Subject:** RE: Age at which ROP status is reached  
**Date:** Tuesday, July 17, 2007 12:43:54 PM

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Michele

If we provide such data it will require unblinding as the infants you are concerned about are randomized to CPAP whereas for the oximeters information we do not unblind when providing the target ranges.

Neil

---

**From:** Walsh, Michele [mailto:Michele.Walsh@UHhospitals.org]  
**Sent:** Tuesday, July 17, 2007 9:14 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached

Rose: The issue is identical to giving centers feedback on keeping the kids in the saturation target range. If a center has zero success getting kids out of the DR on CPAP- then we have a compliance issue. I don't care if the investigators, or the DSMC, look at the issue- but if we need to intervene to help centers be successful with CPAP in the DR we should do so.

Michele

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, July 17, 2007 9:04 AM  
**To:** Walsh, Michele; Wally Carlo, M.D.; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie  
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Please weigh in on this.

Thanks for bringing this up.

Rose

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**From:** Walsh, Michele [mailto:Michele.Walsh@UHhospitals.org]

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**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]

**Subject:** RE: Age at which ROP status is reached

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Another similar potential problem: Wally I think you have raised the issue before, but I wonder if we should consider again, whether we need a report to see how many babes leave the DR on the assigned ventilation arm. If all babies are intubated instead of CPAP, the power to detect a difference may disappear.

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**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]

**Subject:** RE: Age at which ROP status is reached

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wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100

Cell: 205 266 (b) (6)

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**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
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Rose

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**To:** 'wacarlo@uab.edu'; mcw3@case.edu; Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Roger Faix'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); 'Abbot Laptook'; Das, Abhik; Nancy Newman; Wade Rich; 'Neil Finer'; Gantz, Marie  
**Cc:** 'Cunningham, Meg'; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** FW: Age at which ROP status is reached

ROP information for SUPPORT subcommittee

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Friday, July 13, 2007 10:51 PM  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik  
**Subject:** RE: Age at which ROP status is reached

Thanks Marie  
Rose, can you forward this to the subcommittee?  
Thanks  
Neil

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**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, July 13, 2007 12:06 PM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** Age at which ROP status is reached

Hi Neil,

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Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International

mgantz@rti.org  
828-254-6255

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**From:** Gantz, Marie  
**To:** Neil Finer; Abbot Laptook; Walsh, Michele; Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: SUPPORT updates  
**Date:** Monday, July 16, 2007 7:59:21 PM  
**Attachments:** All Centers pct in range through Jun07.rtf

---

SUPPORT Committee Members,

Attached is the latest Pulse Oximeter report, with data through June 2007. Centers will be receiving their individual reports shortly.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Saturday, July 14, 2007 2:42 AM  
**To:** Abbot Laptook; Walsh, Michele; Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Phelps, Dale  
**Subject:** FW: SUPPORT updates

Hi Everyone

Here is a revised agenda for the Steering committee along with some new information from Marie with more to follow regarding the oximeters data.

1. Review Enrollments to date
2. Review Adverse Events, and Protocol Deviations
3. Discuss Eye follow-up and the need for intermediate eye outcome – ie 1 year Dale Phelps
4. Discuss the use of Avastin for infants requiring Laser surgery - Dale Phelps
5. Issues from Coordinators Call
  - Discuss definition of Airleak for SUPPORT trial Pneumothorax versus Any airleak?? Currently only pneumothorax!
  - Clarification of Steroid Dose issue from Coordinators Call
4. Review status of Secondaries-
  - MRI – Susan Hintz Discuss safety of MRIs in infants with PDA ligation with clips
  - Breathing Outcomes – Tim Stevens
  - Nutrition – Christine Navarette Discuss the use of the legth Board
  - Antenatal consent –Wade Rich
5. Discuss Prospective Meta Analysis
6. Other Issues

Let me know if you wish to add any other items

Neil

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]

**Sent:** Friday, July 13, 2007 7:26 AM

**To:** Neil Finer

**Cc:** Das, Abhik

**Subject:** SUPPORT updates

Hi Neil,

Attached are updated reports on SUPPORT enrollment, adverse events, and protocol deviations. The enrollment report incorporates the revisions suggested by the subcommittee at the last SC meeting. James is working on processing the latest pulse ox data, and I will get you a new pulse ox report before the SC meeting. Please let me know if there is anything else you need.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH JUNE 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 7/12/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
Apr07-Jun07	Days of life 1-14	All centers	9451	37.3	9.2	77.8	13.1
		Center 5	1045	31.3	10.3	70.2	19.5
		Center 9 site B	1048	53.7	5.8	87.1	7.1
		Center 11	880	18.0	13.8	65.4	20.8
		Center 14	1382	41.5	7.0	80.3	12.8
		Center 16	1395	40.9	8.0	86.1	5.9
	Day 15 to 36 wks	All centers	36990	29.9	13.0	67.6	19.4
		Center 3	3369	19.9	22.9	58.5	18.6
		Center 5	4931	28.7	14.8	65.6	19.5
		Center 9 site B	3517	43.6	12.1	77.3	10.5
		Center 11	1898	23.5	13.2	58.4	28.4
		Center 12	3587	23.1	9.5	52.7	37.9
		Center 13	3165	26.9	12.7	71.1	16.2
		Center 14	8919	30.7	12.6	71.5	16.0
		Center 15	568	35.1	9.1	70.1	20.7
		Center 16	1348	51.6	4.9	85.4	9.6
Jan07-Mar07	Days of life 1-14	All centers	15663	35.4	8.6	78.6	12.8
		Center 3	1035	31.2	11.0	73.6	15.4
		Center 4	1363	34.8	7.2	82.1	10.6
		Center 5	824	33.6	11.3	68.9	19.7
		Center 11	1300	27.6	9.0	74.5	16.5
		Center 12	996	35.1	5.4	79.4	15.2
		Center 13	1265	34.9	4.7	81.3	14.0
		Center 14	2049	36.4	7.7	84.2	8.1
		Center 15	1259	33.7	7.2	78.6	14.2
		Center 16	2259	45.2	9.8	81.0	9.2
		Center 24	1006	45.1	6.8	75.9	17.4

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH JUNE 2007  
 TIME ON SUPPLEMENTAL O2 ONLY  
 (OXIMETER DATA PROCESSED AS OF 7/12/07)

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
	Day 15 to 36 wks	All centers	47851	27.6	12.5	68.9	18.6
		Center 3	4656	27.1	18.0	62.3	19.6
		Center 4	3884	30.6	9.5	73.9	16.6
		Center 5	2472	29.8	16.6	62.5	21.0
		Center 9 site A	2194	20.0	14.6	61.0	24.5
		Center 11	2232	28.0	10.4	71.9	17.7
		Center 12	7802	21.2	13.5	69.0	17.5
		Center 13	4945	25.9	7.3	72.2	20.6
		Center 14	5426	31.2	12.8	75.8	11.4
		Center 15	3579	33.8	8.5	68.7	22.8
		Center 16	3096	30.8	14.3	70.3	15.4
		Center 24	3054	20.7	17.6	62.8	19.6
Oct06-Dec06	Days of life 1-14	All centers	10873	35.4	8.2	77.9	14.0
		Center 3	667	34.5	7.9	72.2	19.9
		Center 9 site A	756	31.7	9.8	74.0	16.1
		Center 11	897	39.5	5.3	68.6	26.1
		Center 12	935	22.0	6.8	74.5	18.7
		Center 14	779	32.8	7.4	85.8	6.8
		Center 15	600	47.5	5.2	77.9	16.9
		Center 16	1720	39.5	9.0	84.2	6.8
		Center 18	1290	26.9	9.0	73.5	17.5
		Center 25	898	56.0	5.0	83.7	11.3
	Day 15 to 36 wks	All centers	37854	28.1	11.8	67.9	20.3
		Center 3	1295	26.7	14.4	63.2	22.4
		Center 4	2726	28.1	11.4	69.6	19.0
		Center 11	3266	31.3	7.1	63.0	29.9
		Center 12	3089	29.8	5.3	61.7	33.0
		Center 14	2750	30.5	8.8	71.8	19.4
		Center 16	4673	22.3	14.3	69.7	16.0
		Center 18	5287	22.7	18.2	64.4	17.4
		Center 25	6276	39.3	9.4	76.6	14.0

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH JUNE 2007  
 TIME ON SUPPLEMENTAL O2 ONLY  
 (OXIMETER DATA PROCESSED AS OF 7/12/07)

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
Mar06-Sept06	Days of life 1-14	All centers	21390	38.6	8.2	79.8	12.1
		Center 3	3439	45.3	7.7	81.7	10.6
		Center 4	1644	41.8	6.5	84.6	8.9
		Center 9 site A	980	37.0	9.5	72.0	18.6
		Center 11	1522	29.3	11.4	66.9	21.7
		Center 12	1942	35.8	6.8	80.1	13.1
		Center 14	2589	40.2	8.5	80.5	10.9
		Center 16	3838	42.8	7.5	85.0	7.6
		Center 18	2722	31.8	9.7	76.3	14.0
		Center 19	688	26.7	6.7	79.1	14.2
		Center 25	577	39.6	7.2	85.1	7.7
	Day 15 to 36 wks	All centers	66608	29.6	13.1	68.4	18.4
		Center 3	13699	34.1	15.1	69.5	15.3
		Center 4	4512	31.7	11.6	71.6	16.8
		Center 9 site A	3260	38.1	9.7	72.4	17.9
		Center 9 site B	1546	27.9	12.2	72.6	15.2
		Center 11	2649	28.2	14.4	59.3	26.2
		Center 12	7825	23.0	10.9	66.8	22.3
		Center 14	8846	30.0	11.8	71.4	16.8
		Center 16	9219	32.5	11.4	69.1	19.4
		Center 18	9279	22.1	17.0	65.6	17.4
Through Feb06	Days of life 1-14	All centers	26494	37.8	9.3	79.3	11.3
		Center 3	1886	28.9	14.9	77.2	7.9
		Center 8	1448	29.6	6.6	73.3	20.1
		Center 9 site A	1920	36.1	12.2	76.9	11.0
		Center 11	1947	36.9	9.3	75.6	15.1
		Center 12	1848	46.7	6.2	82.5	11.3
		Center 14	3171	38.4	8.8	83.1	8.1
		Center 16	5580	42.6	9.4	81.4	9.2

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH JUNE 2007**  
**TIME ON SUPPLEMENTAL O2 ONLY**  
**(OXIMETER DATA PROCESSED AS OF 7/12/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
		Center 18	1509	31.2	10.2	77.0	12.9
		Center 20	1860	30.8	7.5	74.1	18.4
		Center 21	958	39.1	9.0	85.3	5.6
		Center 22	3363	39.9	8.7	79.5	11.8
	Day 15 to 36 wks	All centers	136360	26.4	12.3	67.7	20.0
		Center 3	15229	19.9	17.1	64.8	18.1
		Center 4	5686	20.6	7.4	64.9	27.7
		Center 8	4802	17.3	8.5	58.1	33.4
		Center 9 site A	10780	26.7	13.5	66.6	19.8
		Center 11	10209	27.5	10.3	67.1	22.7
		Center 12	9532	33.3	10.0	72.9	17.0
		Center 14	19113	25.5	11.8	70.3	17.9
		Center 16	16900	30.8	12.3	71.7	16.0
		Center 18	11637	26.4	17.3	66.4	16.4
		Center 19	1517	29.1	8.2	72.7	19.1
		Center 20	9055	20.5	11.6	63.2	25.2
		Center 21	2450	27.4	17.8	70.3	11.9
		Center 22	17811	29.8	10.1	67.4	22.5

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: Age at which ROP status is reached  
**Date:** Monday, July 16, 2007 6:20:53 PM

---

Since surfactant use is one of our secondary outcomes, the DSMC did look at frequencies at the 25% interim analysis, and they will again at the upcoming 50% interim analysis.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, July 16, 2007 5:04 PM  
**To:** Das, Abhik; Gantz, Marie  
**Subject:** FW: Age at which ROP status is reached

I think this is "data" that could potentially influence the investigators – if this is to be looked at, perhaps the DSMC should do it, but we may want the subcommittee to think long and hard about this. I would appreciate your thoughts>

Thanks  
Rose

---

**From:** Walsh, Michele [mailto:Michele.Walsh@UHhospitals.org]  
**Sent:** Monday, July 16, 2007 5:02 PM  
**To:** Wally Carlo, M.D.; Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached

I agree- this is a problem.  
Another similar potential problem: Wally I think you have raised the issue before, but I wonder if we should consider again, whether we need a report to see how many babes leave the DR on the assigned ventilation arm. If all babies are intubated instead of CPAP, the power to detect a difference may disappear.  
Michele

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Monday, July 16, 2007 4:30 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached

This is almost 10% of the babies enrolled. We need to consider options to address this important issue.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, July 16, 2007 3:07 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; mcw3@case.edu; Bradley.yoder@hsc.utah.edu; Roger Faix; kurt.schibler@cchmc.org; Abbot Laptook; Das, Abhik; Nancy Newman; Wade Rich; Neil Finer; Gantz, Marie  
**Cc:** Cunningham, Meg; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: Age at which ROP status is reached

Here is the blinded attachment  
Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Monday, July 16, 2007 3:36 PM  
**To:** 'wacarlo@uab.edu'; mcw3@case.edu; Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Roger Faix'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); 'Abbot Laptook'; Das, Abhik; Nancy Newman; Wade Rich; 'Neil Finer'; Gantz, Marie  
**Cc:** 'Cunningham, Meg'; Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** FW: Age at which ROP status is reached

ROP information for SUPPORT subcommittee

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**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Friday, July 13, 2007 10:51 PM  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik  
**Subject:** RE: Age at which ROP status is reached

Thanks Marie  
Rose, can you forward this to the subcommittee?  
Thanks  
Neil

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, July 13, 2007 12:06 PM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** Age at which ROP status is reached

Hi Neil,



Here is an updated version of the document describing the ages at which SUPPORT infants reach final ROP status. I thought it might be useful for the subcommittee to see if you plan to discuss the length of time that the ROP outcome will be followed. I apologize, but there was a typo in the previous version of the table I sent you on 5/30/07. For infants with a favorable ROP outcome, 95% reach final status by 64 weeks PMA, not 91 weeks as reported in that table (91 weeks was actually the 99th percentile).

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

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**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik  
**Subject:** RE: ROP data  
**Date:** Monday, July 16, 2007 4:04:55 PM  
**Attachments:** Missing SUPPORT Outcomes June 2007.doc

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Rose,

Attached is a list of the missing outcome messages sent out in June. Please let me know if you would prefer this information in a different format.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
336-514-4255

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higgins@mail.nih.gov]  
**Sent:** Monday, July 16, 2007 3:40 PM  
**To:** Gantz, Marie  
**Subject:** RE: ROP data

No, list each individual missing baby so folks can get an idea of the depth and breadth of the issue. (Cut off the center and patient id number from the prior one you sent me)

Thanks  
Rose

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Monday, July 16, 2007 3:39 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik  
**Subject:** RE: ROP data

Do you want the data summarized by center?

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
336-514-4255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higgins@mail.nih.gov]  
**Sent:** Monday, July 16, 2007 3:37 PM  
**To:** Neil Finer; Das, Abhik  
**Cc:** Gantz, Marie  
**Subject:** RE: ROP data

Marie

can you send me the most recent missing primary outcome data sets (last month's are fine) with the study numbers and sites removed for discussion?

Thanks  
Rose

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Saturday, July 14, 2007 1:35 AM  
**To:** Das, Abhik  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie  
**Subject:** RE: ROP data

I think that we should have this with Dale, and circulate Marie's most recent report.  
Neil

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Friday, July 13, 2007 6:57 AM  
**To:** Neil Finer  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie  
**Subject:** FW: ROP data

Neil:

Do you want a discussion on the issue of how long to continue ROP monitoring at the SUPPORT subcommittee meeting?

Thanks

Abhik

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Thursday, July 12, 2007 6:02 PM  
**To:** Gantz, Marie; higgins@mail.nih.gov  
**Cc:** Das, Abhik  
**Subject:** RE: ROP data

Hi Team,

It is hard to 'excuse' an infant who needs an exam and has not had it.

In my opinion, the child remains on the 'no ROP outcome list'.

It's not like he died, or provided written withdrawal from the study. So why should they be excused from being listed as missing?

Am I being harsh here? Apparently they want not to get edits, is that it?

Or is it that they don't want to get e-mails from Rose? :-)

Question: when such an infant is seen in follow up (18-22 months) should we stop dunning them then?  
There still is no early acute outcome, but it is clear that there never will be, but at least we have the late outcome.

Discussion?  
Dale

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Thursday, May 31, 2007 11:49 AM  
**To:** Vivien Phillips; higginsr@mail.nih.gov; Phelps, Dale  
**Cc:** Shirley Cosby; Monica Collins; Wally Carlo, M.D.; Das, Abhik  
**Subject:** RE: ROP data

Hi Vivien.

I believe that Dale wanted to see some additional information (which you have now provided, below) in order to excuse this infant. I am sending this email to her so she can take a look at this case (# (b) (6)).

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
336-514-2561

---

**From:** Vivien Phillips [mailto:VPhillips@peds.uab.edu]  
**Sent:** Wednesday, May 30, 2007 5:39 PM  
**To:** higginsr@mail.nih.gov  
**Cc:** Shirley Cosby; Monica Collins; Wally Carlo, M.D.; Das, Abhik; Gantz, Marie  
**Subject:** RE: ROP data

Final ROP exam status has been entered on (b) (6)

(b) (6) has never had a follow up eye exam. Several attempts have been made to get the parent to take baby to eye specialist. Pediatrician has been notified of missed appointments with the eye specialist and they have attempted to reschedule appointment but without success. I have asked Marie to give me through the end of this month to try but now the mother doesn't have a reliable phone number to be contacted. Could you take this network number off the missing ROP list? Baby's had 8 ROP exams during hospitalization and none of them reached zone 3.

(b) (6) baby has moved to a different state. I've contacted the pediatrician and so far, no follow up eye exam has been noted in the baby's chart. Will continue to monitor.

Vivien

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wed 5/30/2007 1:06 PM  
**To:** wacarlo@uab.edu; Monica Collins; Shirley Cosby  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** ROP data

Center	Network	Missing ROP error message
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Hi,

We are missing a few ROP outcomes - let us know if you have them.

Thanks for all the hard work and effort!!

Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**Missing SUPPORT Outcomes Messages Sent to Centers in June 2007-07-16**

**ROP Message**

- 1 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 2 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 3 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 4 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 5 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 6 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 7 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 9 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 10 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 11 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 12 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 13 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 14 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 15 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 16 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 17 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 20 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 21 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 22 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 23 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 24 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 25 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 26 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 27 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 28 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 29 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 30 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 31 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 32 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 33 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 34 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 35 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 36 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 37 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 38 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 39 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 40 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

- 41 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 42 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 43 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
- 44 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
- 45 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
- 46 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
- 47 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.
- 48 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.
- 49 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
- 50 Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.
- 51 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
- 52 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
- 53 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
- 54 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.
- 55 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.
- 56 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.
- 57 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.
- 58 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.
- 59 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.
- 60 The infant has died, however 50 weeks PMA was reached and the final ROP exam status has not been reported on the SUPP10 for either eye.

#### BPD Message

- 1 Infant was d/c or transferred at 36 weeks (per NG03) but NG07 status data is not entered
- 2 Infant was eligible for challenge (per PHY01) but outcome was not entered on PHY02RA
- 3 Infant was eligible for challenge (per PHY01) but outcome was not entered on PHY02RA
- 4 Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered
- 5 Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered
- 6 Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered
- 7 Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered
- 8 Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered
- 9 Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered
- 10 Infant was not eligible for challenge (per PHY01) but NG07 36 week snapshot is not entered
- 11 PHY01 is expected based on NG07 but has not been entered
- 12 PHY01 is expected based on NG07 but has not been entered

#### FU Message

- 1 FU marked as complete (per NF10/SF10) but NF05/SF05 and NF09a/SF09a are not completed
- 2 FU marked as complete (per NF10/SF10) but NF09a/SF09a is not completed
- 3 FU marked as complete (per NF10/SF10) but NF09a/SF09a is not completed
- 4 FU window has closed but NF05/SF05 and NF09a/SF09a are not completed
- 5 FU window has closed but NF05/SF05 and NF09a/SF09a are not completed
- 6 FU window has closed but NF05/SF05 and NF09a/SF09a are not completed

**From:** Duara, Shahnaz  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT updates  
**Date:** Monday, July 16, 2007 3:14:45 PM

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Rose,

I will be on the call.

Take care  
Shahnaz

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, July 16, 2007 9:50 AM  
**To:** Duara, Shahnaz; Navarrete, Cristina; Susan Hintz; Timothy\_Stevens@URMC.Rochester.edu  
**Subject:** FW: SUPPORT updates

Support meets at 5 PM ET on July 19 – can you call in at 866-675 (b) (6) with passcode (b) (6) to join the meeting? Let me know

Thanks  
Rose

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**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Saturday, July 14, 2007 2:42 AM  
**To:** Abbot Lptook; Walsh, Michele; Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Phelps, Dale  
**Subject:** FW: SUPPORT updates

Hi Everyone

Here is a revised agenda for the Steering committee along with some new information from Marie with more to follow regarding the oximeters data.

1. Review Enrollments to date
2. Review Adverse Events, and Protocol Deviations
3. Discuss Eye follow-up and the need for intermediate eye outcome – ie 1 year Dale Phelps
4. Discuss the use of Avastin for infants requiring Laser surgery - Dale Phelps
5. Issues from Coordinators Call
  - Discuss definition of Airleak for SUPPORT trial Pneumothorax versus Any airleak?? Currently only pneumothorax!
  - Clarification of Steroid Dose issue from Coordinators Call
4. Review status of Secondaries-
  - MRI – Susan Hintz Discuss safety of MRIs in infants with PDA ligation with clips
  - Breathing Outcomes – Tim Stevens
  - Nutrition – Christine Navarette Discuss the use of the legth Board
  - Antenatal consent –Wade Rich
5. Discuss Prospective Meta Analysis
6. Other Issues

Let me know if you wish to add any other items

Neil

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**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, July 13, 2007 7:26 AM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** SUPPORT updates

Hi Neil,

Attached are updated reports on SUPPORT enrollment, adverse events, and protocol deviations. The enrollment report incorporates the revisions suggested by the subcommittee at the last SC meeting. James is working on processing the latest pulse ox data, and I will get you a new pulse ox report before the SC meeting. Please let me know if there is anything else you need.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

**From:** [Susan Hintz](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [neil finer](#)  
**Subject:** for SUPPORT call  
**Date:** Monday, July 16, 2007 11:01:49 AM  
**Attachments:** [July2007UpdateHINTZ.doc](#)  
[MRIsafetyWebsite.doc](#)  
[Shellock1994.pdf](#)  
[Dex Brain Volumes Parikh "07.pdf](#)

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Hi Rose and Neil,

Attached are materials for Neuroimaging secondary part of SUPPORT subcommittee meeting. It looks like a lot but I will be brief and to the point. I think I already sent you guys the blurb from MRIsafety.com and the Shellock paper, but here they are again.

Thanks. Let me know if any questions -

Susan

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Susan R. Hintz, M.D., M.S. Epi  
Associate Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351



1) Site participation update

- All **14 sites** participating now have IRB consent and have successfully enrolled
  - 9 sites using separate consent, 5 sites using embedded consent

2) Enrollment/MRI central reading update

- All enrollment data now being obtained only from monthly report – no separate site queries being sent
  - **237 patients** have been enrolled
    - 35-42 week neuroimaging *including MRI* is complete for **~162 patients**
      - 36 patients died before late neuroimaging
- MRI central reading: rolling reading ongoing – approximately 92 MRI's have been received by RTI, and have been read or are in process with central reader.

3) Issues with MRI's

- Quality comments from central reader:
  - Dr. Barnes says that quality of the images has been **excellent**. Congratulations and thanks to coordinators, site radiologists and technologists!
- PDA clips and brain MRI's (attachments):
  - Stanford policy: wait 6 weeks after cardiac surgery – probably *conservative*
  - We routinely obtain MRI's on preemies at near-term, and neonates after complex repairs without incident
- Call or email me with any issues or concerns from you, your radiologists or technologists – I will find an answer or do my best to find someone who *can* answer you.

4) Potential ancillary: addition of automated volumetric sequences

- Drs. Nehal Parikh and Pon Narayana (Houston) are working on an ancillary proposal for adding automated volumetric sequences to current MRI sequences
  - Parikh NA, et. al. Postnatal dexamethasone therapy and cerebral tissue volumes in ELBW infants. *Pediatrics* 2007;119:265-272
- Stanford, UAB sites planning to pilot sequences, determine if good results can be achieved with scans from different institutions

5) Tracking enrollment/sending CUS and MRI's to RTI

- THANK YOU to all the coordinators who are keying the FIRST PART of the MRI01 form as soon as they can.
- Please remember send copies of CUS and MRI routinely to RTI (every 2-3 months depending on volume of enrollment).

6) Please call or email with questions, comments, and suggestions

Susan Hintz  
650-723-5711 (office)  
Email: [rhintz@stanford.edu](mailto:rhintz@stanford.edu)

**THANKS TO ALL THE SITES FOR THEIR HARD WORK ON THIS STUDY!**

### ***Statement on MRIsafety.com website***

## **Patent Ductus Arteriosus (PDA), Atrial Septal Defect (ASD), Ventricular Septal Defect (VSD) Occluders, and Patent Foramen Ovale Closure Devices**

Cardiac occluders and closure devices are implants used to treat patients with patent ductus arteriosus (PDA), atrial septal defect (ASD), ventricular septal defect (VSD), or patent foramen ovale (PFO) heart conditions. For implants that have been evaluated relative to the use of 1.5-T MR systems, as long as the proper size occluder or closure device is used, the amount of retention provided by the folded-back, hinged arms of the device is sufficient to keep it in place, acutely. Eventually, tissue growth covers the cardiac occluder or closure device and facilitates retention.

Certain metallic PDA, ASD, VSD occluders and PFO closure devices tested for magnetic qualities were made from either 304V stainless steel or MP35N. Occluders made from 304V stainless steel were found to be "weakly" ferromagnetic, whereas those made from MP35N were nonferromagnetic in association with a 1.5-Tesla MR system.

*Patients with cardiac occluders made from MP35N (i.e., a nonferromagnetic alloy) may undergo MR procedures at 1.5-Tesla or less any time after placement of these implants. However, patients with cardiac occluders made from 304V stainless steel (i.e., a "weakly ferromagnetic" material) are advised to wait a minimum of six weeks after placement of these devices before undergoing MR procedures. This wait period permits tissue ingrowth to provide additional retentive forces for the occluders made from weakly ferromagnetic materials.*

If there is any question about the integrity of the retention aspects of a metallic cardiac occluder made from a ferromagnetic material, the patient or individual should not be allowed into the MR environment or to undergo an MR procedure.

**MR Safety at 3-Tesla and PDA, ASD, VSD Occluders and PFO Closure Devices:** Various PDA, ASD, VSD occluders and PFO closure devices have been evaluated at 3-Tesla (see The List). All of these are considered to be safe based on findings for deflection angles, torque, MRI-related heating and the intended in vivo uses of these specific devices.

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SUPPORT subcommittee  
NICHD NRN Steering Committee Meeting

July 2007

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## Clinical Note

# Ex Vivo Evaluation of Ferromagnetism and Artifacts of Cardiac Occluders Exposed to a 1.5-T MR System<sup>1</sup>

Frank G. Shellock, PhD • Stacy M. Morisoli

**Magnetic resonance (MR) procedures are contraindicated for patients with certain ferromagnetic biomedical implants, primarily owing to the risk of movement or dislodgment of the implants by the static magnetic field. An additional concern is the amount of artifact that the implant produces, which can affect image quality and interpretation of the examination. Therefore, an ex vivo assessment of ferromagnetism and artifact was conducted for 12 different occluders used to treat patients with patent ductus arteriosus, atrial septal defects, and ventricular septal defects, in a 1.5-T MR system. Seven of the occluders, made of 304 stainless steel, were ferromagnetic and displayed deflection forces of 248–299 dynes. Five of the implants, made of MP35n, were nonferromagnetic. Artifacts were variable and depended primarily on the type and amount of metal used to construct the implant. The authors conclude that patients with ferromagnetic cardiac occluders may undergo MR procedures approximately 6 weeks after placement of these devices, to allow tissue growth to provide additional retentive force. After this time, it is highly unlikely that the magnetic fields associated with a 1.5-T MR system are capable of moving or dislodging any of these cardiac occluders.**

MAGNETIC RESONANCE (MR) procedures are contraindicated for patients with certain ferromagnetic biomedical implants, primarily owing to the risk of movement or dislodgment of the implant by the static magnetic field of the MR system (1–12). Although localized heating of metallic implants has been suggested as being a potential hazard to patients undergoing MR procedures, testing of large metallic devices (eg, hip prostheses) has revealed that heating is relatively insignificant (1,4). An additional concern is the amount of artifact that the implant produces, which can affect image quality and interpretation of the examination. Previous studies have indicated that patients with nonferromagnetic or weakly ferromagnetic implants, materials, or devices may safely undergo MR procedures (1–14).

Metallic cardiac occluders are biomedical implants used to treat patients with the following congenital heart conditions: patent ductus arteriosus (PDA), atrial septal defect (ASD), or ventricular septal defect (VSD) (15–19). Because patients with these implants may be encountered in the MR setting, the ferromagnetic qualities and artifacts associated with MR imaging at 1.5 T were determined to assess any related hazards or problems.

### ● MATERIALS AND METHODS

Twelve occluders (USCI Division, C.R. Bard, Billerica, Mass) made of two different types of metal, 304 stainless steel ( $n = 7$ ) and MP35n ( $n = 5$ ), used to treat PDAs, ASDs, or VSDs, were evaluated for deflection forces and artifacts associated with MR imaging at 1.5 T. These occluders were selected for as-

essment because they are made of metallic materials and a patient with one of these implants may require an MR procedure.

### Assessment of Deflection Forces

The metallic biomedical implants were suspended by a 30-cm-long silk suture (4.0), attached at the estimated center of mass, from a specially constructed device (a plastic protractor mounted on a wooden stand), so that the angle of deflection from the vertical could be measured (2–4, 10–12). The accuracy of this device is  $\pm 0.5^\circ$  (based on the ability to read the protractor and the actual alignment of the protractor as it is positioned in the MR system with the aid of axial, coronal, and sagittal laser lights) (2–4, 10, 12). The deflection force was determined at the center of the z axis, the position of maximum force in a 1.5-T superconducting magnet (Signa; GE Medical Systems, Milwaukee, Wis), according to Kagetsu and Litt (20). The deflection angle for each of the occluders was measured three times.

The deflection force  $F$  (the unit of force in the centimeter-gram-second system is the dyne, defined as the force necessary to give a 1-g mass an acceleration of 1 cm/sec<sup>2</sup>) was calculated with the following equation:  $F = mg \times \sin \theta / \cos \theta$ , where  $m$  is the mass of the material,  $g$  the gravitational acceleration (980 cm/sec<sup>2</sup>), and  $\theta$  the deflection angle from the vertical (2–4, 10, 12).

Torque was not quantitatively evaluated because, like Soulen et al (11), we believe that torque is difficult to calculate with any degree of accuracy, owing to the rotational forces associated with the complicated geometric distribution of the ferromagnetic components of the objects examined in the present study. It should be noted that occluders with high deflection forces will also have large torques.

Implant heating associated with MR imaging was not evaluated for these occluders because previous testing of large metallic bioimplants (eg, hip prostheses) has shown that heating is not a concern (4).

### Assessment of Artifacts

Artifacts were assessed by attaching the occluders to the perimeter of a fluid-

**Index terms:** Artifact • Heart, MR, 51.12141 • Prostheses • Safety

**JMRI 1994;** 4:213–215

**Abbreviations:** ASD = atrial septal defect, PDA = patent ductus arteriosus, VSD = ventricular septal defect.

<sup>1</sup>From Tower Imaging, Ste 106, 444 S San Vicente Blvd, Los Angeles, CA 90048 (F.G.S.); the Department of Medical Imaging, St John's Hospital and Health Center, Santa Monica, Calif (F.G.S.); and the Department of Radiological Sciences, UCLA Medical Center, Los Angeles, Calif (F.C.S., S.M.M.). Received July 26, 1993; revision requested September 29; revision received October 7; accepted October 26. Address reprint requests to F.G.S.

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filled quality assurance phantom (GE Medical Systems) and obtaining MR images with a fast spoiled GRASS (gradient-recalled acquisition in the steady state) pulse sequence. This type of sequence is typically used to image the heart and blood vessels and is also likely to have associated imaging artifacts in the presence of metallic objects, because of the lack of a 180° refocusing radio-frequency pulse. Axial-plane MR images were obtained through the center of the largest metallic portion of the implant with the following parameters: TR msec/TE msec = 50/10, 20° flip angle, 16-kHz bandwidth, 24-cm field of view, 256 × 128 matrix, two signals averaged, 3-mm section thickness, and no intersection gap. The resultant MR images were windowed with the same values to determine the presence and extent of the artifacts.

Artifacts were classified as follows: negative, no artifact; +, artifact less than the size of the metal of the implant; ++, artifact the same size as the metal of the implant; +++, artifact slightly larger than the size of the metal of the implant; +++++, artifact larger than twice the size of the metal of the implant (9).

#### ● RESULTS

The Table summarizes the results of the study. Of the 12 different occluders tested, the seven made of 304 stainless steel had relatively minor ferromagnetism compared with other biomedical implants (2,3,10-12), with deflection forces ranging from 248 to 299 dynes. The five occluders made of MP35n were nonferromagnetic (ie, no measurable deflection force).

In the assessment of artifacts, the image distortion due to the presence of the occluder appeared as a "black hole," or area of signal dropout, that varied in size on MR images. The seven occluders made of 304 stainless steel produced the greatest amount (++ or +++) of image distortion, while the five made of MP35n produced only minor (+) artifacts.

#### ● DISCUSSION

Occluders are used in patients with PDA, ASD, or VSD (15-19). The procedure involves placement, under fluoroscopic guidance, of a small, expandable double umbrella-shaped implant into the defect via a catheter passed through the femoral or subclavian vein or the femoral artery (15-19). The folding action of the double umbrella-shaped implant allows it to be collapsed inside the end of the small catheter and to reexpand once positioned in the defect (15-19). When the implant is positioned properly, the hinged arms of the device fold back against themselves and expand into the defect. When the occluder is released from the catheter, it blocks the flow of blood through the defect. As long as the proper-size occluder is used, the amount of retention provided by the hinged arms is sufficient to keep the device in place immediately after

#### Assessment of Ferromagnetism and Artifact Associated with Cardiac Occluders

Implant	Deflection	Deflection Force (dynes)	Artifact <sup>1</sup>
Rashkind PDA Occlusion Implant 12 mm, lot no. 07IC1391 (304 SS)	Yes*	248	++
Rashkind PDA Occlusion Implant 17 mm, lot no. 514486 (304 SS)	Yes*	262	+++
Lock Clamshell Septal Occlusion Implant 17 mm, lot no. 07BCO321 (304 SS)	Yes*	258	+++
Lock Clamshell Septal Occlusion Implant 23 mm, lot no. 07CC1903 (304 SS)	Yes*	271	+++
Lock Clamshell Septal Occlusion Implant 28 mm, lot no. 07BC1557 (304 SS)	Yes*	280	+++
Lock Clamshell Septal Occlusion Implant 33 mm, lot no. 07ACI785 (304 SS)	Yes*	287	+++
Lock Clamshell Septal Occlusion Implant 40 mm, lot no. 07ACI785 (304 SS)	Yes*	299	+++
Bard Clamshell Septal Umbrella 17 mm, lot no. 09ED1230 (MP35n)	No	0	+
Bard Clamshell Septal Umbrella 23 mm, lot no. 09ED1232 (MP35n)	No	0	+
Bard Clamshell Septal Umbrella 28 mm, lot no. 09ED1233 (MP35n)	No	0	+
Bard Clamshell Septal Umbrella 33 mm, lot no. 09ED1234 (MP35n)	No	0	+
Bard Clamshell Septal Umbrella 40 mm, lot no. 09ED1231 (MP35n)	No	0	+

Note.—All occluders were manufactured by the USCI Division of C. R. Bard, Billerica, Mass. SS = stainless steel.

\*Implants that were considered safe for MR procedures despite being deflected by the 1.5-T static magnetic field. The highest deflection measured for each implant is reported. The deflection force is believed to be insufficient to move or dislodge the implant in vivo. These implants typically become firmly incorporated into the tissue site several weeks after implantation.

<sup>1</sup> + = artifact smaller than the metal of the implant, ++ = artifact same size as the metal of the implant, +++ = artifact slightly larger than the metal of the implant.

placement. Clinical testing of these occluders has shown that once the occluder is released and proper positioning is confirmed, it does not become dislodged (17,18). Eventually, tissue growth covers the implant (15-18).

Patients with metallic PDA, ASD, or VSD occluders may be encountered in the MR setting. Therefore, it is important to be aware of the possible risks of performing MR examinations in patients with these implants. The primary danger associated with performing MR procedures in patients with ferromagnetic implants relates to the movement or displacement of the object (1-14). The factors that determine the relative risk of subjecting a patient who has a ferromagnetic implant to an MR procedure include the field strength of the static magnetic field, the mass of the object, the ferromagnetism of the object, the geometry of the object, the orientation and location of the object in situ, the length of time the object has been in place, and the mechanism by which the implant is maintained in place (1-14).

The 12 metallic PDA, ASD, and VSD occluders tested for ferromagnetism and artifacts in the present study were made of two types of metals: 304 stain-

less steel and MP35n. The occluders made of 304 stainless steel displayed relatively minor ferromagnetism relative to other biomedical implants that have been tested for ferromagnetic qualities (3,6-8,10,13,14). Other implants made of 304 stainless steel were also found to be weakly ferromagnetic (3,6-8,10). The steel alloys in the 300 series of stainless steel are austenitic and, in bulk form, nonferromagnetic. However, the type of cold working needed to produce the intricate shapes of the occluders may have induced ferromagnetism, as has been seen with other similar implants, such as those studied by Teitelbaum et al (10). The metal MP35n used in five of the tested occluders was found to be nonferromagnetic.

The test results of the present study (ie, the amount of deflection force measured for each implant) show that patients with ferromagnetic cardiac occluders may undergo MR procedures approximately 6 weeks after placement of these devices, to allow tissue growth to provide additional retentive force. After this time, it is highly improbable that the magnetic fields associated with an MR system of 1.5 T or less are capable of moving or dislodging occluders made of 304 stainless steel, unless

there is a concern about the retention of the implants. In relative terms, the deflection forces measured for the occluders were similar to those measured for intravascular coils, stents, and filters (10). These forces are considered safe for patients undergoing MR procedures after a suitable period (approximately 6 weeks) has elapsed to ensure stable positioning and retention of the implant. Studies have reported that MR procedures may be performed safely in patients with metallic implants that are weakly ferromagnetic (1-14). Obviously, there is no concern that occluders made of MP35n will move or dislodge, since they are nonferromagnetic.

Although each of the metallic occluders was shown to be safe for patients undergoing MR procedures in an MR system with a static magnetic field strength of 1.5 T or less, the amount of artifact these implants produce may be of some concern, especially when imaging anatomy in the immediate area of the site of the occluder. The extent of the artifact produced by the presence of a metallic implant depends primarily on the type and amount of metal used to construct the device. In general, the more ferromagnetic the metal, the greater is the image distortion under the same imaging conditions (for a metallic implant of the same size) (10, 13, 14).

MR imaging artifacts that result from nonferromagnetic implants are characteristically smaller than those produced by ferromagnetic objects (12). Therefore, each of the occluders made of 304 stainless steel caused black-hole artifacts, the severity depending on the amount of metal used in the implant (i.e., the smaller occluders produced smaller artifacts). The implants made of

MP35n produced only minor artifacts. The relative severity of the artifacts produced by the occluders should be considered when performing MR imaging, if it involves the immediate area in which these implants are positioned. ●

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## **Postnatal Dexamethasone Therapy and Cerebral Tissue Volumes in Extremely Low Birth Weight Infants**

Nehal A. Parikh, Robert E. Lasky, Kathleen A. Kennedy, Fernando R. Moya, Leo Hochhauser, Seferino Romo and Jon E. Tyson

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ARTICLE

# Postnatal Dexamethasone Therapy and Cerebral Tissue Volumes in Extremely Low Birth Weight Infants

Nehal A. Parikh, DO<sup>a</sup>, Robert E. Lasky, PhD<sup>a,b</sup>, Kathleen A. Kennedy, MD, MPH<sup>a,b</sup>, Fernando R. Moya, MD<sup>a</sup>, Leo Hochhauser, MD<sup>c,d</sup>, Seferino Romo, RT, MR<sup>d</sup>, Jon E. Tyson, MD, MPH<sup>a,b</sup>

<sup>a</sup>Division of Neonatal-Perinatal Medicine, Department of Pediatrics, <sup>b</sup>Center for Clinical Research and Evidence-Based Medicine, and <sup>c</sup>Department of Neuroradiology, University of Texas Medical School at Houston, Houston, Texas; <sup>d</sup>Department of Neuroradiology, Memorial Hermann Hospital, Houston, Texas

The authors have indicated they have no financial relationships relevant to this article to disclose.

## ABSTRACT

**OBJECTIVE.** Our goal was to relate postnatal dexamethasone therapy in extremely low birth weight infants (birth weight of  $\leq 1000$  g) to their total and regional brain volumes, as measured by volumetric MRI performed at term-equivalent age.

**METHODS.** Among 53 extremely low birth weight infants discharged between June 1 and December 31, 2003, 41 had high-quality MRI studies; 30 of those infants had not received postnatal steroid treatment and 11 had received dexamethasone, all after postnatal age of 28 days, for a mean duration of 6.8 days and a mean cumulative dose of 2.8 mg/kg. Anatomic brain MRI scans obtained at 39.5 weeks (mean) postmenstrual age were segmented by using semiautomated and manual, pretested, scoring algorithms to generate three-dimensional cerebral component volumes. Volumes were adjusted according to postmenstrual age at MRI.

**RESULTS.** After controlling for postmenstrual age at MRI, we observed a 10.2% smaller total cerebral tissue volume in the dexamethasone-treated group, compared with the untreated group. Cortical tissue volume was 8.7% smaller in the treated infants, compared with untreated infants. Regional volume analysis revealed a 20.6% smaller cerebellum and a 19.9% reduction in subcortical gray matter in the dexamethasone-treated infants, compared with untreated infants. In a series of regression analyses, the reductions in total cerebral tissue, subcortical gray matter, and cerebellar volumes associated with dexamethasone administration remained significant after controlling not only for postmenstrual age but also for bronchopulmonary dysplasia and birth weight.

**CONCLUSIONS.** We identified smaller total and regional cerebral tissue volumes in extremely low birth weight infants treated with relatively conservative regimens of dexamethasone. These volume deficits may be the structural antecedents of neuromotor and cognitive abnormalities reported after postnatal dexamethasone treatment.

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### Key Words

extremely premature infants, steroids, bronchopulmonary dysplasia, brain volumes, brain imaging

### Abbreviations

BW—birth weight  
BPD—bronchopulmonary dysplasia  
NICHD—National Institute of Child Health and Human Development  
CI—confidence interval  
ELBW—extremely low birth weight  
CSF—cerebrospinal fluid  
GA—gestational age  
PMA—postmenstrual age

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Address correspondence to Nehal A. Parikh, DO, University of Texas Medical School at Houston, 6431 Fannin, MSB 3.2368, Houston, TX 77030. E-mail: nehal.a.parikh@uth.tmc.edu

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**N**EUROSENSORY DISABILITIES OCCUR in up to 50% of extremely immature or extremely low birth weight (ELBW) (birth weight [BW] of  $\leq 1000$  g) survivors.<sup>1,2</sup> Complications such as bronchopulmonary dysplasia (BPD) are often associated with such neurosensory abnormalities.<sup>3</sup> Unfortunately, reduction in BPD rates with postnatal administration of corticosteroids increases rather than reduces the risk of neurosensory disabilities, limiting corticosteroid utility except perhaps for infants with the most severe lung disease.<sup>4-7</sup> Corticosteroid use has not been eliminated from the nursery; the Vermont Oxford Network reported that 23% of 14 321 ELBW infants received postnatal corticosteroid treatment in 2002.<sup>8</sup> More recently, the Neonatal Research Network database of the National Institute of Child Health and Human Development (NICHD) indicated that, in 2005, 13% of those who survived for  $>12$  hours received postnatal corticosteroid treatment (NICHD Neonatal Research Network, unpublished data, 2006). Use of dexamethasone, the corticosteroid that has been most often administered to prevent or to treat BPD, has also been associated with poor growth and cognitive impairments at school age.<sup>5</sup> The structural antecedents for these functional deficits have not been well characterized.

Preliminary investigations suggested that lesions detected with advanced quantitative MRI technologies, such as volumetric MRI, before nursery discharge correlated well with neurodevelopmental deficits assessed at 1 to 2 years of age.<sup>9-11</sup> Volumetric MRI was also used to characterize the neuroanatomic effects of prolonged steroid therapy at term-corrected age in one reported study.<sup>12</sup> In that report, Murphy et al<sup>12</sup> noted dramatic volume reductions in cerebral cortical gray matter (35%) and total brain tissue volume (30%) in 7 dexamethasone-treated preterm infants, compared with 11 untreated infants. A difficulty in conducting such studies is that the results may be inadvertently biased with the use of convenience samples, unmasked evaluations, and incomplete adjustment for potential confounders, including BPD and timing of brain MRI studies. Moreover, the relevance of the findings of Murphy et al<sup>12</sup> is limited by shifts in current practice prompted by recommended guidelines to restrict postnatal corticosteroid use.<sup>13</sup>

An assessment of current ELBW infants is needed to identify whether relatively conservative dexamethasone regimens affect brain development in high-risk ELBW infants and, if so, to identify the most vulnerable regions that may serve as the neural substrates of permanent neurosensory disabilities. We hypothesized that postnatal systemic dexamethasone therapy would be associated with reduced cortical tissue and total brain tissue volumes, after adjustment for timing of MRI, presence of BPD, and other potential confounders. We also hypothesized that reductions in total and regional volumes, if any, would be considerably less than previously described by Murphy et al.<sup>12</sup>

## METHODS

### Patients

All ELBW infants who were discharged from the NICU of Memorial Hermann Children's Hospital (Houston, TX) between June 1, 2003, and December 31, 2003, were eligible. Because MRI is a more-sensitive indicator than cranial ultrasonography of brain injury and neurodevelopmental prognosis,<sup>14,15</sup> ELBW infants in this unit are evaluated routinely at term-equivalent age with anatomic MRI studies (usually without sedation). All infants are accompanied to the MRI suite by 2 skilled transport nurses, usually after an enteral feeding. After placement of ear plugs, the infant is swaddled; infants are usually asleep during the procedure. Institutional review boards of both the Memorial Hermann Children's Hospital and the University of Texas Medical School at Houston approved our analysis.

Among the 53 ELBW infants discharged from our NICU between June 1, 2003, and December 31, 2003, 12 were excluded because of motion artifacts/poor-quality MRI scans (9 infants) or incomplete coronal sequences (3 infants). The remaining 41 infants formed our study cohort (none had a congenital anomaly of the central nervous system). Of these 41 infants, 11 (27%) had been treated with systemic dexamethasone therapy (8 because of evolving BPD and 3 because of presumed airway edema); 30 (73%) had not received postnatal corticosteroid treatment. Relevant prenatal, perinatal, and postnatal data were collected prospectively by a research nurse. The best obstetric estimate of gestational age (GA) was used to indicate pregnancy length, on the basis of last menstrual period date or first-trimester ultrasonographic results. The pediatric estimate of GA<sup>16</sup> was used for 5 infants for whom obstetric estimates were unavailable. The physiologic definition of BPD<sup>17</sup> was assigned at postmenstrual age (PMA) of  $36 \pm 1$  weeks and included 2 subpopulations of BPD infants, (1) neonates receiving positive pressure support or  $>30\%$  supplemental oxygen, who were assigned the outcome of BPD and were not tested further; and (2) infants receiving  $\leq 30\%$  oxygen or  $>30\%$  effective oxygen with saturations of  $>96\%$  who failed a room-air challenge (saturation of  $<90\%$  during weaning off oxygen). Abnormal cranial ultrasound results were defined as echodense intraparenchymal lesions, periventricular leukomalacia, porencephalic cysts, or ventriculomegaly, with or without intraventricular hemorrhage, in the 10- to 14-day cranial ultrasound studies.<sup>18</sup> This cluster of lesions includes periventricular and intraventricular hemorrhage of grades 3 and 4.<sup>19</sup>

### Training and Experience of Investigators

An extensive training period preceded the study for 2 of the authors (Drs Parikh and Lasky), to develop software expertise, to identify and to define neuroanatomic

boundaries for smaller cerebral structures, to standardize image quality, and to pretest a robust procedure of manual and semiautomated scoring for all of the preselected structures. One of the authors (Dr Lasky) was already highly experienced in performing volumetric MRI studies with nonhuman primates.<sup>20</sup> Primary anatomic references included the neuroanatomy atlas by Haines<sup>21</sup> and various Internet-accessible human atlases.<sup>22,23</sup>

### MRI Acquisition

All images were obtained by using GE-LX (General Electric, Milwaukee, WI) or GE-Horizon (General Electric) 1.5-T scanners. Coronal T2-weighted MRI brain scans were acquired by using the following sequence parameters: repetition time, 7500 ms; echo time, 175 ms; matrix size, 512 × 512; number of excitations, 2; field of view, 18 cm; slice thickness, 4 mm; gap, 0.5 mm. All MRI scans were completed at Memorial Hermann Children's Hospital and were digitally transferred to a workstation for analysis.

### MRI Analysis

Coronal T2-weighted MRI scans were imported into Analyze 4.0 software (Biomedical Imaging Resource, Mayo Clinic, Rochester, MN) for manual and semiautomated whole-brain segmentation and volume rendering (Fig 1A). Tissue segmentation was performed by manually segmenting high-intensity cerebrospinal fluid (CSF) ventricular spaces (right and left lateral ventricles, third ventricle, and fourth ventricle) on the basis of pixel intensity and known spatial neuroanatomic boundaries, after equating image intensity with predefined algorithms. Smaller cortical and subcortical structures were next segmented manually in a similar manner. Scored structures included the corpus callosum, midbrain, pons, medulla, and left and right analogs of the caudate, hippocampus, amygdala, and subcortical gray matter (Fig 1B). Subcortical gray matter was defined as structures with lower signal intensity (consistent with gray matter tissue) medial to the external capsule, lateral to the midline, inferior to the anterior horn of the lateral ven-

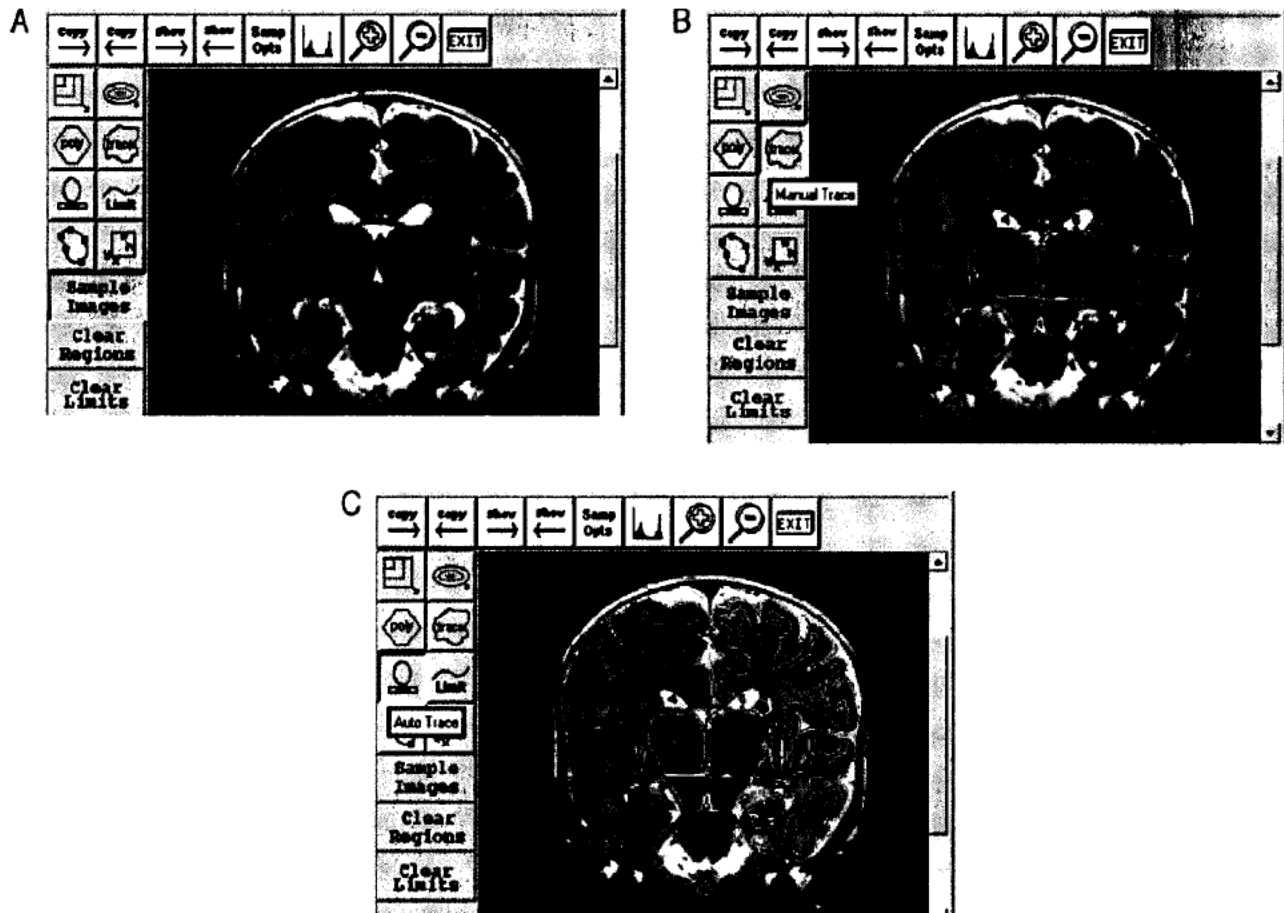


FIGURE 1

Segmentation of MRI scans. A, Example of an unscored, midcoronal, T2-weighted MRI slice loaded in the Analyze segmentation software. B, Example of a coronal, T2-weighted, MRI slice from the same infant after manual scoring. All labeled structures (except the ventricular system) were scored manually by using the manual trace function. C, Representative, fully scored, midcoronal slice. Semiautomated segmentation of the cerebral cortex gray and white matter and extraaxial CSF was performed by using the auto trace tool.

tricle, and superior to the third ventricle. These included the thalamus, hypothalamus, globus pallidus, putamen, and claustrum. The MRI scans did not readily differentiate the internal capsule from surrounding gray matter tissue; therefore, subcortical gray matter volumes also included this white matter structure. Larger structures, including cerebellum, cortical gray matter, cortical white matter, and extraaxial CSF, were identified and labeled last, on the basis of signal intensity and spatial location. The total brain tissue volume (cerebrum plus cerebellum) was defined as the total brain volume minus all CSF spaces. For a given structure/region, the two-dimensional segmented area was multiplied by the thickness of the slice, and the resulting three-dimensional volume was summed for each slice containing the segmented structure, to yield the absolute volume (in cubic millimeters). All images were scored by one of the authors (Dr Parikh), who was masked with respect to clinical history, including dexamethasone therapy.

To describe the magnitude of dexamethasone effects, we calculated the group differences in brain volumes. The percentage volume difference for a selected region was calculated by subtracting the brain volume of the dexamethasone-treated group from the brain volume of the untreated group, dividing by the mean brain volume of the untreated group, and multiplying by 100%. This calculation yielded the mean volume differences and their 95% confident intervals (CIs). The CIs convey the precision of our estimated mean volume differences.

### Statistical Analyses

Data were screened for accuracy and examined for normality to conform to the assumptions of the parametric statistics used. Covariates known or suspected to affect the primary outcome were compared between the dexamethasone-treated and untreated infant groups. Fisher's exact test was used to determine differences in categorical baseline variables, and a 2-tailed *t* test was used to determine differences in continuous variables. A *P* value of  $<.05$  was considered to be statistically significant.

All brain volumes were adjusted for PMA at the time of brain MRI. Because infants are growing rapidly around the time of discharge and age differences at the time of MRI can affect brain component volumes dramatically,<sup>24</sup> adjustment for PMA at MRI was critical, so as not to obscure associations between dexamethasone treatment and brain volumes. Multivariate linear regression techniques were used to evaluate the relationship of postnatal dexamethasone administration to component and total brain volumes (all continuous outcomes) and to adjust for potential confounders. Multivariate linear regression analysis was also used to assess the relationship between dexamethasone doses and brain volumes.

To avoid bias in selecting the regression models, we used the following predefined criteria to decide which covariates could be included: group differences at base-

line at  $P < .10$ , an association with the primary outcome at  $P < .25$ , a  $>20\%$  change in the postnatal steroid regression coefficient when the variable was used in the model, or, for some variables (eg, BW, BPD, and abnormal cranial ultrasound results), a priori evidence<sup>25</sup> that the variable might affect cerebral tissue volumes. Because of the limited number of infants studied, the individual regression equations included no more than 4 predictor variables, 2 of which were PMA at MRI and dexamethasone treatment. The third was a potential confounder tested individually with PMA at MRI and dexamethasone in the regression equation. The last variable (BPD) was added on clinical grounds.

On the basis of the predefined criteria listed above, the following covariates were considered for inclusion in the model: GA, BW, presence of BPD, presence of cranial ultrasound abnormalities, gender, and prenatal steroid use. With our limited sample size, none of these variables was associated significantly with brain volumes. BW was associated marginally with cortical tissue volume ( $P = .10$ ). No association was observed between cortical tissue volume and GA ( $P = .66$ ), prenatal steroid use ( $P = .29$ ), BPD ( $P = .55$ ), or abnormal cranial ultrasound scans ( $P = .58$ ) when these variables were included in the model one at a time with dexamethasone and PMA at MRI. The same regression equations with total brain tissue volumes as the dependent variable resulted in similar *P* values (results not shown). When included with PMA and dexamethasone in the model, BW was associated marginally with the 2 main dependent variables, cortical tissue volume ( $P = .10$ ) and total brain tissue volume ( $P = .12$ ). On the basis of this association and on clinical grounds, BW and BPD were included in the final model (in addition to PMA at MRI and dexamethasone treatment), to control for potential confounding.

### RESULTS

Table 1 summarizes baseline characteristics for our 2 groups. Race, gender, and Apgar scores at 5 minutes were similar in the dexamethasone and untreated groups. GA was significantly lower, by 1 week, in the dexamethasone-treated group. Although not significant, BW, prenatal steroid use, abnormal early head ultrasound scans, and BPD tended to be less favorable in the dexamethasone-treated group.

All 11 dexamethasone-treated infants received orally administered or injected dexamethasone after 4 weeks of age, because of persistent ventilator dependency. The mean duration of therapy was 6.8 days, with a range of 2 to 14 days. The mean cumulative dose was 2.8 mg/kg, with a range of 1.2 to 5.9 mg/kg. On average, dexamethasone was administered later and in lower total doses than in most published studies of postnatal steroid use.<sup>4</sup> Two of these infants also received prednisone because of reactive airway disease. Brain MRI scans were per-

**TABLE 1 Demographic and Clinical Features of Dexamethasone-Treated and Untreated Patients**

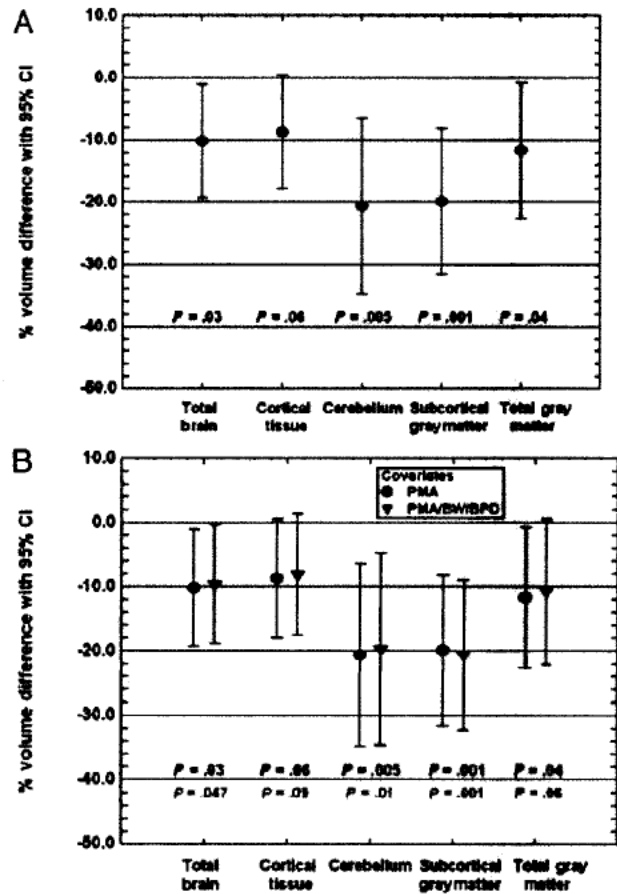
Variables	Dexamethasone (n = 11)	Untreated (n = 30)	P
Black, n (%)	5 (46)	17 (57)	.73
Male, n (%)	5 (46)	11 (37)	.72
Apgar score (5-min) of <7, n (%)	5 (46)	11 (37)	.72
GA, mean ± SD (range), wk	25.1 ± 1.0 (23–27)	26.2 ± 1.6 (22–29)	.04
BW, mean ± SD (range), g	740 ± 118 (520–895)	808 ± 146 (456–1000)	.18
Prenatal steroids, n (%)	4 (36)	20 (67)	.15
Abnormal cranial ultrasound findings at ≤2 wk, n (%)	4 (36)	3 (10)	.07
BPD (physiologic definition), n (%)	10 (91)	18 (60)	.13

formed 3 weeks later, on average, for dexamethasone-treated infants (mean: 41.7 weeks PMA; SD: 3.8 weeks), compared with untreated infants (mean: 38.7 weeks PMA; SD: 2.4 weeks;  $P = .01$ ). As expected, PMA at MRI was highly correlated with total and regional brain volumes; therefore, all analyses were adjusted for PMA at MRI.

Figure 2A depicts dexamethasone-associated cerebral volume effects, adjusted only for PMA at MRI, in 5 affected regions. Total brain tissue volume was 10.2% (95% CI: 1.0%–19.3%) smaller in the dexamethasone-treated infants, compared with untreated infants ( $P = .03$ ). Cortical tissue volume was 8.7% (95% CI: –0.5% to 18.0%;  $P = .06$ ) smaller. Cerebellum and subcortical gray matter volumes were significantly lower, by 20.6% (95% CI: 6.5%–34.8%) and 19.9% (95% CI: 8.2%–31.6%), respectively. Although cortical gray matter (not shown) was 11.1% (95% CI: –0.5% to 22.8%) smaller in dexamethasone-treated infants, this did not reach statistical significance ( $P = .06$ ); total brain gray matter volume was reduced significantly, by 11.7% (95% CI: 0.7%–22.6%;  $P = .04$ ).

As shown in Fig 2B, the relationship between postnatal steroid use and regional and total brain volumes observed with adjustment only for PMA changed little with adjustment for BW and BPD as well as PMA; differences between steroid-treated and untreated infants in total brain (9.5%; 95% CI: 0.1%–18.9%), cerebellar (19.7%; 95% CI: 4.7%–34.6%), and subcortical gray matter (20.6%; 95% CI: 8.9%–32.3%) volumes remained statistically significant. The  $P$  value for total gray matter (10.8%; 95% CI: –0.6% to 22.1%) increased from .04 to .06 after BW and BPD were added to the model. Most other structures and regions also showed little change in measured volume or  $P$  value. Table 2 summarizes the regression coefficients and probability levels for our 4 independent variables as they relate to each of the 5 regions of interest.

No significant correlation was observed between dexamethasone dose and our 2 primary outcomes, cortical tissue volume ( $P = .38$ ) and total brain volume ( $P = .25$ ). Dexamethasone dose was associated marginally with smaller cerebellar volume ( $P = .0548$ ), however, and was correlated significantly with subcortical gray matter volume ( $P = .01$ ).



**FIGURE 2** Graphs of volume effects. A, Dexamethasone-associated cerebral volume effects, adjusted only for PMA at MRI, for 5 affected brain regions (x-axis). Blue circles represent the mean percentage volume differences, and brackets reflect their 95% CIs. Brackets that do not cross 0 (green line) indicate a significantly smaller brain volume in dexamethasone-treated infants. B, Dexamethasone-associated mean percentage cerebral volume differences, with 95% CIs, adjusted only for PMA at MRI (brackets with blue circles) and adjusted for PMA, BW, and BPD (brackets with red triangles) for 5 affected brain regions.

## DISCUSSION

The current investigation characterized global and regional cerebral volume deficits associated with postnatal systemic dexamethasone administration in an unselected cohort of ELBW infants. We found that a 7-day course (on average) of dexamethasone, in commonly prescribed doses, initiated after 4 weeks age was associated with significantly reduced total brain tissue vol-

**TABLE 2. Regression Coefficients and Probability Levels for Our 4 Independent Variables as They Relate to Each of the 5 Regions of Interest**

Independent Variable	Regression Coefficient (P)				
	Total Brain	Cortical Tissue	Cerebellum	Subcortical Gray Matter	Total Gray Matter
BW (per 100-g increase)	6413 (.14)	5819 (.12)	248 (.59)	282 (.25)	3671 (.19)
BPD (physiologic definition)	6752 (.61)	5859 (.61)	-507 (.73)	1273 (.10)	1477 (.87)
PMA at MRI (per 1-wk increase)	10 218 (<.001)	8367 (<.001)	1107 (<.001)	459 (<.001)	8634 (<.001)
Dexamethasone treatment	-29 698 (.047)	-21 495 (.09)	-4211 (.01)	-2964 (.001)	-18 313 (.06)

umes in ELBW infants. These differences in total cerebral tissue volumes seemed to be primarily a result of smaller subcortical gray matter, cerebellum, and total gray matter in dexamethasone-treated infants. We also observed nonsignificant trends in volume deficits in cerebral cortical tissue, cortical gray matter, and midbrain, with concomitant increases in ventricular CSF volumes, in dexamethasone-treated infants. The proportion of our ELBW infants treated with dexamethasone was comparable to the mean proportions in all other centers of the NICHD Neonatal Research Network (13%; NICHD Neonatal Research Network, unpublished data, 2006) and the Vermont Oxford Network (23% in 2002).<sup>8</sup> Therefore, our findings may be representative of ELBW infants in many nurseries around the United States.

The gray matter volume reductions associated with steroid use were severalfold greater in the study by Murphy et al<sup>12</sup> than in our study. This difference might be attributable to subject characteristics, interventions, and study designs. In particular, we studied the effects of lower cumulative doses of dexamethasone prescribed later in life to higher-risk ELBW infants. In addition, to minimize bias, we enrolled an unselected cohort of all ELBW infants, performed masked evaluations, and assessed a larger sample size, which allowed more-complete adjustment for potential confounders. We tested the association of global and regional cerebral volume abnormalities with multiple clinical variables, individually and in combination with other variables, including dexamethasone administration. The strongest association, not surprisingly, was with PMA at MRI, which is why all analyses were conducted only after adjustment for this factor. The period beyond 29 weeks of gestation involves normal rapid increases in total brain tissue volumes.<sup>24</sup> Therefore, differences in age of even 1 to 2 weeks would result in large differences in global and regional volumes. BW also showed a strong relationship with brain volumes. Large differences in cortical gray matter volume (35%) in the infants studied by Murphy et al<sup>12</sup> might have been more reflective of incompletely adjusted group differences in BW and other important covariates and/or exposure to comparatively higher cumulative doses of dexamethasone in lower-risk infants. In univariate analysis, we also observed significantly smaller cortical gray matter volumes in association with steroid administration; however, this difference in mul-

tivariate analysis was not as dramatic (7.5%) and was not statistically significant ( $P = .10$ ). Our findings are disturbing because we observed differences even after adjustment for BPD and other risk factors and with relatively conservative use of dexamethasone. This could be a result of residual confounding or a real effect of dexamethasone on brain volumes, despite use limited to high-risk infants.

The observed smaller subcortical (deep nuclear) and total gray matter volumes in dexamethasone-treated ELBW infants, without similar differences in white matter, suggest that neurons may be particularly vulnerable to the toxic effects of dexamethasone. Very preterm infants are exposed frequently to hypoxia-ischemia or other insults. Dexamethasone may impair protective mechanisms against such insults; dexamethasone pretreatment in adult rats before right cerebral artery occlusion to induce an infarction resulted in a 10-fold greater infarction volume.<sup>26</sup> Alternatively, such gray matter volume deficits may reflect the greater degree of illness in the dexamethasone-treated infants, compared with untreated infants. These differences might have persisted despite our efforts to control for confounding. In children and adolescents who were born prematurely, volumetric MRI studies observed brain volume deficits in cortical and deep nuclear gray matter consistently.<sup>27-30</sup> Subplate neurons and axonal development are crucial for cortical and thalamic neuronal development. Volpe<sup>31</sup> hypothesized that sublethal injury to subplate neurons and/or disrupted axonal development resulting from reactive oxygen species generated through ischemia and inflammation could lead to profound neuronal abnormalities in cortical and deep nuclear gray matter. These neuronal abnormalities are identifiable as early as term-equivalent age and are greatest among the most-immature infants and those with white matter injury.<sup>9,10</sup>

The detrimental effect on the cerebellum we described has not been reported for human subjects after corticosteroid administration. In neonatal mice, corticosterone administration impaired brain DNA, RNA, and protein synthesis, with resulting permanent reductions in size and weight of the cerebellum.<sup>32</sup> Structural and biochemical brain alterations were also observed in the cerebellum of rats after commonly used doses of dexamethasone.<sup>33</sup> Conversely, direct injury to developing cortical gray or white matter might have resulted in

cerebellar volume deficits through trophic transsynaptic negative effects on cerebellar growth.<sup>34,35</sup> Therefore, direct injury to the cerebellum is not a prerequisite for cerebellar volume disturbances. Despite these interesting observations, however, the mechanisms of the neurologic effects of dexamethasone, particularly among vulnerable ELBW infants, are likely still more complex and remain to be clarified.

Despite our use of a relatively more-robust design, we recognize certain limitations with assessing brain volumes in vivo with advanced volumetric MRI. The use of 4-mm brain slices rather than thinner three-dimensional contiguous slices might have resulted in less-reliable measurements of smaller structures such as the corpus callosum and hippocampus. This limitation might have masked true differences in volumes for vulnerable structures such as the hippocampus. The dichotomous physiologic definition of BPD, without quantification of disease severity, might have hampered our efforts to assess and to control for group differences in lung disease adequately. Also, the functional implications of the described volume deficits can be estimated at best without long-term, neurologic, follow-up assessment. Finally, as in all observational studies, the results might be distorted by residual confounding attributable to unknown or incompletely addressed confounders. These study limitations would be best addressed within a well-designed randomized trial with 2-year neurosensory follow-up assessment, as we are undertaking currently.<sup>36</sup>

## CONCLUSIONS

This study enhances our understanding of the neurodevelopmental toxicity associated with dexamethasone and adds to the mounting evidence against routine use of systemic dexamethasone therapy.<sup>6,7</sup> The reduction in regional and total cerebral tissue volumes may help explain the numerous functional deficits after postnatal dexamethasone therapy that are now well described. Volumetric MRI performed at term-equivalent age is emerging as a sensitive tool for assessment of the early neurologic effects of corticosteroids.

## ACKNOWLEDGMENTS

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#### GOOD FOR THE COUNT! HEALTHSOUTH SENTENCE REJECTED AGAIN

"A federal appeals court, for a second time, threw out a prison sentence for Michael Martin, the former finance chief for HealthSouth, calling the sentence too lenient for his role in a \$2.7 billion fraud at the company. . . . 'If any sentence is unreasonable, it is this one,' the appellate court said. 'It is not remotely commensurate with the seriousness and extensive scale of the crimes and does not promote respect for the law.' Mr Martin was one of 15 executives to plead guilty to inflating profits at HealthSouth, a rehabilitation hospital chain based in Birmingham, AL, in an attempt to bolster share price and meet Wall Street analyst expectations."

Bloomberg News. *New York Times*. July 12, 2006

Noted by JFL, MD

**Postnatal Dexamethasone Therapy and Cerebral Tissue Volumes in Extremely Low Birth Weight Infants**

Nehal A. Parikh, Robert E. Lasky, Kathleen A. Kennedy, Fernando R. Moya, Leo Hochhauser, Seferino Romo and Jon E. Tyson

*Pediatrics* 2007;119;265-272

DOI: 10.1542/peds.2006-1354

**This information is current as of February 1, 2007**

<b>Updated Information &amp; Services</b>	including high-resolution figures, can be found at: <a href="http://www.pediatrics.org/cgi/content/full/119/2/265">http://www.pediatrics.org/cgi/content/full/119/2/265</a>
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**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE:  
**Date:** Monday, July 16, 2007 9:57:58 AM

---

Thanks Rose  
I will be available for the SUPPORT calls.  
Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, July 16, 2007 6:41 AM  
To: Neil Finer  
Subject: RE:

Neil

I am so sorry to hear this. I wish (b) (6)

(b) (6)

We will take care of SUPPORT.

Thank you for everything.

Rose

-----Original Message-----

From: Neil Finer [mailto:nfiner@ucsd.edu]  
Sent: Saturday, July 14, 2007 2:42 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE:

Hi Rose

I am in the (b) (6)

(b) (6)  
I will be OK for the Subcommittee but if there are further problems I will call.

Thanks for asking. We just had another (b) (6)

(b) (6)  
The enrollment is looking better.  
I have sent out a modified Agenda.

Be well

Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, July 12, 2007 5:04 PM  
To: Neil Finer  
Subject: Fw:

Wayne state needs more oximeters!!

(b) (6)

(b) (6)

Anywayn  
Take care  
Thanks for the continued support for SUPPORT!  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Rosman, Carolyn <crosman@med.wayne.edu>  
To: Zaterka-Baxter, Kristin <kzaterka@rti.org>; Karen Osborne RN  
<Karen.Osborne@hsc.utah.edu>  
Cc: Higgins, Rosemary (NIH/NICHD) [E]; Bara, Rebecca  
<rbara@med.wayne.edu>  
Sent: Thu Jul 12 18:16:31 2007  
Subject: RE:

Thanks so much!

Carolyn Rosman, B.S.N., R.N.  
Clinical Co-Coordinator  
NICHD Neonatal Research Network  
Hutzel Women's Hospital  
2 Hudson Room 2924  
3980 John R Road  
Detroit, MI 48201

Phone: 313-993-7216  
Fax: 313-993-0198  
Pager: #(b) [REDACTED]  
Email: crosman@med.wayne.edu <<mailto:crosman@med.wayne.edu>>

---

From: Zaterka-Baxter, Kristin [<mailto:kzaterka@rti.org>]  
Sent: Thu 7/12/2007 3:16 PM  
To: Karen Osborne RN  
Cc: Rosman, Carolyn; Higgins, Rosemary (NIH/NICHD) [E]; Bara, Rebecca  
Subject: FW:

Thanks Karen!  
Please send 2 orange oximeters to Carolyn at Wayne State but to her home  
address below:

Carolyn Rosman  
  
6931 Lahser Road  
  
Bloomfield, MI 48301

248-644-6399

Thanks again,

Kris

**From:** Neil Finer  
**To:** [Abbot Laptook](#); [Walsh, Michele](#); [Roger Faix](#); [Zaterka-Baxter, Kristin](#); [wcarlo@peds.uab.edu](#); [mcw3@cwru.edu](#); [Bradley Yoder](#); [kurt.schibler@cchmc.org](#); [Nancy Newman](#); [Wade Rich](#)  
**Cc:** [Gantz, Marie](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Das, Abhik](#); [Phelps, Dale](#)  
**Subject:** FW: SUPPORT updates  
**Date:** Saturday, July 14, 2007 2:41:08 AM  
**Attachments:** [SUPPORT Enrollment 07-11-2007.doc](#)  
[SUPPORT Adverse Events 07-11-07.doc](#)  
[SUPPORT Protocol Deviations 07-11-07.doc](#)  
[SUPPORT Protocol Deviations by center 07-11-07.doc](#)  
[Age at final ROP status 7-11-07 \(2\).doc](#)

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Hi Everyone

Here is a revised agenda for the Steering committee along with some new information from Marie with more to follow regarding the oximeters data.

1. Review Enrollments to date
2. Review Adverse Events, and Protocol Deviations
3. Discuss Eye follow-up and the need for intermediate eye outcome – ie 1 year Dale Phelps
4. Discuss the use of Avastin for infants requiring Laser surgery - Dale Phelps
5. Issues from Coordinators Call
  - Discuss definition of Airleak for SUPPORT trial Pneumothorax versus Any airleak?? Currently only pneumothorax!
  - Clarification of Steroid Dose issue from Coordinators Call
4. Review status of Secondaries-
  - MRI – Susan Hintz Discuss safety of MRIs in infants with PDA ligation with clips
  - Breathing Outcomes – Tim Stevens
  - Nutrition – Christine Navarette Discuss the use of the legth Board
  - Antenatal consent –Wade Rich
5. Discuss Prospective Meta Analysis
6. Other Issues

Let me know if you wish to add any other items  
Neil

---

**From:** Gantz, Marie [mailto:[mgantz@rti.org](mailto:mgantz@rti.org)]  
**Sent:** Friday, July 13, 2007 7:26 AM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** SUPPORT updates

Hi Neil,

Attached are updated reports on SUPPORT enrollment, adverse events, and protocol deviations. The enrollment report incorporates the revisions suggested by the subcommittee at the last SC meeting. James is working on processing the latest pulse ox data, and I will get you a new pulse ox report before the SC meeting. Please let me know if there is anything else you need.

Marie

Marie Gantz, Ph.D.  
Research Statistician

**RTI International**  
**[mgantz@rti.org](mailto:mgantz@rti.org)**  
**828-254-6255**

## SUPPORT Enrollment as of July 11, 2007

### Total Enrolled

	N	% of total (1310)
Enrolled	707	54%

### Enrollment by Center

Center	<Jan-07	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Total
3	51	1	1	4	2	0	6	0	65
4	24	3	3	3	1	6	2	0	42
5	8	1	2	3	2	4	3	3	26
8	17	0	0	0	0	0	0	0	17
9	34	1	3	1	5	5	1	2	52
11	36	1	2	2	1	5	4	0	51
12	24	4	0	3	1	3	2	0	37
13	5	2	7	2	1	1	1	0	19
14	48	2	2	8	6	1	1	0	68
15	13	1	3	1	1	2	3	0	24
16	75	8	2	7	4	5	0	0	101
18	46	1	1	1	0	1	0	0	50
19	27	0	1	0	1	1	0	0	30
20	9	0	0	0	0	0	0	0	9
21	8	0	0	0	0	0	0	0	8
22	43	4	0	3	0	0	1	0	51
23	8	0	1	7	1	3	6	0	26
24	3	4	0	2	1	0	0	0	10
25	10	2	1	0	0	2	0	0	15
26	0	0	1	0	2	3	0	0	6
<b>Total</b>	489	35	30	47	29	42	30	5	707
<b>Centers</b>		17	17	17	17	17	17	17	
<b>Avg/center</b>		2.1	1.8	2.8	1.7	2.5	1.8	0.3	

### Months Needed to Complete Enrollment

Average enrolled per center per month	Number of months needed
2	18
2.5	14
3	12

**Percent of SUPPORT infants with selected adverse events as of July 11, 2007\***

Type of adverse event	All infants	24-25 wks	26-27 wks
Chest compressions/epinephrine in DR	5.7	8.6	3.6
Air leak	7.5	8.9	6.6
Pulmonary hemorrhage	6.4	9.3	4.4
Severe IVH (grades III-IV)	14.5	20.9	10.3

Note: Table includes SUPPORT infants who are still hospitalized and at risk for additional AEs

**Percent of GDB infants with selected adverse events and range across NRN centers\*  
(Includes infants born at NRN centers at 24-27 weeks GA in 2002-2004)**

Type of adverse event	All infants		24-25 wks		26-27 wks	
	Percent	Range	Percent	Range	Percent	Range
Chest compressions/epinephrine in DR	11.2	3.2 - 31.8	13.9	2.8 - 42.1	9.1	3.2 - 23.2
Air leak	8.2	1.9 - 16.1	11.0	2.9 - 20.6	6.1	1.1 - 13.0
Pulmonary hemorrhage	9.0	3.4 - 29.3	12.3	2.5 - 32.0	6.5	1.1 - 26.9
Severe IVH (grades III-IV)	16.9	8.4 - 26.4	24.2	14.0 - 38.9	11.7	2.3 - 20.8

\*Denominator for chest compressions is number of infants with delivery room information (SUPP03/NG02), denominator for air leak and pulmonary hemorrhage is number of infants with NICU data (NG03), denominator for severe IVH is number of infants with head ultrasound (SUPP09/NG03).

### SUPPORT Trial Protocol Deviations Reported as of July 11, 2007

Type of protocol deviation	Number
CPAP not initiated if required by protocol	2
Surfactant not given in the first hour	14
Oximeter not started within 2 hours	10
Infant placed on study oximeter for incorrect treatment	8
Failure to use study oximeter at times required by protocol	39
Non-study (unmasked) oximeter used at same time as study oximeter	5
Mechanical ventilation initiated for other than study criteria	2
NSIMV initiated in infant not previously intubated	5
Extubation (excluding unplanned) for other than study criteria	8
Failure to extubate CPAP infant if all criteria met	5
Failure to extubate surfactant infant if all criteria met	2
High flow nasal cannula used within first 14 days of life	21
Infant received postnatal steroids in first 21 days of life	13
Head ultrasound done outside 4-21 day window	1
Consent errors	3
Randomization errors	12
Other	6
<b>Total</b>	<b>156</b>

Type of protocol deviation (some categories collapsed)	Number
Assigned arm not implemented within required amount of time	26
Infant placed on study oximeter for incorrect treatment	8
Failure to use study oximeter at times required by protocol	39
Non-study (unmasked) oximeter used at same time as study oximeter	5
Mechanical ventilation initiated for other than study criteria	2
NSIMV initiated in infant not previously intubated	5
Extubation (excluding unplanned) for other than study criteria	8
Failure to extubate infant if all criteria met	7
High flow nasal cannula used within first 14 days of life	21
Infant received postnatal steroids in first 21 days of life	13
Head ultrasound done outside 4-21 day window	1
Consent errors	3
Randomization errors	12
Other	6
<b>Total</b>	<b>156</b>



**SUPPORT Trial Protocol Deviations, by Center, as of July 11, 2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol			1								1										2
Surfactant not given in the first hour	3	2				5	1	1	1		1										14
Oximeter not started within 2 hours	1	1				1				1	3	1					2				10
Infant placed on study oximeter for incorrect treatment	1		1	1							5										8
Failure to use study oximeter at times required by protocol	5	5	2		2	4			7		6	1	2	1			1	1	2		39
Non-study (unmasked) oximeter used at same time as study ox.						2	1								1				1		5
Mechanical ventilation initiated for other than study criteria																	2				2
NSIMV initiated in infant not previously intubated	1	1									3										5
Extubation (excluding unplanned) for other than study criteria						3			3		1				1						8
Failure to extubate CPAP infant if all criteria met		1								2						2					5
Failure to extubate surfactant infant if all criteria met						2															2
High flow nasal cannula used within first 14 days of life					1	6			6			1				1			6		21
Infant received postnatal steroids in first 21 days of life									4		3	1				4	1				13
Head ultrasound done outside 4-21 day window											1										1
Consent errors		1										2									3
Randomization errors		2	1		3							1	1	2			2				12
Other					1	1			2	2											6
<b>Total</b>	<b>11</b>	<b>13</b>	<b>5</b>	<b>1</b>	<b>7</b>	<b>24</b>	<b>2</b>	<b>1</b>	<b>23</b>	<b>5</b>	<b>24</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>7</b>	<b>8</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>156</b>

**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center, as of July 11, 2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol			4%								1%										0%
Surfactant not given in the first hour	5%	5%				10%	3%	5%	1%		1%										2%
Oximeter not started within 2 hours	2%	2%				2%				4%	3%	2%					8%				1%
Infant placed on study oximeter for incorrect treatment	2%		4%	6%							5%										1%
Failure to use study oximeter at times required by protocol	8%	12%	8%		4%	8%			10%		6%	2%	7%	11%			4%	10%	13%		6%
Non-study (unmasked) oximeter used at same time as study ox.						4%	3%								13%				7%		1%
Mechanical ventilation initiated for other than study criteria																	8%				0%
NSIMV initiated in infant not previously intubated	2%	2%									3%										1%
Extubation (excluding unplanned) for other than study criteria						6%			4%		1%				13%						1%
Failure to extubate CPAP infant if all criteria met		2%								8%						4%					1%
Failure to extubate surfactant infant if all criteria met						4%															0%
High flow nasal cannula used within first 14 days of life					2%	12%			9%			2%				2%				40%	3%
Infant received postnatal steroids in first 21 days of life									6%		3%	2%				8%	4%				2%
Head ultrasound done outside 4-21 day window											1%										0%
Consent errors		2%										4%									0%
Randomization errors		5%	4%		6%								2%	3%	22%			8%			2%
Other					2%	2%				3%	6%										2%
<b>Total protocol deviations</b>	<b>17%</b>	<b>31%</b>	<b>19%</b>	<b>6%</b>	<b>13%</b>	<b>47%</b>	<b>5%</b>	<b>5%</b>	<b>34%</b>	<b>21%</b>	<b>24%</b>	<b>14%</b>	<b>10%</b>	<b>33%</b>	<b>25%</b>	<b>14%</b>	<b>31%</b>	<b>10%</b>	<b>60%</b>	<b>0%</b>	<b>22%</b>
<b>Total number of infants enrolled</b>	<b>65</b>	<b>42</b>	<b>26</b>	<b>17</b>	<b>52</b>	<b>51</b>	<b>37</b>	<b>19</b>	<b>68</b>	<b>24</b>	<b>101</b>	<b>50</b>	<b>30</b>	<b>9</b>	<b>8</b>	<b>51</b>	<b>26</b>	<b>10</b>	<b>15</b>	<b>6</b>	<b>707</b>

## Age (PMA or post-birth age) at which ROP status is reached for SUPPORT participants 7-11-07

The table below displays selected percentiles for the age (PMA or post-birth) at which ROP status has been reached by SUPPORT infants. Age is calculated on the date of the eye exam that determined the infant's final ROP status, favorable or unfavorable. The information presented here does not take into account any additional time it takes for the centers to obtain eye exam results and enter them into the data management system.

Half of all cases to date in which the infant has an unfavorable ROP outcome were identified by exams that took place by 36 weeks PMA. 95% of the unfavorable ROP cases were identified by 44 weeks PMA, and all unfavorable cases were identified by 53 weeks PMA. There were two cases in which the exam identifying the final unfavorable outcome took place after 50 weeks PMA. Neither of those exams identified new threshold ROP (one infant had surgery for ROP and the other was diagnosed with stage 4 ROP). The latest an infant has been diagnosed with threshold ROP is 44 weeks PMA.

For infants with a favorable ROP outcome, 50% have reached final ROP status by 40 weeks PMA. 95% of favorable cases have reached final status by 64 weeks PMA. To date, the oldest an infant has been when favorable status was obtained is just over 16 months (non-adjusted age).

	PMA (weeks)				Age post-birth (months)			
	50%	90%	95%	100%	50%	90%	95%	100%
Unfavorable	36	41	44	53	2.5	3.4	3.9	6.4
Favorable	40	55	64	98	3.2	6.7	8.3	16.3
All infants	39	53	61	98	3.0	6.4	7.8	16.3

### 50<sup>th</sup>, 90<sup>th</sup>, 95<sup>th</sup> and 100<sup>th</sup> Percentiles for age at which final ROP status was reached

#### Infants Who Reach Favorable ROP Outcome After 50 Weeks PMA

Of infants who have reached a favorable ROP outcome after 50 weeks PMA, all have had at least one eye exam before 50 weeks PMA, and 77% have had three or more exams by 50 weeks PMA. The average number of exams it takes these infants to reach final ROP status is 7.

**From:** Neil Finer  
**To:** Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]; Ellen Hale  
**Cc:** Zaterka-Baxter, Kristin; barbara\_stoll@oz.ped.emory.edu  
**Subject:** RE: Fwd(2): Coding of "Avastin" on GDB data sheet  
**Date:** Saturday, July 14, 2007 1:47:11 AM

---

Hi Everyone

As usual Dale is spot on, and I was concerned so I approached our senior ophthalmologist who does the difficult laser cases but does not do the eye exams. I was concerned because he is a very leading edge guy.

So to my less than great surprise he told me that he had done the Avastin injection 2-3 times at surgery in our babies, and we would have to read the OR notes to get this and even then I'm not sure if this was clearly documented. I will try to find out if these are SUPPORT babies – Thank God Dale's case report was not authored by this guy!!!

- I suspect not because this is more recent – ie 2006 - and we did not enroll for 2006.

We should try to collect and every center needs to have a dialogue with their eye surgeons to ask about Avastin and try to document. It may be more than Alabama and we may have a baby so treated and not know it.

Lets put this on the agenda for the steering committee and have Dale discuss for 5 minutes as well as the other eye issues. – Me, I will plead utter ignorance – not far from the truth!!

Neil

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Friday, July 13, 2007 8:06 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Ellen Hale  
**Cc:** Neil Finer; Zaterka-Baxter, Kristin; barbara\_stoll@oz.ped.emory.edu  
**Subject:** RE: Fwd(2): Coding of "Avastin" on GDB data sheet

Hi Rose,

If this were a clean study being done at several centers, that would be great. However, I think that this is one center (Alabama) with a protocol and a growing number of centers that are going to do spot Avastin because of reading case reports of talking in the hallway. (See case report on 3 infants: Ophthalmic Surgery, Laser & Imaging 2007; 38(3):233-237. Travassos A et al).

There is a LOT of talk in the hallways at the eye meetings. Apparently, unlike wet macular degeneration which needs monthly injections, ROP gets better after one injection (anecdotal, sample sizes of 1 to 3). The monoclonal antibody deteriorates and goes away, so there is not ongoing blockage of vascular development -- everyone hopes. In the hallways, it's a magic bullet. It will have an increasing enthusiasm and will be given at less and less severe degrees of severity until some RCTs finally get done.

Dale

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, July 13, 2007 10:43 AM  
**To:** Phelps, Dale; Ellen Hale  
**Cc:** Neil Finer; Zaterka-Baxter, Kristin; barbara\_stoll@oz.ped.emory.edu  
**Subject:** RE: Fwd(2): Coding of "Avastin" on GDB data sheet

Do we have the "inclusion criteria for the Avastin study? Perhaps we could use the inclusion criteria as a surrogate for the bad disease and make this clean!  
Rose

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Thursday, July 12, 2007 6:09 PM  
**To:** Ellen Hale  
**Cc:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; Zaterka-Baxter, Kristin; barbara\_stoll@oz.ped.emory.edu  
**Subject:** RE: Fwd(2): Coding of "Avastin" on GDB data sheet

I would code it as severe because this infant does have bad ROP (from the standpoint of GDB).

It is a bit more of a debate for SUPPORT.

However, we need to discuss this for final approval at Steering Committee.

Barbara, what do you think?

Dale

---

**From:** Ellen Hale [mailto:Ellen.Hale@oz.ped.emory.edu]  
**Sent:** Tuesday, June 05, 2007 12:19 PM  
**To:** Phelps, Dale  
**Cc:** Barbara Stoll  
**Subject:** Re: Fwd(2): Coding of "Avastin" on GDB data sheet

Dale,  
So at this current time, for children in GDB who are treated with Avastin, how do we code the outcome?  
Our code for Determined -Severe relates to surgery only. Do we need to add a third therapy to the Interventions list?  
This is the comment from Monica:

I just want to know how to code it! Is this severe ROP with a comment, or undetermined with a comment?

The other one had a normal exam after avastin treatment

Monica

Thanks,

Ellen

**From:** [Neil Finer](#)  
**To:** [Bradley Yoder](#); [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Cc:** [Wade Rich](#)  
**Subject:** RE: SUPPORT Pt  
**Date:** Saturday, July 14, 2007 1:25:36 AM

---

Thanks Brad

Neil

---

**From:** [Bradley Yoder](mailto:Bradley.Yoder@hsc.utah.edu) [mailto:Bradley.Yoder@hsc.utah.edu]  
**Sent:** Friday, July 13, 2007 6:52 AM  
**To:** [Neil Finer](#); [Rosemary \(NIH/NICHD\)](#) [E] [Higgins](#)  
**Cc:** [Wade Rich](#)  
**Subject:** RE: SUPPORT Pt

I do not think the Masimo was the problem. I believe it is the babies inherent lability. I have talked with the family twice, & Karen Osbonre, our RN coordinator has also talked with the parents.....they are a very nice couple & willing to continue the follow-ups but I beleive have been "contaminated" by the bedside nurses that the Masimo was the problem.

I'm not sure of the averaging time for our bedside units but will check. It may be longer than the Masimo & thus less "labile".

Thanks.

Brad

---

**From:** [Neil Finer](mailto:nfiner@ucsd.edu) [mailto:nfiner@ucsd.edu]  
**Sent:** Thursday, July 12, 2007 10:23 PM  
**To:** [Bradley Yoder](#); [Rosemary \(NIH/NICHD\)](#) [E] [Higgins](#)  
**Cc:** [Wade Rich](#)  
**Subject:** RE: SUPPORT Pt

Hi Brad

An interesting dilemma

I would keep the baby in the full trial and discontinue the Masimo with a full explanation as to the reason. We can use all of the babies downloads to date, and that covers the infants most vulnerable period. We would have to describe this occurrence and any others in the manuscript, but the baby went through all of the acute interventions.

By way of interest, do you think that the Masimo was at fault – it sounds like the baby is just as labile as before? In addition what averaging time are you using for the Non-research oximeters?

Hope this helps. I will see what the others think

Be well

Neil

---

**From:** Bradley Yoder [mailto:Bradley.Yoder@hsc.utah.edu]  
**Sent:** Thursday, July 12, 2007 3:26 PM  
**To:** Neil Finer; Rosemary (NIH/NICHD) [E] Higgins  
**Subject:** SUPPORT Pt

Neil:

We had a situation come up this week, I'd like your input on.

One of our SUPPORT babies was having "problems" with his pulse oximeter, very wide ranges in SAT's & marked increase in FiO2 needs. He has been on this pulse ox for about [REDACTED] weeks now & at [REDACTED] PMA. The nurses tried changing the cable out but that didn't help so they put the baby on a regular unit monitor & decided that it gave them better readings (more consistent readings with an ability to lower the FiO2). At any rate, I didn't learn of this until at least 12 hours later. Now, as the baby is having quite an up & down time clinically with increased apnea, the parents want to just leave him on the "normal unit monitor" and stop the Masimo. This effectively removes him from the study. I have discussed with the parents the option of continuing with the other arms of the study including the MRI, respiratory follow-up & long-term follow-up & they would be willing to do that, but don't want to continue with the Masimo arm.

So the question is....can we do this? Can we keep him in for the MRI, respiratory & long-term follow-up, as well as collect his eventual ROP data even though they have requested to not continue with the Masimo arm? Or do we need to discontinue all data collection?

Thanks for input.

Brad Yoder  
Dept of Peds/Neonatology  
University of Utah  
Phone 801-581-7052  
Fax: 801-585-7395  
Pager: 801-339-(b) (6)  
Email: [bradley.yoder@hsc.utah.edu](mailto:bradley.yoder@hsc.utah.edu)



**From:** Gantz, Marie  
**To:** Phelps, Dale; Das, Abhik; Auman, Jeanette O.; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin; Newman, Jamie  
**Subject:** RE: ROP data  
**Date:** Friday, July 13, 2007 1:12:41 PM

---

Would we also include infants who have previously been "excused" as lost in the "probably lost" list?

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-4256

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Friday, July 13, 2007 12:06 PM  
**To:** Gantz, Marie; Das, Abhik; Auman, Jeanette O.; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin; Newman, Jamie  
**Subject:** RE: ROP data

This would be fine with me.  
Dale

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, July 13, 2007 11:40 AM  
**To:** Das, Abhik; Auman, Jeanette O.; Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin; Newman, Jamie  
**Subject:** RE: ROP data

As an alternative to changing the SUPP10, we could have centers continue to do what they are currently doing, which is send an email saying that the infant is lost. This email could be sent to RTI, Rose, and Dale, but instead of Dale excusing the infant, we could simply move them into the "probably lost" column of the missing ROP report sent out by Rose each month.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-4256

---

**From:** Das, Abhik  
**Sent:** Friday, July 13, 2007 11:17 AM  
**To:** Auman, Jeanette O.; Phelps, Dale; Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin; Newman, Jamie  
**Subject:** RE: ROP data

Sounds reasonable to me; perhaps we can discuss and get agreement at the subcommittee meeting next week.

Thanks

Abhik

---

**From:** Auman, Jeanette O.  
**Sent:** Friday, July 13, 2007 11:10 AM  
**To:** Phelps, Dale; Gantz, Marie; Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin; Newman, Jamie  
**Subject:** RE: ROP data

Currently I manually enter the center and network ID into the ROP tracking code to formally excuse a case, so there is no code anywhere for them.

If the sites could key a code (possibly in the current SUPP10 location question?) or answer a new question on the SUPP10 with something like "Probably Lost, but will attempt to obtain additional exams during 18-22 month Follow-up", it would be rather easy for me to delay reporting these cases until the window opens for the 18 - 22 month visit. This way the centers would not continue to receive the reminders when there is nothing they can do to obtain additional exams.

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Friday, July 13, 2007 11:09 AM  
**To:** Gantz, Marie; Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin; Newman, Jamie; Auman, Jeanette O.  
**Subject:** RE: ROP data

If everyone agrees, I would like this.  
I have great difficulty justifying excusing a case from a table when it is missing the primary outcome.

Excusing is for babies that die before eye outcome. Or parents withdraw consent for follow up. Or the law does something...

Dale

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, July 13, 2007 11:07 AM  
**To:** Das, Abhik; Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin; Newman, Jamie; Auman, Jeanette O.  
**Subject:** RE: ROP data

So, "probably lost" would be infants that the centers consider (probably) lost but who are not excused by Dale?

Marie

Marie Gantz, Ph.D.  
Research Statistician

RTI International  
mgantz@rti.org  
828-251-4255

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**From:** Das, Abhik  
**Sent:** Friday, July 13, 2007 10:58 AM  
**To:** 'Phelps, Dale'; Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie  
**Cc:** Zaterka-Baxter, Kristin; Newman, Jamie; Auman, Jeanette O.  
**Subject:** RE: ROP data

I was thinking of something similar, an option for "probably lost". As for the 18-month follow up, perhaps we can have a specific reminder set up for babies in this new category. I agree though that this is a primary outcome and we need to make every effort to have all the data in.

Thanks

Abhik

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Friday, July 13, 2007 10:50 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie  
**Cc:** Das, Abhik  
**Subject:** RE: ROP data

I'm trying to think about a way that gets the job done, but is less irritating:

Would an additional code work, that you and RTI could use for the follow up 'letters'? Something like this:

-----  
Of your xx enrolled SUPPORT infants, ROP follow-up status for those who have survived and reached at least 50 weeks PMA are as follows:

Xx completed !  
X permanently lost to follow up, formally excused (don't list)  
X judged probably permanently lost to follow up, agreed to but not excused -- not giving up, right on through the 18-22 month follow up.  
X pending  
List network numbers

-----  
This would help ME a lot, as the 'excuser'. There clearly are A FEW that need to be accepted (Excused) as totally lost. Most, however, it is 'push on' !

Dale

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, July 13, 2007 10:41 AM  
**To:** Phelps, Dale; Gantz, Marie  
**Cc:** Das, Abhik  
**Subject:** RE: ROP data

Dale

The deal is that some coordinators have spent a lot of time trying to schedule/reschedule/ FU with ophthalmology/FU with parents etc. etc. There is a handful of children like this. That being said, unless they input a "permanently missing" entry, it is kept open (as they really want to get the results, if eventually available). The answer is, when effort is being put forth, they don't like the edit from RTI or email from me. However, when I ask the PI's at the SC meetings about this, they find them annoying, but NECESSARY for study success. Ever since the NRN had the outstanding FU rate for hypothermia (which was the first study that we sent the emails for primary outcome), this has been done.

SO, my take is that we should keep sending them - unless I am missing something.

Perhaps Abhik can weigh in as "missing data" are a problem and these reminders from me seem to work for the network in recent studies (hypothermia, preemie iNO, phototherapy)

I will bring it up with the PI's next week.

Thanks  
Rose

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Thursday, July 12, 2007 6:02 PM  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik  
**Subject:** RE: ROP data

Hi Team,

It is hard to 'excuse' an infant who needs an exam and has not had it.

In my opinion, the child remains on the "no ROP outcome list". It's not like he died, or provided written withdrawal from the study. So why should they be excused from being listed as missing?

Am I being harsh here? Apparently they want not to get edits, is that it?

Or is it that they don't want to get e-mails from Rose? :-)

Question: when such an infant is seen in follow up (18-22 months) should we stop dunning them then? There still is no early acute outcome, but it is clear that there never will be, but at least we have the late outcome.

Discussion?  
Dale

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Thursday, May 31, 2007 11:49 AM  
**To:** Vivien Phillips; higginsr@mail.nih.gov; Phelps, Dale  
**Cc:** Shirley Cosby; Monica Collins; Wally Carlo, M.D.; Das, Abhik  
**Subject:** RE: ROP data

Hi Vivien,

I believe that Dale wanted to see some additional information (which you have now provided, below) in order to excuse this infant. I am sending this email to her so she can take a look at this case (# (b) (6)).

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
336-514-8258

---

**From:** Vivien Phillips [mailto:VPhillips@peds.uab.edu]  
**Sent:** Wednesday, May 30, 2007 5:39 PM  
**To:** higginsr@mail.nih.gov  
**Cc:** Shirley Cosby; Monica Collins; Wally Carlo, M.D.; Das, Abhik; Gantz, Marie  
**Subject:** RE: ROP data

Final ROP exam status has been entered on (b) (6).

(b) (6) has never had a follow up eye exam. Several attempts have been made to get the parent to take baby to eye specialist. Pediatrician has been notified of missed appointments with the eye specialist and they have attempted to reschedule appointment but without success. I have asked Marie to give me through the end of this month to try but now the mother doesn't have a reliable phone number to be contacted. Could you take this network number off the missing ROP list? Baby's had 8 ROP exams during hospitalization and none of them reached zone 3.

(b) (6) baby has moved to a different state. I've contacted the pediatrician and so far, no follow up eye exam has been noted in the baby's chart. Will continue to monitor.

Vivien

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wed 5/30/2007 1:06 PM  
**To:** wacarlo@uab.edu; Monica Collins; Shirley Cosby  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** ROP data

Center	Network	Missing ROP error message
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Hi,  
We are missing a few ROP outcomes - let us know if you have them.

Thanks for all the hard work and effort!!  
Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin; Wade Rich  
**Subject:** RE:  
**Date:** Thursday, July 12, 2007 3:20:52 PM

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See my suggestions below.  
Neil

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, July 12, 2007 11:56 AM  
**To:** Neil Finer  
**Cc:** Zaterka-Baxter, Kristin; Wade Rich  
**Subject:**

Neil  
I had a call today with the coordinator liaison committee.

There are a couple of concerns for SUPPORT

1. The missing ROP outcomes are sent out when patients reach 50 weeks and are not final. There are a small number of children who remain on the list until FU at 18-22 months. Currently, sites can get "excused" if reviewed and approved by Dale Phelps. What about infants who keep missing their appointments?? (My take on this is that the numbers are small, but annoying and ROP is a co-primary outcome – if the site wishes to place a "permanently missing" it is up to them to do it). We need to encourage the sites to go after the family and outcome – We should put a restrictive definition on permanently missing – There will still be a small number that we miss
2. There are still issues with the length board \_ I will ask that Christine and Shahnaz are on the SUPPORT subcommittee call next week. The issue is that if the baby is not measured on the length board, should they include a "clinical measurement" or not. I think that the PIs need to step up and communicate with the sites about the length board. Christine was not at the last Steering Comm.
3. For the SUPP02 – the header says to fill it out if the child is to get full resuscitation and this is also an inclusion criteria – this is said to be confusing.

We can remove the header since this from implies that the infant is enrolled

Let me know if you or Wade has thoughts!!  
Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Neil Finer  
**To:** Phelps, Dale; Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Poole, W. Kenneth; Gantz, Marie  
**Subject:** RE: ROP -SUPPORT analysis  
**Date:** Thursday, July 12, 2007 11:27:13 PM

---

Hi Dale  
Are all 3 examiners ophthalmologists?  
Neil

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Thursday, July 12, 2007 3:21 PM  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer  
**Cc:** Poole, W. Kenneth; Gantz, Marie  
**Subject:** RE: ROP -SUPPORT analysis

We did this at the end of the study. Batched them all together (it was quite the event!)

It was not used for interim reports. However, if you wanted to try it, you could pick 10 cases and see if a committee could/would agree. It is a lot of work to set it up. (we did 3 notebooks, sent to the 3 folks and each did all, using a scoring sheet and then sent the sheets back to the coordinating center)

It is probably better to wait.

Dale

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Thursday, July 12, 2007 4:31 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Phelps, Dale; Neil Finer  
**Cc:** Poole, W. Kenneth; Gantz, Marie  
**Subject:** RE: ROP -SUPPORT analysis

Sounds reasonable to me.

Dale: In STOP-ROP did you do this at the end of the study or as the data was accumulating? Did the DSMC interim looks use this secondary definition?

Thanks

Abhik

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, July 12, 2007 4:28 PM  
**To:** Phelps, Dale; Neil Finer; Das, Abhik  
**Subject:** RE: ROP -SUPPORT analysis

We will need something like this in place.

Other thoughts??

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Thursday, July 12, 2007 4:16 PM  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** FW: ROP -SUPPORT analysis

Hi Neil, Rose and Abhik,

I am bringing up a suggestion for ROP analysis for the SUPPORT study. It is becoming more and more clear that getting the final outcome for ROP is not going to approach 100%, even though it is a primary outcome.

In STOP-ROP we approached this with a secondary analysis, where we added in the outcomes from an adjudication committee of 3 individuals that looked at the examinations from each unassigned infant, remaining masked to group assignment.[options were to assign a) probably was favorable, b) probably was unfavorable, c) can't tell.]

I am happy to provide details if you are interested. It was helpful and encouraging for STOP-ROP because we could be comfortable that the secondary analysis did not change the conclusions from the primary analysis (of those infants in whom the primary outcome was known).

Dale

---

**From:** Phelps, Dale  
**Sent:** Thursday, July 12, 2007 4:07 PM  
**To:** 'Auman, Jeanette O. '; Angelita Hensman  
**Cc:** Zaterka-Baxter, Kristin; Abbot Laptook  
**Subject:** RE: ROP - infant is lost to follow up and needs to be taken off list

I agree that you no longer need to be bugged.

There is no primary outcome for this infant as defined by the MOP.

However, an adjudication committee would very likely accept this infant as a favorable outcome for a secondary analysis.

We are almost certainly going to have to do such a type of analysis for this study.

Dale Phelps, MD

---

**From:** Auman, Jeanette O. [mailto:joa@rti.org]  
**Sent:** Thursday, July 12, 2007 3:23 PM  
**To:** Angelita Hensman  
**Cc:** Phelps, Dale; Zaterka-Baxter, Kristin; Abbot Laptook  
**Subject:** RE: ROP - infant is lost to follow up and needs to be taken off list

I'll add the patient to the excused code, so no further ROP exams are expected.

---

**From:** Angelita Hensman [mailto:AHensman@WIHRI.org]  
**Sent:** Thursday, July 12, 2007 9:46 AM  
**To:** Auman, Jeanette O.

**Cc:** Phelps, Dale; Zaterka-Baxter, Kristin; Abbot Laptook  
**Subject:** RE: ROP - infant is lost to follow up and needs to be taken off list

We called the ophthalmology office again this morning and they faxed over the last complete exam from 4/26/06 which is quite detailed. The plan was to follow up in 3 months. This appointment has not been kept despite being rescheduled several times. I also checked with the pediatrician's office and they do not have any further information about the babies vision. They are going by the 4/26/06 exam as well.

We will add an F5 " Plan to follow up in 3 months" on the last date field (4/26/06)and no further outcome should be expected on the SUPP10 for this patient ((b) (6)). The baby is past 22 months. Any further info will be entered on the 18-22 month forms if the parents do bring this baby in for follow up.

Thanks  
Angelita

---

**From:** Auman, Jeanette O. [mailto:joa@rti.org]  
**Sent:** Wednesday, July 11, 2007 10:17 PM  
**To:** Zaterka-Baxter, Kristin; Phelps, Dale; Angelita Hensman  
**Cc:** Abbot Laptook  
**Subject:** RE: ROP - infant is lost to follow up and needs to be taken off list

Yes, keyers can make an F5 comment in any field on the SUPP10 form. If there are any problems with that they should notify James or I.

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Wednesday, July 11, 2007 5:28 PM  
**To:** 'Phelps, Dale'; Angelita Hensman  
**Cc:** Abbot Laptook; Auman, Jeanette O.  
**Subject:** RE: ROP - infant is lost to follow up and needs to be taken off list

Hi,  
I believe an 'F5' comment (in the Supp10) is allowed in any of the fields recording the infants' last exam to capture any recommendation by the MD; will double check with Jenny on this and get back to you.  
Thanks,  
Kris

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Wednesday, July 11, 2007 5:17 PM  
**To:** Angelita Hensman  
**Cc:** Abbot Laptook; Zaterka-Baxter, Kristin  
**Subject:** RE: ROP - infant is lost to follow up and needs to be taken off list

Hi Angelita et al.

While the follow up clinic tries for the follow up visit, here is something that I would suggest for this particular case.

First: you have evidence that this baby almost certainly moved vessels into zone III and that the ROP was regressing there (from stage I to stage 0/gone).

Two pieces of information would be helpful and would allow an adjudication committee to assign an outcome.

1. Did the ophthalmologist on the last exam (zone III, stage 0) make a follow up recommendation?

In his record did he say "1 year", or PRN, or 3 weeks... etc.

Can we record this comment in the database? [Kris, help!]

2. Pediatrician's office. This pediatrician is clearly very helpful. I would expect that the office record has a spot where previous surgery is recorded. The pediatrician could provide the ophthalmology information to you that the baby has (has not) had eye surgery. There is a spot to record this on the 18-22 month follow up examination and you could record just that. You would be recording only ophthalmology outcome.

At this point, I agree with your assessment about risking further alienation of the family.

Dale L. Phelps

**From:** Angelita Hensman [mailto:AHensman@WIHRI.org]  
**Sent:** Tuesday, July 10, 2007 2:27 PM  
**To:** Phelps, Dale  
**Cc:** Abbot Laptook; Zaterka-Baxter, Kristin  
**Subject:** RE: ROP - infant is lost to follow up and needs to be taken off list

See info in pink below.

Thanks  
Angelita

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Thursday, July 05, 2007 3:53 PM  
**To:** Angelita Hensman  
**Cc:** Abbot Laptook; Zaterka-Baxter, Kristin  
**Subject:** RE: ROP - infant is lost to follow up for ROP outcome and needs to be taken off list

Hi Anita,

What is the last ROP status that you have on this infant? **Zone 3, Stage 0** Was it the last eye exam prior to discharge home? No. The last exam in our NICU before the baby was transferred was Zone 2 Stage 1 bilaterally on 12/13/05 (transfer?) and at transfer hospital also Zone 2, stage 1 on 12/27/05 prior to the baby being discharged to home. At the first outpatient visit on 04/27/06: bilateral Zone? 3 Stage? 0 . This was also the last visit to the ophthalmologist.

It sounds like the Pediatrician still has contact with the family. Since the parents gave consent at birth for follow up for the primary outcomes, you can request information from the



pediatrician about if the infant is blind, in early intervention for visual impairment, etc. The pediatrician should also know if the infant ever had eye surgery for ROP. Yes, we have been following up with the pediatrician and could probably get that information however our consent form says nothing about following up or getting information from the pediatrician. Only the ophthalmologists. **Where and on which form would we record and enter the information from the pediatrician?**

Do you mean to give up trying to find this infant for the 18-22 month follow up for the SUPPORT study? **NO**. The follow up clinic will keep trying to get the baby in, however please note the baby was born in (b) (6) and is past 22 months now. There has to be an end point for us to track eye exams!

It is not too late to find out at that the follow up visit if the baby ever had surgery for ROP, or if (s)he has vision loss. We would certainly get that information if the baby ever comes in for the 18-22 month visit.

It is clearly too late for the initial primary outcome. However, the secondary evaluation of the primary outcome is still possible. If we have too many of the primary outcomes missing, it is going to be very difficult to write up this manuscript. Unfortunately yes, but it has not been from lack of trying to get the information on our part. We cannot force the parents to come in if they do not want to regardless of what the AAP guidelines are..... The ophthalmology offices will NOT call the parents. The parents are expected to call and set up the appointment. The last attempt to call the pediatrician to ask him to have the parents make an appointment for follow up and with the eye doctor resulted in the father of the baby calling us very angry and yelling at the research nurse because the pediatrician had said we called to report they had not been in for their eye exam visits.. We had to back off or have him withdraw the baby entirely from the study.

Angelita

Dale

---

**From:** Angelita Hensman [mailto:AHensman@WIHRI.org]  
**Sent:** Thursday, July 05, 2007 2:36 PM  
**To:** Phelps, Dale  
**Cc:** Abbot Laptook  
**Subject:** ROP - infant is lost to follow up and needs to be taken off list  
**Importance:** High

Hi Dale,

This baby's parents have not scheduled ophthalmology follow up in a while (see attachment) and we cannot get a hold of them. Date of birth was (b) (6). Can you please have RTI mark it as a lost to follow up and remove from the list they send out.

Thanks

Angelita

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**From:** Lisa Askie  
**Sent:** Tuesday, 3 July 2007 4:00 PM  
**To:** William Tarnow Mordi; Brian Darlow (bdarlow@chmeds.ac.nz); Peter Brocklehurst (peter.brocklehurst@npeu.ox.ac.uk); Neil Finer (nfiner@ucsd.edu); Barbara Schmidt (schmidt@mcmaster.ca); Adrienne Kirby; Davina Gherzi (ghersid@who.int); Jayne Tierney (Jayne.Tierney@ctu.mrc.ac.uk); John Simes; Cynthia Cole (ccole@bidmc.harvard.edu)  
**Subject:** FW: Subject Line: Spokespersons Reports and Independent Assessment - 512494-Askie

Dear all,

These are the reviewers' comments for our NHMRC grant application for the NeOProm Collaboration (prospective meta-analysis of oxygen trials). We were due to receive these about a month ago. They were delayed and have now, of course, arrived the week I am up on a mountain skiing ..... We only have two weeks to reply, hence I am sending them on to you for comment / advice in the first instance. I will formulate a draft reply first thing next week but if you have any comments you would like to make at this stage please email them onto me. Original application (minus all the CVs) attached.

Regards,  
Lisa

*Lisa Askie PhD MPH*

*Research Fellow, School of Public Health  
Manager, Australian Clinical Trials Registry  
NHMRC Clinical Trials Centre, University of Sydney, Australia*

*Tel: +61 (0)2 9562 5000  
Fax: +61 (0)2 9565 1863  
Mobile: +61 (0)4 2333 (b)  
Email: [laskie@ctc.usyd.edu.au](mailto:laskie@ctc.usyd.edu.au)*

---

**From:** Pardip.Chauhan@health.gov.au on behalf of Applicant\_Response@health.gov.au  
**Sent:** Mon 2/07/2007 12:03 PM  
**To:** Lisa Askie; amanda.collins@usyd.edu.au  
**Subject:** Subject Line: Spokespersons Reports and Independent Assessment - 512494-Askie

Dear Applicant

Please find attached the Spokespersons' Reports and Independent Assessment for the application included in the subject line.

This email contains three reports on your application:

- Primary Spokesperson Report;
- Secondary Spokesperson Report; and
- Independent Assessment.

Applicants are permitted two weeks to provide a response of up to two pages in length.

Some applicants will also receive a Large Scale Clinical Trials (LSCT) Report (attached if

applicable). Applicants who receive a LSCT Report will be permitted an additional page to respond to the LSCT Report.

Applicants were previously incorrectly advised that graphics and tables were not permitted in the Applicant Response. This advice was meant to refer to web links only. Graphics and tables may be included provided that the Applicant Response Guidelines are adhered to.

Applicants should ensure that their response is in accordance with the attached guidelines:

Your response must be submitted by no later than **midnight AEST 16th July 2007**.

Your response must be saved as a PDF document and sent by return email to [applicant\\_response@nhmrc.gov.au](mailto:applicant_response@nhmrc.gov.au) ([applicant\\_response@nhmrc.gov.au](mailto:applicant_response@nhmrc.gov.au)).

Regards

Pardip Chauhan  
NHMRC

---

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---

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; [bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org)  
**Cc:** [mgantz@rti.org](mailto:mgantz@rti.org); [adas@rti.org](mailto:adas@rti.org)  
**Subject:** RE: SUPPORT MISSING OUTCOMES  
**Date:** Tuesday, July 10, 2007 2:11:04 PM

---

Great work Brenda!!  
Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Tuesday, July 10, 2007 8:29 AM  
To: [bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org)  
Cc: [mgantz@rti.org](mailto:mgantz@rti.org); [adas@rti.org](mailto:adas@rti.org); Neil Finer  
Subject: Re: SUPPORT MISSING OUTCOMES

Thanks and keep up the great recruitment!!!  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Mackinnon, Brenda <[BMackinnon@tufts-nemc.org](mailto:BMackinnon@tufts-nemc.org)>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Tue Jul 10 11:24:45 2007  
Subject: RE: SUPPORT MISSING OUTCOMES

Hi Rose,

Sorry this is a bit delayed but GOOD news! We enrolled 8 into SUPPORT last month and 2 already this month so I am a bit behind d/t (b) (6) last week. The ROP status for Subject (b) (6) is still NOT fully vascularized and will be seen again later this month. I think this one will be a long time before endpoint is met. Thank God they don't all take this long.

Thanks,  
Brenda

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E]  
[<mailto:higginsr@mail.nih.gov>]  
Sent: Tuesday, July 03, 2007 2:13 PM  
To: Frantz, Ivan; Mackinnon, Brenda  
Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT MISSING OUTCOMES

CENTER

NETWORK

ROP MESSAGE

23

(b) (6)

No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

CENTER

NETWORK

BPD MESSAGE

23

(b) (6)

Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered

HI,

We are missing the above two patients for SUPPORT. Thanks for all your effort!!

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

---

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**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: Missing rop outcome  
**Date:** Tuesday, July 10, 2007 11:31:58 AM

---

Rose,

This baby has missed all of the ophthalmology appointments since last Sept. I've talked to Janet and she's going to see what she can do.

Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206(b)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 7/2/2007 3:43 PM >>>  
CENTER

NETWORK

ROP MESSAGE

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

We are missing one SUPPORT ROP outcome - let us know if you have it.

Thanks for all the continued effort!!

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

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Bethesda, MD 20892

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Bridge, Renee  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Rich, Wade  
**Subject:** missing support outcomes  
**Date:** Friday, July 06, 2007 2:36:13 PM

---

Thank you for the information regarding our SUPPORT forms. I have ordered the chart to complete (b) (6) completed and entered (b) (6) the NF 10 was completed on 4/16/07. Again thank you for the update.

Renee Bridge  
Research Nurse  
UCSD Neonatology

**From:** Bethany Ball  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** mgantz@rti.org; adas@rti.org; vanmeurs@leland.stanford.edu  
**Subject:** Re: MISSING SUPPORT ITEMS  
**Date:** Thursday, July 05, 2007 4:03:43 PM

---

Hi Rose et al.,

Thanks for the phone call. The applicable data on the SUPPORT baby who died in the DR has been keyed and was transmitted on Tuesday 7/3.

(b) (6) (below) the ROP data was pried out of the ophthal's office on Tuesday and the data will be transmitted on 7/10.

(b) (6) (below) was seen at a transfer hospital and is being followed as an out-patient. When he reaches 50 wks PMA in (b) (6) we'll get the data and send it along to RTI.

(b) (6) (below) This keying problem has been fixed and the data transmitted on 7/3.

For patients whose retinas aren't mature or in zone 3 twice before discharge, we are waiting until 50 weeks PMA to get the data from the ophthalmologist so he only has to send data once on each patient.

Best,  
Beth

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

(b) (6)

No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

The above children are missing ROP outcomes.

We are missing one BPD outcome:

CENTER

NETWORK

BPD MESSAGE

15

(b) (6)

Infant was hospitalized at 36 weeks (per NG03) but NG07 36 week snapshot is not entered

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

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[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Subject Line: Spokespersons Reports and Independent Assessment - 512494-Askie  
**Date:** Thursday, July 05, 2007 2:08:14 PM

Hi Rose  
This is a good point which I will pass on.  
Thanks  
Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, July 05, 2007 5:44 AM  
**To:** Neil Finer  
**Subject:** RE: Subject Line: Spokespersons Reports and Independent Assessment - 512494-Askie

Neil  
I do not have the comment page, but based on your comments I have one remark –  
Each of the ongoing studies has a DSMC in place, and as you say, NEOPROM is not directly enrolling subjects – perhaps a listing of the current trail DSMC may help to satisfy this concern.

Thanks  
Rose

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Wednesday, July 04, 2007 6:40 PM  
**To:** Lisa Askie; William Tarnow Mordi; bdarlow@chmeds.ac.nz; peter.brocklehurst@npeu.ox.ac.uk; schmidt@mcmaster.ca; Adrienne Kirby; ghersid@who.int; Jayne.Tierney@ctu.mrc.ac.uk; John Simes; ccole@bidmc.harvard.edu  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Subject Line: Spokespersons Reports and Independent Assessment - 512494-Askie

Hi Lisa  
I have tried to respond to the comments as made below

- No DSMC – I am not sure how relevant this is as the NeOProm Collaboration is not directly enrolling subjects and there would be no need to have stopping rules or evaluate patient safety apart from the original trials. Only the analyses may show such issues and these by definition would not be completed until all trials are complete.
- The early stoppage of any of the trials may have relevance to the other trials but would only affect the final data set of this trial. In addition the overall results will be very informative when assessing any reasons for early stoppage of the individual trial(s).
- The comment that the end-point is rare is troubling in that the reviewer either has no expertise in the area or suggests that the original application did not state this clearly enough. The latter is clearly untrue as I have pasted the relevant sections
- Here is what the application says
- 
- visual loss. Of survivors <28 weeks' gestation, 50% have retinopathy of prematurity (ROP), 12.5% have severe (Grade III/ IV) ROP,<sup>2</sup> 56% of these have surgery, but about 10% of those treated become blind. Recent recommendations will result in more infants with severe ROP having laser surgery.<sup>8</sup>
- In addition infants with ROP have other significant eye morbidities apart from blindness that are problematic and perhaps this point needs to be made more emphatically. In fact from the original Cryo study 30% of eyes treated at threshold had unfavorable structural and 45% had unfavorable visual outcomes at 15 years of age - Palmer, E. A.; Hardy, R. J.; Dobson, V.; Phelps, D. L.; Quinn, G. E.; Summers, C. G.; Krom, C. P., and Tung, B. 15-year outcomes following threshold retinopathy of prematurity - Final results from the Multicenter Trial of Cryotherapy for Retinopathy of Prematurity. Archives of Ophthalmology. 2005; 123(3):311-318.
- 13% of a UK population had severe visual deficits at one year - Haines, L.; Fielder, A. R.; Baker, H., and Wilkinson, A. RUK population based study of severe retinopathy of prematurity: screening, treatment, and outcome. Archives of Disease in Childhood. 2005; 90(3):F240-F244
- There are other studies on this topic – ie Sahni, J.; Subhedar, N. V., and Clark, D. Treated threshold stage 3 versus spontaneously regressed subthreshold stage 3 retinopathy of prematurity: a study of motility, refractive, and anatomical outcomes at 6 months and 36 months. British Journal of Ophthalmology. 2005; 89(2):154-159
- 
- For SUPPORT these were the actual occurrences that were used for our study sample size-
- 
- --BPD/Mortality—67%
- --ROP > Grade III/Mortality—47%
- --NDI/Mortality—61%
- For SUPPORT to date we have enrolled over ½ of the total of 1310 infants, and enrollments are proceeding such that I believe we will be completed the first phase – ie to neonatal outcomes - in about 16-19 months, perhaps sooner
- 
- The fetus in utero has an SpO2 of approximately 50% (Nijland R, Jongsma HW, Nijhuis JG, van den Berg PP, and Oeseburg B. Arterial oxygen saturation in relation to metabolic acidosis in fetal lambs. Am J Obstet Gynecol. 1995;172:810-819.). We use this in evaluating the increase in SpO2 following delivery and assume that most infants start at 50%. In utero compromise will markedly lower this value. This does not change much with gestation to my knowledge
- I leave you to debate the issue of an economist. Is that easy for your group? Will you have cost data from each study – I would suggest not so that the assumptions will be large and different
- Reviewer # 2
- None of the studies is sufficiently powered to evaluate death. We have not stated that death is a primary – rather survival without ROP

- I would restate primaries as survival without morbidity so that death is not isolated by reviewers.
- There is more than sufficient power here – I guess you may want to look at even larger potential differences and state that to our knowledge no single Neonatal study has even approached this sample size, and none to date have even evaluated different SpO2 ranges from the day of birth. I think you need to emphasize the uniqueness off the trials and the Meta analyses. Should you consider an even lower power with greater outcome differences? These estimates look conservative to me

I hope these comments help. Let me know if you need anything further from me.  
Neil Finer

---

**From:** Lisa Askie [mailto:laskie@ctc.usyd.edu.au]  
**Sent:** Monday, July 02, 2007 11:00 PM  
**To:** William Tamow Mordi; bdarlow@chmrc.ac.nz; peter.brocklehurst@npeu.ox.ac.uk; Neil Finer; schmidt@mcmaster.ca; Adrienne Kirby; gherid@who.int; Jayne.Tierney@ctu.mrc.ac.uk; John Simes; ccole@bidmc.harvard.edu  
**Subject:** FW: Subject Line: Spokespersons Reports and Independent Assessment - 512494-Askie

Dear all,  
These are the reviewers' comments for our NHMRC grant application for the NeOProm Collaboration (prospective meta-analysis of oxygen trials). We were due to receive these about a month ago. They were delayed and have now, of course, arrived the week I am up on a mountain skiing ..... We only have two weeks to reply, hence I am sending them on to you for comment / advice in the first instance. I will formulate a draft reply first thing next week but if you have any comments you would like to make at this stage please email them onto me. Original application (minus all the CVs) attached.

Regards,  
Lisa

Lisa Askie PhD MPH

Research Fellow, School of Public Health  
Manager, Australian Clinical Trials Registry  
NHMRC Clinical Trials Centre, University of Sydney, Australia

Tel: +61 (0)2 9562 5000  
Fax: +61 (0)2 9565 1863  
Mobile: +61 (0)4 2334 1016  
Email: [laskie@ctc.usyd.edu.au](mailto:laskie@ctc.usyd.edu.au)

---

**From:** Pardip.Chauhan@health.gov.au on behalf of Applicant\_Response@health.gov.au  
**Sent:** Mon 2/07/2007 12:03 PM  
**To:** Lisa Askie; amanda.collins@usyd.edu.au  
**Subject:** Subject Line: Spokespersons Reports and Independent Assessment - 512494-Askie

Dear Applicant

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- Primary Spokesperson Report;
- Secondary Spokesperson Report; and
- Independent Assessment.

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Regards

Pardip Chauhan  
NHMRC

---

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**From:** Gantz, Marie  
**To:** Johnson, Karen; Higgins, Rosemary (NIH/NICHD) [E]; Bell, Edward  
**Cc:** Das, Abhik  
**Subject:** RE: Missing SUPPORT outcomes  
**Date:** Thursday, July 05, 2007 9:35:35 AM

---

Hi Karen,

50 weeks PMA is not necessarily a status point, but it is the end of the grace period we have given before starting to send these missing ROP reminders. We realize that not all infants will have reached ROP status by that point, but we want to remind centers to enter the data as it becomes available.

Thanks,  
Marie

Marie Gantz, Ph.D.  
Research Statistician  
ETI International  
mgantz@eti.org  
202-511-4255

---

**From:** Johnson, Karen [mailto:karen-johnson@uiowa.edu]  
**Sent:** Thursday, July 05, 2007 9:07 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Bell, Edward  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: Missing SUPPORT outcomes

Rose,  
I have replied to the specifics below. I am wondering on the ROP messages why it says 50 weeks PMA... I don't find anything in the protocol or manual that says 50 weeks PMA is a status point. Is it?  
Hope you had a good 4th of July.  
Karen

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, July 03, 2007 1:15 PM  
**To:** Bell, Edward; Johnson, Karen  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** Missing SUPPORT outcomes

CENTER	NETWORK	ROP MESSAGE
24	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. -- mature, should have come through on Tuesday's transmission.
24	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. -- still inpatient, ROP not met status yet.
CENTER	NETWORK	BPD MESSAGE
24	(b) (6)	PHY01 is expected based on NG07 but has not been entered -- entered, transmitted Tues(7/3)
24	(b) (6)	Infant was eligible for challenge (per PHY01) but outcome was not entered on PHY02RA - - entered and transmitted Tues. (7/3)

Hi,  
We are missing the above outcomes on patients from the SUPPORT study. Let us know how you are doing.

Thanks for all your effort!!  
Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Wally Carlo, M.D.  
**To:** Shirley Cosby; Higgins, Rosemary (NIH/NICHD) [E]; ambal@uab.edu  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: MISSING SUPPORT ITEMS  
**Date:** Tuesday, July 03, 2007 5:11:41 PM

---

Shirley:

You are a GEM!

THANKS, wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 268 (b) (6)

---

**From:** Shirley Cosby  
**Sent:** Tuesday, July 03, 2007 1:09 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; ambal@uab.edu  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: MISSING SUPPORT ITEMS

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, July 03, 2007 12:54 PM  
**To:** Wally Carlo, M.D.; ambal@uab.edu; Monica Collins; Shirley Cosby  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** MISSING SUPPORT ITEMS

Hi all – we are missing a few SUPPORT outcomes from your site – thank you for the massive recruitment and timely input of the data!!!!

Rose  
ROP:

CENTER	NETWORK	ROP MESSAGE
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. This baby had no other eye exams done after discharge and Dale has been notified and will be working on the resolution of this ROP case this month
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. Baby moved out of town and we are still trying to follow up with the legal guardian to see if she took baby for eye exam last week.

FU:

CENTER	NETWORK	FU NUM	FU MESSAGE
16	(b) (6)	(b) (6)	FU marked as complete (per NF10/SF10) but NF09a/SF09a is not completed This was a phototherapy/SUPPORT baby and we are planning on doing the Bailey 3 on July 5th

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Susan Hintz  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** SUPPORT meeting time?  
**Date:** Tuesday, July 03, 2007 4:15:29 PM

---

Hi Rose

I wondered if you know what time and date the SUPPORT subcommittee will be meeting at the July meeting so I can mark down when I need to be available to join by phone? I don't know what is going on with

(b) (6)

Thanks

Susan

P.S. Note below (b) (6) - signed, sealed, delivered! THANKS for all your help in getting me (b) (6) "

(b) (6)

--

Susan R. Hintz, M.D., M.S. Epi  
Associate Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351

**From:** Neil Finer  
**To:** Zaterka-Baxter, Kristin; Nancy Miller  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie; Das, Abhik; Wade Rich  
**Subject:** RE: SAE's for SUPPORT  
**Date:** Friday, June 29, 2007 2:28:57 AM

---

I agree  
Neil

-----Original Message-----

From: Zaterka-Baxter, Kristin [<mailto:kzaterka@rti.org>]  
Sent: Thursday, June 28, 2007 8:14 AM  
To: Nancy Miller  
Cc: Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie; Neil Finer; Das, Abhik; Wade Rich  
Subject: RE: SAE's for SUPPORT

Hi Nancy,  
For the MedWatch, please code the worst event and describe all relevant events in one report. If this occurred within the first 14 day, code the air leak, date of onset would be the date of the rt. pneumo and in the comments section, I would record the dates of the Dx'd PIE and pneumocystocele. I copied several folks for a consensus.  
Thanks,  
Kris

-----Original Message-----

From: Nancy Miller [<mailto:Nancy.Miller@UTSouthwestern.edu>]  
Sent: Thursday, June 28, 2007 11:05 AM  
To: Zaterka-Baxter, Kristin  
Subject: RE: SAE's for SUPPORT

Kris,  
We have a baby who developed a rt. pneumothorax and CT was placed. The next day the baby was dx'd with PIE and that progressed into a large pneumocystocele. Do I make out 3 AE's or do they all go on one report?  
Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206 (b) (6)

**From:** Wade Rich  
**To:** Zaterka-Baxter, Kristin; Angelita Hensman  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; ellen\_hale@oz.ped.emory.edu; nxs5@cwru.edu; Auman, Jeanette O.; Gantz, Marie; auten002@mc.duke.edu  
**Subject:** RE: Antenatal Enrollment  
**Date:** Thursday, June 28, 2007 10:48:10 AM

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Angelita,

As I recall you requested that we add these two qualifiers because not all infants who are consented will either be "born in the window" or "not born in the window". These babies delivered, but were not eligible for GDB #s because they did not live.  
wade

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Thursday, June 28, 2007 7:37 AM  
**To:** Angelita Hensman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; ellen\_hale@oz.ped.emory.edu; nxs5@cwru.edu; Auman, Jeanette O.; Gantz, Marie; auten002@mc.duke.edu  
**Subject:** RE: Antenatal Enrollment

To clarify a bit further; these infants are technically eligible for screening in Support but do not receive a Network number because they are not 'live born' infants therefore, can not be entered in the DMS for Support screening.

Thanks and hope this help a little more,  
Kris

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**From:** Zaterka-Baxter, Kristin  
**Sent:** Thursday, June 28, 2007 10:26 AM  
**To:** 'Angelita Hensman'; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; ellen\_hale@oz.ped.emory.edu; nxs5@cwru.edu; Auman, Jeanette O.; Gantz, Marie; auten002@mc.duke.edu  
**Subject:** RE: Antenatal Enrollment

Hi

It means that the patient can be born in window per the A6 question on ANT02 but the pregnancy outcome on the ANT01 could be "Stillborn" (code 5; this would not create an edit) or IUFD (code 4 – this would not cause an edit); These codes have been reported 8 times in the data thus far. Should these cases be excluded?

Thanks,  
Kris

---

**From:** Angelita Hensman [mailto:AHensman@WIHRI.org]  
**Sent:** Thursday, June 28, 2007 10:07 AM  
**To:** Wade Rich; Zaterka-Baxter, Kristin  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; ellen\_hale@oz.ped.emory.edu; nxs5@cwru.edu; Auman, Jeanette O.; Gantz, Marie; auten002@mc.duke.edu  
**Subject:** FW: Antenatal Enrollment

What does it mean in the explanation at the bottom of the table for ^^ "it is possible for a patient to be born in window, but not eligible for screening in SUPPORT?"

If they were *not eligible for "screening" in SUPPORT* and they were screened you do not go beyond

answering question # 1 and 1.b on the ANT 02 form. The delivered in the window question is not applicable and not answered. We have not answered this question at our site on the mom's who were "not eligible for screening" and I have not received a single edit asking for it either since the beginning of the study.

We do not need to know how many moms who were "not eligible eligible for screening" delivered in the window.

We only want the "delivered in the study window" information for "mom's who were **screened and eligible** for SUPPORT" and how many of those moms "**delivered within the study window**".

Angelita

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Thursday, June 28, 2007 8:39 AM  
**To:** Zaterka-Baxter, Kristin; Kathy J Auten; Angelita Hensman; Ellen Hale; Nancy Newman  
**Cc:** Wade Rich; Gantz, Marie; Auman, Jeanette O.; Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer  
**Subject:** RE: Antenatal Enrollment

Hi again,  
Apparently the red did not show up – it's there now and centers 20 and 21 have been removed; please see attached

Thanks,  
Kris

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Wednesday, June 27, 2007 5:15 PM  
**To:** 'Kathy J Auten'; 'Angelita Hensman'; 'Ellen Hale'; 'Nancy Newman'  
**Cc:** 'Wade Rich'; Gantz, Marie; Auman, Jeanette O.; Das, Abhik; 'Higgins, Rosemary (NIH/NICHD) [E]'; 'Neil Finer'  
**Subject:** Antenatal Enrollment

Hi all,  
Per Wades' request, RTI has added a column that includes "number of mothers delivered in the window", based on Ante 02 Q.6 in the monthly report. He indicated that this is a number which is based on data collection from the actual trial, and is hence the most appropriate. Centers who have reached 50 mothers in the window will be informed that they may stop collecting Antenatal Consent data forms. Attached is an up-to-date preview of the actual table with this information (in red) which RTI will send to the sites with the subcommittee approval.

Thanks,  
Kris

**From:** Neil Finer  
**To:** Abbot Laptook; Walsh, Michele; Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** RE: Support study definition of air leak  
**Date:** Tuesday, June 26, 2007 8:24:07 PM

---

Hello Everyone

The many responses that I have received are all supportive of us developing a more detailed approach to the recording of the various kinds of air leak. I had discussed this issue on the last coordinator call and suggested that this may be necessary. This will require looking back to ensure that correctly capture all events of interest. I will place this issue on the agenda for next months meeting.

Be well and thanks for the responses to date.

Neil

---

**From:** Abbot Laptook [mailto:ALaptook@WIHRI.org]  
**Sent:** Tuesday, June 26, 2007 2:49 PM  
**To:** Walsh, Michele; Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** RE: Support study definition of air leak

I have also had this concern. I think we will be asked about other forms of air leaks when the study is complete. AL

---

**From:** Walsh, Michele [mailto:Michele.Walsh@UHhospitals.org]  
**Sent:** Tuesday, June 26, 2007 3:04 PM  
**To:** Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; Abbot Laptook; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** RE: Support study definition of air leak

I also am concerned: we just had a babe on the CPAP arm who had a very large pneumomediastinum- I think this could have been potentially study related due to delayed surfactant. I believe that ptx, pneumomediastinum and PIE should be included. I agree with excluding ptx that is related to thoracic surgery. Michele

---

**From:** Roger Faix [mailto:Roger.Faix@hsc.utah.edu]  
**Sent:** Tuesday, June 26, 2007 11:37 AM  
**To:** Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** RE: Support study definition of air leak

Hi All!

I'm not so certain I agree with this determination. Given the potential lethality, I would suggest also including PIE and pneumopericardium (granted that there is some subjectivity re: PIE) as items to be tracked by the DSMB. I think this bears further discussion.

Roger

---



**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Friday, June 22, 2007 9:46 AM  
**To:** wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; Roger Faix; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** Support study definition of air leak

Hi all,

I'm sending this note (below and bolded) at Roses' request so that the subcommittee can review and discuss the suggested definition of air leak in the Support study manual. Currently, there is no definition; in the GDB, we ask about and define pneumothoraces only (as described below). Please circulate any comments to all members of the subcommittee.

**Pneumothorax definition (page 4-4 of the GDB study manual):**

***"...Pneumothorax is a collection of air in the pleural space where a lucency is identified in the pleural space with displacement of the lung away from the chest wall. Do not include a pneumothorax resulting from a thoracotomy during surgery (e.g. PDA ligation)".***

Thanks,

Kris

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, June 22, 2007 2:57 AM  
**To:** nfiner@ucsd.edu; wcarlo@peds.uab.edu; SCosby@peds.uab.edu; Zaterka-Baxter, Kristin  
**Cc:** wrich@ucsd.edu; nxs5@cwru.edu  
**Subject:** Re: Air Leak - Supp08

Kris - can you send us the definition from the MOP and also circulate to the subcommittee with Neil's comments??

My email is only inermittently working.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Neil Finer <nfiner@ucsd.edu>  
**To:** Wally Carlo, M.D. <WCarlo@peds.uab.edu>; Shirley Cosby <SCosby@peds.uab.edu>; Zaterka-Baxter, Kristin <kzaterka@rti.org>; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Wade Rich <wrich@ucsd.edu>; Nancy Newman <nxs5@cwru.edu>  
**Sent:** Thu Jun 21 01:03:44 2007  
**Subject:** RE: Air Leak - Supp08

**Hi Everyone**

**I believe that we previously agreed to use pneumothoraces for SUPPORT as one of the prospective adverse events that we would follow. The death due to PIE should be reported as such, but this would not be counted as a pneumothorax.**

**Rose, can we circulate this issue to the committee and ask if everyone is OK with just the recording of pneumothoraces?**

Thanks

Neil

The enclosed information is **STRICTLY CONFIDENTIAL** and is intended for the use of the addressee only. University Hospitals and its affiliates disclaim any responsibility for unauthorized disclosure of this information to anyone other than the addressee.

Federal and Ohio law protect patient medical information, including psychiatric\_disorders, (H.I.V) test results, A.I.Ds-related conditions, alcohol, and/or drug\_dependence or abuse disclosed in this email. Federal regulation (42 CFR Part 2) and Ohio Revised Code section 5122.31 and 3701.243 prohibit disclosure of this information without the specific written consent of the person to whom it pertains, or as otherwise permitted by law.

**From:** Neil Finer  
**To:** Roger Faix; Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** RE: Support study definition of air leak  
**Date:** Tuesday, June 26, 2007 12:50:10 PM

---

Hi Roger  
Many would share your view. We would then need to also consider pneumomediastinum.  
I will place on the agenda of the SUPPORT subcommittee  
Thanks  
Neil

---

**From:** Roger Faix [mailto:Roger.Faix@hsc.utah.edu]  
**Sent:** Tuesday, June 26, 2007 8:37 AM  
**To:** Zaterka-Baxter, Kristin; wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** RE: Support study definition of air leak

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**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Friday, June 22, 2007 9:46 AM  
**To:** wcarlo@peds.uab.edu; mcw3@cwru.edu; Bradley Yoder; Roger Faix; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** Support study definition of air leak

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Thanks,

Kris

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, June 22, 2007 2:57 AM  
To: nfiner@ucsd.edu; wcarlo@peds.uab.edu; SCosby@peds.uab.edu; Zaterka-Baxter, Kristin  
Cc: wrich@ucsd.edu; nxs5@cwru.edu  
Subject: Re: Air Leak - Supp08

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My email is only inermittently working.

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Neil Finer <nfiner@ucsd.edu>

To: Wally Carlo, M.D. <WCarlo@peds.uab.edu>; Shirley Cosby  
<SCosby@peds.uab.edu>; Zaterka-Baxter, Kristin <kzaterka@rti.org>;  
Higgins, Rosemary (NIH/NICHD) [E]

Cc: Wade Rich <wrich@ucsd.edu>; Nancy Newman <nxs5@cwru.edu>

Sent: Thu Jun 21 01:03:44 2007

Subject: RE: Air Leak - Supp08

**Hi Everyone**

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Rose, can we circulate this issue to the committee and ask if everyone is OK with just the recording of pneumothoraces?

Thanks

Neil

**From:** [nancy\\_newman](mailto:nancy_newman)  
**To:** "[Wade Rich](mailto:Wade Rich)"; "[Zaterka-Baxter, Kristin](mailto:Zaterka-Baxter, Kristin)"; "[Neil Finer](mailto:Neil Finer)"; [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins, Rosemary (NIH/NICHD) [E])  
**Cc:** "[Kathy J Auten](mailto:Kathy J Auten)"; "[Angelita Hensman](mailto:Angelita Hensman)"; "[Nancy Newman](mailto:Nancy Newman)"; "[Ellen Hale](mailto:Ellen Hale)"; "[Nancy Peters](mailto:Nancy Peters)"; "[Auman, Jeanette O.](mailto:Auman, Jeanette O.)"  
**Subject:** RE: Antenatal Enrollment: NRN Coordinators call this afternoon  
**Date:** Friday, June 22, 2007 12:21:10 PM

---

I think the reasons patients are not enrolled- or not agreeing to participate- - are most likely the same at all centers- it is still how much work and what are the costs to conduct an antenatal consented trial will be. ....NN

---

**From:** Wade Rich [<mailto:wrich@ucsd.edu>]  
**Sent:** Friday, June 22, 2007 11:43 AM  
**To:** nancy\_newman; Zaterka-Baxter, Kristin; Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Kathy J Auten; Angelita Hensman; Nancy Newman; Ellen Hale; Nancy Peters; Auman, Jeanette O.  
**Subject:** RE: Antenatal Enrollment: NRN Coordinators call this afternoon

Nancy,  
We limited enrollment because the trial was not funded and we did not want coordinators to get overwhelmed with paperwork for the entire trial. If we do as you say, the final question, which is ultimately how many mom's need to be approached before you deliver one baby in the trial, will be weighted very heavily toward centers like yourselves and Alabama, with virtually no input from small centers like Stanford or Yale. If every center has the same number of moms who delivered in the window in the analysis, then we can see what the reasons were for their not being enrolled and their relative frequency. If I only cared about the Network, and believed as I do that the current top enrollers will always be a part of that system, then your approach would yield a good answer as to how to run a NETWORK antenatal trial. I was hoping to make this information more universally helpful for trialists who enroll from many different types of centers.

Wade

---

**From:** nancy\_newman [<mailto:nxs5@case.edu>]  
**Sent:** Friday, June 22, 2007 8:24 AM  
**To:** Wade Rich; 'Zaterka-Baxter, Kristin'  
**Cc:** 'Kathy J Auten'; 'Angelita Hensman'; 'Nancy Newman'; 'Ellen Hale'; 'Nancy Peters'; 'Auman, Jeanette O.'  
**Subject:** RE: Antenatal Enrollment: NRN Coordinators call this afternoon

What are you saying?? We will find out what are the reasons for failure of consent because every Mom will not consent But as the study aims are stated- we want to evaluate the screening and consent process in attempt to evaluate the efforts required and how this will impact the cost of conducting a study requiring an antenatal consenting process. Actually, I think we should just continue this screening until the SUPPORT Trial is complete- why not?? Then everyone will contribute as much information as they can in the time frame of the larger picture- the SUPPORT Trial.....NN

---

**From:** Wade Rich [<mailto:wrich@ucsd.edu>]  
**Sent:** Friday, June 22, 2007 11:10 AM  
**To:** nancy\_newman; Zaterka-Baxter, Kristin  
**Cc:** Kathy J Auten; Angelita Hensman; Nancy Newman; Ellen Hale; Nancy Peters; Auman, Jeanette O.  
**Subject:** RE: Antenatal Enrollment: NRN Coordinators call this afternoon

Nancy,  
While this is certainly part of the reason we are doing the trial, we are also trying to determine, as defined in the objectives of the protocol, reasons for failure to consent and reasons for failure to enroll. These data come not from the enrolled babies, but from those

who are not enrolled. If most of the data is from the high enrollers because they are the only ones who could reach our threshold, you will see fairly quickly that the effort numbers diminish substantially. I am not sure that is what we want to portray.  
wade

---

**From:** nancy newman [mailto:nxs5@case.edu]  
**Sent:** Friday, June 22, 2007 7:51 AM  
**To:** 'Zaterka-Baxter, Kristin'; Wade Rich  
**Cc:** 'Kathy J Auten'; 'Angelita Hensman'; 'Nancy Newman'; 'Ellen Hale'; 'Nancy Peters'; 'Auman, Jeanette O.'  
**Subject:** RE: Antenatal Enrollment: NRN Coordinators call this afternoon

Actually, I do not agree. The antenatal study, I believe, was to determine the work involved in using an antenatal consenting plan to enroll patients (unborn) in a trial (SUPPORT) when the actually prospective patient population is unknown- since we do not know how many patients will consent, deliver, etc. Therefore, if we use those patients who did not meet all criteria- ie. Approached, consented and their infant(s) participate in the study we will not be able to compare the work involved in approaching moms to yield the number needed to achieve the number needed in SUPPORT. So I believe we should have everyone complete 50 moms who were approached (obviously), consented and delivered in the window.....NN

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Friday, June 22, 2007 10:01 AM  
**To:** Wade Rich  
**Cc:** Kathy J Auten; Angelita Hensman; Nancy Newman; Ellen Hale; Nancy Peters; Auman, Jeanette O.  
**Subject:** RE: Antenatal Enrollment: NRN Coordinators call this afternoon

Hi,  
You are the Subcommittee Chair, so I just want to be clear, we are negating what Neil decided yesterday during the coordinators call (i.e., 50 Moms approached, consented, delivered within the window, infant enrolled in Support and Ante01 complete) and are now stating that to meet the enrollment goal per center it's 50 Moms approached (not necessarily agreed to consent) and delivered within the window (this the delivery regardless of single or multiples). Enrollment to Support is not a criterion to meet study accrual goals though the ante01 still must be completed on all Moms counted as enrolled.

Re. Monica's comment; Moms approached and deliveries must be related correct (ie., if you have a mom who was approached and did not deliver within the window, then you have a mom who was missed (not approached) and did deliver within the window, the first case would not count as a 'mom approached' and the second case would not count as a 'delivery within the window').

If copied the rest of the subcommittee so we are all on the same page.

Thanks,  
Kris

---

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Friday, June 22, 2007 9:21 AM  
**To:** Zaterka-Baxter, Kristin; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Neil Finer  
**Subject:** RE: Antenatal Enrollment: NRN Coordinators call this afternoon

A note for the coordinators.:

When we originally planned the Antenatal Consent trial, we thought of stopping at 50 moms per

center who were enrolled, consented and delivered in the window. Our concern with this approach was that we might bias the data toward successful centers, as there will be several centers who will not reach this stopping point during the duration of the trial. We felt that using data biased toward high enrollers would answer the question of how best to enroll, but perhaps not adequately portray the problems for sites at the lower end of enrollment. If we leave it at 50 moms who delivered in the window, we will eliminate the "Alabama bias" and provide useful information to trial planners who must deal with every type of center.

Wade

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Thursday, June 21, 2007 9:57 AM  
**To:** Nancy Newman; Nancy.Miller@UTSouthwestern.edu; Bara, Rebecca; crosman@med.wayne.edu; Ellen Hale; Cathy Grisby; Wilson, Leslie Dawn; melissa.leps@utsouthwestern.edu; monica.konstantino@yale.edu; Angelita Hensman; mball@leland.stanford.edu; Monica Collins; Shirley Cosby; Georgia E McDavid; auten002@mc.duke.edu; Mackinnon, Brenda; Johnson, Karen; Karen Osborne RN; Conra Backstrom  
**Cc:** Wade Rich; Auman, Jeanette O.; Cunningham, Meg; Pickett, James; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Antenatal Enrollment: NRN Coordinators call this afternoon

Hi all,

Sorry for the 11<sup>th</sup> hour; please see the attached table with antenatal enrolment based on the Ante02, Q.6. We will discuss this during the coordinators call in about an hour.

Thanks,

Kris

**From:** Zaterka-Baxter, Kristin  
**To:** wcarlo@peds.uab.edu; mcw3@cwru.edu; bradley.yoder@hsc.utah.edu; Roger Faix; alaptook@wihri.org; kurt.schibler@cchmc.org; Nancy Newman; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik; Gantz, Marie; Auman, Jeanette O.  
**Subject:** Support study definition of air leak  
**Date:** Friday, June 22, 2007 11:45:43 AM

---

Hi all,

I'm sending this note (below and bolded) at Roses' request so that the subcommittee can review and discuss the suggested definition of air leak in the Support study manual. Currently, there is no definition; in the GDB, we ask about and define pneumothoaces only (as described below). Please circulate any comments to all members of the subcommittee.

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Thanks,

Kris

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, June 22, 2007 2:57 AM  
To: nfiner@ucsd.edu; wcarlo@peds.uab.edu; SCosby@peds.uab.edu; Zaterka-Baxter, Kristin  
Cc: wrich@ucsd.edu; nxs5@cwru.edu  
Subject: Re: Air Leak - Supp08

Kris - can you send us the definition from the MOP and also circulate to the subcommittee with Neil's comments??

My email is only inermittently working.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Neil Finer <nfiner@ucsd.edu>  
To: Wally Carlo, M.D. <WCarlo@peds.uab.edu>; Shirley Cosby <SCosby@peds.uab.edu>; Zaterka-Baxter, Kristin <kzaterka@rti.org>; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Wade Rich <wrich@ucsd.edu>; Nancy Newman <nxs5@cwru.edu>  
Sent: Thu Jun 21 01:03:44 2007  
Subject: RE: Air Leak - Supp08

**Hi Everyone**

**I believe that we previously agreed to use pneumothoraces for SUPPORT as one of the prospective adverse events that we would follow. The death due to PIE should be reported as such, but this would not be counted as a pneumothorax.**

**Rose, can we circulate this issue to the committee and ask if everyone is OK with just the recording of pneumothoraces?**

Thanks

Neil



**From:** Zaterka-Baxter, Kristin  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT Pulse Oximeter  
**Date:** Friday, June 22, 2007 11:23:15 AM

---

HI, I talked to Nancy, they have 3 consented, one will go out of the window on Sunday; they have 4 blues and 4 oranges. Nancy said she was concerned about coverage over the weekend but thins it will be ok for now. She will call on Monday if she does need more.

Thanks,

Kris

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, June 22, 2007 3:29 AM  
**To:** Zaterka-Baxter, Kristin  
**Subject:** Fw: SUPPORT Pulse Oximeter

Can you help???

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Nancy Miller <Nancy.Miller@UTSouthwestern.edu>  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Thu Jun 21 18:01:40 2007  
**Subject:** Re: SUPPORT Pulse Oximeter

Rose,

Sorry to get hold of you so late but I just consented another Mom. I need a blue and orange pulse ox.

Thanks,

Nancy

P.S. I won't be able to answer any e-mails because I have to leave the office as soon as I send this. My address is on the Network website.

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206-(b) (6)

**From:** Zaterka-Baxter, Kristin  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Air Leak - Supp08  
**Date:** Friday, June 22, 2007 8:58:10 AM

---

Hi Rose,  
Hi, just wanted to clarify a bit before I sent it out; there isn't a definition in the Support MOP for air leak, the definition in GDB is only for pneumothorax; is this the definition I should send around with the comments below,  
Thanks,

Kris

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, June 22, 2007 2:57 AM  
To: nfiner@ucsd.edu; wcarlo@peds.uab.edu; SCosby@peds.uab.edu; Zaterka-Baxter, Kristin  
Cc: wrich@ucsd.edu; nxs5@cwru.edu  
Subject: Re: Air Leak - Supp08

Kris - can you send us the definition from the MOP and also circulate to the subcommittee with Neil's comments??

My email is only inermittently working.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Neil Finer <nfiner@ucsd.edu>  
To: Wally Carlo, M.D. <WCarlo@peds.uab.edu>; Shirley Cosby <SCosby@peds.uab.edu>; Zaterka-Baxter, Kristin <kzaterka@rti.org>; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Wade Rich <wrich@ucsd.edu>; Nancy Newman <nxs5@cwru.edu>  
Sent: Thu Jun 21 01:03:44 2007  
Subject: RE: Air Leak - Supp08

Hi Everyone

I believe that we previously agreed to use pneumothoraces for SUPPORT as one of the prospective adverse events that we would follow. The death due to PIE should be reported as such, but this would not be counted as a pneumothorax.

Rose, can we circulate this issue to the committee and ask if everyone is OK with just the recording of pneumothoraces?

Thanks

Neil

---

From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
Sent: Wednesday, June 20, 2007 1:00 PM  
To: Shirley Cosby; Zaterka-Baxter, Kristin  
Cc: Wade Rich; Nancy Newman; Neil Finer  
Subject: RE: Air Leak - Supp08

Shirley clarified that the GDB question is different. We should address this with the committee to make a decision.

wally

Wally Carlo, M.D.

Edwin M. Dixon Professor of Pediatrics

University of Alabama at Birmingham

Director, Division of Neonatology

Director, Newborn Nurseries

619 South 20th Street

525 New Hillman Building

Birmingham, AL 35233-7335

Phone: 205 934 4680

FAX: 205 934 3100

Cell: 205 266 (b) (6)

---

From: Shirley Cosby  
Sent: Wednesday, June 20, 2007 2:55 PM  
To: 'Zaterka-Baxter, Kristin'; Wally Carlo, M.D.  
Cc: Wade Rich; Nancy Newman; Neil Finer  
Subject: RE: Air Leak - Supp08

The GDB form is only interested in pneumothorax. The main reason we were interested in the definition of air leak for SUPPORT is because we have a death due to PIE and felt that it would be an important bit of information for the study, but without having the definition in the MOP

we weren't sure what to do.

Shirley

---

From: Zaterka-Baxter, Kristin [<mailto:kzaterka@rti.org>]  
Sent: Wednesday, June 20, 2007 2:32 PM  
To: Wally Carlo, M.D.  
Cc: Wade Rich; Shirley Cosby; Nancy Newman; Neil Finer  
Subject: FW: Air Leak - Supp08

Hi Dr. Carlo,

The definition below is not from the GDB; there is no definition of airleak in either Support or GDB. The definition below came from the Merck manual. Please let me know if we should clarify this definition in a memo to the sites.

Thanks,

Kris

Kris Zaterka-Baxter

RTI International

4426 South Miami Blvd.

Durham, NC 27703

Telephone: (919) 485-7750

Fax: (919) 485-7762

[kzaterka@rti.org](mailto:kzaterka@rti.org)

---

From: Wade Rich [<mailto:wrich@ucsd.edu>]  
Sent: Wednesday, June 20, 2007 2:32 PM  
To: Zaterka-Baxter, Kristin  
Subject: FW: Air Leak - Supp08

Use the GDB definition.

wade

---

From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
Sent: Wednesday, June 20, 2007 11:25 AM  
To: Wade Rich  
Subject: RE: Air Leak - Supp08

Sorry. Use the GDB definition which is what Kris used.

wally

Wally Carlo, M.D.

Edwin M. Dixon Professor of Pediatrics

University of Alabama at Birmingham

Director, Division of Neonatology

Director, Newborn Nurseries

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525 New Hillman Building

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Phone: 205 934 4680

FAX: 205 934 3100

Cell: 205 266 (b) (6)

---

From: Wade Rich [mailto:wrich@ucsd.edu]  
Sent: Wednesday, June 20, 2007 12:34 PM  
To: Wally Carlo, M.D.  
Subject: RE: Air Leak - Supp08

There was not definition. Do you mean we decided to use the full scope definition Kris lists below?

wade

---

From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]

Sent: Wednesday, June 20, 2007 10:28 AM  
To: Wade Rich  
Subject: RE: Air Leak - Supp08

HI Wade:

I think we discussed exactly what you say but decided not to change the definition of air leaks.

wally

Wally Carlo, M.D.

Edwin M. Dixon Professor of Pediatrics

University of Alabama at Birmingham

Director, Division of Neonatology

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---

From: Wade Rich [mailto:wrich@ucsd.edu]  
Sent: Wednesday, June 20, 2007 11:58 AM  
To: Wally Carlo, M.D.  
Subject: FW: Air Leak - Supp08

Hi Wally,

Neil is away. Didn't we discuss this and decide we were not going to report PIE, but only pneumothoraces for this form?

wade

---

From: Zaterka-Baxter, Kristin [<mailto:kzaterka@rti.org>]  
Sent: Thursday, June 14, 2007 9:32 AM  
To: Wade Rich  
Subject: Air Leak - Supp08

When reporting 'Air Leak' on the Supp08, would this always be considered pneumothorax or does it also take into account pulmonary interstitial emphysema, pneumomediastinum, pneumopericardium, pneumoperitoneum, and subcutaneous emphysema (i.e., air leak syndromes) as far as reporting status on the NG03?

Thanks,

Kris

0190000.01

**From:** nancy newman  
**To:** "Neil Finer"; "Wally Carlo, M.D."; "Shirley Cosby"; "Zaterka-Baxter, Kristin"; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** "Wade Rich"; "Nancy Newman"  
**Subject:** RE: Air Leak - Supp08  
**Date:** Thursday, June 21, 2007 8:50:36 AM

---

Hi everyone- I think that we need to clarify the definition of air leak for SUPPORT- because there may already have been other types of air leaks reported- not just pneumothorax, as we say to record air leak as a category and not specifically pneumothorax. BUT wouldn't PIE or pneumomediastinum be important also if it occurred in the first 14 days? I agree- the GDB definition only deals with pneumothorax.....NN

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Thursday, June 21, 2007 1:04 AM  
**To:** Wally Carlo, M.D.; Shirley Cosby; Zaterka-Baxter, Kristin; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Wade Rich; Nancy Newman  
**Subject:** RE: Air Leak - Supp08

Hi Everyone

I believe that we previously agreed to use pneumothoraces for SUPPORT as one of the prospective adverse events that we would follow. The death due to PIE should be reported as such, but this would not be counted as a pneumothorax.

Rose, can we circulate this issue to the committee and ask if everyone is OK with just the recording of pneumothoraces?

Thanks

Neil

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Wednesday, June 20, 2007 1:00 PM  
**To:** Shirley Cosby; Zaterka-Baxter, Kristin  
**Cc:** Wade Rich; Nancy Newman; Neil Finer  
**Subject:** RE: Air Leak - Supp08

Shirley clarified that the GDB question is different. We should address this with the committee to make a decision.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
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619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

---

**From:** Shirley Cosby  
**Sent:** Wednesday, June 20, 2007 2:55 PM  
**To:** 'Zaterka-Baxter, Kristin'; Wally Carlo, M.D.  
**Cc:** Wade Rich; Nancy Newman; Neil Finer  
**Subject:** RE: Air Leak - Supp08



The GDB form is only interested in pneumothorax. The main reason we were interested in the definition of air leak for SUPPORT is because we have a death due to PIE and felt that it would be an important bit of information for the study, but without having the definition in the MOP we weren't sure what to do.  
Shirley

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Wednesday, June 20, 2007 2:32 PM  
**To:** Wally Carlo, M.D.  
**Cc:** Wade Rich; Shirley Cosby; Nancy Newman; Neil Finer  
**Subject:** FW: Air Leak - Supp08

Hi Dr. Carlo,  
The definition below is not from the GDB; there is no definition of airleak in either Support or GDB. The definition below came from the Merck manual. Please let me know if we should clarify this definition in a memo to the sites.

Thanks,  
Kris

Kris Zaterka-Baxter  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Wednesday, June 20, 2007 2:32 PM  
**To:** Zaterka-Baxter, Kristin  
**Subject:** FW: Air Leak - Supp08

Use the GDB definition.  
wade

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@ped.s.uab.edu]  
**Sent:** Wednesday, June 20, 2007 11:25 AM  
**To:** Wade Rich  
**Subject:** RE: Air Leak - Supp08

Sorry. Use the GDB definition which is what Kris used.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
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525 New Hillman Building  
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Cell: 205 266 (b) (6)

---

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Wednesday, June 20, 2007 12:34 PM  
**To:** Wally Carlo, M.D.  
**Subject:** RE: Air Leak - Supp08

There was not definition. Do you mean we decided to use the full scope definition Kris lists below?  
wade

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Wednesday, June 20, 2007 10:28 AM  
**To:** Wade Rich  
**Subject:** RE: Air Leak - Supp08

Hi Wade:

I think we discussed exactly what you say but decided not to change the definition of air leaks.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
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525 New Hillman Building  
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---

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Wednesday, June 20, 2007 11:58 AM  
**To:** Wally Carlo, M.D.  
**Subject:** FW: Air Leak - Supp08

Hi Wally,

Neil is away. Didn't we discuss this and decide we were not going to report PIE, but only pneumothoraces for this form?

wade

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Thursday, June 14, 2007 9:32 AM  
**To:** Wade Rich  
**Subject:** Air Leak - Supp08

When reporting 'Air Leak' on the Supp08, would this always be considered pneumothorax or does it also take into account pulmonary interstitial emphysema, pneumomediastinum, pneumopericardium, pneumoperitoneum, and subcutaneous emphysema (i.e., air leak syndromes) as far as reporting status on the NG03?

Thanks,  
Kris

**From:** Wade Rich  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin  
**Subject:** RE: SAE 22-1  
**Date:** Tuesday, June 19, 2007 5:45:12 PM

---

Not study related. (b) (6) wkr who was weaning successfully to cpap who had bilateral grade 4 hemorrhages. They decided to withdraw support on DOL 3. On the Early Surf. Arm. "Unlikely" related to trial.  
wade

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, June 18, 2007 10:53 PM  
To: Wade Rich; kzaterka@rti.org  
Subject: Re: SAE 22-1

Wade or Kris

I can't open the pdf. Is this considered study related? Can you send me a line or two on the baby?

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Wade Rich <wrich@ucsd.edu>  
To: Zaterka-Baxter, Kristin <kzaterka@rti.org>; Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Mon Jun 18 17:41:36 2007  
Subject: SAE 22-1

Wade Rich, BSHS,RRT,CCRC  
Clinical Research Coordinator  
Division of Neonatology  
UCSD Medical Center  
200 W Arbor Dr  
San Diego, CA 92103-8774  
619-543-5375  
pgr 290 (b) (6)

**From:** Neil Finer  
**To:** Zaterka-Baxter, Kristin; Wade Rich  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Support SAE reporting  
**Date:** Tuesday, June 19, 2007 4:02:52 PM

---

Hi Kris

This death was secondary to withdrawal of care secondary to bilateral intraparenchymal hemorrhages. The mom had severe choriomanionitis, anhydramnious and the infant was managed after birth with intubation and surf for resuscitation and was a Control infant. The respiratory distress was manageable, there was little hypotension and the infant had an acidosis from birth that only very slowly resolved. I believe that the intracranial pathology was secondary to probable intrauterine hypoxia-ischemia.  
Neil Finer

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Tuesday, June 19, 2007 9:57 AM  
**To:** Wade Rich; Neil Finer  
**Subject:** RE: Support SAE reporting

Thanks,

Please let me know if, and/or how you would like this memo stated. The current MOP (section 13-4) states: report death or unexpected SAE. Do we want to leave it at that or do you want to add attribution?

Thanks,  
Kris

---

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Tuesday, June 19, 2007 12:23 PM  
**To:** Zaterka-Baxter, Kristin; Neil Finer  
**Subject:** RE: Support SAE reporting

I believe we should be reporting death no matter the relationship.  
Wade

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Tuesday, June 19, 2007 9:06 AM  
**To:** Neil Finer; Wade Rich  
**Subject:** Support SAE reporting

Hi all,

After the SMC in April, we discussed reporting SAEs for the Support trial and sending out a clarification memo; would the clarification be to report an SAE on the Supp08A (Medwatch form) only if the event meets all the following criteria:

Serious (as defined on the Medwatch – attached, or can be found at [http://www.fda.gov/medwatch/safety/FDA3500\\_fillable\\_2-21-2006.pdf](http://www.fda.gov/medwatch/safety/FDA3500_fillable_2-21-2006.pdf))  
Unexpected (in this patient population)  
At least possibly related to study

Thanks,  
Kris

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]

**Sent:** Monday, April 02, 2007 6:55 AM  
**To:** Neil Finer; Wade Rich  
**Cc:** Gantz, Marie; Das, Abhik; Higgins, Rosemary  
**Subject:** FW: QEstions for FDA

The Support manual discusses adverse events that may be anticipated in this population and as such these events should be recorded on the Supp08 form if occurring within the first 14 days. The manual also states in the same section:

*"The SUPPO8A (Medwatch Form) should be completed in the event of a serious adverse event. It should be faxed to RTI (919) 485-7762 and Rosemary Higgins (301) 496-3790 within 24 hours or the next working day."*

The manual does not clarify whether these serious adverse events should meet any criteria in order to be reported on the MedWatch (i.e. all of the following: serious, at least possibly related and unexpected, or if occurring in a certain timeframe on study)". It appears the centers interpret the current manual differently. When monitoring Case and UAB, we found they do not report serious adverse events that are anticipated per the manual, or anticipated in general in this population (i.e. NEC), even if occurring within DOL 14 via the MedWatch form (unless a death occurs); however, some centers do report serious adverse events that are anticipated and occur within DOL 14 on the Medwatch form; RTI has received several Medwatch forms reporting several of the events listed on the Supp08. Would a technical memo clarifying when to report an SAE on the Medwatch form be helpful?

Thanks,  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

-----Original Message-----

From: Neil Finer [mailto:nfiner@ucsd.edu]  
Sent: Saturday, March 31, 2007 11:11 PM  
To: Sood, Beena; Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich; Zaterka-Baxter, Kristin  
Cc: Shankaran, Seetha  
Subject: RE: QEstions for FDA

I agree  
Neil

-----Original Message-----

From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Saturday, March 31, 2007 7:16 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Wade Rich;  
kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: RE: QEstions for FDA

In that case we will just fill the SUPP08 form and not fax a MedWatch form (SUPP08A)

Thanks

Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Sat 3/31/2007 8:45 PM

To: nfiner@ucsd.edu; wrich@ucsd.edu; Sood, Beena; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: Re: QUEStions for FDA

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----  
From: Neil Finer <nfiner@ucsd.edu>  
To: Wade Rich <wrich@ucsd.edu>; Higgins, Rosemary (NIH/NICHD) [E];  
bsood@med.wayne.edu <bsood@med.wayne.edu>; kzaterka@rti.org  
<kzaterka@rti.org>  
Cc: sshankar@med.wayne.edu <sshankar@med.wayne.edu>  
Sent: Sat Mar 31 20:03:07 2007  
Subject: RE: QUEStions for FDA

Hi Rose and Wade  
Thanks for clarifying Wade. Rose my question is indeed the need to file  
a Medwatch form.  
Neil

-----Original Message-----  
From: Wade Rich  
Sent: Saturday, March 31, 2007 3:20 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; bsood@med.wayne.edu;  
kzaterka@rti.org  
Cc: sshankar@med.wayne.edu  
Subject: RE: QUEStions for FDA

Rose,  
Centers I have visited are including IVH (GR III and IV only) on the  
SUPP 08, but not writing a Medwatch for them.  
Wade

-----Original Message-----  
From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Saturday, March 31, 2007 11:19 AM  
To: Neil Finer; bsood@med.wayne.edu; Wade Rich; kzaterka@rti.org  
Cc: sshankar@med.wayne.edu  
Subject: Re: QUEStions for FDA

We are tracking all ivh in the first 14 days of the study.  
Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----  
From: Neil Finer <nfiner@ucsd.edu>  
To: Sood, Beena <bsood@med.wayne.edu>; Higgins, Rosemary (NIH/NICHD)  
[E]; Wade Rich <wrich@ucsd.edu>; kzaterka@rti.org <kzaterka@rti.org>  
Cc: Shankaran, Seetha <sshankar@med.wayne.edu>  
Sent: Sat Mar 31 14:09:12 2007  
Subject: RE: QUEStions for FDA

Hi Beena and Rose  
Sorry for the delay - I have been on service till today  
I agree with the approach taken for study documentation. I am not sure  
why a Medwatch is being filed if this is an event that is known to occur  
in such infants and the investigator does not believe that it is study  
related

-----Original Message-----  
From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Saturday, March 31, 2007 4:19 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich; Neil Finer;  
kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: RE: QUEStions for FDA

For now, I think I will not report to WSU IRB because truly I do not think this is related to the study and the data that you refer to seems to show lower incidence in enrolled infants. Will discuss further with Dr Shankaran

Thanks for the prompt response

Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Sat 3/31/2007 7:15 AM  
To: Sood, Beena; wrich@ucsd.edu; nfiner@ucsd.edu; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: Re: QUESions for FDA

This is one of the adverse events for the study and should be reported to us - do you think that the IVH is related to the study? Also, the AE's should go to the IRB per local rules. If this ivh is unrelated to the study, it is usually not an issue. We also provided sites with "ranges of rates" of complications followed in the first 14 days. As of the last steering committee meeting, our rates were lower than those of the match GDB population from the sites from 2002-2004. Let us know if you need more info. Thanks, and it sounds like your site is doing well recruiting base on the number of questions!  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Sood, Beena <bsood@med.wayne.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich <wrich@ucsd.edu>; Neil Finer <nfiner@ucsd.edu>; Kristin Zaterka-Baxter (E-mail) <kzaterka@rti.org>  
Cc: Shankaran, Seetha <sshankar@med.wayne.edu>; Sood, Beena <bsood@med.wayne.edu>  
Sent: Sat Mar 31 07:08:22 2007  
Subject: RE: QUESions for FDA

I have another question re SUPPORT - a baby currently enrolled in the study came off the study pulse oximeter (b) (6) because the baby was in RA for 72 hours, 1 days later on day 10 of life a HUS showed B/L Grade III IVH (done on 3/26/07). I became aware of this yesterday evening. I have reviewed the HUS myself and agree with the official report. We are going to be keying in this data and faxing a MEDWATCH form first thing Monday morning.

The question is - is this something I am expected to report to the WSU IRB as an adverse event? Logically, if this is being reported to the NICHD as a potential AE, then it should be reported to the WSU IRB. However, after going through the WSU AE form, there is latitude in reporting but if reported then the questions of whether this AE was stated in the consent form and if not whether changes are going to be made in the consent form are raised.

Please advise

Thanks  
Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Fri 3/30/2007 10:41 AM  
To: Wade Rich; Neil Finer; Kristin Zaterka-Baxter (E-mail)  
Cc: Sood, Beena; Shankaran, Seetha  
Subject: FW: QUESions for FDA

Hi,  
See not from Beena - the baby had a PDA ligation and was off the oximeter for the duration of the procedure - should she just document that the kid was off it?  
Thanks  
Rose

-----Original Message-----  
From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Friday, March 30, 2007 10:38 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Shankaran, Seetha  
Subject: RE: QUEStions for FDA

Thanks for the update - will await their decision.

Quick SUPPORT question - one of the SUPPORT babies had to go for PDA ligation - was off the masimo pulseox in th OR. Is there a specific procedure to record this, report this or prevent this? The OR nurse did nor comply with our requests.

Thanks  
Beena

-----Original Message-----  
From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, March 30, 2007 10:27 AM  
To: Sood, Beena  
Cc: Shankaran, Seetha  
Subject: RE: QUEStions for FDA

Beena  
For the PDA response to the FDA, I said that the steering committee would consider post-treatment (IPGE) evaluation if the IND is approved. The NRN protocol did not address PDA, so I left it as such. The re-application was sent yesterday and I will let you know once I get a decision from them.

Thanks for all the hard work and effort!  
Rose

-----Original Message-----  
From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Wednesday, March 28, 2007 11:07 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE: QUEStions for FDA

I am not in my office but I can call you if this is a good time for you. I am available to discuss these - as you know Dr Shankaran is out of the office.  
Thanks  
Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wed 3/28/2007 11:04 AM  
To: Sood, Beena  
Cc: Shankaran, Seetha  
Subject: QUEStions for FDA

Beena

I have a few questions for the IND clinical hold submission as well as the protocol.



Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Neil Finer](#)  
**To:** [Phelps, Dale](#); [Cunningham, Meg](#)  
**Cc:** [Zaterka-Baxter, Kristin](#); [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Subject:** RE: Question from Coordinators  
**Date:** Monday, June 18, 2007 5:02:36 PM  
**Attachments:** [Age at final ROP status.doc](#)

---

Hi Dale

There is/was no one year follow up and your memory is correct. We should have the eye evaluation at status or last eye exam. We did look at the latest age that the infants who had ROP were diagnosed, and I have attached Marie's findings for you.

Thanks for staying tuned.

Be well

Neil

---

**From:** Phelps, Dale [mailto:[Dale\\_Phelps@URMC.Rochester.edu](mailto:Dale_Phelps@URMC.Rochester.edu)]  
**Sent:** Monday, June 18, 2007 9:44 AM  
**To:** Cunningham, Meg  
**Cc:** Zaterka-Baxter, Kristin; Neil Finer; Rosemary Higgins  
**Subject:** RE: Question from Coordinators

Hi Meg,

I am not on the SUPPORT subcommittee, so I have not heard about a one year outcome for ROP. To my knowledge, there is no form for this.

I'm wondering if the 'idea' came from a discussion that I have seen parts of. Someone asked when the eyes actually reach "final status." I think RTI produced some tables that showed postmenstrual ages of 52 weeks for some kids. Perhaps that '52 weeks' got translated into 'one year'. It is actually only 12 weeks after due date and therefore is closer to 3 months corrected age (maybe as long as 6 months chronologic age).

There is also the possibility that my (b) (6) brain fog is not remembering something I do know about. (b) (6)

I will copy Neil Finer to see if he can clarify for me.

Dale

---

**From:** Cunningham, Meg [mailto:[mcunningham@rti.org](mailto:mcunningham@rti.org)]  
**Sent:** Monday, June 18, 2007 10:53 AM  
**To:** Phelps, Dale  
**Subject:** Question from Coordinators

Hi Dr. Phelps

The coordinators sent around some questions that they would like answered on the call this Thursday.

This one I think applies to you:

2. SUPPORT study ROP outcomes:- The subcommittee was considering having an endpoint at one year for following up ROP outcomes - where do they stand on this? Could we get some follow up?

Just wanted to give you the heads up on this, and I will send around an agenda later today for the call and will make sure you are last on the call.

Thanks

**Meg**

### **Age (PMA or post-birth age) at which ROP status is reached for SUPPORT participants 5-30-07**

The table below displays selected percentiles for the age (PMA or post-birth) at which ROP status has been reached by SUPPORT infants. Age is calculated on the date of the eye exam that determined the infant's final ROP status, favorable or unfavorable. The information presented here does not take into account any additional time it takes for the centers to obtain eye exam results and enter them into the data management system.

Half of all cases to date in which the infant has ROP were identified by exams that took place by 36 weeks PMA. 95% of the ROP cases were identified by 44 weeks PMA, and all cases with ROP were identified by 53 weeks PMA. There were two cases in which the exam identifying ROP took place after 50 weeks PMA. Neither of those exams identified new threshold ROP. The latest an infant has been diagnosed with threshold ROP is 44 weeks PMA.

For infants without ROP, 50% have reached final ROP status by 40 weeks PMA or approximately 3 months post-birth. 95% of non-ROP cases have reached final status by 8 months of age. To date, the oldest an infant has been when favorable status was obtained is just over 16 months.

	PMA (weeks)			Age post-birth (months)		
	50%	95%	100%	50%	95%	100%
ROP=Y	36	44	53	2.5	4.1	6.4
ROP=N	40	91	98	3.1	8.0	16.3
All infants	39	59	98	3.0	7.6	16.3

**50<sup>th</sup>, 95<sup>th</sup> and 100<sup>th</sup> Percentiles for age at which final ROP status was reached**

**From:** Shirley Cosby  
**To:** Zaterka-Baxter, Kristin  
**Cc:** Mackinnon, Brenda; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Orange Oximeters Needed to tufts  
**Date:** Monday, June 18, 2007 3:28:50 PM

---

2 oranges on the way! UPS tracking number is 4684 874 170 8. The serial numbers on the PO's are 317227 and 312192  
Shirley

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Monday, June 18, 2007 1:48 PM  
**To:** Shirley Cosby  
**Cc:** Mackinnon, Brenda; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: Orange Oximeters Needed to tufts

Thanks Shirley! Brenda's correct address is below. Two orange oximeters please!

Kris

-----Original Message-----

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Monday, June 18, 2007 1:50 PM  
**To:** Mackinnon, Brenda  
**Cc:** wrich@ucsd.edu; auten002@mc.duke.edu  
**Subject:** RE: Orange Oximeters Needed

Hi,

I've contacted Kathy at Duke who can send you **two** orange oximeters and I'm still looking for 1 or 2 more. Please confirm your shipping address below (**for fed-ex delivery**);

**Division of Newborn Medicine**  
**The Floating Hospital for Children**  
**750 Washington Street, Tufts-NEMC #44**  
**Boston, MA 02111**  
**617-636-1218**  
**[bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org)**

For the oximeter; I'm copying Wade Rich from UCSD who might be able to help and if further assistance is needed from Masimo, I've included their contacts (Tech Support team at [tech@masimo.com](mailto:tech@masimo.com) or you can call them at 800.326.4890 option 2). I'll also post the RMA form and these contacts under the 'FAQ' link in the Support study on the private gateway of the web shortly.

Thanks much!

Thanks,  
Kris

---

**From:** Mackinnon, Brenda [mailto:BMackinnon@tufts-nemc.org]  
**Sent:** Monday, June 18, 2007 1:18 PM  
**To:** Zaterka-Baxter, Kristin  
**Subject:** RE: Orange Oximeters Needed

I left you a message I think 3 or 4 would be enough as I have 3 undelivered and don't know if they will deliver or how they will randomize and then I will have 2 back ups. How do I get the ability to read compliance into the one that doesn't?

Thanks,  
B

-----Original Message-----

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Monday, June 18, 2007 12:18 PM  
**To:** Mackinnon, Brenda  
**Subject:** RE: Orange Oximeters Needed

Hi Brenda, I'll get them for you – so you need at least 6 orange oximeters?  
Thanks,

Kris

---

**From:** Mackinnon, Brenda [mailto:BMackinnon@tufts-nemc.org]  
**Sent:** Monday, June 18, 2007 11:57 AM  
**To:** Zaterka-Baxter, Kristin  
**Subject:** Orange Oximeters Needed  
**Importance:** High

Hi Kris,

We have just enrolled a (b) (6) into SUPPORT and I am down to 2 orange oximeters one of which we can't read compliance on. I have 2 Moms (3 babies) with consents signed and will need some orange oximeters. Do you make the request to the coordinators or do I?

Let me know,  
Thanks,  
Brenda



**From:** Gantz, Marie  
**To:** Dale\_Phelps@URMC.Rochester.edu  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Auman, Jeanette O.; Elen.Hale@oz.ped.emory.edu  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Friday, June 15, 2007 12:14:24 PM

---

Hi Dale,

I was wondering if you have had the chance to review the two missing ROP cases from Emory (below). I will be running the missing ROP report again next week (Wednesday), so any clarification you could give us before then would be very helpful.

Thanks,  
Marie

**Marie Gantz, Ph.D.**  
Research Statistician  
RTI International  
mgantz@rti.org  
334-851-4252

---

**From:** Gantz, Marie  
**Sent:** Tuesday, June 05, 2007 2:54 PM  
**To:** 'Dale\_Phelps@URMC.Rochester.edu'  
**Cc:** 'Higgins, Rosemary (NIH/NICHD) [E]'; Auman, Jeanette O.; 'Elen.Hale@oz.ped.emory.edu'  
**Subject:** RE: SUPPORT ROP OUTCOMES

---

Hi Dale,

When you return, would you please review the two cases of missing ROP data at Emory that are awaiting your input (see below)?

Thanks,  
Marie

**Marie Gantz, Ph.D.**  
Research Statistician  
RTI International  
mgantz@rti.org  
334-851-4252

---

**From:** Gantz, Marie  
**Sent:** Wednesday, May 16, 2007 1:05 PM  
**To:** 'Elen.Hale@oz.ped.emory.edu'; 'Dale\_Phelps@URMC.Rochester.edu'  
**Cc:** 'Higgins, Rosemary (NIH/NICHD) [E]'; Auman, Jeanette O.  
**Subject:** RE: SUPPORT ROP OUTCOMES

---

Hi Ellen,

Dale Phelps is in charge of "excusing" infants who do not have an outcome for ROP. I am including her on this email so that she can determine what should be done in the two cases described below.

Marie

**Marie Gantz, Ph.D.**  
Research Statistician  
RTI International  
mgantz@rti.org  
334-851-4252

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higgins@mail.nih.gov]  
**Sent:** Wednesday, May 16, 2007 12:00 PM  
**To:** Gantz, Marie; Auman, Jeanette O.  
**Subject:** FW: SUPPORT ROP OUTCOMES

---

Can you guys help with this?  
Thanks

Rose

---

**From:** Elen Hale [mailto:Elen.Hale@oz.ped.emory.edu]  
**Sent:** Wednesday, May 16, 2007 11:27 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Fwd: SUPPORT ROP OUTCOMES

---

Rose,

(b) (6) This is the child who the mom said she took the child for the eye exam and they would fax the report to us. We have never received the report. We saw the child at the 18 month f-u visit and the child's vision appeared to be normal. What to do?

(b) (6) This is the child that we scanned the last eye exam and sent to you to discuss with Dale.

Let me know what to do.

Thanks,  
Ellen

Center Network ROP error message

9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Hi,

We are missing the above two children's ROP outcomes. THANKS FOR GETTING ALL OF THE OTHER CHILDREN'S OUTCOMES!!!

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)



**From:** Julie Rohr  
**Subject:** Oximeters being sent back to Duke  
**Date:** Wednesday, June 13, 2007 3:53:54 PM

---

Kathy,

I want to thank you for sending us the two oximeters so we had enough when (b) (6) were born.

We are sending you back the two oximeters you sent us.

They are being sent via DHL today. They were sent second day so they should get there on Friday.

The serial numbers are:

Blue #316506

Orange #316382

We really appreciate your help!

Julie

Julie Rohr MSN RNC  
Nurse/Clinical Trials Coordinator  
Department of Pediatrics  
UNM Hospital  
2211 Lomas Blvd NE  
Albuquerque, NM 87106  
(505) 272-0363

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik  
**Subject:** RE: SUPPORT FU  
**Date:** Monday, June 11, 2007 2:29:36 PM

---

As of last week, we had 673 infants enrolled in SUPPORT.

I will need to know how we will define NDI using the Bayley III. Do we have a definitive answer to that question yet?

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, June 11, 2007 2:26 PM  
To: Gantz, Marie  
Cc: Das, Abhik  
Subject: Re: SUPPORT FU

Let me know if you have any questions about "needed data fields" for the outcomes.

Alos, how many dod we have enrolled in SUPPORT after last week's data dump?

Thanks

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Gantz, Marie <mgantz@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Das, Abhik <adas@rti.org>  
Sent: Mon Jun 11 14:24:24 2007  
Subject: RE: SUPPORT FU

I will do that.

Thanks,  
Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]

Sent: Monday, June 11, 2007 2:24 PM  
To: Gantz, Marie  
Subject: Re: SUPPORT FU

For FU, list the children with closed windows and those who have been seen, but who are missing data for NDI determination.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Gantz, Marie <mgantz@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik <adas@rti.org>  
Sent: Mon Jun 11 14:20:18 2007  
Subject: RE: SUPPORT FU

OK, I will do that. For BPD, I will generate a list of infants who have reached 36 weeks PMA but do not have the BPD outcome. For FU, how much of a "grace period" should we allow? Should I generate the report for all infants who have entered the FU window but who do not yet have FU data?

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Monday, June 11, 2007 2:18 PM  
To: Gantz, Marie; Das, Abhik  
Subject: Re: SUPPORT FU

Send me the individual patients with center number and missing info and I will start beating the bushes to get the data.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Gantz, Marie <mgantz@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik <adas@rti.org>  
Sent: Mon Jun 11 14:15:49 2007  
Subject: RE: SUPPORT FU

I am scheduled to run the missing ROP report next week, so I will plan to add the other missing outcomes as well. Do you want to see the number of infants with missing outcomes, or the infant IDs as in the ROP report?

Thanks,  
Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, June 11, 2007 2:10 PM  
To: Gantz, Marie; Das, Abhik  
Subject: Re: SUPPORT FU

If they have been "excused" they should not be on the list. But otherwise, yes

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Gantz, Marie <mgantz@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik <adas@rti.org>  
Sent: Mon Jun 11 14:08:10 2007  
Subject: RE: SUPPORT FU

I can start to run a report on missing outcomes at the same time that I generate the monthly list of infants with missing ROP. Do we want to look at how many infants have permanently missing outcomes, how many are missing outcomes that may still be collected (as in the current missing ROP report), or both?

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, June 11, 2007 2:03 PM  
To: Das, Abhik  
Cc: Gantz, Marie  
Subject: Re: SUPPORT FU

Both primary outcomes (already doing ROP) and FU at 18-22 months (very impt secondary outcome).

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Das, Abhik <adas@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Gantz, Marie <mgantz@rti.org>  
Sent: Mon Jun 11 14:01:04 2007  
Subject: RE: SUPPORT FU

Rose:

Are you talking about identifying infants for whom the SUPPORT primary outcomes appear to be permanently missing?

Thanks

Abhik

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Monday, June 11, 2007 1:53 PM  
To: Das, Abhik; Gantz, Marie  
Subject: SUPPORT FU

Hi,

Should we start to compile missing data patients for the SUPPORT trial?

We can wait until after mid-July.

Let me know what you think?

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

**From:** Das, Abhik  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT FU  
**Date:** Monday, June 11, 2007 2:21:41 PM

---

I think it should be for all those with closed windows, but missing or incomplete information for NDI. Not sure how many of those we have at this point.

Thanks

Abhik

-----Original Message-----

**From:** Gantz, Marie  
**Sent:** Monday, June 11, 2007 2:20 PM  
**To:** 'Higgins, Rosemary (NIH/NICHD) [E]'; Das, Abhik  
**Subject:** RE: SUPPORT FU

OK, I will do that. For BPD, I will generate a list of infants who have reached 36 weeks PMA but do not have the BPD outcome. For FU, how much of a "grace period" should we allow? Should I generate the report for all infants who have entered the FU window but who do not yet have FU data?

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
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-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Monday, June 11, 2007 2:18 PM  
**To:** Gantz, Marie; Das, Abhik  
**Subject:** Re: SUPPORT FU

Send me the individual patients with center number and missing info and I will start beating the bushes to get the data.

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Gantz, Marie <mgantz@rti.org>  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik <adas@rti.org>  
**Sent:** Mon Jun 11 14:15:49 2007  
**Subject:** RE: SUPPORT FU

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of infants with missing outcomes, or the infant IDs as in the ROP report?

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Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
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From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, June 11, 2007 2:10 PM  
To: Gantz, Marie; Das, Abhik  
Subject: Re: SUPPORT FU

If they have been "excused" they should not be on the list. But otherwise, yes

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Gantz, Marie <mgantz@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik <adas@rti.org>  
Sent: Mon Jun 11 14:08:10 2007  
Subject: RE: SUPPORT FU

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Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, June 11, 2007 2:03 PM  
To: Das, Abhik  
Cc: Gantz, Marie  
Subject: Re: SUPPORT FU

Both primary outcomes (already doing ROP) and FU at 18-22 months (very impt secondary outcome).

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Das, Abhik <adas@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Gantz, Marie <mgantz@rti.org>  
Sent: Mon Jun 11 14:01:04 2007  
Subject: RE: SUPPORT FU

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Are you talking about identifying infants for whom the SUPPORT primary outcomes appear to be permanently missing?

Thanks

Abhik

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Monday, June 11, 2007 1:53 PM  
To: Das, Abhik; Gantz, Marie  
Subject: SUPPORT FU

Hi,

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We can wait until after mid-July.

Let me know what you think?

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld



**From:** Das, Abhik  
**To:** Gantz, Marie  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT FU  
**Date:** Monday, June 11, 2007 2:17:04 PM

---

I think a summary of the numbers followed by site-specific IDs would be helpful.

-----Original Message-----

From: Gantz, Marie  
Sent: Monday, June 11, 2007 2:16 PM  
To: 'Higgins, Rosemary (NIH/NICHD) [E]'; Das, Abhik  
Subject: RE: SUPPORT FU

I am scheduled to run the missing ROP report next week, so I will plan to add the other missing outcomes as well. Do you want to see the number of infants with missing outcomes, or the infant IDs as in the ROP report?

Thanks,  
Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Monday, June 11, 2007 2:10 PM  
To: Gantz, Marie; Das, Abhik  
Subject: Re: SUPPORT FU

If they have been "excused" they should not be on the list. But otherwsie, yes

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Gantz, Marie <mgantz@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik <adas@rti.org>  
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Marie

Marie Gantz, Ph.D.  
Research Statistician  
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mgantz@rti.org  
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-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
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To: Das, Abhik  
Cc: Gantz, Marie  
Subject: Re: SUPPORT FU

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Rose

-----  
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----- Original Message -----

From: Das, Abhik <adas@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Gantz, Marie <mgantz@rti.org>  
Sent: Mon Jun 11 14:01:04 2007  
Subject: RE: SUPPORT FU

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Thanks

Abhik

-----Original Message-----

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To: Das, Abhik; Gantz, Marie  
Subject: SUPPORT FU

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Should we start to compile missing data patients for the SUPPORT trial?

We can wait until after mid-July.

Let me know what you think?

Thanks

Rose

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Sent from my BlackBerry Wireless Handheld

**From:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**To:** ["Zaterka-Baxter, Kristin"](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); ["Cunningham, Meg"](#)  
**Subject:** SUPPORT DSMC report  
**Date:** Thursday, June 07, 2007 3:10:21 PM  
**Attachments:** [Yale\\_recruitment\\_telcon\\_notes\\_04-25-07.doc](#)  
[Indiana U\\_recruitment\\_telcon\\_notes\\_04-24-07.doc](#)  
[U Cinn\\_recruitment\\_telcon\\_notes\\_04-25-07.doc](#)  
[UNM\\_recruitment\\_telcon\\_notes\\_04-24-07.doc](#)  
[Wayne State\\_recruitment\\_activity\\_report\\_05-22-07.xls](#)  
[Wayne State\\_recruitment\\_telcon\\_notes\\_04-18-07.doc](#)

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Hi Kris,

Because the last DSMC meeting for SUPPORT noted the slow recruitment into the trial, Rose wanted me to forward to you the notes of teleconference we had with the low-recruiting sites (Cincinnati, Indiana, New Mexico, Wayne State, and Yale). She recommends that we include these notes in our next report to the DSMC to show what measures have been taken to boost recruitment.

Please let me know if you have any questions about this,

Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
[archerst@mail.nih.gov](mailto:archerst@mail.nih.gov)

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Yale University April 25, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Kris Zaterka-Baxter, RTI; Richard Ehrenkranz, Vineet Bhandari, Jo Ann Poulsen, Yale; Harris Jacobs, Yale-Bridgeport; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, ADas, REhrenkranz, KZaterka-Baxter]

#### Process

- At Yale, neonatal consults usually are done first by a fellow
  - Occasionally approached before, but then do some of the consult at that time
- Pls approach
- Coordinators follow-up
- MFMs. Have a group there (not in the MFMU Network). Doing one trial currently with amnios looking for evidence of chorio. For mothers up to 34 weeks gestation. Does not conflict with SUPPORT, so not prohibited from approaching them for multiple trials.
- IRB does not allow approach if mother is in active labor
- Problems with SUPPORT 02 form. Some data entering correction problems. Have 10-15 mothers to enter that were eligible, but could not get consent because they were in active labor. The system bounces them back. Should be catalogued as "unavailable."
  - **ACTION ITEM: Kris will talk to Abhik about how to correct this so that they can be entered correctly.**
  - **ACTION ITEM: Abhik will check whether consent should be entered per mother or per baby (Yale and UCSD count each baby, not just each mother)**

#### Recruitment

- The lower recruitment seems to be because of dip in number of eligible mothers – this was countered in February with a sudden spike in enrollment luck with consented women delivering 2 sets of twins within the eligibility window (see bullet #3)
- Approaching and getting consent for ~ 50%
- In February, we had a month with several consents with multiple births at once, so we were able to enroll 7 infants in 1 month. Enrolled 1 a few days ago.
- Projected GDB eligible ELBWs = 110/year = 9/month (not all of which are in the window)
- Hardly miss approaching anyone
- "Undecideds." Have a few, but lately they have gone outside of the window

#### Action Items

1. Kris will talk to Abhik about how to correct this so that they can be entered correctly.
2. Abhik will check whether consent should be entered per mother or per baby.

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Indiana University April 24, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Brenda Poindexter, Indiana U; Leslie Wilson, Indiana U; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, ADas, BPoindexter, LWilson]

#### Process

- Fellows seem to discuss the study well with the mothers
- Neonatal consults
  - IRB – can't approach for research study prior to a neonatal consult
  - OBs don't always request a consult (this is only the case at one of our three delivery hospitals, and even at this hospital, the not requesting a consult only applies to those women who are less than 24-25 weeks gestation)
- NOT RECRUITING uniformly AT 3 SITES because of infrastructure problems
  - Not enough people on team for 24/7 monitoring, so have to rely on faculty Our recruitment plan has always included all of our neonatal faculty – each attending neonatologist is a co-investigator on the SUPPORT study. As all of our faculty provide in-house coverage 24-7, we have always planned to rely on faculty for recruitment and the faculty are uniformly supportive of this plan. The one hospital that we are not recruiting at is our county hospital – in addition to having a very small number of ELBW deliveries, this SCN does not have dedicated neonatal respiratory therapists, has a large percentage of Spanish-only mothers, and the majority of ELBW deliveries are precipitous. These factors were the primary reasons that we have decided to focus our recruitment efforts at our other two delivery sites – not solely that we don't have enough people on the team for 24/7 monitoring as stated above in the minutes.
  - Power calculations for individual studies are determined using eligible number in GDB who would be available and approached, consented, and enrolled

#### Recruitment

- Since January 2007: Since 12/29/06 we have screened 25 mothers
- 21 infants consented; 12 randomized; 8 consented delivered outside the window; 1 remains consented and not delivered (still in the window)
  - Eligible= 11 (all at U hospital)
    - Jan/Feb = 3 (should be 5 using GDB numbers)
    - Jan = 4 eligible and all 4 enrolled
    - Feb = 1 – missed due to precipitous delivery
    - March = 1 (should be 5 eligible)
    - 3 were enrolled; 1 missed due to precip delivery; 1 missed
    - April = 0 to date (should be 3 eligible)
    - 1 enrolled and 2 (twins) missed due to precip delivery
  - Delivered outside of window = 5 (should be 8)
  - Refusals = 3
  - Missed = 3 (including 1 set of twins)
  - Consented and awaiting delivery = 5 (now 1)
  - A few delivery room deaths that were not going to be resuscitated
- For “consent not requested,” had several drug addicts, mentally disturbed, and under-aged mothers (all from before January 2007) – parenthetical statement not true – the consent not

requested has included maternal substance abuse, mental handicap, etc. since the beginning of the trial – not just from before 1/07

- Problem: entering numbers correctly
  - For multiples, you should get 1 consent per baby
  - Getting one per mother makes it look like less moms were approached and/or consented (number consented should be 2-3 times the number randomized)
  - **ACTION ITEM: Abhik will double-check which method should be used**
  - **ACTION ITEM: U Indiana will go back through their records to make sure data was entered correctly with 1 consent per baby**
  - **We have gone through our records – here are what the RTI numbers should be:**
    - Screened = 75 (87 since beginning the antenatal consent secondary in 4/06)
    - Approached = 38 (56 approached)
    - 27 of 56 approached – refused consent
    - 22 consented and enrolled (4 sets of multiples, so 18 of the 87)
    - 10 consented and not enrolled – delivered out of window
    - Consented = 18 (we have randomized 32 infants)
    - Randomized = 18 (due to multiples) (we have randomized 22 infants total)

\*Another important note – in the past, if we were not able to screen a mom because of precipitous delivery, the antenatal screening form (ANT01 and ANT02) was not consistently being filled out – Leslie has gone back and fixed this

### **Action Items**

1. RTI will look at which sites are/are not enrolling and their GDB numbers; how many were missed because of this.
2. Abhik will check whether consent should be entered per mother or per baby
3. U Indiana will go back through their records to make sure data was entered correctly (depending upon Abhik's findings) – see revised numbers above – we will wait to hear back from RTI to make sure these discrepancies have been resolved – please feel free to call or email Leslie regarding any clarifications

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call University of Cincinnati April 25, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kris Baxter, RTI; Kurt Schibler, UCinn; Cathy Grisby, UCinn; Holly Mincey, UCinn; Barbara Alexander, UCinn; Kate Bridges, UCinn; Estelle Fischer, UCinn; Jody Shively, UCinn; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, ADas, CGrisby]

#### Process

- Missing some moms who did not give an answer before delivery, particularly with emergencies
  - Maybe ask on-call teams to ask parents one more time (as time allows).
    - **ACTION ITEM: UCinn will ask delivery teams to request consent from parents one more time (whenever possible) for those who delivery precipitously**
  - Not appropriate some times to ask when they are in active labor or about to go into OR
  - UCinn tries to get back to the mothers within 12-24 hours after first approach
- IRB Limitations – can't approach prisoners or mothers under 18 years old at Good Samaritan Hospital. At University Hospital we approach 16-<18 years old and get consent from mom and her parent/guardian.
- Process at UCSD
  - PI with a coordinator does the first approach
  - Preferably with, or just after, the neonatal consult – the consult gets them in the frame of mind that you are there to help them and their baby(ies)
  - Level of effort = ½ hour or more, especially if combined with the consult
  - Let them know that statistically we are finding that babies in trials do better than non-trial babies in general, no matter which research group they fall in (U. Cinn does this too).
  - Coordinator follows up later for consent
- OB investigator who has an ongoing trial
  - Will not allow approach/enrollment any patient who is eligible for any of her studies. For instance, if a mom is already in the MFM progesterone trial, the OB investigator feels the two trials will conflict.
  - **ACTION ITEM: Develop handout that details how the two trials do not conflict (Rose and Neil could help with this). If a synopsis of the protocol can be provided for evaluation by the concurrent research subcommittee, we can make a recommendation in writing.**
- Logistical problem: not having Drs. Schibler or Narendran at Good Samaritan. Dr. Schibler will move his office over to Good Sam. in a few months, following the departure of Dr. Barbara Warner.
- Literature for parents. Have a general brochure about research and one specific for SUPPORT that are both handed out by the coordinators. Currently UCinn gives out both brochures when they approach SUPPORT moms.

#### Recruitment

- "Our biggest problem is closing the deal." – consent = 40% of those approached
  - They approach almost everyone, except precipitous deliveries
  - Population in Cincinnati area seems to have a general distrust of research and are, therefore, reluctant to get involved in it.
  - Have had several research trials with negative outcomes that were covered in the local media; this perception of negativity seems to get projected onto all research trials.
  - Kurt feels that it is harder to get consent here than from his previous experience in Salt Lake City.
  - Same across all ethnic groups, but especially in African Americans
  - For those enrolled and randomized, Kurt doesn't believe that there has been any specific ethnic group or circumstances that led them to consent
  - Only difference between hospitals is due to volume
- ~50-80% approached before neonatal consult

- **ACTION ITEM: Look at which mothers were more likely to give consent, those approached before or after their consult.**

#### **Action Items**

1. UCinn will ask delivery teams to ask the parents for consent one more time before delivery (whenever possible)
2. U Cinn will develop handout that details how the two trials do not conflict (Rose and Neil could help with this).
3. U. Cinn will look at which mothers were more likely to give consent, those approached before or after their consult.



## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call University of New Mexico April 24, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kristi Watterberg, UNM; Conra Lacy, UNM; Julie Rohr, UNM; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, ADas, KWatterberg]

#### Process

- UNM does a neonatal consult for all women coming in with premature labor when requested by obstetrics
  - OBs, however, may not request this if the labor stops
- Consent prior to neonatal consult
  - IRB is letting them do this
  - Identification of mothers in the window
  - Approached for SUPPORT if they are in, or earlier than (<24 weeks), the window
  - If they have not received a neonatal consult, they go over some of the statistical information on prematurity with the mothers
- Consent forms changed
  - They noticed that as they went over the forms with the mothers, they tended to automatically refuse consent whenever read the description of potential air leaks
  - IRB agreed to let them take this out of the form itself
  - Now consent had increased 60-70%
- Level of effort = 4-6 hours of work per consent request

#### Recruitment

- Only 25-30% of moms with consent deliver in the window
- Number of eligible babies dropped in January-March 2007, but is up again now.
  - May just be a trough
  - With decrease, they started an investigation to find out why; possible reasons:
    - Private hospital in the city just opened a new Level 3 NICU, so may be getting some of their eligible patients
    - In previous months, UNM had to divert people to other hospitals because of lack of beds – this may have led to some people automatically going elsewhere now without calling to inquire about availability
    - UNM new NICU is supposed to open in June
  - Now have ~50-55 ELBW with 85% inborn, but not all are eligible for SUPPORT
  - Number randomized now = 3 (2 born in early April, so not on the March report)
  - Consent rate ~ 50% which is average
  - Spanish translation is required in ~ 50% of cases, using hospital interpreters. They have forms in Spanish.
    - Moms from Mexico are concerned with deportation, so they are less likely to consent
- Survey of centers at last Steering Committee meeting suggested that the highest enrolling sites had the coordinators doing recruitment
  - U Alabama is also high, but has Wally involved in the recruit
  - UNM tried to separate the PI from the parents -- the PI may be hesitant to present the study, not wanting to put pressure on the parents; using coordinators creates more of a buffer

## **Supplies**

- Oximeters – have enough for the (b) (6) coming +1 extra

**Support Monthly  
Activity 2007  
Infants 24 - 27 Weeks Gestation**

	Patients Screened	Patients Approached	Neonatal Consults Done	Patients Delivered (Support Eligible)	Support Grade III/IV IVH	Support Infants Expired	Enrolled	NEO Consult & Enrolled
January	7	4	3	3	1 (cerebellar)		1	1
February	23	10	12	9			2	2
March	15	11	7	5	1		2	2
April	18	11	11	9		1	2	2
May	15	6	5	4	2	2	3	3
June								
July								
August								
September								
October								
November								
December								

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Wayne State University April 18, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Seetha Shankaran, WSU; Beena Sood, WSU; Becky Bara, WSU; Caroline Rosman, WSU; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, ADas,]

#### Process

- OBs/nurses were not letting coordinators know of potential recruits
  - Have increased coordinator visits to high-risk populations, talking to every potential mother
  - Had a meeting with research and clinical teams to get everyone on board
    - Coordinator do recruitment during the day, which makes fellows more willing to do it at night and on the weekends
    - Now giving incentives to fellows to recruit for the trial
    - Weekend coverage has improved
  - **ACTION ITEM: WSU will check on the percentage of mothers receiving a consult**
- IRB – now have approval to request consent within a hour after birth
- Fixed the problem with IT connections with the electronic medical records (EMRs)
  - They can now access WSU's information database to see when the mothers are getting a neonatal consult, and in many cases are doing the consult and the consent together
- New interventions
  - Whenever a mother is missed, talking to the fellow on call at the time
  - Setting targets for recruitment

#### Recruitment

- Recruited = 14 year-to-date

#### Action Items

1. WSU will check on the percentage of mothers receiving a consult

**From:** Shankaran, Seetha  
**To:** Richard Ehrenkranz  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: aEEG proposal review  
**Date:** Wednesday, June 06, 2007 2:55:14 PM  
**Attachments:** Review Amplitude-Integrated EEG and brain injury in ELBW infants Does aEEG predict neuroimaging abnormalities and or neurodevelopmental impairment.doc

---

Rich  
Here it is  
Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436  
Fax 313-745-5867

Email [sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)

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-----Original Message-----

From: Richard Ehrenkranz [<mailto:richard.ehrenkranz@yale.edu>]  
Sent: Thursday, May 31, 2007 3:49 PM  
To: Shankaran, Seetha  
Subject: aEEG proposal review

Seetha:

I know that you are a seizure meeting today and have a grant deadline tomorrow. But, I hope that you will have time to review the aEEG proposal submitted by Alexis Davis and prepare some comments about it by Tuesday June 5th. As you will see from the attached draft of the review, we are most interested in your comments related to the technical aspects about aEEG and about the feasibility of performing this project. Please send me those comments and I will add them to the summary document and then email it to David and Krisa. Thanks for your help and sorry for the confusion on Tuesday.  
Richard

**Review:** Amplitude-Integrated EEG and brain injury in ELBW infants. Does aEEG predict neuroimaging abnormalities and or neurodevelopmental impairment?

This is a proposal to do a prospective, observational, Multicenter study of aEEG as a potential predictive tool of brain injury in extremely low birth weight infants (ELBW  $\leq$  1000g infants).

- The first aim of the study is to determine if aEEG is an early predictor of death and/or neurodevelopmental impairment in extremely low birthweight infants.
- The second aim is to determine if a delay in maturation of aEEG patterns with advancing post-conceptual age identifies infants at risk for neurodevelopmental impairment.
- The third aim is to develop a multivariate predictive model to determine if aEEG findings in combination with the clinical factors are predictive of neurodevelopmental impairment.

**Background and Significance:**

- The investigator has done thorough review of the existing literature evaluating aEEG in preterm infants. It should be noted, however, that the number of infants who were the subjects of each of the studies quoted is relatively few. It should also be noted that there are very few neonates at the extremely low gestational age that has been studied longitudinally with aEEG as is being proposed in this study.
- It would be important to look at the correlation between aEEG, cranial sonography, and MRI before this tool will be available for counseling of families as stated in the proposal. A single MRI may have a good correlation with outcome, however currently cranial sonography is still the most frequently utilized tool to evaluate brain injury.

**Methods:**

- The feasibility of performing aEEG studies for 6 hours interval each in the extremely low birthweight infant needs to be explored in a pilot study. In the NICHD study evaluating aEEG in term infants with encephalopathy, the number of infants for whom the aEEG was performed as per protocol (prior to 6 hours of age) was disappointing low among all the Network Centers. Therefore, re-training of each of the participating centers needs to be held (as was conducted in the aEEG Network trial in term infants). In addition the feasibility of obtaining aEEG in the critically unstable infant needs to be examined.
- The reason for which an aEEG was not done needs to be documented with appropriate choices rather than leaving the question open ended.
- The impact of the infants with early deaths needs to be analyzed carefully. It is not clear if they will be included in the study or if they are going to be excluded. The primary outcome does appear to be death or neurodevelopmental impairment, We do not have much information in the literature on aEEG changes in ELBW who are clinically deteriorating so is death truly a competing outcome?
- The training of the individuals who proposed to read the aEEG in the current grant submission needs to be clarified. Have these individuals participated in any

of the conferences dedicated to CFM and the reading aEEG studies or have they undergone specific training to read the amplitude integrated EEG. The investigator can provide a paragraph on the current experience of the individuals who will be the central readers for the proposed study.

- The MRI scans that will be obtained on infants who survived to 36 weeks gestation should be classified in the methodology that is being used in the current SUPPORT MRI study.
- It has been documented that neonates receiving morphine do have prolonged period of EEG quiescence as well as excessive periods of interictal epileptic form of activity (Young et al Clinical Neurophysiology 2000, 111-1955 to 1960.) How do the investigators propose to look at the effect of medication on aEEG patterns?
- Changes in cerebral blood flow and acidosis, in addition to medication, does alter the aEEG. It has been recommended that a full EEG be obtained simultaneously with the aEEG (Hellstrom-Westas, Early Human Development 2005,81-255-261.) Maybe the investigators are planning on doing this? The updated Moberg monitors will have this capability in a few months, per my discussions with Moberg Research last week. If the investigators perform a pilot study it will good to look at the effect of these physiological and non-physiological states on the aEEG.
- Another clinical entity that shows changes that occur fairly rapidly on an aEEG is changes in ventricular size with post hemorrhagic ventriculomegaly. (see Olischar citation). It would be a good idea for the investigators to also document changes in cranial sonography if it is done on the patient (Olischar et al Childs Nervous Systems 2004 vol. 20 pp41-45.) In our experience we have seen changes with aEEG occurring fairly rapidly when term infants are placed on ECMO (Pappas et al, J Peds. 2006)
- More details needs to be provided concerning the statistical analysis as to how each of the aims that have been described will be achieved. It is also difficult to evaluate maturational change in the aEEG patterns without current clear definition of what these maturational changes are in the preterm infants.

I will strongly support the investigators do a pilot to evaluate the feasibility of performing aEEG in extremely low birth weight infants. I can not underestimate the time and effort that was spent in attempting to get aEEG readings for the current aEEG study on full term infants. I also would like to see some preliminary data demonstrating the experience of the investigators in performing and reading aEEG studies in preterm infants. I do believe that aEEG, as a tool reflecting cerebral functioning monitoring, does have a tremendous scope in the future as a predictive tool in conjunction with sonography and MRI. Hence, I strongly encourage the investigator to proceed with a pilot. I would also encourage a reevaluation of the budget since I do believe it has to include one or two training sessions of the nurse coordinators of each of the participating sites so that feasibility of doing this study can be clearly delineated. I will be more than happy to help with my experience in the current aEEG term HIE study

**From:** [Richard Ehrenkranz](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Re: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Tuesday, June 05, 2007 5:47:53 PM

---

Rose:  
Sorry. I vote yes.  
Richard

Higgins, Rosemary (NIH/NICHD) [E] wrote:

> Hi,  
> Attached is the coding variables for the meta analysis for the  
> randomized oxygen levels for all studies utilizing the enrolled patients  
> for the meta analysis. RTI has incorporated changes that are in line  
> with our forms for SUPPORT.  
> Let me know if you are ok with sending this back to Dr. Askie by June 1.  
>  
> Thanks  
> Rose  
>  
> -----Original Message-----  
> From: Wally Carlo, M.D. [<mailto:WCarlo@peds.uab.edu>]  
> Sent: Tuesday, May 29, 2007 2:01 PM  
> To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; [mcw3@case.edu](mailto:mw3@case.edu);  
> Bradley Yoder; [Roger.Faix@hsc.utah.edu](mailto:Roger.Faix@hsc.utah.edu); Abbot Laptook;  
> [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); Das, Abhik; Wade Rich; nancy newman; Gantz,  
> Marie  
> Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;  
> Zaterka-Baxter, Kristin  
> Subject: RE: CONFIDENTIAL SUPPORT META ANALYSIS variables  
>  
>  
>  
> Wally Carlo, M.D.  
> Edwin M. Dixon Professor of Pediatrics  
> University of Alabama at Birmingham  
> Director, Division of Neonatology  
> Director, Newborn Nurseries  
> 619 South 20th Street  
> 525 New Hillman Building  
> Birmingham, AL 35233-7335  
> Phone: 205 934 4680  
> FAX: 205 934 3100  
> Cell: 205 266 (b) (6)  
>  
> -----Original Message-----  
> From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
> Sent: Wednesday, May 09, 2007 3:08 PM  
> To: Neil Finer; Wally Carlo, M.D.; [mcw3@case.edu](mailto:mw3@case.edu); Bradley Yoder;  
> [Roger.Faix@hsc.utah.edu](mailto:Roger.Faix@hsc.utah.edu); Abbot Laptook; [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); Das,  
> Abhik; Wade Rich; nancy newman; Gantz, Marie  
> Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;  
> Zaterka-Baxter, Kristin  
> Subject: CONFIDENTIAL SUPPORT META ANALYSIS variables  
>



>  
> Hi,  
> I have attached the proposal for the meta analysis - Lisa Aksie has  
> asked for input on the variables to be collected for the prospective  
> meta analysis. As you probably recall, the NRN steering committee  
> agreed in principle to be part of the prospective metaanalysis following  
> a presentation by Dr. Cole at the Steering Committee meeting in Jan.  
> 2005.  
> The group is also interested in seeing data from the first 50 patients  
> recruited into each trial. I had informed them that this is not  
> normally done with NRN trials.  
>  
> We also need to develop a potential timeline for data release for this  
> collaboration which will need to be approved by the steering committee.  
>  
> On a very positive note, the SUPPORT Trial is way ahead of any of the  
> other ongoing trials with respect to enrollment!!  
>  
> I will have Robin set up a call with the SUPPORT Subcommittee in the  
> next month for discussion.  
>  
> Thanks  
> Rose  
> <<NeOProm variable coding form - V4\_30 April07 RTI comments.doc>>

**From:** Ronald N Goldberg  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Tuesday, June 05, 2007 1:05:48 PM

---

sorry Rose , Ive been out of the country.  
we are ok.  
Ron

Ronald N. Goldberg, M.D.  
Shaad-McBryde Professor of Pediatrics  
Chief, Neonatal-Perinatal Medicine  
Box 3179  
Duke University Medical Center  
Durham, NC 27710  
Phone: 919-681-6037  
Fax: 919-681-6065  
email: goldb008@mc.duke.edu

"Higgins, Rosemary (NIH/NICHD) [E]"  
<higginsr@mail.nih.gov>

05/29/2007 03:31 PM

<rohls@unm.edu>, <alaptook@WHRI.org>, "Abhik Das"  
<adas@rti.org>, <ambal@uab.edu>, <aaf2@po.cwru.edu>,  
<Bradley.yoder@hsc.utah.edu>, "Brenda Poindexter"  
<bpoindex@iupui.edu>, "Carlo Waldemar (E-mail)"  
<wcarlo@peds.uab.edu>, "Ed Bell" <Edward-bell@uiowa.edu>, "Ed  
Donovan" <edward.donovan@cchmc.org>, "Ehrenkranz Richard (E-  
mail)" <richard.ehrenkranz@yale.edu>, "Ivan Frantz" <IFrantz@Tufts-  
NEMC.org>, "Kennedy, Kathleen A"  
<Kathleen.A.Kennedy@uth.tmc.edu>, "Krisa VanMeurs (VanMeurs,  
Krisa)" <vanmeurs@leland.stanford.edu>, "Kristi Watterberg"  
To <kwatterberg@salud.unm.edu>, <kurt.schibler@cchmc.org>,  
<cotte010@mc.duke.edu>, "Michelle Walsh" <mcw3@po.cwru.edu>,  
"Mickey Caplan" <mca113@Northwestern.edu>, "Oh William (E-mail)"  
<william\_oh@brown.edu>, "Pablo Sanchez"  
<Pablo.Sanchez@UTSouthwestern.edu>, "Poole Kenneth (E-mail)"  
<poo@rti.org>, "Roger Faix" <Roger.Faix@hsc.utah.edu>, "Ronald  
GOLdberg" <goldb008@mc.duke.edu>, "Seetha Shankaran"  
<sshankar@med.wayne.edu>, "Stevenson David (E-mail)"  
<dstevenson@stanford.edu>, "Stoll Barbara (E-mail)"  
<barbara\_stoll@oz.ped.emory.edu>, "Tyson Jon (E-mail)"  
<Jon.E.Tyson@uth.tmc.edu>  
"Kris Zaterka-Baxter" <kzaterka@rti.org>, "Cunningham, Meg"  
cc <mcunningham@rti.org>, "Archer, Stephanie (NIH/NICHD) [E]"  
<archerst@mail.nih.gov>, "Neil Finer" <nfiner@ucsd.edu>  
Subject FW: CONFIDENTIAL SUPPORT META ANALYSIS variables

Hi,  
Attached is the coding variables for the meta analysis for the  
randomized oxygen levels for all studies utilizing the enrolled patients  
for the meta analysis. RTI has incorporated changes that are in line  
with our forms for SUPPORT.  
Let me know if you are ok with sending this back to Dr. Askie by June 1.

Thanks  
Rose

-----Original Message-----

From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
Sent: Tuesday, May 29, 2007 2:01 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; mcw3@case.edu;  
Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook;  
kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz,

Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;  
Zaterka-Baxter, Kristin  
Subject: RE: CONFIDENTIAL SUPPORT META ANALYSIS variables

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

-----Original Message-----  
From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wednesday, May 09, 2007 3:08 PM  
To: Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder;  
Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das,  
Abhik; Wade Rich; nancy newman; Gantz; Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;  
Zaterka-Baxter, Kristin  
Subject: CONFIDENTIAL SUPPORT META ANALYSIS variables

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On a very positive note, the SUPPORT Trial is way ahead of any of the other ongoing trials with respect to enrollment!!

I will have Robin set up a call with the SUPPORT Subcommittee in the next month for discussion.

Thanks  
Rose  
<<NeOProm variable coding form - V4\_30 April07 RTI comments.doc>>  
[attachment "NeOProm variable coding form - V4\_30 April07 RTI comments.doc" deleted by Ronald N Goldberg/Pediatrics/mc/Duke]

From: Duqa, Shahnaz  
To: Higgins, Rosemary (NIH/NICHD) [E]; sduara@miami.edu; Everett, Ruth  
Cc: Das, Abhik; Gantz, Marie  
Subject: RE: MISSING ROP DATA  
Date: Monday, June 04, 2007 2:51:24 PM

Rose,

The data for these infants was put in by Ruth in the past month and should come up on this month's report.

Thanks  
Shahnaz

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wednesday, May 30, 2007 1:55 PM  
To: sduara@miami.edu; Everett, Ruth  
Cc: Das, Abhik; Gantz, Marie  
Subject: MISSING ROP DATA

Center	Network	Missing ROP error message
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8		50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8		50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
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8		50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8		Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.

We are missing the above ROP outcomes for SUPPORT. Let us know if you have any of them (or if you can get them at FU).

Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** [Krisa Van Meurs](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Re: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Monday, June 04, 2007 1:26:17 AM

---

Rose,

Sorry to be a bit tardy. I'm fine with sending it to her.

Krisa

>Hi,

>Attached is the coding variables for the meta analysis for the  
>randomized oxygen levels for all studies utilizing the enrolled patients  
>for the meta analysis. RTI has incorporated changes that are in line  
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>Thanks

>Rose

>

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>From: Wally Carlo, M.D. [<mailto:WCarlo@peds.uab.edu>]

>Sent: Tuesday, May 29, 2007 2:01 PM

>To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; mcw3@case.edu;

>Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Lptook;

>kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz,

>Marie

>Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;

>Zaterka-Baxter, Kristin

>Subject: RE: CONFIDENTIAL SUPPORT META ANALYSIS variables

>

>

>

>Wally Carlo, M.D.

>Edwin M. Dixon Professor of Pediatrics

>University of Alabama at Birmingham

>Director, Division of Neonatology

>Director, Newborn Nurseries

>619 South 20th Street

>525 New Hillman Building

>Birmingham, AL 35233-7335

>Phone: 205 934 4680

>FAX: 205 934 3100

>Cell: 205 266 (b) (6)

>

>-----Original Message-----

>From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]

>Sent: Wednesday, May 09, 2007 3:08 PM

>To: Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder;

>Roger.Faix@hsc.utah.edu; Abbot Lptook; kurt.schibler@cchmc.org; Das,

>Abhik; Wade Rich; nancy newman; Gantz, Marie

>Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;

>Zaterka-Baxter, Kristin

>Subject: CONFIDENTIAL SUPPORT META ANALYSIS variables

>  
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>next month for discussion.  
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>Thanks  
>Rose  
> <<NeOProM variable coding form - V4\_30 April07 RTI comments.doc>>  
>  
>Content-Type: application/msword;  
> name="NeOProM variable coding form - V4\_30 April07 RTI comments.doc"  
>Content-Description: NeOProM variable coding  
>form - V4\_30 April07 RTI comments.doc  
>Content-Disposition: attachment;  
> filename="NeOProM variable coding form -  
>V4\_30 April07 RTI comments.doc"  
>  
>Attachment converted: KVM PowerBook :NeOProM  
>variable codi#C2416.doc (WDBN/«IC») (000C2416)

**From:** Walsh, Michele  
**To:** Gantz, Marie; Neil Finer; Wally Carlo, M.D.; Cunningham, Meg; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** RE: Eye Outcomes - SUPPORT  
**Date:** Friday, June 01, 2007 3:36:32 PM

---

Wally: You are such a comedian!- get it? eye opener?  
I will be out of the country for the next 2 weeks.  
Nancy will have an emergency contact number for me if anything comes up.  
Regards, Michele

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Friday, June 01, 2007 11:33 AM  
**To:** Neil Finer; Wally Carlo, M.D.; Cunningham, Meg; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** RE: Eye Outcomes - SUPPORT

To answer Wally's question, I looked at only those infants without ROP who reached ROP status after 50 weeks PMA (since most infants *with* ROP reach status before 50 weeks). Of infants who have reached a favorable outcome (no ROP) after 50 weeks PMA, all have had at least one eye exam before 50 weeks PMA, and 65% have had four or more exams by 50 weeks. The average number of exams it takes these infants to reach final ROP status is 7.

Let me know if you would like any additional information.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Thursday, May 31, 2007 7:19 PM  
**To:** Wally Carlo, M.D.; Cunningham, Meg; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz, Marie  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** RE: Eye Outcomes - SUPPORT

Hi Wally  
It looks like 50 weeks would be a reasonable final date for the last baby.  
I think most of these are late exams. Marie, Can you answer Wally's question?  
Thanks  
Neil

---

**From:** Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
**Sent:** Thursday, May 31, 2007 3:45 PM

**To:** Neil Finer; Cunningham, Meg; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Lptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz, Marie  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** RE: Eye Outcomes - SUPPORT

This is an eye opener for me. I had no idea it took so long to determine ROP status.

How much of this time delay is due to repeat exams that are not definite vs no exam till late?  
wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Thursday, May 31, 2007 2:27 PM  
**To:** Cunningham, Meg; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Lptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz, Marie  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** Eye Outcomes - SUPPORT

Hello Everyone  
Here is the document that Marie produced regarding the eye outcomes.  
Neil

The enclosed information is STRICTLY CONFIDENTIAL and is intended for the use of the addressee only. University Hospitals and its affiliates disclaim any responsibility for unauthorized disclosure of this information to anyone other than the addressee.

Federal and Ohio law protect patient medical information, including psychiatric\_disorders, (H.I.V) test results, A.I.Ds-related conditions, alcohol, and/or drug\_dependence or abuse disclosed in this email. Federal regulation (42 CFR Part 2) and Ohio Revised Code section 5122.31 and 3701.243 prohibit disclosure of this information without the specific written consent of the person to whom it pertains, or as otherwise permitted by law.



**From:** Pablo Sanchez  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Friday, June 01, 2007 12:34:18 AM

---

ok--pablo

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 5/29/07 2:31:41 PM >>>

Hi,

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Thanks  
Rose

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Subject: RE: CONFIDENTIAL SUPPORT META ANALYSIS variables

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I will have Robin set up a call with the SUPPORT Subcommittee in the next month for discussion.

Thanks

Rose

<<NeOProM variable coding form - V4\_30 April07 RTI comments.doc>>

**From:** Gantz, Marie  
**To:** Dale\_Phelps@URMC.Rochester.edu  
**Cc:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Age at ROP report  
**Date:** Friday, June 01, 2007 10:33:17 AM  
**Attachments:** Age at final ROP status.doc

---

Hi Dale,

Attached is the report I sent Neil regarding the age at which ROP status has been reached for SUPPORT infants.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

### Age (PMA or post-birth age) at which ROP status is reached for SUPPORT participants 5-30-07

The table below displays selected percentiles for the age (PMA or post-birth) at which ROP status has been reached by SUPPORT infants. Age is calculated on the date of the eye exam that determined the infant's final ROP status, favorable or unfavorable. The information presented here does not take into account any additional time it takes for the centers to obtain eye exam results and enter them into the data management system.

Half of all cases to date in which the infant has ROP were identified by exams that took place by 36 weeks PMA. 95% of the ROP cases were identified by 44 weeks PMA, and all cases with ROP were identified by 53 weeks PMA. There were two cases in which the exam identifying ROP took place after 50 weeks PMA. Neither of those exams identified new threshold ROP. The latest an infant has been diagnosed with threshold ROP is 44 weeks PMA.

For infants without ROP, 50% have reached final ROP status by 40 weeks PMA or approximately 3 months post-birth. 95% of non-ROP cases have reached final status by 8 months of age. To date, the oldest an infant has been when favorable status was obtained is just over 16 months.

	PMA (weeks)			Age post-birth (months)		
	50%	95%	100%	50%	95%	100%
ROP=Y	36	44	53	2.5	4.1	6.4
ROP=N	40	91	98	3.1	8.0	16.3
All infants	39	59	98	3.0	7.6	16.3

**50<sup>th</sup>, 95<sup>th</sup> and 100<sup>th</sup> Percentiles for age at which final ROP status was reached**

**From:** Das, Abhik  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie  
**Subject:** RE: Eye Outcomes - SUPPORT  
**Date:** Friday, June 01, 2007 10:29:55 AM

---

Isn't she just talking about the document that Marie prepared on the timing of ROP exams? It seems Neil did not send that on to her. If so, Marie can just forward that to her.

Thanks

Abhik

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, June 01, 2007 10:27 AM  
To: Das, Abhik; Gantz, Marie  
Subject: Fw: Eye Outcomes - SUPPORT

Can Dale see the blinded form (we had previously approved access for QA issues)m Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Phelps, Dale <Dale\_Phelps@URMC.Rochester.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Fri Jun 01 10:24:36 2007  
Subject: RE: Eye Outcomes - SUPPORT

Hi Rose,

Would it be possible for me to see the report that is being referred to?

Dale

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, May 31, 2007 6:48 PM  
To: Phelps, Dale  
Subject: Fw: Eye Outcomes - SUPPORT

Fyi

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Wally Carlo, M.D. <WCarlo@peds.uab.edu>  
To: Neil Finer <nfiner@ucsd.edu>; Cunningham, Meg <mcunningham@rti.org>;  
Webb, Robin E. <rwebb@rti.org>; Higgins, Rosemary (NIH/NICHD) [E];  
mcw3@case.edu <mcw3@case.edu>; Bradley Yoder  
<Bradley.Yoder@hsc.utah.edu>; Roger Faix@hsc.utah.edu  
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kurt.schibler@cchmc.org <kurt.schibler@cchmc.org>; Das, Abhik

<adas@rti.org>; Wade Rich <wrich@ucsd.edu>; nancy newman  
<nxs5@case.edu>; Gantz, Marie <mgantz@rti.org>  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
<kzaterka@rti.org>  
Sent: Thu May 31 18:45:08 2007  
Subject: RE: Eye Outcomes - SUPPORT

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Cc: Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
Subject: Eye Outcomes - SUPPORT

Hello Everyone

Here is the document that Marie produced regarding the eye outcomes.

Neil

**From:** Frantz, Ivan  
**Subject:** RE: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Thursday, May 31, 2007 5:48:15 PM

---

ok

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Tuesday, May 29, 2007 3:32 PM  
To: rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Frantz, Ivan; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald GOLDBERG; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail)  
Cc: Kris Zaterka-Baxter; Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Neil Finer  
Subject: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables

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Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.; Zaterka-Baxter, Kristin  
Subject: RE: CONFIDENTIAL SUPPORT META ANALYSIS variables

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)



-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wednesday, May 09, 2007 3:08 PM  
To: Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder;  
Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das,  
Abhik; Wade Rich; nancy newman; Gantz, Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;  
Zaterka-Baxter, Kristin  
Subject: CONFIDENTIAL SUPPORT META ANALYSIS variables

Hi,

I have attached the proposal for the meta analysis - Lisa Aksie has asked for input on the variables to be collected for the prospective meta analysis. As you probably recall, the NRN steering committee agreed in principle to be part of the prospective metaanalysis following a presentation by Dr. Cole at the Steering Committee meeting in Jan. 2005.

The group is also interested in seeing data from the first 50 patients recruited into each trial. I had informed them that this is not normally done with NRN trials.

We also need to develop a potential timeline for data release for this collaboration which will need to be approved by the steering committee.

On a very positive note, the SUPPORT Trial is way ahead of any of the other ongoing trials with respect to enrollment!!

I will have Robin set up a call with the SUPPORT Subcommittee in the next month for discussion.

Thanks

Rose

<<NeOProM variable coding form - V4\_30 April07 RTI comments.doc>>

**From:** Kennedy, Kathleen A  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Thursday, May 31, 2007 5:04:46 PM

---

It looks like we don't have much of what they want, but I'm ok with sending them what we have.

Kathleen A. Kennedy, MD, MPH  
Professor of Pediatrics  
Director, Division of Neonatal-Perinatal Medicine  
Director, MS in Clinical Research Degree Program  
UT-Houston Medical School  
6431 Fannin, Suite 2.106  
(713) 500-6708

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, May 29, 2007 2:32 PM  
To: rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald GOLDBERG; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson, Jon E  
Cc: Kris Zaterka-Baxter; Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Neil Finer  
Subject: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables

Hi,

Attached is the coding variables for the meta analysis for the randomized oxygen levels for all studies utilizing the enrolled patients for the meta analysis. RTI has incorporated changes that are in line with our forms for SUPPORT.

Let me know if you are ok with sending this back to Dr. Askie by June 1.

Thanks  
Rose

-----Original Message-----

From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
Sent: Tuesday, May 29, 2007 2:01 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz, Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.; Zaterka-Baxter, Kristin  
Subject: RE: CONFIDENTIAL SUPPORT META ANALYSIS variables

Wally Carlo, M.D.

Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b) (6)

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wednesday, May 09, 2007 3:08 PM  
To: Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder;  
Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das,  
Abhik; Wade Rich; nancy newman; Gantz, Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;  
Zaterka-Baxter, Kristin  
Subject: CONFIDENTIAL SUPPORT META ANALYSIS variables

Hi,

I have attached the proposal for the meta analysis - Lisa Aksie has asked for input on the variables to be collected for the prospective meta analysis. As you probably recall, the NRN steering committee agreed in principle to be part of the prospective metaanalysis following a presentation by Dr. Cole at the Steering Committee meeting in Jan. 2005.

The group is also interested in seeing data from the first 50 patients recruited into each trial. I had informed them that this is not normally done with NRN trials.

We also need to develop a potential timeline for data release for this collaboration which will need to be approved by the steering committee.

On a very positive note, the SUPPORT Trial is way ahead of any of the other ongoing trials with respect to enrollment!!

I will have Robin set up a call with the SUPPORT Subcommittee in the next month for discussion.

Thanks

Rose

<<NeOProm variable coding form - V4\_30 April07 RTI comments.doc>>

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: Missing ROP data  
**Date:** Thursday, May 31, 2007 4:11:05 PM

---

Rose,  
Next eye appointment is tomorrow, 6/1/07.  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206-(b)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 5/30/2007 12:53 PM >>>  
Center

Network

Missing ROP error message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

The above patient is missing ROP outcome data for SUPPORT. Let us know if you have any information.

Thanks for all the hard work and effort!!!  
Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Neil Finer  
**To:** Cunningham, Meg; Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy.newman; Gantz, Marie  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** Eye Outcomes - SUPPORT  
**Date:** Thursday, May 31, 2007 3:30:42 PM  
**Attachments:** Age at final ROP status.doc

---

Hello Everyone

Here is the document that Marie produced regarding the eye outcomes.

Neil

**Age (PMA or post-birth age) at which ROP status is reached for SUPPORT participants  
5-30-07**

The table below displays selected percentiles for the age (PMA or post-birth) at which ROP status has been reached by SUPPORT infants. Age is calculated on the date of the eye exam that determined the infant's final ROP status, favorable or unfavorable. The information presented here does not take into account any additional time it takes for the centers to obtain eye exam results and enter them into the data management system.

Half of all cases to date in which the infant has ROP were identified by exams that took place by 36 weeks PMA. 95% of the ROP cases were identified by 44 weeks PMA, and all cases with ROP were identified by 53 weeks PMA. There were two cases in which the exam identifying ROP took place after 50 weeks PMA. Neither of those exams identified new threshold ROP. The latest an infant has been diagnosed with threshold ROP is 44 weeks PMA.

For infants without ROP, 50% have reached final ROP status by 40 weeks PMA or approximately 3 months post-birth. 95% of non-ROP cases have reached final status by 8 months of age. To date, the oldest an infant has been when favorable status was obtained is just over 16 months.

	PMA (weeks)			Age post-birth (months)		
	50%	95%	100%	50%	95%	100%
ROP=Y	36	44	53	2.5	4.1	6.4
ROP=N	40	91	98	3.1	8.0	16.3
All infants	39	59	98	3.0	7.6	16.3

**50<sup>th</sup>, 95<sup>th</sup> and 100<sup>th</sup> Percentiles for age at which final ROP status was reached**

**From:** Neil Finer  
**To:** Zaterka-Baxter, Kristin; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Gantz, Marie; Das, Abhik; Auman, Jeanette O.; Wade Rich  
**Subject:** RE: SUPPORT advise please  
**Date:** Thursday, May 31, 2007 3:23:59 PM

---

Hi

I would just collect the 36 week outcome re BPD and the ROP outcomes etc. I would not attempt to get the oximeters over to the new site as that would require separate IRB approval.

Neil

-----Original Message-----

From: Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
Sent: Thursday, May 31, 2007 9:25 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Neil Finer; Gantz, Marie; Das, Abhik; Auman, Jeanette O.  
Subject: RE: SUPPORT advise please

Hi,

Would this case have met status (transferred) for both Support and GDB? If the infants are off the oximeters there really isn't any other data that is collected other than the 02 at 36 weeks which can (and should in all cases) be collected if an infant met status by DC or transfer prior to 36 weeks. A reportable AE may be the other possibility but would be reported at this point on the Medwatch because it's after the first 14 days of study.

Thanks,

Kris

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, May 31, 2007 11:20 AM  
To: CBackstrom@salud.unm.edu; Zaterka-Baxter, Kristin  
Cc: JRohr@salud.unm.edu; kwatterberg@salud.unm.edu; Das, Abhik; nfiner@ucsd.edu  
Subject: Re: SUPPORT advise please

This would be a "deviation.". If the parent can still allow collection of data, we will have everything except the saturations. I would recommend getting as much info as possible and go from there.

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Conra Lacy <CBackstrom@salud.unm.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Kristin Zaterka-Baxter <kzaterka@rti.org>  
Cc: Julie Rohr <JRohr@salud.unm.edu>; Kristi Watterberg <KWatterberg@salud.unm.edu>



Sent: Thu May 31 11:13:58 2007  
Subject: SUPPORT advise please

Rose/Kris,

We appear to be facing a dilemma with our SUPPORT (b) (6) who was transported across town for shunt placement, has developed an infection and cannot be transported back to us. Because this family is insured by the insurance of the other hospital, the insurance company and the neonatologists have arranged for the (b) (6). The family just wants the kids to all be together. We are giving the family a tour of our new unit, which opens on Monday, but are afraid it may not be enough to convince the family to "fight" the transport.

We should be able to get all the necessary data to complete the study on all babies, who are now (b) (6) days old. It is not feasible, however, to send the Masimo monitors to the other hospital. They no experience or interest in, nor financial responsibility for the monitors. We would need approval of their IRB to use the monitors, and that would take months.

I'm sure this has happened at other centers. How have they handled it?  
What would you advise?

Thanks,  
Connie

Conra (Connie) Backstrom Lacy  
University of New Mexico  
Pediatric Research Nurse Manager  
(505) 272-0367  
pager (505) 951 (b) (6) 5  
fax (505) 272-6845  
cbackstrom@salud.unm.edu

**From:** Zaterka-Baxter, Kristin  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** nfiner@ucsd.edu; Gantz, Marie; Das, Abhik; Auman, Jeanette O.  
**Subject:** RE: SUPPORT advise please  
**Date:** Thursday, May 31, 2007 12:43:19 PM

---

Right, that too, they can key that regardless of what the ultimate status date is and it's looked for from time of discharge through follow-up. That shouldn't change if the babies are transfers now.

Thanks,  
Kris

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, May 31, 2007 12:37 PM  
To: Zaterka-Baxter, Kristin  
Cc: nfiner@ucsd.edu; Gantz, Marie; Das, Abhik; Auman, Jeanette O.  
Subject: Re: SUPPORT advise please

We definately need ROP outcomes for support.  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Zaterka-Baxter, Kristin <kzaterka@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Neil Finer <nfiner@ucsd.edu>; Gantz, Marie <mgantz@rti.org>; Das, Abhik <adas@rti.org>; Auman, Jeanette O. <joa@rti.org>  
Sent: Thu May 31 12:24:35 2007  
Subject: RE: SUPPORT advise please

Hi,  
Would this case have met status (transferred) for both Support and GDB?  
If the infants are off the oximeters there really isn't any other data that is collected other than the 02 at 36 weeks which can (and should in all cases) be collected if an infant met status by DC or transfer prior to 36 weeks. A reportable AE may be the other possibility but would be reported at this point on the Medwatch because it's after the first 14 days of study.

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Kris

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From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, May 31, 2007 11:20 AM  
To: CBackstrom@salud.unm.edu; Zaterka-Baxter, Kristin  
Cc: JRohr@salud.unm.edu; kwatterberg@salud.unm.edu; Das, Abhik; nfiner@ucsd.edu  
Subject: Re: SUPPORT advise please

This would be a "deviation.". If the parent can still allow collection of data, we will have everything except the saturations. I would

recommend getting as much info as possible and go from there.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

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To: Higgins, Rosemary (NIH/NICHD) [E]; Kristin Zaterka-Baxter <kzaterka@rti.org>  
Cc: Julie Rohr <JRohr@salud.unm.edu>; Kristi Watterberg <KWatterberg@salud.unm.edu>  
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We should be able to get all the necessary data to complete the study on all (b) (6) babies, who are now (b) (6) days old. It is not feasible, however, to send the Masimo monitors to the other hospital. They no experience or interest in, nor financial responsibility for the monitors. We would need approval of their IRB to use the monitors, and that would take months.

I'm sure this has happened at other centers. How have they handled it? What would you advise?

Thanks,  
Connie

Conra (Connie) Backstrom Lacy  
University of New Mexico  
Pediatric Research Nurse Manager  
(505) 272-0367  
pager (505) 951-(b) (6)  
fax (505) 272-6845  
cbackstrom@salud.unm.edu

**From:** Neil Finer  
**To:** Gantz, Marie  
**Cc:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Age at ROP  
**Date:** Thursday, May 31, 2007 11:20:17 AM

---

Hi Marie  
Many thanks  
It looks like we can close the book on ROP close to status. We will continue to follow this  
Neil

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Wednesday, May 30, 2007 1:27 PM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** Age at ROP

Hi Neil,

Attached is a document that answers the questions raised yesterday regarding the age at which ROP status is reached for SUPPORT infants. Please let me know if you have any questions.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

**From:** [Cunningham, Meg](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Neil Finer](#); [Wally Carlo, M.D.](#); [mcw3@case.edu](#); [Bradley Yoder](#); [Roger.Faix@hsc.utah.edu](#); [Abbot Laptook](#); [kurt.schibler@cchmc.org](#); [Das, Abhik](#); [Wade Rich](#); [nancy newman](#); [Gantz, Marie](#)  
**Cc:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#); [Zaterka-Baxter, Kristin](#)  
**Subject:** RE: Reminder: CONFIDENTIAL SUPPORT META ANALYSIS variables call  
**Date:** Thursday, May 31, 2007 8:23:56 AM  
**Attachments:** [SUPPORT052907.doc](#)

---

Attached are minutes from Tuesday's call. They will be posted to the NRN website shortly.

---

**From:** Webb, Robin E.  
**Sent:** Wednesday, May 23, 2007 12:13 PM  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Neil Finer](#); [Wally Carlo, M.D.](#); [mcw3@case.edu](#); [Bradley Yoder](#); [Roger.Faix@hsc.utah.edu](#); [Abbot Laptook](#); [kurt.schibler@cchmc.org](#); [Das, Abhik](#); [Wade Rich](#); [nancy newman](#); [Gantz, Marie](#)  
**Cc:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#); [Cunningham, Meg](#); [Zaterka-Baxter, Kristin](#); [Webb, Robin E.](#)  
**Subject:** CONFIDENTIAL SUPPORT META ANALYSIS variables

The SUPPORT call has been scheduled for

**Tuesday 5/29**  
**2:00pm ET**

Dial:  
Outside the USA  
**1-203-310-(b) (6)**  
or  
Within the USA  
**866-675-(b) (6)**

Then, enter Participant Passcode:

**(b) (6)** #

## **SUPPORT Subcommittee Conference Call May 29, 2007**

**Participants:** Neil Finer, Rose Higgins, Wally Carlo, Abbot Laptook, Roger Faix, Abhik Das, Krut Schibler, Nancy Newman, Marie Gantz, Kris Zaterka-Baxter, Meg Cunningham and Stephanie Archer

### ***Neonatal Oxygenation Prospective Meta-analysis Collaboration***

- Lisa Aiske, from Australia is leading this endeavour.
- She has asked the NRN to provide the variables used for the oxygen saturation arm of the SUPPORT trial. The Steering Committee previously agreed to send Lisa the manual and forms so variable and definitions were available.
- Lisa Aiske also asked that data on the first 50 babies be released. Abhik suggested that we could release fictitious data based on the ranges that we have received. Network rules state that data can not be released until the study is completed and published. Rose will tell Lisa that policy states that data cannot generally be released.
- Rose will have SC review and approve the changes made to the data collection instrument based on SUPPORT before she sends any info to Lisa.

### ***General SUPPORT Update***

- At the end of last week 647 babies were enrolled.
- Site visits have continued. Last weeks visit at the University of New Mexico went extremely well.

### ***Secondary application from Cincinnati***

- This does not require further deliberation. It is considered an ancillary study since it is only at one site.

### ***ROP Outcomes***

- 80% of the time ROP status is reached at 5 months
- 95% of the time ROP status is reached at 7 months.
- Marie Gantz will looking into the following:
  - How often SUPPORT infants need surgery for ROP or reach threshold ROP after 50 weeks PMA.
  - What is the latest age that SUPPORT infants have reached threshold ROP.

### ***Altitude Issue***

- Brad Yoder created tables with altitude corrections for FiO<sub>2</sub> data.
- It was decided that RTI will convert the FiO<sub>2</sub> data for the sites at altitudes > 5000ft however, the sites will also need to convert the 'raw' data to determine if an infant passed or failed the challenge. RTI will add two questions so that both the 'real' FiO<sub>2</sub> and 'converted' FiO<sub>2</sub> can be recorded in section E of the PHY02RA.
- Abhik will ask the RTI programmers if it is possible to add the two additional FiO<sub>2</sub> questions in the DMS only for the two higher altitude sites (NM and Utah) and report back to the committee.

**From:** Sood, Beena  
**To:** Archer, Stephanie (NIH/NICHD) [E]; nfiner@ucsd.edu; adas@rti.org; Higgins, Rosemary (NIH/NICHD) [E]; Shankaran, Seetha; Rosman, Carolyn; ae5357@wayne.edu; Elizabeth Billian  
**Subject:** RE: SUPPORT| Recruitment teleconference with Wayne State (4-18-07)  
**Date:** Wednesday, May 30, 2007 3:51:59 PM  
**Attachments:** 2007 activity report Rosman 2007-05-22.xls

---

In response to the question in the minutes of the teleconference, we tabulated the number of patients screened for SUPPORT, consented and enrolled. We also then looked at how many had an antenatal or intrapartum neo consult and adverse events. These data are attached. These results are from Jan 9 2007 to May 21 2007

Thanks  
Beena

---

**From:** Archer, Stephanie (NIH/NICHD) [E] [mailto:archerst@mail.nih.gov]  
**Sent:** Monday, May 21, 2007 11:15 AM  
**To:** nfiner@ucsd.edu; adas@rti.org; Higgins, Rosemary (NIH/NICHD) [E]; Shankaran, Seetha; Sood, Beena; Rosman, Carolyn; ae5357@wayne.edu  
**Subject:** SUPPORT| Recruitment teleconference with Wayne State (4-18-07)

I recently located some notes from the teleconference on April 18th with Wayne State about recruitment for SUPPORT. Attached are typed notes. This was only my second day in the office, so it's quite likely I misinterpreted something! Please review these notes and send me any comments/corrections by May 25th.

Thanks!  
Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

**Support Monthly  
Activity 2007  
Infants 24 - 27 Weeks Gestation**

	Patients Screened	Patients Approached	Neonatal Consults Done	Patients Delivered (Support Eligible)	Support Grade III/IV IVH	Support Infants Expired	Enrolled	NEO Consult & Enrolled
January	7	4	3	3	1 (cerebellar)		1	1
February	23	10	12	9			2	2
March	15	11	7	5	1		2	2
April	18	11	11	9		1	2	2
May	15	6	5	4	2	2	3	3
June								
July								
August								
September								
October								
November								
December								



**From:** Wade Rich  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: MISSING SUPPORT ROP OUTCOME  
**Date:** Wednesday, May 30, 2007 2:24:22 PM

---

Sent to another facility. Working on it...  
wade

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, May 30, 2007 11:11 AM  
**To:** Neil Finer; Wade Rich  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** MISSING SUPPORT ROP OUTCOME

Center	Network	Missing ROP error message
22	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

Hi,  
Do you have the ROP outcome for this baby? Thanks for all the effort

Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
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301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov



> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

> 19

>

> (b) (6)

> No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.

> 19

>

> (b) (6)

> No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

> 19

>

> (b) (6)

> Infant died more than a week after the last ROP exam and final ROP status has not been obtained. Please confirm that all ROP exams have been entered.

> 19

>

> (b) (6)

> No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.

>

>  
> We are missing the above ROP outcomes for SUPPORT. Let us know how  
> you are doing.  
>  
> Thanks  
> Rose  
> Rosemary D. Higgins, M.D.  
> Program Scientist for the Neonatal Research Network  
> Pregnancy and Perinatology Branch  
> Center for Developmental Biology and Perinatal Medicine  
> NICHD, NIH  
> 6100 Executive Blvd., Room 4B03B  
> MSC 7510  
> Bethesda, MD 20892  
> (For overnight delivery, use Rockville, MD 20852)  
> 301-435-7909  
> 301-496-3790 (FAX)  
> higginsr@mail.nih.gov  
>

**From:** Barbara Stoll  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Wednesday, May 30, 2007 1:36:21 PM

---

Thanks

I agree with sharing the info you sent-- and also to participation once these studies have some data to meta- analyze!!

BJJ "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> writes:

~~There are other studies that have either started or are about to start.~~

~~Australian (Askle + Jarnow-Mordi) -- just started enrolling~~

~~UK (Edmund Hey) -- still pending~~

~~Canadian (Schmidt) -- about to start~~

~~Cole -- not yet funded~~

~~These studies have 2 year outcome as a primary outcome.~~

~~We are ahead on the recruitment, so data release would not be anticipated until after we reach our primary outcome (at least 2 years is a guess). The other studies will not be completed at this time.~~

.

Thanks

Rose

.

---

**From:** Barbara Stoll, [mailto:Barbara.Stoll@oz.ped.emory.edu]  
**Sent:** Tuesday, May 29, 2007 10:46 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables

.

Rose

Remind me of the timeline for doing the metaanalysis.

BJJ

Barbara J. Stoll, MD

George W. Brumley, Jr., Professor and Chair, Department of Pediatrics

Medical Director, Children's Healthcare of Atlanta at Egleston

Office: 404-727-2456 Fax: 404-727-5737

barbara\_stoll@oz.ped.emory.edu

**This message is for the designated recipient only and may contain privileged or confidential information. If you have received it in error, please notify the sender immediately and delete the original.**

Barbara J. Stoll, MD  
George W. Brumley, Jr., Professor and Chair, Department of Pediatrics  
Medical Director, Children's Healthcare of Atlanta at Egleston  
Office: 404-727-2456 Fax: 404-727-5737  
barbara\_stoll@oz.ped.emory.edu

This message is for the designated recipient only and may contain privileged or confidential information.  
If you have received it in error, please notify the sender immediately and delete the original.

**From:** Abbot Laptook  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Tuesday, May 29, 2007 6:46:52 PM

---

Yes, AL

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, May 29, 2007 3:32 PM  
To: rohls@unm.edu; Abbot Laptook; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald Goldberg; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail)  
Cc: Kris Zaterka-Baxter; Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Neil Finer  
Subject: FW: CONFIDENTIAL SUPPORT META ANALYSIS variables

Hi,

Attached is the coding variables for the meta analysis for the randomized oxygen levels for all studies utilizing the enrolled patients for the meta analysis. RTI has incorporated changes that are in line with our forms for SUPPORT.

Let me know if you are ok with sending this back to Dr. Askie by June 1.

Thanks  
Rose

-----Original Message-----

From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]  
Sent: Tuesday, May 29, 2007 2:01 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz, Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.; Zaterka-Baxter, Kristin  
Subject: RE: CONFIDENTIAL SUPPORT META ANALYSIS variables

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100

Cell: 205 266 (b) (6)

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wednesday, May 09, 2007 3:08 PM  
To: Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder;  
Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das,  
Abhik; Wade Rich; nancy newman; Gantz, Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;  
Zaterka-Baxter, Kristin  
Subject: CONFIDENTIAL SUPPORT META ANALYSIS variables

Hi,

I have attached the proposal for the meta analysis - Lisa Aksie has asked for input on the variables to be collected for the prospective meta analysis. As you probably recall, the NRN steering committee agreed in principle to be part of the prospective metaanalysis following a presentation by Dr. Cole at the Steering Committee meeting in Jan. 2005.

The group is also interested in seeing data from the first 50 patients recruited into each trial. I had informed them that this is not normally done with NRN trials.

We also need to develop a potential timeline for data release for this collaboration which will need to be approved by the steering committee.

On a very positive note, the SUPPORT Trial is way ahead of any of the other ongoing trials with respect to enrollment!!

I will have Robin set up a call with the SUPPORT Subcommittee in the next month for discussion.

Thanks

Rose

<<NeOProm variable coding form - V4\_30 April07 RTI comments.doc>>

This e-mail and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or taking of any action in reliance on the information contained in this e-mail is prohibited. If you have received this e-mail in error, please notify sender by reply e-mail and delete this message and any attachment(s) immediately. Thank you for your consideration in this matter.



**From:** Wally Carlo, M.D.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Tuesday, May 29, 2007 4:36:21 PM

---

Ok.

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b)

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Tuesday, May 29, 2007 2:32 PM  
To: rohls@unm.edu; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Wally Carlo, M.D.; Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; Poole Kenneth (E-mail); Roger Faix; Ronald Goldberg; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail)  
Cc: Kris Zaterka-Baxter; Cunningham, Meg; Archer, Stephanie (NIH/NICHD) [E]; Neil Finer  
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Let me know if you are ok with sending this back to Dr. Askie by June 1.

Thanks  
Rose

-----Original Message-----

From: Wally Carlo, M.D. [<mailto:WCarlo@peds.uab.edu>]  
Sent: Tuesday, May 29, 2007 2:01 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz, Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.; Zaterka-Baxter, Kristin  
Subject: RE: CONFIDENTIAL SUPPORT META ANALYSIS variables

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
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Cell: 205 266 (b) (6)

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Wednesday, May 09, 2007 3:08 PM  
To: Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder;  
Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das,  
Abhik; Wade Rich; nancy newman; Gantz, Marie  
Cc: Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Webb, Robin E.;  
Zaterka-Baxter, Kristin  
Subject: CONFIDENTIAL SUPPORT META ANALYSIS variables

Hi,

I have attached the proposal for the meta analysis - Lisa Aksie has asked for input on the variables to be collected for the prospective meta analysis. As you probably recall, the NRN steering committee agreed in principle to be part of the prospective metaanalysis following a presentation by Dr. Cole at the Steering Committee meeting in Jan. 2005.

The group is also interested in seeing data from the first 50 patients recruited into each trial. I had informed them that this is not normally done with NRN trials.

We also need to develop a potential timeline for data release for this collaboration which will need to be approved by the steering committee.

On a very positive note, the SUPPORT Trial is way ahead of any of the other ongoing trials with respect to enrollment!!

I will have Robin set up a call with the SUPPORT Subcommittee in the next month for discussion.

Thanks

Rose

<<NeOProm variable coding form - V4\_30 April07 RTI comments.doc>>

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Conra Lacy; Kristin Zaterka-Baxter  
**Cc:** Julie Rohr; Kristi Watterberg  
**Subject:** RE: data dilemma  
**Date:** Tuesday, May 29, 2007 4:29:56 PM

---

I agree  
Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Tuesday, May 29, 2007 12:45 PM  
To: Conra Lacy; Kristin Zaterka-Baxter  
Cc: Julie Rohr; Kristi Watterberg; Neil Finer  
Subject: RE: data dilemma

I would suggest that you document the absence, but collect the data for SUPPORT.

Thanks for the heads up - just let Kris know the network number!  
Rose

-----Original Message-----

From: Conra Lacy [<mailto:CBackstrom@salud.unm.edu>]  
Sent: Tuesday, May 29, 2007 3:44 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Kristin Zaterka-Baxter  
Cc: Julie Rohr; Kristi Watterberg  
Subject: data dilemma

One of our SUPPORT trial babies was "temporarily" transported to another hospital for neurosurgery. He was to have returned within 24 hours. That 24 hours has now stretched to <sup>90</sup> days, and he is not back yet. I expect he will return, as we have (b) (6). I am certain that the SUPPORT trial will want the data to be as complete as possible. The GDB, however, will consider him "transferred" if he doesn't return tomorrow and the data will be completed, except NG03 sections M and N, as of 5/22. Since so much of the SUPPORT trial outcomes are collected in the GDB, should we "ignore" his absence and try to complete the GDB until he goes home?

Thanks,  
Connie

Conra (Connie) Backstrom Lacy  
University of New Mexico  
Pediatric Research Nurse Manager  
(505) 272-0367  
pager (505) 951 (b) (6)  
fax (505) 272-6845  
[cbackstrom@salud.unm.edu](mailto:cbackstrom@salud.unm.edu)

**From:** [Kathy J Auten](mailto:Kathy.J.Auten)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins.Rosemary@NIH.NICHD)  
**Cc:** [goldb008@mc.duke.edu](mailto:goldb008@mc.duke.edu); [cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu); [Kris Zaterka-Baxter](mailto:Kris.Zaterka-Baxter)  
**Subject:** RE: SUPPORT  
**Date:** Tuesday, May 29, 2007 1:16:34 PM

---

We have eventually enrolled all of the other kids to which this happened (all but one were GDB-enrolled before they left the premises), but it has caused us a bit of heartburn in the process. Mike is going to talk to the IRB chair and ask if that's possible. We'll let you know the outcome of the discussion. In the meantime, I'll hold on to this data.

Kathy

Kathy J. Auten, MSHS  
Project Manager  
NICHD Neonatal Research Network Trials  
Duke University Medical Center  
Box 3179  
Bell Building, Room 141  
Durham, NC 27710 USA  
919-681-5859 tel  
919-681-4868 fax  
[kathy.auten@duke.edu](mailto:kathy.auten@duke.edu)

"Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)> wrote on 05/29/2007 01:02:30 PM:

> Kathy  
> Did this happen with one of your other children also?? Since the  
> SUPPORT Consent says we collect infant data, would your IRB let you  
> submit the GDB data because they signed the SUPPORT consent?  
> Thanks  
> Rose  
>  
>  
> From: Kathy J Auten [<mailto:auten002@mc.duke.edu>]  
> Sent: Tuesday, May 29, 2007 1:00 PM  
> To: Higgins, Rosemary (NIH/NICHD) [E]; Kris Zaterka-Baxter  
> Subject: SUPPORT  
>  
>  
> Rose and Kris,  
> I have a SUPPORT baby who was just transferred to our hospital  
> across town without being enrolled in GDB. His mom has been  
> extremely indecisive about participating in GDB . We have actively  
> recruited her for 2 months and will continue to do so, both at our  
> other site and when she comes back to clinic. In the meantime, I  
> can't enter the forms or upload the oximeter data without a network  
> #. Should I just hold on to the forms and hope mom consents to GDB  
> down the road?  
> Kathy  
>  
> Kathy J. Auten, MSHS  
> Project Manager  
> NICHD Neonatal Research Network Trials  
> Duke University Medical Center  
> Box 3179  
> Bell Building, Room 141  
> Durham, NC 27710 USA  
> 919-681-5859 tel  
> 919-681-4868 fax  
> [kathy.auten@duke.edu](mailto:kathy.auten@duke.edu)

**From:** Cunningham, Meg  
**To:** Webb, Robin E.; Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz, Marie  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Zaterka-Baxter, Kristin  
**Subject:** Reminder: CONFIDENTIAL SUPPORT META ANALYSIS variables call  
**Date:** Tuesday, May 29, 2007 8:25:47 AM

---

Reminder for today's call.

---

**From:** Webb, Robin E.  
**Sent:** Wednesday, May 23, 2007 12:13 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy newman; Gantz, Marie  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Zaterka-Baxter, Kristin; Webb, Robin E.  
**Subject:** CONFIDENTIAL SUPPORT META ANALYSIS variables

The SUPPORT call has been scheduled for

**Tuesday 5/29**  
**2:00pm ET**

Dial:  
Outside the USA  
1-203-310 (b) (6)  
or  
Within the USA  
3256

Then, enter Participant Passcode:  
#

**From:** [Wally Carlo, M.D.](#)  
**To:** [Neil Finer](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: Coding of "Avastin" on GDB data sheet  
**Date:** Friday, May 25, 2007 4:42:00 PM

---

Neil: That is correct. wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680  
FAX: 205 934 3100  
Cell: 205 266 (b)

-----Original Message-----

From: Neil Finer [<mailto:nfiner@ucsd.edu>]  
Sent: Friday, May 25, 2007 3:39 PM  
To: Wally Carlo, M.D.  
Cc: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE: Coding of "Avastin" on GDB data sheet

Thanks Wally  
This would then fall under your standard of care.  
Neil

-----Original Message-----

From: Wally Carlo, M.D. [<mailto:WCarlo@peds.uab.edu>]  
Sent: Friday, May 25, 2007 1:33 PM  
To: Neil Finer; Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: [kzaterka@rti.org](mailto:kzaterka@rti.org); Monica Collins; Wade Rich  
Subject: RE: Coding of "Avastin" on GDB data sheet

Neil:

Our ophthalmologists recommend this treatment very selectively.  
Currently, it is our clinical practice under an IRB protocol but not an RCT yet.

wally

Wally Carlo, M.D.  
Edwin M. Dixon Professor of Pediatrics  
University of Alabama at Birmingham  
Director, Division of Neonatology  
Director, Newborn Nurseries  
619 South 20th Street  
525 New Hillman Building  
Birmingham, AL 35233-7335  
Phone: 205 934 4680

FAX: 205 934 3100

Cell: 205 266 (b) (6)

-----Original Message-----

From: Neil Finer [mailto:nfiner@ucsd.edu]

Sent: Friday, May 25, 2007 3:10 PM

To: Wally Carlo, M.D.; Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]

Cc: kzaterka@rti.org; Monica Collins; Wade Rich

Subject: RE: Coding of "Avastin" on GDB data sheet

Hello Monica and Wally

Since ROP requiring treatment is an end-point in SUPPORT, is the use of Avastin only post laser? This would effect the final eye outcomes and thus I would guess that this would compete with SUPPORT. Are other infants being treated at your or other centers, and are SUPPORT infants included?

If we discussed this before, my apologies, but I do not remember the details of that discussion.

Thanks

Neil

-----Original Message-----

From: Wally Carlo, M.D. [mailto:WCarlo@peds.uab.edu]

Sent: Friday, May 25, 2007 12:27 PM

To: Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]

Cc: kzaterka@rti.org; Neil Finer; Monica Collins

Subject: RE: Coding of "Avastin" on GDB data sheet

We have an IRB protocol which includes parental consent.

By the way, we had talked about this and I have asked our collaborators here to consider submitting an NRN protocol.

wally

Wally Carlo, M.D.

Edwin M. Dixon Professor of Pediatrics

University of Alabama at Birmingham

Director, Division of Neonatology

Director, Newborn Nurseries

619 South 20th Street

525 New Hillman Building

Birmingham, AL 35233-7335

Phone: 205 934 4680

FAX: 205 934 3100

Cell: 205 266 (b) (6)

-----Original Message-----

From: Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]

Sent: Friday, May 25, 2007 2:11 PM

To: Higgins, Rosemary (NIH/NICHD) [E]

Cc: kzaterka@rti.org; nfiner@ucsd.edu; Wally Carlo, M.D.; Monica Collins

Subject: RE: Coding of "Avastin" on GDB data sheet

Monica,

1. Is this a GDB question? Or a SUPPORT ROP question? The course of

reasoning for the answer differs. The additions for the Manual(s) differ.

Avastin use for ROP is an experimental, non-FDA approved intervention.

If you know, Is there a protocol, an informed consent, or randomization? Or does this seem to be an off label use?

This matters to us only to the degree that we need to determine how to deal with it in the MOP(s).

Dale

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]

Sent: Friday, May 25, 2007 2:11 PM

To: Phelps, Dale

Cc: kzaterka@rti.org; nfiner@ucsd.edu; wcarlo@peds.uab.edu; mcollins@peds.uab.edu

Subject: Fw: Coding of "Avastin" on GDB data sheet

Dale -

Any advice on this?

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Monica Collins <MCollins@peds.uab.edu>

To: Zaterka-Baxter, Kristin <kzaterka@rti.org>

Cc: Higgins, Rosemary (NIH/NICHD) [E]; barbara\_stoll@oz.ped.emory.edu <barbara\_stoll@oz.ped.emory.edu>; Wally Carlo, M.D. <WCarlo@peds.uab.edu>

Sent: Fri May 25 13:04:15 2007

Subject: Coding of "Avastin" on GDB data sheet

I think I asked about this question before and cannot remember the answer. I have a baby who was treated with avastin (instead of retinal ablation, scleral buckle, or vitrectomy). This was after reaching St. 3 Zone 2 on 2 exams bilaterally and Stage 3 Zone 2, subthreshold disease. She had no surgery or retinal detachment.

After treatment with Avastin, her ROP is regressing. How do I code this on the Ophthalmology Section of the NG03?

Monica Collins



**From:** [Shirley Cosby](#)  
**To:** [Zaterka-Baxter, Kristin](#); [Ellen Hale](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: Support Masimo's  
**Date:** Thursday, May 24, 2007 3:05:12 PM

---

2 blues (312095 & 312272) on the way! The UPS tracking number is 4684 874 154 8.  
Have Fun!  
Shirley

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Thursday, May 24, 2007 12:40 PM  
**To:** Shirley Cosby; Monica Collins; Ellen Hale  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Support Masimo's  
**Importance:** High

2 blues only please - I just spoke with Ellen. They do not use SatShare.  
Ellen's home contact is below  
Thanks tons!!!!!!!!!!

**Ellen Hale**

(b) (6)

(b) (6)

home phone: 770-(b) (6)

Kris

**From:** [Zaterka-Baxter, Kristin](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [ellen\\_hale@oz.ped.emory.edu](mailto:ellen_hale@oz.ped.emory.edu)  
**Subject:** RE: Fwd: monirors  
**Date:** Thursday, May 24, 2007 12:55:45 PM

---

Yup - I believe UAB has some now - I will set it up and let you know.  
Thanks,  
Kris

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Thursday, May 24, 2007 12:52 PM  
To: Zaterka-Baxter, Kristin  
Cc: [ellen\\_hale@oz.ped.emory.edu](mailto:ellen_hale@oz.ped.emory.edu)  
Subject: Fw: Fwd: monirors

Can you help Ellen out?

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Ellen Hale <[Ellen.Hale@oz.ped.emory.edu](mailto:Ellen.Hale@oz.ped.emory.edu)>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Thu May 24 12:32:43 2007  
Subject: Fwd: monirors

Rose,  
I sent this email earlier and just realized I left the r out of your email address. We just had another baby enrolled in SUPPORT.  
Thanks,  
Ellen  
I'm at 404-686-3424

Rose,  
We have enrolled 4 babies in SUPPORT this week (2 last night). Does anyone have some extra monitors? At least one of each would be great.

Please send to my home:

(b) (6)

home phone: 770-(b) (6)

Thanks and hope all have a happy holiday,  
Ellen

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** MedWatch | WSU SUPPORT  
**Date:** Thursday, May 24, 2007 10:20:09 AM

---

From WSU:

Male infant born at 24 4/7 weeks on (b) (6) and randomized to CPAP. Was intubated in the delivery room and on a ventilator because of poor color and apnea. On (b) (6) blood culture showed E. coli, and antibiotics were given. Baby developed hypotension refractory to medical management and severe metabolic acidosis secondary to E. coli sepsis. Died of fulminate E. coli sepsis with shock on (b) (6)

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

**From:** Webb, Robin E.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Wally Carlo, M.D.; mcw3@case.edu; Bradley Yoder; Roger.Faix@hsc.utah.edu; Abbot Laptook; kurt.schibler@cchmc.org; Das, Abhik; Wade Rich; nancy.newman; Gantz, Marie  
**Cc:** Archer, Stephanie (NIH/NICHD) [E]; Cunningham, Meg; Zaterka-Baxter, Kristin; Webb, Robin E.  
**Subject:** CONFIDENTIAL SUPPORT META ANALYSIS variables  
**Date:** Wednesday, May 23, 2007 12:13:06 PM

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The SUPPORT call has been scheduled for

**Tuesday 5/29**  
**2:00pm ET**

Dial:  
Outside the USA  
**1-203-310 (b) (6)**  
or  
Within the USA  
**866-675 (b) (6)**

Then, enter Participant Passcode:  
**(b) (6)**

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Zaterka-Baxter, Kristin; Abhik Das  
**Subject:** RE: deviation  
**Date:** Tuesday, May 22, 2007 2:57:37 PM

---

Hi Rose

I found this email not yet sent. My apologies for the delay in responding.

This is interesting and understandable

I believe that the most important step that needs to be done is informing the relevant IRB of this event. They would need to approve including this infant in the trial (as it could appear that this infant was entered on a Waiver). If they approve then I would file a protocol deviation, and use the infant's information and continue the infant in the trial. Otherwise, this infant may need to be excluded.

Regards

Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, May 10, 2007 12:08 PM  
To: Zaterka-Baxter, Kristin; Abhik Das; Neil Finer  
Subject: FW: deviation

FYI

Rose

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Thursday, May 10, 2007 3:07 PM  
To: 'Tate, Patti L'  
Cc: Georgia McDavid; Kennedy, Kathleen A; 'Morris, Brenda H'  
Subject: RE: deviation

Hi,

Thanks for the thoroughness. This should be sent to your IRB and to RTI.

Thanks for the honesty!!

Rose

-----Original Message-----

From: Tate, Patti L [mailto:Patti.L.Tate@uth.tmc.edu]  
Sent: Thursday, May 10, 2007 3:00 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: deviation

Good afternoon Rose,

We had a situation where we had 2 patients with the same last name, one was consented for the Support Study and was 27 5/7 weeks gestation and the other came in Saturday afternoon (b) (6) and was not consented and was 24 4/7 weeks gestation. The 24 4/7 weeker delivered and the RT saw the last name and randomized this infant to intubation and surfactant and proceeded to enroll the infant not realizing the mistake. Our team

member didn't see the monitor until (b) (6) it was hidden behind pumps and the isolette) and she was unable to reach Georgia or myself. This morning she discussed the problem with me (Georgia is out of town) and we spoke with the mother who gave us consent to continue with the study, then I spoke with Dr. Brenda Morris and with Georgia. In speaking with Georgia she said to send you an email to give you a heads up and to make sure it is okay for us to continue. So to summarize we had an infant enrolled in the study without consent for 5 days when it was discovered we spoke with the mother of whom gave consent to continue, in speaking with our PI and Senior Coordinator I was told to notify you and do a protocol deviation and Georgia said that she would do an adverse event when she returns on Tuesday. Is this okay? I apologize for the mistake. Have a great day, Patti

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Physiologic definition of BPD  
**Date:** Monday, May 21, 2007 8:33:07 PM

---

Great  
Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, May 21, 2007 5:11 PM  
To: Neil Finer  
Subject: Re: Physiologic definition of BPD

Neil  
Robin will send out an email for the SUPPORT call tomorrow.  
Take care,  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Neil Finer <nfiner@ucsd.edu>  
To: Bradley Yoder <Bradley.Yoder@hsc.utah.edu>; Higgins, Rosemary (NIH/NICHD) [E]; mcw3@cwru.edu <mcw3@cwru.edu>; kwatterberg@salud.unm.edu <kwatterberg@salud.unm.edu>; Roger Faix <Roger.Faix@hsc.utah.edu>  
Sent: Mon May 21 20:08:55 2007  
Subject: RE: Physiologic definition of BPD

Hi Brad

I am OK with having this document go the subcommittee and see if they approve. I fully understand the concept and appreciate the detail that you have gone to.

Have you discussed with the Albuquerque people? Would is there practice.

Neil

---

From: Bradley Yoder [mailto:Bradley.Yoder@hsc.utah.edu]  
Sent: Monday, May 21, 2007 1:31 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; mcw3@cwru.edu; Neil Finer; kwatterberg@salud.unm.edu; Roger Faix  
Subject: RE: Physiologic definition of BPD

Yes, but I would like to hear back from Neil & Michelle first.

Thanks.

BAY

---

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Monday, May 21, 2007 8:06 AM  
To: Bradley Yoder; mcw3@cwru.edu; Neil Finer; kwatterberg@salud.unm.edu;  
Roger Faix  
Subject: RE: Physiologic definition of BPD

I am ok with this - do you want me to set up a call with the SUPPORT subcommittee as it is most relevant to them at this point?

Thanks  
Rose

---

From: Bradley Yoder [<mailto:Bradley.Yoder@hsc.utah.edu>]  
Sent: Friday, May 18, 2007 6:25 PM  
To: mcw3@cwru.edu; Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer;  
kwatterberg@salud.unm.edu; Roger Faix  
Subject: Physiologic definition of BPD

I have spent a considerable amount of time trying to come to grips with the Physiologic Definition of BPD at 5000 feet.

There are methodological issues with the current methods for weaning of NC flow. The main one is that, at 5000 ft, a NC flow of 0.1 lpm & 100% O<sub>2</sub> generates an effective FiO<sub>2</sub> (as calculated from the Tables in the Protocol) of 0.25 in babies weighing > 1800 grams. But at 5000 ft this is equivalent to 0.21 at sea level. Further reductions in flow & / or FiO<sub>2</sub> decrease the FiO<sub>2</sub> further & expose infants to sea level FiO<sub>2</sub>'s < 0.21.

I think it would be a safer process with a similar weaning interval if we could use the methods as shown in the attached word file. I have included Tables that we have generated for determining effective FiO<sub>2</sub> based on weight and blender FiO<sub>2</sub> at 0.5 lpm or low flow rates at FiO<sub>2</sub> = 1.00.

The wise words of all are welcome!



Brad Yoder

Dept of Peds/Neonatology

University of Utah

Phone 801-581-7052

Fax: 801-585-7395

Pager: 801-339-(b) (6)

Email: [bradley.yoder@hsc.utah.edu](mailto:bradley.yoder@hsc.utah.edu)

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Neil Finer (nfiner@ucsd.edu)"; "Abhik Das (adas@rti.org)"; Higgins, Rosemary (NIH/NICHD) [E]; "Seetha Shankaran (sshankar@med.wayne.edu)"; "Benna Sood (bsood@med.wayne.edu)"; "Carolyn Rosman (crosmar@med.wayne.edu)"; "Rebecca Bara (ae5357@wayne.edu)"  
**Subject:** SUPPORT| Recruitment teleconference with Wayne State (4-18-07)  
**Date:** Monday, May 21, 2007 11:14:34 AM  
**Attachments:** Wayne State\_recruitment\_telcon\_notes\_04-18-07.doc

---

I recently located some notes from the teleconference on April 18th with Wayne State about recruitment for SUPPORT. Attached are typed notes. This was only my second day in the office, so it's quite likely I misinterpreted something! Please review these notes and send me any comments/corrections by May 25th.

Thanks!  
Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Wayne State University April 18, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Seetha Shankaran, WSU; Beena Sood, WSU; Becky Bara, WSU; Caroline Rosman, WSU; Stephanie Archer, NICHD

[Notes reviewed and approved by ██████]

#### Process

- OBs/nurses were not letting coordinators know of potential recruits
  - Have increased coordinator visits to high-risk populations, talking to every potential mother
  - Had a meeting with research and clinical teams to get everyone on board
    - Coordinator do recruitment during the day, which makes fellows more willing to do it at night and on the weekends
    - Now giving incentives to fellows to recruit for the trial
    - Weekend coverage has improved
  - **ACTION ITEM: WSU will check on the percentage of mothers receiving a consult**
- IRB – now have approval to request consent within a hour after birth
- Fixed the problem with IT connections with the electronic medical records (EMRs)
  - They can now access WSU's information database to see when the mothers are getting a neonatal consult, and in many cases are doing the consult and the consent together
- New interventions
  - Whenever a mother is missed, talking to the fellow on call at the time
  - Setting targets for recruitment

#### Recruitment

- Recruited = 14 year-to-date

#### Action Items

1. WSU will check on the percentage of mothers receiving a consult

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Physiologic definition of BPD  
**Date:** Monday, May 21, 2007 10:39:42 AM

---

Hi Rose

I think the committee needs to review and approve/ not approve this. Do you also want to talk about the Meta Analysis on this call?

Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, May 21, 2007 6:06 AM  
**To:** Bradley Yoder; mcw3@cwru.edu; Neil Finer; kwatterberg@salud.unm.edu; Roger Faix  
**Subject:** RE: Physiologic definition of BPD

I am ok with this – do you want me to set up a call with the SUPPORT subcommittee as it is most relevant to them at this point?

Thanks

Rose

---

**From:** Bradley Yoder [mailto:Bradley.Yoder@hsc.utah.edu]  
**Sent:** Friday, May 18, 2007 6:25 PM  
**To:** mcw3@cwru.edu; Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; kwatterberg@salud.unm.edu; Roger Faix  
**Subject:** Physiologic definition of BPD

I have spent a considerable amount of time trying to come to grips with the Physiologic Definition of BPD at 5000 feet.

There are methodological issues with the current methods for weaning of NC flow. The main one is that, at 5000 ft, a NC flow of 0.1 lpm & 100% O<sub>2</sub> generates an effective FiO<sub>2</sub> (as calculated from the Tables in the Protocol) of 0.25 in babies weighing > 1800 grams. But at 5000 ft this is equivalent to 0.21 at sea level. Further reductions in flow & / or FiO<sub>2</sub> decrease the FiO<sub>2</sub> further & expose infants to sea level FiO<sub>2</sub>'s < 0.21.

I think it would be a safer process with a similar weaning interval if we could use the methods as shown in the attached word file. I have included Tables that we have generated for determining effective FiO<sub>2</sub> based on weight and blender FiO<sub>2</sub> at 0.5 lpm or low flow rates at FiO<sub>2</sub> = 1.00.

The wise words of all are welcome!

Brad Yoder  
Dept of Peds/Neonatology  
University of Utah  
Phone 801-581-7052  
Fax: 801-585-7395  
Pager: 801-339-(b) (6)

This document is provided for reference purposes only. Persons with disabilities having difficulty accessing information in this document should e-mail NICHD FOIA Office at NICHDFOIARequest@mail.nih.gov for assistance.

Email: [bradley.yoder@hsc.utah.edu](mailto:bradley.yoder@hsc.utah.edu)

**From:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** SUPPORT recruitment teleconference notes  
**Date:** Monday, May 21, 2007 10:23:09 AM  
**Attachments:** [Yale\\_recruitment\\_telcon\\_notes\\_04-25-07.doc](#)  
[Indiana U\\_recruitment\\_telcon\\_notes\\_04-24-07.doc](#)  
[U\\_Cinn\\_recruitment\\_telcon\\_notes\\_04-25-07.doc](#)  
[UNM\\_recruitment\\_telcon\\_notes\\_04-24-07.doc](#)  
[Wayne State\\_recruitment\\_telcon\\_notes\\_04-18-07.doc](#)

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Here are all of the finalized notes, plus notes for the call with WSU.

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
[archerst@mail.nih.gov](mailto:archerst@mail.nih.gov)

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Yale University April 25, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Kris Zaterka-Baxter, RTI; Richard Ehrenkranz, Vineet Bhandari, Jo Ann Poulsen, Yale; Harris Jacobs, Yale-Bridgeport; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, REhrenkranz, ADas, KZaterka-Baxter]

#### Process

- At Yale, neonatal consults usually are done first by a fellow
  - Occasionally approached before, but then do some of the consult at that time
- Pls approach
- Coordinators follow-up
- MFMs. Have a group there (not in the MFMU Network). Doing one trial currently with amnios looking for evidence of chorio. For mothers up to 34 weeks gestation. Does not conflict with SUPPORT, so not prohibited from approaching them for multiple trials.
- IRB does not allow approach if mother is in active labor
- Problems with SUPPORT 02 form. Some data entering correction problems. Have 10-15 mothers to enter that were eligible, but could not get consent because they were in active labor. The system bounces them back. Should be catalogued as "unavailable."
  - **ACTION ITEM: Kris will talk to Abhik about how to correct this so that they can be entered correctly.**
  - **ACTION ITEM: Abhik will check whether consent should be entered per mother or per baby (Yale and UCSD count each baby, not just each mother)**

#### Recruitment

- The lower recruitment seems to be because of dip in number of eligible mothers – this was countered in February with a sudden spike in enrollment luck with consented women delivering 2 sets of twins within the eligibility window (see bullet #3)
- Approaching and getting consent for ~ 50%
- In February, we had a month with several consents with multiple births at once, so we were able to enroll 7 infants in 1 month. Enrolled 1 a few days ago.
- Projected GDB eligible ELBWs = 110/year = 9/month (not all of which are in the window)
- Hardly miss approaching anyone
- "Undecideds." Have a few, but lately they have gone outside of the window

#### Action Items

1. Kris will talk to Abhik about how to correct this so that they can be entered correctly.
2. Abhik will check whether consent should be entered per mother or per baby.

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Indiana University April 24, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Brenda Poindexter, Indiana U; Leslie Wilson, Indiana U; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, BPoindexter, LWilson]

#### Process

- Fellows seem to discuss the study well with the mothers
- Neonatal consults
  - IRB – can't approach for research study prior to a neonatal consult
  - OBs don't always request a consult (this is only the case at one of our three delivery hospitals, and even at this hospital, the not requesting a consult only applies to those women who are less than 24-25 weeks gestation)
- NOT RECRUITING uniformly AT 3 SITES because of infrastructure problems
  - Not enough people on team for 24/7 monitoring, so have to rely on faculty Our recruitment plan has always included all of our neonatal faculty – each attending neonatologist is a co-investigator on the SUPPORT study. As all of our faculty provide in-house coverage 24-7, we have always planned to rely on faculty for recruitment and the faculty are uniformly supportive of this plan. The one hospital that we are not recruiting at is our county hospital – in addition to having a very small number of ELBW deliveries, this SCN does not have dedicated neonatal respiratory therapists, has a large percentage of Spanish-only mothers, and the majority of ELBW deliveries are precipitous. These factors were the primary reasons that we have decided to focus our recruitment efforts at our other two delivery sites – not solely that we don't have enough people on the team for 24/7 monitoring as stated above in the minutes.
  - Power calculations for individual studies are determined using eligible number in GDB who would be available and approached, consented, and enrolled

#### Recruitment

- Since January 2007: Since 12/29/06 we have screened 25 mothers
- 21 infants consented; 12 randomized; 8 consented delivered outside the window; 1 remains consented and not delivered (still in the window)
  - Eligible= 11 (all at U hospital)
    - Jan/Feb = 3 (should be 5 using GDB numbers)
    - Jan = 4 eligible and all 4 enrolled
    - Feb = 1 – missed due to precipitous delivery
    - March = 1 (should be 5 eligible)
    - 3 were enrolled; 1 missed due to precip delivery; 1 missed
    - April = 0 to date (should be 3 eligible)
    - 1 enrolled and 2 (twins) missed due to precip delivery
  - Delivered outside of window = 5 (should be 8)
  - Refusals = 3
  - Missed = 3 (including 1 set of twins)
  - Consented and awaiting delivery = 5 (now 1)
  - A few delivery room deaths that were not going to be resuscitated
- For “consent not requested,” had several drug addicts, mentally disturbed, and under-aged mothers (all from before January 2007) – parenthetical statement not true – the consent not



requested has included maternal substance abuse, mental handicap, etc. since the beginning of the trial – not just from before 1/07

- Problem: entering numbers correctly
  - For multiples, you should get 1 consent per baby
  - Getting one per mother makes it look like less moms were approached and/or consented (number consented should be 2-3 times the number randomized)
  - **ACTION ITEM: Abhik will double-check which method should be used**
  - **ACTION ITEM: U Indiana will go back through their records to make sure data was entered correctly with 1 consent per baby**
  - **We have gone through our records – here are what the RTI numbers should be:**
    - Screened = 75 (87 since beginning the antenatal consent secondary in 4/06)
    - Approached = 38 (56 approached)
    - 27 of 56 approached – refused consent
    - 22 consented and enrolled (4 sets of multiples, so 18 of the 87)
    - 10 consented and not enrolled – delivered out of window
    - Consented = 18 (we have randomized 32 infants)
    - Randomized = 18 (due to multiples) (we have randomized 22 infants total)

\*Another important note – in the past, if we were not able to screen a mom because of precipitous delivery, the antenatal screening form (ANT01 and ANT02) was not consistently being filled out – Leslie has gone back and fixed this

#### **Action Items**

1. RTI will look at which sites are/are not enrolling and their GDB numbers; how many were missed because of this.
2. Abhik will check whether consent should be entered per mother or per baby
3. U Indiana will go back through their records to make sure data was entered correctly (depending upon Abhik's findings) – see revised numbers above – we will wait to hear back from RTI to make sure these discrepancies have been resolved – please feel free to call or email Leslie regarding any clarifications

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call University of Cincinnati April 25, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kris Baxter, RTI; Kurt Schibler, UCinn; Cathy Grisby, UCinn; Holly Mincey, UCinn; Barbara Alexander, UCinn; Kate Bridges, UCinn; Estelle Fischer, UCinn; Jody Shively, UCinn; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, CGrisby]

#### Process

- Missing some moms who did not give an answer before delivery, particularly with emergencies
  - Maybe ask on-call teams to ask parents one more time (as time allows).
    - **ACTION ITEM: UCinn will ask delivery teams to request consent from parents one more time (whenever possible) for those who delivery precipitously**
  - Not appropriate some times to ask when they are in active labor or about to go into OR
  - UCinn tries to get back to the mothers within 12-24 hours after first approach
- IRB Limitations – can't approach prisoners or mothers under 18 years old at Good Samaritan Hospital. At University Hospital we approach 16-<18 years old and get consent from mom and her parent/guardian.
- Process at UCSD
  - PI with a coordinator does the first approach
  - Preferably with, or just after, the neonatal consult – the consult gets them in the frame of mind that you are there to help them and their baby(ies)
  - Level of effort = ½ hour or more, especially if combined with the consult
  - Let them know that statistically we are finding that babies in trials do better than non-trial babies in general, no matter which research group they fall in (U. Cinn does this too).
  - Coordinator follows up later for consent
- OB investigator who has an ongoing trial
  - Will not allow approach/enrollment any patient who is eligible for any of her studies. For instance, if a mom is already in the MFM progesterone trial, the OB investigator feels the two trials will conflict.
  - **ACTION ITEM: Develop handout that details how the two trials do not conflict (Rose and Neil could help with this). If a synopsis of the protocol can be provided for evaluation by the concurrent research subcommittee, we can make a recommendation in writing.**
- Logistical problem: not having Drs. Schibler or Narendran at Good Samaritan. Dr. Schibler will move his office over to Good Sam. in a few months, following the departure of Dr. Barbara Warner.
- Literature for parents. Have a general brochure about research and one specific for SUPPORT that are both handed out by the coordinators. Currently UCinn gives out both brochures when they approach SUPPORT moms.

#### Recruitment

- "Our biggest problem is closing the deal." – consent = 40% of those approached
  - They approach almost everyone, except precipitous deliveries
  - Population in Cincinnati area seems to have a general distrust of research and are, therefore, reluctant to get involved in it.
  - Have had several research trials with negative outcomes that were covered in the local media; this perception of negativity seems to get projected onto all research trials.
  - Kurt feels that it is harder to get consent here than from his previous experience in Salt Lake City.
  - Same across all ethnic groups, but especially in African Americans
  - For those enrolled and randomized, Kurt doesn't believe that there has been any specific ethnic group or circumstances that led them to consent
  - Only difference between hospitals is due to volume
- ~50-80% approached before neonatal consult

- **ACTION ITEM: Look at which mothers were more likely to give consent, those approached before or after their consult.**

#### **Action Items**

1. UCinn will ask delivery teams to ask the parents for consent one more time before delivery (whenever possible)
2. U Cinn will develop handout that details how the two trials do not conflict (Rose and Neil could help with this).
3. U. Cinn will look at which mothers were more likely to give consent, those approached before or after their consult.

## **TELECONFERENCE NOTES**

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### **SUPPORT Low Recruitment Call University of New Mexico April 24, 2007**

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kristi Watterberg, UNM; Conra Lacy, UNM; Julie Rohr, UNM; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, KWatterberg]

#### **Process**

- UNM does a neonatal consult for all women coming in with premature labor when requested by obstetrics
  - OBs, however, may not request this if the labor stops
- Consent prior to neonatal consult
  - IRB is letting them do this
  - Identification of mothers in the window
  - Approached for SUPPORT if they are in, or earlier than (<24 weeks), the window
  - If they have not received a neonatal consult, they go over some of the statistical information on prematurity with the mothers
- Consent forms changed
  - They noticed that as they went over the forms with the mothers, they tended to automatically refuse consent whenever read the description of potential air leaks
  - IRB agreed to let them take this out of the form itself
  - Now consent had increased 60-70%
- Level of effort = 4-6 hours of work per consent request

#### **Recruitment**

- Only 25-30% of moms with consent deliver in the window
- Number of eligible babies dropped in January-March 2007, but is up again now.
  - May just be a trough
  - With decrease, they started an investigation to find out why; possible reasons:
    - Private hospital in the city just opened a new Level 3 NICU, so may be getting some of their eligible patients
    - In previous months, UNM had to divert people to other hospitals because of lack of beds – this may have led to some people automatically going elsewhere now without calling to inquire about availability
    - UNM new NICU is supposed to open in June
  - Now have ~50-55 ELBW with 85% inborn, but not all are eligible for SUPPORT
  - Number randomized now = 3 (2 born in early April, so not on the March report)
  - Consent rate ~ 50% which is average
  - Spanish translation is required in ~ 50% of cases, using hospital interpreters. They have forms in Spanish.
    - Moms from Mexico are concerned with deportation, so they are less likely to consent
- Survey of centers at last Steering Committee meeting suggested that the highest enrolling sites had the coordinators doing recruitment
  - U Alabama is also high, but has Wally involved in the recruit
  - UNM tried to separate the PI from the parents -- the PI may be hesitant to present the study, not wanting to put pressure on the parents; using coordinators creates more of a buffer

## **Supplies**

- Oximeters – have enough for the (b) (6) coming +1 extra

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Wayne State University April 18, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Seetha Shankaran, WSU; Beena Sood, WSU; Becky Bara, WSU; Caroline Rosman, WSU; Stephanie Archer, NICHD

[Notes reviewed and approved by ██████]

#### Process

- OBs/nurses were not letting coordinators know of potential recruits
  - Have increased coordinator visits to high-risk populations, talking to every potential mother
  - Had a meeting with research and clinical teams to get everyone on board
    - Coordinator do recruitment during the day, which makes fellows more willing to do it at night and on the weekends
    - Now giving incentives to fellows to recruit for the trial
    - Weekend coverage has improved
  - **ACTION ITEM: WSU will check on the percentage of mothers receiving a consult**
- IRB – now have approval to request consent within a hour after birth
- Fixed the problem with IT connections with the electronic medical records (EMRs)
  - They can now access WSU's information database to see when the mothers are getting a neonatal consult, and in many cases are doing the consult and the consent together
- New interventions
  - Whenever a mother is missed, talking to the fellow on call at the time
  - Setting targets for recruitment

#### Recruitment

- Recruited = 14 year-to-date as of the end of April

#### Action Items

1. WSU will check on the percentage of mothers receiving a consult

**From:** Raju, Tonse (NIH/NICHD) [E]  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Prospective meta analysis  
**Date:** Monday, May 21, 2007 9:50:55 AM

---

Is that Turner Mordi? At one time he was interested in NIH support, too.

*Tonse N. H. Raju, MD*

**Medical Officer/Program Scientist  
Pregnancy and Perinatology Branch  
National Institute of Child Health and Human Development  
National Institutes of Health  
6100 Executive Blvd, Room 4B03  
\*Bethesda, MD, 20892.  
Phone: 301-402-1872; Fax: 301-496-3790  
\*(for courier services, use Rockville, MD 20852)**

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Monday, May 21, 2007 9:47 AM  
**To:** Raju, Tonse (NIH/NICHD) [E]  
**Subject:** RE: Prospective meta analysis

I think they were requesting Australian Support, Not NIH  
Rose

---

**From:** Raju, Tonse (NIH/NICHD) [E]  
**Sent:** Monday, May 21, 2007 9:46 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Prospective meta analysis

Hi Rose,

Do you know whether it was scored? I think two prospective meta analyses I worked with the PIs were un-scored; one was on HIFI and the other, I think, was on oxygen.

*Tonse N. H. Raju, MD*

**Medical Officer/Program Scientist  
Pregnancy and Perinatology Branch  
National Institute of Child Health and Human Development  
National Institutes of Health  
6100 Executive Blvd, Room 4B03  
\*Bethesda, MD, 20892.  
Phone: 301-402-1872; Fax: 301-496-3790  
\*(for courier services, use Rockville, MD 20852)**

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Monday, May 21, 2007 9:41 AM  
**To:** williamtm@med.usyd.edu.au  
**Cc:** Raju, Tonse (NIH/NICHD) [E]  
**Subject:** Prospective meta analysis

Hi William –

I hope you had a safe trip home from PAS. I finally had time to look at the publication that appeared in Pediatrics from our workshop regarding the question of prospective meta analysis. I copied a couple of paragraphs from the paper below (these appear just after the description of the SUPPORT Trial). We did include one sentence regarding the meta analysis – see below-

“Funded by the National Health and Medical Research Council in Australia, BOOST II<sup>26</sup> is a randomized, double-blind trial that will evaluate 2 ranges of oxygen saturation (85%–90% and 91%–95%) to determine whether development, vision, and health assessment are affected at 2 years of age. The primary study outcomes include severe ROP (stage III or higher), major disability, and death. Children will be enrolled by 24 hours of life and be of gestational age of <28 weeks. At the time of this writing, BOOST II has begun enrollment.

The US Pulse Oximetry Saturation Trial for Prevention of ROP under development<sup>27</sup> will enroll children by 24 hours of age into 2 saturation arms (85%–89% and 91%–95%). The study will enroll 1525 children by 24 hours of age at <28 weeks of gestation. The primary study outcomes are ROP, pulmonary morbidity, severe disability at 24 months, and death. The hypothesis of this study is that children assigned randomly to the lower saturation arm should have less severe ROP and less pulmonary morbidity with no increase in the combined outcome of death or severe disability at a corrected age of 24 months. A prospective meta-analysis has been proposed to combine the resultant data from the Surfactant, Positive Airway Pressure, Pulse Oximetry Randomized Trial, BOOST II, and the Pulse Oximetry Saturation Trial for Prevention of ROP to examine moderate but important effects that may be detected with the large number of patients.”

Hope this suffices!!  
Regards,

Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510



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Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

From: Ellen Hale  
To: [Rosemary\\_Rosemary@NICH-DHLE](mailto:Rosemary_Rosemary@NICH-DHLE)  
Subject: Fwd: SUPPORT ROP OUTCOMES  
Date: Wednesday, May 16, 2007 11:28:45 AM  
Attachments: [Attach0.html](#)

---

Rose,

(b) (6) This is the child who the mom said she took the child for the eye exam and they would fax the report to us. We have never received the report. We saw the child at the 18 month f-u visit and the child's vision appeared to be normal. What to do?

(b) (6) This is the child that we scanned the last eye exam and sent to you to discuss with Dale.

Let me know what to do.  
Thanks,  
Ellen

Center Network ROP error message

9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

9 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Hi,

We are missing the above two children's ROP outcomes. THANKS FOR GETTING ALL OF THE OTHER CHILDREN'S OUTCOMES!!!

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

Center	Network	ROP error message
9	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
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Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
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301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Kathy J Auten](mailto:Kathy.J.Auten)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins.Rosemary@nih.gov)  
**Cc:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](mailto:Archer.Stephanie@nih.gov); [Michael Cotten](mailto:Michael.Cotten@nih.gov); [Ronald Goldberg](mailto:Ronald.Goldberg@nih.gov); [M. Bethany Ball](mailto:M.Bethany.Ball@nih.gov); [nancy newman](mailto:nancy.newman@nih.gov)  
**Subject:** RE: SUPPORT Pulse Oximeters (blue) needed for Indiana U.  
**Date:** Tuesday, May 15, 2007 3:58:16 PM

---

Thanks to all!

Kathy J. Auten, MSHS  
Project Manager  
NICHD Neonatal Research Network Trials  
Duke University Medical Center  
Box 3179  
Bell Building, Room 141  
Durham, NC 27710 USA  
919-681-5859 tel  
919-681-4868 fax  
[kathy.auten@duke.edu](mailto:kathy.auten@duke.edu)

"Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)> wrote on 05/15/2007 01:42:41 PM:

> Kathy  
> Nancy will send 2 from Case and you will get one from Stanford.  
>  
> THANKS  
> ROSE  
>  
>  
> From: Kathy J Auten [<mailto:auten002@mc.duke.edu>]  
> Sent: Tuesday, May 15, 2007 1:16 PM  
> To: Archer, Stephanie (NIH/NICHD) [E]  
> Cc: [ae5357@wayne.edu](mailto:ae5357@wayne.edu); [ahensman@wihri.org](mailto:ahensman@wihri.org); [bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org);  
> [CBackstrom@salud.unm.edu](mailto:CBackstrom@salud.unm.edu); [crosman@med.wayne.edu](mailto:crosman@med.wayne.edu); [ellen.hale@oz.ped.emory.edu](mailto:ellen.hale@oz.ped.emory.edu); [Georgia.E.McDavid@uth.tmc.edu](mailto:Georgia.E.McDavid@uth.tmc.edu); [grisbyca@emal.uc.edu](mailto:grisbyca@emal.uc.edu);  
> Higgins, Rosemary (NIH/NICHD) [E]; [jennifer.j.jensen@hsc.utah.edu](mailto:jennifer.j.jensen@hsc.utah.edu);  
> [jrohr@salud.unm.edu](mailto:jrohr@salud.unm.edu); Johnson, Karen; [karena.strong@intermountainmail.org](mailto:karena.strong@intermountainmail.org); [kimberlee.weaverlewis@intermountainmail.org](mailto:kimberlee.weaverlewis@intermountainmail.org);  
> [linda.reubens@urmc.rochester.edu](mailto:linda.reubens@urmc.rochester.edu); [mball@leland.stanford.edu](mailto:mball@leland.stanford.edu);  
> [mcollins@peds.uab.edu](mailto:mcollins@peds.uab.edu); [melissa.leps@UTSouthwestern.edu](mailto:melissa.leps@UTSouthwestern.edu); [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); [Nancy.Miller@UTSouthwestern.edu](mailto:Nancy.Miller@UTSouthwestern.edu); [nxs5@cwru.edu](mailto:nxs5@cwru.edu); [scosby@peds.uab.edu](mailto:scosby@peds.uab.edu); Wade Rich  
> Subject: RE: SUPPORT Pulse Oximeters (blue) needed for Indiana U.  
>  
>  
> Does anyone have 3 blue oximeters to send to Duke? I just used my  
> last blue one on a new admission and have twins and a singleton we  
> are attempting to consent.  
> Kathy  
>  
> Kathy J. Auten, MSHS  
> Project Manager  
> NICHD Neonatal Research Network Trials  
> Duke University Medical Center  
> Box 3179  
> Bell Building, Room 141  
> Durham, NC 27710 USA  
> 919-681-5859 tel  
> 919-681-4868 fax  
> [kathy.auten@duke.edu](mailto:kathy.auten@duke.edu)  
>  
> "Archer, Stephanie (NIH/NICHD) [E]" <[archerst@mail.nih.gov](mailto:archerst@mail.nih.gov)> wrote on  
> 05/14/2007 04:38:08 PM:  
>  
> > Patty Tate at UT-Houston (filling in for Georgia who gets back  
> > tomorrow) has 2 blue oximeters to send to you.  
> >  
> >  
> > Stephanie Wilson Archer  
> > Neonatal Research Network  
> > National Institute of Child Health and Human Development  
> > 6100 Executive Boulevard, Room 4B03 (MSC 7510)  
> > Bethesda, MD 20892  
> > Tel: 301-496-0430  
> > Fax: 301-496-3790  
> > [archerst@mail.nih.gov](mailto:archerst@mail.nih.gov)

>>  
>> From: Wilson, Leslie Dawn [mailto:ldw@iupui.edu]  
>> Sent: Monday, May 14, 2007 3:18 PM  
>> To: Archer, Stephanie (NIH/NICHD) [E]; Wade Rich; Johnson, Karen;  
>> ahensman@wihri.org; mbball@leland.stanford.edu; bmackinnon@tufts-  
>> nmc.org; crosman@med.wayne.edu; grisbyca@email.uc.edu;  
>> CBackstrom@salud.unm.edu; ellen.hale@oz.ped.emory.edu; Georgia.E.  
>> McDavid@uth.tmc.edu; jennifer.j.jensen@hsc.utah.edu; jrohr@salud.  
>> unmc.edu; karena.strong@intermountainmail.org; auten002@mc.duke.edu;  
>> kimberlee.weaverlewis@intermountainmail.org; linda.reubens@urmc.  
>> rochester.edu; mcollins@peds.uab.edu; monica.konstantino@yale.edu;  
>> Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; ae5357@wayne.edu;  
>> scosby@peds.uab.edu  
>> Cc: Higgins, Rosemary (NIH/NICHD) [E]; melissa.leps@UTSouthwestern.edu  
>> Subject: RE: SUPPORT Pulse Oximeters (orange) needed  
>>  
>> Is anyone able to loan Indiana a couple of blue oximeters. We have  
>> one and (b) (6) consented-thanks for checking-  
>>  
>> Address would be:  
>>  
>> Leslie Wilson RN  
>> Riley Hospital for Children  
>> 699 West Dr RR 208  
>> Indianapolis IN 46202  
>>  
>> Leslie Dawn Wilson, RN, BSN  
>> Research Manager  
>> Neonatal Network Coordinator  
>> Riley Hospital RR 208  
>> ldw@iupui.edu (e-mail)  
>> 699 West Dr  
>> Indianapolis, IN 46202  
>> 317.274.8255 (phone)  
>> 317.274.8963 (fax)  
>> 317.312.(b) (6) (pager)

**Blansfield, Earl (NIH/NICHD) [E]**

---

**From:** Monica Collins <MCollins@peds.uab.edu>  
**Sent:** Tuesday, May 15, 2007 3:03 PM  
**To:** Zaterka-Baxter, Kristin; Archer, Stephanie (NIH/NICHD) [E]; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** As we ship Masimos all around the country...  
**Attachments:** Masimo Log.xls

Kris,  
As we send these Masimos all around the country, I noticed that Utah has 3 blues that they can send to someone. I have attached a spreadsheet with our Masimo numbers—the highlighted ones are still out to other centers. Because we have so many new coordinators, we think it is possible that sites don't know that they are supposed to send the borrowed ones back to the site that sent them to them—in a timely fashion. If they are in use, it is not a problem. We currently have 13 out and these may have been sent on to other sites without our knowledge.

We are concerned ours may be out somewhere that we don't know. Could you check? If sites are finished with ours, we would like to put them back in the repository to have available for other sites. Unless we are changing the procedure--  
Thanks,  
Monica

Blue		returned date	returned date	returned date	returned date
311530				Utah 11/3/06	
312095	Detroit 3/13/07				
312119	Emory 5/22/06	8/9/2006	Duke 8/10/06	11/18/2006	Yale 2/9/07
312125				Utah 11/3/06	
312131			Houston 10/2/06	11/18/2006	Detroit 3/13/07
312225	Emory 5/22/06	8/9/2006	Duke 8/10/06	11/18/2006	
312233	Yale 2/9/07				
312268				Utah 11/3/06	
312272	Dallas 6/29/06	8/10/2006	Duke 8/10/06	11/18/2006	
312283				Utah 11/3/06	
317363					
317420					
317219					
317431					

Orange		returned date	returned date	returned date	returned date
311557		12/9/2006	Houston 10/3/06	3/1/2007	
311576	Yale 2/9/07				
312116					
312133					
312172					
312192	Yale 2/9/07				
312214		12/9/2006	Houston 10/3/06	3/1/2007	
312229					
312242	UT Dallas 5/14/07				
312260			Houston 10/3/06		
317384	Duke 8/10/06	11/18/2006			
317560	Duke 8/10/06	11/18/2006			
317227	Duke 8/10/06	11/18/2006	Yale 2/9/07		
317438		12/9/2006	Houston 10/3/06	3/1/2007	

**From:** Kimberlee Weaver Lewis  
**To:** Kathy J Auten; Archer, Stephanie (NIH/NICHD) [E]  
**Cc:** ae5357@wayne.edu; ahensman@wihri.org; bmackinnon@tufts-nemc.org; CBackstrom@salud.unm.edu; crosman@med.wayne.edu; ellen\_hale@oz.ped.emory.edu; Georgia.E.McDavid@uth.tmc.edu; grisbyca@email.uc.edu; Higgins, Rosemary (NIH/NICHD) [E]; jennifer.j.jensen@hsc.utah.edu; jrohr@salud.unm.edu; Johnson, Karen; Karena Strong; Wilson, Leslie Dawn; linda\_reubens@urmc.rochester.edu; mball@leland.stanford.edu; mcollins@peds.uab.edu; melissa.leps@UTSouthwestern.edu; monica.konstantino@yale.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; scosby@peds.uab.edu; Wade Rich  
**Subject:** RE: SUPPORT Pulse Oximeters (blue) needed for Indiana U.  
**Date:** Tuesday, May 15, 2007 2:49:56 PM

---

I have 3 blue oximeters that I can send you today from the Univ. of Utah-LDS Hospital site.

Kim

Kimberlee Weaver Lewis, RN, BSN  
Neonatal Research Network Coordinator  
LDS Hospital, Newborn Intensive Care Unit  
Office: (801) 408-1289  
Pager: (801) 339-(b) (6)  
kimberlee.weaverlewis@intermountainmail.org

---

**From:** Kathy J Auten [mailto:auten002@mc.duke.edu]  
**Sent:** Tuesday, May 15, 2007 11:16 AM  
**To:** Archer, Stephanie (NIH/NICHD) [E]  
**Cc:** ae5357@wayne.edu; ahensman@wihri.org; bmackinnon@tufts-nemc.org; CBackstrom@salud.unm.edu; crosman@med.wayne.edu; ellen\_hale@oz.ped.emory.edu; Georgia.E.McDavid@uth.tmc.edu; grisbyca@email.uc.edu; Higgins, Rosemary (NIH/NICHD) [E]; jennifer.j.jensen@hsc.utah.edu; jrohr@salud.unm.edu; Johnson, Karen; Karena Strong; Kimberlee Weaver Lewis; Wilson, Leslie Dawn; linda\_reubens@urmc.rochester.edu; mball@leland.stanford.edu; mcollins@peds.uab.edu; melissa.leps@UTSouthwestern.edu; monica.konstantino@yale.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; scosby@peds.uab.edu; Wade Rich  
**Subject:** RE: SUPPORT Pulse Oximeters (blue) needed for Indiana U.

Does anyone have 3 blue oximeters to send to Duke? I just used my last blue one on a new admission and have twins and a singleton we are attempting to consent.

Kathy

Kathy J. Auten, MSHS  
Project Manager  
NICHD Neonatal Research Network Trials  
Duke University Medical Center  
Box 3179  
Bell Building, Room 141  
Durham, NC 27710 USA  
919-681-5859 tel  
919-681-4868 fax  
kathy.auten@duke.edu

"Archer, Stephanie (NIH/NICHD) [E]" <archerst@mail.nih.gov> wrote on 05/14/2007 04:38:08 PM:

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---



> Stephanie Wilson Archer  
> Neonatal Research Network  
> National Institute of Child Health and Human Development  
> 6100 Executive Boulevard, Room 4B03 (MSC 7510)  
> Bethesda, MD 20892  
> Tel: 301-496-0430  
> Fax: 301-496-3790  
> archerst@mail.nih.gov  
>  
>  
> From: Wilson, Leslie Dawn [mailto:ldw@iupui.edu]  
> Sent: Monday, May 14, 2007 3:18 PM  
> To: Archer, Stephanie (NIH/NICHD) [E]; Wade Rich; Johnson, Karen;  
> ahensman@wihri.org; mball@leland.stanford.edu; bmackinnon@tufts-  
> nemc.org; crosman@med.wayne.edu; grisbyca@email.uc.edu;  
> CBackstrom@salud.unm.edu; ellen\_hale@oz.ped.emory.edu; Georgia.E.  
> McDavid@uth.tmc.edu; jennifer.j.jensen@hsc.utah.edu; jrohr@salud.  
> unm.edu; karena.strong@intermountainmail.org; auten002@mc.duke.edu;  
> kimberlee.weaverlewis@intermountainmail.org; linda\_reubens@urmc.  
> rochester.edu; mcollins@peds.uab.edu; monica.konstantino@yale.edu;  
> Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; ae5357@wayne.edu;  
> scosby@peds.uab.edu  
> Cc: Higgins, Rosemary (NIH/NICHD) [E]; melissa.leps@UTSouthwestern.edu  
> Subject: RE: SUPPORT Pulse Oximeters (orange) needed  
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>  
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> Research Manager  
> Neonatal Network Coordinator  
> Riley Hospital RR 208  
> ldw@iupui.edu (e-mail)  
> 699 West Dr  
> Indianapolis, IN 46202  
> 317.274.8255 (phone)  
> 317.274.8963 (fax)  
> 317.312.(b) (6) (pager)

**From:** CATHY A. GRISBY  
**To:** Kathy J Auten; Archer, Stephanie (NIH/NICHD) [E]  
**Cc:** ae5357@wayne.edu; ahensman@wihri.org; bmackinnon@tufts-nemc.org; CBackstrom@salud.unm.edu; crosman@med.wayne.edu; ellen\_hale@oz.ped.emory.edu; Georgia.E.McDavid@uth.tmc.edu; Higgins, Rosemary (NIH/NICHD) [E]; jennifer.j.jensen@hsc.utah.edu; jrohr@salud.unm.edu; Johnson, Karen; karena.strong@intermountainmail.org; kimberlee.weaverlewis@intermountainmail.org; Wilson, Leslie Dawn; linda\_reubens@urmc.rochester.edu; mball@leland.stanford.edu; mcollins@peds.uab.edu; melissa.leps@UTSouthwestern.edu; monica.konstantino@yale.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; scosby@peds.uab.edu; Wade Rich  
**Subject:** RE: SUPPORT Pulse Oximeters (blue) needed for Indiana U.  
**Date:** Tuesday, May 15, 2007 1:20:01 PM

---

Sounds like we'll finish enrollment in SUPPORT by the end of the month!

---- Original message ----

**Date:** Tue, 15 May 2007 13:15:33 -0400  
**From:** Kathy J Auten <auten002@mc.duke.edu>  
**Subject:** RE: SUPPORT Pulse Oximeters (blue) needed for Indiana U.  
**To:** "Archer, Stephanie (NIH/NICHD) [E]" <archerst@mail.nih.gov>  
**Cc:** ae5357@wayne.edu, ahensman@wihri.org, bmackinnon@tufts-nemc.org, CBackstrom@salud.unm.edu, crosman@med.wayne.edu, ellen\_hale@oz.ped.emory.edu, Georgia.E.McDavid@uth.tmc.edu, grisbyca@email.uc.edu, "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>, jennifer.j.jensen@hsc.utah.edu, jrohr@salud.unm.edu, "Johnson, Karen" <karen-johnson@uiowa.edu>, karena.strong@intermountainmail.org, kimberlee.weaverlewis@intermountainmail.org, "Wilson, Leslie Dawn" <ldw@iupui.edu>, linda\_reubens@urmc.rochester.edu, mball@leland.stanford.edu, mcollins@peds.uab.edu, melissa.leps@UTSouthwestern.edu, monica.konstantino@yale.edu, Nancy.Miller@UTSouthwestern.edu, nxs5@cwru.edu, scosby@peds.uab.edu, "Wade Rich" <wrich@ucsd.edu>

Does anyone have 3 blue oximeters to send to Duke? I just used my last blue one on a new admission and have twins and a singleton we are attempting to consent.

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Kathy J. Auten, MSHS

Project Manager

NICHD Neonatal Research Network Trials

Duke University Medical Center

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> Stephanie Wilson Archer

> Neonatal Research Network

> National Institute of Child Health and Human  
Development

> 6100 Executive Boulevard, Room 4B03 (MSC 7510)

> Bethesda, MD 20892

> Tel: 301-496-0430

> Fax: 301-496-3790

> archerst@mail.nih.gov

>

>

> From: Wilson, Leslie Dawn [mailto:ldw@iupui.edu]

> Sent: Monday, May 14, 2007 3:18 PM

> To: Archer, Stephanie (NIH/NICHD) [E]; Wade Rich; Johnson, Karen;

> ahensman@wihri.org; mball@leland.stanford.edu; bmackinnon@tufts-

> nmc.org; crosman@med.wayne.edu; grisbyca@email.uc.edu;

> CBackstrom@salud.unm.edu; ellen\_hale@oz.ped.emory.edu; Georgia.E.

> McDavid@uth.tmc.edu; jennifer.j.jensen@hsc.utah.edu; jrohr@salud.

> unmc.edu; karenaststrong@intermountainmail.org; auten002@mc.duke.edu;

> kimberlee.weaverlewis@intermountainmail.org; linda\_reubens@urmc.

> rochester.edu; mcollins@peds.uab.edu; monica.konstantino@yale.edu;

> Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; ae5357@wayne.edu;

> scosby@peds.uab.edu

> Cc: Higgins, Rosemary (NIH/NICHD) [E]; melissa.leps@UTSouthwestern.edu

> Subject: RE: SUPPORT Pulse Oximeters (orange) needed

>  
> Is anyone able to loan Indiana a couple of blue  
oximeters. We have  
> one and (b) (6) consented—thanks for checking—  
>  
> Address would be:  
>  
> Leslie Wilson RN  
> Riley Hospital for Children  
> 699 West Dr RR 208  
> Indianapolis IN 46202  
>  
>  
> Leslie Dawn Wilson, RN, BSN  
> Research Manager  
> Neonatal Network Coordinator  
> Riley Hospital RR 208  
> ldw@iupui.edu (e-mail)  
> 699 West Dr  
> Indianapolis, IN 46202  
> 317.274.8255 (phone)  
> 317.274.8963 (fax)  
> 317.312.(b) (6) (pager)

**From:** CATHY A. GRISBY  
**To:** [Wilson, Leslie Dawn](mailto:Wilson, Leslie Dawn); [Archer, Stephanie \(NIH/NICHD\) \[E\]](mailto:Archer, Stephanie (NIH/NICHD) [E]); [Wade Rich](mailto:Wade Rich); [Johnson, Karen](mailto:Johnson, Karen); [ahensman@wihri.org](mailto:ahensman@wihri.org); [mbball@leland.stanford.edu](mailto:mbball@leland.stanford.edu); [bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org); [crosman@med.wayne.edu](mailto:crosman@med.wayne.edu); [CBackstrom@salud.unm.edu](mailto:CBackstrom@salud.unm.edu); [ellen\\_hale@oz.ped.emory.edu](mailto:ellen_hale@oz.ped.emory.edu); [Georgia.E.McDavid@uth.tmc.edu](mailto:Georgia.E.McDavid@uth.tmc.edu); [jennifer.j.jensen@hsc.utah.edu](mailto:jennifer.j.jensen@hsc.utah.edu); [jrohr@salud.unm.edu](mailto:jrohr@salud.unm.edu); [karena.strong@intermountainmail.org](mailto:karena.strong@intermountainmail.org); [auten002@mc.duke.edu](mailto:auten002@mc.duke.edu); [kimberlee.weaverlewis@intermountainmail.org](mailto:kimberlee.weaverlewis@intermountainmail.org); [linda\\_reubens@urmc.rochester.edu](mailto:linda_reubens@urmc.rochester.edu); [mcollins@peds.uab.edu](mailto:mcollins@peds.uab.edu); [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); [Nancy.Miller@UTSouthwestern.edu](mailto:Nancy.Miller@UTSouthwestern.edu); [nxs5@cwru.edu](mailto:nxs5@cwru.edu); [ae5357@wayne.edu](mailto:ae5357@wayne.edu); [scosby@peds.uab.edu](mailto:scosby@peds.uab.edu)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins, Rosemary (NIH/NICHD) [E]); [melissa.leps@UTSouthwestern.edu](mailto:melissa.leps@UTSouthwestern.edu)  
**Subject:** RE: SUPPORT Pulse Oximeters (orange) needed  
**Date:** Tuesday, May 15, 2007 12:58:55 PM

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No extra blue or orange in Cincinnati.

----- Original message -----

**Date:** Mon, 14 May 2007 15:17:51 -0400  
**From:** "Wilson, Leslie Dawn" <[ldw@iupui.edu](mailto:ldw@iupui.edu)>  
**Subject:** RE: SUPPORT Pulse Oximeters (orange) needed  
**To:** "Archer, Stephanie (NIH/NICHD) [E]" <[archerst@mail.nih.gov](mailto:archerst@mail.nih.gov)>, "Wade Rich" <[wrich@ucsd.edu](mailto:wrich@ucsd.edu)>, "Johnson, Karen" <[karen-johnson@uiowa.edu](mailto:karen-johnson@uiowa.edu)>, <[ahensman@wihri.org](mailto:ahensman@wihri.org)>, <[mbball@leland.stanford.edu](mailto:mbball@leland.stanford.edu)>, <[bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org)>, <[crosman@med.wayne.edu](mailto:crosman@med.wayne.edu)>, <[grisbyca@email.uc.edu](mailto:grisbyca@email.uc.edu)>, <[CBackstrom@salud.unm.edu](mailto:CBackstrom@salud.unm.edu)>, <[ellen\\_hale@oz.ped.emory.edu](mailto:ellen_hale@oz.ped.emory.edu)>, <[Georgia.E.McDavid@uth.tmc.edu](mailto:Georgia.E.McDavid@uth.tmc.edu)>, <[jennifer.j.jensen@hsc.utah.edu](mailto:jennifer.j.jensen@hsc.utah.edu)>, <[jrohr@salud.unm.edu](mailto:jrohr@salud.unm.edu)>, <[karena.strong@intermountainmail.org](mailto:karena.strong@intermountainmail.org)>, <[auten002@mc.duke.edu](mailto:auten002@mc.duke.edu)>, <[kimberlee.weaverlewis@intermountainmail.org](mailto:kimberlee.weaverlewis@intermountainmail.org)>, <[linda\\_reubens@urmc.rochester.edu](mailto:linda_reubens@urmc.rochester.edu)>, <[mcollins@peds.uab.edu](mailto:mcollins@peds.uab.edu)>, <[monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu)>, <[Nancy.Miller@UTSouthwestern.edu](mailto:Nancy.Miller@UTSouthwestern.edu)>, <[nxs5@cwru.edu](mailto:nxs5@cwru.edu)>, <[ae5357@wayne.edu](mailto:ae5357@wayne.edu)>, <[scosby@peds.uab.edu](mailto:scosby@peds.uab.edu)>  
**Cc:** "Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)>, <[melissa.leps@UTSouthwestern.edu](mailto:melissa.leps@UTSouthwestern.edu)>

Is anyone able to loan Indiana a couple of blue oximeters. We have one and have (b) (6) consented—thanks for checking—

Address would be:

Leslie Wilson RN

Riley Hospital for Children

699 West Dr RR 208

Indianapolis IN 46202

*Leslie  
Dawn Wilson, RN, BSN*

**Research  
Manager**

**Neonatal  
Network Coordinator**

**Riley  
Hospital RR 208**

**ldw@iupui.edu (e-mail)**

**699  
West Dr**

**Indianapolis,  
IN 46202**

**317.274.8255  
(phone)**

**317.274.8963  
(fax)**

**317.312. (b) (6)  
(pager)**

---

**From:** Archer,  
Stephanie (NIH/NICHD) [E] [mailto:archerst@mail.nih.gov]

**Sent:** Monday, May 14, 2007 2:48 PM

**To:** Wade Rich; Johnson, Karen;  
ahensman@wihri.org; mball@leland.stanford.edu; bmackinnon@tufts-nemc.org;  
crosmann@med.wayne.edu; grisbyca@email.uc.edu; CBackstrom@salud.unm.edu;  
ellen\_hale@oz.ped.emory.edu; Georgia.E.McDavid@uth.tmc.edu;  
jennifer.j.jensen@hsc.utah.edu; jrohr@salud.unm.edu;  
karena.strong@intermountainmail.org; auten002@mc.duke.edu;  
kimberlee.weaverlewis@intermountainmail.org; Wilson, Leslie Dawn;  
linda\_reubens@urmc.rochester.edu; mcollins@peds.uab.edu;  
monica.konstantino@yale.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu;  
ae5357@wayne.edu; scosby@peds.uab.edu

**Cc:** Higgins, Rosemary (NIH/NICHD)  
[E]; melissa.leps@UTSouthwestern.edu

**Subject:** RE: SUPPORT Pulse  
Oximeters (orange) needed

Got the third one from Alabama. Thanks  
everyone for your responses!



---

**From:** Archer,  
Stephanie (NIH/NICHD) [E]

**Sent:** Monday, May 14, 2007 2:03 PM

**To:** 'Wade Rich'; Johnson, Karen;  
ahensman@wihri.org; mball@leland.stanford.edu; bmackinnon@tufts-nemc.org;  
crossman@med.wayne.edu; grisbyca@email.uc.edu; CBackstrom@salud.unm.edu;  
ellen\_hale@oz.ped.emory.edu; Georgia.E.McDavid@uth.tmc.edu;  
jennifer.j.jensen@hsc.utah.edu; jrohr@salud.unm.edu;  
karena.strong@intermountainmail.org; auten002@mc.duke.edu;  
kimberlee.weaverlewis@intermountainmail.org; ldw@iupui.edu;  
linda\_reubens@urmc.rochester.edu; mcollins@peds.uab.edu;  
monica.konstantino@yale.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu;  
ae5357@wayne.edu; scosby@peds.uab.edu

**Cc:** Higgins, Rosemary (NIH/NICHD)  
[E]; Melissa Leps (melissa.leps@utsouthwestern.edu)

**Subject:** RE: SUPPORT Pulse  
Oximeters (orange) needed

Nancy Newman at Case Western will send the  
2 she has -- thanks, Nancy for your help!

We still need 1 more! Can anyone spare one?

Machines need to go to:

UT Southwestern

Attn: Nancy Miller, RN

5323 Harry Hines, office E3.404B

Dallas, TX 75390

214-648-3780

Stephanie

---

**From:** Archer,  
Stephanie (NIH/NICHD) [E] [mailto:archerst@mail.nih.gov]

**Sent:** Monday, May 14, 2007 11:34  
AM

**To:** ahensman@wihri.org;  
mbball@leland.stanford.edu; bmackinnon@tufts-nemc.org; crosman@med.wayne.edu;  
grisbyca@email.uc.edu; CBackstrom@salud.unm.edu; ellen\_hale@oz.ped.emory.edu;  
Georgia.E.McDavid@uth.tmc.edu; jennifer.j.jensen@hsc.utah.edu; jrohr@salud.unm.edu;  
Johnson, Karen; karenastrong@intermountainmail.org; auten002@mc.duke.edu;  
kimberlee.weaverlewis@intermountainmail.org; ldw@iupui.edu;  
linda\_reubens@urmc.rochester.edu; mcollins@peds.uab.edu;  
monica.konstantino@yale.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu;  
ae5357@wayne.edu; scosby@peds.uab.edu; wrich@ucsd.edu

**Cc:** Higgins, Rosemary (NIH/NICHD)  
[E]

**Subject:** SUPPORT Pulse Oximeters  
(orange) needed

**Importance:** High

UT Southwestern (Dallas) needs 3 orange pulse oximeters  
ASAP. Can anyone provide these?

Please contact Missy Leps (a new coordinator) at UT-Dallas:  
214-648-3780.

Thanks!

Stephanie

---

Stephanie Wilson Archer

Neonatal Research Network

National Institute of Child Health and Human Development

6100 Executive Boulevard, Room 4B03 (MSC 7510)

Bethesda, MD 20892

Tel: 301-496-0430

Fax: 301-496-3790

archerst@mail.nih.gov

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Wilson, Leslie Dawn"; "Wade Rich"; "Johnson, Karen"; "ahensman@wihri.org"; "mbball@leland.stanford.edu"; "bmackinnon@tufts-nemc.org"; "crosman@med.wayne.edu"; "grisbyca@email.uc.edu"; "CBackstrom@salud.unm.edu"; "ellen\_hale@oz.ped.emory.edu"; "Georgia.E.McDavid@uth.tmc.edu"; "jennifer.j.jensen@hsc.utah.edu"; "jrohr@salud.unm.edu"; "karena.strong@intermountainmail.org"; "auten002@mc.duke.edu"; "kimberlee.weaverlewis@intermountainmail.org"; "linda\_reubens@urmc.rochester.edu"; "mcollins@peds.uab.edu"; "monica.konstantino@yale.edu"; "Nancy.Miller@UTSouthwestern.edu"; "nxs5@cwru.edu"; "ae5357@wayne.edu"; "scosby@peds.uab.edu"  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; "melissa.leps@UTSouthwestern.edu"  
**Subject:** RE: SUPPORT Pulse Oximeters (blue) needed for Indiana U.  
**Date:** Monday, May 14, 2007 4:38:10 PM

---

Patty Tate at UT-Houston (filling in for Georgia who gets back tomorrow) has 2 blue oximeters to send to you.

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

---

**From:** Wilson, Leslie Dawn [mailto:ldw@iupui.edu]  
**Sent:** Monday, May 14, 2007 3:18 PM  
**To:** Archer, Stephanie (NIH/NICHD) [E]; Wade Rich; Johnson, Karen; ahensman@wihri.org; mbball@leland.stanford.edu; bmackinnon@tufts-nemc.org; crosman@med.wayne.edu; grisbyca@email.uc.edu; CBackstrom@salud.unm.edu; ellen\_hale@oz.ped.emory.edu; Georgia.E.McDavid@uth.tmc.edu; jennifer.j.jensen@hsc.utah.edu; jrohr@salud.unm.edu; karena.strong@intermountainmail.org; auten002@mc.duke.edu; kimberlee.weaverlewis@intermountainmail.org; linda\_reubens@urmc.rochester.edu; mcollins@peds.uab.edu; monica.konstantino@yale.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; ae5357@wayne.edu; scosby@peds.uab.edu  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; melissa.leps@UTSouthwestern.edu  
**Subject:** RE: SUPPORT Pulse Oximeters (orange) needed

Is anyone able to loan Indiana a couple of blue oximeters. We have one and have (b) (6) consented— thanks for checking—

Address would be:

Leslie Wilson RN  
Riley Hospital for Children  
699 West Dr RR 208  
Indianapolis IN 46202

*Leslie Dawn Wilson, RN, BSN*  
**Research Manager**  
**Neonatal Network Coordinator**  
**Riley Hospital RR 208**  
**ldw@iupui.edu (e-mail)**  
**699 West Dr**  
**Indianapolis, IN 46202**  
**317.274.8255 (phone)**  
**317.274.8963 (fax)**

**317.312.(b) (6) (pager)**

**From:** Duara, Shahnaz  
**To:** Zaterka-Baxter, Kristin; Higgins, Rosemary (NIH/NICHD) [E]; sduara@miami.edu; Navarrete, Cristina; nfiner@ucsd.edu  
**Cc:** Das, Abhik; Auman, Jeanette O.  
**Subject:** RE: Growth secondary  
**Date:** Thursday, May 10, 2007 4:38:32 PM

---

Yes – thanks for reminding us!  
Shahnaz

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Thursday, May 10, 2007 3:56 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; sduara@miami.edu; Navarrete, Cristina; nfiner@ucsd.edu  
**Cc:** Das, Abhik; Auman, Jeanette O.  
**Subject:** FW: Growth secondary

Hi,  
Is this the final decision on length measurements for the Support Growth secondary study; should I send out a technical memo stating only measurements obtained via length board will be recorded, otherwise code "\*" for missing data.  
Thanks,  
Kris

-----Original Message-----  
From: Duara, Shahnaz [mailto:SDuara@med.miami.edu]  
Sent: Thursday, April 19, 2007 12:05 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; sduara@miami.edu  
Cc: Zaterka-Baxter, Kristin; Das, Abhik; nfiner@ucsd.edu  
Subject: RE: Growth secondary

Rose,

Does this mean they want to put in missing data points on those days where they were unable to get lengths using the board? If so, that would be OK. I was afraid that this would happen if we mixed clinical and research measurements, so my only plea would be that we ask that every effort be made to minimize missing data points, keeping patient well-being in mind.

Thanks  
Shahnaz

-----Original Message-----  
From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, April 19, 2007 11:49 AM  
To: sduara@miami.edu  
Cc: kzaterka@rti.org; adas@rti.org; nfiner@ucsd.edu  
Subject: Growth secondary

Shahnaz,  
The investigators and coordinators are concerned about the value of collecting lengths on children in the SUPPORT growth secondary that were measured clinically and NOT using the board. They feel that it is inaccurate and is generating edits due to "lower measurements" on subsequent data collection (I.e. A week or two later). They propose to eliminate this data collection. Let us know if you and Cristine agree.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld



**From:** Susan Hintz  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Fwd: Re: SUPPORT Neuroimaging?  
**Date:** Thursday, May 10, 2007 3:48:20 PM

---

FYI

Delivered-To: srhintz@stanford.edu  
X-AuditID: aa8c08de-0000000a0000004ef-0d-464146bf4b2b  
Date: Tue, 08 May 2007 23:56:19 -0400  
Subject: Re: SUPPORT Neuroimaging?  
X-FC-SERVER-TZ: 15729388  
To: "Susan Hintz" <srhintz@stanford.edu>  
From: "Ira Adams-Chapman" <Ira\_Adams-Chapman@oz.ped.emory.edu>  
X-Brightmail-Tracker: AAAAAA==

Hi Susan,

Thanks for touching base. I have been trying for sometime to convince everyone that we should pursue this. I am planning to try again and it will help that Barbara and I have spoken and agree. I will take the information about the Hugger and discuss with our neuroradiology staff. The reluctance at our site was that babies typically get sedated for MRI and Susie did not think that we could get the IRB to sign off on that. What I spoke with Barbara about was that we should enroll them and try to use the hugger. If they are unable to perform an unsedated scan than we could just abort the attempt. Would this be a problem to potentially have some drop out of the intend to analyze group? My hope is that they would actually be able to complete the study, therefore this would be a non- issue.

Let me know your thoughts. Thanks for the slides b/c I was planning to e-mail you about it. I must have missed ti the first time. Take care and great seeing you at the meeting. I will keep you posted but will try to move forward quickly.

Ira Adams-Chapman, MD  
Director, Developmental Progress Clinic  
Assistant Professor of Pediatrics  
Emory University School of Medicine  
Department of Pediatrics/Division of Neonatology

404-778-1450 (O)  
ira\_adams-chapman@oz.ped.emory.edu

--

Susan R. Hintz, M.D., M.S. Epi  
Assistant Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351

**From:** Neil Finer  
**To:** Kurt Schibler; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Yang ROP Protocol  
**Date:** Thursday, May 10, 2007 3:37:01 PM

---

Hi Kurt and Rose

I have reviewed this protocol with an eye to whether it could be a secondary of SUPPORT.

I believe that the stated Purposes are as indicated below:

Primary Hypothesis:

1. The use of an alternative protocol for screening eyes assigned as low-risk by a multivariate risk model will result in a 17.3 % and 10.0% reduction in eye examinations among infants with low-risk eyes and among all infants, respectively, with no more than a mean delay in detection of threshold or type 1 ROP of 0.5 weeks among low-risk eyes, when comparison is made with the actual sequence of eye examinations performed conventionally.

Secondary Hypotheses:

1. Gender and rate of weight gain in the first 6 weeks of life are significant predictive variables for the development of threshold or type 1 ROP.

However this is an observational study only

I believe that we are collecting the data required to do this evaluation and test various algorithms, and that SUPPORT would have a rich database for the eye exams.

If this study will be done using the completed SUPPORT database after completion, and needs no modifications to our current data fields nor those of the GDB, then I would have no objection to allowing these investigators full access to the data for this study.

If the study can be done in this way it would obviously alter the required budget.

From my reading there is no additional data collection required as they are dropping the CRIBSUB score. Is that correct?

The sample size overall would not be met by SUPPORT but I suspect that there would still be reasonable power - RTI would need to reassess.

Please let me know if I have correctly interpreted this proposed study and your thoughts.

Regards

Neil

-----Original Message-----

From: Kurt Schibler [mailto:kurt.schibler@cchmc.org]

Sent: Thursday, May 10, 2007 7:21 AM

To: Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]

Subject: Yang ROP Protocol

Hi Neil and Rose,

Michael Yang has asked me whether his protocol to examining Risk modes for efficiency of ROP screening could be accomplished as a secondary study to

SUPPORT. He contacted Dale Phelps about submission as a secondary to inositol. She advised that there would be a long delay since the trial will not be completed for several years whereas support is ongoing and ROP is a primary outcome. His study is observational and thus would not interfere with the study. Attached are the protocol as submitted to the Protocol Subcommittee and the subsequent review. He intends to revise it based upon the review but would like to know whether it could be a secondary study to

SUPPORT. Let me know how to proceed.  
Thanks,

Kurt

Kurt Schibler, MD  
Associate Professor of Pediatrics  
Division of Neonatology  
Cincinnati Children's Hospital  
3333 Burnet Avenue  
Cincinnati, Ohio 45229-3972  
TEL: 513-636-3972  
Pager: 513-736-(b) (6)  
FAX: 513-636-4404  
E-mail: kurt.schibler@cchmc.org

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** SUPPORT MedWatch Adverse Event | U. Alabama  
**Date:** Monday, May 07, 2007 10:32:04 AM

---

Good morning,

I hope your weekend went well.

Another MedWatch form arrived over the weekend from the University of Alabama (this was handwritten, so a few words are not legible):

420gm 24 wk. male randomized to early NCP group. Required intubation in delivery for resuscitation. Remained intubated throughout hospitalization with (b) (6) days on HFV. Problems that occurred during hospitalization include: sepsis, jaundice, hepatic hematoma, acute renal failure, anemia coagulopathy, pulmonary hemorrhage, IVH, seizures. On (b) (6), blood culture grew out gram rods. Respiratory status decompensated and infant coded (?). HR improved briefly. When it dropped again, XI more dose of epi given and he was removed from ventilator, so that mom could hold. Time of death was 1830 on (b) (6)

Let me know if you want the other details on the form. I don't see anywhere on this form that mentions whether they believe it was study-related or not.

Steph

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

**From:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Publications file  
**Date:** Thursday, May 03, 2007 5:32:30 PM  
**Attachments:** [Pub spreadsheet 5-03-07.xls](#)

---

Here's the updated Publications file, in case you need it electronically. I'll continue to add on publications to the Publications tab as I find them.

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
[archerst@mail.nih.gov](mailto:archerst@mail.nih.gov)

Neonatal Research Network  
Publications in Process

Current Status = upcoming, reviewing, approvals, submitted, accepted, or publis

Current Status	PI	Working Title	PAS Abstract	Approvals		Submission			Comments/Status
				Co-Authors	NICHD	Journal	Submitted	Accepted	
Accepted	Bender	Bili Binding (SS-BR)	2005			Pediatrics		12/7/06	
Accepted	Cotten	Candida Centr Deiff	2005			J Pediatrics		1/1/06	
Accepted	Heller	HM and ROP	2003	6/1/05		Pediatrics		7/1/06	
Accepted	Stephens	FU: Family and NDI	2005			Infant Mental Hlth J		3/1/07	1/2006 Pediatrics rejected
Accepted	Vohr	FU: 30mos and breast milk	2005			Pediatrics		3/1/07	
Accepted	Walsh	Benchmarking primary	2005	6/1/05		Pediatrics		12/8/06	1/2006 JAMA rejected
Approvals	Chock	iNO, rupture mem, oligo, hypoplasia	2006						4-5-07 Submitting to Ped Pulm next month
On Hold	Kazzi	FU: Placental Inflammation (SS-WS)	2005						1/2006 On hold
Pending	Adams-Chapman	FU: Shunt and Infection	2005						7/2006 In progress
Pending	Adams-Chapman	Speech Language at 30 mo	2006						7/2006 In progress
Pending	Broitman	36wk HUS LT ND Outcome	2004	3/1/05	5/11/05	J Peds		12/1/06	4/18/07 Working on it
Pending	Carlo	ANS at 23 wks	2001						4/18/07 Working on it
Pending	Duara	HM and BPD in ELBW	2004						1/2006 In progress
Pending	Dusick	FU: Growth Outcomes	2005						1/2006 In progress
Pending	Fanaroff	GDB 7	2005						3/2007 Will begin work on it
Pending	Fanaroff	Micronates	2003			NEJM	12/5/03		1/2006 In progress
Pending	Fuller	Social isolation by family resource scale	2006						7/2006 In progress
Pending	Gargus	FU: Unscathed 18mos	2005						7/2006 In progress
Pending	Johnson	ELBW mortality	2002						6/2005 In progress
Pending	Johnson	FU: BPD outcomes over time	2005						6/2005 In progress
Pending	Mayes	Behavioral profiles: ELBW	2002						1/2005 RTI analyzing; 6/2005 RTI analyzing; 1/2006 RTI analyzing
Pending	Mayes	Language scale from Bayley	—						1/2006 In progress
Pending	Navarrete	P-INDO, ELBW and PMA	2006						4/2007 Sent to Dr Dura for revision
Pending	Peralta	FU: Motor Trajectories	2005						6/2006 In progress
Pending	Salhab	DR Cardiopulm resus and outcome	2006						4/2007 Will finish this month
Pending	Sanchez	Antimicrobial rx for NEC	2006						3/2007 In progress
Pending	Sokol	iNO dose related toxicity	2006						4-5-07 Statement rcvd by Publications SubC.
Pending	Stark	FU: SAVE: Dex FU	2001	11/14/04	11/1/05				1/2006 In progress

Neonatal Research Network

Publications in Process

Current Status = upcoming, reviewing, approvals, submitted, accepted, or publis

Current Status	PI	Working Title	PAS Abstract	Approvals		Submission			Comments/Status
				Co-Authors	NICHD	Journal	Submitted	Accepted	
Pending	Thakkar	Metabolic screening (SS-WS)	2005						7/2006 In progress
Pending	Van Meurs	OIs and Outcomes	2005						1/2006 Add bench data; 3/2007 In progress
Pending	Vaucher	FU: Gr. 1,2 IVH	2005						1/2006 In progress
Pending	Vogt	FU: ND Predictions	2005						6/2005 In progress
Pending	Vohr	FU: HM	2003						
Pending	Wadhawan	Twin Gest and Adverse ND	2004						1/2005 On hold; 1/2006 In progress
Pending	Wilson	Postnatal corticosteroid and ND	2006						7/2006 In progress
Reviewing	Prarikh	Viability, treatment, Outcome	2006						7/2006 In progress; Prarikh is 2nd author
Reviewing	Vohr	Mother 30 yrs	2003						
Submitted	Ambalavanan	Death BPD of Preterm resp failure	2006	7/1/06		Pediatrics	3/14/07		
Submitted	Duara	GDB: Mortality <12hr	2002	4/1/05		Pediatrics	8/1/05		
Submitted	Gordon	iNO and SIP	2006		7/1/06	Peds Res	4/5/07		
Submitted	Hintz	FU: Special Services	2005			J Pediatrics	3/1/07		
Submitted	Hintz	ND Outcome of PiNO resp failure	2006			J Pediatrics	3/1/07		8/2006 Rejected by NEJM
Submitted	Malcolm	ARM at discharge for ELBW	2006			Pediatrics	2/1/07		
Submitted	Meinzen-Derr	Human milk and LOS	2004			J Pediatrics	3/1/07		
Submitted	Oh	Urinary Lactate to Creatinine Ratio (ULCR) in Full Term Infants with Hypoxic Ischemic Encephalopathy: (HIE): Predictor of Neuro-Developmental Outcome Following Whole Body Cooling [Poster]	2007			Pediatrics	3/14/07		
Submitted	Vohr	ELBW Poor Growth/Outcome	—			Pediatrics	2/6/07		
Unknown	Bradt	Simpler CP diagnosis	2004						4/8/2005 No response
Unknown	Buchter	Neonatal team, delivery <1250g	2006						
Unknown	Haberman	Surf/extub	2002						4-5-07 Never moved forward
Unknown	Hamlin-Smith	FU: Bayley and Mental/Motor Dev	2005						4/2005 Not started; 4/5/2007 Email bounced back
Unknown	Kazzi	FU: Tumor Necrosis Factor (SS-WS)	2005			Pediatrics	12/1/05		



Neonatal Research Network

Publications in Process

Current Status = upcoming, reviewing, approvals, submitted, accepted, or publis

Current Status	PI	Working Title	PAS Abstract	Approvals		Submission			Comments/Status
				Co-Authors	NICHD	Journal	Submitted	Accepted	
Unknown	Meinzen-Derr	Human milk and NEC	2006						
Unknown	Meinzen-Derr	Prediction Models Informed consent	2006						
Unknown	Morris	Phototherapy devices ELBW	2006						To discuss with subcommittee
Unknown	Peralta	Socio-emotional and competence	2006						
Unknown	Rasmussen	Oximetry (SS-SD)	2005						4/8/05 No response
Unknown	Stark	IRB variation	--						09/18/03 NEJM rejected; 4/2004 Preparing for JAMA; 1/2006 No progress
Unknown	Vaucher	Brain injury, emotion/behavior	2006						
Unknown	Wadhawan	GDB/FU: Labor/Weigh Loss/SGA	2002	1/28/03	3/6/03				4/2003 Pediatrics rejected; 8/2006 Pediatrics rejected
Unknown	Walsh	Intensity of Care in first 24 hrs.	2004						4/2005 Tabled; 1/2006 Analyses needed
Upcoming	Ambalavanan	Cytokines Associated with BPD/Death in Extremely Low Birth Weight Infants: A Role for T-Lymphocytes? [Platform Presentation]	2007						
Upcoming	Bhandari	Use of Nasal Ventilation (NV) Is Associated with Significantly Decreased Bronchopulmonary Dyplasia (BPD) and/or Death in Babies of 500-750 Grams Birth Weight [Platform Presentation]	2007						
Upcoming	Carlo	Inflammatory Cytokines and Neurodevelopmental Outcomes in Extremely Low Birth Weight Infants [Platform Presentation]	2007						
Upcoming	Cotten	Duration of Initial Antibiotic Course in Extremely Low Birthweight Infants: Association with Necrotizing Enterocolitis and Death [Poster]	2007						

Neonatal Research Network

Publications in Process

Current Status = upcoming, reviewing, approvals, submitted, accepted, or publis

Current Status	PI	Working Title	PAS Abstract	Approvals		Submission			Comments/Status
				Co-Authors	NICHD	Journal	Submitted	Accepted	
Upcoming	Ehrenkranz	Early Nutritional Support for ELBW Infants: Influence of Severity of Illness [Poster]	2007						
Upcoming	Kwon	Clinical Neonatal Seizures Have No Independent Effect on Outcomes in the NRN Systemic Hypothermia Trial [Poster]	2007						
Upcoming	Madan	PDA Treatment and NDI/Death, NEC and BPD [Platform Presentation]	2007						
Upcoming	Morris	A 16-Center Randomized Trial of Aggressive vs Conservative Phototherapy for Extremely Low Birth Weight Infants [Platform Presentation]	2007						
Upcoming	Pappas	Early Hypocarbica Following Hypoxic-Ischemic Encephalopathy (HIE) Is Associated with an Increased Risk of Poor Outcome [Poster]	2007						

**From:** Auman, Jeanette O.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Thursday, May 03, 2007 11:47:18 AM

Yes, I'll take this patient off. Thanks!

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, May 03, 2007 11:36 AM  
**To:** Auman, Jeanette O.  
**Subject:** FW: SUPPORT ROP OUTCOMES

Jenny

(b) (6) can this be taken off the reminder list?

---

**From:** Karen Osborne RN [mailto:Karen.Osborne@hsc.utah.edu]  
**Sent:** Thursday, May 03, 2007 11:24 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Roger Faix; Bradley Yoder  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: SUPPORT ROP OUTCOMES

Patient (b) (6) withdrew from the study at one week of age so no further information was collected on him. He obviously had not had any eye exams at this point. There is not a status for 'withdrawn' on the SUPPO9 so we had to enter a star with a comment for this patient which is why it might not be apparent that he was withdrawn from the study. It would probably be helpful all round to include a 'withdrawn' in the status section the next time the forms are changed (although I'm sure no one is wanting or anticipating this happening again!).

We are working on obtaining clinic information on patient (b) (6) We will hopefully have this in the next week or so.

Thanks,  
Karen

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, April 30, 2007 12:27 PM  
**To:** Roger Faix; Bradley Yoder; Karen Osborne RN  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT ROP OUTCOMES

Center	Network	ROP error message
25	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
25	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Hi,

We are missing the above two children's ROP outcomes. THANKS FOR GETTING ALL OF THE OTHER CHILDREN'S OUTCOMES!!!

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Vivien Phillips  
**To:** dale\_pheps@urmc.rochester.edu; mgantz@rti.org; higgins\_rosemary@NIH/NICHD [E]  
**Cc:** Monica Collins; Wally Carlo, M.D.; Shirley Cosby; adas@rti.org  
**Subject:** ROP Outcome  
**Date:** Tuesday, May 01, 2007 5:07:28 PM

Network (b) (6) - this child is (b) (6) 18 month follow up visit. As far as I know the child has not had any eye follow up exam since discharge from the nursery, last exam was on 10/22/05, no ROP immature zone 3 bilateral. Several attempts to get this child seen at the eye clinic have been made since last year. Child's pediatrician has been notified and they have even made the referral to the Eye Clinic and have been scheduled twice however, child didn't show up. Per pediatrician, family has been compliant about bringing child to pediatrician and is current with his immunization. This family is very difficult to reach. Child is due to be seen for his 18 month visit or (b) (6) and vision exam will be done at that visit.

Vivien Phillips  
Research Nurse Follow Up Coordinator  
Division of Neonatology  
University of Alabama at Birmingham

**From:** Monica Collins  
**Sent:** Tuesday, May 01, 2007 3:08 PM  
**To:** Vivien Phillips  
**Subject:** FW:

**From:** Phelps, Dale [mailto:Dale\_Pheps@URMC.Rochester.edu]  
**Sent:** Tuesday, May 01, 2007 2:18 PM  
**To:** Gantz, Marie  
**Cc:** Das, Abhik; Monica Collins; Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; Shirley Cosby  
**Subject:** RE:

Hi Marie,

I do need more detail.

#1. Apparently will not return, but does go to the pediatrician.

Depending on what the findings were up to the time of the last eye examination, it may be extremely important that this infant be seen for basic clinical care purposes. Can you please tell me what the exams were up to the last one you have? We then can appeal to the pediatrician for at least the poor kids' medical needs, even if we can't get the research information (although we usually can).

#2. If there is no way to find or contact this infant at all, you don't even know if s/he is a survivor. I'm not sure how you are going to get 18-22 mo. Follow up?  
Maybe you will just monitor the ED and follow up if they show up?

At any rate, in order to do an 'excuse' I need to know what efforts you have made and also what at least the last two eye examinations showed (that you have).

Dale

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Tuesday, May 01, 2007 2:56 PM  
**To:** Monica Collins; Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; Shirley Cosby  
**Cc:** Das, Abhik; Phelps, Dale  
**Subject:** RE:

Hi Monica,

Dale Phelps is in charge of "excusing" SUPPORT infants with missing ROP outcomes. I am Ccing her on this email. She may need additional information from you regarding these infants.

Thanks,  
Marie

**Marie Gantz, Ph.D.**  
Research Scientist  
RTI International  
mgantz@rti.org  
330 514-4255

**From:** Monica Collins [mailto:MCollins@peds.uab.edu]  
**Sent:** Tuesday, May 01, 2007 2:53 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; wacarlo@uab.edu; Shirley Cosby  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE:

Rose,

We have entered the data on 2 of the babies—these are permanently missing—have refused to come back to ophthalmology—one has not returned to the pediatrician—so is totally lost! Vivien will be attempting to get this on 18 month follow-up. We marked them as permanently missing but continue to get these edits. What should we do?  
Monica

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, April 30, 2007 1:20 PM  
**To:** wacarlo@uab.edu; Monica Collins; Shirley Cosby  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:**

Hi,

We are missing the above two children's ROP outcomes. THANKS FOR GETTING ALL OF THE OTHER CHILDREN'S OUTCOMES!!!

Center	Network	ROP error message
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: SUPPORT FU  
**Date:** Tuesday, May 01, 2007 2:22:23 PM  
**Attachments:** SUPPORT FU by center 05-01-07.rtf  
SUPPORT FU windows opening through March 2008.rtf

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Hi Rose,

Attached are two documents containing SUPPORT follow-up data by center. The first lists the number of SUPPORT infants with completed follow-up (according to forms NF10/SF10), the number with the NDI outcome available, the number lost to FU, and the number with FU pending. So far, there are four infants who have FU completed according to the NF10/SF10 but who do not yet have the actual FU data entered (and thus have no NDI outcome). The "FU pending" column includes infants who have not been followed-up but who have reached status (thus, FU is expected).

The second document lists the number of infants with FU windows opening, by month, through the end of March 2008. Infants who have already been followed-up or who are lost to FU (according to NF10/SF10) are not included, but I have included infants whose windows have already opened but for whom no FU data have been entered.

I also looked at eye surgeries recorded on the NF04/SF04. So far, there are three infants whose records indicate eye surgery for ROP. All three also had eye surgery according to the SUPP10 form. Two had laser surgery, and the third apparently had surgery because the highest stage in any zone was coded as "Post laser/cryo" but the exact type of surgery is unknown. If you would like more detailed information, let me know.

Please let me know if there is anything else you need or if you have any questions.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, April 30, 2007 9:29 AM  
**To:** Gantz, Marie; Das, Abhik  
**Subject:** RE: SUPPORT FU

That would be great!  
Thanks  
Rose

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Monday, April 30, 2007 9:25 AM  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT FU

I can do that as well.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Das, Abhik  
**Sent:** Monday, April 30, 2007 9:24 AM  
**To:** 'Higgins, Rosemary (NIH/NICHD) [E]'; Gantz, Marie  
**Subject:** RE: SUPPORT FU

If Marie has time, perhaps we can also look at how many eye surgeries we are capturing in the NF04 and how that correlates with ROP info we already have?

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, April 30, 2007 9:17 AM  
**To:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT FU

Hi,

I know it is very late notice, BUT can I get the following for the SUPPORT FU meeting:  
List of sites with FU seen, follow up pending, lost to FU, and complete for FU outcome (NDI or normal).  
Also, can you project for sites through March 31, 2008 the number of children entering the FU windows?  
Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

SUPPORT FOLLOW-UP BY CENTER

Center	FU completed (according to NF10/SF10)	Has NDI outcome	Lost to FU (according to NF10/SF10)	FU pending
3=Case Western University	4	4		42
4=University of Texas-Dallas				23
5=Wayne State University				6
8=University of Miami	1	1		15
9=Emory University	2			27
11=University of Cincinnati	2	2	2	27
12=Indiana University	6	6	1	11
13=Yale University	1	1		7
14=Brown University	5	5		35
15=Stanford University				9
16=University of Alabama	6	4		56
18=University of Tex-Houston	7	7		20
19=Duke University				17
20=Wake Forest University				9
21=University of Rochester				5
22=University of California-San Diego	10	10	4	19
23=Tufts University				3
24=University of Iowa				3
25=University of Utah				9
26=University of New Mexico				
<b>Total</b>	<b>44</b>	<b>40</b>	<b>7</b>	<b>343</b>

**SUPPORT FOLLOW-UP WINDOWS OPENING THROUGH MARCH 2008**

Center	Month FU window opens	Number of infants with window opening	Cumulative number of infants
3=Case Western University	JAN07	1	1
	FEB07	2	3
	MAR07	2	5
	APR07	2	7
	MAY07	9	16
	JUN07	1	17
	JUL07	1	18
	DEC07	5	23
	JAN08	6	29
	FEB08	1	30
	MAR08	3	33
4=University of Texas-Dallas	APR07	2	2
	MAY07	4	6
	JUL07	3	9
	FEB08	2	11
	MAR08	2	13
5=Wayne State University	DEC07	1	1
	JAN08	2	3
	MAR08	1	4
8=University of Miami	FEB07	2	2
	APR07	4	6
	MAY07	4	10
	JUN07	2	12
	JUL07	2	14
	AUG07	1	15

Table includes infants whose windows have already opened but for whom no FU data have been entered



SUPPORT FOLLOW-UP WINDOWS OPENING THROUGH MARCH 2008

Center	Month FU window opens	Number of Infants with window opening	Cumulative number of Infants
9=Emory University	MAR07	1	1
	APR07	3	4
	JUL07	2	6
	AUG07	3	9
	JAN08	3	12
	FEB08	3	15
	MAR08	4	19
11=University of Cincinnati	FEB07	2	2
	MAR07	1	3
	APR07	4	7
	MAY07	2	9
	JUL07	2	11
12=Indiana University	MAY07	1	1
	JUL07	1	2
	FEB08	2	4
	MAR08	1	5
13=Yale University	MAR08	2	2
14=Brown University	FEB07	1	1
	MAR07	3	4
	APR07	4	8
	JUN07	1	9
	JUL07	4	13
	AUG07	1	14
	JAN08	2	16
	FEB08	2	18
	MAR08	2	20

Table includes infants whose windows have already opened but for whom no FU data have been entered

SUPPORT FOLLOW-UP WINDOWS OPENING THROUGH MARCH 2008

Center	Month FU window opens	Number of infants with window opening	Cumulative number of infants
15=Stanford University	FEB07	2	2
	JAN08	1	3
	FEB08	1	4
16=University of Alabama	FEB07	2	2
	MAR07	2	4
	APR07	3	7
	MAY07	5	12
	JUN07	3	15
	JUL07	1	16
	AUG07	3	19
	MAR08	6	25
18=University of Tex-Houston	JAN07	1	1
	MAR07	1	2
	APR07	1	3
	JUN07	1	4
	JUL07	3	7
	JAN08	3	10
	FEB08	1	11
	MAR08	2	13
19=Duke University	FEB07	1	1
	MAR07	2	3
	APR07	1	4
	MAY07	2	6
	JUN07	3	9
	JUL07	1	10
	MAR08	1	11

Table includes infants whose windows have already opened but for whom no FU data have been entered

**SUPPORT FOLLOW-UP WINDOWS OPENING THROUGH MARCH 2008**

Center	Month FU window opens	Number of Infants with window opening	Cumulative number of infants
20=Wake Forest University	JUN07	2	2
	JUL07	3	5
	AUG07	4	9
21=University of Rochester	MAY07	1	1
	JUN07	2	3
	JUL07	1	4
	NOV07	1	5
22=University of California-San Diego	DEC06	1	1
	MAR07	1	2
	MAY07	10	12
	JUN07	3	15
	JUL07	1	16
	AUG07	2	18
	DEC07	1	19

Table includes infants whose windows have already opened but for whom no FU data have been entered

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Richard Ehrenkranz"  
**Cc:** "nfiner@ucsd.edu"; Higgins, Rosemary (NIH/NICHD) [E]; "kzaterka@rti.org"  
**Subject:** RE: SUPPORT| Recruitment teleconference with Yale  
**Date:** Tuesday, May 01, 2007 11:38:29 AM  
**Attachments:** Yale\_recruitment\_telcon\_notes\_04-25-07.doc

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Hello Richard, Neil, Abhik, and Kris,

Attached is the final version of the notes. Everyone has reviewed it now and send in comments.

Kris will be sending out the clarifications mentioned under the action items shortly.

Take care,  
Steph

---

**From:** Richard Ehrenkranz [mailto:richard.ehrenkranz@yale.edu]  
**Sent:** Monday, April 30, 2007 5:37 PM  
**To:** Archer, Stephanie (NIH/NICHD) [E]  
**Cc:** nfiner@ucsd.edu; Higgins, Rosemary (NIH/NICHD) [E]; kzaterka@rti.org  
**Subject:** Fwd: SUPPORT| Recruitment teleconference with Yale

Stephanie:

I edited your minutes slightly. I do not know if they make sense. The blue inserts are comments or revisions; I not sure if I did actually used track changes. Anna Dusick should be deleted; she is at Univ of Indiana. Let me know if you have any questions.

Richard

Date: Thu, 26 Apr 2007 10:39:29 -0400  
From: "Archer, Stephanie (NIH/NICHD) [E]" <archerst@mail.nih.gov>  
Subject: SUPPORT| Recruitment teleconference with Yale  
To: nfiner@ucsd.edu, adas@rti.org,  
"Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>,  
richard.ehrenkranz@yale.edu, kzaterka@rti.org, adusick@iupui.edu

Attached are my notes from our teleconference early this week about SUPPORT recruitment issues.

Please review these notes and send me any comments/corrections by May 1<sup>st</sup>.

Thanks!  
Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

Richard A. Ehrenkranz, MD  
Department of Pediatrics  
Yale University School of Medicine  
333 Cedar Street  
PO Box 208064  
New Haven, CT 06520-8064  
tele: 203-688-2320  
fax: 203-688-5426

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## TELECONFERENCE NOTES

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### **SUPPORT Low Recruitment Call Yale University April 25, 2007**

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Kris Zaterka-Baxter, RTI; Richard Ehrenkranz, Vineet Bhandari, Jo Ann Poulsen, Yale; Harris Jacobs, Yale-Bridgeport; Stephanie Archer, NICHD

[Notes reviewed and approved by RHiggins, NFiner, REhrenkranz, ADas, KZaterka-Baxter]

#### **Process**

- At Yale, neonatal consults usually are done first by a fellow
  - Occasionally approached before, but then do some of the consult at that time
- Pls approach
- Coordinators follow-up
- MFMs. Have a group there (not in the MFMU Network). Doing one trial currently with amnios looking for evidence of chorio. For mothers up to 34 weeks gestation. Does not conflict with SUPPORT, so not prohibited from approaching them for multiple trials.
- IRB does not allow approach if mother is in active labor
- Problems with SUPPORT 02 form. Some data entering correction problems. Have 10-15 mothers to enter that were eligible, but could not get consent because they were in active labor. The system bounces them back. Should be catalogued as "unavailable."
  - **ACTION ITEM: Kris will talk to Abhik about how to correct this so that they can be entered correctly.**
  - **ACTION ITEM: Abhik will check whether consent should be entered per mother or per baby (Yale and UCSD count each baby, not just each mother)**

#### **Recruitment**

- The lower recruitment seems to be because of dip in number of eligible mothers – this was countered in February with a sudden spike in enrollment luck with consented women delivering 2 sets of twins within the eligibility window (see bullet #3)
- Approaching and getting consent for ~ 50%
- In February, we had a month with several consents with multiple births at once, so we were able to enroll 7 infants in 1 month. Enrolled 1 a few days ago.
- Projected GDB eligible ELBWs = 110/year = 9/month (not all of which are in the window)
- Hardly miss approaching anyone
- "Undecideds." Have a few, but lately they have gone outside of the window

#### **Action Items**

1. Kris will talk to Abhik about how to correct this so that they can be entered correctly.
2. Abhik will check whether consent should be entered per mother or per baby.

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Zaterka-Baxter, Kristin"; "Das, Abhik"  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT| Recruitment teleconference with Yale  
**Date:** Tuesday, May 01, 2007 11:35:14 AM

---

Thanks, Kris and Abhik.

Rose, should we send out Kris' clarification to all centers just to be sure they all are working off the same assumptions?

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Tuesday, May 01, 2007 9:37 AM  
**To:** Das, Abhik; Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT| Recruitment teleconference with Yale

I have no comments either but will send out a clarifying email about the consent per support (Supp01 = per baby) and consent per antenatal (Ante02= per mom). I talked with Jenny about this and will talk to her about the Supp02 form and kids eligible but not consented (should be coded as 2= parent not available)

Thanks,  
Kris

---

**From:** Das, Abhik  
**Sent:** Tuesday, May 01, 2007 9:11 AM  
**To:** 'Archer, Stephanie (NIH/NICHD) [E]'  
**Cc:** Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT| Recruitment teleconference with Yale

That is correct.

Thanks

Abhik

---

**From:** Archer, Stephanie (NIH/NICHD) [E] [mailto:archerst@mail.nih.gov]  
**Sent:** Tuesday, May 01, 2007 9:10 AM  
**To:** Das, Abhik  
**Cc:** Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT| Recruitment teleconference with Yale

For any of the notes? I'm still waiting on comments back from Brenda in Indiana, but think I have them from everyone else.

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Tuesday, May 01, 2007 9:08 AM  
**To:** Archer, Stephanie (NIH/NICHD) [E]  
**Cc:** Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT| Recruitment teleconference with Yale

I did not have any comments.

---

**From:** Archer, Stephanie (NIH/NICHD) [E] [mailto:archerst@mail.nih.gov]  
**Sent:** Tuesday, May 01, 2007 9:00 AM  
**To:** Richard Ehrenkranz  
**Cc:** nfiner@ucsd.edu; Higgins, Rosemary (NIH/NICHD) [E]; Zaterka-Baxter, Kristin; Das, Abhik  
**Subject:** RE: SUPPORT| Recruitment teleconference with Yale

Thanks, Richard. These edits look fine. I'm still waiting to hear if the data center has any comments, then I'll send everyone a final copy of the notes.

---

**From:** Richard Ehrenkranz [mailto:richard.ehrenkranz@yale.edu]  
**Sent:** Monday, April 30, 2007 5:37 PM  
**To:** Archer, Stephanie (NIH/NICHD) [E]  
**Cc:** nfiner@ucsd.edu; Higgins, Rosemary (NIH/NICHD) [E]; kzaterka@rti.org  
**Subject:** Fwd: SUPPORT| Recruitment teleconference with Yale

Stephanie:

I edited your minutes slightly. I do not know if they make sense. The blue inserts are comments or revisions; I not sure if I did actually used track changes. Anna Dusick should be deleted; she is at Univ of Indiana. Let me know if you have any questions.

Richard

Date: Thu, 26 Apr 2007 10:39:29 -0400  
From: "Archer, Stephanie (NIH/NICHD) [E]" <archerst@mail.nih.gov>  
Subject: SUPPORT| Recruitment teleconference with Yale  
To: nfiner@ucsd.edu, adas@rti.org,  
"Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>,  
richard.ehrenkranz@yale.edu, kzaterka@rti.org, adusick@iupui.edu

Attached are my notes from our teleconference early this week about SUPPORT recruitment issues. Please review these notes and send me any comments/corrections by May 1<sup>st</sup>.

Thanks!  
Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

Richard A. Ehrenkranz, MD  
Department of Pediatrics  
Yale University School of Medicine  
333 Cedar Street  
PO Box 208064  
New Haven, CT 06520-8064  
tele: 203-688-2320  
fax: 203-688-5426



The information contained in this email may be privileged and confidential. If you are the intended recipient, you must maintain this message in a secure and confidential manner. If you are not the intended recipient, please notify the sender immediately and destroy this message. Thank you.

**From:** Richard Ehrenkranz  
**To:** Archer, Stephanie (NIH/NICHD) [E]  
**Cc:** nfiner@ucsd.edu; Higgins, Rosemary (NIH/NICHD) [E]; kzaterka@rti.org  
**Subject:** Fwd: SUPPORT| Recruitment teleconference with Yale  
**Date:** Monday, April 30, 2007 5:36:59 PM  
**Attachments:** Yale\_recruitment\_telcon\_notes\_04-25-07.doc

---

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Richard

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Subject: SUPPORT| Recruitment teleconference with Yale  
To: nfiner@ucsd.edu, adas@rti.org,  
"Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>,  
richard.ehrenkranz@yale.edu, kzaterka@rti.org, adusick@iupui.edu

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Stephanie

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Stephanie Wilson Archer  
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Richard A. Ehrenkranz, MD  
Department of Pediatrics  
Yale University School of Medicine  
333 Cedar Street  
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## TELECONFERENCE NOTES

### SUPPORT Low Recruitment Call Yale University April 25, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Kris Zaterka-Baxter, RTI; Richard Ehrenkranz, Vineet Bhandari, Jo Ann Poulsen, Yale; Harris Jacobs, Yale-Bridgeport; ~~delete Yale; Anna Dusick; Yale; Stephanie Archer, NICHD~~

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#### Process

- At Yale, neonatal consults usually are done first by a fellow
  - Occasionally approached before, but then do some of the consult at that time
- Pls approach
- Coordinators follow-up
- MFMs. Have a group there (not in the MFMU Network). Doing one trial currently within amnios looking for evidence of choreio. For mothers up to 34 weeks gestation. Does not conflict with SUPPORT, so not prohibited from approaching them for multiple trials.
- IRB does not allow approach if mother is in active labor
- Problems with SUPPORT 02 form. Some data entering correction problems. Have 10-15 mothers to enter that were eligible, but could not get consent because they were in active labor. The system bounces them back. Should be catalogued as "unavailable."
  - ACTION ITEM: Kris will talk to Abhik about how to correct this so that they can be entered correctly.
  - ACTION ITEM: Abhik will check whether consent should be entered per mother or per baby (Yale and UCSD count each baby, not just each mother)

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#### Recruitment

- Dip in recruitment seems to be because of dip in number of eligible mothers- Actually there was a sudden spike in enrollment, which was luck (2 sets of twins, consented women delivering within the eligibility window)-see bullet #3
- Approaching and getting consent for ~ 50%
- In ~~February~~ April, we had ~~hit~~ a month with several consents with multiple births at once, so we were able to enroll 7 infants in 1 month. numbers are going up again. Enrolled 1 a few days ago.
- Projected GDB eligible ELBWs = 110/year = 9/month (not all of which are in the window)
- Hardly miss approaching anyone
- "Undecideds." Have a few, but lately they have gone outside of the window

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#### Action Items

1. Kris will talk to Abhik about how to correct this so that they can be entered correctly.
2. Abhik will check whether consent should be entered per mother or per baby.

From: Wilson, Leslie Dawn  
To: Higgins, Rosemary (NIH/NICHD) [E]; Poindexter, Brenda B  
Cc: Das, Abhik; Gantz, Marie  
Subject: RE: SUPPORT ROP OUTCOMES  
Date: Monday, April 30, 2007 2:53:35 PM

---

Entered--thanks

Leslie Dawn Wilson, RN, BSN  
Research Manager  
Neonatal Network Coordinator  
Riley Hospital RR 208  
ldw@iupui.edu (e-mail)  
699 West Dr  
Indianapolis, IN 46202  
317.274.8255 (phone)  
317.274.8963 (fax)  
317.312.6100 (pager)

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, April 30, 2007 2:17 PM  
To: Poindexter, Brenda B; Wilson, Leslie Dawn  
Cc: Das, Abhik; Gantz, Marie  
Subject: SUPPORT ROP OUTCOMES

Hi,

We are missing the above two children's ROP outcomes. THANKS FOR GETTING ALL OF THE OTHER CHILDREN'S OUTCOMES!!!

Center	Network	ROP error message
12	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
8100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Kathy J Auten  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Michael Cotten; Ronald N Goldberg; Kathy J Auten; Gantz, Marie  
**Subject:** Re: SUPPORT ROP OUTCOMES  
**Date:** Monday, April 30, 2007 2:26:30 PM

---

I am working on these.

Kathy J. Auten, MSHS  
Project Manager  
NICHD Neonatal Research Network Trials  
Duke University Medical Center  
Box 3179  
Bell Building, Room 141  
Durham, NC 27710 USA  
919-681-5859 tel  
919-681-4868 fax  
kathy.auten@duke.edu

"Higgins, Rosemary \ (NIH/NICHD\ ) [E]" <higginsr@mail.nih.gov> wrote on 04/30/2007 02:22:55 PM:

> Hi,  
> We are missing the above two children's ROP outcomes. THANKS FOR  
> GETTING ALL OF THE OTHER CHILDREN'S OUTCOMES!!!  
>  
> Center  
> Network  
>  
> ROP error message  
>  
> 19  
>  
> (b) (6)  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
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> reported on the SUPP10 for either eye.  
>  
> 19  
>  
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> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
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> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for the left eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> No SUPP10 records have been entered even though SUPP09 Question C1  
> indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
>  
> 19  
>  
> (b) (6)  
>  
> No SUPP10 records have been entered even though SUPP09 Question C1  
> indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> Infant died more than a week after the last ROP exam and final ROP  
> status has not been obtained. Please confirm that all ROP exams have  
> been entered.  
>  
>  
>  
> Rosemary D. Higgins, M.D.

> Program Scientist for the Neonatal Research Network  
> Pregnancy and Perinatology Branch  
> Center for Developmental Biology and Perinatal Medicine  
> NICHD, NIH  
> 6100 Executive Blvd., Room 4B03B  
> MSC 7510  
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> 301-435-7909  
> 301-496-3790 (FAX)  
> [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)  
>

**From:** CATHY A. GRISBY  
**To:** Archer, Stephanie (NIH/NICHD) [E]; nfiner@ucsd.edu; adas@rti.org; Higgins, Rosemary (NIH/NICHD) [E]; kurt.schibler@cchmc.org; kzaterka@rti.org  
**Cc:** Barb; Estelle; Holly; Jody; Kate; Lenora Jackson  
**Subject:** Re: SUPPORT| Recruitment teleconference with U. Cincinnati  
**Date:** Thursday, April 26, 2007 3:36:10 PM  
**Attachments:** U Cinn. recruitment, telcon notes, 04-25-07 revised.doc

---

I haven't had the forgotten attachment disease for quite a while. Oh well, tomorrow's another day!

----- Original message -----

**Date:** Thu, 26 Apr 2007 10:40:39 -0400  
**From:** "Archer, Stephanie \ (NIH/NICHD) [E]" <archerst@mail.nih.gov>  
**Subject:** SUPPORT| Recruitment teleconference with U. Cincinnati  
**To:** <nfiner@ucsd.edu>, <adas@rti.org>, "Higgins, Rosemary \ (NIH/NICHD) [E]" <higginsr@mail.nih.gov>, <kurt.schibler@cchmc.org>, <kzaterka@rti.org>, <grisbyca@email.uc.edu>

Attached are my notes from our teleconference early this week about SUPPORT recruitment issues. Please review these notes and send me any comments/corrections by May 1<sup>st</sup>.

Thanks!



Stephanie

---

Stephanie Wilson Archer

Neonatal Research Network

National Institute  
of Child Health and Human  
Development

6100 Executive  
Boulevard, Room 4B03 (MSC 7510)

Bethesda, MD 20892

Tel: 301-496-0430

Fax: 301-496-3790

archerst@mail.nih.gov

> \_\_\_\_\_ >U Cinn, recruitment, telcon notes, 04-25-07.doc (63k bytes)

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call University of Cincinnati April 25, 2007e

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kris Baxter, RTI; Kurt Schibler, UCinn; Cathy Grisby, UCinn; Holly Mincey, UCinn; Barbara Alexander, UCinn; Kate Bridges, UCinn; Estelle Fischer, UCinn; Jody Shively, UCinn; Stephanie Archer, NICHD

#### Process

- Missing some moms who did not give an answer before delivery, particularly with emergencies
  - Maybe ask teams on-call to ask parents one more time (as time allows) This may be an appropriate ACTION ITEM for us
  - Not appropriate some times to ask when they are in active labor or about to go into OR
  - Try to get back to the mothers within 12-24 hours after first approach We do this currently.
- IRB Limitations – can't approach prisoners or mothers under 18 years old at GSH. At UH we approach 16-<18 years old and get consent from mom and her parent/guardian.
- Process at UCSD
  - PI with a coordinator does the first approach
  - Preferably with, or just after, the neonatal consult – the consult gets them in the frame of mind that you are there to help them and their baby(ies)
  - Level of effort = ½ hour or more, especially if combined with the consult
  - Let them know that statistically we are finding that babies in trials do better than non-trial babies in general, no matter which research group they fall in (U. Cinn does this too).
  - Coordinator follows up later for consent
- OB investigator who has an ongoing trial
  - Will not allow approach/enrollment of a mom if she is already in the MFM progesterone trial, as she feels the two trials will conflict. She will not let us approach any patient who is eligible for any of her studies.
  - **ACTION ITEM: Develop handout that details how the two trials do not conflict (Rose and Neil could help with this). If a synopsis of the protocol can be provided for evaluation by the concurrent research subcommittee, we can make a recommendation in writing.**
- Logistical problem: not having Drs. Schibler or Narendranat at Good Samaritan. Dr. Schibler will move his office over to Good Sam. in a few months, following the departure of Dr. Barbara Warner.
- Literature for parents. Have a general brochure about research and one specific for SUPPORT that are both handed out by the coordinators. Currently we give out both brochures to when we approach SUPPORT moms.

#### Recruitment

- "Our biggest problem is closing the deal." – consent = 40% of those approached
  - They approach almost everyone, except precipitous deliveries
  - Population in Cincinnati area seems to have a general distrust of research and are, therefore, reluctant to get involved in it.
  - Have had several research trials with negative outcomes that were covered in the local media; this perception of negativity seems to get projected onto all research trials.
  - Kurt feels that it is harder to get consent here than from his previous experience in Salt Lake City.
  - Same across all ethnic groups, but especially in African Americans
  - For those enrolled and randomized, Kurt doesn't believe that there has been any specific ethnic group or circumstances that led them to consent
  - Only difference between hospitals is due to volume
- ~50% approached before neonatal consult. I think this number is higher—more like 80%.
  - **ACTION ITEM: Look at which mothers were more likely to give consent, those approached before or after their consult.**

### **Action Items**

1. U Cinn will develop handout that details how the two trials do not conflict (Rose and Neil could help with this).
2. U. Cinn will look at which mothers were more likely to give consent, those approached before or after their consult.

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT| Recruitment teleconference with UNM  
**Date:** Thursday, April 26, 2007 11:19:47 AM

---

I changed it to her description. Do I need to resend the final editions once I've heard back from everyone (or at least Neil and the PIs)?

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Thursday, April 26, 2007 11:19 AM  
**To:** Archer, Stephanie (NIH/NICHD) [E]  
**Subject:** FW: SUPPORT| Recruitment teleconference with UNM

Can we just delete that phrase?

---

**From:** Kristi Watterberg [mailto:KWatterberg@salud.unm.edu]  
**Sent:** Thursday, April 26, 2007 11:00 AM  
**To:** Archer, Stephanie (NIH/NICHD) [E]; Higgins, Rosemary (NIH/NICHD) [E]; adas@rti.org; Conra Lacy; Julie Rohr; nfiner@ucsd.edu  
**Subject:** Re: SUPPORT| Recruitment teleconference with UNM

Thanks. Looks fine to me, except for the statement at the end "in case the PI has a bias against the study". It's not that the PI may have a bias against his/her own study, but may be hesitant to present the study, not wanting to put pressure on the parents. The research nurses have extensive history in presenting studies, and can navigate that fine line.

Kristi

>>> "Archer, Stephanie (NIH/NICHD) [E]" <archerst@mail.nih.gov> 4/26/2007 8:33 am >>>  
Attached are my notes from our teleconference early this week about SUPPORT recruitment issues.  
Please review these notes and send me any comments/corrections by May 1<sup>st</sup>.

Thanks!  
Stephanie

---

Stephanie Wilson Archer  
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National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

**From:** Neil Finer  
**To:** Archer, Stephanie (NIH/NICHD) [E]; adas@rti.org; Higgins, Rosemary (NIH/NICHD) [E]; kurt.schibler@cchmc.org; kzaterka@rti.org; grisbyca@email.uc.edu  
**Subject:** RE: SUPPORT| Recruitment teleconference with U. Cincinnati  
**Date:** Thursday, April 26, 2007 11:11:30 AM

---

This looks accurate. I think that the investigators at this site are very appropriate and are doing everything they can to overcome old prejudices.

Neil

---

**From:** Archer, Stephanie (NIH/NICHD) [E] [mailto:archerst@mail.nih.gov]  
**Sent:** Thursday, April 26, 2007 7:41 AM  
**To:** Neil Finer; adas@rti.org; Higgins, Rosemary (NIH/NICHD) [E]; kurt.schibler@cchmc.org; kzaterka@rti.org; grisbyca@email.uc.edu  
**Subject:** SUPPORT| Recruitment teleconference with U. Cincinnati

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Stephanie

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Stephanie Wilson Archer  
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Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Neil Finer (nfiner@ucsd.edu)"; "Abhik Das (adas@rti.org)"; Higgins, Rosemary (NIH/NICHD) [E]; "Kurt Schibler (kurt.schibler@cchmc.org)"; "Kristin Zaterka-Baxter (kzaterka@rti.org)"; "Cathy Grisby (grisbyca@email.uc.edu)"  
**Subject:** SUPPORT] Recruitment teleconference with U. Cincinnati  
**Date:** Thursday, April 26, 2007 10:40:40 AM  
**Attachments:** U.Cinn, recruitment, telcon notes, 04-25-07.doc

---

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Thanks!  
Stephanie

---

Stephanie Wilson Archer  
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National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

## TELECONFERENCE NOTES

---

### SUPPORT Low Recruitment Call University of Cincinnati April 25, 2007e

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kris Baxter, RTI; Kurt Schibler, UCinn; Cathy Grisby, UCinn; Holly Mincey, UCinn; Barbara Alexander, UCinn; Stephanie Archer, NICHD

#### Process

- Missing some moms who did not give an answer before delivery, particularly with emergencies
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  - Preferably with, or just after, the neonatal consult – the consult gets them in the frame of mind that you are there to help them and their baby(ies)
  - Level of effort = ½ hour or more, especially if combined with the consult
  - Let them know that statistically we are finding that babies in trials do better than non-trial babies in general, no matter which research group they fall in (U. Cinn does this too).
  - Coordinator follows up later for consent
- OB investigator who has an ongoing trial
  - Will not allow approach/enrollment of a mom if she is already in the MFM progesterone trial, as she feels the two trials will conflict
  - **ACTION ITEM: Develop handout that details how the two trials do not conflict (Rose and Neil could help with this). If a synopsis of the protocol can be provided for evaluation by the concurrent research subcommittee, we can make a recommendation in writing.**
- Logistical problem: not having Drs. Schibler or Narendranat at Good Samaritan. Dr. Schibler will move his office over to Good Sam. in a few months, following the departure of Dr. Barbara Warner.
- Literature for parents. Have a general brochure about research and one specific for SUPPORT that are both handed out by the coordinators.

#### Recruitment

- "Our biggest problem is closing the deal." – consent = 40% of those approached
  - They approach almost everyone, except precipitous deliveries
  - Population in Cincinnati area seems to have a general distrust of research and are, therefore, reluctant to get involved in it.
  - Have had several research trials with negative outcomes that were covered in the local media; this perception of negativity seems to get projected onto all research trials.
  - Kurt feels that it is harder to get consent here than from his previous experience in Salt Lake City.
  - Same across all ethnic groups, but especially in African Americans
  - For those enrolled and randomized, Kurt doesn't believe that there has been any specific ethnic group or circumstances that led them to consent
  - Only difference between hospitals is due to volume
- ~50% approached before neonatal consult
  - **ACTION ITEM: Look at which mothers were more likely to give consent, those approached before or after their consult.**

#### Action Items

1. U Cinn will develop handout that details how the two trials do not conflict (Rose and Neil could help with this).
2. U. Cinn will look at which mothers were more likely to give consent, those approached before or after their consult.



**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Neil Finer (nfiner@ucsd.edu)"; "Abhik Das (adas@rti.org)"; Higgins, Rosemary (NIH/NICHD) [E]; "Richard Ehrenkranz (richard.ehrenkranz@yale.edu)"; "Kristin Zaterka-Baxter (kzaterka@rti.org)"; "Anna Dusick (adusick@iupui.edu)"  
**Subject:** SUPPORT| Recruitment teleconference with Yale  
**Date:** Thursday, April 26, 2007 10:39:31 AM  
**Attachments:** Yale\_recruitment\_telcon\_notes\_04-25-07.doc

---

Attached are my notes from our teleconference early this week about SUPPORT recruitment issues. Please review these notes and send me any comments/corrections by May 1<sup>st</sup>.

Thanks!  
Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Yale University April 25, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Kris Zaterka-Baxter, RTI; Richard Ehrenkranz, Yale; Anna Dusick, Yale; Stephanie Archer, NICHD

#### Process

- Neonatal consults are done first by a fellow
  - Occasionally approached before, but then do some of the consult at that time
- PIs approach
- Coordinators follow-up
- MFMs. Have a group there (not in the MFMU Network). Doing one trial currently on amnios looking for evidence of choreo. For mothers up to 34 weeks gestation. Does not conflict with SUPPORT, so not prohibited from approaching them for multiple trials.
- IRB does not allow approach if mother is in active labor
- Problems with SUPPORT 02 form. Some data entering correction problems. Have 10-15 mothers to enter that were eligible, but could not get consent because they were in active labor. The system bounces them back. Should be catalogued as "unavailable."
  - **ACTION ITEM: Kris will talk to Abhik about how to correct this so that they can be entered correctly.**
  - **ACTION ITEM: Abhik will check whether consent should be entered per mother or per baby (Yale and UCSD count each baby, not just each mother)**

#### Recruitment

- Dip in recruitment seems to be because of dip in number of eligible mothers
- Approaching and getting consent for ~ 50%
- In April, have hit a month with several consents with multiple births at once, so numbers are going up again. Enrolled 1 a few days ago.
- Projected GDB eligible ELBWs = 110/year = 9/month (not all of which are in the window)
- Hardly miss approaching anyone
- "Undecideds." Have a few, but lately they have done outside of the window

#### Action Items

1. Kris will talk to Abhik about how to correct this so that they can be entered correctly.
2. Abhik will check whether consent should be entered per mother or per baby.

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Neil Finer (nfiner@ucsd.edu)"; "Abhik Das (adas@rti.org)"; Higgins, Rosemary (NIH/NICHD) [E]; "Leslie Dawn Wilson (ldw@iupui.edu)"; "Brenda Poindexter (bpoindex@iupui.edu)"  
**Subject:** SUPPORT] Recruitment teleconference with Indiana U.  
**Date:** Thursday, April 26, 2007 10:35:41 AM  
**Attachments:** Indiana U. recruitment. telcon notes. 04-24-07.doc

---

Attached are my notes from our teleconference early this week about SUPPORT recruitment issues.  
Please review these notes and send me any comments/corrections by May 1<sup>st</sup>.

Thanks!  
Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Indiana University April 24, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Brenda Poindexter, Indiana U; Leslie Wilson, Indiana U; Stephanie Archer, NICHD

#### Process

- Fellows seem to discuss the study well with the mothers
- Neonatal consults
  - IRB – can't approach for research study prior to a neonatal consult
  - OBs don't always request a consult
- NOT RECRUITING uniformly AT 3 SITES because of infrastructure problems
  - Not enough people on team for 24/7 monitoring, so have to rely on faculty
  - Power calculations for individual studies are determined using eligible number in GDB who would be available and approached, consented, and enrolled

#### Recruitment

- Since January 2007:
  - Eligible= 11 (all at U hospital)
    - Jan/Feb = 3
    - March = 1
    - April = 0 to date
  - Delivered outside of window = 5
  - Refusals = 3
  - Missed = 3 (including 1 set of twins)
  - Consented and awaiting delivery = 5
  - A few delivery room deaths that were not going to be resuscitated
- For "consent not requested," had several drug addicts, mentally disturbed, and under-aged mothers (all from before January 2007)
- Problem: entering numbers correctly
  - For multiples, you should get 1 consent per baby
  - Getting one per mother makes it look like less moms were approached and/or consented (number consented should be 2-3 times the number randomized)
  - **ACTION ITEM: Abhik will double-check which method should be used**
  - **ACTION ITEM: U Indiana will go back through their records to make sure data was entered correctly with 1 consent per baby**
    - Screened = 75
    - Approached = 38
    - Consented = 18
    - Randomized = 18 (due to multiples)

#### Action Items

1. RTI will look at which sites are/are not enrolling and their GDB numbers; how many were missed because of this.
2. Abhik will check whether consent should be entered per mother or per baby
3. U Indiana will go back through their records to make sure data was entered correctly (depending upon Abhik's findings)

**From:** Archer, Stephanie (NIH/NICHD) [E]  
**To:** "Neil Finer (nfiner@ucsd.edu)"; "Kristi Watterberg (kwatterberg@salud.unm.edu)"; "Julie Rohr (jrohr@salud.unm.edu)"; "Abhik Das (adas@rti.org)"; Higgins, Rosemary (NIH/NICHD) [E]; "Conra Backstrom (CBackstrom@salud.unm.edu)"  
**Subject:** SUPPORT| Recruitment teleconference with UNM  
**Date:** Thursday, April 26, 2007 10:33:06 AM  
**Attachments:** UNM\_recruitment\_telcon\_notes\_04-24-07.doc

---

Attached are my notes from our teleconference early this week about SUPPORT recruitment issues.  
Please review these notes and send me any comments/corrections by May 1<sup>st</sup>.

Thanks!  
Stephanie

---

Stephanie Wilson Archer  
Neonatal Research Network  
National Institute of Child Health and Human Development  
6100 Executive Boulevard, Room 4B03 (MSC 7510)  
Bethesda, MD 20892  
Tel: 301-496-0430  
Fax: 301-496-3790  
archerst@mail.nih.gov

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call University of New Mexico April 24, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kristi Watterberg, UNM; Conra Lacy, UNM; Julie Rohr, UNM; Stephanie Archer, NICHD

#### Process

- UNM does a neonatal consult for all women coming in with premature labor when requested by obstetrics
  - OBs, however, may not request this if the labor stops
- Consent prior to neonatal consult
  - IRB is letting them do this
  - Identification of mothers in the window
  - Approached for SUPPORT if they are in, or earlier than (<24 weeks), the window
  - If they have not received a neonatal consult, they go over some of the statistical information on prematurity with the mothers
- Consent forms changed
  - They noticed that as they went over the forms with the mothers, they tended to automatically refuse consent whenever read the description of potential air leaks
  - IRB agreed to let them take this out of the form itself
  - Now consent had increased 60-70%
- Level of effort = 4-6 hours of work per consent request

#### Recruitment

- Only 25-30% of moms with consent deliver in the window
- Number of eligible babies dropped in January-March 2007, but is up again now.
  - May just be a trough
  - With decrease, they started an investigation to find out why; possible reasons:
    - Private hospital in the city just opened a new Level 3 NICU, so may be getting some of their eligible patients
    - In previous months, UNM had to divert people to other hospitals because of lack of beds – this may have led to some people automatically going elsewhere now without calling to inquire about availability
    - UNM new NICU is supposed to open in June
  - Now have ~50-55 ELBW with 85% inborn, but not all are eligible for SUPPORT
  - Number randomized now = 3 (2 born in early April, so not on the March report)
  - Consent rate ~ 50% which is average
  - Spanish translation is required in ~ 50% of cases, using hospital interpreters. They have forms in Spanish.
    - Moms from Mexico are concerned with deportation, so they are less likely to consent
- Survey of centers at last Steering Committee meeting suggested that the highest enrolling sites had the coordinators doing recruitment
  - U Alabama is also high, but has Wally involved in the recruit
  - UNM tried to separate the PI from the parents, in case the PI is overly aggressive with getting consent, or has a bias against the study; using coordinators creates more of a buffer

#### Supplies

- Oximeters – have enough for the (b) (6) coming +1 extra

**From:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Yale SUPPORT Recruit telcon notes  
**Date:** Wednesday, April 25, 2007 4:56:33 PM  
**Attachments:** [Yale\\_recruitment\\_telcon\\_notes\\_04-25-07.doc](#)  
[Adding\\_non-network\\_sites\\_telcon\\_notes\\_04-25-07.doc](#)

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Attached along with notes on your side conversation with Neil about adding sites.

That should be it, since I didn't take notes for Wayne State's call.

## TELECONFERENCE NOTES

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### **SUPPORT Low Recruitment Call Yale University April 25, 2007**

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Kris Zaterka-Baxter, RTI; Richard Ehrenkranz, Yale; Anna Dusick, Yale; Stephanie Archer, NICHD

#### **Process**

- Neonatal consults are done first by a fellow
  - Occasionally approached before, but then do some of the consult at that time
- Pls approach
- Coordinators follow-up
- MFMs. Have a group there (not in the MFMU Network). Doing one trial currently on amnios looking for evidence of choreo. For mothers up to 34 weeks gestation. Does not conflict with SUPPORT, so not prohibited from approaching them for multiple trials.
- IRB does not allow approach if mother is in active labor
- Problems with SUPPORT 02 form. Some data entering correction problems. Have 10-15 mothers to enter that were eligible, but could not get consent because they were in active labor. The system bounces them back. Should be catalogued as "unavailable."
  - **ACTION ITEM: Kris will talk to Abhik about how to correct this so that they can be entered correctly.**
  - **ACTION ITEM: Abhik will check whether consent should be entered per mother or per baby (Yale and UCSD count each baby, not just each mother)**

#### **Recruitment**

- Dip in recruitment seems to be because of dip in number of eligible mothers
- Approaching and getting consent for ~ 50%
- In April, have hit a month with several consents with multiple births at once, so numbers are going up again. Enrolled 1 a few days ago.
- Projected GDB eligible ELBWs = 110/year = 9/month (not all of which are in the window)
- Hardly miss approaching anyone
- "Undecideds." Have a few, but lately they have done outside of the window

#### **Action Items**

1. Kris will talk to Abhik about how to correct this so that they can be entered correctly.
2. Abhik will check whether consent should be entered per mother or per baby.



## TELECONFERENCE NOTES

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### **SUPPORT Recruitment April 25, 2007**

Present: Neil Finer, UCSD; Rose Higgins, NICHHD; Stephanie Archer, NICHHD

#### **Adding non-Network sites for SUPPORT**

- **ACTION ITEM: Rose will talk with Dorothy Gale at NHLBI about whether this is possible and what would have to be done to make it happen.**
  - Would need to find money for it
  - Can we divert money from sites that are not recruiting to non-Network sites?
  - Would need Steering Committee approval
- **Prospective sites**
  - Not a lot of sites with known corporate capabilities with good follow-up
  - U Miami. Their RoP follow-up was not good.
  - U. Denver. No experience with them.
    - **ACTION ITEM: Neil will talk with them about their follow-up experience (without mentioning SUPPORT specifically).**
  - **ACTION ITEM: Look at Late Breaker PAS presentation on follow-up to see if any other sites there are relevant.**

#### **Action Items**

1. Rose will talk with Dorothy Gale at NHLBI about whether this is possible and what would have to be done to make it happen.
2. Neil will talk with them about their follow-up experience (without mentioning SUPPORT specifically).
3. Rose will look at Late Breaker PAS presentation on follow-up to see if any other sites there are relevant.

**From:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** U. Cinn SUPPORT Recruitment Telcon  
**Date:** Wednesday, April 25, 2007 4:25:42 PM  
**Attachments:** [U Cinn recruitment telcon notes\\_04-25-07.doc](#)

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Here are my notes for the Cincinnati call.

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call University of Cincinnati April 25, 2007e

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kurt Schibler, UCinn; Cathy Grisby, UCinn; Holly, UCinn; Barbara, UCinn; Stephanie Archer, NICHD

#### Process

- Missing some moms who did not give an answer before delivery, particularly with emergencies
  - Maybe ask teams on-call to ask parents one more time (as time allows)
  - Not appropriate some times to ask when they are about to go into OR
  - Try to get back to the mothers within 12-24 hours after first approach
- Limitations – can't approach prisoners or mothers under 18 years old
- Process at UCSD
  - PI with a coordinator does the first approach
  - Preferably with, or just after, the neonatal consult – the consult gets them in the frame of mind that you are there to help them and their baby(ies)
  - Level of effort = ½ hour or more, especially if combined with the consult
  - Let them know that statistically we are finding that babies in trials do better than non-trial babies in general, no matter which research group they fall in (U. Cinn does this too).
  - Coordinator follows up later for consent
- Some U Cinn. PI don't want direct contact
  - One PI will not approach/enroll a mom if she is already in the MFM progesterone trial, as she feels the two trials will conflict
  - **ACTION ITEM? Develop handout that details how the two trials do not conflict (Rose and Neil could help with this).**
- Logistical problem with not having anyone at Good Samaritan, especially after Barbara leaves for St. Louis. Kurt will move his office over there in a few months
- Literature for parents. Have a general brochure about research and one specific for SUPPORT that are both handed out by the coordinators.

#### Recruitment

- "Our biggest problem is closing the deal." – consent = 40% of those approached
  - They approach almost everyone, except precipitous deliveries
  - People in Cincinnati area seem to have a general distrust of research and are, therefore, reluctant to get involved in it.
  - Have had several research trials with negative outcomes that were covered in the local media; this perception of negativity seems to get projected onto all research trials.
  - Kurt feels that it is harder to get consent here than from his previous experience in Salt Lake City.
  - Same across all ethnic groups, but especially in African Americans
  - For those enrolled and randomized, Kurt doesn't believe that there has been any specific ethnic group or circumstances that led them to consent
  - Only difference between hospitals is due to volume
- ~50% approached before neonatal consult
  - **ACTION ITEM: Look at which mothers were more likely to give consent, those approached before or after their consult?**

#### Action Items

1. U Cinn will develop handout that details how the two trials do not conflict (Rose and Neil could help with this)?
2. U. Cinn will look at which mothers were more likely to give consent, those approached before or after their consult?

**From:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** U Indiana SUPPORT recruitment telcon notes  
**Date:** Wednesday, April 25, 2007 2:58:48 PM  
**Attachments:** [U Indiana, recruitment, telcon notes, 04-24-07.doc](#)

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Here are my notes for the Indiana call.

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call Indiana University April 24, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Brenda Poindexter, U Indiana; Stephanie Archer, NICHD

#### Process

- Fellows seem to discuss the study well with the mothers
- Neonatal consults
  - IRB – can't approach prior to a neonatal consult
  - OBs don't always request a consult
- NOT RECRUITING AT 3 SITES AT ALL because of infrastructure problems
  - Not enough people on team for 24/7 monitoring, so have to rely on faculty
  - **ACTION ITEM: RTI will look at which sites are/are not enrolling and their GDB numbers; how many were missed because of this?**
  - Centers are measured against eligible number in GDB who are approached, consented, and enrolled

#### Recruitment

- Since January 2007:
  - Enrolled = 11 (all at U hospital)
    - March = 1
    - April = 0 to date
  - Delivered outside of window = 5
  - Refusals = 3
  - Missed = 3 (including 1 set of twins)
  - Consented and awaiting delivery = 5
  - A few delivery room deaths that were not going to be resuscitated
- For "consent not requested," had several drug addicts, mentally disturbed, and under-aged mothers (all from before January 2007)
- Problem: entering numbers correctly
  - For multiples, should you get 1 consent per mom, or 1 consent per baby? Neil and Abhik think it should be per baby.
  - This makes it look like less were approached and/or consented (number consented should be 2-3 times the number randomized)
  - **ACTION ITEM: Abhik will check which method should be used**
  - **ACTION ITEM: U Indiana will go back through their records to make sure data was entered correctly with 1 consent per baby**
    - Screened = 75
    - Approached = 38
    - Consented = 18
    - Randomized = 18?

#### Action Items

1. RTI will look at which sites are/are not enrolling and their GDB numbers; how many were missed because of this?
2. Abhik will check whether consent should be entered per mother or per baby
3. U Indiana will go back through their records to make sure data was entered correctly (depending upon Abhik's findings)

**From:** Kurt Schibler  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]; nfiner@ucsd.edu](mailto:Higgins.Rosemary@NIH/NICHD)  
**Cc:** [Cathy Grisby](mailto:Cathy.Grisby)  
**Subject:** SUPPORT enrollment  
**Date:** Wednesday, April 25, 2007 12:43:20 PM

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Hi Rose and Neil,

Thanks for your time and trouble-shooting with us on SUPPORT enrollment issues. From our call and further discussion afterwards we will try the following interventions:

- 1) NNP and Fellow notification of mothers who have been approached and are still considering SUPPORT, in cases when delivery may occur in off hours and there may be enough time to consider consent for the trial.
- 2) We will try the combined process of doing consult and consent at the same meeting or with our research coordinators in tandem.
- 3) I will contact our MFM physicians about doing neo consults prior to antenatal consents so mothers do not get the impression that we are only interested in research and not in their infant and so that we are approaching parents well before delivery.

Over the long run we will try to establish a positive culture showing the beneficial effect of research on quality of care.

Again, Thanks for your time and ideas.

Kurt

Kurt Schibler, MD  
Associate Professor of Pediatrics  
Division of Neonatology  
Cincinnati Children's Hospital  
3333 Burnet Avenue  
Cincinnati, Ohio 45229-3972  
TEL: 513-636-3972  
Pager: 513-736-(b)  
FAX: 513-636-4404  
E-mail: [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org)

**From:** [Archer, Stephanie \(NIH/NICHD\) \[E\]](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** SUPPORT Recruitment call - UNM  
**Date:** Wednesday, April 25, 2007 11:03:04 AM  
**Attachments:** [UNM\\_recruitment\\_telcon\\_notes\\_04-24-07.doc](#)

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Not sure if this helps, but I typed up my notes from the call with New Mexico. I could remember who all was on the call on their end aside from Kristi?

## TELECONFERENCE NOTES

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### SUPPORT Low Recruitment Call University of New Mexico April 24, 2007

Present: Neil Finer, UCSD; Rose Higgins, NICHD; Abhik Das, RTI; Kristi Watterberg, UNM; Stephanie Archer, NICHD

Formatted: German (Germany)

#### Process

- UNM does a neonatal consult for all women coming in with premature labor when requested by obstetrics
  - OBs, however, may not request this if the labor stops
- Consent prior to neonatal consult
  - IRB is letting them do this
  - ~~ID~~ Identification of mothers in the window
  - Approach them for SUPPORT if they are in, or earlier than (<24 weeks), the window
  - If they have not received a neonatal consult, they go over some of the statistical information on prematurity with the mothers
- Consent forms changed
  - They noticed that as they went over the forms with the mothers, they tended to automatically refuse consent whenever they got to read the part description of that mentioned potential -air leaks
  - IRB agreed to let them take this out of the form itself
  - Now consent had increased 60-70%
- Level of effort = 4-6 hours of work per consent request

#### Recruitment

- Only 25-30% of moms with consent deliver in the window
- Number of eligible babies dropped in January-March 2007, but is up again now.
  - May just be a trough
  - With decrease, they started an investigation to find out why; possible reasons:
    - Private hospital in the city just opened a new Level 3 NICU, so may be getting some of their eligible patients
    - In previous months, UNM had to divert people to other hospitals because of lack of beds – this may have led to some people automatically going elsewhere now without calling to inquire about availability
    - UNM new NICU is supposed to open in June
  - They now have about 50-55 ELBW with 85% inborn, but not all are eligible for SUPPORT
  - Number randomized now = 3 (2 were born in early April, so not on the March report)



- Consent rate ~ 50% which is average
- Spanish translation is required in ~ 50% of cases, using hospital interpreters. They have forms in Spanish.
  - Moms from Mexico are concerned with deportation, so they are less likely to consent
- Survey of centers at last Steering Committee meeting suggested that the highest enrolling sites had the coordinators doing recruitment
  - U Alabama is also high, but has Wally involved in the recruit
  - UNM tried to separate the PI from the parents, in case the PI is overly aggressive with getting consent, or has a bias against the study; using coordinators creates more of a buffer

#### **Supplies**

- Oximeters – have enough for the (b) (6) coming +1 extra

**From:** [Ellen Hale](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [kzaterka@rti.org](mailto:kzaterka@rti.org); [Susie Buchter](#); [Anthony Piazza](#)  
**Subject:** SUPPORT consent withdrawal  
**Date:** Tuesday, April 24, 2007 4:43:37 PM

---

Rose,

Consent was withdrawn for the SUPPORT study for (b) (6). She withdrew authorization for further data collection and all study procedures. Our last time to collect data was noon on (b) (6) (study day 9).

Ellen

**From:** [Wally Carlo, M.D.](#)  
**To:** [Neil Finer](#); [Shankaran, Seetha](#); [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Subject:** RE: PCO2.pdf and SUPPORT  
**Date:** Sunday, April 22, 2007 10:15:12 AM

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Seetha:

I have missed this email and am responding now.

The meta-analysis of the three RCTs show no adverse effects of hypercapnia. I think the best analysis of the data would lead to an assessment of equipoise.

wally

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**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Tuesday, March 06, 2007 3:57 PM  
**To:** Shankaran, Seetha; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Wally Carlo, M.D.  
**Subject:** RE: PCO2.pdf and SUPPORT

Hi Seetha

I fully understand this debate. At the present time there is inadequate data, and almost none from prospective experiences or trials that provides a strong level of evidence either for or against the approach of allowing higher PaCO<sub>2</sub>s in the ELBW infants. Columbia seems to indicate in their review of their own data that they do not have a higher incidence of problems, but again this is not prospective. I know that you were going to look at some of the data from benchmarking etc to report on the associations of hypercarbia and I would look forward to this.

Indeed SUPPORT may provide some such prospective data. We will have substantial blood gas information in the first weeks of life. Our 2 groups should be separated with respect to the actual PaCO<sub>2</sub>s.

Before we try to change practice, we need better data which SUPPORT will in part provide.

We should not change our protocol at this time, and we may, I suspect, be surprised by our results.

Remember that the previous prospective trial was halted for other reasons, and I am skeptical that others will do a large trial on this issue (with the possible exception of Wally!!).

Hope this helps

Neil

---

**From:** Shankaran, Seetha [mailto:sshankar@med.wayne.edu]  
**Sent:** Tuesday, March 06, 2007 12:56 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer  
**Cc:** Wally  
**Subject:** RE: PCO2.pdf and SUPPORT

Rose

No, I am not reporting any violations---what we are asking is, how do we (PI's) respond to our colleagues when they say that this paper showed an association with high PCO<sub>2</sub>. Wally was an author---Wally, what do you do? How do you maintain equipoise?

Should the SUPPORT subcommittee discuss this

Thanks

Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine

Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436  
Fax 313-745-5867

Email sshankar@med.wayne.edu

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, March 06, 2007 10:03 AM  
**To:** Shankaran, Seetha; Neil  
**Subject:** RE: PCO2.pdf and SUPPORT

Seetha

The protocol has specific criteria which were approved in advance of the beginning of the trial. **If there is deviation, a protocol violation needs to be completed.**

For children randomized to CPAP:

These infants will be managed on nasal CPAP, and intubation is never required by protocol. They *MAY* be intubated if they meet **ANY** of the criteria listed below. If intubated within the first 48 hours of life they should receive surfactant

**Intubation:**

- An  $\text{FiO}_2 > .50$  required to maintain an indicated  $\text{SpO}_2 > 88\%$  (using the altered Pulse Oximeters) for one hour
- An arterial  $\text{PaCO}_2 > 65$  torr (arterial or capillary samples, if venous  $\text{PvCO}_2 > 70$  torr) documented on a single blood gas within 1 hour of intubation
- Hemodynamic instability defined as a low blood pressure for gestational age and/or poor perfusion, requiring volume and/or pressor support for a period of 4 hours or more. (Note that clinically defined shock is an accepted indication for intubation.)

Intubation may be performed at any time for the occurrence of repetitive apnea requiring bag and mask ventilation, clinical shock, sepsis, and/or the need for surgery

These criteria will continue in effect for a minimum of 14 days of life.

And for extubation:

**Extubation:**

An intubated CPAP-Treatment infant **MUST** have extubation attempted within 24 hours if **ALL** of the following criteria are met and documented on a single blood gas

- $\text{PaCO}_2 < 65$  torr with a  $\text{pH} > 7.20$  (arterial or capillary samples)
- An indicated  $\text{SpO}_2 > 88\%$  with an  $\text{FiO}_2 < 50\%$
- A mean airway pressure (MAP)  $< 10$  cm  $\text{H}_2\text{O}$ , ventilator rate  $< 20$  bpm, an amplitude  $< 2X$  MAP if on high frequency ventilation (HFV)
- Hemodynamically stable (Defined as an infant with clinically acceptable blood

pressure and perfusion in the opinion of the clinical team – such an infant may be receiving inotropic/vasopressor agents, but should not require ongoing volume infusions to stabilize the circulation and the doses of any continuously infused medications for circulatory stabilization should not have increased within 1 hour of any planned extubation).

- Absence of clinically significant PDA

These criteria will continue in effect for the first 14 days of life.

For the Surfactant/intubation arm:

**Extubation:**

An intubated Surfactant-Control infant will continue to receive mechanical ventilation until extubation criteria are satisfied, but **MUST** have Extubation attempted within 24 hours of fulfilling **ALL** of the following criteria documented on a single blood gas.

- PaCO<sub>2</sub> < 50 torr and pH > 7.30 (arterial or capillary samples)
  - An FiO<sub>2</sub> = 35 with a SpO<sub>2</sub> = 88% using the study pulse oximeters with
  - A mean airway pressure (MAP) < 8 cm H<sub>2</sub>O, ventilator rate < 20 bpm, an amplitude < 2X MAP if on high frequency ventilation (HFO)
  - Hemodynamically stable (Defined as an infant with clinically acceptable blood pressure and perfusion in the opinion of the clinical team – such an infant may be receiving inotropic / vasopressor agents, but should not require ongoing volume infusions to stabilize the circulation and the doses of any continuously infused medications for circulatory stabilization should not have increased within 1 hour of any planned extubation).
  - Absence of clinically significant PDA (Defined as bounding pulses, audible murmur and Echo confirmation of L-R shunting with increased LA/Ao size)
- These criteria will continue in effect for a minimum of 14 days for all infants.

*Failure to attempt to extubate an infant meeting all of the above criteria, or extubation prior to reaching criteria, will be recorded as a study protocol violation unless extenuating circumstances are noted.*

**Weaning**

This protocol will not define strict weaning criteria for the Control infants, but it is to be understood that reasonable attempts should be made to extubate these infants. While it is understood that some centers may be using somewhat more severe FiO<sub>2</sub> and PaCO<sub>2</sub> criteria than those listed here as current practice, these Criteria are thought to reflect current Network practice and practice at 2 of the 3 Best practice centers.

**Reintubation:**

- Control Infants may be reintubated using Standard of Care.

---

**From:** Shankaran, Seetha [mailto:sshankar@med.wayne.edu]

**Sent:** Tuesday, March 06, 2007 9:52 AM

**To:** Neil; Higgins, Rosemary (NIH/NICHD) [E]

**Subject:** PCO2.pdf and SUPPORT

Neil and Rose

We recently reviewed this in Journal club. The faculty and fellows are concerned about current intubation/extubation criteria for SUPPORT (allowing PCO<sub>2</sub> to rise above up to 65 and ph as low as 7.2)

Please advise

Thanks

**Seetha**

**From:** Duara, Shahnaz  
**To:** Das, Abhik  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu; Navarrete, Cristina; Everett, Ruth; Zaterka-Baxter, Kristin  
**Subject:** RE: Question re growth study  
**Date:** Friday, April 20, 2007 12:58:03 PM

---

Abhik,

Please respond on our behalf. If a baby is not feeding, GRO-01 question B 1 should be circled 'N'. The Enteral Key Code 'Type 00 = none' should be ignored.

Thanks  
Shahnaz

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Thursday, April 19, 2007 5:51 PM  
**To:** Duara, Shahnaz; Navarrete, Cristina  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu; Zaterka-Baxter, Kristin  
**Subject:** FW: Question re growth study

Shahnaz and Cristina:

Can you answer this question from Seetha about one of the SUPPORT Growth secondary forms.

Thanks

Abhik

---

**From:** Shankaran, Seetha [mailto:sshankar@med.wayne.edu]  
**Sent:** Wednesday, April 18, 2007 2:48 PM  
**To:** Zaterka-Baxter, Kristin; Neil; higginsr@mail.nih.gov; Das, Abhik  
**Cc:** Sood, Beena; du2744@wayne.edu; Rosman, Carolyn; Shankaran, Seetha  
**Subject:** Question re growth study

Neil

On GRO-01, Q B1 if Y to enteral intake, why do we still have 00 under Type (it is none?)

Please advise

Thanks

Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436  
Fax 313-745-5867

Email sshankar@med.wayne.edu

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**From:** [Neil Finer](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Wade Rich](#)  
**Date:** Thursday, April 19, 2007 12:57:11 PM  
**Attachments:** [SUPPORT Subcommittee Report - Meeting April 19.ppt](#)

---

Hi Rose

Here is the report of the SUPPORT Subcommittee for the Steering Committee.

Neil

# **SUPPORT Subcommittee Report – Meeting April 19**

## **1. Review of Enrollments to date:**

- As of most current information - 604 infants enrolled representing 46% of total**
- Projections suggest that if we can achieve 2 infants per site per month we will need an additional 21 months - we have only achieved this target for 2 months since restarting the trial.**
- March is the best month to date!!**



# **SUPPORT Subcommittee**

## **2. Review of Serious Adverse Events**

- All such events apart from air leaks in the first 14 days are occurring at less than the baseline rates, and the air leaks are only marginally increased for the larger strata.**
- Discussion of Medwatch and IRB reporting- Suggested that any adverse event that was Unexpected, Study related and Severe should be reported to IRB and have a Medwatch form**
- All Deaths should be reported via Medwatch**

# **SUPPORT Subcommittee**

## **3. Review of Protocol Violations**

- **Felt that these are not excessive and will continue to be followed.**

## **4. Review of Oximeter Data**

- **Time in Narrow Target overall is 38% and times > 96 12.2% and < 84% 8.1%**
- **It was stressed that centers should look at their average SpO<sub>2</sub> and continue to use trend plots with care teams to increase time in the narrow target.**

# **SUPPORT Subcommittee**



- 5. Secondaries – MRI - S Hintz**
  - Reviewed technical issues regarding MR routines – these are being discussed with sites as they arise with the central reader Dr Barnes**
  - The use of the Hugger was reviewed and there may be new information to help the sites utilize this device and further decrease the need for sedation for such studies ( Susan will circulate)**
  - Discussed longer term follow up of this cohort to school age – Susan will prepare a protocol for review**

# **SUPPORT Subcommittee**

## **6. Pulmonary Outcomes – Tim Stevens**

- 260 infants consented, with 13 being seen at 18 months**
- Enrollments are increasing over past 6 months**

## **7. Growth Secondary**

- Discussion about using length recorder by nurse if coordinator unavailable**

# **SUPPORT Subcommittee SUMMARY**

- **Study almost halfway complete**
- **Best estimate for completion based on current enrollments is 2 years, less if we can achieve more than 2/site/month**
- **Will continue to dialogue with sites with decreased % of enrolled to eligibles**
- **Secondaries are enrolling at reasonable rates and will be very informative**

# **SUPPORT Subcommittee SUMMARY**

- **We now have enrolled > 240 infants in the small strata which represents one of the largest prospective cohorts in an RCT of such infants**
- **Thanks to all the Coordinators for their incredible work for this trial!!**
- **Thanks to all the PIs and especially the new centers for initiating and participating**





**From:** Zaterka-Baxter, Kristin  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Thursday, April 19, 2007 11:56:54 AM

---

Please see below

Kris

---

**From:** Duara, Shahnaz [mailto:SDuara@med.miami.edu]  
**Sent:** Tuesday, October 31, 2006 6:02 PM  
**To:** Zaterka-Baxter, Kristin; Navarrete, Cristina; sduara@miami.edu; Everett, Ruth  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Auman, Jeanette O.  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY

That sounds fine. Thanks for everything.  
Shahnaz

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Tuesday, October 31, 2006 4:40 PM  
**To:** Navarrete, Cristina; sduara@miami.edu; Everett, Ruth  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Auman, Jeanette O.  
**Subject:** FW: SUPPORT GROWTH SECONDARY STUDY

Hi,

We will ask the Center to enroll these infants in support however there is not a protocol deviation form for this study. We should ask this center to document an asterisk for any required data field where the measurement was not obtained by the length board, then F5 to allow a comment and record the length of the measurements taken by tape measure and the reason why it was not by length board per protocol. This way, the statistician would never combine the two types of measurements in analysis. Please let me know if this sounds feasible or if anyone has any questions or concerns.

Thanks,  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, October 31, 2006 3:14 PM  
**To:** Zaterka-Baxter, Kristin  
**Subject:** FW: SUPPORT GROWTH SECONDARY STUDY

---

**From:** Everett, Ruth [mailto:REverett@med.miami.edu]  
**Sent:** Thursday, October 26, 2006 1:31 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]

**Subject: RE: SUPPORT GROWTH SECONDARY STUDY**

Hi Rose and Kris, I spoke with Dr. Duara concerning this matter and we agree that the centers should continue the measurements and just make a comment or complete a protocol violation to why a measurement was not obtained because there may be other reasons as well that may prevent the staff from using the length board such as when the babies are on the oscillator or his/her condition is too unstable for handling which is quite common in the smaller babies during sepsis and complications from the PDA. So I think these missing data points should be very similar in all instances and recorded as such. Also, Cristina contact information is 305 585-6408 office to the division of neonatology 305 750-**(b)** pager number and she has an office in the Batchelor building 305 243-6457.

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]

**Sent:** Thursday, October 26, 2006 9:46 AM

**To:** Navarrete, Cristina; Duara, Shahnaz; Everett, Ruth

**Cc:** Zaterka-Baxter, Kristin

**Subject:** SUPPORT GROWTH SECONDARY STUDY

Hi,

For the Support growth study, if the length cannot be measured during the first week of life due to nursing practice, should those sites NOT participate in the study?

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Susan Hintz](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** update for subcommittee meeting  
**Date:** Wednesday, April 18, 2007 3:20:28 AM  
**Attachments:** [April2007UpdateHINTZ.doc](#)

---

Hi Rose

Could you look this over? If OK by you, please could you have someone make copies for the SUPPORT meeting?

Thanks

Susan

--

Susan R. Hintz, M.D., M.S.  
Assistant Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351

SUPPORT Neuroimaging secondary update  
NICHD NRN Steering Committee Meeting

SUSAN HINTZ  
April 2007

### 1) Site participation update

- Of the **14 sites** participating or planning to participate in Neuroimaging secondary:
  - Only one site still waiting for IRB approval
  - One site with approval has not yet enrolled any patients – but in this case, IRB approval was *JUST* granted on April 4<sup>th</sup>
- 9 sites using separate consent, 5 sites using embedded consent

### 2) Enrollment update

- Queries sent to sites regarding secondary enrollment, completion of 35-42 week neuroimaging, etc.
  - Approximately **205 patients** have been enrolled thus far
    - **~134 patients:** 35-42 week neuroimaging is complete
    - **40 patients:** enrolled, but either too early to get 35-42 week imaging, or in window and awaiting imaging
    - **28 patients:** enrolled, but died before 35-42 week imaging
    - **7 patients:** late CUS or MRI “missed”
  - MRI central reading: rolling reading ongoing – approximately 60 MRI’s read or in process with central reader.

### 3) Issues with MRI’s

- A few centers had some initial problems with obtaining some of the sequences – particularly GRE and FLAIR. These issues have been resolved after discussions with the site lead technologists and/or neuroradiologists. Our thanks to the coordinators and site PI’s for being attentive to these issues!
- Positive feedback re: “hugger” from several sites -
- Feel free to call or email with any issues or concerns from you or your radiologists and technologists regarding MRI issues ([srhintz@stanford.edu](mailto:srhintz@stanford.edu)) – I will do my best to find out the answer, or put your team in touch with Dr. Barnes and our lead MRI technologist

### 4) Tracking

- We are requesting that the coordinators key the FIRST PART of the MRI01 data as soon as they can, then leave it INCOMPLETE in the data entry system. RTI has programmed this such that there should be NO RISK of receiving an edit failure for the MRI01 incomplete form until that patient's status date is reached.
- Partial information from MRI01 will be included in the monthly report, so we will have closer to “up to date” information from the monthly report. We therefore hope to avoid sending out those annoying q 2-3 month requests for additional information
- Jenny Auman also discussed this at the Coordinators’ meeting this morning

### 5) Possible extended follow-up (4-5 years)? - VERY preliminary discussion

- We have an extremely valuable sub-cohort –extremely preterm, part of a randomized controlled trial, with specifically timed *and centrally-read* cranial US and brain MRI’s
- Outstanding opportunity for extended neurodevelopmental follow-up study
- The objective of such a study would be to determine the absolute and relative value of neonatal MRI and early and late cranial US, alone and in combination with traditional risk factors, to predict abnormal 4-5 year outcomes.

SUPPORT Neuroimaging secondary update  
NICHD NRN Steering Committee Meeting

SUSAN HINTZ  
April 2007

- This would be a unique opportunity to determine if abnormalities on neonatal MRI are associated with the potentially more subtle yet important cognitive, language, and developmental delays we may see at school age but cannot assess at 18-22 months.
- Would not include any further neuroimaging (i.e., no imaging at 4-5 year follow-up)
- Comments and suggestions about this concept are welcome -

6) Reminder: Please remember send copies of CUS and MRI routinely to RTI (every 2-3 months depending on volume of enrollment).

7) Please call or email with questions, comments, and suggestions

Susan Hintz  
650-723-5711 (office)  
email: [srhintz@stanford.edu](mailto:srhintz@stanford.edu)

Again, I am also very happy to put you or your neuroradiologist or technologist in touch with our technologists or with Dr. Barnes.

**THANKS TO ALL THE SITES FOR THEIR HARD WORK ON THIS PROTOCOL!**

**From:** Julie Rohr  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Oximeters  
**Date:** Wednesday, April 18, 2007 2:18:56 PM

---

Thanks

Julie Rohr MSN RNC  
Nurse/Clinical Trials Coordinator  
Department of Pediatrics  
UNM Hospital  
2211 Lomas Blvd NE  
Albuquerque, NM 87106  
(505) 272-0363

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 4/18/2007 12:16 pm >>>

Julie

If you consent anyone else or if the (b) (6) mom delivers in the window, let us know and we will get you more oximeters.

Thanks  
Rose

---

**From:** Julie Rohr [mailto:JRohr@salud.unm.edu]  
**Sent:** Wednesday, April 18, 2007 2:13 PM  
**To:** Kristin Zaterka-Baxter  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Conra Lacy; Kristi Watterberg  
**Subject:** RE: Oximeters

Kris,

Thanks for the info.

I used the info from the MOP and I think we have all this covered.

I am quite concerned about having enough oximeters as I have consented a mom (b) (6). If she delivers, as of right now we would be out of one color of the oximeters based on how they randomize.

Currently

Blue

2 on patients

3 on reserve for mom (b) (6)

Orange

1 on patient

1 malfunctioning - sent back to Masimo

3 on reserve for (b) (6)

If I consent another mother, as of right now we might not have the oximeters to accommodate them, based on the randomization.

So, if we can get more oximeters, it would be really helpful in case we consent some more moms.

Thanks for your help  
Julie

Plus, if we can get more oximeters, they have to be inspected by our Clinical Engineering Department before we can use them on patients.

Julie Rohr MSN RNC  
Nurse/Clinical Trials Coordinator  
Department of Pediatrics  
UNM Hospital  
2211 Lomas Blvd NE  
Albuquerque, NM 87106  
(505) 272-0363

>>> "Zaterka-Baxter, Kristin" <kzaterka@rti.org> 4/18/2007 8:48 am >>>

Hi Julie,

You will need to complete the RMA form and request an RMA number from Masimo by calling the phone number on this form if you have not already done so. I will forward you another email with options in returning the oximeters. If you need another oximeter in the meantime for potentials, please let me know and I can transfer some oximeters from other sites to you until this one is repaired and sent back.

Thanks and hope this helps; please let me know if you have any questions,  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Julie Rohr [mailto:JRohr@salud.unm.edu]  
**Sent:** Tuesday, April 17, 2007 7:18 PM  
**To:** higginsr@mail.nih.gov; Zaterka-Baxter, Kristin  
**Cc:** jbradley@masimo.com; MSayre@masimo.com; Conra Lacy; Julie Rohr; Kristi Watterberg  
**Subject:** Oximeters

One of our orange Masimo oximeters (329709 in docking station 062544) that we had on a study baby started having the screen go blank. We took it off the patient and put on another. We don't know if we lost any study data.

I downloaded the oximeter and took it to our clinical engineering department. They also had the screen go blank on them so they are packaging it and sending it back to Masimo per the MOP page 17-4 item 17.2.8.

How can we get a replacement oximeter?

Thanks  
Julie

Julie Rohr MSN RNC  
Nurse/Clinical Trials Coordinator  
Department of Pediatrics  
UNM Hospital  
2211 Lomas Blvd NE  
Albuquerque, NM 87106  
(505) 272-0363

**From:** Webb, Robin E.  
**To:** Webb, Robin E.; kurt.schibler@cchmc.org; Cathy Grisby; Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Das, Abhik  
**Subject:** Support recruitment calls  
**Date:** Tuesday, April 17, 2007 3:09:30 PM

---

The support recruitment call has been scheduled for:

**Wednesday, April 25**  
**11:00am ET**

Dial:  
Outside the USA  
**1-203-310-(b) (6)**  
or  
Within the USA  
**866-675-(b) (6)**

Then, enter Participant Passcode:  
**(b) (6)**



**From:** Susan Hintz  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** karen.osborn@hsc.utah.edu  
**Subject:** Re: FW: SUPPORT MRI  
**Date:** Tuesday, April 17, 2007 2:00:42 PM

---

That's fantastic! Thanks for the information

Susan

---

**From:** Karen Osborne RN [mailto:Karen.Osborne@hsc.utah.edu]  
**Sent:** Tuesday, April 17, 2007 12:49 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Bradley Yoder  
**Subject:** RE: SUPPORT MRI

Rose,

The responses to the MRI study questions:

- 1) How many patients have been enrolled to date in the SUPPORT Neuroimaging secondary at your site? 13
- 2) How many have completed 35-42 week neuroimaging studies (MRI and CUS) 8 have completed both
- 3 a) How many died before reaching the 35-42 week window? 4
  - b) How many have not yet reached the window? 0
  - c) How many have reached the window, but have not yet been imaged? 0
  - d) How many missed/were unsuccessful with neuroimaging study? 0
  - e) Other issues? 1 withdrew prior to reaching the window

Thanks,

Karen

---

**From:** Bradley Yoder  
**Sent:** Monday, April 16, 2007 11:12 AM  
**To:** Karen Osborne RN  
**Subject:** FW: SUPPORT MRI

Karen:  
Can you please help me with the #'s here??

Thanks.

Brad

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, April 16, 2007 11:58 AM  
**To:** Walid.Salhab@UTsouthwestern.edu; Pablo.Sanchez@UTSouthwestern.edu; Bell, Edward; Roger Faix; Bradley Yoder; Wade Rich; Frantz, Ivan  
**Cc:** srhintz@stanford.edu  
**Subject:** FW: SUPPORT MRI

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Thursday, April 12, 2007 6:04 PM  
**To:** Wally Carlo, M.D.; mcw3@case.edu; Brenda Poindexter; Abbot Laptook; vanmeurs@stanford.edu; Tyson, Jon E; Morris, Brenda H; Ronald N Goldberg  
**Cc:** srhintz@stanford.edu  
**Subject:** SUPPORT MRI

**Please respond to the following questions by APRIL 18th.**

1) How many patients have been enrolled to date in the **SUPPORT Neuroimaging secondary** at your site?

2) How many have completed 35-42 week neuroimaging studies (MRI and CUS)

3) If you have enrolled patients that have not completed 35-42 week neuroimaging, please tell us:

a) How many died before reaching the 35-42 week window?

b) How many have not yet reached the window?

c) How many have reached the window, but have not yet been imaged?

d) How many "missed"/were unsuccessful with a neuroimaging study?

Please describe: \_\_\_\_\_

e) Other issues?

Please describe: \_\_\_\_\_

**\*\*Thank you for your hard work and dedication on SUPPORT and the Neuroimaging Secondary!\*\***

Alabama

Case

Dallas

Indiana

Brown

Stanford

Houston

Duke

Iowa

Utah

Tufts

UCSD

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

--

Susan R. Hintz, M.D., M.S.

Assistant Professor of Pediatrics

Division of Neonatal and Developmental Medicine

Stanford University School of Medicine

750 Welch Road, Suite 315

Palo Alto, CA 94304

ph: 650-723-5711

fax: 650-725-8351

**From:** Neil Finer  
**To:** Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Karen Osborne RN; Roger.Faix@hsc.utah.edu; Bradley Yoder; Gantz, Marie; Das, Abhik  
**Subject:** RE: ROP outcome for SUPPORT  
**Date:** Monday, April 16, 2007 3:31:02 PM

---

Thanks Dale  
This sounds fine  
Neil

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Monday, April 16, 2007 10:14 AM  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Karen Osborne RN; Roger.Faix@hsc.utah.edu; Bradley Yoder; Gantz, Marie; Das, Abhik  
**Subject:** RE: ROP outcome for SUPPORT

The form is set up for the primary outcome (reaching criteria for laser, or getting laser or cryo). However, the form continues to be filled out until each eye reaches final/acute, so sometimes the buckle or vitrectomy on the other eye gets recorded too.

Neil, I hear you about the 'final' outcome, but that is a nightmare in terms of following every eye exam after discharge for months.

Instead, we pick up later surgeries after discharge at the 18-22 month examination.

We also find out about the real visual bottom line there. Can they see (by eye).

Is this ok?  
Dale

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Tuesday, April 10, 2007 12:44 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Phelps, Dale  
**Cc:** Karen Osborne RN; Roger.Faix@hsc.utah.edu; Bradley Yoder; Gantz, Marie; Das, Abhik  
**Subject:** RE: ROP outcome for SUPPORT

Hi Rose  
I would like the most final outcome available. I yield to Dale's opinion.  
Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, April 10, 2007 9:27 AM  
**To:** Neil Finer; Phelps, Dale  
**Cc:** Karen Osborne RN; Roger.Faix@hsc.utah.edu; Bradley Yoder; Gantz, Marie; Das, Abhik  
**Subject:** ROP outcome for SUPPORT

Hi  
For infants who have laser surgery for support and then go on to have a scleral buckle procedure, are both recorded, or does the infant reach status when the laser procedure is done??

Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: SUPPORT and MIAMI  
**Date:** Monday, April 16, 2007 3:27:24 PM  
**Attachments:** Miami infants - primary outcome status.rtf

---

Hi Rose,

Attached is a list of the 17 SUPPORT infants enrolled by Miami. All have the primary outcome involving BPD, but only two have the outcome for ROP.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-0255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, April 16, 2007 1:33 PM  
**To:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT and MIAMI

Can you get me a list of the patients enrolled at the Univ. of Miami site and the ones who have missing outcome data? They were great at recruiting prior to the trial being halted, but I need to know if we have primary outcome data for them (as they seem to be missing much of the ROP data). A yes/no for primary outcome will suffice for each child enrolled. Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**Miami SUPPORT Infants - primary outcome status**

Obs	Center ID number	Network number	BPD status known	ROP status known
1	8	(b) (6)	Y	
2	8		Y	
3	8		Y	
4	8		Y	Y
5	8		Y	
6	8		Y	
7	8		Y	
8	8		Y	
9	8		Y	
10	8		Y	
11	8		Y	
12	8		Y	
13	8		Y	
14	8		Y	
15	8		Y	
16	8		Y	Y
17	8		Y	



**From:** Webb, Robin E.  
**To:** Higgins, Rosemary (NIH/NICHD) [F]  
**Subject:** FW: Support recruitment calls  
**Date:** Monday, April 16, 2007 2:39:02 PM

---

Hi Rose,

I'm still working on a time for the Cincinnati call (see email below). I checked with Kurt about moving this call. He's on delivery call and also has a meeting off campus at 1 PM. He can't promise but will try to be on the call from 12 noon to 12:45PM. Is that ok? Or should I find a time he can definitely make?

Thanks,  
Robin

---

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Monday, April 16, 2007 1:38 PM  
**To:** Webb, Robin E.  
**Cc:** Wade Rich  
**Subject:** RE: Support recruitment calls

Hi Robin

Cinn call – I will be in a quality council meeting till 9:00AM PT tomorrow Can this be moved to 12:00-1:00P?

Wayne – This is Wednesday and should be ok for 8:00PT

The others look OK

Neil

---

**From:** Webb, Robin E. [mailto:rwebb@rti.org]  
**Sent:** Monday, April 16, 2007 7:39 AM  
**To:** Neil Finer  
**Subject:** RE: Support recruitment calls

Neil,

Below are the days and times I came up with for these calls based on availability of the sites. Please let me know if you're available. There is some flexibility in time on some of the days, so please let me know if another time would work better for you.

Thanks,  
Robin

CINN CALL SCHEDULED FOR TUES 4/17 11-12PM – Would you be able to make 11? If not, we'll have to find another time for this site.

Wayne-CALL SCHEDULED FOR TUES 4/18 11-12pm ET

NM-CALL SCHEDULED FOR TUES 4/24 12-1PM ET

INDIANNA CALL SCHEDULED FOR TUES 4/24 2-3PM ET

Yale-CALL SCHEDULED FOR Tues 4/25 2-3PM

-----Original Message-----

From: Neil Finer [mailto:nfiner@ucsd.edu]  
Sent: Saturday, April 14, 2007 10:55 AM  
To: Webb, Robin E.; Das, Abhik  
Subject: RE: Support recruitment calls

I can be available April 17 after 8:30 AM PT and 18 and April 24 and 25 depending on the time  
Neil Finer

-----Original Message-----

From: Webb, Robin E. [mailto:rwebb@rti.org]  
Sent: Friday, April 13, 2007 11:52 AM  
To: Neil Finer; Das, Abhik  
Subject: FW: Support recruitment calls

Below are the days we are currently looking at for these calls. Please let me know your availability.

Thanks,  
Robin

April 17 all day  
April 18 all day  
April 23 9-12  
April 24 all day  
April 25 all day

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, April 10, 2007 3:19 PM  
To: Webb, Robin E.  
Cc: Das, Abhik; nfiner@ucsd.edu  
Subject: Support recruitment calls

Robin,  
We would like to set up 5 individual calls with each of the sites listed below to discuss enhancing recruitment in the SUPPORT trial as these sites have less than 25 percent randomized/eligible GDB infants):

Wayne State  
Indiana  
New Mexico  
Yale  
Cincinnati

We will need the PI, coordinator and others involved in SUPPORT recruitment and enrollment.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

**From:** [Webb, Robin E.](#)  
**To:** [Webb, Robin E.](#); [bpointex@iupui.edu](mailto:bpointex@iupui.edu); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Neil Finer](#)  
**Cc:** [ldw@iupui.edu](mailto:ldw@iupui.edu); [cameyer@iupui.edu](mailto:cameyer@iupui.edu)  
**Subject:** RE: Support recruitment calls  
**Date:** Monday, April 16, 2007 2:29:58 PM

---

The support recruitment call has been scheduled for:

**Tuesday, April 24**  
**2:00pm ET**

Dial:  
Outside the USA  
**1-203-310 (b) (6)**  
or  
Within the USA  
**866-675 (b) (6)**

Then, enter Participant Passcode:  
**(b) (6)**

**From:** Webb, Robin E.  
**To:** Kristi Watterberg; Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer  
**Cc:** Webb, Robin E.  
**Subject:** Support recruitment call  
**Date:** Monday, April 16, 2007 2:27:45 PM

---

The support recruitment call has been scheduled for:

**Tuesday, April 24**  
**12:00pm ET**

Dial:  
Outside the USA  
**1-203-310-(b) (6)**  
or  
Within the USA  
**866-675-(b) (6)**

Then, enter Participant Passcode:  
**(b) (6)**

**From:** [Webb, Robin E.](#)  
**To:** [Webb, Robin E.](#); [Seetha Shankaran](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Neil Finer](#)  
**Cc:** [bsood@med.wayne.edu](#); [ae5357@wayne.edu](#); [crosmann@med.wayne.edu](#); [Ktownsen@med.wayne.edu](#)  
**Subject:** Support recruitment calls  
**Date:** Monday, April 16, 2007 2:26:03 PM

---

The support recruitment call has been scheduled for:

**Wednesday, April 18**  
**11:00am ET**

Dial:  
Outside the USA  
**1-203-310-(b) (6)**  
or  
Within the USA  
**866-675-(b) (6)**

Then, enter Participant Passcode:  
**(b) (6)**

**From:** Brenda Poindexter  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Susan Hintz  
**Cc:** Cunningham, Meg  
**Subject:** Re: SUPPORT MRI  
**Date:** Monday, April 16, 2007 1:50:47 PM

---

Rose and Susan,  
I have answered the questions below in red. Please let me know if you have any questions.  
Brenda

- > Please respond to the following questions by APRIL 16th.
- >
- > 1) How many patients have been enrolled to date in the SUPPORT Neuroimaging  
> secondary at your site?
- > Two have been enrolled (twins) and two more are pending (also twins; parents to bring in signed consent form later today)
- > 2) How many have completed 35-42 week neuroimaging studies (MRI and CUS)
- > None
- > 3) If you have enrolled patients that have not completed 35-42 week  
> neuroimaging, please tell us:
- > a) How many died before reaching the 35-42 week window? None
- > b) How many have not yet reached the window? None
- > c) How many have reached the window, but have not yet been imaged? Two
- > d) How many "missed"/were unsuccessful with a neuroimaging study? Two
- > Please describe: The twins that were enrolled had their MRIs scheduled; on the day before the study was to be done, the parents changed their mind and refused at the last moment. The twins were having AsBs that were delaying hospital discharge (they needed to be event free for 5 days prior to discharge) and the family was concerned that having the MRI might prompt additional events that would delay discharge. We offered them the option of an outpatient MRI, but they still refused.
- > e) Other issues?
- > Please describe: \_\_\_\_\_
- >
- >
- > \*\*Thank you for your hard work and dedication on SUPPORT and the Neuroimaging  
> Secondary!\*\*
- >
- > Alabama
- > Case
- > Dallas
- > Indiana
- > Brown
- > Stanford
- > Houston
- > Duke
- > Iowa
- > Utah
- > Tufts
- > UCSD
- >
- >
- > Rosemary D. Higgins, M.D.
- > Program Scientist for the Neonatal Research Network
- > Pregnancy and Perinatology Branch
- > Center for Developmental Biology and Perinatal Medicine
- > NICHD, NIH
- > 6100 Executive Blvd., Room 4B03B
- > MSC 7510
- > Bethesda, MD 20892
- > (For overnight delivery, use Rockville, MD 20852)
- > 301-435-7909

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> 301-496-3790 (FAX)  
> [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov) <<mailto:higginsr@mail.nih.gov>>  
>

**From:** [Morris, Brenda H](#)  
**To:** [Susan Hintz; Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Mcdavid, Georgia E](#)  
**Subject:** FW: SUPPORT MRI  
**Date:** Saturday, April 14, 2007 4:32:08 PM  
**Attachments:** [survey 4-12-07.doc](#)

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See the results of questionnaire provided by Georgia McDavid. Brenda Morris



- 1) How many patients have been enrolled to date in the SUPPORT Neuroimaging secondary at your site? 30
- 2) How many have completed 35-42 week neuroimaging studies (MRI and CUS) 20
- 3) If you have enrolled patients that have not completed 35-42 week neuroimaging, please tell us:
  - a) How many died before reaching the 35-42 week window? 6
  - b) How many have not yet reached the window? 2
    - c) How many have reached the window, but have not yet been imaged? 1
    - d) How many "missed"/were unsuccessful with a neuroimaging study? 1

Please describe: one patient's 35-42 wk HUS was missed, however the MRI was completed within the window.

e) Other issues?

Please describe: Our center is not currently using GRE and FLAIR sequences. Dr. Parikh has talked with the MRI manager and they will add these sequences for all SUPPORT infants moving forward starting 4/16/07

**From:** [Cunningham, Meg](#)  
**To:** [Scott, Francilia \(NIH/OD\) \[C\]](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Zaterka-Baxter, Kristin](#)  
**Subject:** FW: SUPPORT updates  
**Date:** Saturday, April 14, 2007 1:18:52 PM  
**Attachments:** [All Centers pct in range through Mar07 \(4-12-07\).rtf](#)  
[SUPPORT Enrollment 04-11-2007.doc](#)  
[SUPPORT Adverse Events 04-04-07.doc](#)  
[SUPPORT Protocol Deviations by center 04-11-07.doc](#)  
[SUPPORT Protocol Deviations 04-11-07.doc](#)  
[SUPPORT-agenda.doc](#)

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Hi Francilia,

Earlier in the week I sent you a SUPPORT agenda for the Steering Committee meeting. This has been updated and is attached. Also attached are materials that will be needed in a packet with the agenda. Could you make 20 packets?

Thanks for all of your help!

Meg

---

**From:** Zaterka-Baxter, Kristin  
**Sent:** Saturday, April 14, 2007 11:58 AM  
**To:** Cunningham, Meg  
**Subject:** FW: SUPPORT updates

Please see below – an update of the previous agenda. Could you please have about 15 to 20 packets with the attached information together for this subcommittee meeting? Thanks!  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
[kzaterka@rti.org](mailto:kzaterka@rti.org)

---

**From:** Neil Finer [<mailto:nfiner@ucsd.edu>]  
**Sent:** Saturday, April 14, 2007 11:15 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Wally Carlo, M.D.; Michele Walsh; Bradley Yoder; Roger Faix; Abbot Laptook; [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); Das, Abhik; Nancy Newman; Gantz, Marie; Poole, W. Kenneth  
**Cc:** Wade Rich; Huitema, Carolyn Petrie; Zaterka-Baxter, Kristin  
**Subject:** FW: SUPPORT updates

Hello Everyone

Here is an Agenda for the SUPPORT Meeting at next weeks Steering Committee

1. Review Enrollments to date, and the need to potentially add additional centers
2. Review the reporting of serious adverse events, and the occurrences to date – all below the expected rate except air leak in the larger strata
3. Review of Protocol Deviations to date
4. Review of Oximeter data.
5. Review any site issues
6. Report from Secondary PIs, including Consent study.

7. Other business.

Marie has supplied supporting information as noted below and attached to this email.

1. Summary of pulse oximeter data time in target range, by center
2. Enrollment update
3. Adverse events
4. Protocol deviations overall and by center. In the report by center, This includes the numbers of protocol deviations and protocol deviations as a percent of infants enrolled (to give some perspective on the numbers since enrollment varies widely).

Please review this information before the Subcommittee meeting. Look forward to talking with you on Thursday.

Safe travels

Neil

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]

**Sent:** Friday, April 13, 2007 4:04 PM

**To:** Neil Finer

**Cc:** Das, Abhik

**Subject:** SUPPORT updates

Hi Neil,

Attached you will find the following updates for SUPPORT

We will be sending centers their individual pulse oximeter reports next week before the SC meeting. Let me know if there is anything else you need that I did not include.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH MARCH 2007  
TIME ON SUPPLEMENTAL O2 ONLY  
(OXIMETER DATA PROCESSED AS OF 4/9/07)**

Month	Time on supplemental oxygen	Site	Number of hours	Percent in narrow range 88-92	Percent 84-88	Percent 81-86	Percent 78-80
Through Feb06	Days of life 1-14	All centers	26494	37.8	9.3	79.3	11.3
		Center 3	1886	28.9	14.9	77.2	7.9
		Center 8	1448	29.6	6.6	73.3	20.1
		Center 9 site A	1920	36.1	12.2	76.9	11.0
		Center 11	1947	36.9	9.3	75.6	15.1
		Center 12	1848	46.7	6.2	82.5	11.3
		Center 14	3171	38.4	8.8	83.1	8.1
		Center 16	5580	42.6	9.4	81.4	9.2
		Center 18	1509	31.2	10.2	77.0	12.9
		Center 20	1860	30.8	7.5	74.1	18.4
		Center 21	958	39.1	9.0	85.3	5.6
		Center 22	3363	39.9	8.7	79.5	11.8
	Day 15 to 36 wks	All centers	136360	26.4	12.3	67.7	20.0
		Center 3	15229	19.9	17.1	64.8	18.1
		Center 4	5686	20.6	7.4	64.9	27.7
		Center 8	4802	17.3	8.5	58.1	33.4
		Center 9 site A	10780	26.7	13.5	66.6	19.8
		Center 11	10209	27.5	10.3	67.1	22.7
		Center 12	9532	33.3	10.0	72.9	17.0
		Center 14	19113	25.5	11.8	70.3	17.9
		Center 16	16900	30.8	12.3	71.7	16.0
		Center 18	11637	26.4	17.3	66.4	16.4
		Center 19	1517	29.1	8.2	72.7	19.1
		Center 20	9055	20.5	11.6	63.2	25.2
		Center 21	2450	27.4	17.8	70.3	11.9
		Center 22	17811	29.8	10.1	67.4	22.5

**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH MARCH 2007  
TIME ON SUPPLEMENTAL O2 ONLY  
(OXIMETER DATA PROCESSED AS OF 4/9/07)**

Months	Time of supplemental oxygen	Site	Number of hours	Percent in narrow range 88-92	Percent <84	Percent 84-86	Percent 86-88
Mar06-Sept06	Days of life 1-14	All centers	19910	38.1	8.1	79.7	12.2
		Center 3	2136	45.2	7.0	82.2	10.7
		Center 4	1644	41.8	6.5	84.6	8.9
		Center 9 site A	980	37.0	9.5	72.0	18.6
		Center 11	1522	29.3	11.4	66.9	21.7
		Center 12	1942	35.8	6.8	80.1	13.1
		Center 14	2589	40.2	8.5	80.5	10.9
		Center 16	3838	42.8	7.5	85.0	7.6
		Center 18	2722	31.8	9.7	76.3	14.0
		Center 19	688	26.7	6.7	79.1	14.2
	Day 15 to 36 wks	All centers	60768	29.1	12.7	68.4	18.9
		Center 3	7859	33.5	13.5	70.1	16.4
		Center 4	4512	31.7	11.6	71.6	16.8
		Center 9 site A	3260	38.1	9.7	72.4	17.9
		Center 9 site B	1546	27.9	12.2	72.6	15.2
		Center 11	2649	28.2	14.4	59.3	26.2
		Center 12	7825	23.0	10.9	66.8	22.3
		Center 14	8846	30.0	11.8	71.4	16.8
		Center 16	9219	32.5	11.4	69.1	19.4
		Center 18	9279	22.1	17.0	65.6	17.4
Oct06-Dec06	Days of life 1-14	All centers	8201	37.1	7.7	78.8	13.5
		Center 11	897	39.5	5.3	68.6	26.1
		Center 14	779	32.8	7.4	85.8	6.8
		Center 15	600	47.5	5.2	77.9	16.9
		Center 16	1720	39.5	9.0	84.2	6.8

**PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH MARCH 2007  
TIME ON SUPPLEMENTAL O2 ONLY  
(OXIMETER DATA PROCESSED AS OF 4/9/07)**

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-95	Percent >95
	Day 15 to 36 wks	All centers	30067	26.8	11.8	67.4	20.8
		Center 3	1111	24.2	15.3	61.4	23.4
		Center 4	2026	23.8	12.1	69.2	18.7
		Center 11	3266	31.3	7.1	63.0	29.9
		Center 12	3089	29.8	5.3	61.7	33.0
		Center 14	2750	30.5	8.8	71.8	19.4
		Center 16	4673	22.3	14.3	69.7	16.0
		Center 18	2419	21.5	21.5	58.6	19.9
		Center 25	3406	35.8	9.9	78.4	11.7
Jan07-Mar07	Days of life 1-14	All centers	10707	35.7	8.7	78.3	13.0
		Center 13	1265	34.9	4.7	81.3	14.0
		Center 14	1923	35.9	7.9	83.7	8.4
		Center 15	1259	33.7	7.2	78.6	14.2
		Center 16	1624	42.8	11.8	76.9	11.3
	Day 15 to 36 wks	All centers	30274	28.4	12.2	68.9	18.9
		Center 3	3396	24.4	19.7	60.6	19.7
		Center 11	1282	36.6	7.6	69.9	22.4
		Center 12	4370	23.4	11.3	66.9	21.8
		Center 13	4543	25.5	7.1	72.0	20.9
		Center 14	5003	31.3	13.1	76.2	10.7
		Center 15	3430	33.5	8.5	68.5	23.0
		Center 16	2904	29.5	14.8	69.4	15.8

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

## SUPPORT Enrollment as of April 11, 2007

### Total Enrolled

	N	% of total (1310)
Enrolled	604	46%

### Enrollment by Center July 2006 – March 2007

Center	Jul-06	Aug06	Sep06	Oct06	Nov06	Dec06	Jan07	Feb07	Mar07	Total
3	1	3	1	0	1	4	1	1	4	16
4	0	3	1	3	0	2	3	3	3	18
5	0	0	1	1	0	2	1	2	3	10
9	2	1	1	6	1	1	1	3	1	17
11	1	7	2	3	2	1	1	2	1	20
12	1	0	2	1	0	4	4	0	3	15
13	0	1	0	0	0	1	2	7	2	13
14	3	0	4	3	1	4	2	2	8	27
15	2	0	2	1	1	3	1	3	1	14
16	6	7	0	1	15	2	8	2	7	48
18	1	5	4	4	2	2	1	1	1	21
19	3	1	0	1	3	0	0	1	0	9
22	0	0	0	0	0	0	4	0	0	4
23	0	0	0	2	2	4	0	1	7	16
24	0	0	0	1	0	2	4	0	0	7
25	0	0	6	3	1	0	2	1	0	13
26	0	0	0	0		0	0	1	0	1
<b>Total</b>	20	28	24	30	29	32	35	30	41	269
<b># Enrolling</b>	9	8	10	13	10	13	14	14	12	
<b>Avg/center</b>	2.2	3.5	2.4	2.3	2.9	2.5	2.5	2.1	3.4	

### Average Enrollment Per Center Per Month

Time period	Total enrolled	Average # of centers enrolling	Average per center per month
Jul06-Dec06	163	10.5	2.6
Jan07-Mar07	106	13.3	2.7

### Months Needed to Enroll Remaining 706 Patients

Average per center per month	Number of centers enrolling									
	8	9	10	11	12	13	14	15	16	17
2	44	39	35	32	30	27	25	24	22	21
2.5	35	31	28	26	24	22	20	19	18	17
3	30	26	24	21	20	18	17	16	15	14

**Percent of SUPPORT infants with selected adverse events as of April 4, 2007\***

Type of adverse event	All infants	24-25 wks	26-27 wks
Chest compressions/epinephrine in DR	6.0	9.1	3.8
Air leak	7.9	9.2	7.1
Pulmonary hemorrhage	6.0	8.1	4.6
Severe IVH (grades III-IV)	14.1	20.5	9.9

Note: Table includes SUPPORT infants who are still hospitalized and at risk for additional AEs

**Percent of GDB infants with selected adverse events and range across NRN centers\*  
(Includes infants born at NRN centers at 24-27 weeks GA in 2002-2004)**

Type of adverse event	All infants		24-25 wks		26-27 wks	
	Percent	Range	Percent	Range	Percent	Range
Chest compressions/epinephrine in DR	11.2	3.2 - 31.8	13.9	2.8 - 42.1	9.1	3.2 - 23.2
Air leak	8.2	1.9 - 16.1	11.0	2.9 - 20.6	6.1	1.1 - 13.0
Pulmonary hemorrhage	9.0	3.4 - 29.3	12.3	2.5 - 32.0	6.5	1.1 - 26.9
Severe IVH (grades III-IV)	16.9	8.4 - 26.4	24.2	14.0 - 38.9	11.7	2.3 - 20.8

\*Denominator for chest compressions is number of infants with delivery room information (SUPP03/NG02), denominator for air leak and pulmonary hemorrhage is number of infants with NICU data (NG03), denominator for severe IVH is number of infants with head ultrasound (SUPP09/NG03).



**SUPPORT Trial Protocol Deviations, by Center (as of April 11, 2007)**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol											1										1
Surfactant not given in the first hour	3	1				2	1	1	1		1										10
Oximeter not started within 2 hours	1	1				1				1	3	1					2				10
Infant placed on study oximeter for incorrect treatment	1			1							5										7
Failure to use study oximeter at times required by protocol	5	4	1		2	3			4		6	1	2	1						2	31
Non-study (unmasked) oximeter used at same time as study ox.						1	1								1						3
NSIMV initiated in infant not previously intubated		1									3										4
Extubation (excluding unplanned) for other than study criteria						2			2		1				1						6
Failure to extubate CPAP infant if all criteria met		1								2						2					5
Failure to extubate surfactant infant if all criteria met						1															1
High flow nasal cannula used within first 14 days of life					1	5			6			1				1				6	20
Infant received postnatal steroids in first 21 days of life									4		3	1				4					12
Head ultrasound done outside 4-21 day window											1										1
Consent errors		1										1									2
Randomization errors		2			3									2							11
Other					1	1			2	1											5
<b>Total protocol deviations</b>	<b>10</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>16</b>	<b>2</b>	<b>1</b>	<b>19</b>	<b>4</b>	<b>24</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>129</b>

**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center (as of April 11, 2007)**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol											1%										0%
Surfactant not given in the first hour	5%	3%				5%	3%	6%	2%		1%										2%
Oximeter not started within 2 hours	2%	3%				3%				6%	3%	2%					13%				2%
Infant placed on study oximeter for incorrect treatment	2%			6%							5%										1%
Failure to use study oximeter at times required by protocol	9%	12%	7%		5%	8%			6%		7%	2%	7%	11%						15%	5%
Non-study (unmasked) oximeter used at same time as study ox.						3%	3%								13%						0%
NSIMV initiated in infant not previously intubated		3%									3%										1%
Extubation (excluding unplanned) for other than study criteria						5%			3%		1%				13%						1%
Failure to extubate CPAP infant if all criteria met		3%								11%						4%					1%
Failure to extubate surfactant infant if all criteria met						3%															0%
High flow nasal cannula used within first 14 days of life					2%	13%			9%			2%				2%				46%	3%
Infant received postnatal steroids in first 21 days of life									6%		3%	2%				9%					2%
Head ultrasound done outside 4-21 day window											1%										0%
Consent errors		3%										2%									0%
Randomization errors		6%			7%							2%	4%	22%			13%				2%
Other					2%	3%			3%	6%											1%
<b>Total protocol deviations</b>	<b>18%</b>	<b>33%</b>	<b>7%</b>	<b>6%</b>	<b>17%</b>	<b>40%</b>	<b>6%</b>	<b>6%</b>	<b>29%</b>	<b>22%</b>	<b>26%</b>	<b>12%</b>	<b>11%</b>	<b>33%</b>	<b>25%</b>	<b>15%</b>	<b>25%</b>	<b>0%</b>	<b>62%</b>	<b>0%</b>	<b>21%</b>
<b>Total number of infants enrolled</b>	<b>57</b>	<b>33</b>	<b>14</b>	<b>17</b>	<b>42</b>	<b>40</b>	<b>31</b>	<b>16</b>	<b>65</b>	<b>18</b>	<b>92</b>	<b>49</b>	<b>28</b>	<b>9</b>	<b>8</b>	<b>47</b>	<b>16</b>	<b>7</b>	<b>13</b>	<b>2</b>	<b>604</b>

### SUPPORT Trial Protocol Deviations Reported as of April 11, 2007

Type of protocol deviation	Number
CPAP not initiated if required by protocol	1
Surfactant not given in the first hour	10
Oximeter not started within 2 hours	10
Infant placed on study oximeter for incorrect treatment	7
Failure to use study oximeter at times required by protocol	31
Non-study (unmasked) oximeter used at same time as study oximeter	3
NSIMV initiated in infant not previously intubated	4
Extubation (excluding unplanned) for other than study criteria	6
Failure to extubate CPAP infant if all criteria met	5
Failure to extubate surfactant infant if all criteria met	1
High flow nasal cannula used within first 14 days of life	20
Infant received postnatal steroids in first 21 days of life	12
Head ultrasound done outside 4-21 day window	1
Consent errors	2
Randomization errors	11
Other	5
<b>Total</b>	<b>129</b>

Type of protocol deviation (some categories collapsed)	Number
Assigned arm not implemented within required amount of time	21
Infant placed on study oximeter for incorrect treatment	7
Failure to use study oximeter at times required by protocol	31
Non-study (unmasked) oximeter used at same time as study oximeter	3
NSIMV initiated in infant not previously intubated	4
Extubation (excluding unplanned) for other than study criteria	6
Failure to extubate infant if all criteria met	6
High flow nasal cannula used within first 14 days of life	20
Infant received postnatal steroids in first 21 days of life	12
Head ultrasound done outside 4-21 day window	1
Consent errors	2
Randomization errors	11
Other	5
<b>Total</b>	<b>129</b>

## SUPPORT – Agenda

1. Review Enrollments to date, and the need to potentially add additional centers
2. Review the reporting of serious adverse events, and the occurrences to date – all below the expected rate except air leak in the larger strata
3. Review of Protocol Deviations to date
4. Review of Oximeter data.
5. Review any site issues
6. Report from Secondary PIs, including Consent study.
7. Other business.

**From:** Abbot Laptook  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** srhintz@stanford.edu  
**Subject:** RE: SUPPORT MRI  
**Date:** Saturday, April 14, 2007 11:25:12 AM

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Rose

Answers are below, AL

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, April 12, 2007 6:04 PM  
To: Wally Carlo, M.D.; mcw3@case.edu; Brenda Poindexter; Abbot Laptook; vanmeurs@stanford.edu; Tyson, Jon E; Morris, Brenda H; Ronald N Goldberg  
Cc: srhintz@stanford.edu  
Subject: SUPPORT MRI

Please respond to the following questions by APRIL 16th.

- 1) How many patients have been enrolled to date in the SUPPORT Neuroimaging secondary at your site? 13
- 2) How many have completed 35-42 week neuroimaging studies (MRI and CUS) 12
- 3) If you have enrolled patients that have not completed 35-42 week neuroimaging, please tell us:
  - a) How many died before reaching the 35-42 week window?
  - b) How many have not yet reached the window?
  - c) How many have reached the window, but have not yet been imaged?
  - d) How many "missed"/were unsuccessful with a neuroimaging study?  
Please describe: One infant to be scheduled in the next 2 weeks. One infant is past 36 weeks and the consent is pending. Five families have refused.
  - e) Other issues?  
Please describe: \_\_\_\_\_

**\*\*Thank you for your hard work and dedication on SUPPORT and the Neuroimaging Secondary!\*\***

Alabama

Case  
Dallas  
Indiana  
Brown  
Stanford  
Houston  
Duke  
Iowa  
Utah  
Tufts  
UCSD

**Rosemary D. Higgins, M.D.**  
Program Scientist for the Neonatal Research Network Pregnancy and  
Perinatology Branch Center for Developmental Biology and Perinatal  
Medicine NICHD, NIH 6100 Executive Blvd., Room 4B03B MSC 7510 Bethesda,  
MD 20892 (For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov) <<mailto:higginsr@mail.nih.gov>>

**From:** Neil Finer  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Wally Carlo, M.D.](#); [Michele Walsh](#); [Bradley Yoder](#); [Roger Faix](#); [Abbot Laptook](#); [kurt.schibler@cchmc.org](#); [Das, Abhik](#); [Nancy Newman](#); [Gantz, Marie](#); [Poole, W. Kenneth](#)  
**Cc:** [Wade Rich](#); [Petrie, Carolyn](#); [Zaterka-Baxter, Kristin](#)  
**Subject:** FW: SUPPORT updates  
**Date:** Saturday, April 14, 2007 11:14:00 AM  
**Attachments:** [All Centers pct in range through Mar07 \(4-12-07\).rtf](#)  
[SUPPORT Enrollment 04-11-2007.doc](#)  
[SUPPORT Adverse Events 04-04-07.doc](#)  
[SUPPORT Protocol Deviations by center 04-11-07.doc](#)  
[SUPPORT Protocol Deviations 04-11-07.doc](#)

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Hello Everyone

Here is an Agenda for the SUPPORT Meeting at next weeks Steering Committee

1. Review Enrollments to date, and the need to potentially add additional centers
2. Review the reporting of serious adverse events, and the occurrences to date – all below the expected rate except air leak in the larger strata
3. Review of Protocol Deviations to date
4. Review of Oximeter data.
5. Review any site issues
6. Report from Secondary PIs, including Consent study.
7. Other business.

Marie has supplied supporting information as noted below and attached to this email.

1. Summary of pulse oximeter data time in target range, by center
2. Enrollment update
3. Adverse events
4. Protocol deviations overall and by center. In the report by center, This includes the numbers of protocol deviations and protocol deviations as a percent of infants enrolled (to give some perspective on the numbers since enrollment varies widely).

Please review this information before the Subcommittee meeting. Look forward to talking with you on Thursday.  
Safe travels  
Neil

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**From:** Gantz, Marie [<mailto:mgantz@rti.org>]  
**Sent:** Friday, April 13, 2007 4:04 PM  
**To:** Neil Finer  
**Cc:** Das, Abhik  
**Subject:** SUPPORT updates

Hi Neil,

Attached you will find the following updates for SUPPORT

We will be sending centers their individual pulse oximeter reports next week before the SC meeting. Let me know if there is anything else you need that I did not include.

Marie

Marie Gantz, Ph.D.

Research Statistician  
RTI International  
[mgantz@rti.org](mailto:mgantz@rti.org)  
828-251-6255



PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH MARCH 2007  
 TIME ON SUPPLEMENTAL O2 ONLY  
 (OXIMETER DATA PROCESSED AS OF 4/9/07)

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
Through Feb06	Days of life 1-14	All centers	26494	37.8	9.3	79.3	11.3
		Center 3	1886	28.9	14.9	77.2	7.9
		Center 8	1448	29.6	6.6	73.3	20.1
		Center 9 site A	1920	36.1	12.2	76.9	11.0
		Center 11	1947	36.9	9.3	75.6	15.1
		Center 12	1848	46.7	6.2	82.5	11.3
		Center 14	3171	38.4	8.8	83.1	8.1
		Center 16	5580	42.6	9.4	81.4	9.2
		Center 18	1509	31.2	10.2	77.0	12.9
		Center 20	1860	30.8	7.5	74.1	18.4
		Center 21	958	39.1	9.0	85.3	5.6
		Center 22	3363	39.9	8.7	79.5	11.8
	Day 15 to 36 wks	All centers	136360	26.4	12.3	67.7	20.0
		Center 3	15229	19.9	17.1	64.8	18.1
		Center 4	5686	20.6	7.4	64.9	27.7
		Center 8	4802	17.3	8.5	58.1	33.4
		Center 9 site A	10780	26.7	13.5	66.6	19.8
		Center 11	10209	27.5	10.3	67.1	22.7
		Center 12	9532	33.3	10.0	72.9	17.0
		Center 14	19113	25.5	11.8	70.3	17.9
		Center 16	16900	30.8	12.3	71.7	16.0
		Center 18	11637	26.4	17.3	66.4	16.4
		Center 19	1517	29.1	8.2	72.7	19.1
		Center 20	9055	20.5	11.6	63.2	25.2
		Center 21	2450	27.4	17.8	70.3	11.9
		Center 22	17811	29.8	10.1	67.4	22.5

PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH MARCH 2007  
 TIME ON SUPPLEMENTAL O2 ONLY  
 (OXIMETER DATA PROCESSED AS OF 4/9/07)

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
Mar06-Sept06	Days of life 1-14	All centers	19910	38.1	8.1	79.7	12.2
		Center 3	2136	45.2	7.0	82.2	10.7
		Center 4	1644	41.8	6.5	84.6	8.9
		Center 9 site A	980	37.0	9.5	72.0	18.6
		Center 11	1522	29.3	11.4	66.9	21.7
		Center 12	1942	35.8	6.8	80.1	13.1
		Center 14	2589	40.2	8.5	80.5	10.9
		Center 16	3838	42.8	7.5	85.0	7.6
		Center 18	2722	31.8	9.7	76.3	14.0
		Center 19	688	26.7	6.7	79.1	14.2
	Day 15 to 36 wks	All centers	60768	29.1	12.7	68.4	18.9
		Center 3	7859	33.5	13.5	70.1	16.4
		Center 4	4512	31.7	11.6	71.6	16.8
		Center 9 site A	3260	38.1	9.7	72.4	17.9
		Center 9 site B	1546	27.9	12.2	72.6	15.2
		Center 11	2649	28.2	14.4	59.3	26.2
		Center 12	7825	23.0	10.9	66.8	22.3
		Center 14	8846	30.0	11.8	71.4	16.8
		Center 16	9219	32.5	11.4	69.1	19.4
		Center 18	9279	22.1	17.0	65.6	17.4
Oct06-Dec06	Days of life 1-14	All centers	8201	37.1	7.7	78.8	13.5
		Center 11	897	39.5	5.3	68.6	26.1
		Center 14	779	32.8	7.4	85.8	6.8
		Center 15	600	47.5	5.2	77.9	16.9
		Center 16	1720	39.5	9.0	84.2	6.8

Center shown only if the center had 5+ infants (at least 1 in each oximeter group) and 500+ hours in the time period

PERCENT OF TIME SPENT IN SELECTED OXIMETER DISPLAY RANGES THROUGH MARCH 2007  
 TIME ON SUPPLEMENTAL O2 ONLY  
 (OXIMETER DATA PROCESSED AS OF 4/9/07)

Months	Time on supplemental oxygen	Site	Number of hours	Percent in narrow target 88-92	Percent <84	Percent 84-96	Percent >96
	Day 15 to 36 wks	All centers	30067	26.8	11.8	67.4	20.8
		Center 3	1111	24.2	15.3	61.4	23.4
		Center 4	2026	23.8	12.1	69.2	18.7
		Center 11	3266	31.3	7.1	63.0	29.9
		Center 12	3089	29.8	5.3	61.7	33.0
		Center 14	2750	30.5	8.8	71.8	19.4
		Center 16	4673	22.3	14.3	69.7	16.0
		Center 18	2419	21.5	21.5	58.6	19.9
		Center 25	3406	35.8	9.9	78.4	11.7
Jan07-Mar07	Days of life 1-14	All centers	10707	35.7	8.7	78.3	13.0
		Center 13	1265	34.9	4.7	81.3	14.0
		Center 14	1923	35.9	7.9	83.7	8.4
		Center 15	1259	33.7	7.2	78.6	14.2
		Center 16	1624	42.8	11.8	76.9	11.3
	Day 15 to 36 wks	All centers	30274	28.4	12.2	68.9	18.9
		Center 3	3396	24.4	19.7	60.6	19.7
		Center 11	1282	36.6	7.6	69.9	22.4
		Center 12	4370	23.4	11.3	66.9	21.8
		Center 13	4543	25.5	7.1	72.0	20.9
		Center 14	5003	31.3	13.1	76.2	10.7
		Center 15	3430	33.5	8.5	68.5	23.0
		Center 16	2904	29.5	14.8	69.4	15.8

## SUPPORT Enrollment as of April 11, 2007

### Total Enrolled

	N	% of total (1310)
Enrolled	604	46%

### Enrollment by Center July 2006 – March 2007

Center	Jul-06	Aug06	Sep06	Oct06	Nov06	Dec06	Jan07	Feb07	Mar07	Total
3	1	3	1	0	1	4	1	1	4	16
4	0	3	1	3	0	2	3	3	3	18
5	0	0	1	1	0	2	1	2	3	10
9	2	1	1	6	1	1	1	3	1	17
11	1	7	2	3	2	1	1	2	1	20
12	1	0	2	1	0	4	4	0	3	15
13	0	1	0	0	0	1	2	7	2	13
14	3	0	4	3	1	4	2	2	8	27
15	2	0	2	1	1	3	1	3	1	14
16	6	7	0	1	15	2	8	2	7	48
18	1	5	4	4	2	2	1	1	1	21
19	3	1	0	1	3	0	0	1	0	9
22	0	0	0	0	0	0	4	0	0	4
23	0	0	0	2	2	4	0	1	7	16
24	0	0	0	1	0	2	4	0	0	7
25	0	0	6	3	1	0	2	1	0	13
26	0	0	0	0		0	0	1	0	1
<b>Total</b>	20	28	24	30	29	32	35	30	41	269
<b># Enrolling</b>	9	8	10	13	10	13	14	14	12	
<b>Avg/center</b>	2.2	3.5	2.4	2.3	2.9	2.5	2.5	2.1	3.4	

### Average Enrollment Per Center Per Month

Time period	Total enrolled	Average # of centers enrolling	Average per center per month
Jul06-Dec06	163	10.5	2.6
Jan07-Mar07	106	13.3	2.7

### Months Needed to Enroll Remaining 706 Patients

Average per center per month	Number of centers enrolling									
	8	9	10	11	12	13	14	15	16	17
2	44	39	35	32	30	27	25	24	22	21
2.5	35	31	28	26	24	22	20	19	18	17
3	30	26	24	21	20	18	17	16	15	14

**Percent of SUPPORT infants with selected adverse events as of April 4, 2007\***

Type of adverse event	All infants	24-25 wks	26-27 wks
Chest compressions/epinephrine in DR	6.0	9.1	3.8
Air leak	7.9	9.2	7.1
Pulmonary hemorrhage	6.0	8.1	4.6
Severe IVH (grades III-IV)	14.1	20.5	9.9

Note: Table includes SUPPORT infants who are still hospitalized and at risk for additional AEs

**Percent of GDB infants with selected adverse events and range across NRN centers\*  
(Includes infants born at NRN centers at 24-27 weeks GA in 2002-2004)**

Type of adverse event	All infants		24-25 wks		26-27 wks	
	Percent	Range	Percent	Range	Percent	Range
Chest compressions/epinephrine in DR	11.2	3.2 - 31.8	13.9	2.8 - 42.1	9.1	3.2 - 23.2
Air leak	8.2	1.9 - 16.1	11.0	2.9 - 20.6	6.1	1.1 - 13.0
Pulmonary hemorrhage	9.0	3.4 - 29.3	12.3	2.5 - 32.0	6.5	1.1 - 26.9
Severe IVH (grades III-IV)	16.9	8.4 - 26.4	24.2	14.0 - 38.9	11.7	2.3 - 20.8

\*Denominator for chest compressions is number of infants with delivery room information (SUPP03/NG02), denominator for air leak and pulmonary hemorrhage is number of infants with NICU data (NG03), denominator for severe IVH is number of infants with head ultrasound (SUPP09/NG03).

**SUPPORT Trial Protocol Deviations, by Center (as of April 11, 2007)**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol											1										1
Surfactant not given in the first hour	3	1				2	1	1	1		1										10
Oximeter not started within 2 hours	1	1				1				1	3	1					2				10
Infant placed on study oximeter for incorrect treatment	1			1							5										7
Failure to use study oximeter at times required by protocol	5	4	1		2	3			4		6	1	2	1						2	31
Non-study (unmasked) oximeter used at same time as study ox.						1	1								1						3
NSIMV initiated in infant not previously intubated		1									3										4
Extubation (excluding unplanned) for other than study criteria						2			2		1				1						6
Failure to extubate CPAP infant if all criteria met		1								2						2					5
Failure to extubate surfactant infant if all criteria met						1															1
High flow nasal cannula used within first 14 days of life					1	5			6			1				1			6		20
Infant received postnatal steroids in first 21 days of life									4		3	1				4					12
Head ultrasound done outside 4-21 day window											1										1
Consent errors		1										1									2
Randomization errors		2			3							1	1	2			2				11
Other					1	1			2	1											5
<b>Total protocol deviations</b>	<b>10</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>16</b>	<b>2</b>	<b>1</b>	<b>19</b>	<b>4</b>	<b>24</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>129</b>

**SUPPORT Trial Protocol Deviations as a Percent of Infants Enrolled, by Center (as of April 11, 2007)**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	
CPAP not initiated if required by protocol											1%										0%
Surfactant not given in the first hour	5%	3%				5%	3%	6%	2%		1%										2%
Oximeter not started within 2 hours	2%	3%				3%				6%	3%	2%					13%				2%
Infant placed on study oximeter for incorrect treatment	2%			6%							5%										1%
Failure to use study oximeter at times required by protocol	9%	12%	7%		5%	8%			6%		7%	2%	7%	11%						15%	5%
Non-study (unmasked) oximeter used at same time as study ox.						3%	3%								13%						0%
NSIMV initiated in infant not previously intubated		3%									3%										1%
Extubation (excluding unplanned) for other than study criteria						5%			3%		1%				13%						1%
Failure to extubate CPAP infant if all criteria met		3%								11%						4%					1%
Failure to extubate surfactant infant if all criteria met						3%															0%
High flow nasal cannula used within first 14 days of life					2%	13%			9%			2%				2%				46%	3%
Infant received postnatal steroids in first 21 days of life									6%		3%	2%				9%					2%
Head ultrasound done outside 4-21 day window											1%										0%
Consent errors		3%										2%									0%
Randomization errors		6%			7%							2%	4%	22%			13%				2%
Other					2%	3%			3%	6%											1%
<b>Total protocol deviations</b>	<b>18%</b>	<b>33%</b>	<b>7%</b>	<b>6%</b>	<b>17%</b>	<b>40%</b>	<b>6%</b>	<b>6%</b>	<b>29%</b>	<b>22%</b>	<b>26%</b>	<b>12%</b>	<b>11%</b>	<b>33%</b>	<b>25%</b>	<b>15%</b>	<b>25%</b>	<b>0%</b>	<b>62%</b>	<b>0%</b>	<b>21%</b>
<b>Total number of infants enrolled</b>	<b>57</b>	<b>33</b>	<b>14</b>	<b>17</b>	<b>42</b>	<b>40</b>	<b>31</b>	<b>16</b>	<b>65</b>	<b>18</b>	<b>92</b>	<b>49</b>	<b>28</b>	<b>9</b>	<b>8</b>	<b>47</b>	<b>16</b>	<b>7</b>	<b>13</b>	<b>2</b>	<b>604</b>

### SUPPORT Trial Protocol Deviations Reported as of April 11, 2007

Type of protocol deviation	Number
CPAP not initiated if required by protocol	1
Surfactant not given in the first hour	10
Oximeter not started within 2 hours	10
Infant placed on study oximeter for incorrect treatment	7
Failure to use study oximeter at times required by protocol	31
Non-study (unmasked) oximeter used at same time as study oximeter	3
NSIMV initiated in infant not previously intubated	4
Extubation (excluding unplanned) for other than study criteria	6
Failure to extubate CPAP infant if all criteria met	5
Failure to extubate surfactant infant if all criteria met	1
High flow nasal cannula used within first 14 days of life	20
Infant received postnatal steroids in first 21 days of life	12
Head ultrasound done outside 4-21 day window	1
Consent errors	2
Randomization errors	11
Other	5
<b>Total</b>	<b>129</b>

Type of protocol deviation (some categories collapsed)	Number
Assigned arm not implemented within required amount of time	21
Infant placed on study oximeter for incorrect treatment	7
Failure to use study oximeter at times required by protocol	31
Non-study (unmasked) oximeter used at same time as study oximeter	3
NSIMV initiated in infant not previously intubated	4
Extubation (excluding unplanned) for other than study criteria	6
Failure to extubate infant if all criteria met	6
High flow nasal cannula used within first 14 days of life	20
Infant received postnatal steroids in first 21 days of life	12
Head ultrasound done outside 4-21 day window	1
Consent errors	2
Randomization errors	11
Other	5
<b>Total</b>	<b>129</b>



**From:** M. Bethany Ball  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Fwd: SUPPORT MRI  
**Date:** Friday, April 13, 2007 8:23:37 PM

---

Hi Rose,  
Info below. I don't mind filling these out occasionally but I'd really appreciate having more lead time.  
Thanks,  
Beth

- 1) How many patients have been enrolled to date in the SUPPORT Neuroimaging secondary at your site? **19**
- 2) How many have completed 35-42 week neuroimaging studies (MRI and CUS) **8**
- 3) If you have enrolled patients that have not completed 35-42 week neuroimaging, please tell us:
  - a) How many died before reaching the 35-42 week window?  
**3**
  - b) How many have not yet reached the window? **1**
  - c) How many have reached the window, but have not yet been imaged? **3**
  - d) How many "missed"/were unsuccessful with a neuroimaging study? **5**

Please describe: **2 missed late CUS due to discharge**

e) Other issues? Please describe:

---

X-Sieve: CMU Sieve 2.3  
Date: Thu, 12 Apr 2007 23:01:40 -0700  
To: mball@stanford.edu  
From: Krisa Van Meurs <vanmeurs@stanford.edu>  
Subject: Fwd: SUPPORT MRI

X-Sieve: CMU Sieve 2.3  
Delivered-To: vanmeurs@stanford.edu  
Subject: SUPPORT MRI  
Date: Thu, 12 Apr 2007 18:04:17 -0400  
Thread-Topic: SUPPORT MRI  
Thread-Index: Acd9ToOdNwRndx0R6y2JcdJY3CAvQ==  
From: "Higgins, Rosemary \ (NIH/NICHD) [E]"  
<higginsr@mail.nih.gov>  
To: "Wally Carlo, M.D." <WCarlo@peds.uab.edu>,  
<mcw3@case.edu>,  
"Brenda Poindexter" <bpoindex@iupui.edu>,  
"Abbot Laptook" <ALaptook@WIHRI.org>,  
<vanmeurs@stanford.edu>,  
"Tyson, Jon E" <Jon.E.Tyson@uth.tmc.edu>,  
"Morris, Brenda H" <Brenda.H.Morris@uth.tmc.edu>,  
"Ronald N Goldberg" <goldb008@mc.duke.edu>  
Cc: <srhintz@stanford.edu>

Please respond to the following questions by APRIL 16th.

- 1) How many patients have been enrolled to date in the SUPPORT Neuroimaging secondary at your site?
- 2) How many have completed 35-42 week neuroimaging studies (MRI and CUS)
- 3) If you have enrolled patients that have not completed 35-42 week neuroimaging, please tell us:
  - a) How many died before reaching the 35-42 week window?
  - b) How many have not yet reached the window?
  - c) How many have reached the window, but have not yet been imaged?
  - d) How many "missed"/were unsuccessful with a neuroimaging study?

Please describe:

---

e) Other issues? Please describe:

---

**\*\*Thank you for your hard work and dedication on SUPPORT and the Neuroimaging Secondary!\*\***

Alabama

Case  
Dallas  
Indiana  
Brown  
Stanford

Houston  
Duke  
Iowa  
Utah  
Tufts  
UCSD

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov <mailto:higginsr@mail.nih.gov>

--

Bethany Ball  
Neonatal and Developmental Medicine  
Stanford University  
750 Welch Road, Suite 315  
Palo Alto, CA 94304

Tel (650) 725 8342

Fax (650) 725 8351\_\_\_\_\_

**From:** Das, Abhik  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Gantz, Marie  
**Subject:** RE: SAE in SUPPORT  
**Date:** Friday, April 13, 2007 5:46:58 PM

---

Rose:

We have looked at this, and let us just say that no news is good news!

Thanks

Abhik

-----Original Message-----

**From:** Das, Abhik  
**Sent:** Friday, April 13, 2007 12:14 PM  
**To:** 'Higgins, Rosemary (NIH/NICHD) [E]'  
**Cc:** Gantz, Marie  
**Subject:** RE: SAE in SUPPORT

This was not a concern at our first interim look (where we looked at NEC as a secondary outcome), but we will look again now to make sure.

Thanks

Abhik

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Friday, April 13, 2007 12:08 PM  
**To:** Das, Abhik; Gantz, Marie  
**Subject:** Fw: SAE in SUPPORT

Hi, I have had several AE's for NEC from Support over the last month or two. Can you look to see if the rates are different among groups or for the support babies compared to the nrn rates over the past few years? If there is concern, this would need to go to the dsmc. I hope I am not opening a can of worms, but want to insure safety.

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Ellen Hale <[Ellen.Hale@oz.ped.emory.edu](mailto:Ellen.Hale@oz.ped.emory.edu)>  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Susie Buchter <[Susie.Buchter@oz.ped.emory.edu](mailto:Susie.Buchter@oz.ped.emory.edu)>  
**Sent:** Fri Apr 13 09:36:02 2007  
**Subject:** SAE in SUPPORT

Rose,

We have had another death in SUPPORT. This was (b) (6) He was doing well and on a NC 1 L @ 21% until he developed bilious residuals and

eventually NEC confirmed via x-ray. He went for surgery and had NEC totalis. I will send the Medwatch and send a summary the first of the week.  
Ellen

**From:** Webb, Robin E.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Support recruitment calls  
**Date:** Friday, April 13, 2007 2:42:47 PM

---

Do Ahbik and Neil need to be on these call?

Thanks,  
Robin

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wednesday, April 11, 2007 2:36 PM  
To: Webb, Robin E.  
Subject: Re: Support recruitment calls

April 16 11-3  
April 17 all day  
April 18 all day  
April 23 9-12  
April 24 all day  
April 25 all day

Start with those and see what you get.  
Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Webb, Robin E. <rwebb@rti.org>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Wed Apr 11 10:56:17 2007  
Subject: RE: Support recruitment calls

Rose,

What days and times do you have available for these calls?

Thanks,  
Robin

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, April 10, 2007 3:19 PM  
To: Webb, Robin E.  
Cc: Das, Abhik; nfiner@ucsd.edu  
Subject: Support recruitment calls

Robin,

We would like to set up 5 individual calls with each of the sites listed below to discuss enhancing recruitment in the SUPPORT trial as these sites have less than 25 percent randomized/eligible GDB infants):

Wayne State  
Indiana  
New Mexico  
Yale  
Cincinnati

We will need the PI, coordinator and others involved in SUPPORT recruitment and enrollment.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

**From:** [Newman, Jamie](#)  
**To:** [Anna Bodnar](#)  
**Cc:** [Das, Abhik](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Cunningham, Meg](#)  
**Subject:** Follow-up of SUPPORT patient less than 401 g  
**Date:** Tuesday, April 10, 2007 5:24:38 PM  
**Attachments:** [SUPPORT FU Tech memo1.pdf](#)

---

You indicated on the Follow-up Protocol Call today that the infant you mention below (395 g) is enrolled in the SUPPORT Trial. All SUPPORT patients will be followed up, regardless of whether they are included in the GDB follow-up. I am writing to clarify that you will need to complete the SUPPORT follow-up forms as babies less than 401g (and greater than 1000g) will not be covered by the regular GDB follow-up. Attached is a memo that was distributed last year on the topic. Also, please note that the Bayley 3 will be conducted for the follow-up of all SUPPORT patients.

The SUPPORT Follow-up forms have been posted to the private gateway of the NRN website under:  
Protocols/SUPPORT/Secondary Studies/18 month Follow Up/Forms.

Please let me know if you have any questions.

Thanks, Jamie

Jamie E. Newman, MPH

Statistics and Epidemiology

RTI International

Telephone: (919) 485-5719

Fax: (919) 485-7762

[newman@rti.org](mailto:newman@rti.org)

---

**From:** Anna Bodnar [<mailto:abodnar@utah.gov>]  
**Sent:** Tuesday, April 10, 2007 2:21 PM  
**To:** Newman, Jamie  
**Subject:** RE: Follow Up PI call - Draft Follow-up Protocol Call -Tuesday April 10

Is there a reason why the study delineates limit for lowest birth weight (401-1000 gm) rather than <1000 gms. We have a baby with a birth weight of 395 gms and he would have been eliminated from the study.

>>> "Newman, Jamie" <[newman@rti.org](mailto:newman@rti.org)> 4/5/2007 11:59 AM >>>  
Thank you for your comments. Please let me know if anyone else has additional comments to add before the call. I have included the call information below:



The Follow Up PI conference call to discuss a current version of an 18-22 month Follow Up protocol has been scheduled for

Tuesday, April 10

3:00 pm ET

Dial:

Outside the USA

1-203-310-(b) (6)

or

Within the USA

866-675-(b) (6)

Then, enter Participant Passcode:

(b) (6)

Thanks, Jamie

Jamie E. Newman, MPH  
Statistics and Epidemiology  
RTI International  
Telephone: (919) 485-5719  
Fax: (919) 485-7762  
newman@rti.org

-----Original Message-----

From: Dusick, Anna M. [mailto:adusick@iupui.edu]  
Sent: Wednesday, April 04, 2007 2:04 PM  
To: Newman, Jamie; Webb, Robin E.; bvohr@wihri.org (b) (6);  
golds005@mc.duke.edu; ira\_adams-chapman@oz.ped.emory.edu;  
srhintz@stanford.edu; MPeralta@PEDS.UAB.EDU; steichjj@email.uc.edu;  
Kimberly.Yolton@cchmc.org; Roy.Heyne@utsouthwestern.edu;  
jon.e.tyson@uth.tmc.edu; Patricia.W.Evans@uth.tmc.edu;  
apappas@med.wayne.edu; richard.ehrenkranz@yale.edu;  
JaFuller@salud.unm.edu; michael-acarregui@uiowa.edu; abodnar@utah.gov;  
pchurch@tufts-nemc.org; higginsr@mail.nih.gov; Das, Abhik  
Cc: Alice.J.Reardon@uth.tmc.edu; jrose@wihri.org; Huitema, Carolyn  
Petrie; Cunningham, Meg  
Subject: RE: Follow Up PI call - Draft Follow-up Protocol Attached

Jamie,

This was well done and reflects alot of work. I made a few comments for discussion on our call. Thank you,  
Anna

From: Newman, Jamie [mailto:newman@rti.org]  
Sent: Mon 3/12/2007 1:44 PM  
To: Webb, Robin E.; bvohr@wihri.org; (b) (6)  
gold005@mc.duke.edu; ira\_adams-chapman@oz.ped.emory.edu; Dusick, Anna  
M.; srhinz@stanford.edu; MPeralta@PEDS.UAB.EDU; steichjj@email.uc.edu;  
Kimberly.Yolton@cchmc.org; Roy.Heyne@utsouthwestern.edu;  
jon.e.tyson@uth.tmc.edu; Patricia.W.Evans@uth.tmc.edu;  
apappas@med.wayne.edu; richard.ehrenkranz@yale.edu;  
JaFuller@salud.unm.edu; michael-acarregui@uiowa.edu; abodnar@utah.gov;  
pchurch@tufts-nemc.org; higginsr@mail.nih.gov; Das, Abhik  
Cc: Alice.J.Reardon@uth.tmc.edu; jrose@wihri.org; Huiterna, Carolyn  
Petrie; Cunningham, Meg  
Subject: RE: Follow Up PI call - Draft Follow-up Protocol Attached

Attached is the draft of the Follow-up Protocol to be discussed during the upcoming Follow-up PI conference call. We anticipate that Centers' IRBs will increasingly require a protocol for this study. Therefore, we would like this protocol to reflect the current 18-22month Follow Up study. Highlighted in yellow are areas of uncertainty, which will need to be resolved during the call. We thank Betty Vohr and Roy Heyne for their comments as well as Tari Gratton and Kim Yolton at Cincinnati for your help in developing this document.

If you have not already replied to Robin Webb concerning your availability for the call (rwebb@rti.org <mailto:rwebb@rti.org> - see original message below), please remember to do so.

Thank you,

Jamie E. Newman, MPH

Statistics and Epidemiology

RTI International

Telephone: (919) 485-5719

Fax: (919) 485-7762

newman@rti.org

---

From: Webb, Robin E.  
Sent: Friday, March 09, 2007 9:28 AM  
To: bvohr@wihri.org; (b) (6); gold005@mc.duke.edu;  
ira\_adams-chapman@oz.ped.emory.edu; adusick@iupui.edu;  
srhinz@stanford.edu; MPeralta@PEDS.UAB.EDU; steichjj@email.uc.edu;  
Kimberly.Yolton@cchmc.org; Roy.Heyne@utsouthwestern.edu;  
jon.e.tyson@uth.tmc.edu; Patricia.W.Evans@uth.tmc.edu;

apappas@med.wayne.edu; richard.ehrenkranz@yale.edu;  
JaFuller@salud.unm.edu; michael-acarregui@uiowa.edu; abodnar@utah.gov;  
pchurch@tufts-nemc.org; 'higginsr@mail.nih.gov'; Das, Abhik  
Cc: Alice.J.Reardon@uth.tmc.edu; jrose@wihri.org; Newman, Jamie;  
Huitema, Carolyn Petrie; Webb, Robin E.  
Subject: Follow Up PI call

We need to set up a Follow Up PI conference call discuss a current version of an 18-22month Follow Up protocol. This version is to reflect the current 18-22month Follow Up study. A draft of this protocol will be sent in a subsequent email. Please let me know your availability for the days below, indicating time zone if other than ET.

Thanks,

Robin

Thurs 3/15

Fri 3/16

Mon 3/19

Tues 3/20

Wed 3/21

Thurs 3/22

Fri 3/23

Mon 3/26

Tues 3/27

Wed 3/28

Thurs 3/29

Fri 3/30

Mon 4/2

Tues 4/3

Wed 4/4

Thurs 4/5

Fri 4/6

Mon 4/9

Tues 4/10

Wed 4/11

Thurs 4/12

Fri 4/13



## Memorandum

### SUPPORT FOLLOW-UP TECHNICAL MEMO # 1

DATE: March 8, 2006

TO: Network Follow-up PIs and Coordinators  
SUPPORT Trial PIs and Coordinators

FROM: The Data Coordinating Center

SUBJECT: SUPPORT 18 month Follow-up

Follow-up at 18 months should be completed for all patients enrolled in the SUPPORT Trial. The SUPPORT Trial Follow-up will be as follows:

1. All Network patients, eligible for the 18+4 month follow-up should have the GDB ELBW Follow-up forms completed (NF01, NF02, etc.). These forms are entered into the regular GDB Follow-up program.
2. All SUPPORT Trial study patients NOT eligible for the ELBW Network Follow-up Study, such as patients >1000 g, should complete the SUPPORT Follow-up Study forms (e.g., SF01, SF02, etc.). These forms will be entered into the SUPPORT Trial database.

Because the content of the follow-up is the same, the ELBW Follow-up study manual will be used for the additional SUPPORT Trial study patients, using the following substitutions: NF01 = SF01, NF02 = SF02, NF03 = SF03, Etc.

The NF13 (BITSEA) will not be done for SUPPORT Trial patients unless they are in the ELBW Follow-up Study. The SUPPORT patients not eligible for the ELBW Follow-up Study will use their Network number as the identifier. For patients that transfer to another center, the forms will need to be sent to the original center for keying.

The following forms will need to be completed for the SUPPORT Trial patients NOT eligible for ELBW Follow-up Study:

SF01 SES at Discharge  
SF03 SES at 18 + 4 Months  
SF04 Medical History Form  
SF04A Readmission Form  
SF05 Infant Examination Form  
SF05A Gross Motor Function Work Sheet (will not be keyed)  
SF09 Bayley Scales Summary Score Sheet  
SF10 Status Form  
SF10A Status Form  
SF11 Summary of 18 Month Visit  
SF12 Lost to Follow-up Questionnaire

These forms will be posted to the private gateway of the NRN website under: Protocols/SUPPORT/Secondary Studies/18 month Follow Up.

Please contact Jamie Newman at [newman@rti.org](mailto:newman@rti.org) or Carolyn Petrie Huitema at [petrie@rti.org](mailto:petrie@rti.org) if you have any questions.

Cc: Rosemary Higgins

**From:** [Zaterka-Baxter, Kristin](#)  
**To:** [nfiner@ucsd.edu](mailto:nfiner@ucsd.edu); [Wade Rich](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** FW: DSMC Minutes (Support Study review)  
**Date:** Tuesday, April 10, 2007 2:35:01 PM  
**Attachments:** [NRNDSMCSupportReport\(Sites\)20070206.doc](#)

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Hi Dr. Finer,

Please find attached minutes from the first planned DSMC review of Support Study interim analysis held in Rockville, MD on February 6, 2007. These minutes were sent to all centers as well, my apologies for not copying you on the first email.

Thanks, and please let me know if you have any questions.

Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
[kzaterka@rti.org](mailto:kzaterka@rti.org)

**The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely  
Low Birth Weight Infants**

**NEONATAL RESEARCH NETWORK**

**DATA SAFETY AND MONITORING COMMITTEE**

**MINUTES**

**February 6, 2007**

The Data Safety and Monitoring Committee for the Neonatal Research Network met on February 6, 2007 for the first planned review of interim analysis. The DSMC members in attendance were Drs. Avery (Chair), Boyle, Gleason, Willinger, Clemons, Ross, Bangdiwala, Thomson, Allen and Gail. Drs. Das and Gantz, Ms. Zaterka-Baxter, and Ms. Cunningham from the Data Center were also present. Dr. Rosemary Higgins, NICHD Program Scientist was present during the open session.

Dr. Avery opened the meeting with introductions. He informed the committee that this was the first of four planned periodic reviews of the Support Trial study data presented by the Data Coordinating Center (RTI). He continued with an overview of the meeting agenda which included a presentation of study data to date to be followed by committee discussions and conclude with a summation of the findings.

Dr. Das then presented a summary of the background, primary outcomes, eligibility, recruitment and interim analysis methods for the Support Trial.

Dr. Gantz continued by presenting study data to date on enrollment, compliance in oxygen saturations, primary outcomes, secondary outcomes, adverse events and protocol deviations.

Upon discussion of the data presented, the DSMC agreed that no significant safety or efficacy issues were apparent, and recommended that the study should continue as planned. At the same time, they expressed some concern at the slower than expected pace of recruitment into the trial and noted the critical importance of conducting this important trial and disseminating its results in a timely manner. The DSMC also noted the need for continued monitoring of the degree of separation between the high and low oxygen groups in the oxygen saturation arm of the trial.

**From:** Zaterka-Baxter, Kristin  
**To:** Nancy Newman; Nancy.Miller@UTSouthwestern.edu; grisbyca@email.uc.edu; ldw@iupui.edu; monica.konstantino@yale.edu; Angelita Hensman; mball@leland.stanford.edu; mcollins@peds.uab.edu; Georgia E McDavid; Kathy J Auten; Mackinnon, Brenda; Johnson, Karen; Karen Osborne; Conra Lacy; mcw3@cwru.edu; Pablo.Sanchez@UTSouthwestern.edu; sshankar@med.wayne.edu; kurt.schibler@cchmc.org; bpoindex@iupui.edu; richard.ehrenkranz@yale.edu; Abbot Laptook; Krisa Van Meurs; wcarlo@peds.uab.edu; Walid.Salhab@UTSouthwestern.edu; jon.e.tyson@uth.tmc.edu; goldb008@mc.duke.edu; Frantz, Ivan; Bell, Edward; Roger Faix; Kristi Watterberg; KATHLEEN F ABRAMCZYK; crosman@med.wayne.edu; [SCRN] Stoll, Barbara; ellen\_hale@oz.ped.emory.edu  
**Cc:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie; Poole, W. Kenneth; Auman, Jeanette O.; Pickett, James; Cunningham, Meg; Price, Jeffrey M.; Newman, Jamie; Gordon Avery  
**Subject:** DSMC Minutes (Support Study review)  
**Date:** Tuesday, April 10, 2007 2:30:48 PM  
**Attachments:** NRNDSMCSupportReport(Sites)20070206.doc

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Hi all,

Please find attached minutes from the first planned DSMC review of Support Study interim analysis held in Rockville, MD on February 6, 2007.

Thanks, and please let me know if you have any questions.  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org



**The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely  
Low Birth Weight Infants**

**NEONATAL RESEARCH NETWORK**

**DATA SAFETY AND MONITORING COMMITTEE**

**MINUTES**

**February 6, 2007**

The Data Safety and Monitoring Committee for the Neonatal Research Network met on February 6, 2007 for the first planned review of interim analysis. The DSMC members in attendance were Drs. Avery (Chair), Boyle, Gleason, Willinger, Clemons, Ross, Bangdiwala, Thomson, Allen and Gail. Drs. Das and Gantz, Ms. Zaterka-Baxter, and Ms. Cunningham from the Data Center were also present. Dr. Rosemary Higgins, NICHD Program Scientist was present during the open session.

Dr. Avery opened the meeting with introductions. He informed the committee that this was the first of four planned periodic reviews of the Support Trial study data presented by the Data Coordinating Center (RTI). He continued with an overview of the meeting agenda which included a presentation of study data to date to be followed by committee discussions and conclude with a summation of the findings.

Dr. Das then presented a summary of the background, primary outcomes, eligibility, recruitment and interim analysis methods for the Support Trial.

Dr. Gantz continued by presenting study data to date on enrollment, compliance in oxygen saturations, primary outcomes, secondary outcomes, adverse events and protocol deviations.

Upon discussion of the data presented, the DSMC agreed that no significant safety or efficacy issues were apparent, and recommended that the study should continue as planned. At the same time, they expressed some concern at the slower than expected pace of recruitment into the trial and noted the critical importance of conducting this important trial and disseminating its results in a timely manner. The DSMC also noted the need for continued monitoring of the degree of separation between the high and low oxygen groups in the oxygen saturation arm of the trial.

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu; Phelps, Dale  
**Cc:** Karen Osborne RN; Roger.Faix@hsc.utah.edu; Bradley Yoder; Das, Abhik  
**Subject:** RE: ROP outcome for SUPPORT  
**Date:** Tuesday, April 10, 2007 12:47:37 PM

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Currently, we have no entries on the SUPP10 where infants have had the scleral buckle procedure. Since the laser surgery does count as status (per my conversations with Dale), it could be that additional procedures, if any, are not being entered.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, April 10, 2007 12:27 PM  
**To:** nfiner@ucsd.edu; Phelps, Dale  
**Cc:** Karen Osborne RN; Roger.Faix@hsc.utah.edu; Bradley Yoder; Gantz, Marie; Das, Abhik  
**Subject:** ROP outcome for SUPPORT

Hi

For infants who have laser surgery for support and then go on to have a scleral buckle procedure, are both recorded, or does the infant reach status when the laser procedure is done??

Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Zaterka-Baxter, Kristin  
**To:** ahensman@wihri.org; mball@leland.stanford.edu; grisbyca@email.uc.edu; ellen\_hale@oz.ped.emory.edu; gaynelle.hensley@utsouthwestern.edu; Georgia E McDavid; auten002@mc.duke.edu; linda\_reubens@urmc.rochester.edu; mcollins@peds.uab.edu; monica.konstantino@yale.edu; Nancy.Miller@UTSouthwestern.edu; Nancy Newman; npeters@wfubmc.edu; ae5357@wayne.edu; risa.demetrio@sharp.com; iyhall@stanford.edu; kathy.arnell@sharp.com; Reverett@med.miami.edu; wrich@ucsd.edu; carl\_dangio@urmc.rochester.edu; Cassandra\_Horihan@URMC.Rochester.edu; JANET.MORGAN@childrens.com; Ang, Jocelyn Y; Mperalta@peds.uab.edu; RSchelonka@peds.uab.edu; Roy.Heyne@utsouthwestern.edu; theresa\_murray@urmc.rochester.edu; vphillips@peds.uab.edu; danny.benjamin@duke.edu; Dhiren H. Desai; Brenda.H.Morris@uth.tmc.edu; liwashbu@wfubmc.edu; ronnie\_guillet@urmc.rochester.edu; yanmeurs@leland.stanford.edu; alaptook@wihri.org; [SCRNI] Stoll, Barbara; bpindex@iupui.edu; dale\_phelps@urmc.rochester.edu; dstevenson@stanford.edu; edward.donovan@chmcc.org; jlemons@iupui.edu; jon.e.tyson@uth.tmc.edu; moshea@wfubmc.edu; nfiner@ucsd.edu; richard.ehrenkranz@yale.edu; goldb008@mc.duke.edu; sshankar@med.wayne.edu; sduara@miami.edu; wcarlo@peds.uab.edu; woh@wihri.org; mcw3@cwru.edu; Barbara.Alexander@cchmc.org; Estelle E. Fischer; Holly Mincey; Jody Shively; Kate Bridges, MD; Lenora Jackson; Frantz, Ivan; Furey, Anne; Pablo.Sanchez@UTSouthwestern.edu; kurt.schibler@cchmc.org; Michael Cotten; Bell, Edward; Johnson, Karen; Kristi Watterberg; papile@unm.edu; Roger Faix; Conra Backstrom; bradley.yoder@hsc.utah.edu; Valid.Sahab@UTSouthwestern.edu; aaf2@po.cwru.edu; ira\_adams-chapman@oz.ped.emory.edu; chauer@peds.med.miami.edu; apappas@med.wayne.edu; srhntz@stanford.edu; yvaucher@ucsd.edu; golds005@mc.duke.edu; rdillard@wfubmc.edu; gary\_myers@urmc.rochester.edu; byohr@wihri.org; adusick@iupui.edu; steichij@email.uc.edu; drfcmd@aol.com; Mayes, Linda; maegan.c.currence@uth.tmc.edu; SEquaras@med.miami.edu; MNeri@med.miami.edu; mgfuller@ucsd.edu; lnoel@wihri.org; ldrichar@iupui.edu; diane\_hust@urmc.rochester.edu; elaine.romano@yale.edu; Teresa.Gratton@uc.edu; Jackie.Hickman@Childrens.com; bss5@cwru.edu; lohme001@mc.duke.edu; Stevens, Timothy; Charles.Green@uth.tmc.edu; Patricia.W.Evans@uth.tmc.edu; Kimberly.Yolton@cchmc.org; Sharon.Wright@uth.tmc.edu; ldw@iupui.edu; dhwilson@iupui.edu; Karen Osborne RN; Mackinnon, Brenda; kathymw@wayne.edu; Elizabeth Billian; crosmann@med.wayne.edu  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; [StatEpi] Neonatal Statisticians; [StatEpi] Neonatal Programmers  
**Subject:** 2007 GDB Updates  
**Date:** Friday, April 06, 2007 2:41:54 PM  
**Attachments:** GDB19(20070401).doc  
2007 GDB Manual(uc)20070401.doc  
NG02(20070401uc).doc  
NG03(20070401uc).doc

Hi all,

Please find below a list of GDB manual sections and study forms that have been revised; these revisions come primarily from discussions during the last Steering Committee meeting held in January 2007. In this first email, please find attached the revised study materials and technical memo GDB19 outlining these changes. The email to follow directly will contain the clean copy documents which will also be posted on the NRN website shortly (neonatal.rti.org).

1. Manual of Operations revisions; version date 04/01/07
  - Form NG02, page 3-7
  - Form NG03, page 4-14 and 4-18
  - Appendix A
  - Appendix B
  - Appendix 1a
  - Appendix J
2. Forms revisions; version date 04/01/07
  - NG02 *version 3.2*
  - NG03 *version 1.3*

Thanks and please let me now if you have any questions.

Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International

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4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org



Memorandum

April 1, 2007

**GDB TECHNICAL MEMO # 19**

TO: Network Coordinators  
Network PIs

FROM: The Data Coordinating Center

SUBJECT: 1. Manual of Operations Updates version date 04/01/07;  
Form NG02, page 3-7  
Form NG03, page 4-14 and 4-18  
Appendix A  
Appendix B  
Appendix Ia  
Appendix J  
2. Forms Revisions (NG02v3.2, NG03v1.3) version date 04/01/07

---

As was discussed at the January 2007 Steering Committee meeting, the current ACOG recommendation is NOT to repeat a course of steroids. Based on this recommendation we have amended question C.2.b on form **NG02** and the corresponding study manual section on page 3-7 accordingly.

In addition, two questions on form **NG03** have been modified (question H.1.a and O.1.a). The study manual reflects these modifications in addition to updates to Appendix A (organism code list) and Appendix B (antibiotic code list). All changes are listed below; underlines text has been added and text stricken through has been deleted:

***(These changes should take effect April 1, 2007 with IRB approval as necessary; a notification will be sent when the Data Entry system reflects these changes)***

---

1. Manual page 3-7:

- b. **Was a complete course of steroids given ~~within 7 days~~ prior to delivery?**  
Code 'Y' if bethamethasone [2 doses, 12 or 24 hours apart] or dexamethasone [4 doses, 6 hours apart] were given specifically to promote lung maturity and at least 12 hours from the second dose or 24 hours from the first dose has elapsed before delivery. If the time elapsed was less, this indicates that there was insufficient time for the drug to have an effect and would be considered incomplete. Information may be obtained from the maternal and/or infant chart. Count only doses that occurred ~~within one week~~ prior to delivery. Code 'UK' if unknown.



#### 4. APPENDIX A: Organism Code List

Code	Genus	Species
160	Bifidobacterium	sp. [Bifidum, lactis, infantis, thermophilum, and others]
170	Lactobacillus	sp. [Acidophilus, casei, and others]
813	Candida	krusei
899	Other; Code to be assigned	
<del>Other; Code to be assigned</del>		

---

#### 5. APPENDIX B: Drug Therapeutic Agent List

##### Penicillins

- 10= Amoxicillin
- 11= Amoxicillin/clavulanate (Augmentin)

##### Cefalosporins (3<sup>rd</sup> gen)

- 19= Cephalexin (Keflex)
- 25= Ceftazidime (Fortaz)
- 30= Cefixime

##### Other Antibiotics

- 50= Erythromycin (IV)
- 91= Linezolid
- ~~65= Amphotericin B lipid complex~~
- 67= Ampicillin + sulbactam (unasyn)
- 76= Piperacillin + tazobactam (zosyn)
- 80= Ciprofloxacin
- 81= Clarithromycin (Biaxin)
- 82= Doxycycline
- 83= Trimethopim/sulfa (TMP/SMX)

##### Antifungals

- 48= ~~Oral~~ Nystatin
- 92= Itraconazole
- 93= Posaconazole
- 94= Voriconazole
- 66= Amphotericin B Liposome (Ambisome)
- 95= Amphotericin B lipid complex (Abelcet)
- 97= Anidulafungin
- 98= Micafungin

##### Antivirals

- 73= Nevarapine
- 

#### 6. APPENDIX Ia: Chorioamnionitis – Pathologic Findings.

This Appendix has been added to the study manual.

---

#### 7. APPENDIX J: Overview of the Generic Database

This Appendix has been updated with the changes since 01/01/06 to include revisions on 06/19/06 and 04/04/07.

April 1, 2007

The updated Manual of Operations and Study Forms NG02 and NG03 will be posted on the Neonatal Web site and dated 04/01/07. Changes to the forms are not yet programmed in the Data Entry System. A transmission update email will be sent when the additional data fields are available. Please submit these changes to your IRB as necessary.

Cc: Rosemary Higgins, MD



**SURVEY OF MORBIDITY AND MORTALITY AMONG VERY  
LOW BIRTH WEIGHT INFANTS (401 TO 1500 GRAMS)  
(GDB)**

**NICHD Neonatal Research Network**

**Manual of Operations**

**January 1, 2006**  
**Revised June 19, 2006**  
**Revised April 1, 2007**

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## Chapter 1 Objectives and Study Designs

### 1.1 Introduction

This manual gives detailed instructions for the **Survey of Morbidity and Mortality in Very Low Birth Weight (401 to 1500 grams) Infants**. It is meant to serve as a reference guide for study staff, including investigators, coordinators, technicians and data managers. This study is being conducted by the NICHD Neonatal Research Network.

### 1.2 Survey of Morbidity and Mortality in Very Low Birth Weight Infants

The purpose of this study is to provide a registry of baseline and outcome data for very low birth weight infants, based on data collected in a uniform manner from neonatal intensive care units (NICUs) at institutions participating in the NICHD Neonatal Research Network. These data, although not representative of a regional sample, do represent a number of major tertiary care academic centers. Although centers serve varying populations, they exemplify the neonatal morbidity problems of the 1980's through the 2000's. These data will be used to characterize the infants admitted to the units, to examine the relationships between certain entry characteristics and outcome, to measure trends in incidence of various disease entities, and to provide the basis for hypothesis formulation for future multi-center studies.

Baseline and outcome data will be collected on all liveborn infants with birth weight from 401 to 1500 grams who are admitted to the NICUs within 14 days of birth or infants with a heart rate at birth, who died in the delivery room. These data will be obtained by review of the mother's and baby's charts. The data forms for the survey have been named '**generic data forms**' in recognition of the fact that the information collected is of universal interest and not specific to a particular disease or treatment. They provide a descriptive summary of the babies' background, perinatal and neonatal experience. Baseline data will be obtained soon after admission to the NICU and the outcome data will be obtained at the time of discharge from the NICU.

## **Chapter 2 Administration**

### **2.1 Organizational Structure**

The Survey of Morbidity and Mortality in Very Low Birth Weight Infants is being conducted by the NICHD Neonatal Research Network. The NICHD Research Network was established by the Center for Research for Mothers and Children in 1986 to conduct multi-center clinical trials in neonatal medicine and management. The Network is funded as a cooperative agreement between the Clinical Centers, the Data Coordinating Center (DCC) and the NICHD. The Steering Committee for the Network is limited to the Principal Investigator from each Clinical Center, the Data Coordinating Center, and the NICHD Neonatal Research Program Official. Non-voting Steering Committee participants include the Director of the Center for Research for Mothers and Children (CRMC) and the Steering Committee Chairman, who is appointed by NICHD. The Steering Committee has the responsibility to develop study protocols and monitor their implementation.

#### **2.1.1 Participating Centers**

##### *2.1.1.1 Clinical Centers*

The Principal Investigators representing the Clinical Centers have agreed to abide by the study protocols and, in addition, to have comparable staff, facilities, and equipment. To ensure that centers meet standards for procedures, equipment and staffing, each center is certified prior to participation in Network studies.

##### *2.1.1.2 Data Coordinating Center*

The Data Coordinating Center (DCC) collaborates with the Steering Committee on protocol design, data management, data collection systems (including the final versions of protocols, forms and manual of operations), and analysis. The DCC conducts the interim and final statistical analyses and collaborates with the Steering Committee members in the preparation of publications based on the study results. The Principal Investigator of the DCC reports to the Steering Committee and the Data Monitoring and Safety Committee.

## **2.1.2 NICHD**

In addition to its role as the funding agency, the NICHD participates as a voting member of the Steering Committee (the Program Official). NICHD staff also participate in the development of protocols and in assisting the Steering Committee in the coordination and publication of the studies conducted by the Network.

## **2.2 Committees**

### **2.2.1 Steering Committee**

This committee is comprised of the Principal Investigators from each of the Clinical Centers and the Data Coordinating Center, the NICHD Program Official, and the Chairman of the Steering Committee. The Steering Committee has the responsibility for identifying topics for network studies, designing study protocols, monitoring study implementation, and recruitment. The Steering Committee will also make recommendations for changes to study protocols if it deems necessary. This committee receives recommendations from the Data Monitoring and Safety Committee via NICHD.

### **2.2.2 Generic Database Subcommittee**

The Generic Database Subcommittee is responsible for the design of the generic data forms and for monitoring the conduct of the study. This subcommittee reports to the Steering Committee.

### **2.2.3 Publication Committee**

The Publication Committee is responsible for developing the publication policy for the NICHD Neonatal Research network and for writing the policy for the use of the Generic Data Base for publication.

## Chapter 3

### Survey of Morbidity and Mortality - Enrollment and Baseline Data

#### 3.1 Enrollment

##### 3.1.1 Eligibility

All infants with birth weights 401 through 1500 grams admitted to the NICU within 14 days of age are eligible for the study. In addition, all inborn, liveborn infants in the same weight range (401-1500 gms) who die prior to admission to the NICU are enrolled posthumously.

##### 3.1.2 Screening Log Entry - Form NG01

The purpose of the Screening Log is to record all infants with birth weights 401 through 1500 grams, who are admitted to the NICU within 14 days of age or who die prior to admission. It serves as a cross check for identification and ensures that no infants are forgotten for data collection. This form will not be entered into the center-based computer system.

###### 3.1.2.1 *NICU admissions*

The Network Coordinator enters daily onto the log the baby's name, hospital record number, date of birth, and birth weight for every infant admitted to the NICU in the 401-1500 gram birth weight range. In addition, the mother's initials may be recorded. For all births each sibling is assigned a birth number. For singleton or first born of a multiple birth, the code will be "1", "2", etc). **This log may be modified to meet the particular needs of individual centers.**

###### 3.1.2.2 *Deaths Prior to NICU Admission*

The Network Coordinator checks the delivery room record at the beginning of every week, to identify liveborn infants in the weight range who expired prior to NICU admission. Name, hospital record number, date of birth, birth weight (measurement from the delivery room record), mother's initials and birth number (as above) should be recorded on the screening log.



### 3.1.3 Data Forms

If the baby is in the weight range 401-1500 grams, forms NG02 and NG03 should be obtained and placed in a file folder designated for that baby. If the infant dies in 12 hours or less then replace the NG03 with the NG03E.

### 3.1.4 Assignment of Network Number by Computer

The infant's identifying information should be entered into the Neonatal Research Network's microcomputer data management system as soon as possible. This is known as the 'base' screen in the computer system and it does not, unlike the rest of the data to be entered, correspond to a paper form. However, the computer system uses the 'base' form and the NG01 interchangeably.

The following information is contained on the base record:

- **Date of Birth**
- **Birth Weight**
- **Mother's Initials:**  
The Mother's normal initials (first, middle and last). If there is **no** middle initial, record the two initials. **This information is optional.**
- **Birth Number [This information is required]**  
For a single birth or first born of a multiple birth enter '1'. This code establishes a Family ID in the NICU. For the second born code '2' etc. It does not necessarily have to conform to strict birth order from a multiple birth, but must be kept consistent for each baby.
- **Site [This information is required]**  
The center assigns these to their various hospitals. If applicable, any site letter or number is acceptable.
- **Network #:** The Network number is made up of a four digit Family (Pregnancy) Number plus the Birth Order Number. Therefore the Network Number is 5 digits.

It is important to enter a 'base' screen for an infant as soon as possible, since at the time of entering data on the 'base' screen that infant is assigned a Network Number. This number is the infant's unique identifying number and should be used for all subsequent data forms.

When entering test data, the computer assigns a 5-digit number starting at 'T1001'. When entering real data, the assigned network numbers start at '1'. Five spaces have been allotted to network number on all the forms.

### 3.1.5 Adding Network Number to NG01: Screening Log after Base Record Completion

After the base record is entered, put the network number on the screening log and all of the infant's generic forms.

## 3.2 Baseline Data Collection

When a baby has been enrolled in this study the coordinator should complete form NG02 with baseline information. Coding instructions are presented below. Most of the information required is standard in nature, and is to be obtained from the baby's chart and from the mother's medical record.

### 3.2.1 For Infants Participating in Clinical Trials

If an infant is in a study and is receiving either placebo or study drug, then answer 'T' (Trial) for any questions associated with this drug or medication. However, if the same infant receives the known medication at another time – not under the study protocol – the question regarding the medication would be "yes."

## NG02: GENERIC BASELINE FORM

### 3.3 Coding Instructions for Form NG02

#### 3.3.1 Heading

- **Mother's Initials: [Optional]**  
The Mother's normal initials (first, middle and last). If there is **no** middle initial, record the two initials. **This information is optional.**
- **Birth Number:**  
For a single birth or first born of a multiple birth enter '1'. This code establishes a Family ID in the NICU. For the second born code '2' etc. It does not necessarily have to conform to strict birth order from a multiple birth, but must be kept consistent for each baby.
- **Network Number:** The Network number is made up of a four digit Family (Pregnancy) Number plus the Birth Order Number. Therefore the Network Number will be 5 digits.

- When the patient has been entered on the database for the first time, the computer assigns this unique identifier.

### 3.3.2 Section A - MATERNAL INFORMATION

The following information is to be obtained primarily from the mother's chart or any other reliable source.

1. **Mother's age:**  
Record the age in completed years at the time of delivery.
2. **Maternal Zip Code:**  
Record the five digit zip code of the mother's current address as documented on the mother's chart. Code '00000' if mother is homeless and/or in a shelter.
3. **Pregnancy history (include this pregnancy):**
  - a. **Gravida:**  
The number of confirmed pregnancies, including this one.
  - b. **Parity:**  
The number of products of conception delivered after 20 weeks gestation, resulting in the birth of a child, including this delivery. This includes live births only. Note that each infant of a multiple birth has the same parity. For example, if twins were born and it was the first delivery, then the parity for each twin would be 2. The parity for a singleton birth following these twins would be 3.
4. **Marital status:**  
Choose the appropriate marital status code. If mother is currently married but separated (including legal separations) use code '1' married. If the marital status is common law, use code '1' married. If she is single, divorced or widowed then use code '2' single. If marital status is unknown code '6'.

- 5. Highest level of education achieved by the biological Mother:**  
Record the highest level of education achieved by the biological mother at the time this delivery. If this is a surrogate pregnancy, record the highest education level of the surrogate mother at the time of delivery. This information should be obtained from the mother's or infant's medical record or other reliable source.  
Code as follows:  
1= <7<sup>th</sup> grade  
2= 7<sup>th</sup> to 9<sup>th</sup> grade  
3= 10<sup>th</sup> to 12<sup>th</sup> grade  
4= High School degree  
5= Partial college (include Jr. college and associates degree)  
6= College degree (4 years)  
7= Graduate degree  
8= Unknown
- 6. Mother's medical insurance:**  
Record the type of medical insurance documented in the maternal medical record at the time of admission. This information may often be found on the admitting or face sheet in the hospital record.  
Code as follows:  
1= Medicaid- this may include Medicaid, Medicare, a state funded program, federally funded program  
3= Private- This is traditional insurance, managed care, etc. (include CHAMPUS, Tricare or any insurance that may be tied to work).  
5= Self-Pay/uninsured- if hospitalization is to be or has already been paid for by the mother or other responsible party  
6= Unknown  
9= Other

### 3.3.3 Section B - PREGNANCY COMPLICATIONS

The following information is to be obtained primarily from the mother's chart or any other reliable source. Items 4a and 5a may be coded as Yes, No or Unknown. Code 'Y' if the item is listed as a problem in the maternal or infant record. Code "UK" or 'N' otherwise.

**1. Multiple birth?**

Code 'Y' if there was a multiple birth.

**If YES,**

Complete only if this pregnancy is a multiple gestation. Do not include early (< 14 weeks) fetal reductions.

- a. Number of fetuses:**  
Include all fetuses, live or stillborn.

2. **Mother has evidence of at least one prenatal care visit for this pregnancy?**  
Code 'Y' if at least one prenatal care visit, prior to delivery is specifically documented. Code 'N' otherwise.
3. **Diabetes - insulin dependent?**  
Record 'Y' if diabetes mellitus requiring insulin for control is diagnosed during or prior to present pregnancy.
  - a. **If Yes, was insulin given prior to pregnancy?**
4. **Hypertension?**  
Record 'Y' if hypertension, chronic or pregnancy induced, is specifically recorded in the mother's chart. The standard definition of hypertension is maternal BP above 140 systolic or 90 diastolic was recorded prior to or during the present pregnancy on at least 2 occasions.  
**If Yes,**
  - a. **Hypertension existed prior to pregnancy?**  
Record 'Y' if patient had hypertension prior to this pregnancy documented in the chart and/or chronic hypertension.
5. **Antepartum hemorrhage?**  
Record 'Y' if placenta previa, abruptio or threatened abortion resulting in bleeding, which can be external (vaginal bleeding) or occult (retroplacental clot), other than bloody show, is documented after 20 weeks of pregnancy.
6. **Was Chorioamnionitis documented in the Mother's medical record?**  
Record 'Y' if Chorioamnionitis is specifically documented in the Mother's medical record.
7. **Was placental pathology performed?**  
**If Yes,**
  - a. **Was histologic chorioamnionitis documented?**

### 3.3.4 Section C - LABOR AND DELIVERY

1. **Was there rupture of membranes prior to delivery?**

**Note: If ROM at delivery this question should be answered 'No'.**

For C-sections, if the date and time is not recorded, assume ROM at delivery and answer "No".

**If Yes,**

a. **Date:**

From labor and delivery sheet, admission notes or other reliable source

b. **Time:**

From labor and delivery sheet, admission notes, or other reliable source. Use a 24 hour clock with midnight coded as 00:00

c. **If date and/or time unknown, were ROM estimated at > 18 hours?**

2.. **Were steroids given prior to delivery to accelerate maturity?**

Record 'Y' if corticosteroids (e.g. betamethasone, dexamethasone) were given during this pregnancy. Record 'N' if no steroids were given or 'UK' if unknown.

a. **If YES, type of antenatal steroids given:**

Record the type of corticosteroid given, or both as documented in the maternal medical record. Code 1= Betamethasone, 2= Dexamethasone, 3= Both or 4= If unknown

If the mother is in a study and is receiving either the placebo or the drug, then answer 'T' to any questions concerning mother being on the drug.

b. **Was a complete course of steroids given ~~within 7 days~~ prior to delivery?**

Code 'Y' if bethamethasone [2 doses, 12 or 24 hours apart] or dexamethasone [4 doses, 6 hours apart] were given specifically to promote lung maturity and at least 12 hours from the second dose or 24 hours from the first dose has elapsed before delivery. If the time elapsed was less, this indicates that there was insufficient time for the drug to have an effect and would be considered incomplete. Information may be obtained from the maternal and/or infant chart. Count only doses that occurred ~~within one week~~ prior to delivery. Code 'UK' if unknown.

3. **Were maternal antibiotics used during the admission resulting in this delivery?**  
Code 'Y' if any maternal antibiotics were used during the admission resulting in this delivery.
  - a. **If Yes, were antibiotics given by any systemic method (IV, IM or oral) within 72 hours prior to delivery?**
  - b. **If Yes, list antibiotics given:**
  
4. **Final mode of delivery:**  
As documented on labor/delivery sheet. If the final mode of delivery is unknown, code UK. Code NOS = not otherwise specified.

### 3.3.5 Section D - NEONATAL INFORMATION

1. **Date and time of birth:**
  - a. **Date:**  
Record the date on which child was born (day begins at 00:00, ends at 23:59).
  - b. **Time:**  
Use a 24-hour clock with midnight coded as 00:00.
  
2. **Was the infant outborn?**  
  
**Code 'N'** if the infant was born within the walls of one of the designated hospitals of the perinatal center.  
  
**Code 'Y'** if the infant was born outside of a Network hospital and was admitted to a Network hospital within 2 weeks (14 days) of birth. (this should include anything outside of the Network center hospital (s); could include other hospital, home delivery, taxi, etc).  
  
**If YES, date admitted to NICU**
  - a. **Date:**  
Day begins at 00:00, ends at 23:59.
  
3. **Did the infant die ≤12 hours?**  
  
**IF YES, COMPLETE FORM NG03E.**

4. **Sex:**  
Record the stated sex of the infant. To score '3', ambiguous, there must be confirmation of ambiguous genitalia by either a genetics consult at time of birth or pathology report if infant expires.
5. **Ethnic Categories:**  
Code the mother's ethnicity as follows:  
**1= Hispanic or Latino:** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."  
**2= Not Hispanic or Latino:** None above.  
**3= Unknown or Not Reported:** A person not knowing or not reporting ethnicity.
6. **Racial Categories:**  
Code the mother's race as follows:  
**1= Black:** A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."  
**2= White:** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.  
**3= American Indian or Alaskan Native:** A person having origins in any of the original peoples of North, Central, or South America, and who maintains tribal affiliation or community attachment.  
**4= Asian:** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. (Note: Individuals from the Philippine Islands have been recorded as Pacific Islanders in previous data collection strategies.)  
**5= Native Hawaiian or Other Pacific Islander:** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.  
**6= More Than One Race:** A person having origins in multiple racial designations.  
**7= Unknown or Not Reported:** A person not knowing or not reporting Race
- a. If coding option 6, record all races indicated (optional).



**7. Gestational age in weeks and days:**

Record the best estimate of gestational age using the following hierarchy:

- 1) Best OB estimate/Obstetrical measures based on last menstrual period, obstetrical parameters, and/or early prenatal ultrasound as recorded in the maternal chart.
- 2) Best Neonatologist estimate/Neonatologist's estimate based on physical criteria, neurologic examination, combined physical and gestational age exam (Ballard or Dubowitz), or examination of the lens. In instances when the gestational age in days is not recorded, enter "0" in the days field.

**8. Apgar score - 1 minute:**

Use the official one minute Apgar score as assigned in the delivery room from delivery chart.

**9. Apgar score - 5 minute:**

Use the official five minute Apgar score recorded as above.

**10. Birth resuscitation/stabilization:**

Record 'Y' for support provided to the infant at the time of birth.

**a. Oxygen?**

Supplemental O<sub>2</sub> (FiO<sub>2</sub> > .21) delivered to the infant via face mask, hood, CPAP, or ET tube.

**b. Bagging and mask?**

Positive pressure ventilation (breathing) with face mask and (anesthesia) bag. This includes Neopuff.

**c. CPAP?**

Continuous positive airway pressure delivered by CPAP device or mask.

**d. Intubation?**

Insertion of a tube (even if transiently) into the trachea to allow positive pressure ventilation for breathing. If intubation was done for suctioning or to give surfactant and immediately removed it should not be included here.

**e. Chest compression?**

External pressure over central chest to contract heart.

**f. Epinephrine?**

Epinephrine delivered intravenously or intratracheally for resuscitation.

**11. Birth weight:**

The birth weight in grams of the infant as recorded in one of the following places on the chart in order of preference (an individual center may employ a different ordering if it is deemed more reliable):

- 1) On the labor and delivery record.
- 2) On the nursery admission record.
- 3) On the admission physical examination form.
- 4) The pathology report when an infant expires.

**12. Length:**

The length in centimeters, as recorded on the admission physical (within 72 hours of birth).

**13. Head circumference:**

The head circumference in centimeters as recorded (within 72 hours of birth):

- 1) On the admission physical exam form.
- 2) On the nursery admission record.
- 3) The pathology report if the infant died.

**14. Was cord blood gas done?**

Record 'Y' if a cord gas was obtained at the time of delivery.

Record pH and base deficit values as documented on the delivery room record in the maternal and/or infant chart. If more than one vessel was sampled, record results from umbilical artery sample.

**If Yes,**

**a. Cord pH (any vessel):**

**b. Base deficit (any vessel):**

**15. Was Infant's first temperature in the NICU within 60 minutes of birth?**

**If Yes,**

Record the first temperature obtained on the infant after resuscitation and stabilization provided the temperature was recorded within 60 minutes of birth. For centers who admit infants to a holding area or a delivery room stabilization area, record the first temperature taken in this location. This applies for inborn and outborn infants. Record the temperature in centigrade or fahrenheit.

**a. Date:**

**b. Time:**

**c. Record the source of the temperature as:**

**1= Rectal, 2= Axillary, 3= Skin**

## **Chapter 4**

# **Survey of Morbidity and Mortality - Outcome Data Collection**

### **4.0 Overview of Clinical Outcome Data Collection**

#### **4.1 Clinical Outcome - Forms NG03, NG03E and NG05**

The outcome data form NG03 (to be completed from the baby's chart through day 120, discharge, transfer or death, whichever comes first) was designed to summarize each baby's clinical course. For infants who die in 12 hours or less, the early death form NG03E is completed in lieu of the NG03, as there are many questions on the NG03 which do not apply to infants who die early. In addition, because an infant's values for some items on NG03 could change after 120 days of hospitalization, form NG05 was created. This late clinical outcome form contains a subset of the items on NG03 and should be completed only for infants hospitalized greater than 120 days, after they have died, have been discharged or have been transferred.

It is very important that form NG03 or form NG03E be coded and entered on in computer system as soon as possible after the baby's discharge, transfer, death or as soon as possible after day 120. Special attention should be paid to obtaining the chart quickly. For example, it may be feasible to intercept the chart before it leaves the NICU for Medical Records.

It should be noted that form NG03 or form NG03E should not be held back for coding or entry into the computer system by waiting for the autopsy report. If the autopsy result for cause of death is to be included, it may be entered on the computer at a later date.

There are several different situations in which the baby leaves the NICU; in each case an effort should be made to obtain as complete data as possible.

##### **4.1.1 Discharge from the NICU to Home**

This is the straightforward case: The first date the baby is discharged to home, the baby's clinical data are all obtainable from the medical record in the NICU. If the baby is readmitted to the NICU from home, no further data will be collected.

##### **4.1.2 Transfer to Another Location within the Center**

When the baby is transferred from the NICU to a step down unit, another floor, or even another hospital within the same clinical center, the coordinator is still

expected to keep track of the baby and complete form NG03 when the baby finally leaves the clinical center.

#### **4.1.3 Transfer to Another Hospital or to a Chronic Care Facility**

The Network Coordinator should attempt to find out the final outcome (death or discharge) for each baby that is transferred out of the clinical center to another hospital. If an infant is transferred back within 7 days, do not count this as a discharge but rather as a continuous admission.

#### **4.1.4 Death**

The cause of death is to be recorded (descriptions and codes are listed in Appendix C). If possible, the coordinator should also try to ascertain cause of death for those babies who are transferred out to another hospital and die there.

### **NG03: GENERIC CLINICAL OUTCOME FORM**

#### **4.3 Coding Instructions for Form NG03**

##### **4.3.1 Heading**

- **Mother's Initials:**  
The Mother's normal initials (first, middle and last). If there is no middle initial, record the two initials. **This information is optional.**
- **Birth Number:**  
For a single birth or first born of a multiple birth enter '1'. This code establishes a Family ID in the NICU. For the second born code '2' etc. It does not necessarily have to conform to strict birth order from a multiple birth, but must be kept consistent for each baby.
- **Network Number:** The Network number is made up of a four digit Family (Pregnancy) Number plus the Birth Order Number. The Network Number will now be 5 digits.

When the patient has been entered on the database for the first time, the computer assigns this unique identifier.

#### 4.3.2 Section A - STATUS

1. **Status of infant at time of completion of form:**
  - **Discharged to home**  
Record '1' if infant was discharged to home.
  - **Still in hospital at 120 days**  
Record '2' if infant is still in the hospital at 120 days.
  - **Transferred to another hospital**  
Record '3' if infant was transferred to another hospital without returning to a Network hospital within 7 days.
  - **Transferred to chronic care facility**  
Record '4' if infant was transferred to a chronic care facility without returning in 7 days.
  - **Death**  
Record '5' if the infant died.
2. **Date of status:**  
Give date at status.
3. **Weight at status:**  
Weight in grams on day of status (preferably), or within 7 days.
4. **Length at status:**  
Length in centimeters on day of status (preferably), or within 7 days.
5. **Head circumference at status:**  
Head circumference in centimeters on day of status (preferably), or within 7 days.

#### 4.3.3 Section B - PULMONARY

1. **Respiratory Distress:**
  - a. **Demonstrated clinical features of respiratory distress within the first 24 hours?**  
Record 'Y' if infant showed signs of grunting, flaring, retracting, paradoxical breathing, cyanosis and/or supplemental oxygen requirement within the first 24 hours.



#### 4.3.4 Section C - CARDIAC

1. **Patent ductus arteriosus (PDA)?**

Record 'Y' if clinical evidence of left to right PDA shunt documented by continuous murmur, hyperdynamic precordium, bounding pulses, wide pulse pressure, congestive heart failure, increased pulmonary vasculature or cardiomegaly by CXR, and/or increased oxygen requirement or ECHO evidence of PDA with documentation of left to right ductal shunting.

**If YES Treatment?**

a. **Indomethacin?**

**If YES, total number of courses:**

A complete course is 3 doses. Some patients receive less than 3 doses because of adverse drug effects, decrease urine output, increased BUN/Cr, decreased platelets, etc. The intent is to give a complete course of 3 doses. If an infant received a partial course and then a second partial or complete course, this should be counted as 2 courses.

b. **Ibuprofen?**

**If YES, total number of courses:**

A complete course is 3 doses. Some patients receive less than 3 doses because of adverse drug effects, decrease urine output, increased BUN/Cr, decreased platelets, etc. The intent is to give a complete course of 3 doses. If an infant received a partial course and then a second partial or complete course, this should be counted as 2 courses.

c. **Surgery?**

Record 'Y' if surgical ligation was required to close the PDA.

#### 4.3.5 Section D - NEUROLOGIC

1. **Was indomethacin given within the first 24 hours of life for any prophylaxis?**

If Yes,

- a. Date
- b. Time

2. **Were there seizures treated with an anti-convulsant for > 72 hours?**

Record 'Y' if seizures were treated with anti-convulsant for more than 72 hours.

3. **Were any cranial sonograms done within 28 days of birth?**

Record 'Y' if cranial sonograms were done within the first 28 days of life.

**IF NO, GO TO QUESTION D5**

a. **If YES, Were all studies without evidence of intracranial hemorrhage, peri-ventricular leukomalacia or ventriculomegaly?**

**IF YES, GO TO QUESTION D5**

If No, continue with question 3b.

b. **Date of sonogram with most severe findings:**

Record the date of the **cranial sonogram** with the most **severe findings** within the first 28 days. Determination of the most severe findings should be based on the following rank order from least severe to most severe. Least severe is blood/echo-density in the germinal matrix/sub-ependymal area followed by blood echo-density in the ventricle, ventricular dilatation and blood/echo-density in the parenchyma is the most severe. **Use the earliest scan of an infant in whom multiple scans have the same most severe findings.**

**PLEASE NOTE:** Document all the findings on the cranial imaging identified above. For all imaging studies (questions D3, D4 and D6) only record **definite** findings and do not record those that are interpreted as uncertain, probable or possible. **If it is unclear how to record the results of an image, discuss findings with the PI or his designee.** The documentation for items 3c-3g **does not** correspond to a grade of hemorrhage. Items 3c-3g should be considered independent of each other and therefore an infant may have more than one item recorded. For items d-g, indicate side of involvement by marking Y under right (R), left (L), or both.

c. **Blood/echodensity in germinal matrix/subependymal area?**

Record Y if blood/echo-density in the germinal matrix/sub-ependymal area is documented. **When blood echo-density is seen in the ventricle but NOT in the germinal matrix, record 'N' for germinal matrix hemorrhage.**



- d. Blood/echodensity in the ventricle?**  
Record Y if blood/echo-density in the ventricle is documented. This finding should be recorded independent of the size of the ventricle. Indicate side of involvement.
- e. Ventricular size enlarged with concurrent or prior blood in the ventricles?**  
Record Y if ventricular enlargement occurs in association with blood/echo-density in the ventricular system on any scan. Indicate side of involvement, right, left or both.
- f. Ventricular size enlarged without concurrent or prior blood in the ventricles?**  
Record Y if ventricular enlargement occurs without blood/echo-density in the ventricular system on any scans. Indicate side of involvement, right, left or both.
- g. Blood/echodensity in the parenchyma?**  
Record Y if blood/echo-density in the parenchyma is documented. Intra-parenchymal echo-densities may or may not be accompanied by blood/echo-density in the ventricle. Intra-parenchymal echo-density differs from increased echogenicity. Indicate side of involvement, left, right or both.

**NOTE:** For sonographic reports that are limited to a grade of ICH (usually I-IV) without a description of the findings record as follows:

Grade I: record as 3c

Grade II: record as 3d

Grade III: record as 3d and 3e

Grade IV: record as 3g

For sonographic reports that are limited to isolated ventricular dilatation without other associated findings (**no blood/echo-density in ventricles**) record as 3f.

For sonographic reports that contain both a grade of ICH and a description, prioritize the descriptive findings over the assigned grade if the two pieces of information are not consistent. **Confirm the latter prioritization with the PI.**

- 4. Cystic area(s) in the parenchyma within 28 days?**  
If Yes, go to Question 4a.  
If No, go to Question 5.

**a. Cystic Periventricular leukomalacia (cPVL)?**

Record as cPVL when this diagnosis is used. In the absence of a diagnosis of cystic PVL on sonographic reports, use cPVL when cysts (echo-lucencies) are described in the white matter around the ventricle. These cysts are most commonly dorsal and lateral to the external angle of the lateral ventricle. Echo-lucencies may be single or multiple, may be bilateral or unilateral, may vary in size, and may be diffuse or focal in distribution along the front to back axis of the head. **If PVL is reported and cysts or echolucencies within the brain parenchyma are not specified, review the scan with the PI or designee of the PI to verify the presence of this finding.** Indicate side of involvement by marking Y under right (R), left (L), or both.

**b. Porencephalic cyst?**

Porencephalic cyst will be used to lump all cystic disease other than cystic PVL. In the absence of a diagnosis on sonographic reports, use porencephalic cyst when there is a single unitary cyst within the cerebral hemisphere that may or may not communicate with the lateral ventricle. These cysts may be congenital and can be present on sonograms shortly after birth, or may evolve over time at the site of a previous parenchymal blood/echo-density (3g from above). These cysts may also be termed post-hemorrhagic cysts, or if multiple, multi-cystic encephalomalacia. Do not include subependymal cysts or choroids plexus cysts as part of this category. The latter two are minor cysts that will not be recorded. Indicate side of involvement by marking Y under right (R), left (L), or both.

**5. Were any cranial imaging studies performed after 28 days of birth?**

Record 'Y' if any cranial imaging was done after 28 days of life.

**If No, Go to Section E.**

**6. Cranial imaging study performed closest to 36 weeks postmenstrual age and after 28 days of birth:**

**6a. Type of imaging**

Code Type: (1=MRI, 2= Sonogram, 3=CT scan). If the infant has more than one imaging modality within 7 days of the 36 week postmenstrual age date, record results based on the following hierarchy (highest to lowest) of MRI, sonogram, CT scan.

**6b. Date of imaging**

Record the date of the imaging study closest to 36 weeks PCA.

**c. Normal Study?**

Record 'Y' if the results of the cranial imaging closest to 36 weeks postmenstrual age was reported to be normal.

*If No,*

**d. Ventricle size enlarged?**

Record 'Y' if ventricular size was documented to be enlarged. Indicate side of involvement if enlarged.

**e. Cystic Periventricular leukomalacia (cPVL):** Record as cPVL when this diagnosis is used. In the absence of a diagnosis of cystic PVL on sonographic reports, use cPVL when cysts (echo-lucencies) are described in the white matter around the ventricle. These cysts are most commonly dorsal and lateral to the external angle of the lateral ventricle. Echo-lucencies may be single or multiple, may be bilateral or unilateral, may vary in size, and may be diffuse or focal in distribution along the front to back axis of the head. **If PVL is reported and cysts or echolucencies within the brain parenchyma are not specified, review the scan with the PI or designee of the PI to verify the presence of this finding.** Indicate side of involvement by marking Y under right (R), left (L), or both.

**f. Porencephalic cyst?**

Porencephalic cyst will be used to lump all cystic disease other than cystic PVL. In the absence of a diagnosis on sonographic reports, use porencephalic cyst when there is a single unitary cyst within the cerebral hemisphere that may or may not communicate with the lateral ventricle. These cysts may be congenital and can be present on sonograms shortly after birth, or may evolve over time at the site of a previous parenchymal blood/echo-density (3g from above). These cysts may also be termed post-hemorrhagic cysts, or if more than one, multi-cystic encephalomalacia. Do not include subependymal cysts or choroids plexus cysts as part of this category. The latter two are minor cysts that will not be recorded. Indicate side of involvement by marking Y under right (R), left (L), or both

#### 4.3.6 Section E - INFECTIONS

Organism codes for this section are listed in Appendix A. If the organism is not included in the list, code as '010' (to be assigned), and notify the DCC that a new code should be assigned. The DCC will issue new lists periodically.

**1. Early onset septicemia/bacteremia ( $\leq 72$  hrs)?**

Record 'Y' if there was a positive blood culture drawn within the first 72 hours.

**a. If YES, organism code(s):**

Record the code(s) of organism(s) identified. If there were more than two organisms identified, list the organisms felt to be most important.

**2. Did the infant receive antibiotics for  $\geq 5$  days, starting within the first 72 hours?**

Code 'Y' if the infant was treated with antibiotics for five or more days beginning by 72 hours. Include cases where the infant died before an intended therapy of five or more days was completed.

**3. Number of episodes of late onset blood culture negative clinical infection ( $> 72$  hours to status) treated with antibiotics for  $\geq 5$  days?**

An episode is defined as a blood culture obtained and antibiotics started. Record the number of culture negative episodes, occurring after 72 hours, treated with antibiotics for five or more days. Include cases where the infant died before an intended therapy of five or more days was completed.

**4. Late onset culture positive septicemia/bacteremia ( $> 72$  hrs)?**

Record 'Y' if there was a positive culture of blood, obtained in the presence of compatible clinical signs of septicemia, occurring after 72 hours.

**If YES,**

**a. Number of episodes between day 3 and status that were treated with antibiotics for  $\geq 5$  days:**

Record the number of episodes of culture positive septicemia/bacteremia, occurring after 72 hours, treated with antibiotics for  $\geq 5$  days. Include positive episodes in which the infant dies before an intended therapy of five or more days is completed. A new organism cultured at any time is considered an additional episode. If the same bacterial organism is cultured, after

10 days of appropriate antibiotic therapy, this is considered a second episode.

- b. **Organism code(s) and date of first positive culture for each of episodes for which the infant was treated with antibiotics for  $\geq$  5 days:**

Record the date and organism code(s) from positive blood culture(s) for which the infant was treated, or where there was intent to treat, for  $\geq$  5 days. If more than 3 organisms are identified, list the 3 organisms felt to be the most important. If the same organism is isolated under the circumstances described in a. (above), the code is repeated.

**\*For clarification on coding refer to Appendix I.**

**5. Meningitis?**

Record 'Y' if there was a positive cerebrospinal fluid (CSF) culture and treatment (or intent to treat) with antibiotics or antifungals for 7 or more days.

- a. **If YES, organism code(s):**  
Record the date and code(s) of organism(s) identified. If there were more than three organisms identified, list the three organisms felt to be most important

Use Appendix A to obtain code(s) for identified organism(s)

**4.3.7 Section F – GASTROINTESTINAL**

1. **Did weight ever fall below the birth weight during the first 10 days?**

Record 'Y' if the infant's weight recorded was below his/her birthweight.

If Yes,

- a. **Lowest weight in the first 10 days.**

Record the lowest weight recorded in the first 10 days.

- b. **Date of lowest weight in the first 10 days.**

Record the date of the lowest recorded weight for the infant during the first 10 days.

- c. **Was birth weight regained?**

If Yes,

- d. **Date birth weight first regained.**

Record the date when the infant first regained his/her birth weight.

**2. Did the baby receive parenteral alimentation?**

**If YES,**

**a. Date of first parenteral alimentation:**

**b. Parenteral alimentation, total number of days:**

Record the number of days in which the baby received parenteral alimentation including amino acids or lipid solution at some point during the day.

**3. Did the baby receive enteral feeds?**

**If YES,**

Record 'Y' if the infant was fed enterally. Feeds consist of formula or breast milk. Sterile water is not considered enteral feeding.

**a. Date of first enteral feed:**

**b. Did enteral feeds reach 120 ml/kg/day?**

Calculate using the current weight.

**If YES, date first achieved?**

Record the date first achieved.

**c. Did the baby receive any breast milk in the first 28 days?**

Record 'Y' if medical record indicates that the infant received any breast milk in the first 28 days.

**1) If YES, number of days baby received any breast milk in the first 28 days.**

**4. Proven necrotizing enterocolitis (NEC) Diagnosis:**

Code the correct response using the Modified Bell's Staging Criteria for NEC in Appendix G. Also refer to Appendix I.

- Code '0' (Absent/Suspect) when there is no necrotizing enterocolitis present or in the presence Bell's Stage IA or IB.
- Code '2' (Proved, no surgery, Stages IIA, IIB or IIIA) or '3' (Proved, surgery, Stage IIIB) as appropriate.

a. If proven NEC, record date of first episode.

**5. Spontaneous gastrointestinal perforation without proven NEC?**

Record 'Y' if the infant has a spontaneous gastrointestinal perforation separate from necrotizing enterocolitis.

**a. If YES, Date of the first spontaneous gastrointestinal perforation:**

Record the date on which the first spontaneous gastrointestinal perforation occurred.

**6. Did the infant have GI surgery that resulted in short gut?**

Record 'Y' if the infant had surgery involving the GI that resulted in the diagnosis of short gut which includes malabsorption, severe diarrhea, gastric hypersecretion, secondary bacterial overgrowth and failure to thrive. Record surgical procedure in Section J.

**4.3.8 Section G - HEARING**

**1. Was a hearing screen performed?**

Record 'Y' if a hearing screen was performed to evaluate the infant's hearing while in the hospital.

**a. If 'Y', record the type of hearing screen protocol used:**

1= OAE (otoacoustic emissions)

2= AABR (automated auditory brainstem responses)

3= ABR (auditory brainstem responses)

4= OAE + AABR

5= other protocol

**b. Final screen results before status:**

Record for each ear the results of the final screen before discharge as noted in hospital chart:

1= pass

2= fail

3= incomplete

**c. If a failed screen in either ear, was a diagnostic ABR done prior to status?**

If 'Y', record the results for each ear. If no result was recorded for either ear, enter \*

1= pass

2= fail

3= incomplete

#### 4.3.9 Section H – OPHTHALMOLOGIC

For your use, Appendix D contains a Retinopathy of Prematurity (ROP) Diagram.

1. **Was an exam performed for Retinopathy of Prematurity (ROP)?**  
Review the medical record to determine if an examination was performed for ROP and flag all examinations found in order to answer the remainder of the questions. Record 'Y' if an ophthalmologist examined the infant's eyes for ROP. The exams usually begin at 4 to 6 weeks and continue until the retinal vasculature is mature.

**If Yes,**

- a. **Was ROP diagnosed in either eye?**  
Code 'Y' if ROP diagnosed prior to 'status' (any stage) in either eye in any of the examinations.

**If Yes,**

- 1) ~~If yes,~~ **Did it reach stage 3 or worse in either eye?**

Code 'Y' if it reached stage 3 or worse in either eye.

- 2) **Did plus disease develop in either eye?**

Plus disease is noted by the ophthalmologist separately from the stage and zone. It is recorded as present or not. Sometimes it is referred to as "posterior pole vascular dilation and tortuosity". Usually if this is present on any examination, it is close to the worst ROP time for the infant. Record 'Y' if plus disease was observed on the worst exam recorded above for either eye. When the posterior veins of the retina are enlarged and the arterioles tortuous, then the designation "plus" is added to the ROP stage number. For example, Stage 2 with plus disease is sometimes written 2+.

- b. **Intervention therapies:**
  1. **Was retinal ablation performed in either eye (laser and/or cryotherapy)?**
  2. **Was any scleral buckle or vitrectomy performed in either eye?**

2. **At the time of reaching status, indicate the most appropriate description as described below:**



**1= Determined, favorable in both eyes**

EACH eye met one of the following criteria

- Vessels mature (aka fully vascularized)
- Vessels in zone III for two consecutive examinations
- Acute ROP of stage 1 or 2 in zone III for two consecutive examinations
- ROP in zone II or zone III but determined to be clearly regressing

**2= Determined, severe ROP in either eye**

Severe: EITHER eye met one of the following criteria

- Received surgery for ROP
- Retinal detachment from ROP

**3= Undetermined ROP status in either eye (and neither had 'severe ROP')**

EITHER eye met one of the following criteria:

- Immature vessels in zone I or zone II
- Immature vessels reaching zone III for only 1 consecutive examination
- Stage 1 or 2 ROP in zone III for only 1 consecutive examination
- Stage 3 ROP in zone III
- ROP in zone I or zone II
- plus disease

**4.3.10 Section I - SYNDROMES**

**1. Syndromes and/or major malformations?**

Record 'Y' if any syndromes and/or major malformations were observed, including Downs syndrome, chromosomal abnormalities, and other syndromes with multi-organ involvement.

**a. If YES, code:**

Record the code(s) of the syndromes and/or major malformations that were observed. The Syndrome/Major malformation codes are listed in Appendix H: Birth Defect Codes.

**i) If a syndrome is coded 699, specify:**

Write the specific name of the syndrome indicated.

**4.3.11 Section J - MAJOR SURGERY**

1. **Other major surgery not covered in previous sections?**

Record 'Y' if any surgery not mentioned in previous section occurred prior or on day 120.

a. **If YES, Code:**

See Appendix E for major surgery codes.

i) **If a major surgery is coded 999, specify:**

Write the specific name of the surgery performed.

**4.3.12 Section K - 36 WEEK INFORMATION**

If the infant has not been discharged by 36 weeks gestational age then record the following information at 36 weeks gestational age.

1. **Status at 36 weeks:**

- **Discharged to home**  
Record '1' if infant was discharged to home.
- **Still in hospital at 36 weeks Gestational Age**  
Record '2' if infant is still in the hospital at 36 weeks.
- **Transferred to another hospital**  
Record '3' if infant was transferred to another hospital without returning in 7 days.
- **Death**  
Record '5' if the infant died.

**If 2 (In Hospital):**

a. **Date of 36 week measurement:**

Record the actual date that this measurement was taken.

**NOTE: The measurements may not be taken on the same calendar day but all should be within the window at 36 weeks ( $\pm 7$  days). If all the measurements are not taken on the same day, then the date recorded should be that of the weight at 36 weeks  $\pm 7$  days.**

b. **Weight:**

Record the weight in grams at 36 weeks (+-7 days) gestational age.

c. **Length:**

Record the length in centimeters at 36 weeks (+- 7 days) gestational age.

- d. **Head circumference:**  
Record the head circumference in centimeters at 36 weeks (+- 7 days) gestational age.

#### 4.3.13 Section L - FEEDING STATUS

Complete this section if status of infant at time of completion of this form is Code '1' discharged to home.

1. **Type of nutrition at discharge to home (*Do not complete for transfer patients*). Complete for all that apply.**

**Use following codes:**

1= Breastmilk (Mother's milk, donor milk, fortified or not).

2= Formula

3= TPN

2. **If enteral mode. Use following codes and code all that apply:**

1= Breast

2= Bottle

3= NG/NJ tube

4= Gastrostomy tube

9= Unknown

#### 4.3.14 Section M - TRANSFER

This section refers to when the infant is sent to another hospital or chronic care facility without returning in 7 days.

1. **Date of transfer:**  
Record date of transfer.
2. **Final outcome:**  
Code '1' if the baby died in hospital (informed via telephone contact or letter from the other hospital), Code '2' if the baby was discharged to home, Code '6' if the baby is still in hospital one year post natal age.
- a. **If discharged to home, final weight at discharge:**  
Enter final weight at discharge in grams.

#### 4.3.15 Section N - DISCHARGE ALIVE

This refers to when the baby is finally discharged home.

1. **Date of discharge to home:**  
Give date of discharge.

2. **Discharged home on continuous oxygen?**  
Code 'Y' if discharged home on continuous oxygen.
3. **Discharged home on any of the following medications?**  
Record 'Y' if infant is discharged home on any medication(s) listed below. If 'Y', record which medications the infant was to be receiving after discharge.
  - a. Diuretics including but not limited to furosemide, spironolactone, chlorothiazide, or hydrochlorothiazide
  - b. Bronchodilators including but not limited to albuterol.
  - c. Anticonvulsants including but not limited to Phenobarbital, dilantin, valproic acid, depakane, carbamapazine
  - d. Antireflux medications including but not limited to ranitidine, famotidine, metaclopramide

#### 4.3.16 Section O - DEATH

1. **Date of death:**
  - a. **Time of death:**
2. **Autopsy performed?**  
If an autopsy is performed the cause of death should not be coded until the results of the autopsy are known.
3. **Contributory cause of death:**  
This should be the underlying, proximate disease which initiated the train of events leading to the cause of death. This underlying cause must be (1) etiologically specific and (2) antecedent to all other causes with respect to time and pathologic relationship. Without the underlying cause, death would not have occurred. The cause of death should be based on both clinical evidence and autopsy findings. In the absence of an autopsy, the clinical evidence will be used. Only one of the options is to be coded, after consultation with the PI or alternate PI.  
  
A description of the causes of death is listed in Appendix C.
4. **If contributory cause of death is code 10 (Congenital malformation) or code 90 (Other), specify:**

**5 Was respiratory support withheld or withdrawn at any time after the first 24 hours and prior to death?**

Record 'Y' if a decision by made by the attending physician after discussion with the family to withhold or withdraw usual respiratory support therapies due to the extreme prematurity, severity of illness or congenital malformation with the expectation that the infant will expire imminently.

## **NG03E: GENERIC EARLY DEATH FORM**

### **4.4 Coding Instructions for Form NG03E**

#### **4.4.1 Heading**

- **Mother's Initials:**  
The Mother's normal initials (first, middle and last). If there is **no** middle initial, record the two initials. **This information is optional.**
- **Birth Number:**  
For a single birth or first born of a multiple birth enter '1'. This code establishes a Family ID in the NICU. For the second born code '2' etc. It does not necessarily have to conform to strict birth order from a multiple birth, but must be kept consistent for each baby.
- **Network Number:** The Network number is made up of a four digit Family (Pregnancy) Number plus the Birth Order Number. Therefore the Network Number is 5 digits.

When the patient has been entered on the database for the first time, the computer assigns this unique identifier.

#### **4.4.2 NG03E Form Questions**

To be completed if the infant died at < 12 hours of age.

- 1. Location of death:**  
Code '1' if infant died in delivery room. Code '2' if infant died in the NICU. If the infant was treated in the NICU and died in the mother's room, code '2' NICU.
  
- 2. Received ventilator support?**  
Include all forms of support with a ventilator after initial resuscitation.  
  
**If YES, duration of ventilator support (to the nearest 1/4 hour)**  
Record duration in hours and minutes.
  - a. **Hours:**
  
  - b. **Minutes:**
  
- 3. Received intravenous fluid therapy?**
  
- 4. Medical therapy initiated**
  - a. **Antibiotics?**
  
  - b. **Surfactant replacement therapy?**
  
  - c. **Pressor support?**  
This is to include Dopamine, Dobutamine, Epinephrine and Isuprel.
  
  - d. **Volume support?**  
This is to include albumin 5% or 20%, blood transfusion, fresh frozen plasma, Plasmanate and Ringers Lactate.
  
- 5. Autopsy performed?**  
If an autopsy is performed the cause of death should not be coded until the results of the autopsy are known.
  
- 6. Was respiratory support withheld or withdrawn at any time prior to death?**  
Record 'Y' if a decision was made by the attending physician after discussion with the family, to withhold or withdraw usual respiratory therapies due to extreme prematurity, severity of illness or congenital malformation with the expectation that the infant will expire imminently.
  
- 7. Contributory cause of death:**  
This should be the underlying, proximate disease which initiated the train of events leading to the cause of death. This underlying

cause must be (1) etiologically specific and (2) antecedent to all other causes with respect to time and pathologic relationship. Without the underlying cause, death would not have occurred. The cause of death should be based on both clinical evidence and autopsy findings. In the absence of an autopsy, the clinical evidence will be used. Only one of options is to be coded, after consultation with the PI or alternate PI.

A description of the causes of death is listed in Appendix C.

8. **If contributory cause of death is code 10 (Congenital malformation) or code 90 (Other), specify:**

## **NG05: LATE CLINICAL OUTCOME FORM**

### **4.5 Coding Instructions for Form NG05**

The NG05 is to be completed for infants who are hospitalized greater than 120 days, after the infant dies, is discharged, is transferred, or reaches one year post-natal age. When completing questions on the NG05 consider only diagnoses and treatments made after day 120.

#### **4.5.1 Section A STATUS**

1. **Status of infant at time of completion of form:**
  - **Discharged to home**  
Record '1' if infant was discharged to home.
  - **Transferred to another hospital**  
Record '3' if infant was transferred to another hospital without returning in 7 days.
  - **Transferred to chronic care facility**  
Record '4' if infant was transferred to a chronic care facility without returning in 7 days.
  - **Death**  
Record '5' if the infant died.
  - **Remains in hospital at one year**  
Record '6' if the infant is still in hospital after one year post-natal age.

2. **Date of status:**  
Give date at status.
3. **Weight at status:**  
Weight in grams at status (preferably), or within 7 days.
4. **Length at status:**  
Length in centimeters at status (preferably), or within 7 days.
5. **Head circumference at status:**  
Head circumference in centimeters at status (preferably), or within 7 days.

#### 4.5.2 Section B - EXTENDED STAY INFORMATION

1. **What problem (s) caused hospitalization greater than 120 days:**  
Answer 'Y' to all that apply.
  - a. Pulmonary?
  - b. Cardiac?
  - c. Neurologic?
  - d. Gastrointestinal?
  - e. Multiple Malformations?
  - f. Social
  - g. Ophthalmologic?
  - h. Other? (If Yes, specify)
2. **After reaching status, did either eye receive surgery for ROP?**
  - a. **If Yes, List all surgeries done for either eye (Use codes below):**  
1= Laser treatment  
2= Cryotherapy  
3= Scleral buckle  
4= Vitrectomy  
5 = Other (specify for either eye)
3. **Was a hearing screen performed after 120 days?**  
Record 'Y' if a hearing screen was performed to evaluate the infant's hearing while in the hospital.
  - a. If 'Y', record the type of hearing protocol used:  
1= OAE (otoacoustic emissions)  
2= AABR (automated auditory brainstem responses)  
3= ABR (auditory brainstem responses)



4= OAE + AABR

5= other protocol

b. Final screen results before discharge:

Record for each ear the results of the final screen before discharge as noted in hospital chart:

1= pass

2= fail

3= incomplete

c. If a failed screen in either ear, was a diagnostic ABR done prior to discharge?

If 'Y', record the results for each ear. If no result was recorded for either ear, enter \*

#### 4.5.3 Section C - TRANSFER

This section refers to when the infant is sent to another hospital or chronic care facility without returning in 7 days.

1. **Date of transfer:**

Give date of transfer.

2. **Transferred on oxygen?**

3. **Transferred on ventilator and/or CPAP?**

4. **Final outcome:**

Code '1' if the baby died in hospital (informed via telephone contact or letter from the other hospital). Code '2' if the baby was discharged to home. Code '3' if the baby remains in the hospital at one year of age.

a. **If Discharged to home, final weight:**

#### 4.5.4 Section D - DISCHARGE ALIVE

This refers to when the baby is finally discharged home.

1. **Date of discharge to home:**

Give date of discharge.

2. **Discharged home on continuous oxygen?**  
Code 'Y' if discharged home on continuous oxygen.
3. **Discharged home on any of the following medications?**  
Record 'Y' if infant is discharged home on any medication(s) listed below. If 'Y', record which medications the infant was to be receiving after discharge.
  - b. **Diuretics-** including but not limited to furosemide, spironolactone, chlorothiazide, or hydrochlorothiazide
  - b. **Bronchodilators-** including but not limited to albuterol.
  - c. **Anticonvulsants** including but not limited to phenobarbital, dilantin, valproic acid, depakane, carbamapazine
  - d. **Antireflux medications-** including but not limited to ranitidine, famotidine, metaclopramide

#### 4.5.5 Section E - DEATH

1. **Date of death:**
2. **Autopsy performed?**  
If an autopsy is performed, the cause of death should not be coded until the results of the autopsy are known.
3. **Contributory cause of death:**  
This should be the underlying, proximate disease which initiated the train of events leading to the cause of death. This underlying cause must be (1) etiologically specific and (2) antecedent to all other causes with respect to time and pathologic relationship. Without the underlying cause, death would not have occurred. The cause of death should be based on both clinical evidence and autopsy findings. In the absence of an autopsy, the clinical evidence will be used. Only one of the options is to be coded, after consultation with the PI or alternate PI.

A description of the causes of death is listed in Appendix C.

4. **If cause of death is code 10 (Congenital malformation) or code 90 (Other), specify:**

## Chapter 5

### THE RESPIRATORY SUPPORT DATA

#### 5.1 Respiratory Support Form NG07:

This form should be completed for all infants who have survived for  $\geq 12$  hours who reach Status (death, discharge, transfer or 120 days). Document the support the infant received during the hospitalization at the time points noted. If infants survived  $\geq 12$  hours but death occurred  $< 24$  hours, fill in data in Status column only.

The respiratory support box collects respiratory data in two ways:

**A) By SNAPSHOT-** recording the respiratory support at exactly 24 hours and highest level of support on day of 36 weeks postmenstrual age. If the infant reaches Status (death, discharge, transfer) before any time point(s), no data is entered for the missed time point(s).

**B) by CUMULATIVE DATA-** recording the total number of days for each type of support (across a row) at each time point listed (day 3, 7, 14, 28, 36 wk and Status) cumulative over the hospitalization. If the infant reaches Status (death, discharge, transfer) before any time point(s), no data is entered for the missed time point(s).

#### Section A- SNAPSHOT DATA

At 24 hours from birth:

For questions #1-4, record 'Y' for the type of support the infant is receiving at exactly 24 hours from birth. If the infant is not receiving the type of support, record 'N'.

Question #6 and #7- ONLY ONE QUESTION WILL BE ANSWERED.

Question #6- record the amount of oxygen the infant is receiving at exactly 24 hours from birth by ventilation (any mode), CPAP, nasal SIMV, Hood or isolette. If the infant is in room air record the  $FiO_2 = .21$ .

**OR**

Question #7- record 'Y' if the infant is receiving supplemental oxygen ( $FiO_2 > .21$ ) by nasal cannula (any flow and oxygen concentration) at exactly 24 hours from birth.

Question #8- if the amount of oxygen in question #6 is recorded as  $.21$ , record 'Y' if the infant is receiving room air ( $FiO_2 = .21$ ) by nasal cannula, CPAP or ventilation (any mode). Otherwise record 'N'.

**At 36 weeks postmenstrual age:**

Questions #1-4- record 'Y' for the highest type of support the infant is receiving for the day of 36 weeks postmenstrual age (i.e. if the infant was receiving conventional ventilation (CV) and high frequency ventilation (HFV) on the day of 36 week postmenstrual age, count only the HFV for that day). The hierarchy for support will be HFV as highest, CV as next, nasal SIMV next, then CPAP as lowest type of support.

Question #6 and #7- ONLY ONE QUESTION WILL BE ANSWERED.

Question #6- record the highest amount of oxygen the infant is receiving on the day of 36 weeks postmenstrual age. by ventilation (any mode), CPAP, nasal SIMV, Hood or isolette. If the infant is in room air record the  $FiO_2 = .21$ .

**OR**

Question #7- record 'Y' if the infant is receiving supplemental oxygen ( $FiO_2 > .21$ ) by nasal cannula (any flow and oxygen concentration) on the day of 36 weeks postmenstrual age.

Question #8- if the amount of oxygen in question #6 is recorded as .21, record 'Y' if the infant is receiving room air ( $FiO_2 = .21$ ) by nasal cannula, CPAP or ventilation (any mode). Otherwise record 'N'. If in section 'A', Snapshot @36 weeks, questions 1 - 4 or 7 or 8 are answered "Yes" or in question 6  $FiO_2 > .21\%$ , complete the PHY01 form.

**Section B- CUMULATIVE DATA**

Questions #1-5- For the columns Day 3 through STATUS, record the cumulative number of days the infants has received each type of support. The cumulative data will be calculated from birth (day of life 1) to Day 3, birth to Day 7, birth to Day 14, birth to Day 28, birth to day of 36 weeks postmenstrual age and birth to STATUS.

For each day the infant is in the hospital from birth, count only the highest type of respiratory support (including HFV, CV, Nasal SIMV and CPAP) for that day, i.e. if the infant was receiving conventional ventilation (CV) and high frequency ventilation (HFV) on the same calendar day, count only the HFV for that day. The hierarchy for respiratory support will be HFV as highest, CV as next, Nasal SIMV next, then CPAP as lowest type of support.

The last entry is STATUS which will document the total number of days of HFV, CV (all modes of conventional ventilation including IMV, SIMV, and/or assist control where the infant has an endotracheal tube in place), Nasal SIMV (via nasal prong or cannula), CPAP (via nasal prongs or cannula) and supplemental oxygen (delivered by any method including ventilator, CPAP, hood, isolette, cannula, or vapotherm).

Question #6 and #7- ONLY ONE QUESTION WILL BE ANSWERED

Question #6- Record the highest  $FiO_2$  for infants who are receiving oxygen (delivered by HFV, CV, Nasal SIMV, CPAP, hood or isolette) the infant has

received on Day 3, Day 7, Day 14, Day 28, on day of 36 weeks postmenstrual age and on day of STATUS. When determining the highest FiO<sub>2</sub> for the day, disregard any temporary increases in FiO<sub>2</sub> for desaturation episodes, apnea, bradycardia or procedures, where the infant returns to his/her previous FiO<sub>2</sub> in a reasonable amount of time (< 2 hours). DO NOT include supplemental oxygen given only with feedings.

**OR**

Question#7- record 'Y' if the infant is receiving supplemental oxygen (FiO<sub>2</sub> >.21) by nasal cannula (any flow and oxygen concentration) on Day 3, Day 7, Day 14, Day 28, on day of 36 weeks postmenstrual age and on day of STATUS. Supplemental oxygen by Vapotherm is counted here.

Question #8- if the amount of oxygen in question #6 is recorded as .21, record 'Y' if the infant is receiving room air (FiO<sub>2</sub>= .21) by nasal cannula, CPAP or ventilation (any mode). Otherwise record 'N'.

**NOTE: Questions 6, 7 and 8 in Section B @36 weeks postmenstrual age will not be answered because this section is already recorded in Section A @ 36 weeks postmenstrual age.**

## Chapter 6

### Revisions/Additions to the GDB

#### 6.0 Overview

It is recognized that changes (additions, deletions, revisions) to the GDB will be necessary periodically. Such changes may be: 1) permanent changes to the core GDB; or 2) time-limited data collection for studies which relate to areas of special interest. All proposed changes to the GDB must undergo thorough, prospective and formal review to determine whether the proposed changes are appropriate and acceptable.

The core GDB is a limited data set which represents important/essential information (which is expected to change over time) for all VLBW infants. The core GDB is not intended to include detailed data on areas of special interest in the VLBW population. Such data, in sufficient detail to provide meaningful information, can be collected as an addendum to the core GDB after appropriate approval.

It is the understanding of the GDB Subcommittee that areas of special interest generally lend themselves to data collection for a finite period of time; i.e. special interest data collection forms are not considered part of the core GDB. The process for proposing changes to the GDB, either permanent or temporary, is described in Section 6.1

#### 6.1 Process of Proposing Revisions/Additions to the GDB

All proposed changes to the GDB must be submitted as a formal proposal to the Protocol Review Subcommittee (PR Subcommittee).

The Chair of the PR Subcommittee will determine whether the proposal is acceptable (contains all information required for review as identified by policies established by the Protocol Review Subcommittee). The Chair will also determine whether the proposal requires full review by the PR Subcommittee or whether it may be reviewed by the GDB Subcommittee (without prior full review by the PR Subcommittee).

If a proposal is reviewed and approved by either the PR or the GDB Subcommittee, the proposal will be reviewed by the Steering Committee for final approval prior to implementation.

## APPENDIX A

### ORGANISM CODES LIST

Code	Genus	Species
<b><u>Bacteria</u></b>		
310	Achromobacter	sp. [inc. Achromobacter xylosoxidans and others]
320	Acinetobacter	sp. [antiratus, baumannii calcoaceticus, haemolyticus, johnsonii, junii, lwoffii, radioresistens]
330	Aeromonas	sp.
340	Alcaligenes	sp. [Alcaligenes xylosoxidans and others]
140	Bacillus	sp.
410	Bacteroides	sp.
<b>160</b>	<b>Bifidobacterium</b>	<b>sp. [Bifidum, lactis, infantis, thermophilum, and others]</b>
350	Burkholderia	sp. [Burkholderia capecica and others]
360	Campylobacter	sp. [Campylobacter fetus, C. jejuni and others]
370	Chryseobacterium	sp.
226	Citrobacter	sp. [Citrobacter diversus, C. freundii, C. koseri and others]
420	Clostridia	sp.
500	Corynebacterium	sp.
240	Enterobacter	sp. [Enterobacter aerogenes, E. cloacae, and others]
380	Enterococcus	sp. [Enterococcus faecalis (a.k.a. Streptococcus faecalis and Streptococcus Group D), E faecium, and other Enterococcus species]
200	Escherichia	coli
390	Flavobacterium	sp.
590	Hemophilus	sp. [Haemophilus influenzae, H. vaginalis and others]
325	Herellea	vaginicola
230	Klebsiella	sp. [Klebsiella oxytoca, K. pneumoniae and others]

Code	Genus	Species
<u>170</u>	<u>Lactobacillus</u>	<u>sp. [Acidophilus, casei, and others]</u>
150	Listeria	sp. [Listeria monocytogenes]
105	Micrococcus	sp.
430	Moraxella	sp. [Moraxella catarrhalis (a.k.a. Branhamella catarrhalis) and others]
570	Neisseria	sp. [Neisseria meningitides, N. gonorrhoeae and others]
440	Pasteurella	sp.
460	Peptostreptococcus	sp.
480	Prevotella	sp.
470	Propionibacterium	sp.
260	Proteus	sp. [Proteus mirabilis, P. vulgaris and others]
300	Pseudomonas	sp.
301	Pseudomonas	aeruginosa
210	Salmonella	sp.
250	Serratia	sp. [Serratia liquefaciens, S. marcescens odorifera, ficara, plymuthica and others]
101*	Staphylococcus	aureus [coagulase positive]
104	Staphylococcus	coagulase negative (including S. epidermis, saprophyticus, haemolyticus, hominis, lugdunensis, simulans, cohnii, warnei, saccharolyticus)
510	Stenotrophomonas	maltophilia
111	Streptococcus	viridans
112	Streptococcus	Group A
113	Streptococcus	Group B
*Note- call lab if unclear whether staphylococcus is coagulase negative, coagulase positive, aureus or epi.		
133	Streptococcus	pneumoniae
699	Other; Code to be assigned	



<b>Code</b>	<b>Genus</b>	<b>Species</b>
<b><u>Fungi</u></b>		
834	Aureobasidium	sp.
810	Candidia	sp.
811	Candidia	ablicans
<b>813</b>	<b>Candida</b>	<b>krusei</b>
816	Candidia	parapsilosis
817	Candidia	tropicalis
819	Candidia	glabrata
820	Candidia	guilliermondi
821	Candidia	lusitaniae
881	Malassezia	fur fur
872	Saccharomyces	sp. [yeast]
<b>899</b>	<b>Other; Code to be assigned</b>	
<del>Other; Code to be assigned</del>		

## **Resistant Organisms**

750	Methicillin resistant staphylococcus aureus (MRSA)
760	Vancomycin resistant enterococci (VRE)

## **Other Organism**

010	Other; Code to be assigned
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## APPENDIX B

### Drug Therapeutic Agent List

#### Penicillins

- 01= Ampicillin
- 02= Carbenicillin
- 03= Oxacillin
- 04= Penicillin G
- 05= Piperacillin
- 06= Ticarcillin
- 07= Mezlocillin
- 08= Methicillin
- 09= Nafcillin
- 10= Amoxicillin
- 11= Amoxicillin/clavulanate (Augmentin)

#### Cefalosporins (3<sup>rd</sup>-gen)

- 19= Cephalexin (Keflex)
- 20= Cephalothin
- 21= Cefazolin (Kefzol)
- 22= Cefotaxime (Claforan)
- 23= Cefoxitin
- 24= Moxalactam
- 25= Ceftazidime (Fortaz)
- 26= Ceftriaxone (Rocephin)
- 27= Ceftizoxime
- 28= Cefuroxime
- 29= Cefotetan
- 30= Cefixime

#### Aminoglycosides

- 31= Amikacin
- 32= Gentamicin
- 33= Kanamycin
- 34= Tobramycin

## Other Antibiotics

- 44= Vancomycin
- 46= Bactrim
- 47= Chloramphenicol (Chloromycetin)
- 49= Clindamycin
- 50= Erythromycin (~~IV~~)
- 91= Linezolid
- 62= Imipenem
- 63= Metronidazole
- 64= Aztreonam
- ~~65= Amphotericin b lipid complex~~
- 67= Ampicilling + sulbactam (unasyn)
- 68= Azithromycin
- 70= Cefepime
- 75= Meropenem
- 76= Piperacillin + tazobactam (zosyn)
- 77= Rifampin
- 78= Ticarcillin + clavulanate
- 80= Ciprofloxacin
- 81= Clarithromycin (Biaxin)
- 82= Doxycycline
- 83= Trimethopin/sulfa (TMP/SMX)

## Antifungals

- 43= Flucytosine (5FC)
- 48= ~~Oral~~ Nystatin
- 61= Fluconazole
- 69= Caspofungin
- 92= Itraconazole
- 93= Posaconazole
- 94= Voriconazole
- 41 = Amphotericin B
- 66= Amphotericin B Liposome (Ambisome)
- 95= Amphotericin B lipid complex (Abelcet)
- 97= Anidulafungin
- 98= Micafungin

## Antivirals

- 45= Vidarabine
- 71= Acyclovir
- 72 = Ganciclovir
- 73= Nevarapine
- 74= Zidovuldine (AZT)

**Other Drugs Not Listed**

99= Other

## **Appendix C**

### **Causes of Death**

#### **Malformation**

##### **10 - Congenital malformation**

Code '10' for major congenital malformations that are incompatible with life, or incompatible with life without drastic surgical or other measures to maintain life such as a chromosomal defect, inborn error of metabolism, neural tube defect, congenital heart disease, or renal abnormality. If an infant has respiratory distress syndrome or intracranial hemorrhage but is allowed to die because his/her main problem is the congenital malformation, then malformation should be coded as the cause of death.

#### **Pulmonary**

##### **20 - RDS**

Code '20', RDS, for severe respiratory insufficiency in the presence of RDS during the first 28 days of life where the infant dies of respiratory insufficiency, i.e., increasing oxygen and pressure requirements, pneumothorax, pneumopericardium, etc.

##### **21 - RDS with severe intracranial hemorrhage**

Code '21' for infants with severe respiratory insufficiency during the first 28 days of life with a severe (grade III-IV) intracranial hemorrhage. If an infant dies or is allowed to die because of or with the severe intracranial hemorrhage, the cause of death is really the respiratory insufficiency rather than the intracranial hemorrhage.

##### **22 - RDS with infection**

Code '22' for infants with severe respiratory distress during the first 28 days who have a fulminant pulmonary or other infection. For example, if an infant has group B strep sepsis with a clinical presentation of respiratory distress, or respiratory distress syndrome with an intercurrent bacterial infection then RDS with infection should be coded as the cause of death.

**23 - RDS with massive pulmonary hemorrhage**

Code '23' for infants with respiratory distress and massive pulmonary hemorrhage during the first 28 days of life.

**25 - BPD**

Code '25', for infants with chronic lung disease after 28 days of life who die of progressive respiratory insufficiency, with or without cor-pulmonale.

**26 - BPD with infection**

Code '26' for infants with chronic lung disease requiring oxygen for more than 28 days who develop a severe intercurrent infection. The combination of the chronic lung disease and infection usually predisposes the child to death.

**27 - BPD with severe CNS insult**

Code '27' for infants with chronic lung disease who have an oxygen requirement of more than 28 days where the lung disease is progressing and will most probably eventually cause death, but the infant is extubated prior to death because of severe brain atrophy, hydrocephalus, etc.

**Infection**

**30 - Suspect sepsis/infection**

Code '30' for infants with clinical presentation of septicemia or localized infection without positive cultures during life or on autopsy. The autopsy may reveal polymorph infiltrate of organs and other indications of infection, however cultures are negative.

**31 - Proven sepsis/infection**

Code '31' for septicemia or localized infection with positive blood or organ cultures. For example, septicemia, meningitis, pulmonary abscess  
etc.

**NEC**

**40 - NEC**

Code '40' for proven NEC, stage IIA or higher by Bell's criteria as shown in Appendix G.

**41 - NEC with sepsis**

Code '41' when the infant has proven NEC (stage IIA or higher by Bell's criteria in Appendix G.) together with positive blood or peritoneal fluid cultures. If the combination of the necrotizing enterocolitis with

the documented septicemia or intestinal infection causes the death, then code "41" as the cause of death.

**42 - Spontaneous perforation**

Code '42' when the infant has an acute gastrointestinal perforation diagnosed by x-ray without classic radiographic findings of necrotizing enterocolitis or findings of necrotizing enterocolitis at surgery or autopsy, including pathologic specimens.

**CNS insult**

**50 - Severe intracranial hemorrhage**

Code '50' when the infant has severe intracranial hemorrhage (massive grade II-IV) with a clinical presentation of central nervous system decompensation including seizures, apneas, etc., in the absence of severe respiratory distress syndrome requiring high ventilator settings.

**51 - Severe IVH with infection with culture proven or suspected**

Code '51' when the infant has severe intracranial hemorrhage (grade III or IV) with documented blood/echo-density in the ventricle, ventricular size enlargement occurs in association with blood/echo-density in the ventricular system or blood/echo-density in the parenchyma.

**Other**

**60 - Immaturity**

Code '60' for infants < 24 weeks who die in the absence of infection, RDS, or massive IC bleed.

**90 - Other**

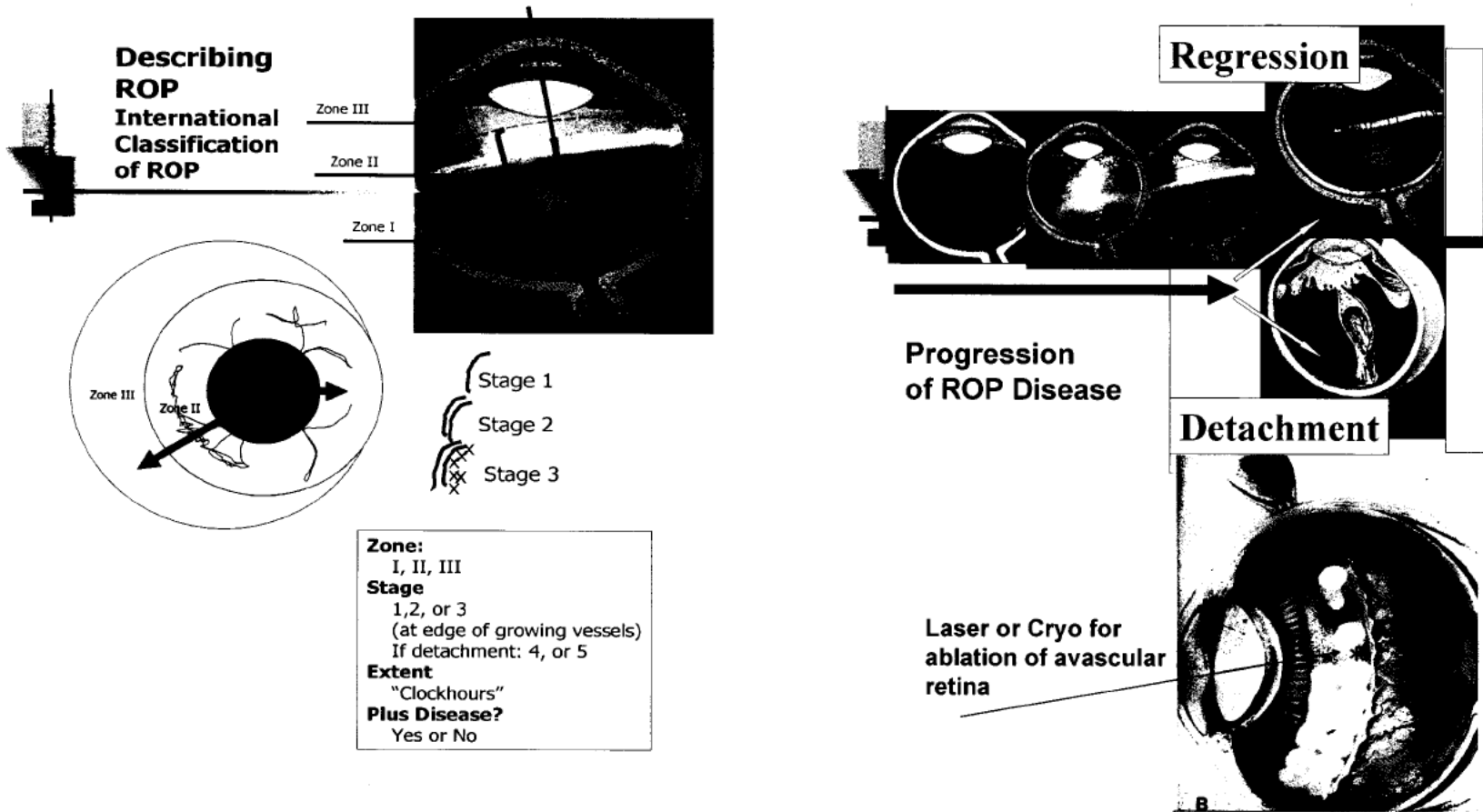
Code '90' for infants with other causes of death such as severe asphyxia with multi-system failure, severe metabolic disease, and severe trauma. Cardiorespiratory arrest is not to be used.

**99 - Unknown**

Code '99' only if the cause of death has been investigated but could not be established.

## Appendix D

### Retinopathy of Prematurity Diagram





## Appendix E

### Surgical Procedures

<b>GI – 200 Series</b>	
201	Laparotomy
202	Bowel resection (end to end anastomosis)
203	Jejunostomy/ileostomy/colostomy
204	Ostomy takedown/reanastomosis
205	Peritoneal drain
206	Gastrostomy
207	Appendectomy
208	Fundoplication
209	T-E fistula/esophageal atresia repair
210	Gastroschisis/omphalocele repair
211	Diaphragmatic hernia repair
212	Inguinal hernia repair
<b>Pulmonary - 300 Series</b>	
301	Tracheostomy
302	Anterior cricoid split
303	Resection of cystic adenomatoid malformation
<b>GU – 400 Series</b>	
401	Repair of extrophy of the bladder
402	Urinary diversion
<b>Head &amp; Neck - 500 Series</b>	
501	Correction of choanal atresia
502	Repair of cleft lip/palate
<b>CNS – 600 Series</b>	
601	Shunt for hydrocephalus (post hemorrhagic)
602	Shunt for hydrocephalus (not post hemorrhagic)
603	Vent reservoir
<b>Cardiac – 700 Series</b>	
701	Repair of CHD
702	Cardiac shunt procedure
<b>Other - 900 Series</b>	
901	Central line placement (requiring anesthesia; not including umbilical or percutaneous central lines)
999	Other Surgeries not listed

## Appendix F

### Data Forms

THE FOLLOWING PAGES CONTAIN THE DATA FORMS FOR THE SURVEY OF MORTALITY AMONG VERY LOW BIRTH WEIGHT INFANTS (401 TO 1500 GRAMS)

NGO1	SCREENING LOG
NGO2	GENERIC BASELINE FORM
NGO3	GENERIC CLINICAL OUTCOME FORM
NGO3E	GENERIC EARLY DEATH FORM
NGO5	GENERIC LATE CLINICAL OUTCOME FORM
NGO7	GENERIC RESPIRATORY SUPPORT FORM

## Appendix G

### Modified Bell's Staging Criteria for NEC

Stage	Systemic	Intestinal Signs	Radiologic Signs
<b>IA - Suspected NEC</b>	Temperature instability, apnea, bradycardia, lethargy	Elevated pre-gavage residuals, mild abdominal distension, emesis, guaiac. positive stool	Normal or intestinal dilation, mild ileus
<b>IB - Suspected NEC</b>	Same as above	Bright red blood from rectum	Same as above
<b>IIA - Definite NEC Moderately ill</b>	Same as above	Same as above, plus absent bowel sounds, ± abdominal tenderness	Intestinal dilation, ileus, pneumatosis intestinalis
<b>IIB - Definite NEC</b>	Same as above, plus mild metabolic acidosis, mild thrombocytopenia	Same as above, plus absent bowel sounds, definite abdominal tenderness, ± abdominal cellulitis or right lower quadrant mass	Same as IIA, plus portal vein gas, ± ascites
<b>IIIA - Advanced NEC Severely ill Bowel intact</b>	Same as IIB, plus hypotension, bradycardia, severe apnea, combined respiratory and metabolic acidosis, disseminated intravascular coagulation, neutropenia	Same as above, plus signs of generalized peritonitis marked tenderness, and distention of abdomen	Same as IIB, plus definite ascites
<b>IIIB - Advanced NEC Severely ill Bowel perforated</b>	Same as IIIA	Same as IIIA	Same as IIB, plus pneumoperitoneum

From: Ped. Clinics of North America, February 1986, Walsh, M., Kliegman, R., Necrotizing enterocolitis: Treatment based staging criteria.

## Appendix H

### Birth Defects Codes

CODE	TYPE OF DEFECT
<b>Central Nervous System Defects - 100 Series</b>	
101	Anencephaly
102	Meningomyelocele
103	Hydranencephaly
104	Congenital Hydrocephalus
105	Holoprosencephaly
199	<b>Other Central Nervous System Defects</b>
<b>Congenital Heart Defects - 200 Series</b>	
201	Truncus Arteriosus
202	Transposition of the Great Vessels
203	Tetralogy of Fallot
204	Single Ventricle
205	Double Outlet Right Ventricle
206	Complete Atrio-Ventricular Canal
207	Pulmonary Atresia
208	Tricuspid Atresia
209	Hypoplastic Left Heart Syndrome
210	Interrupted Aortic Arch
211	Total Anomalous Pulmonary Venous Return
299	<b>Other Congenital Heart Defects</b>

### **Gastro-Intestinal Defects - 300 Series**

- 301 Cleft Palate
- 302 Tracheo-Esophageal Fistula
- 303 Esophageal Atresia
- 304 Duodenal Atresia
- 305 Jejunal Atresia
- 306 Ileal Atresia
- 307 Atresia of large bowel or rectum
- 308 Imperforate anus
- 309 Omphalocele
- 310 Gastroschisis
- 399 **Other Gastro-Intestinal Defects**

### **Genito-Urinary Defects - 400 Series**

- 401 Bilateral Renal Agenesis
- 402 Bilateral polycystic, multicystic, or dysplastic kidneys
- 403 Obstructive Uropathy with Congenital Hydronephrosis
- 404 Exstrophy of the Urinary Bladder
- 499 **Other Genito-Urinary Defects**

### **Chromosomal Abnormalities – 500 Series**

- 501 Trisomy 13
- 502 Trisomy 18
- 503 Trisomy 21
- 599 **Other Chromosomal Abnormality (DESCRIBE w/ Comment)**

### **Other Birth Defects – 600 Series**

601	Skeletal Dysplasia (DESCRIBE w/ Comment)
602	Congenital Diaphragmatic Hernia
605	Inborn Error of Metabolism (DESCRIBE w/ Comment)
699	<b>Other Serious and/or Life-Threatening Birth Defect</b>

### **Pulmonary - 700 Series**

701	Cystic Adenomatoid Malformation (CAM)
799	<b>Other Pulmonary</b>

The following conditions should **NOT** be coded as a Major Birth Defect.

- Extreme Prematurity
- Intrauterine Growth Retardation
- Small Size for Gestational Age
- Fetal Alcohol Syndrome
- Hypothyroidism
- Intrauterine Infection
- Cleft Lip with out Cleft Palate
- Club Feet
- Congenital Dislocation of the Hips
- Limb Abnormalities
- Syndactyly
- Hypospadias
- Patent Ductus Arteriosus
- Pulmonary Hypoplasia (use code 401 for bilateral renal agenesis)

## Appendix I

### CLARIFICATION OF INFECTION/NEC

<b>BLOOD CULTURE</b>	<b>NEC</b>	<b>ANTIBIOTICS</b>	<b>FINDINGS</b>
Positive	Absent/suspect	≥ 5 days	Late onset sepsis
Positive	Proven	≥ 5 days	NEC and late onset sepsis
Negative	Absent/suspect	≥ 5 days	Blood culture negative
Negative	Proven	≥ 5 days	NEC

## Appendix Ia

### CHORIOAMNIONITIS – PATHOLOGIC FINDINGS

If “chorioamnionitis” is noted on the placental pathology report or if **any** of the following findings (as defined by the Stillbirth Collaborative Research Network {SCRN} Pathology Protocol) are documented on the placental pathology report, Code YES to histologic chorioamnionitis.

#### ACUTE CHORIOAMNIONITIS

- Grade I Acute subchorionitis – early acute chorionitis or both. Patchy-diffuse accumulations of neutrophils in the subchorionic plate fibrin and/or membranous chorionic trophoblast layer, (a few scattered neutrophils in the lower ½ of chorionic plate and/or the membranous chorionic connective tissue allowed)
- Grade II More than 10 PMNs per high power field scattered in the chorionic plate or membranous chorionic connective tissue and/or the amnion.
- Grade III Numerous PMNs present without necrosis of the amnion.
- Grade IV Necrotizing chorioamnionitis. Degenerating neutrophils (karyorrhexis), thickened eosinophilic amniotic basement membrane and at least focal amniotic epithelial degeneration/sloughing.

#### SUBACUTE CHORIOAMNIONITIS

More than occasional mononuclear cells (usually macrophages) in the placental membranes or chorionic plate. Neutrophils may be rare or abundant, but a coexistent acute chorioamnionitis should be present in at least one section. (Mononuclear cells are most frequent near the amnion).

#### CHRONIC CHORIONITIS

Mononuclear cell infiltrates in chorion without evidence of acute chorioamnionitis.

*From* SCRN Pathology Protocol, Manual of Operations



## Appendix J

### Overview of the Generic Database:

Information in this document was compiled from notebooks sent by George Washington University dated 1987-1997 that reside on RTI main campus, RTP, North Carolina.

Six major versions of the generic database manual were issued between 1987 and 1997. For each of these, documentation sent to RTI includes the manual of operations, the summary of changes from the previous version, the study forms, and a copy of the study forms showing the SAS variable names. The originals are available through RTI by request. Additionally, electronic versions have been made by scanning the originals into PDF form.

To make a request, please email Betty Hastings, [bkh@rti.org](mailto:bkh@rti.org) or Kristin Zaterka-Baxter, [kzaterka@rti.org](mailto:kzaterka@rti.org).

#### ***Variable Naming Convention***

Variables on forms NG02, NG03, NG03E, NG05, and NG06 all start with a 3 character prefix. The prefixes are OBG for NG02, OCG for NG03, OZG for NG03E, OEG for NG05 and OFG for NG06. The variables on the form NG01 start with the letter A. No prefix is used for the few variables on the NG04.

#### ***Precautions in using the database***

When analyzing data from the GDB, always check whether a version change occurred within the period of time covered by the analysis. If one or more changes occur within the period of time covered by the analysis, check that the variable you are using exist in all the relevant versions of the forms, and that they have identical or nearly identical definitions. The GDB contains many instances of questions being dropped, added, significantly modified, or replaced by groups of more detailed questions.

### History of Changes

#### ***Introduction***

The GDB was initiated in November 1987. Since then, over 700 changes were made to it, with a quarter of these being clarifications or minor modifications to the definitions in the manual. This brief overview describes some of the more significant changes instituted in each of the six revisions of the manual of operations.

#### ***November 1, 1987 (original release)***

The original GDB included infants 501-1500 grams admitted within 30 days. There were 3 forms: the NG01 (screening log), the NG02 and the NG03 (which extended to discharge or death, and was not truncated at 120 days).

## **July 31, 1988**

**Major Changes:** The NEC log (NG04) was added because of concerns about NEC during the IVIG trial. These concerns eventually led to the temporary suspension of the trial from June to September 1989. The NEC log recorded the basic information on all cases of suspected NEC. It was essentially abandoned when the IVIG study ended in April 1991 and was officially discontinued in 1993.

**Form Changes:** Information on high frequency ventilator use was added to the NG03, as were Bell's classification for NEC and information on the 5-7 day sonogram. The question on autopsies was expanded to include presence of IVH, cystic PVL and porencephaly.

### **Specific Changes made in the 1988 version of the GDB forms and Manual of Operations:**

#### **NG03**

##### **NEW QUESTIONS**

A19a. *High frequency ventilator?*

A19b. *High frequency ventilator, if yes, give type:*

Code 1=oscillator 2=jet If another type occurs, contact the DCC to add to the code list.

C3a. *5-7 day sonogram results:*

Grade I = PV area; Grade II = Mild IVH with no dilation; Grade III = with dilation; Grade IV = in parenchyma

C3c. *5-7 day sonogram: echodense lesions observed?* Yes/No

C4n. *Date of diagnosis for the most severe IVH*

G4b. *Necrotizing Enterocolitis – Bell's Classification*

G4c. *Date of diagnosis of NEC*

J5. *Autopsy performed?*

J6a. *Presence of intracranial bleeding on autopsy*

J6b. *Cystic periventricular Leukomalacia present?*

J6c. *Porencephaly?*

## **September 22, 1989**

**Major Changes:** The NG03 was limited to the first 120 days and a new form, NG05 was added to cover the period after 120 days. Before the split, information about morbidity such as NEC and IVH was not received until NG03 was completed, at death or discharge which, for some infants, would take a very long time.

**Form Changes:** On the NG02, the use of maternal drugs (cigarettes, narcotics, cocaine), of tocolytics and Phenobarbital was added.

On the NG03, surfactants and steroids for BPD were added to the pulmonary section. In the neurologic section, indomethacin for IVH, Phenobarbital were added. The question on feeding, NEC were also expanded, and intra-uterine infections were added.

Finally, note that this version did not include new NG01 and NG04 forms: the forms from the 1988 version were re-used.

**Specific Changes made in the 1989 version of the GDB forms and Manual of Operations:**

**NG02**

**NEW QUESTIONS**

A1. The information in this section is from: 1=mother's chart, 2=child's chart

A5a2. If narcotics, specify.

A5b2. If Cocaine, source of information: 1=history, 2=urine screen, 3=both

A5d1. Cigarettes at anytime?

A5d2. Cigarettes during pregnancy?

A5d3. If cigarettes, average/day during pregnancy:

C5. Did the mother receive Phenobarbital within 7 days prior to delievery?

C6a. Tocolytic agents during labor?

C6b. If tocolytic agents, specify:

D8. Last menstrual period: Date of first day of last menstrual period.

**NG03**

**NEW QUESTIONS**

Form Header: Is the infant still in this hospital at 120 days?

If yes, this form should be completed at this time. Complete NG05 when the infant dies or is discharged.

Form Header: If infant in this hospital at 120 days, date form completed:

A8a. Steroids for bronchopulmonary dysplasia?

A8b. If steroids for bronchopulmonary dysplasia, give date started:

A8c. If steroids for bronchopulmonary dysplasia, give date stopped:

A8d. If steroids for bronchopulmonary dysplasia, give number of days:

A20. Conventional ventilation?

A22. Did the baby receive surfactant?

C1a. Neurologic, malformation?

C5a. IVH: Discharge sonogram grade:

0=none, 1=grade I, 2=grade II, 3=grade III, 4=grade IV, 9=no ultrasound

C5b. Date of last sonogram prior to 'Status':

C10a. Was idomethacin given for IVH?

C10b. If idomethacin given for IVH, first date given:

C11a. Was Phenobarbital given for any reason?

C11b. If Phenobarbital given, date first given:

D1b. If G.1. malformation, specify:

D5. Date of first enteral feed:

D6. Date of full enteral feeds first achieved:

D8d. More than one episode of proven NEC?

E5a. Intra-Uterine Infection?

E5b. If intra-uterine infection, describe:

E6a. Other infection?

E6b. If other infection, specify:

15. If transferred and then discharged home, give date of discharge:

16a. Discharged home on oxygen?

16b. If discharged home on oxygen, date finally weaned from oxygen

J4. If cause of death is RDS, further classify:

1=respiratory insufficiency, 2=air leak, 3=BPD after 28 days

J5. *If cause of death is malformation, specify:*

**DELETED**

The question "Persistent increase in ventricle size?" was dropped.

**November 30, 1990**

**Major Changes:** The NG06 was added to record information on the administration of surfactants. The cutoff for admissions was reduced from 30 days to 14 days. Also, infants are no longer counted as having been discharged or transferred if they are readmitted within 7 days.

**Form Changes:** On the NG02, maternal antibiotics and syndromes and/or major malformations were added. Tocolytics, Phenobarbital, alcohol, and several detail questions on cigarettes and narcotics were dropped. Several questions (such as mode of delivery) were simplified.

On NG03, 36 week measurements were added, as were PLUS disease details on BPD, NEC complications, feeding, and last sonogram, and on transfers and discharge. Information about Phenobarbital, and details about pneumonia and autopsy were dropped. Fluid restrictions for PDA were no longer recorded. Sepsis was split into early vs. late sepsis. Coding of death was altered significantly.

**Specific Changes made in the 1990 version of the GDB forms and Manual of Operations:**

**ADDED/CHANGED**

**NG02**

A3. *Marital Status*

Codes 2-5 were collapsed into one category called 'single'.

B6. *Hypertension/pre-eclampsia/eclampsia?*

The questions 'Hypertension' and 'Pre-eclampsia/eclampsia' were combined and the definition revised to read 'Hypertension, chronic or pregnancy induced, with or without edema and albuminuria, recorded in the mother's chart, or maternal blood pressure above 140 systolic or 90 diastolic starting prior to or during present pregnancy.'

C5. *Antibiotics given prior to delivery?* (new question coded as Y/N variable)

C7. *Mode of delivery*

Code 1 was changed from 'Vaginal spontaneous' to 'Vaginal vertex' and codes 2='Vaginal forceps' and 3='Vaginal vacuum' were deleted.

D6b. *Race* (new question added)

'If Hispanic, further classify as follows:'  
1=white, 2=black, 3=unknown

D17a. *Syndromes and/or major malformations*

D17b. *If yes, specify:*

### NG03

- A8. *Pulmonary hemorrhage?*
- A10. *Number of days of the first 28 the infant was in  $FiO_2 > 0$*
- A11. *Chest X-ray consistent with chronic lung disease at any time during course? (Coded Y/N)*
- A12. *Highest  $FiO_2$  concentration at postconceptional age of 36 weeks:*
- B1. *Was idomethacin given prophylactically for PDA or IVH within the first 24 hours?*
- C5. *Last sonogram prior to death/discharge (old question was deleted and modified)*
- C9f. *Treatments for PHH – Other treatments (coded Y if other treatments used)*
- D8e. *NEC complications – stricture S/P NEC requiring surgery?*
- D10a. *Other G.I. conditions?*
- D10b. *If yes, specify.*
- E1. *Early onset septicemia/bacteremia ( $\leq 72$  hours)*
- E1a. *Early onset septicemia/bacteremia?*
- E1b,c. *If yes, organism codes (with two places for entries)*
- E1d. *Did the infant receive antibiotics for  $\geq 5$  days (coded as Y/N)*
- G5. *Plus disease? (to be coded for right and left eyes)*
- I1. *36 weeks information*
- I1a. *Date*
- I1b. *Weight*
- I1c. *Length*
- I1d. *Head circumference*
- Section J formerly section I
- J5. *Discharged home on monitor*
- Section K formerly section J

### DELETED

#### NG02

- A1. *The information from this section is from.*
- A5a2. *If yes, specify (specify narcotics used)*
- A5d1. *Cigarettes at any time?*
- A5d3. *If yes, packs/day during pregnancy.*
- B5. *Did the mother receive Phenobarbital within 7 days prior to delievery?*
- B6. *Tocolytic agents given?*

#### NG03

- A3b. *Origin of pneumonia*
- A3c. *If other, specify*
- B2e. *Fluid restrictions, digoxin or diuretics for treatment of PDA*
- C10. *Was indomethacin given for IVH?*
- C11. *Was Phenobarbital given for any reason?*
- F3. *Code 0=no information for zone of ROP*
- F5. *Grade of cicatricial ROP*
- H8. *Presence of intracranial bleed on autopsy.*

### February 16, 1993

#### Major Changes:

- The lower limit for birth weight was changed to 401 grams.
- The NG04 (NEC log) was officially discontinued. The NG06 was also discontinued, with most of its information incorporated into NG03.
- The NG03E, was added to capture specific information on infants who died within 12 hours.

- The NG05 was drastically shortened.

**Form Changes:** On NG02, tocolytics were brought back, and RPR/VDRL and Hepatitis B were added. Questions on maternal drugs (cocaine, cigarettes, heroin/methadone, etc...), gestational diabetes, prolapsed cord and antenatal steroids were removed.

Several sections of the NG03 were substantially expanded and reorganized. In particular, the pulmonary section was expanded to include detailed pulmonary information on days 10 and 28, week 36, and at status. PIE, pneumoperitoneum, pneumomediastinum and details on RDS were also added. RIP, pneumonia and details about steroids for BPD were removed. The neurologic section was also modified to include more detailed information on sonograms, and the 5-7 day sonogram was changed to a 3-7 day sonogram. Other affected sections include those on PDA, ROP, catheters, status (weight, length and H.C. added), and infections (abscesses and cellulites, and culture negative sepsis were added).

**Specific Changes made in the 1990 version of the GDB forms and Manual of Operations:**

**ADDED/CHANGED**

**NG02**

*Maternal Hepatitis B and RPR/VDRL*

*Use of tocolitics*

**NG03**

*Respiratory distress question now asks about specific symptoms.*

*Information on NG06 (surfactant administration) has been incorporated into the NG03.*

*Air leak*

*Use of flow interrupter ventilator*

*The date of administration of indomethacin, and of surgery for PDA are now recorded (Cardiac Section)*

*The 5-7 day sonogram information has been replaced by a 3-7 day sonogram (Neurologic Section)*

*Days on peripheral artery catheters are now recorded (Gastrointestinal Section)*

*Infection Section:*

*Culture negative infections*

*Organisms for intra-uterine infections*

*Abscesses and cellulites*

*No longer asks number of days of phototherapy and the number of exchange transfusions, only whether the infant received any phototherapy and any exchange transfusions (Hematologic Section).*

*Syndromes and Malformations Section Added*

**NG05**

*Most of the information on NG05 has been deleted. Now it only contains the discharge/transfer/death in the same format as the NG03, and a question about which organ system caused hospitalization beyond 120 days.*

**DELETED**

**NG02**

*Maternal Drug Section*

*Gestational diabetes and prolapsed cord have been deleted from the pregnancy complication section.*

**NG03**

*Pneumonia no longer recorded*

*No longer records when steroids for BPD were started and stopped (still records if given)  
GI conditions other than NEC and cholestatic jaundice are no longer recorded  
Hearing test method no longer recorded*

### **September 24, 1993**

This was a minor update with a few changes to definitions. The most significant change was that antenatal steroids were brought back on the NG02. The antenatal steroids information was added retrospectively for infants whose NG02 was entered under the February 16 version (so there is no gap in antenatal steroids information). This effectively makes the September 1993 version a minor modification of the February version. For documentation purposes, both 1993 versions are treated as a single version dated September 1993.

### **June 4, 1994**

The major changes to this version were the addition of the components CRIB score and the expansion of the question on tocolytics. A few sections on the NG03 were also re-organized.

### **Specific Changes made in the 1994 version of the GDB forms and Manual of Operations:**

See "Specific GDB Changes 1994.pdf" in this same directory.

**July 1, 1998**

In April of 1998, RTI took over as the DCC for the Neonatal Network, and shortly after the following changes were made.

**Several nutrition questions from the old NG03 (6/6/94 version) have been restored to the GDB form NG03. The following nutrition questions have been restored to the gastrointestinal section of the new NG03:**

<u>Old NG03 (6/6/94)</u>	<u>New NG03 (7/6/98)</u>
D2	F1
D2a	F1a
D2a1	F1a1
D3	F2
D3a	F2a
D3b	F2b
D4	F3
D4a	F3a
D4b	F3b
D4b1	F3b1

**Please begin to use the enclosed revised NG03 (7/6/98 version) for all infants reaching NG03 “status” after 7/1/98.**

**In addition to the revised NG03 form, there were also revisions of the NG01, NG02, NG03E, NG05 and the NG07. Please note that the only changes to these forms are formatting changes. These changes are as follows:**

- **Form headers have been reformatted and a new field (Site No.) has been added.**
- **All date fields have now been changed to allow for a 4-digit year.**

**February 14, 2002**

**See the following table.**



## SUMMARY OF UPDATES/CHANGES TO THE GDB MANUAL AND FORMS SINCE THE AUGUST 4, 1998 VERSION

### Screening Log--NG01 (current version dated 2/14/02)

**Reformatted:** Placed the Mother's initial after the baby's hospital number. Changed Network Number to Family Number and placed the birth number after the Family Number.

### Baseline Form--NG02 (current version dated 2/14/02)

#### **A. MATERNAL INFORMATION**

**Added:** Question 5. Highest level of education achieved by the Biological Mother.

**Added:** Question 6. Mother's medical insurance

#### **B. PREGNANCY COMPLICATION**

**Added:** Question 3. Was this pregnancy the product of artificial reproductive technology?

#### **C. LABOR AND DELIVERY**

**Revised: Question 3 to read:** Were steroids given prior to delivery to accelerate maturity?

**Added:** Type of antenatal steroid given: [1 = Betamethasone 2= Dexamethasone 3 =Both]

#### **D. NEONATAL INFORMATION**

**Added:** Question 13. Was cord blood gas done?

If Yes,

- a. Cord arterial pH (if done)
- b. Cord venous pH (if done)
- c. Cord pH (unknown vessel)
- d. Arterial base deficit (if done)
- e. Venous base deficit (if done)
- f. Base deficit (unknown vessel)

**Added:** Question 14. Infant's temperature on initial admission to the nursery from L & D

**Added:** Source: [1= Rectal 2 = Axillary 3= Skin]

**Added:** Date and Time:

### Clinical Outcome Form--NG03 (current version dated 2/14/02)

**Changed all occurrences of Chronic Lung Disease to BPD**

#### **B. PULMONARY**

**Changed:** Question B. 5 changed to: Was a chest x-ray done after 21 days of age?

If Yes,

- a. Was chest x-ray consistent with BPD/CLD?
- b. Date of x-ray after day 21 and closest to day 28 used to meet criteria:

**Changed:** Question 6 changed to: Did baby require supplemental O<sub>2</sub> at 36 weeks?

**Changed:** Question 7 changed to: Was x-ray done at 36 weeks?

If Yes,

- a. Date of x-ray

#### **D. NEUROLOGIC**

**Deleted:** Old question 4- Cranial sonogram within 28 days of birth showing the most severe hemorrhage:

**Revised:** Question 3. Were any cranial sonograms done within 28 days of birth?

If No, go to Question D6

If Yes,

a. Were all studies normal?

If Yes, go to Question D6

b. Date of sonogram for most severe hemorrhage

#### **E. INFECTION**

**Changed:** Question 5.b to: Organism code(s) and date of first positive culture for each episode for which the infant was treated with antibiotics for  $\geq 5$  days. Added additional lines and dates for each episode.

**Changed:** Question 6. Infection of meninges/brain? If Yes, added additional lines and dates for each episode.

#### **F. GASTROINTESTINAL**

**Changed:** Question 1.a. to: If Yes, lowest weight?

**Changed:** 1.a.1) to: Date of lowest weight

**Added:** Question 1.b. If Yes, Did the infant regain birth weight?

**Added:** Question 1.b.1) If Yes, Date when first regained

**Added:** Question 6. Did the infant have GI surgery that resulted in short gut?

#### **G. HEARING**

**Changed: Question 1 to:** Was a hearing screen performed?

**Added:** If Yes, Hearing screen protocol used:

[1 = OAE 2 = AABR 3 = ABR 4= OAE +AABR 5= Other]

b. Final screen results before discharge:

i) Right ear

ii) Left ear:

Results: 1. Pass 2. Fail 3. Incomplete

c. If a failed screen in either ear, was a diagnostic ABR done prior to discharge?

1) If YES,

i) Right ear:

ii) Left ear:

Results: [1= Pass 2= Fail 3= Incomplete]

#### **H. OPHTHALMOLOGY**

**Added:** 1.a. 2) If ROP diagnosed, was threshold ROP diagnosed at any time?

I Right

ii Left

**Changed:** 3) Intervention Therapies:

**Added:** a. Was retinal ablation performed prior to a threshold diagnosis?

I Right, ii Left

b. Was any surgery performed?

I Right, ii Left

**Codes:**[0= None 1= Lasertherapy 2= Cryotherapy 3= Scleral buckle 4= Other]

**Added:** 4) If ROP diagnosed, were the ROP findings regressing at time of status?

a. Right

b. Left

**K. 28 DAY ANTHROPOMETRICS [This section was added]**

1. Status at 28 Days:  
[1 = Discharged = 2 = In hospital 3 = Transferred 5 = Death]  
If "2", (In Hospital):  
a. Date at 28 Days  
b. Weight (g):  
c. Length (cm):  
d. Head circumference (cm):

**N. DISCHARGE ALIVE**

- Deleted:** Question 3. Discharged home on monitor?  
**Added:** New Question 3: Discharged home on any of the following medications?  
If YES,  
a. Diuretics?  
b. Bronchodilators?  
c. Anticonvulsants?  
d. Antireflux medications?

**O. DEATH**

- Changed:** Question 3. to :Autopsy requested?  
**Added:** a. If YES, Was consent granted?  
**Changed: Old Question 3 to 4.** Autopsy performed?

**Early Death Form--NG03E (current version dated 2/14/02)**

- Changed** Question 6. to :Autopsy requested?  
**Added:** a. If YES, Was consent granted?  
**Changed: Old Question 6 to 7.** Autopsy performed?

**Late Clinical Outcome Form--NG05 (current version dated 2/14/02)**

**B. SYSTEM INFORMATION**

- Added:** Question 2. Was a hearing screen performed after 120 days?  
a. If Yes, Hearing screen protocol used:[1=OAE, 2=AABR, 3=ABR, 4=OAE+AABR  
5=Other]  
b. Final screen results before discharge  
i) right ear, ii) left ear  
c. If a failed screen in either ear, was a diagnostic ABR done prior to discharge:  
1) If Yes, i) right ear, ii) left ear [Results: 1= Pass, 2= Fail, 3= Incomplete]

**D. DISCHARGE ALIVE**

- Deleted:** Question 3. Discharged home on monitor?  
**Added:** New Question 3: Discharged home on any of the following medications?  
If YES,  
a. Diuretics?  
b. Bronchodilators?  
c. Anticonvulsants?  
d. Antireflux medications?

**E. DEATH**

- Changed** Question 3. to: Autopsy requested?

**Added:** a. If YES, Was consent granted?  
**Changed old Question 3 to 4.** Autopsy performed?

**Respiratory Support Form--NG07 (current version dated 2/14/02)**

**Changed:** Question 3 to Number of Days on Nasal SIMV

**Added:** New Question 6: Number of Days on Oxygen via Hood/Isolette

**Added:** New Question 7: Number of Days on Oxygen by Nasal Cannula

**Changed:** Old question 6 to 7: Highest FIO<sub>2</sub>

**Changed:** Old question 7 to 9: Supplemental O<sub>2</sub> by Nasal Cannula?

**Added:** New question 10: If in Room air, by Nasal Cannula or CPAP?

**Infection Forms--NG08**

**All of the infection Data Collection was terminated as of 1/1/2002**

**Appendix I**

**Added: APPENDIX I CLARIFICATION OF INFECTION/NEC**

## SUMMARY OF UPDATES/CHANGES TO THE GDB FORMS SINCE THE FEBRUARY 14, 2002 VERSION

### Screening Log--NG01 (current version dated 1/1/06)

No changes since the February 14, 2002 version

### Baseline Form--NG02 (current version dated 1/1/06)

#### A. MATERNAL INFORMATION

**Changed:** Question 6. Mother's medical insurance

**Deleted:** 2= Medicaid HMO, 4=Other HMO, 7= Both private and public (e.g. Medicaid; CHIPS) assistance and 8 = No insurance upon admission

**Reworded:** 3= Self-pay/uninsured, **added** 9= Other

#### B. PREGNANCY COMPLICATION

**Revised:** Question 2 to read: Mother has evidence of at least one prenatal visit in this pregnancy.

**Deleted:** Question 3. Was this pregnancy the product of artificial reproductive technology?

**Changed:** Old Question 4 to Question 3

**Added:** To New Question 3. If Yes, was insulin given prior to pregnancy. Added Yes/No/UK

**Changed:** Old Question 5 to Question 4

**Revised:** **New Question 4.** Hypertension/pre-eclampsia/eclampsia to read: Hypertension? Yes/No

**Added:** If Yes, a. Hypertension existed prior to pregnancy? Yes/No/UK

**Changed:** Old Question 6 to Question 5

**Changed:** Old Question 7 to Question 6

**Added:** New Question 6. Was Chorioamnionitis documented in the mother's medical record? Yes/No

**Added:** New Question 7. Was placental pathology performed? Yes/No.

**Added:** If Yes to question 7, a. Was histologic chorioamnionitis documented? Yes/No.

#### C. LABOR AND DELIVERY

**Revised:** Question 1 to read: Was there rupture of membranes prior to delivery?, Yes/No/UK

**Added:** If Yes, a. Date, b. Time, c. If date and time unknown, were ROM estimated at >18 hours? Yes/ No/UK

**Deleted:** Old Questions 2, 2a Date and 2b. time

**Changed:** Old Question 3 to Question 2, 2a and 2b. Added UK to response options.

**Deleted:** Old Questions 3c. Total number of courses given during this pregnancy.

**Deleted:** Old Question 4. Were tocolytics used during the admission resulting in this delivery?

**Changed:** Old Question 5 to Question 3 and reworded to read: Were maternal antibiotics used during the admission resulting in this delivery?, Yes/No/UK

**Added:** New Question 3a, If Yes, were antibiotics given within 72 hours prior to delivery?, Yes/No/UK

**Added:** New Question 3b, If Yes, list antibiotics given.

**Changed:** Old Question 6 to Question 4

**Added:** To New Question 4, Code 4= Unknown

**Baseline Form--NG02 (current version dated 1/1/06) Continued**

**D. NEONATAL INFORMATION**

- Added:** New Question 5. Ethnic Categories
- Added:** New Questions 6. Racial Categories
- Changed:** Old Question 9 (new question 10), Delivery room resuscitation to read "Birth resuscitation/stabilization"
- Added:** New Questions 10c- CPAP and question 10f. Epinephrine
- Deleted:** Old Questions 9e, Drugs
- Deleted:** Old Questions 13a, 13b, 13d and 13e.
- Changed:** Old Question 13c was changed to 13a and 13f was changed to 13b.
- Renumbered the remainder to the form.**

**Clinical Outcome Form--NG03 (current version dated 1/1/06)**

**A. STATUS:**

- Deleted:** Question 6. Was respiratory support withheld and/or withdrawn at any time between birth and 24 hours after the infant was born?

**B. PULMONARY**

- Changed:** Question 1 to: Respiratory distress
- Changed:** Old Question 1b. to 1a. Demonstrated clinical features of respiratory distress within age 24 hours.
- Changed:** Old Question 1a. to 1b. **Reworded "New" 1b to:** Required oxygen or positive pressure support for more than 6 hours within the first 24 hours.
- Deleted:** Old Question 1c and 1d.
- Added:** New Question 2a. If Yes, date and time of first dose.
- Deleted:** Old Questions 5, 5a and 5b
- Deleted:** Old Question 6
- Deleted:** Old Question 7, 7a and 7b.
- Changed:** Old Questions 8 and 8a to Question 5 and 5a.
- Added:** New Question 6, Did infant receive inhaled nitric oxide? Yes/No.  
Question 6a, If Yes, Date of first exposure.
- Deleted:** Old Questions 9 and 10.

**C. CARDIAC**

- Changed:** Question 1, If Yes, to If Yes, treatment.
- Changed:** Question 1a. Indomethacin for PDA to 1a. Indomethacin Yes/No  
If Yes, total number of courses.
- Added:** New Question 1b. Ibuprofen, Yes/No. If Yes, total number of courses.
- Changed:** Old Question 1b. Surgery for PDA to 1c. Surgery, Yes/No

**Clinical Outcome Form--NG03 (current version dated 1/1/06) Continued**

**D. NEUROLOGIC**

**Changed:** Question 1 to read - Was indomethacin given within the first 24 hours of life for any prophylaxis?

**Changed:** Question 2 to read - Were there seizures treated with an anti-convulsant for > 72 hours?

**Deleted:** Question 2a.

**Changed:** Question 3a to read - If Yes, were all studies without evidence of intracranial hemorrhage, peri-ventricular leukomalacia or ventriculomegaly?

**Changed:** Question 3b to read - Date of sonogram with most severe findings.

**Changed:** Question 3d to collect Yes/No information for right/left side

**Added:** New Question 3e - Ventricular size enlarged with concurrent or prior blood in the ventricles? Yes/No for right/left side

**Deleted:** Old Question 3f. ventricles? Yes/No

**Added:** New Question 3f - Ventricular size enlarged without concurrent or prior blood in the ventricles? Yes/No for right/left side

**Changed:** Old Question 3e to Question 3g

**Added:** To Question 4, If Yes

4a. Cystic periventricular leukomalacia within 28 days? Yes/No for right/left side

4b. Porencephalic cyst within 28 days? Yes/No for right/left side

**Deleted:** Old Question 5

**Changed:** Old Question 6 to Question 5

**Changed:** Old Question 7 to **New Question 6**. Reworded: Cranial imaging study performed closest to 36 weeks postmenstrual age and after 28 days of birth.

**Added:** New Question 6a. Type of imaging (1= MRI, 2=Sonogram, 3=CT scan)

**Changed:** Old Question 7a to 6b. Date of sonogram changed to Date of image.

**Changed:** Old Question 7b to 6c Normal Study?

**Deleted:** Old Question 7d

**Changed:** Old Question 7c to 6d. **Added:** Yes/No for right/left side

**Changed:** Old Question 7e to 6e. **Added:** Yes/No for right/left side

**Changed:** Old Question 7f to 6f. **Added:** Yes/No for right/left side

**Deleted:** Old Question 8

**E. INFECTION**

**Deleted:** Old Question 1, 1a and 1b

Renumbered the remainder of Section E

**Changed:** Question 3 (old question 4) to: Number of episodes of late onset blood culture negative clinical infection.

**Changed:** Question 5 (old question 6) to: Meningitis?

**Clinical Outcome Form--NG03 (current version dated 1/1/06) Continued**

**F. GASTROINTESTINAL**

- Changed:** Question 1 to read: Did the weight ever fall below the birth weight during the first 10 days? If Yes,
- Changed:** Question 1a to read: Lowest weight in the first 10 days.
- Changed:** Question 1a1) to 1b: Reworded to read: Date of lowest weight in first 10 days.
- Changed:** Old Question 1b to Question 1c. Reworded to read: Was birth weight regained? If Yes,
- Changed:** Old Question 1b1) to Question 1d. Reworded to read: Date birth weight first regained.
- Changed:** Reworded Question 2b to read: Total number of days.
- Changed:** Reworded Question 3b to read: Did enteral feeds reach 120 ml/kg/day?
- Added:** New Question 3c. Did the baby receive any breast milk in the first 28 days? Yes/No/UK
- Added:** New Question 3c1). If Yes, number of days baby received any breast milk in the first 28 days.
- Changed:** Question 5 reworded to read: Spontaneous gastrointestinal perforation without proven NEC?

**G. OPHTHALMOLOGY**

- Deleted:** Old Questions 1a.1).i,ii, and iii
- Deleted:** Old Question 2), I and ii.
- Deleted:** Old Question 3)a, and b
- Deleted:** Old Question 4), a and b
- Changed:** Question 1a to read: If Yes, was ROP diagnosed in either eye?
- Added:** 1a.1) If yes, Did it reach stage 3 or worse in either eye? and 1a.2) Did plus disease develop in either eye?
- Added:** 1b and questions b1 and b2
- Added:** Question 2 and 1, 2, 3

**K. 28 DAY ANTHROPOMETRICS-- Deleted this entire section.**

**CHANGED OLD SECTION L TO: SECTION K. 36 WEEKS INFORMATION**

All questions remained the same as the previous Section L.

**L. FEEDING STATUS- This is a new section that has been added for January 1, 2006**

**M. TRANSFER**

- Deleted:** Question 2
- Changed:** Old Question 3 to question 2

**O. DEATH**

- Deleted:** Question 2. Time of Death
- Deleted:** Question 3 and 3a. Autopsy Requested? If Yes, was consent granted?
- Changed:** Old Question 4 to Question 2
- Changed:** Old Question 5 to Question 3. Reworded to read: Contributory Cause of Death.
- Changed:** Old Question 6 to Question 4. Reworded to read: If contributory cause of death is code "10" (Congenital malformation), or code "90" (other), specify.
- Changed:** Old Question 7 to Question 5. Reworded to read: Was respiratory support withheld or withdrawn at any time prior to death?



**Early Death Form--NG03E (current version dated 1/1/06)**

- Deleted:** Question 1, 1a and 1b. Date and time of Death.
- Deleted:** Question 6 and 6a. Autopsy requested? If yes, was consent granted?
- Renumbered the remainder of the form.**
- Changed:** New Question 7 to read: Contributory cause of death.
- Changed:** New Question 8 to read: If contributory cause of death is code "10" (Congenital malformation) or code "90" (other), specify.

**Late Clinical Outcome Form--NG05 (current version dated 1/1/06)**

**B. EXTENDED STAY INFORMATION (Section was changed from System Information)**

- Changed:** Question 1 to read: What problem(s) caused hospitalization greater than 120 days (answer all that apply)
- Changed:** Question 1f to Question 1h
- Added:** A new Question 1f. Social?
- Added:** New Question 1g. Ophthalmologic?
- Changed:** Old Question 1f to Question 1h
- Added:** New Question 2. After reaching status, did either eye receive surgery for ROP
  - 2a. If Yes, list all surgeries done for either eye (use codes below)
  - 2b. List codes (1= Laser Treatment, 2= Cryotherapy, 3= Scleral buckle, 4= Vitrectomy, = Other (specify) for either eye.
- Changed:** Old Question 2 to Question 3

**C. TRANSFER**

- Changed:** Question 3 to read: Transferred on ventilator and/or CPAP?
- Deleted:** Final Outcome Reason code 4= Remains in chronic Care facility at one year.

**E. DEATH**

- Deleted:** Question 2 time of death.
- Deleted:** Question 3 Autopsy requested? a. If yes, was consent granted?
- Changed:** Old Question 4 to Question 2
- Changed:** Old Question 5 to Question 3: Reworded to read: Contributory Cause of Death
- Added:** Code 51 = Severe IVH with culture proven infection or suspected infection
- Deleted:** Code 60 = Immaturity

**Respiratory Support Form--NG07 (current version dated 1/1/06)**

**This entire form has been revised**

**Appendix A  
Updated with additional Antibiotic Codes**

## SUMMARY OF UPDATES/CHANGES TO THE GDB STUDY MANUAL AND FORMS SINCE THE JANUARY 1, 2006 VERSION

### Baseline Form--NG02 (version 3.1) (current version dated 06/19/06)

#### D. NEONATAL INFORMATION

**Added:** Codes for question D.5 and D.6 (and question D.6.a) to reflect the current enrollment reports for NIH as follows (shades codes):

5. Ethnic Categories: \_\_\_\_\_

1 = Hispanic or Latino
2 = Not Hispanic or Latino
3 = Unknown or Not Reported

6. Racial Categories: \_\_\_\_\_

1 = Black	5 = Native Hawaiian or Other Pacific Islander
2 = White	6 = More Than One Race
3 = American Indian or Alaskan Native	7 = Unknown or Not Reported
4 = Asian	

a. If coding option 6, record all races indicated \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
(optional)

**Revised corresponding page 3-9, section 3.3.5 (item 5 and 6) in the study manual.**

## SUMMARY OF UPDATES/CHANGES TO THE GDB STUDY MANUAL AND FORMS SINCE THE JUNE 19, 2006 VERSION

### Baseline Form--NG02 (version 3.2) (current version dated 04/01/07)

#### C. LABOR AND DELIVERY

**Changed:** Question C.2.b clarifying data is to be collected on completed courses 'of steroids' and deleting the 'within 7 days' time period in the question.

**Revised corresponding page 3-7 in the study manual**

### Baseline Form--NG03 (version 1.3) (current version dated 04/01/07)

#### H. OPHTHALMOLOGY

**Revised:** Question H.1.a and H.1.a.1 to clarify which subsequent questions to answer if question H.1 is 'Yes' as follows:

##### H. OPTHALMOLOGY

1. Was an exam performed for ROP? Y N

If Yes,

a. ~~If YES,~~ Was ROP diagnosed in either eye? Y N

If Yes,

1) ~~If Yes,~~ Did it reach stage 3 or worse in either eye? Y N

**Revised corresponding page 4-14 in the study manual**

**Added:** Question O.1.a "Time of Death" as follows:

**Revised corresponding page 4-18 in the study manual**

#### **Appendix A**

**Updated:** Appendix A: Organism Code list

#### **Appendix B**

**Updated:** Appendix B: Drug Therapeutic Agent List

#### **Appendix 1a**

**Added:** Appendix 1a: Chorioamnionitis – Pathologic Findings



BASELINE FORM (NG02)

Revised April, 1 2007

Center: \_\_\_ Site: \_\_\_ Family No: \_\_\_ Birth No: \_\_\_ Mother's Initials: \_\_\_

**D. NEONATAL INFORMATION**

1. Date and time of birth:

a. Date: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

b. Time: \_\_\_:\_\_\_  
Hour Min

2. Was the infant outborn? Y N

If YES, date admitted to NICU:

a. Date: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

3. Did the infant die ≤ 12 hours? Y N

IF YES, COMPLETE FORM NG03E

4. Sex: \_\_\_\_\_

1 = Male      2 = Female      3 = Ambiguous

5. Ethnic Categories: \_\_\_\_\_

1 = Hispanic or Latino  
2 = Not Hispanic or Latino  
3 = Unknown or Not Reported

6. Racial Categories: \_\_\_\_\_

1 = Black      5 = Native Hawaiian or Other Pacific Islander  
2 = White      6 = More Than One Race  
3 = American Indian or Alaskan Native      7 = Unknown or Not Reported  
4 = Asian

a. If coding option 6, record all races indicated (optional) \_\_\_\_\_

7. Gestational age: Weeks \_\_\_ Days \_\_\_

8. Apgar score - 1 minute: \_\_\_\_\_

9. Apgar score - 5 minutes: \_\_\_\_\_

10. Birth resuscitation/stabilization:

a. Oxygen? Y N  
b. Bagging and mask? Y N  
c. CPAP? Y N  
d. Intubation? Y N  
e. Chest compression? Y N  
f. Epinephrine? Y N

11. Birth Weight (grams): \_\_\_\_\_

12. Length (cm): \_\_\_\_\_

13. Head Circumference (cm): \_\_\_\_\_

14. Was cord blood gas done? Y N

If Yes,

a. Cord pH (any vessel): \_\_\_\_\_

b. Base deficit (any vessel): \_\_\_\_\_

15. Was Infant's first temperature within 60 minutes of birth? Y N UK

If Yes,

1. Centigrade: \_\_\_\_\_ 2. Fahrenheit: \_\_\_\_\_

a. Date: \_\_\_/\_\_\_/\_\_\_  
Month Day Year      b. Time: \_\_\_:\_\_\_  
Hour Min

c. Source: \_\_\_\_\_

1= Rectal      2= Axillary      3= Skin

Initials of person completing this form: \_\_\_\_\_

Center: \_\_\_ Site: \_\_\_ Family No: \_\_\_ Birth No: \_\_\_ Mother's Initials: \_\_\_

**A. STATUS**

1. Status of infant at time of completion of form: \_\_\_

- |                                     |  |
|-------------------------------------|--|
| 1 = Discharged to home              | 4 = Transferred to chronic care facility |
| 2 = Still in hospital at 120 days   | 5 = Death                                |
| 3 = Transferred to another hospital |  |

2. Date of status: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

3. Weight at status (grams): \_\_\_\_\_

4. Length at status (cm): \_\_\_\_\_

5. Head circumference at status (cm): \_\_\_\_\_

**B. PULMONARY**

1. Respiratory Distress:

a. Demonstrated clinical features of respiratory distress within the first 24 hrs? Y N

b. Required oxygen or positive pressure support for more than 6 hours within the first 24 hours? Y N

2. Did the baby receive surfactant? Y N

a. If YES, date and time of first dose: \_\_\_/\_\_\_/\_\_\_ Hours: \_\_\_ Min: \_\_\_  
Month Day Year

b. Total number of surfactant doses given: \_\_\_

3. Pneumothorax? Y N

4. Pulmonary hemorrhage? Y N

5. Steroids for BPD/CLD? Y N

a. If YES, Date of first dose: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

6. Did infant receive inhaled nitric oxide? Y N

a. If YES, Date of first exposure: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

**C. CARDIAC**

1. Patent ductus arteriosus (PDA)? Y N

If YES, treatment:

a. Indomethacin Y N

If YES, total number of courses: \_\_\_\_\_

b. Ibuprofen Y N

If YES, total number of courses: \_\_\_\_\_

c. Surgery? Y N

**D. NEUROLOGIC**

1. Was indomethacin given within the first 24 hours of life for any prophylaxis? Y N

If YES,

a. Date: \_\_\_/\_\_\_/\_\_\_ b. Time: \_\_\_:\_\_\_  
Month Day Year Hours Min

2. Were there seizures treated with an anti-convulsant for >72 hours? Y N

3. Were any cranial sonograms done within 28 days of birth? Y N

If NO, Go to Question D5

a. If Yes, were all studies without evidence of intracranial hemorrhage, peri-ventricular leukomalacia or ventriculomegaly? Y N

If YES, Go to Question D5

b. Date of sonogram with most severe findings: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

c. Blood/echo-density in germinal matrix/sub-ependymal area? Y N

	<u>(1) RIGHT</u>	<u>(2) LEFT</u>
d. Blood/echo-density in the ventricle?	Y N	Y N
e. Ventricular size enlarged with concurrent or prior blood in the ventricles?	Y N	Y N
f. Ventricular size enlarged without concurrent or prior blood in the ventricles?	Y N	Y N
g. Blood/echo-density in the parenchyma?	Y N	Y N

4. Cystic area(s) in the parenchyma within 28 days? Y N

If YES,

	<u>(1) RIGHT</u>	<u>(2) LEFT</u>
a. Cystic periventricular leukomalacia within 28 days?	Y N	Y N
b. Porencephalic cyst within 28 days?	Y N	Y N

5. Were any cranial imaging studies done after 28 days of birth? Y N

If NO, Go to Section E.

6. Cranial imaging study performed closest to 36 weeks postmenstrual age and after 28 days of birth:

a. Type of imaging (1= MRI, 2= Sonogram, 3= CT scan) \_\_\_\_\_

b. Date of image: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

Center: \_\_\_ Site: \_\_\_ Family No: \_\_\_ Birth No: \_\_\_ Mother's Initials: \_\_\_

c. Normal study? Y N

If NO,

(1) RIGHT (2) LEFT

d. Ventricular size enlarged? Y N Y N

e. Cystic periventricular leukomalacia? Y N Y N

f. Porencephalic cyst? Y N Y N

**E. INFECTION**

1. Early onset septicemia/bacteremia ( $\leq 72$  hours)? Y N

If YES, complete organism code(s) a. \_\_\_ b. \_\_\_

2. Did the infant receive antibiotics for  $\geq 5$  days, starting within the first 72 hours? Y N

3. Number of episodes of late onset blood culture negative clinical infection (>72 hours to status) treated with antibiotics for  $\geq 5$  days: \_\_\_

4. Late onset culture positive septicemia/bacteremia (>72 hours)? Y N

If YES,

a. Number of episodes between day 3 and status that were treated with antibiotics for  $\geq 5$  days: \_\_\_

b. Organism code(s) and date of first positive culture for each of episodes for which the infant was treated with antibiotics for  $\geq 5$  days:

a) Episode #	(b) Date	(1) Organism	(2) Organism	(3) Organism
1	___/___/___	___	___	___
2	___/___/___	___	___	___
3	___/___/___	___	___	___
4	___/___/___	___	___	___
5	___/___/___	___	___	___
6	___/___/___	___	___	___

5. Meningitis? Y N

a. If YES,

(a) Episode #	(b) Date	(1) Organism	(2) Organism	(3) Organism
1	___/___/___	___	___	___
2	___/___/___	___	___	___

**F. GASTROINTESTINAL**

1. Did weight ever fall below the birth weight during the first 10 days? Y N UK

If YES,

a. Lowest weight in the first 10 days? \_\_\_

b. Date of lowest weight in the first 10 days: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

c. Was birth weight regained? Y N UK

If YES,

d. Date birth weight first regained: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

2. Did the baby receive parenteral alimentation? Y N

If YES,

a. Date of first parenteral alimentation: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

b. Total number of days: \_\_\_

3. Did the baby receive enteral feeds? Y N

If YES,

a. Date of first enteral feed: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

b. Did enteral feeds reach 120 ml/kg/day? Y N

1) If YES, date first achieved: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

c. Did the baby receive any breast milk in the first 28 days? Y N UK

1) If YES, number of days baby received any breast milk in first 28 days: \_\_\_

4. Proven NEC: \_\_\_

0 = Absent/Suspect 2 = Proved, no surgery 3 = Proved, surgery

a. If proven NEC, Date of first episode? \_\_\_/\_\_\_/\_\_\_  
Month Day Year

5. Spontaneous gastrointestinal perforation without proven NEC? Y N

a. If YES, date of the first spontaneous gastrointestinal perforation: \_\_\_/\_\_\_/\_\_\_  
Month Day Year

6. Did the infant have GI surgery that resulted in short gut? Y N

Center: \_\_\_\_\_ Site: \_\_\_\_\_ Family No: \_\_\_\_\_ Birth No: \_\_\_\_\_ Mother's Initials: \_\_\_\_\_ Page 3 of 4

**G. HEARING**

1. Was a hearing screen performed? Y N

a. If YES, hearing screen protocol used: \_\_\_\_\_

1 = OAE    2 = AABR    3 = ABR    4 = OAE +AABR    5 = Other

b. Final screen results before status: \_\_\_\_\_

i) Right ear: \_\_\_\_\_

ii) Left ear: \_\_\_\_\_

Results: 1. Pass    2. Fail    3. Incomplete

c. If a failed screen in either ear, was a diagnostic ABR done prior to status? Y N

1) If YES, answer the following:

i) Right ear: \_\_\_\_\_

ii) Left ear: \_\_\_\_\_

Results: 1. Pass    2. Fail    3. Incomplete

**1. Determined Favorable:**

- Vessels mature (fully vascularized)
- Vessels in zone III for two consecutive exams
- ROP of stage 1 or 2 in zone III for two consecutive exams
- ROP in zone II or zone III but determined to be clearly regressing

**2. Determined-Severe:**

- ROP surgery
- Retinal detachment

**3. Undetermined:**

- Immature Vessels in zone I and II
- Immature vessels reaching zone III for only 1 exam
- Stage 1 or 2 ROP in zone III for only 1 exam
- Stage 3 ROP in zone III
- ROP in zone I or zone II
- Plus disease

**H. OPHTHALMOLOGY**

1. Was an exam performed for ROP? Y N

If Yes:

a. ~~If YES, was~~ Was ROP diagnosed in either eye? Y N

If Yes:

1) ~~If Yes,~~ Did it reach stage 3 or worse in either eye? Y N

2) Did plus disease develop in either eye? Y N

b. Intervention Therapies:

1. Was retinal ablation performed in either eye (laser and/or cryotherapy)? Y N

2. Was any scleral buckle or vitrectomy performed in either eye? Y N

2. At the time of reaching status, indicate the most appropriate: \_\_\_\_\_

1 = Determined, favorable in both eyes

2 = Determined, severe ROP in either eye

3 = Undetermined ROP status in either eye (and neither had "severe ROP")

**I. SYNDROMES**

1. Syndromes and/or major malformations? Y N

a. If YES, code:

1) = \_\_\_\_\_ 2) = \_\_\_\_\_ 3) = \_\_\_\_\_  
4) = \_\_\_\_\_ 5) = \_\_\_\_\_

b) If a syndrome is coded "699", specify: \_\_\_\_\_

**J. MAJOR SURGERY**

1. Other major surgery not covered in previous sections? Y N

a. If YES, code:

1) = \_\_\_\_\_ 2) = \_\_\_\_\_ 3) = \_\_\_\_\_  
4) = \_\_\_\_\_ 5) = \_\_\_\_\_

b) If a major surgery is coded "999", specify: \_\_\_\_\_



Center: \_\_\_\_\_ Site: \_\_\_\_\_ Family No: \_\_\_\_\_ Birth No: \_\_\_\_\_ Mother's Initials: \_\_\_\_\_ Page 4 of 4

**K. 36 WEEK INFORMATION**

1. Status at 36 weeks: \_\_\_\_\_

1 = Discharged    2 = In hospital    3 = Transferred    5 = Death

If "2", (In Hospital):

a. Date of 36 weeks measurement: \_\_\_\_\_

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Month    Day    Year

b. Weight (g) \_\_\_\_\_

c. Length (cm): \_\_\_\_\_

d. Head circumference (cm): \_\_\_\_\_

**L. FEEDING STATUS:**

1. Type of nutrition at discharge to home. Code all that apply (Do not complete for transfer patients): \_\_\_\_\_

1 = Breastmilk    2 = Formula    3 = TPN

2. If enteral, Mode: \_\_\_\_\_

1 = Breast    2 = Bottle    3 = NG/NJ tube    4 = Gastrostomy tube    9 = Unknown

**M. TRANSFER**

Complete this section if status (Q.A1) of infant at time of completion of this form is "3" or "4".

1. Date of transfer: \_\_\_\_\_

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Month    Day    Year

2. Final outcome: \_\_\_\_\_

1 = Died in hospital    2 = Discharged to home    6 = Remains in hospital at one year

a. If discharged to home, final weight at discharge (grams): \_\_\_\_\_

**N. DISCHARGE ALIVE**

Complete this section if status (Q.A1) of infant at time of completion of this form is "1" or if the final outcome for a transferred infant is 'Discharged to home.'

1. Date of discharge to home: \_\_\_\_\_

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Month    Day    Year

2. Discharged home on continuous oxygen? \_\_\_\_\_

Y    N

3. Discharged home on any of the following medications? \_\_\_\_\_

Y    N    UK

If YES,

a. Diuretics? \_\_\_\_\_

Y    N

b. Bronchodilators? \_\_\_\_\_

Y    N

c. Anticonvulsants? \_\_\_\_\_

Y    N

d. Antireflux medications? \_\_\_\_\_

Y    N

**O. DEATH**

1. Date of Death: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Month    Day    Year

a. Time of Death \_\_\_\_\_:\_\_\_\_\_  
Hours    Min

2. Autopsy performed? \_\_\_\_\_

Y    N

3. Contributory Cause of death \_\_\_\_\_

Malformation

10 = Congenital malformation

Pulmonary

20 = RDS

21 = RDS with severe intracranial hemorrhage

22 = RDS with infection

23 = RDS with massive pulmonary hemorrhage

25 = BPD

26 = BPD with infection

27 = BPD with severe CNS insult

Infection

30 = Suspect sepsis/infection

31 = Proven sepsis/infection

GI

40 = NEC

41 = NEC with sepsis

42 = Spontaneous perforation

CNS Insult

50 = Severe intracranial hemorrhage

51 = Severe IVH with infection

Other

60 = Immaturity

90 = Other

99 = Unknown

4. If contributory cause of death is code "10" (Congenital malformation), or code "90" (other), specify: \_\_\_\_\_

5. Was respiratory support withheld or withdrawn at any time prior to death? \_\_\_\_\_

Y    N

Initials of person completing this form: \_\_\_\_\_

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Zaterka-Baxter, Kristin; Wade Rich  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: QUestions for FDA  
**Date:** Monday, April 09, 2007 12:20:02 PM

---

Hi Rose

I would express the view that deaths should be reported and all others are collected and noted. However, I will put this on the Agenda for the Steering Comm meeting to further discuss.

Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, April 09, 2007 6:26 AM  
**To:** Zaterka-Baxter, Kristin; Neil Finer; Wade Rich  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: QUestions for FDA

I was under the impression that med watches are sent in the first 14 days if there is a death, severe IVH, CPR in the DR, or pneumothorax as part of monitoring for SAE's. Was that the impression of others?

Sounds like we need some type of clarification.

Thanks

Rose

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Monday, April 02, 2007 9:55 AM  
**To:** nfiner@ucsd.edu; Wade Rich  
**Cc:** Gantz, Marie; Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: QUestions for FDA

The Support manual discusses adverse events that may be anticipated in this population and as such these events should be recorded on the Supp08 form if occurring within the first 14 days. The manual also states in the same section:

*"The SUPPO8A (Medwatch Form) should be completed **in the event of a serious adverse event**. It should be faxed to RTI (919) 485-7762 and Rosemary Higgins (301) 496-3790 within 24 hours or the next working day."*

The manual does not clarify whether these serious adverse events should meet any criteria in order to be reported on the MedWatch (i.e. all of the following: serious, at least possibly related and unexpected, or if occurring in a certain timeframe on study)". It appears the centers interpret the current manual differently. When monitoring Case and UAB, we found they do not report serious adverse events that are anticipated per the manual, or anticipated in general in this population (i.e. NEC), even if occurring within DOL 14 via the MedWatch form (unless a death occurs); however, some centers do report serious adverse events that are anticipated and occur within DOL 14 on the Medwatch form; RTI has received several Medwatch forms reporting several of the events listed on the Supp08. Would a technical memo clarifying when to report an SAE on the Medwatch form be helpful?

Thanks,

Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703

Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

-----Original Message-----

From: Neil Finer [mailto:nfiner@ucsd.edu]  
Sent: Saturday, March 31, 2007 11:11 PM  
To: Sood, Beena; Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich; Zaterka-Baxter, Kristin  
Cc: Shankaran, Seetha  
Subject: RE: QUEStions for FDA

I agree  
Neil

-----Original Message-----

From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Saturday, March 31, 2007 7:16 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Wade Rich; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: RE: QUEStions for FDA

In that case we will just fill the SUPP08 form and not fax a MedWatch form (SUPP08A)

Thanks  
Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Sat 3/31/2007 8:45 PM  
To: nfiner@ucsd.edu; wrich@ucsd.edu; Sood, Beena; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: Re: QUEStions for FDA

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Neil Finer <nfiner@ucsd.edu>  
To: Wade Rich <wrich@ucsd.edu>; Higgins, Rosemary (NIH/NICHD) [E]; bsood@med.wayne.edu <bsood@med.wayne.edu>; kzaterka@rti.org <kzaterka@rti.org>  
Cc: sshankar@med.wayne.edu <sshankar@med.wayne.edu>  
Sent: Sat Mar 31 20:03:07 2007  
Subject: RE: QUEStions for FDA

Hi Rose and Wade  
Thanks for clarifying Wade. Rose my question is indeed the need to file a Medwatch form.  
Neil

-----Original Message-----

From: Wade Rich  
Sent: Saturday, March 31, 2007 3:20 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; bsood@med.wayne.edu; kzaterka@rti.org  
Cc: sshankar@med.wayne.edu  
Subject: RE: QUEStions for FDA

Rose,  
Centers I have visited are including IVH (GR III and IV only) on the SUPP 08, but not writing a Medwatch for them.  
Wade

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Saturday, March 31, 2007 11:19 AM  
To: Neil Finer; bsood@med.wayne.edu; Wade Rich; kzaterka@rti.org  
Cc: sshankar@med.wayne.edu  
Subject: Re: QUestions for FDA

We are tracking all ivh in the first 14 days of the study.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Neil Finer <nfiner@ucsd.edu>  
To: Sood, Beena <bsood@med.wayne.edu>; Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich <wrich@ucsd.edu>; kzaterka@rti.org <kzaterka@rti.org>  
Cc: Shankaran, Seetha <sshankar@med.wayne.edu>  
Sent: Sat Mar 31 14:09:12 2007  
Subject: RE: QUestions for FDA

Hi Beena and Rose

Sorry for the delay - I have been on service till today  
I agree with the approach taken for study documentation. I am not sure why a Medwatch is being filed if this is an event that is known to occur in such infants and the investigator does not believe that it is study related

-----Original Message-----

From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Saturday, March 31, 2007 4:19 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich; Neil Finer; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: RE: QUestions for FDA

For now, I think I will not report to WSU IRB because truly I do not think this is related to the study and the data that you refer to seems to show lower incidence in enrolled infants. Will discuss further with Dr Shankaran

Thanks for the prompt response

Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Sat 3/31/2007 7:15 AM  
To: Sood, Beena; wrich@ucsd.edu; nfiner@ucsd.edu; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: Re: QUestions for FDA

This is one of the adverse events for the study and should be reported to us - do you think that the IVH is related to the study?

Also, the AE's should go to the IRB per local rules. If this ivh is unrelated to the study, it is usually not an issue. We also provided sites with "ranges of rates" of complications followed in the first 14 days. As of the last steering committee meeting, our rates were lower than those of the match GDB population from the sites from 2002-2004. Let us know if you need more info.

Thanks, and it sounds like your site is doing well recruiting base on the number of questions!

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Sood, Beena <bsood@med.wayne.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich <wrich@ucsd.edu>; Neil Finer <nfiner@ucsd.edu>; Kristin Zaterka-Baxter (E-mail) <kzaterka@rti.org>

Cc: Shankaran, Seetha <sshankar@med.wayne.edu>; Sood, Beena <bsood@med.wayne.edu>  
Sent: Sat Mar 31 07:08:22 2007  
Subject: RE: QEstions for FDA

I have another question re SUPPORT - a baby currently enrolled in the study came off the study pulse oximeter (b) (6) because the baby was in RA for 72 hours, (b) (6) days later on day (b) (6) of life a HUS showed B/L Grade III IVH (done on 3/26/07). I became aware of this yesterday evening. I have reviewed the HUS myself and agree with the official report. We are going to be keying in this data and faxing a MEDWATCH form first thing Monday morning.

The question is - is this something I am expected to report to the WSU IRB as an adverse event? Logically, if this is being reported to the NICHD as a potential AE, then it should be reported to the WSU IRB. However, after going through the WSU AE form, there is latitude in reporting but if reported then the questions of whether this AE was stated in the consent form and if not whether changes are going to be made in the consent form are raised.

Please advise

Thanks  
Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Fri 3/30/2007 10:41 AM  
To: Wade Rich; Neil Finer; Kristin Zaterka-Baxter (E-mail)  
Cc: Sood, Beena; Shankaran, Seetha  
Subject: FW: QEstions for FDA

Hi,  
See not from Beena - the baby had a PDA ligation and was off the oximeter for the duration of the procedure - should she just document that the kid was off it?  
Thanks  
Rose

-----Original Message-----  
From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Friday, March 30, 2007 10:38 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Shankaran, Seetha  
Subject: RE: QEstions for FDA

Thanks for the update - will await their decision.

Quick SUPPORT question - one of the SUPPORT babies had to go for PDA ligation - was off the masimo pulseox in th OR. Is there a specific procedure to record this, report this or prevent this? The OR nurse did nor comply with our requests.

Thanks  
Beena

-----Original Message-----  
From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, March 30, 2007 10:27 AM  
To: Sood, Beena  
Cc: Shankaran, Seetha  
Subject: RE: QEstions for FDA

Beena  
For the PDA response to the FDA, I said that the steering committee would consider post-treatment (IPGE) evaluation if the IND is approved. The NRN protocol did not address PDA, so I left it as such. The

re-application was sent yesterday and I will let you know once I get a decision from them.

Thanks for all the hard work and effort!  
Rose

-----Original Message-----  
From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Wednesday, March 28, 2007 11:07 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE: QEstions for FDA

I am not in my office but I can call you if this is a good time for you. I am available to discuss these - as you know Dr Shankaran is out of the office.  
Thanks  
Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wed 3/28/2007 11:04 AM  
To: Sood, Beena  
Cc: Shankaran, Seetha  
Subject: QEstions for FDA

Beena

I have a few questions for the IND clinical hold submission as well as the protocol.

Thanks

Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Ellen Hale  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** SAE in SUPPORT  
**Date:** Friday, April 06, 2007 2:14:12 PM

---

Rose,

Hope you have had a wonderful week with your family.

One of our SUPPORT babies (b) (6) was doing well but unfortunately developed NEC. This little girl was taken to surgery but did not survive. Cause of death not related to this study. We will complete medwatch and report this SAE to our IRB.

Ellen

**From:** Karen Osborne RN  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Potential SPAM:RE: SUPPORT ROP OUTCOMES  
**Date:** Wednesday, April 04, 2007 2:10:14 PM

---

Rose,  
These results are now all entered into the data base.  
Thanks,  
Karen

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, March 29, 2007 3:02 PM  
**To:** Roger Fab; Bradley Yoder; Karen Osborne RN  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT ROP OUTCOMES

We are missing the following ROP outcomes for SUPPORT:

Center	Network	Error message
25	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
25	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
25	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
25	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Let us know if you have any information on these children.

Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov



**From:** [Wade Rich](#)  
**To:** [Mackinnon, Brenda](#)  
**Cc:** [Zaterka-Baxter, Kristin](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: Masimo repair question  
**Date:** Tuesday, April 03, 2007 6:20:47 PM

---

Brenda,

Call tech support at Masimo. # is on the Return Goods form in Appendix E of the manual. They will either tell you how to fix it, or give you an RMA. Be sure And let them know, both in person and on the form, that it is a SUPPORT oximeter.

Tx.

wade

---

**From:** Mackinnon, Brenda [mailto:BMackinnon@tufts-nemc.org]  
**Sent:** Tuesday, April 03, 2007 4:04 AM  
**To:** Wade Rich  
**Subject:** Masimo repair question

Thanks Wade,

Any idea where I get the returned material confirmation number to ship broken equipment back to Masimo for repairs? I have 1 broken docking station and 1 handheld that keeps blacking out intermittently without any obvious reason any ideas?

Thanks,

Brenda

-----Original Message-----

**From:** Wade Rich [mailto:wrich@ucsd.edu]  
**Sent:** Monday, April 02, 2007 8:08 AM  
**To:** Mackinnon, Brenda; Neil Finer; Zaterka-Baxter, Kristin  
**Cc:** Frantz, Ivan; Rosemary Higgins (E-mail); Das, Abhik  
**Subject:** RE: Support Infant with PPHN and use of study monitor

Brenda,

Glad the baby is doing better. Only the primary oximeter, the one which remains, needs to be uploaded to RTI. The other one can be cleared and stored.

Wade

---

**From:** Mackinnon, Brenda [mailto:BMackinnon@tufts-nemc.org]  
**Sent:** Monday, April 02, 2007 4:07 AM  
**To:** Neil Finer; Zaterka-Baxter, Kristin; Wade Rich  
**Cc:** Frantz, Ivan; Rosemary Higgins (E-mail); Das, Abhik; Mackinnon, Brenda  
**Subject:** RE: Support Infant with PPHN and use of study monitor

Thanks for the information. Now the baby is well and off one of the SUPPORT monitors. How does this data get handled?

Brenda

-----Original Message-----

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Friday, March 30, 2007 6:24 PM  
**To:** Zaterka-Baxter, Kristin; Wade Rich  
**Cc:** Frantz, Ivan; Rosemary Higgins (E-mail); Das, Abhik; Mackinnon, Brenda  
**Subject:** RE: Support Infant with PPHN and use of study monitor

Sorry for the delay in responding.

In this situation we would recommend 2 study oximeters pre and post.  
If there is a concern about the need to see small shunts within the altered range, I would discontinue the study oximeters for the period of the suspect PPHN and use standard oximeters until the infant stabilizes. I would not use a standard and altered oximeter as these could suggest a shunt when none exists.  
Neil

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Friday, March 30, 2007 5:38 AM  
**To:** Neil Finer; Wade Rich  
**Cc:** Frantz, Ivan; Rosemary Higgins (E-mail); Das, Abhik; Mackinnon, Brenda  
**Subject:** Support Infant with PPHN and use of study monitor

Hi Dr. Finer,  
Please see the email below; please advise.  
Thanks,  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

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**From:** Mackinnon, Brenda [mailto:BMackinnon@tufts-nemc.org]  
**Sent:** Friday, March 30, 2007 7:13 AM  
**To:** Zaterka-Baxter, Kristin  
**Cc:** Frantz, Ivan; Rosemary Higgins (E-mail)  
**Subject:**

Hi Kris,  
We enrolled another SUPPORT baby (our 7th for the month!) (b) (6) who has PPHN and has pre and post sat monitors in place. I can't find any guidance for this in the manual. The SUPPORT monitor is post and a NICU Masimo is the pre. Any information you have would be helpful. The staff asked if they should have put on 2 blue monitors or 1 study and 1 standard. I felt they needed a standard in this scenario due to the acuity of the patient. Please let me know how this has been handled in the past if it has come up. Rose I cc'd you as I know you are up as you responded to my previous email any thoughts?  
Thanks,  
Brenda

Brenda MacKinnon, RNC  
NICHD Neonatal Research Network Coordinator  
Tufts-NEMC Floating Hospital for Children  
750 Washington Street  
Boston, MA 02111

Phone: 617-636-1218  
Fax: 617-636-1456  
bmackinnon@tufts-nemc.org



\*\*\*\*\*

**Confidentiality Notice**

\*\*\*\*\*

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If you received this e-mail in error, please contact the sender and delete the e-mail and any attached material immediately. Thank you.

**From:** Karen Osborne RN  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Roger Fabk; Bradley Yoder  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Tuesday, April 03, 2007 3:09:51 PM

---

Rose,

We are working on getting this information. (b) (6) should be in the data base by the end of today. (b) (6) will take a little longer to get as we are waiting on a chart but we should have the data by the end of the week if not earlier.

Thanks  
Karen

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, March 29, 2007 3:02 PM  
**To:** Roger Fabk; Bradley Yoder; Karen Osborne RN  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT ROP OUTCOMES

We are missing the following ROP outcomes for SUPPORT:

Center	Network	Error message
25	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
25	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
25	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
25	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Let us know if you have any information on these children.

Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Neil Finer  
**To:** Zaterka-Baxter, Kristin; Wade Rich  
**Cc:** Gantz, Marie; Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: QUestions for FDA  
**Date:** Monday, April 02, 2007 11:34:52 AM

---

Hi Kris

I think that we need to clarify. What are the overarching regulations regarding reporting?  
Can we circulate these to the subcommittee and put it on the agenda for the Subcommittee meeting?  
Neil

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Monday, April 02, 2007 6:55 AM  
**To:** Neil Finer; Wade Rich  
**Cc:** Gantz, Marie; Das, Abhik; Higgins, Rosemary  
**Subject:** FW: QUestions for FDA

The Support manual discusses adverse events that may be anticipated in this population and as such these events should be recorded on the Supp08 form if occurring within the first 14 days. The manual also states in the same section:

*"The SUPPO8A (Medwatch Form) should be completed in the event of a serious adverse event. It should be faxed to RTI (919) 485-7762 and Rosemary Higgins (301) 496-3790 within 24 hours or the next working day."*

The manual does not clarify whether these serious adverse events should meet any criteria in order to be reported on the MedWatch (i.e. all of the following: serious, at least possibly related and unexpected, or if occurring in a certain timeframe on study)". It appears the centers interpret the current manual differently. When monitoring Case and UAB, we found they do not report serious adverse events that are anticipated per the manual, or anticipated in general in this population (i.e. NEC), even if occurring within DOL 14 via the MedWatch form (unless a death occurs); however, some centers do report serious adverse events that are anticipated and occur within DOL 14 on the Medwatch form; RTI has received several Medwatch forms reporting several of the events listed on the Supp08. Would a technical memo clarifying when to report an SAE on the Medwatch form be helpful?

Thanks,  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

-----Original Message-----

From: Neil Finer [mailto:nfiner@ucsd.edu]  
Sent: Saturday, March 31, 2007 11:11 PM  
To: Sood, Beena; Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich; Zaterka-Baxter, Kristin  
Cc: Shankaran, Seetha  
Subject: RE: QUestions for FDA

I agree  
Neil

-----Original Message-----

From: Sood, Beena [mailto:bsood@med.wayne.edu]

Sent: Saturday, March 31, 2007 7:16 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; Wade Rich;  
kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: RE: QEstions for FDA

In that case we will just fill the SUPP08 form and not fax a MedWatch form (SUPP08A)

Thanks

Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Sat 3/31/2007 8:45 PM  
To: nfiner@ucsd.edu; wrich@ucsd.edu; Sood, Beena; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: Re: QEstions for FDA

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----  
From: Neil Finer <nfiner@ucsd.edu>  
To: Wade Rich <wrich@ucsd.edu>; Higgins, Rosemary (NIH/NICHD) [E];  
bsood@med.wayne.edu <bsood@med.wayne.edu>; kzaterka@rti.org  
<kzaterka@rti.org>  
Cc: sshankar@med.wayne.edu <sshankar@med.wayne.edu>  
Sent: Sat Mar 31 20:03:07 2007  
Subject: RE: QEstions for FDA

Hi Rose and Wade  
Thanks for clarifying Wade. Rose my question is indeed the need to file a Medwatch form.  
Neil

-----Original Message-----  
From: Wade Rich  
Sent: Saturday, March 31, 2007 3:20 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer; bsood@med.wayne.edu;  
kzaterka@rti.org  
Cc: sshankar@med.wayne.edu  
Subject: RE: QEstions for FDA

Rose,  
Centers I have visited are including IVH (GR III and IV only) on the SUPP 08, but not writing a Medwatch for them.  
Wade

-----Original Message-----  
From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Saturday, March 31, 2007 11:19 AM  
To: Neil Finer; bsood@med.wayne.edu; Wade Rich; kzaterka@rti.org  
Cc: sshankar@med.wayne.edu  
Subject: Re: QEstions for FDA

We are tracking all ivh in the first 14 days of the study.

Thanks

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----  
From: Neil Finer <nfiner@ucsd.edu>  
To: Sood, Beena <bsood@med.wayne.edu>; Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich <wrich@ucsd.edu>; kzaterka@rti.org <kzaterka@rti.org>  
Cc: Shankaran, Seetha <sshankar@med.wayne.edu>

Sent: Sat Mar 31 14:09:12 2007  
Subject: RE: QEstions for FDA

Hi Beena and Rose  
Sorry for the delay - I have been on service till today  
I agree with the approach taken for study documentation. I am not sure why a Medwatch is being filed if this is an event that is known to occur in such infants and the investigator does not believe that it is study related

-----Original Message-----

From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Saturday, March 31, 2007 4:19 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich; Neil Finer; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: RE: QEstions for FDA

For now, I think I will not report to WSU IRB because truly I do not think this is related to the study and the data that you refer to seems to show lower incidence in enrolled infants. Will discuss further with Dr Shankaran

Thanks for the prompt response

Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Sat 3/31/2007 7:15 AM  
To: Sood, Beena; wrich@ucsd.edu; nfiner@ucsd.edu; kzaterka@rti.org  
Cc: Shankaran, Seetha  
Subject: Re: QEstions for FDA

This is one of the adverse events for the study and should be reported to us - do you think that the IVH is related to the study?  
Also, the AE's should go to the IRB per local rules. If this ivh is unrelated to the study, it is usually not an issue. We also provided sites with "ranges of rates" of complications followed in the first 14 days. As of the last steering committee meeting, our rates were lower than those of the match GDB population from the sites from 2002-2004. Let us know if you need more info.  
Thanks, and it sounds like your site is doing well recruiting base on the number of questions!  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Sood, Beena <bsood@med.wayne.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich <wrich@ucsd.edu>; Neil Finer <nfiner@ucsd.edu>; Kristin Zaterka-Baxter (E-mail) <kzaterka@rti.org>  
Cc: Shankaran, Seetha <sshankar@med.wayne.edu>; Sood, Beena <bsood@med.wayne.edu>  
Sent: Sat Mar 31 07:08:22 2007  
Subject: RE: QEstions for FDA

I have another question re SUPPORT - a baby currently enrolled in the study came off the study pulse oximeter (b) (6) because the baby was in RA for 72 hours, 9 days later on day 81 of life a HUS showed B/L Grade III IVH (done on 3/26/07). I became aware of this yesterday evening. I have reviewed the HUS myself and agree with the official report. We are going to be keying in this data and faxing a MEDWATCH form first thing Monday morning.

The question is - is this something I am expected to report to the WSU IRB as an adverse event? Logically, if this is being reported to the NICHD as a potential AE, then it should be reported to the WSU IRB. However, after going through the WSU AE form, there is latitude in reporting but if reported then the questions of whether this AE was

stated in the consent form and if not whether changes are going to be made in the consent form are raised.

Please advise

Thanks  
Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Fri 3/30/2007 10:41 AM  
To: Wade Rich; Neil Finer; Kristin Zaterka-Baxter (E-mail)  
Cc: Sood, Beena; Shankaran, Seetha  
Subject: FW: QEstions for FDA

Hi,  
See not from Beena - the baby had a PDA ligation and was off the oximeter for the duration of the procedure - should she just document that the kid was off it?  
Thanks  
Rose

-----Original Message-----  
From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Friday, March 30, 2007 10:38 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Shankaran, Seetha  
Subject: RE: QEstions for FDA

Thanks for the update - will await their decision.

Quick SUPPORT question - one of the SUPPORT babies had to go for PDA ligation - was off the masimo pulseox in th OR. Is there a specific procedure to record this, report this or prevent this? The OR nurse did nor comply with our requests.

Thanks  
Beena

-----Original Message-----  
From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, March 30, 2007 10:27 AM  
To: Sood, Beena  
Cc: Shankaran, Seetha  
Subject: RE: QEstions for FDA

Beena  
For the PDA response to the FDA, I said that the steering committee would consider post-treatment (IPGE) evaluation if the IND is approved. The NRN protocol did not address PDA, so I left it as such. The re-application was sent yesterday and I will let you know once I get a decision from them.

Thanks for all the hard work and effort!  
Rose

-----Original Message-----  
From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Wednesday, March 28, 2007 11:07 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE: QEstions for FDA

I am not in my office but I can call you if this is a good time for you. I am available to discuss these - as you know Dr Shankaran is out of the office.  
Thanks  
Beena



From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wed 3/28/2007 11:04 AM  
To: Sood, Beena  
Cc: Shankaran, Seetha  
Subject: QUestions for FDA

Beena

I have a few questions for the IND clinical hold submission as well as the protocol.

Thanks

Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich; Kristin Zaterka-Baxter (E-mail)  
**Cc:** Sood, Beena; Shankaran, Seetha  
**Subject:** RE: QUestions for FDA  
**Date:** Saturday, March 31, 2007 2:07:50 PM

---

Hi Rose and Beena  
I would just note this and continue.  
Thanks  
Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, March 30, 2007 7:41 AM  
To: Wade Rich; Neil Finer; Kristin Zaterka-Baxter (E-mail)  
Cc: Sood, Beena; Shankaran, Seetha  
Subject: FW: QUestions for FDA

Hi,  
See not from Beena - the baby had a PDA ligation and was off the oximeter for the duration of the procedure - should she just document that the kid was off it?  
Thanks  
Rose

-----Original Message-----

From: Sood, Beena [mailto:bsood@med.wayne.edu]  
Sent: Friday, March 30, 2007 10:38 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Shankaran, Seetha  
Subject: RE: QUestions for FDA

Thanks for the update - will await their decision.

Quick SUPPORT question - one of the SUPPORT babies had to go for PDA ligation - was off the masimo pulseox in th OR. Is there a specific procedure to record this, report this or prevent this? The OR nurse did nor comply with our requests.

Thanks  
Beena

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, March 30, 2007 10:27 AM  
To: Sood, Beena  
Cc: Shankaran, Seetha  
Subject: RE: QUestions for FDA

Beena  
For the PDA response to the FDA, I said that the steering committee would consider post-treatment (IPGE) evaluation if the IND is approved.

The NRN protocol did not address PDA, so I left it as such. The re-application was sent yesterday and I will let you know once I get a decision from them.

Thanks for all the hard work and effort!

Rose

-----Original Message-----

From: Sood, Beena [mailto:[bsood@med.wayne.edu](mailto:bsood@med.wayne.edu)]

Sent: Wednesday, March 28, 2007 11:07 AM

To: Higgins, Rosemary (NIH/NICHD) [E]

Subject: RE: QUESIONS for FDA

I am not in my office but I can call you if this is a good time for you. I am available to discuss these - as you know Dr Shankaran is out of the office.

Thanks

Beena

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)]

Sent: Wed 3/28/2007 11:04 AM

To: Sood, Beena

Cc: Shankaran, Seetha

Subject: QUESIONS for FDA

Beena

I have a few questions for the IND clinical hold submission as well as the protocol.

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Nancy Peters  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Michael O' Shea  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: SUPPORT ROP Outcomes  
**Date:** Friday, March 30, 2007 2:25:45 PM

---

Rose,

Thank you. I had scored the Chapter 15 section in the manual for instructions about scoring as a 4 since I was unsure if 3 was the correct choice, but did not find instructions about scoring it as such. Perhaps it would be helpful to add on page 15-3 under section 15.2 "Favorable", along with the first bullet that discusses the vessel growth to the ora serrata that this outcome should be scored as a 4.

Again. Thank you for your assistance with correctly scoring this child.

Nancy P.

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, March 30, 2007 1:44 PM  
**To:** Nancy Peters; Michael O' Shea  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: SUPPORT ROP Outcomes

If the vessels had grown to the ora serrata, this child is "fully mature" so the child can be called 4. mature under the zone question and no ROP.

Thanks  
Rose

---

**From:** Nancy Peters [mailto:npeters@wfubmc.edu]  
**Sent:** Friday, March 30, 2007 1:41 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Michael O' Shea  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** RE: SUPPORT ROP Outcomes

Rose,

I picked up a statement from the peds ophth office today and will enter the changes making the lowest zone a III. The peds ophth states that the last exam shows that the vessels were at the ora serrata for both eyes (although the diagram from that exam did not lead Mike or I to that same conclusion). There will be no further evaluations for this child until pr-school F/U.

Thank you for your patience while we tried to sort out these problematic eye exams.

Nancy P.

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, March 29, 2007 4:58 PM  
**To:** Michael O' Shea; Nancy Peters  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** SUPPORT ROP Outcomes

Center	Network	Error message
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing information on the above listed patient for SUPPORT. Let us know if you have any information.

Thanks  
Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
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Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Wade Rich  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Antenatal Consent Presentation  
**Date:** Friday, March 30, 2007 10:45:59 AM  
**Attachments:** PresentationSeaTac.ppt

---

Revised version for subcommittee with logos and corrections.  
wade

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Friday, March 30, 2007 7:38 AM  
To: Wade Rich  
Subject: RE: Antenatal Consent Presentation

Wade

I have attached the logos (need to have at least DHHS logo on first slide).

Third slide - 3rd bullet should be "TRIALS"

6th slide - did the DSMC not follow this (it was before my time, but even pilots get followed, right?) I would leave it out.

Also, the subcommittee should review this - shall I send it on?

Thanks for all the effort!!!

Rose

-----Original Message-----

From: Wade Rich [mailto:wrich@ucsd.edu]  
Sent: Friday, March 30, 2007 10:30 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: Antenatal Consent Presentation

Rose,

Attached is a copy of the .ppt I will be presenting at ACRP in April (pending further revisions). Since the study is not complete yet I have not been too bold in my comments.

wade

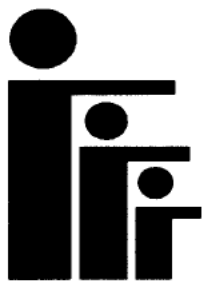
Wade Rich, BSHS,RRT,CCRC  
Clinical Research Coordinator  
Division of Neonatology  
UCSD Medical Center  
200 W Arbor Dr  
San Diego, CA 92103-8774  
619-543-5375  
pgr 290 (b) (6)

## **2007 ACRP GLOBAL CONFERENCE & EXHIBITION**

*Tomorrow's Clinical Research Team: delivering on the promise for innovation for medicine*

April 20-24, 2007 Seattle, Washington

# **Pre-screening and Antenatal Informed Consent for Neonatal Trials: *A Research Conundrum***



**Wade Rich, BSHS, RRT-NPS, CCRC  
UCSD Medical Center  
San Diego, CA**

**Kathy Auten, MSHS  
Duke University Medical Center  
Durham, NC**



# **NICHD Neonatal Research Network**

- **16 Academic Centers**
- **Centralized Data Management & Data Safety Monitoring Committee**
- **Sites average 500 NICU admissions per year, > 70% inborn**
- **Active maternal-fetal medicine service**





# **NICHD Neonatal Research Network**

- **Cooperative research projects in neonates**
- **Primarily critically ill newborns**
- **Trials are historically funded based on capitation.**
- **This does not always work.**



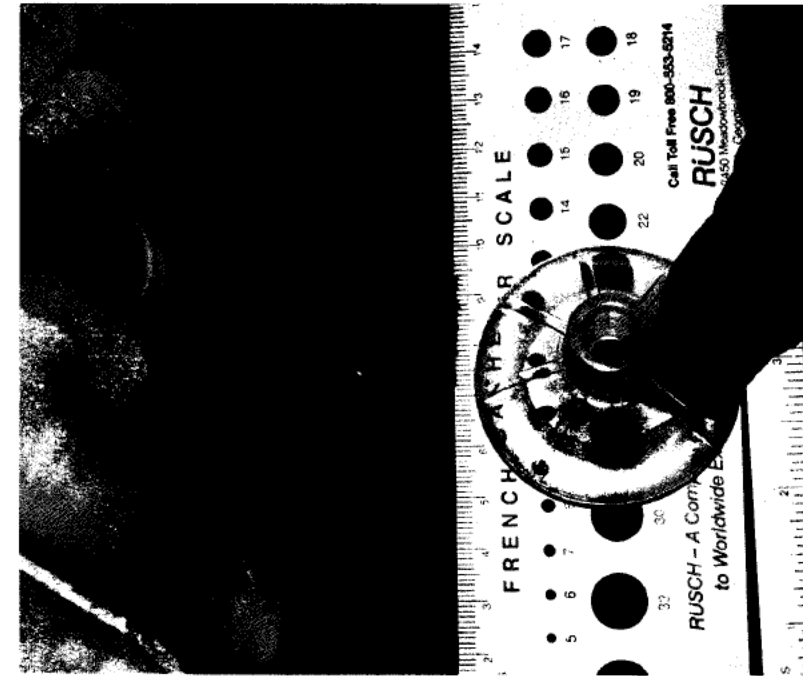
## **The Trials**

- **DR CPAP – A small pilot trial**
- **SUPPORT – A large multi-center interventional trial**
- **Antenatal Consent – A secondary to SUPPORT**

# The DR CPAP Trial – 2002

## Finer, et al.

- **<28 weeks Gestation (Best OB)**
- **Inborn**
- **N= 100**
- **Primary Question – Was CPAP in DR possible**



## **The DR CPAP Trial – 2002**

### **Finer, et al.**

- **DR CPAP was subcommittee members (committed)**
- **4 of 5 centers enrolled under waiver.**
- **Individual site visits from study PI.**



## **Patient Population**

### **Means $\pm$ Standard Deviation**

	<b>CPAP N=55</b>	<b>Control N=48</b>
<b>Birth Weight</b>	<b>753 <math>\pm</math> 196</b>	<b>799 <math>\pm</math> 186</b>
<b>Gestation (weeks)</b>	<b>25 <math>\pm</math> 1.3</b>	<b>25 <math>\pm</math> 1.2</b>
<b>Apgar @ 1 min</b>	<b>4</b>	<b>4</b>
<b>Apgar @ 5 min</b>	<b>6</b>	<b>6</b>
<b>Apgar @ 10 min</b>	<b>6</b>	<b>6</b>

## **DR CPAP Trial Enrollment**

- **5 centers enrolled 100 subjects in 6 months.**
- **Using this model, 16 centers in the main SUPPORT trial would enroll 600 babies per year, and the trial would take about 2.5 years.**



## **Conclusions from DR- CPAP Trial**

- ✓ *All Infants < 24 weeks required DR Intubation for resuscitation!*
- ✓ **Early CPAP in the DR is a feasible intervention for infants > 24 weeks and > 500 gm**
- ✓ **Antenatal consent was feasible**

## **Pilot Enrollment Data**

- **281 infants <28wks GA infants delivered**
- **162/281 of these were screened → 120 eligible**
- **104/120 consented & enrolled**
- **Enrollment rate = *83%*.**



## **Pilot Enrollment Data**

- **There were 281 infants of less than 28 weeks who delivered in the study hospitals during the period of the study** Did not Deliver? Transferred?
- **Of whom 162 infants were screened by study personnel.** We assumed incentive would increase this.
- **Forty-two were determined to be ineligible by the study criteria.** Includes “out of window”
- **104 infants were consented of the 126 eligible patients, for an enrollment rate of *83%*.”** Were there 239 eligible ?

## **Beginnings of SUPPORT**

- **Support trial was based on the DR CPAP model, using data from the pilot study as a benchmark.**
- **All centers required an informed consent. (i.e. No Waivers)**
- **Startup was not “shotgun”; covered over one year.**



## **Why Didn't Centers Enroll Under Waiver**

- **Studies which involve treatment in the delivery room**  
**have historically been either consented antenatally or**  
**have functioned under a *waiver of consent* as**  
**established in the Code of Federal Regulations**

## **(45 CFR 46.116[d])**

- (d) An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth in this section, or waive the requirements to obtain informed consent provided the IRB finds and documents that:**
- (1) The research involves no more than minimal risk to the subjects;**
  - (2) The waiver or alteration will not adversely affect the rights and welfare of the subjects;**
  - (3) The research could not practicably be carried out without the waiver or alteration;**
  - (4) Whenever appropriate, the subjects will be provided with additional pertinent information after participation.**

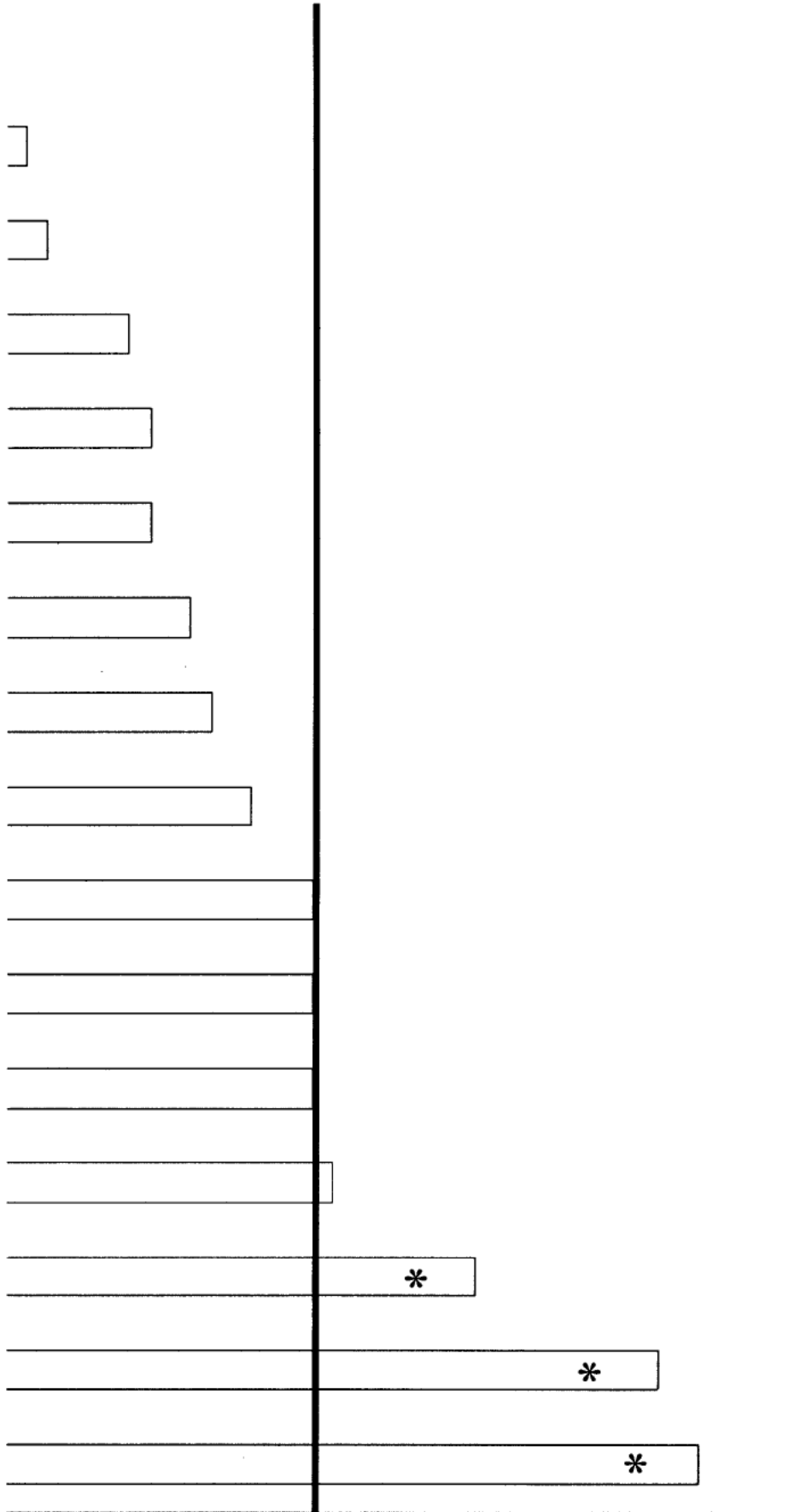
## **SUPPORT – The Primary Trial**

- **24 – 27 6/7 GA - 4 week window**
- **Target enrollment = 1310**
- **Pool of Candidates (Delivered) = 1100/year**
- **Projected enrollment 33 to 50% of those eligible →  
~ 435/year or ~ 36/month or 2+/center/month**
- **Estimated time to completion – 3 years**

## **The 6 month Report Card**

- **Averaging 2 enrollments per center per month**
- **Centers reporting difficulty with complexity of trial**
- **Coordinators describing lengthy process for obtaining consent.**

# Enrollment Distribution – 6 mos



## **Why We Can't Enroll**

- **“Our IRB won't let us talk to moms in labor.”**
- **“The consent requires multiple visits – ↑Time”**
- **“Moms are already overwhelmed by other studies”**
- **“We consent them, then they deliver out of the window”**



## **Antenatal Consent Trial - NRN**



- **Secondary to the SUPPORT Trial**
- **Based on input from study coordinators regarding time/effort involved in enrollment**
- **Target is 50 infants who delivered in the window per center.**

## **Antenatal Consent Trial**

- **Ellen Hale - Emory**
- **Angelita Hensman - Brown**
- **Nancy Newman – CWRU**
- **Nancy Peters – Wake Forest**

## **Primary Goals**

- **To determine the average number of attempts to present a study to a prospective parent and the average length of time it takes to obtain an answer regarding participation for all centers and between centers**
- **To determine how many mothers must be approached for consent to yield one enrolled subject**

## **Primary Goals**

- **To determine reasons for failure to enroll consented newborns.**
- **To determine the amount of personnel time it takes to yield one enrolled subject.**

## **Primary Goals**

- **To make recommendations regarding budgeting and antenatal recruitment practices for future neonatal studies.**
- **To determine reasons for failure to obtain consent.**

## **Antenatal Consent Secondary**

- **Started enrolling in October 2005**
- **1288 mothers have been approached**
- **We have screening data from 20 centers**

# **What is Antenatal Consent & Pre-Screening?**

## **Pre-Screening**

**Identify women hospitalized for risk of premature delivery**

## **Antenatal Consent**

**Present study & ask for consent**

## **Screening**

**Is infant born in window ? No congenital anomalies?**

## **Enrollment**

**Randomize & start study treatments**

## **Phase 1 - Pre-Screening**

- **Coordinators and PI need to have a relationship with the perinatal service**
- **Every mother carrying a 23 week infant is not a candidate for consent**
- **Mothers move !**



## **Communication – OB**

- **60% of the time OB permission was obtained prior to approaching a mother for consent.**
- **This increases the time needed to obtain a consent, but provides a framework for two-way communication when qualifying infants arrive on Labor deck.**

## **Neonatal Consult**

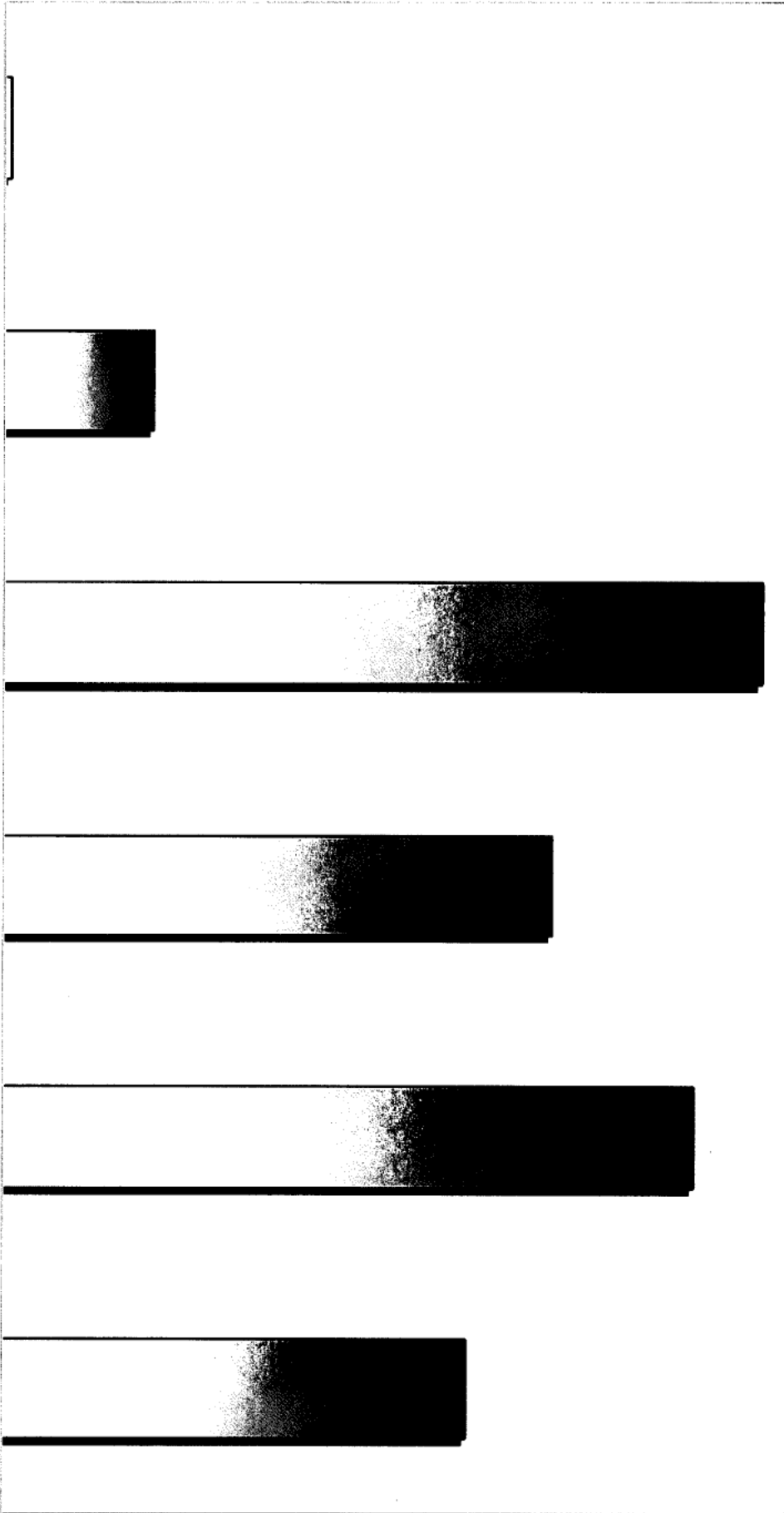
- **A neonatal consult was not done on 36% of the mothers approached for this trial.**
- **A mother for whom a consult was provided was significantly more likely to consent to the trial than one who did not have a consult. ( $p < .05$ ).**
- **Centers who do consults on 100% of infants in the trial were not significantly more successful obtaining consent.**

## **Neonatal Consult**

- **In infants who had a consult, the SUPPORT trial was discussed about 1/3<sup>rd</sup> of the time.**
- **Nearly 10% of infants were consented during the neonatal consult.**
- **Consult becomes functional part of pre-screening process**

## **Phase 2 - Obtain Consent**

- **Understanding of site-specific regulations**
- **Maternal health status may effect decision**
- **Some centers were not allowed to speak to moms who were in labor**



## Why Was Mother Not Approached ?



● <b>Active Labor</b>	<b>13.3%</b>
● <b>Insufficient Time</b>	<b>15.5</b>
● <b>Week Night, Weekend, Holiday</b>	<b>8.9</b>
● <b>Neonatal Consult not Done</b>	<b>3.7</b>
● <b>Not notified/aware of admission</b>	<b>5.5</b>
● <b>Other</b>	<b>55.3 %</b>

## **“Other” Reasons for Not Approaching Mother**

- **Most Common – Congenital Abnormalities**

**Note: This was not specifically an exclusion criteria.**

- **Other common non-specified reasons:**
  - **Maternal illness which precluded consent**
  - **Language**

## **Number of Attempts**

- **82 % of attempts to approach mom done by Coordinator/ Research RN.**
- **75% of mothers were approached 2 or less times.**
- **Range was 1-11 attempts**





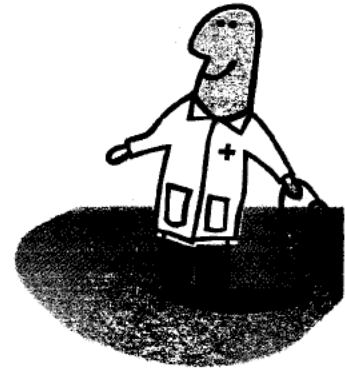
## Too Many Consents

- **We were concerned that mothers who were in “Bi-Network” centers, those who were in Neonatal and Maternal NICHD networks, would overwhelm moms with consents.**
- **Only 5% of screened subjects were specifically identified as being in another antenatal study, and 8% in a neonatal study (Note to self: Never include “Unk” as an option. )**

## Consent Rate

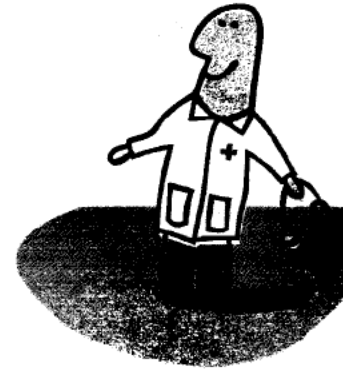


- **Of the 1292 infants screened, 1017 have current data forms indicating status of consent.**
- **554 were consented , for a consent rate of 54.2 %**



## **What Affects Consent Rate?**

- **Is the rate of consent effected by gestational age at which we approach the mother ?**
- **Is it affected by who obtains the consent?**
- **Other factors?**



## What Affects Consent Rate?

- **There is a significant relationship between doing a neonatal consult and obtaining consent. ( $P < .018$ )**
- **Translation: You were more likely to get a consent if a consult was done.**

## **Phase 3 - Screening**

- **Post-Consent tracking – Moved, Transferred, D/C'd, Readmitted**
- **Delivery status - Does everyone know about delivery**  
*(Flip side - does everyone know that a particular mom has an active consent?)*
- **Equipment status - enough for multiples?**
- **Tracking through window of eligibility**

## **Delivery in the Study Window**

- **Only 43% of women who consented delivered an infant in the study window**
- **Range was 25 – 76%**
- **SUPPORT – An effective tocolytic !**

## **Delivery out of the Window**

- **34 % delivered out of the window in the study hospital.**
- **15% were transferred or discharged prior to deliv.**
- **1% died in utero**

## Multiple Births - SUPPORT



- **15% of pregnancies yield multiple fetuses.**
- **27% of infants are from a multiple pregnancy.**



## **Phase 4 - Enrollment**

- **What was the rate of enrollment ?**
- **What factors effected that rate?**
- **Who were the most efficient enrollers ?**

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

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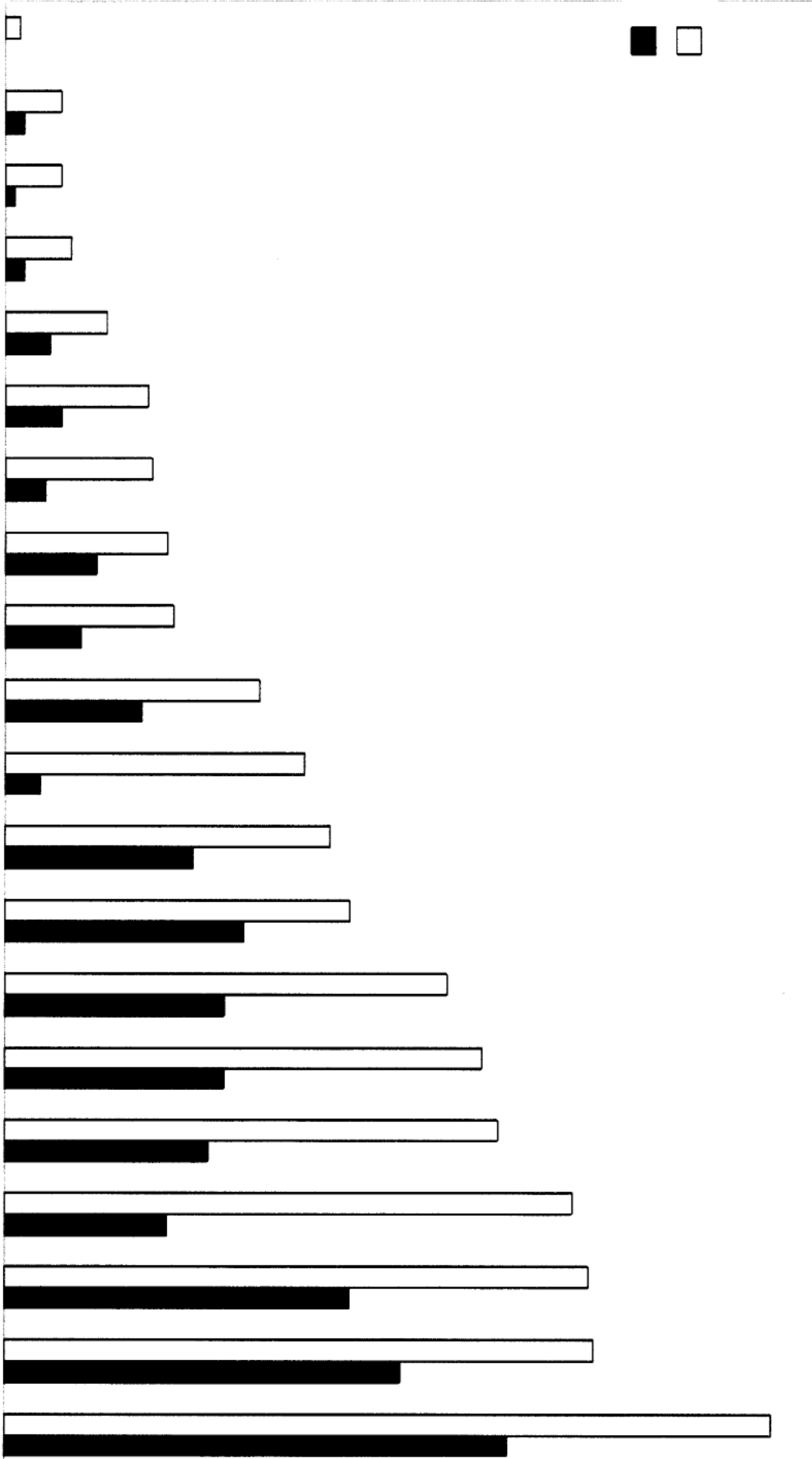
[Redacted]

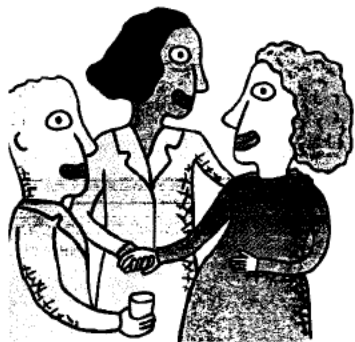
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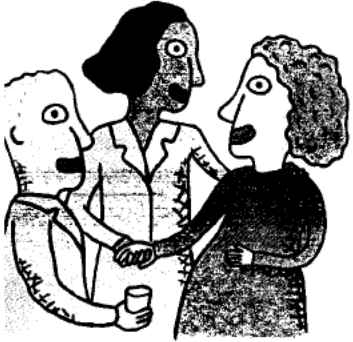




## When Mothers Were Approached

### Gestational Age at first contact (Weeks)

<u>Weeks</u>	<u>#</u>	<u>%</u>
22	2	0.2
23	58	5.7
24	295	29.0
25	214	21.0
26	268	26.4
27	180	17.7



## **When Mothers Were Approached**

**Gestational Age at the time of first contact did  
not significantly effect the rate of enrollment.**



## Too Many Consents

- **Centers who have both types of Networks in place are now 4 of the top 5 enrollers.**
- **These centers approach more women, get more consults, enrolled at a higher rate, and used less time to do it than their counterparts.**

## **The Current Numbers - Overview**

- **1289 moms were screened**
- **1015 were approached for consent**
- **554 agreed to allow their infants to participate**
- **259 infants and 254 moms enrolled in the trial**
- **$1289/259 = 5:1$  screening to enrollment ratio**

## **SUPPORT – Workload**

- **Each enrolled subject required the following:**
  - 1) **4 unsuccessful screenings (1-11 visits ea.) at 1.2 hour.**
  - 1) **1 successful screening (1-11 visits ea.) at 1.2 hours for this subject**
  - 2) **6 hours screening/subject.**



## **The Bottom Line**

- **In order to enroll *one* infant in an trial with antenatal consent and a 4 week delivery window we found that you must approach five women and spend about six hours just in the consent process.**

## **Limitations of the Study**

- **Data was collected by coordinators**
- **We are missing the overall denominator**
- **No information regarding comparing coordinators with physicians regarding consent rates**
- **Data collection is not yet complete**

## **Implications**

- **Studies requiring antenatal consent must budget more coordinator time for recruitment**
- **When establishing timelines for a trial, a screening to recruitment ratio of 5:1 is reasonable**

## **Where do we go from here?**

- **How does this estimate differ from the amount of time it takes to consent for studies at/after birth? Should studies requiring antenatal consent be budgeted differently than post-natal consent studies?**
- **Are there ways to shorten the amount of time spent doing antenatal consent?**

## Participating Centers

- **Case Western Univ.**
- **Univ. of Texas-Dallas**
- **Univ. of Miami**
- **Emory University**
- **Univ. of Cincinnati**
- **Indiana Univ.**
- **Brown Univ.**
- **Wayne St. Univ.**

**Stanford University**

**Univ. of Alabama - Birmingham**

**Univ. of Texas – Houston**

**Duke Univ.**

**Yale Univ.**

**UCSD**

**Tufts Univ.**

**Univ of Utah**



**From:** Wilson, Leslie Dawn  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Friday, March 30, 2007 10:27:42 AM

Hi. I had them enter the data for (b) (6). However (b) (6) is an outpatient and the Ophthalmologists are out until 4/5. I have a message there requesting the info. Have a question though. There are two zone 3's in a row listed which I thought was the outcome and I did not need to send anymore—which is why I wasn't looking for them. Although the first Zone 3, had not stages on the report. Second zone 3 has stage 2 for both eyes. Is this why we needed more exams?  
Thanks--

*Leslie Dawn Wilson, RN, BSN*  
**Research Manager**  
**Neonatal Network Coordinator**  
**Riley Hospital RR 208**  
**ldw@iupui.edu (e-mail)**  
**699 West Dr**  
**Indianapolis, IN 46202**  
**317.274.8255 (phone)**  
**317.274.8963 (fax)**  
**317.312.(b) (6) (pager)**

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, March 29, 2007 4:20 PM  
**To:** Poindexter, Brenda B; Wilson, Leslie Dawn  
**Cc:** Gantz, Marie; Das, Abhik  
**Subject:** SUPPORT ROP OUTCOMES

We are missing the following SUPPORT ROP outcomes:

Center	Network	Error message
12	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
12	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.
12	(b) (6)	No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

Let us know if you have them.

Thanks  
Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Wade Rich  
**To:** Zaterka-Baxter, Kristin; Neil Finer  
**Cc:** Frantz, Ivan; Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik; Mackinnon, Brenda  
**Subject:** RE: Support Infant with PPHN and use of study monitor  
**Date:** Friday, March 30, 2007 9:13:53 AM

---

I am not sure if Neil is around today, so I will give you my answer based on what we have talked about, and Neil will add his comments if he is around.

We would prefer two study oximeters. The reasons go something like this:

- 1) Your intent is probably to keep kids in the high sat range, for which the study oximeter will be reading accurately.
- 2) What you are looking for is a shunt, which will be represented by a pre/post differential. If both devices are the same skew, the shunt you see will be real, though the absolute values might not be. If you use a non-study oximeter, you will either see an artificially large shunt, or an artificially small one. Neither is desirable.
- 3) With two study oxims you decrease the risk of unblinding.

Hope this helps.

Wade

---

**From:** Zaterka-Baxter, Kristin [mailto:kzaterka@rti.org]  
**Sent:** Friday, March 30, 2007 5:38 AM  
**To:** Neil Finer; Wade Rich  
**Cc:** Frantz, Ivan; Rosemary Higgins (E-mail); Das, Abhik; Mackinnon, Brenda  
**Subject:** Support Infant with PPHN and use of study monitor

Hi Dr. Finer,  
Please see the email below; please advise.  
Thanks,  
Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
kzaterka@rti.org

---

**From:** Mackinnon, Brenda [mailto:BMackinnon@tufts-nemc.org]  
**Sent:** Friday, March 30, 2007 7:13 AM  
**To:** Zaterka-Baxter, Kristin  
**Cc:** Frantz, Ivan; Rosemary Higgins (E-mail)  
**Subject:**

Hi Kris,

We enrolled another SUPPORT baby (our 7th for the month!) last night who has PPHN and has pre and post sat monitors in place. I can't find any guidance for this in the manual. The SUPPORT monitor is post and a NICU Masimo is the pre. Any information you have would be helpful. The staff asked if they should have put on 2 blue monitors or 1 study and 1 standard. I felt they needed a standard in this scenario due to the acuity of the patient. Please let me know how this has been handled in the past if it has come up.

Rose I cc'd you as I know you are up as you responded to my previous email any thoughts?

Thanks,  
Brenda

Brenda MacKinnon, RNC  
NICHD Neonatal Research Network Coordinator  
Tufts-NEMC Floating Hospital for Children  
750 Washington Street  
Boston, MA 02111

Phone: 617-636-1218  
Fax: 617-636-1456  
bmackinnon@tufts-nemc.org



\*\*\*\*\*

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\*\*\*\*\*

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**From:** Wally Carlo, M.D.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; ambal@uab.edu; Monica Collins  
**Cc:** Das, Abhik; Cunningham, Meg  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Thursday, March 29, 2007 5:47:22 PM

---

Rose:

We will work on these. Thanks for the reminder.

wally

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, March 29, 2007 3:54 PM  
**To:** Wally Carlo, M.D.; ambal@uab.edu; Monica Collins  
**Cc:** Das, Abhik; Cunningham, Meg  
**Subject:** SUPPORT ROP OUTCOMES

Hi,

We are missing the following SUPPORT ROP outcomes:

Center	Network	Error message
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
16	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Let us know if you have information o these children.

Thanks

Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Pablo Sanchez; Walid Salhab  
**Cc:** Abhik Das; Marie Gantz  
**Subject:** Re: SUPPORT ROP OUTCOMES  
**Date:** Thursday, March 29, 2007 5:39:24 PM

---

Rose,

(b) (6) has missed numerous appointments and is scheduled to come in on 6/1/07.

(b) (6) canceled the last appointment and is scheduled for 4/12/07

(b) (6) had an appointment for today (3/28/07) and I'll check on it tomorrow and get back with you.

Thanks,

Nancy

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 3/29/2007 3:12 PM >>>

The following infants are missing ROP outcomes for SUPPORT:

Center

Network

Error message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

4

(b) (6)

No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed.

Let us know if you have them.

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Kathy J Auten  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Michael Cotten; Ronald N Goldberg; Gantz, Marie  
**Subject:** Re: SUPPORT ROP OUTCOMES  
**Date:** Thursday, March 29, 2007 5:04:01 PM

---

We continue to work on getting this information.

Kathy J. Auten, MSHS  
Project Manager  
NICHD Neonatal Research Network Trials  
Duke University Medical Center  
Box 3179  
Bell Building, Room 141  
Durham, NC 27710 USA  
919-681-5859 tel  
919-681-4868 fax  
kathy.auten@duke.edu

"Higgins, Rosemary \ (NIH/NICHD\ ) [E]" <higginsr@mail.nih.gov> wrote on 03/29/2007 04:55:03 PM:

> We are missing the following SUPPORT ROP outcomes:

>

> Center

>

> Network

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> Error message

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> 19

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> (b) (6)

>

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

>

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for the left eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

> No SUPP10 forms have been entered though 50 weeks PMA has been  
> reached and the infant did not die early.

>

> 19

>

> (b) (6)

> No SUPP10 records have been entered even though SUPP09 Question C1  
> indicates that an exam for ROP was performed. 50 weeks PMA has been reached.

>

> 19

>

> (b) (6)

> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.

> 19

> (b) (6)

> No SUPP10 forms have been entered though 50 weeks PMA has been  
> reached and the infant did not die early.

> Let us know if you have information on these children.

> Thanks

> Rose

> Rosemary D. Higgins, M.D.

> Program Scientist for the Neonatal Research Network

> Pregnancy and Perinatology Branch

> Center for Developmental Biology and Perinatal Medicine

> NICHD, NIH

> 6100 Executive Blvd., Room 4B03B

> MSC 7510

> Bethesda, MD 20892

> (For overnight delivery, use Rockville, MD 20852)

> 301-435-7909

> 301-496-3790 (FAX)

> higginsr@mail.nih.gov

>

**From:** [Zaterka-Baxter, Kristin](#)  
**To:** [Frantz, Ivan](#); [Mackinnon, Brenda](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Das, Abhik](#); [Poole, W. Kenneth](#); [Gantz, Marie](#); [Gordon Avery](#)  
**Subject:** Support Trial Adverse Event (20070320)  
**Date:** Wednesday, March 21, 2007 5:25:39 PM  
**Attachments:** [A+E 66381\\_32107.doc](#)  
**Importance:** High

---

Hi all,

The adverse event report (Medwatch) and IRB notice attached here were sent to the Neonatal Research Network IRB Chair, Dr. Gordon Avery. Upon review, Dr. Avery felt this single event was with in the background of what is expected of the study and that while we need to note this event and monitor for patterns, no additional action is required at this point; Dr. Higgins, the NRN Program Scientist concurs.

Thanks and please let me know if you have any questions.

Kris

Kris Zaterka-Baxter, RN, CCRP  
RTI International  
4426 South Miami Blvd.  
Durham, NC 27703  
Telephone: (919) 485-7750  
Fax: (919) 485-7762  
[kzaterka@rti.org](mailto:kzaterka@rti.org)

---

**From:** Mackinnon, Brenda [<mailto:BMackinnon@tufts-nemc.org>]  
**Sent:** Wednesday, March 21, 2007 12:19 PM  
**To:** Zaterka-Baxter, Kristin  
**Cc:** Rosemary (NIH/NICHD) [E] Higgins; Frantz, Ivan  
**Subject:** Adverse event  
**Importance:** High

Hi Kris,

I have faxed this attachment to RTI already but have been asked to email it to you as well. This is a letter to our IRB explaining the circumstances of an adverse event that occurred in study pt # **(b) (6)** that was felt to be study related. The baby was assigned to the CPAP arm of the SUPPORT Study. CPAP was delivered via NeoPuff and a face mask. I am trying to find out the type of face mask but haven't as of yet. As soon as I do I will send that information to you.

Thanks,  
Brenda

Brenda MacKinnon, RNC  
NICHD Neonatal Research Network Coordinator  
Tufts-NEMC Floating Hospital for Children  
750 Washington Street  
Boston, MA 02111

Phone: 617-636-1218  
Fax: 617-636-1456  
[bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org)

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\*\*\*\*\*

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\*\*\*\*\*

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March 21, 2007

Dr. David Chelmow  
IRB Chair  
Tufts-New England Medical Center  
Institutional Review Board  
35 Kneeland Street, 8th Floor  
Box #817

RE: IRB# 7856; SUPPORT: Resuscitation required in delivery room

Dear Dr. Chelmow:

This letter is to notify the IRB of the need to resuscitate a baby in the delivery room. The baby is subject (b) (6) and was enrolled in SUPPORT yesterday (b) (6). The baby was randomized to and started on CPAP in the delivery room. After a few minutes of CPAP by facemask air accumulated in the stomach, when the naso-gastric tube was placed the baby had what was thought to be a vaso-vagal response with decreased heart rate, tone and color change, which required chest compressions and intubation. Once intubated, ventilated and surfactant administered the baby improved rapidly. The cause of this event was felt to be study related as CPAP was initiated due to randomization. The accumulation of air in the stomach was caused by the use of CPAP, which often occurs with its use. Enclosed is the Adverse Event Report.

Sincerely,

John Fiascone, MD  
Director of NICU  
Co-Investigator SUPPORT

**From:** Susan Hintz  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Neuroimaging SUPPORT update email requests  
**Date:** Friday, March 16, 2007 1:24:40 PM

---

The issue is that the monthly report is not an up-to-date, "real-time" tool. Everyone is doing this in a different way - some are approaching families at 36 weeks. Do you think we should NOT be sending requests for additional information? If not, or if you think people will think it's a total pain, I could reconsider. But this was always the problem with the monthly report mechanism with this protocol

Let me know

Susan

How much of this is in the monthly report?

---

**From:** Susan Hintz [mailto:srhintz@stanford.edu]  
**Sent:** Thursday, March 15, 2007 6:35 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Neuroimaging SUPPORT update email requests

March 15, 2007

Hi Rose,

It's time for an update from sites on the SUPPORT secondary progress - again. As always...feel free to edit!

You will note that both Wayne State and New Mexico are not on this list. We both know where Wayne State is in terms of the process - so I guess no need to email them.

I also have heard from New Mexico - I have spoken by email to Julie Rohr because their IRB has concerns with the concept of feeding and swaddling in the face of potential "reflux". I gave her some suggestions for getting around that, timing of feeds, re-wording things so the IRB knows that they will not be sending massive refluxers/aspirators to MRI -

Thanks Rose

Susan

---

For Alabama

Case  
Dallas  
Indiana  
Brown  
Stanford  
Houston  
Duke  
Iowa  
Utah  
Tufts  
UCSD

**Please respond to the following questions by March 29th, 2007**

- 1) How many patients have been enrolled to date in the **SUPPORT Neuroimaging secondary** at your site?
- 2) How many have completed 35-42 week neuroimaging studies (MRI and CUS)
- 3) If you have enrolled patients that have **not** completed 35-42 week neuroimaging, please tell us:
  - a) How many died before reaching the 35-42 week window?
  - b) How many have not yet reached the window?
  - c) How many have reached the window, but have not yet been imaged?
  - d) How many "missed"/were unsuccessful with a neuroimaging study?  
Please describe:  

---
  - e) Other issues?  
Please describe:  

---
- 4) How many patients received sedation for the MRI?
- 5) Are you using an "immobilizer" or "hugger" device for the MRI?
- 6) How many of the following neuroimaging studies have been copied and sent to RTI?  
Early cranial US? \_\_\_\_\_  
Late cranial US? \_\_\_\_\_  
Brain MRI? \_\_\_\_\_

**\*\*Thank you for your hard work and dedication on SUPPORT and the Neuroimaging Secondary!\*\***

--

Susan R. Hintz, M.D., M.S. Epi

**Assistant Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine**

750 Welch Road, Suite 315

Palo Alto, CA 94304

ph: 650-723-5711

fax: 650-725-8351

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT Data Safety Committee Chair  
**Date:** Thursday, March 15, 2007 1:27:06 PM

---

Hi Rose

That sounds OK. We have 5 to date without Sharp, and 4 more consented as of today.

Be well

Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, March 15, 2007 7:51 AM  
To: Neil Finer  
Subject: Re: SUPPORT Data Safety Committee Chair

No problem - I am out of the office and Kris will get then Dr. Avery's contact info. Also, we are putting you on the sc meeting schedule on 4/19 at 11 and also at 11 on 4/20.

I spoke to Wade yesterday about potential recruitment numbers for Support from Ucsd/sharp through next April and are targetting about 50.

Take care

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Neil Finer <nfiner@ucsd.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Thu Mar 15 10:35:12 2007  
Subject: RE: SUPPORT Data Safety Committee Chair

Thanks Rose

Have a good day

Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Thursday, March 15, 2007 7:32 AM  
To: schmidt@mcmaster.ca; Neil Finer; william.fraser@umontreal.ca  
Cc: kzaterka@rti.org  
Subject: Re: SUPPORT Data Safety Committee Chair

I have asked the data center to do this.

Regards,

Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Barbara Schmidt <schmidt@mcmaster.ca>  
To: Neil Finer <nfiner@ucsd.edu>; Fraser William Donald

<william.fraser@umontreal.ca>  
Cc: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Thu Mar 15 10:27:50 2007  
Subject: Re: SUPPORT Data Safety Committee Chair

Thanks very much, Neil.

Rose,

please send Dr. Avery's contact information to Dr. Fraser at the address copied on this message.

Thanks so much.

Best regards

Barbara

----- Original Message -----

From: Neil Finer <<mailto:nfiner@ucsd.edu>>  
To: Barbara Schmidt <<mailto:schmidt@mcmaster.ca>>  
Cc: Higgins, Rosemary (NIH/NICHD) [E]  
<<mailto:higginsr@mail.nih.gov>>  
Sent: Wednesday, March 14, 2007 3:54 PM  
Subject: RE: SUPPORT Data Safety Committee Chair

Hi Barbara

The Chairman is Gordon Avery. I will ask Rose Higgins to provide the email as I do not have it.

Neil

---

From: Barbara Schmidt [<mailto:schmidt@mcmaster.ca>]  
Sent: Wednesday, March 14, 2007 8:08 AM  
To: Neil Finer  
Cc: Fraser William Donald  
Subject: SUPPORT Data Safety Committee Chair

Dear Neil,

Prof. William Fraser, the chair of the COT DSMB, would like to be able to contact the chair of your SUPPORT safety committee.

Please let us know who is the chair of your committee, and please send this person's email address to Dr. Fraser at the address that is copied on this message.

Many thanks and best regards

Barbara



**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: Physiologic definition and SUPPORT  
**Date:** Tuesday, March 13, 2007 1:01:22 PM  
**Attachments:** Reasons for no challenge (for Rose 3-13-07).xls

---

Hi Rose,

According to our current data, 35 challenges of SUPPORT infants have been completed (they have a challenge result entered on form PHY02RA). There are 30 infants who were eligible but not challenged according to the PHY01 (25 of these were weaned to RA before the challenge date). Five infants were eligible according to the PHY01, but are missing the challenge result (2 are missing all other physiologic definition forms, 2 have challenge data that went missing at the center, and one parent withdrew consent). There are 17 infants who should have the PHY01 according to the NG07 but do not (14 were on supplemental oxygen, and 3 on RA by NC at 36 weeks). This information is presented in table form on the attached spreadsheet. Let me know if you need any additional information.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, March 13, 2007 11:01 AM  
**To:** Gantz, Marie; Das, Abhik  
**Subject:** RE: Physiologic definition and SUPPORT

If they were on CPAP or the ventilator, they are "too sick" to be challenged. If they are on more than 30% oxygen, they are also ineligible. There is two other questions on the PHY01 that ask about oxygen and saturation which can also eliminate some from being challenged.

Thanks  
Rose

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Tuesday, March 13, 2007 10:46 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: Physiologic definition and SUPPORT

On 12/5/06 (when I generated the queries) there were 36 infants who should have had a PHY01 according to the NG07 but who did not. 32 of those were receiving supplemental oxygen at 36 weeks, and 4 were on room air by CPAP, NC or vent. I will get you more details shortly.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, March 13, 2007 10:30 AM  
**To:** Gantz, Marie; Das, Abhik  
**Subject:** RE: Physiologic definition and SUPPORT

Are we missing only a few or a lot?? Also, I only want this for tracking and payment, so remove any treatment group identifiers as I don't want to be inadvertently unblended.

Thanks for the quick response.

Rose

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Tuesday, March 13, 2007 10:29 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: Physiologic definition and SUPPORT

Hi Rose,

Before doing the DSMC analysis, we actually sent some queries to the centers regarding infants with BPD on NG07 who did not have physiologic definition forms. I will pull that information together and send you a summary.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
328-254-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, March 13, 2007 10:23 AM  
**To:** Das, Abhik; Gantz, Marie  
**Subject:** Physiologic definition and SUPPORT

Hi,

I am working on budget items and noticed that we only have 149 infants from May 2005 through Jan 2007 who have had a physiologic challenge. Either the sites are getting better at reducing BPD or the children are not being challenged. Can you check to see for the SUPPORT trial if children coded as BPD at 36 weeks on the NG07 are having the physiologic challenge data collected on the PHY01 and PHY02? I have a feeling we may be missing some children. If they have BPD on the NG07 and are not getting the PHY01 completed, this is a problem. We may need to track this prospectively for this trial.

Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892

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(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**SUPPORT infants who were eligible for BPD challenge but for whom challenge was not done or is missing  
3/13/2007**

<u>Reason for no challenge</u>	<u>Infants</u>	
Eligible but challenge not done according to PHY01	30	
25 weaned to RA before challenge date		These are ok
1 increased FiO2		If oxygen was > 30%, ok
1 had increased support to vapotherm		ok
2 physician did not want child challenged		WHY??
1 policy not in place yet		??
Eligible according to PHY01 but no challenge result from PHY02RA	5	
2 challenge data lost at center		can they find the data?
1 parent withdrew consent		
2 no PHY02 forms entered		
No PHY01 entered, but infant on supplemental oxygen at 36 weeks according to NG07	14	These infants need a PHY01
No PHY01 entered, but infant on RA by NC at 36 weeks according to NG07	3	needs a PHY01

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Physiologic definition and SUPPORT  
**Date:** Tuesday, March 13, 2007 11:20:47 AM

---

Correct -- I was querying those cases because if they answer "Yes" to on RA by CPAP, NC or vent on the NG07 they are supposed to have a PHY01 (even though they would not be eligible for challenge if they were on CPAP or vent). I looked back at the responses to my queries, and most centers responded by entering the appropriate PHY01. In three cases, the NG07 was amended to reflect the fact that the infant was not actually on supplemental oxygen or RA by CPAP, NC or vent. I am just about to look at the data to get the number of infants who were not actually challenged even though they met criteria for challenge. I will get back to you shortly.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, March 13, 2007 11:01 AM  
**To:** Gantz, Marie; Das, Abhik  
**Subject:** RE: Physiologic definition and SUPPORT

If they were on CPAP or the ventilator, they are "too sick" to be challenged. If they are on more than 30% oxygen, they are also ineligible. There is two other questions on the PHY01 that ask about oxygen and saturation which can also eliminate some from being challenged.

Thanks  
Rose

---

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**Sent:** Tuesday, March 13, 2007 10:46 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
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Marie Gantz, Ph.D.  
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**Sent:** Tuesday, March 13, 2007 10:30 AM  
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**Subject:** RE: Physiologic definition and SUPPORT

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Thanks for the quick response.

Rose

---

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Tuesday, March 13, 2007 10:29 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: Physiologic definition and SUPPORT

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Before doing the DSMC analysis, we actually sent some queries to the centers regarding infants with BPD on NG07 who did not have physiologic definition forms. I will pull that information together and send you a summary.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-251-6255

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, March 13, 2007 10:23 AM  
**To:** Das, Abhik; Gantz, Marie  
**Subject:** Physiologic definition and SUPPORT

Hi,

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Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
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[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Neil Finer](#)  
**To:** [Phelps, Dale](#); [Abbot Laptook](#); [Zaterka-Baxter, Kristin](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: ROP outcomes  
**Date:** Monday, March 12, 2007 4:02:02 PM

---

Hi Dale

Thanks for this

Can we use 1 or 2 depending on the length of follow-up ie 52 wks vs 45wks?

Neil

---

**From:** Phelps, Dale [mailto:[Dale\\_Phelps@URMC.Rochester.edu](mailto:Dale_Phelps@URMC.Rochester.edu)]  
**Sent:** Monday, March 12, 2007 11:01 AM  
**To:** Abbot Laptook; Zaterka-Baxter, Kristin  
**Cc:** [HigginsR@mail.nih.gov](mailto:HigginsR@mail.nih.gov); Neil Finer  
**Subject:** RE: ROP outcomes

Hi Abbot, and Kris, please note this for further future reference:

This remains a 'discussion' at the moment, but we should pick one of the three choices below.

Abbot, for your case, (s)he qualifies as finished -- good, under any of the three.

Based on the \*\*CRYO-ROP Natural History Cohort of <1250g BW infants followed for 5 years:

There are babies like this one. A small number of infants experience vessels that arrest growth in zone II and never go on into zone III and/or to complete vascularization.

In the Reynolds paper, they found that if an infant did not progress to needing laser Rx, and was indeed getting better by 52 weeks postmenstrual age (PMA) (about 3 months after due date usually) that he was basically 'home free'.

To accommodate infants like this in the SUPPORT trial, we could: (decision to be made)

1. State that if an infant reaches 52 weeks PMA without the retinas being fully vascularized, AND there has been no eye surgery, AND the ROP has been getting better, not worse That the eye has a 'favorable outcome'.

OR

2. That if an infant passes 45 weeks PMA and still has vessels ending in zone II or zone III AND has not had stage 3 ROP nor plus disease, that he can be considered to have a favorable outcome (per the Reynolds paper).

OR

3. That we do not classify these infants as favorable or unfavorable, but simply record them through 50 weeks PMA and stop.

Other answers to your questions are put in below... and the source for the answers is the Reynolds manuscript.

Dale Phelps

\*\* Reynolds JD, Dobson V, Quinn QE, Fielder AR, Palmer EA, Saunders RA, Hardy RJ, Phelps DL, Baker J, Trese MR, Schaffer D, Tung B. Evidenced-based screening criteria for retinopathy of prematurity: natural history data from the CRYO-ROP and LIGHT-ROP



studies. *Arch Ophthalmol* 2002; 120:1470-1476.

---

**From:** Abbot Laptok [mailto:ALaptok@WIHRI.org]  
**Sent:** Monday, March 12, 2007 11:28 AM  
**To:** Phelps, Dale  
**Cc:** HigginsR@mail.nih.gov; nfiner@ucsd.edu  
**Subject:** ROP outcomes

Dale

Need to get your perspective of an issue we are encountering to obtain final ROP status on Support infants. Here is a specific example: An infant born in (b) (6) at 25 weeks and has been followed as an outpatient since Jan 06 by our Ophthalmologists.

- 1) As of Feb 07 the lowest zone of any vessels is zone II for both eyes.
- 2) In the hospital this infant had stage II ROP in zone II which regressed to stage I in zone II (both eyes) by 2-3 months corrected age.
- 3) Since May 06 we have the following exams:
  - May 5, 06: zone II, stage II both eyes
  - Aug 10, 06: zone II, no ROP both eyes
  - Feb 15, 07: zone II both eyes, stage I left eye, stage 0 right eyeNext visit is scheduled for Feb 08

Questions:

- 1) What is the typical time scale that retinas vascularize? Is such a long interval as above possible?
  - Typically, onset of prethreshold is between 31 and 43 weeks PMA, threshold between 31 and 42 weeks (Fig. 1,2)
  - Progression into zone III is between 31 and 41 weeks for the 90% that make it there. (Fig. 3)
  - Full vascularization between 31 and 43 weeks. (Table 2)
- 2) Is it common to see variations in ROP stage when we are dealing with stage 0, 1 or 2 (I am not sure that all exams are done by the same Ophthalmologist)?
  - Oh yes ! Also at more severe stages as well. They don't all agree with the zones either.
  - These exams are very difficult.
- 3) Do you think the interval for the next exam is acceptable or is the interval too long?
  - More that acceptable.

Obviously we can't assign final outcome with this type of data. Appreciate any input. AL  
See above.

**From:** Wade Rich  
**To:** Shankaran, Seetha; Susan Hintz  
**Cc:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: sedation  
**Date:** Monday, March 12, 2007 1:48:46 PM

---

Seetha,

Do you think you do not have enough experience sedating them, or that we do not have enough data on whether they need sedation?  
wade

-----Original Message-----

From: Shankaran, Seetha [mailto:[sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)]  
Sent: Monday, March 12, 2007 10:46 AM  
To: Susan Hintz  
Cc: Neil Finer; Wade Rich; [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)  
Subject: RE: sedation

Hi all

Just got back the SUPPORT MRI today from IRB because of "lack of experience with premature infant sedation". Please can you update me on the status of sedation for the infants enrolled in SUPPORT so far. Any help will be welcome. I need this ASAP, I will be out of the country by last week of March Thanks Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine Director, Neonatal-Perinatal  
Medicine Children's Hospital of Michigan and Hutzel Women's Hospital

Tel 313-745-1436  
Fax 313-745-5867

Email [sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)

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-----Original Message-----

From: Susan Hintz [mailto:[srhintz@stanford.edu](mailto:srhintz@stanford.edu)]  
Sent: Tuesday, January 23, 2007 1:17 PM  
To: Shankaran, Seetha  
Cc: neil finer; Wade Rich  
Subject: sedation

Hi Seetha,

Well, as predicted in my 1/22 email to you, the problem with relying on

the MRI01 forms for the sedation information is that it is not "up to the minute" - in other words, completion of the forms is not required until status + 1 month, and even then there are a few edits resulting in an incomplete form.

But, what I can tell you is that, of the 64 MRIs reported to RTI by the MRI01 form thus far, only 9 used sedation (14%). All 9 of those used only conscious sedation. Of note, all 9 came from just 2 centers (of the 11 reporting to RTI by the MRI01 form so far).

I am working with RTI to include more information from the MRI01 in the monthly report -

Susan

--

Susan R. Hintz, M.D., M.S. Epi  
Assistant Professor of Pediatrics  
Division of Neonatal and Developmental Medicine Stanford University  
School of Medicine 750 Welch Road, Suite 315 Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351

**From:** Shankaran, Seetha  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; s\_shankaran@wayne.edu  
**Subject:** RE: Support  
**Date:** Wednesday, March 07, 2007 3:17:04 PM

---

Rose

No, not yet---I first sent it for pre-review, then for formal review. They had questions whether parents would be told results, how do we deal with parental anxiety etc. I responded top those queries---I have done everything I had to do. Am awaiting the response  
Will keep you posted  
Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436  
Fax 313-745-5867

Email sshankar@med.wayne.edu

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-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wednesday, March 07, 2007 2:24 PM  
To: s\_shankaran@wayne.edu  
Subject: Support

Seetha

Did you get the support mri study approved? I am working on budget items and need to know for projections.

Thanks  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

**From:** [Shankaran, Seetha](#)  
**To:** [Neil Finer](#); [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Cc:** [Wally](#)  
**Subject:** RE: PCO2.pdf and SUPPORT  
**Date:** Wednesday, March 07, 2007 9:47:13 AM

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Thanks Neil

I have shared your e-mail with my faculty and fellows. This is exactly what I wanted! Michele will start on benchmarking analysis soon I think

Thanks again

Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436

Fax 313-745-5867

Email [sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)

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**From:** Neil Finer [<mailto:nfiner@ucsd.edu>]  
**Sent:** Tuesday, March 06, 2007 4:57 PM  
**To:** Shankaran, Seetha; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Wally  
**Subject:** RE: PCO2.pdf and SUPPORT

Hi Seetha

I fully understand this debate. At the present time there is inadequate data, and almost none from prospective experiences or trials that provides a strong level of evidence either for or against the approach of allowing higher PaCO<sub>2</sub>s in the ELBW infants. Columbia seems to indicate in their review of their own data that they do not have a higher incidence of problems, but again this is not prospective. I know that you were going to look at some of the data from benchmarking etc to report on the associations of hypercarbia and I would look forward to this.

Indeed SUPPORT may provide some such prospective data. We will have substantial blood gas information in the first weeks of life. Our 2 groups should be separated with respect to the actual PaCO<sub>2</sub>s.

Before we try to change practice, we need better data which SUPPORT will in part provide.

We should not change our protocol at this time, and we may, I suspect, be surprised by our results.

Remember that the previous prospective trial was halted for other reasons, and I am skeptical that others will do a large trial on this issue (with the possible exception of Wally!!).

Hope this helps

Neil

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**From:** Shankaran, Seetha [mailto:sshankar@med.wayne.edu]  
**Sent:** Tuesday, March 06, 2007 12:56 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer  
**Cc:** Wally  
**Subject:** RE: PCO2.pdf and SUPPORT

Rose

No, I am not reporting any violations---what we are asking is, how do we (PI's) respond to our colleagues when they say that this paper showed an association with high PCO2. Wally was an author---Wally, what do you do? How do you maintain equipoise?

Should the SUPPORT subcommittee discuss this

Thanks

Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436

Fax 313-745-5867

Email sshankar@med.wayne.edu

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**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, March 06, 2007 10:03 AM  
**To:** Shankaran, Seetha; Neil  
**Subject:** RE: PCO2.pdf and SUPPORT

Seetha

The protocol has specific criteria which were approved in advance of the beginning of the trial. **If there is deviation, a protocol violation needs to be completed.**

For children randomized to CPAP:

These infants will be managed on nasal CPAP, and intubation is never required by protocol. They *MAY* be intubated if they meet **ANY** of the criteria listed below. If intubated within the first 48 hours of life they should receive surfactant

**Intubation:**

- An  $FiO_2 > .50$  required to maintain an indicated  $SpO_2 > 88\%$  (using the altered Pulse Oximeters) for one hour
- An arterial  $PaCO_2 > 65$  torr (arterial or capillary samples, if venous  $PvCO_2 > 70$  torr) documented on a single blood gas within 1 hour of intubation
- Hemodynamic instability defined as a low blood pressure for gestational age and/or poor perfusion, requiring volume and/or pressor support for a period of 4

hours or more. (Note that clinically defined shock is an accepted indication for intubation.)

Intubation may be performed at any time for the occurrence of repetitive apnea requiring bag and mask ventilation, clinical shock, sepsis, and/or the need for surgery. These criteria will continue in effect for a minimum of 14 days of life.

And for extubation:

**Extubation:**

An intubated CPAP-Treatment infant **MUST** have extubation attempted within 24 hours if **ALL** of the following criteria are met and documented on a single blood gas

- PaCO<sub>2</sub> < 65 torr with a pH > 7.20 (arterial or capillary samples)
- An indicated SpO<sub>2</sub> > 88% with an FiO<sub>2</sub> < 50%
- A mean airway pressure (MAP) < 10 cm H<sub>2</sub>O, ventilator rate < 20 bpm, an amplitude < 2X MAP if on high frequency ventilation (HFV)
- Hemodynamically stable (Defined as an infant with clinically acceptable blood pressure and perfusion in the opinion of the clinical team – such an infant may be receiving inotropic/vasopressor agents, but should not require ongoing volume infusions to stabilize the circulation and the doses of any continuously infused medications for circulatory stabilization should not have increased within 1 hour of any planned extubation).
- Absence of clinically significant PDA

These criteria will continue in effect for the first 14 days of life.

For the Surfactant/intubation arm:

**Extubation:**

An intubated Surfactant-Control infant will continue to receive mechanical ventilation until extubation criteria are satisfied, but **MUST** have Extubation attempted within 24 hours of fulfilling **ALL** of the following criteria documented on a single blood gas.

- PaCO<sub>2</sub> < 50 torr and pH > 7.30 (arterial or capillary samples)
- An FiO<sub>2</sub> = 35 with a SpO<sub>2</sub> = 88% using the study pulse oximeters with
- A mean airway pressure (MAP) < 8 cm H<sub>2</sub>O, ventilator rate < 20 bpm, an amplitude < 2X MAP if on high frequency ventilation (HFO)
- Hemodynamically stable (Defined as an infant with clinically acceptable blood pressure and perfusion in the opinion of the clinical team – such an infant may be receiving inotropic / vasopressor agents, but should not require ongoing volume infusions to stabilize the circulation and the doses of any continuously infused medications for circulatory stabilization should not have increased within 1 hour of any planned extubation).
- Absence of clinically significant PDA (Defined as bounding pulses, audible murmur and Echo confirmation of L-R shunting with increased LA/Ao size)

These criteria will continue in effect for a minimum of 14 days for all infants. Failure to attempt to extubate an infant meeting all of the above criteria, or extubation prior to reaching criteria, will be recorded as a study protocol violation unless extenuating circumstances are noted.

**Weaning**

This protocol will not define strict weaning criteria for the Control infants, but it is to be understood that reasonable attempts should be made to extubate these infants. While it is understood that some centers may be using somewhat more severe FiO<sub>2</sub> and PaCO<sub>2</sub> criteria than those listed here as current practice, these Criteria are thought to reflect

current Network practice and practice at 2 of the 3 Best practice centers.

**Reintubation:**

- Control Infants may be reintubated using Standard of Care.

---

**From:** Shankaran, Seetha [mailto:sshankar@med.wayne.edu]

**Sent:** Tuesday, March 06, 2007 9:52 AM

**To:** Neil; Higgins, Rosemary (NIH/NICHD) [E]

**Subject:** PCO2.pdf and SUPPORT

Neil and Rose

We recently reviewed this in Journal club. The faculty and fellows are concerned about current intubation/extubation criteria for SUPPORT (allowing PCO2 to rise above up to 65 and ph as low as 7.2)

Please advise

Thanks

Seetha



**From:** [Shankaran, Seetha](#)  
**To:** [Neil; Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** PCO2.pdf and SUPPORT  
**Date:** Tuesday, March 06, 2007 9:51:46 AM  
**Attachments:** [PCO2.pdf](#)

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Neil and Rose

We recently reviewed this in Journal club. The faculty and fellows are concerned about current intubation/extubation criteria for SUPPORT (allowing PCO2 to rise above up to 65 and ph as low as 7.2)

Please advise

Thanks

Seetha

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**Both Extremes of Arterial Carbon Dioxide Pressure and the Magnitude of  
Fluctuations in Arterial Carbon Dioxide Pressure Are Associated With Severe  
Intraventricular Hemorrhage in Preterm Infants**

Jorge Fabres, Waldemar A. Carlo, Vivien Phillips, George Howard and Namasivayam  
Ambalavanan

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ARTICLE

# Both Extremes of Arterial Carbon Dioxide Pressure and the Magnitude of Fluctuations in Arterial Carbon Dioxide Pressure Are Associated With Severe Intraventricular Hemorrhage in Preterm Infants

Jorge Fabres, MD, MSPH<sup>a</sup>, Waldemar A. Carlo, MD<sup>a</sup>, Vivien Phillips, RN<sup>a</sup>, George Howard, DrPH<sup>b</sup>, Namasivayam Ambalavanan, MD<sup>a</sup>

Departments of <sup>a</sup>Pediatrics and <sup>b</sup>Biostatistics, University of Alabama at Birmingham, Birmingham, Alabama

The authors have indicated they have no financial relationships relevant to this article to disclose.

## ABSTRACT

**OBJECTIVE.** The goal was to test the hypothesis that extremes of  $\text{Paco}_2$  during the first 4 days after birth are associated with severe intraventricular hemorrhage (grades 3 and 4).

**METHODS.** A single-center retrospective review of clinical and blood gas data in the first 4 postnatal days for 849 infants with birth weights of 401 to 1250 g was performed. The univariate and multivariate relationships of severe intraventricular hemorrhage with maximal and minimal  $\text{Paco}_2$ ,  $\text{Paco}_2$  averaged over time (time-weighted  $\text{Paco}_2$ ), and measures of  $\text{Paco}_2$  fluctuation (SD of  $\text{Paco}_2$  and difference in  $\text{Paco}_2$  [maximum minus minimum]) were assessed.

**RESULTS.** Birth weight (mean  $\pm$  SD) was  $848 \pm 212$  g, and the median gestational age was 26 weeks. Infants with severe intraventricular hemorrhage had higher maximal  $\text{Paco}_2$  (median: 72 vs 59 mm Hg) and time-weighted  $\text{Paco}_2$  (mean: 49 vs 47 mm Hg) values but lower minimal  $\text{Paco}_2$  values (32 vs 37 mm Hg). High  $\text{Paco}_2$ , low  $\text{Paco}_2$ , SD of  $\text{Paco}_2$ , and difference in  $\text{Paco}_2$  predicted severe intraventricular hemorrhage, but time-weighted average  $\text{Paco}_2$  was not as predictive.

**CONCLUSIONS.** Both extremes and fluctuations of  $\text{Paco}_2$  are associated with severe intraventricular hemorrhage. It may be prudent to avoid extreme hypocapnia and hypercapnia during the period of risk for intraventricular hemorrhage.

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Dr Fabres' current address is Department de Pediatría, Pontificia Universidad Católica de Chile, Lira 85, Piso 5, Santiago, Chile 8330074.

### Key Words

infant, premature, hypercapnia, hypocapnia, intracranial hemorrhage

### Abbreviations

AUC—area under the curve  
BPD—bronchopulmonary dysplasia  
CBF—cerebral blood flow  
CPAP—continuous positive airway pressure  
IVH—intraventricular hemorrhage  
PVL—periventricular leukomalacia  
ROC—receiver operating characteristic  
VLBW—very low birth weight  
IMV—intermittent mechanical ventilation

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Address correspondence to Namasivayam Ambalavanan, MD, 525 New Hillman Building, 619 19th St South, University of Alabama at Birmingham, Birmingham, AL 35249. E-mail: ambal@uab.edu

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**I**NTRAVENTRICULAR HEMORRHAGE (IVH) is a major risk factor for poor neurodevelopmental outcomes for extremely premature infants.<sup>1,2</sup> Abnormal cerebral blood flow (CBF) regulation is considered to predispose patients to IVH.<sup>3-6</sup> Many animal and human studies have established  $Paco_2$  as one of the main regulators of CBF,<sup>7-12</sup> and several investigators have shown that extremely low or high levels of  $Paco_2$  may be associated with increases in neurologic morbidity rates.<sup>13-18</sup> Higher levels of  $Paco_2$  may be associated with an increased risk of IVH in very low birth weight (VLBW) infants, possibly because of an increase in CBF secondary to hypercapnia.<sup>19</sup> Low levels of  $Paco_2$  are associated with the development of periventricular leukomalacia (PVL) in ventilated premature infants, perhaps because of a decrease in CBF and subsequent ischemia.<sup>12,16</sup> Therefore, the safe upper and lower limits of  $Paco_2$  for VLBW infants need to be determined, because  $Paco_2$  targets for mechanical ventilation strategies are needed.

Permissive hypercapnia or "minimal ventilation," in which higher levels of  $Paco_2$  are tolerated, is often used in the ventilatory management of extremely premature infants, in an attempt to reduce ventilator-induced lung injury and thereby diminish bronchopulmonary dysplasia (BPD). BPD affects 25% of infants with birth weights of 501 to 1249 g, as defined with the new physiologic definition developed by the National Institute of Child Health and Human Development Neonatal Research Network.<sup>20</sup> The new physiologic definition, which uses a timed, room-air challenge for selected infants, has standardized the definition of BPD and reduced the variation among centers, but significant variation in BPD among centers persists.<sup>20</sup> Clinical trials of permissive hypercapnia in adults have shown reductions in mortality rates and the number of days of ventilation.<sup>21</sup> Three randomized, controlled trials of a permissive hypercapnia strategy for VLBW infants have been performed.<sup>22-24</sup> One of those studies reported reductions in rates of chronic lung disease and death in the subgroup of 501-g to 750-g infants.<sup>23</sup> However, a meta-analysis combining 2 of the trials failed to show any significant overall benefit of a permissive hypercapnia/minimal ventilation strategy targeting hypercapnia, compared with a routine ventilation strategy aiming for normocapnia, but also showed no adverse effects of a minimal ventilation strategy.<sup>25</sup> However, with the small sample sizes and the avoidance of a high or low target  $Paco_2$  in those trials, it is not clear whether the meta-analysis provided an adequately powered assessment of whether extremes of  $Paco_2$  might lead to a higher incidence of IVH in extremely premature infants. We performed this retrospective study to test the hypothesis that high and low levels of  $Paco_2$ ,  $Paco_2$  averaged over time (time-weighted  $Paco_2$ ), and measures of  $Paco_2$  fluctuation (SD of  $Paco_2$  and difference in  $Paco_2$ , ie, maximum minus minimum) in the first 4 days

after birth are associated with increased risk of severe IVH.

## METHODS

We studied all infants with birth weights between 401 and 1250 g who were admitted to the level III NICU at the University of Alabama at Birmingham between January 1, 2000, and December 31, 2003. The protocol was approved by the institutional review board for human use. Infants were included if they survived until  $\geq 96$  hours of life and underwent  $\geq 1$  head ultrasound examination during the hospital stay after 96 hours. The initial ultrasound examination was usually performed between postnatal day 5 and day 7; any examinations performed before 96 hours were not included for analysis. The ultrasound studies were performed by a certified radiology technician, and multiple images in angled coronal, sagittal, and parasagittal planes were obtained. The images were interpreted subsequently by a pediatric radiologist, who could access essential clinical data (birth weight, gestational age, postnatal age, and major clinical problems such as respiratory distress syndrome). Review of the ultrasound images was not performed for this study.

Data were obtained from an electronic hospital archive of laboratory data and a NICU database. All data in the NICU database were collected by a trained database specialist, immediately after discharge of the infant, with standard definitions. Data analyzed included main prenatal and neonatal variables that were shown previously to be associated with severe IVH,<sup>1,2</sup> including birth weight, gestational age, pregnancy-induced hypertension, premature prolonged rupture of membranes, any prenatal steroid use, 5-minute Apgar score, any use of nasal continuous positive airway pressure (CPAP), and use of intermittent mechanical ventilation (IMV). In addition, data were collected on severe IVH (grades 3 and 4 in the classification described by Papile et al<sup>26</sup>), cystic PVL, and blood gas results from the first 4 days after birth. The highest and lowest  $Paco_2$  values were identified from the blood gas results obtained during the first 96 hours of life. Measures of  $Paco_2$  dispersion for each patient, including the SD of  $Paco_2$  and the maximum to minimum range (difference in  $Paco_2$ ), were calculated. A time-weighted  $Paco_2$  was also calculated (Fig 1). As can be noted from Fig 1, the time period between 2 blood gas assessments is represented by the  $Paco_2$  of the second blood gas analysis, rather than by the average of the  $Paco_2$  results from the 2 blood gas analyses, because blood gas samples are usually obtained at intervals of a few hours and ventilator settings are changed soon after a blood gas sample is obtained. Therefore, because the  $Paco_2$  usually changes rapidly, most of the time period between blood gas analyses usually reflects the  $Paco_2$  associated with the subsequent

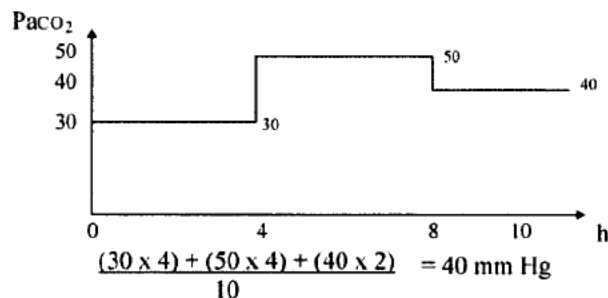


FIGURE 1  
Time-weighted  $Paco_2$  calculation. In this example, the infant has 3  $Paco_2$  values for a period of 10 hours. The equation shows how the time-weighted  $Paco_2$  value would be calculated.

blood gas assessment, rather than a mathematical average of the 2  $Paco_2$  values.

The relationships between the median highest, lowest, time-weighted average, SD, and difference in  $Paco_2$  and severe IVH were analyzed by using the Mann-Whitney rank sum test and by the area under the curve (AUC) of the receiver operating characteristic (ROC) curve. ROC curves plot sensitivity versus  $1 - \text{specificity}$ ; the more the AUC approaches 1, the higher the predictive value. Dot plots were also used to show the distribution and overlap of  $Paco_2$  values for infants with and without severe IVH, for each of the  $Paco_2$  variables. Similar analyses were performed for the subset of infants who received IMV/CPAP (because  $Paco_2$  could not be controlled for infants not on respiratory support). The relationships between median highest, lowest, and time-weighted average  $Paco_2$  and mild IVH (grades 1 and 2) were also evaluated, to determine whether there was dose dependence in the relationship between  $Paco_2$  and grade of IVH. A multivariate logistic regression analysis with severe IVH as the dependent variable was performed with independent variables including the main prenatal and postnatal variables and the highest, lowest, and time-weighted average  $Paco_2$ . All statistical analyses were performed with SigmaStat 2.03 for Windows (Jandel Scientific, San Rafael, CA) and MedCalc 7.6 (MedCalc, Mariakerke, Belgium).

## RESULTS

The 849 infants included in the study had a birth weight (mean  $\pm$  SD) of  $848 \pm 212$  g and a gestational age of  $26 \pm 2$  weeks (Table 1); 21% were diagnosed as having severe IVH and 5% as having PVL. A total of 71% required IMV, and 79% received either CPAP and/or IMV. Infants who did not require CPAP or IMV had a lower incidence of severe IVH, compared with those who received CPAP/IMV (6.3% vs 24.9%;  $P < .01$ ).

Infants with severe IVH had significantly higher maximal  $Paco_2$  and time-weighted average  $Paco_2$  values, whereas the minimal  $Paco_2$  was significantly lower (Table 2). Analysis of the AUC of the ROC curves indicated

TABLE 1 Patient Demographic Features

Birth weight, mean $\pm$ SD, g	848 $\pm$ 212
Gestational age, mean $\pm$ SD, wk	26 $\pm$ 2
Prenatal steroid use, %	73
IMV, %	71
IMV or CPAP, %	79
IVH (any degree), %	36
Severe IVH (grade 3 or 4), %	21
PVL, %	5

TABLE 2 Univariate Analyses of Maximal  $Paco_2$ , Minimal  $Paco_2$ , Time-Weighted  $Paco_2$ , Difference in  $Paco_2$ , and SD of  $Paco_2$  in Relation to Severe IVH (Papille Grade 3 or 4)

	Severe IVH (n = 179)	No Severe IVH (n = 670)	P
Maximal $Paco_2$ , median (25th to 75th percentile range), mm Hg	72 (61–89)	59 (50–70)	<.001
Minimal $Paco_2$ , median (25th to 75th percentile range), mm Hg	32 (27–37)	37 (31–42)	<.001
Time-weighted $Paco_2$ , median (25th to 75th percentile range), mm Hg	49 (44–54)	47 (41–52)	<.01
Difference in $Paco_2$ , median (25th to 75th percentile range), mm Hg	39 (26–55)	21 (11–35)	<.001
SD of $Paco_2$ , median (25th to 75th percentile range), mm Hg	11 (8–15)	7 (4–11)	<.001

that both extremes of  $Paco_2$  were good predictors of severe IVH (Table 3). AUC values of the ROC curves for SD of  $Paco_2$  and difference in  $Paco_2$  were similar, indicating that the magnitude of  $Paco_2$  fluctuation was also a good predictor of severe IVH. Statistically significant, time-weighted  $Paco_2$  did not predict severe IVH as well as other  $Paco_2$  variables. Maximal  $Paco_2$  and difference in  $Paco_2$  were associated significantly with severe IVH even for infants who did not receive either IMV or CPAP, although the sample size of infants without IMV/CPAP was limited and their incidence of severe IVH was lower ( $n = 174$ ; 11 with severe IVH) (Table 3). Infants receiving respiratory support (IMV or CPAP) had wider variations in their  $Paco_2$  values, compared with those not receiving support (maximal  $Paco_2$ : IMV/CPAP: median: 65 mm Hg; range: 54–77 mm Hg; no IMV/CPAP: median: 50 mm Hg; range: 45–57 mm Hg; minimal  $Paco_2$ : IMV/CPAP: median: 34 mm Hg; range: 29–40 mm Hg; no IMV/CPAP: median: 41 mm Hg; range: 35–45 mm Hg; time-weighted average  $Paco_2$ : IMV/CPAP: median: 48 mm Hg; range: 40–49 mm Hg; no IMV/CPAP: median: 45 mm Hg; range: 43–53 mm Hg; difference in  $Paco_2$ : IMV/CPAP: median: 30 mm Hg; range: 18–44 mm Hg; no IMV/CPAP: median: 8 mm Hg; range: 0–17 mm Hg; SD of  $Paco_2$ : IMV/CPAP: median: 9 mm Hg; range: 6–12 mm Hg; no IMV/CPAP: median: 4 mm Hg; range: 0–6 mm Hg; all  $P < .001$ ).

**TABLE 3: AUC of the ROC Curve for Paco<sub>2</sub> Variables in Relation to Severe IVH for All Infants and for the Subsets of Infants Who Received CPAP/IMV (n = 675) or Did Not Receive Such Respiratory Support (n = 174)**

	AUC	95% Confidence Interval	P
Maximal Paco <sub>2</sub>			
All infants	0.70	0.67–0.73	<.0001
No CPAP/IMV	0.74	0.67–0.80	<.01
CPAP/IMV	0.66	0.65–0.70	<.0001
Minimal Paco <sub>2</sub>			
All infants	0.66	0.62–0.69	<.0001
No CPAP/IMV	0.57	0.50–0.65	.40
CPAP/IMV	0.63	0.60–0.67	<.0001
Time-weighted Paco <sub>2</sub>			
All infants	0.58	0.54–0.61	<.005
No CPAP/IMV	0.61	0.54–0.69	.20
CPAP/IMV	0.55	0.51–0.59	<.05
Difference in Paco <sub>2</sub>			
All infants	0.74	0.71–0.77	<.0001
No CPAP/IMV	0.73	0.66–0.79	<.01
CPAP/IMV	0.70	0.66–0.73	<.0001
SD of Paco <sub>2</sub>			
All infants	0.71	0.68–0.74	<.0001
No CPAP/IMV	0.68	0.60–0.74	.06
CPAP/IMV	0.68	0.64–0.71	<.0001

The AUC of the time-weighted Paco<sub>2</sub> was significantly lower than the AUCs of maximal Paco<sub>2</sub>, minimal Paco<sub>2</sub>, difference in Paco<sub>2</sub>, and SD of Paco<sub>2</sub> for all infants (P < .05).

With the ROC curve and a dot plot (Fig 2) for each of maximal Paco<sub>2</sub>, minimal Paco<sub>2</sub>, time-weighted Paco<sub>2</sub>, difference in Paco<sub>2</sub>, and SD of Paco<sub>2</sub>, an optimal threshold was identified at which the highest sensitivity was obtained with minimal loss of specificity (with increasing sensitivity, specificity is lower). This optimal threshold was determined automatically by the MedCalc software and was confirmed through manual adjustment of the threshold upward or downward and evaluation of the sensitivity and specificity after these adjustments. Maximal Paco<sub>2</sub> of >60 mm Hg had 76% sensitivity and 54% specificity, and minimal Paco<sub>2</sub> of <39 mm Hg had 81% sensitivity and 42% specificity for severe IVH. Time-weighted average Paco<sub>2</sub> of >52 mm Hg had 41% sensitivity and 72% specificity (Fig 2). Infants with maximal Paco<sub>2</sub> values of >60 mm Hg (n = 442; 52%) had a 31% incidence of severe IVH, whereas infants with minimal Paco<sub>2</sub> values of <39 mm Hg (n = 532; 63%) had a 27% incidence. Infants with both maximal Paco<sub>2</sub> values of >60 mm Hg and minimal Paco<sub>2</sub> values of <39 mm Hg (n = 282; 33%) had a 38% incidence, whereas those within the "optimal" range of Paco<sub>2</sub> values of 39 to 60 mm Hg (n = 156; 18%) had only a 3% incidence of severe IVH.

In the multivariate logistic regression analysis, maximal Paco<sub>2</sub>, minimal Paco<sub>2</sub>, and time-weighted average Paco<sub>2</sub> (either as continuous variables or as dichotomous variables, with the thresholds noted above) were all associated independently with severe IVH, in addition to

the clinical variables of lower gestational age, absence of pregnancy-induced hypertension, absence of premature rupture of membranes, lack of prenatal steroid exposure, lower 5-minute Apgar score, and need for IMV (Table 4). Additional multivariate logistic regression analyses with SD of Paco<sub>2</sub> and difference in Paco<sub>2</sub> as independent variables were performed, but the overall model fit was similar and, because the predictive ability was being parceled out among more variables, SD of Paco<sub>2</sub> and difference in Paco<sub>2</sub> reduced the statistical significance of the highest, lowest, and time-weighted average Paco<sub>2</sub> values (data not shown).

Any-grade IVH (grade 1, 2, 3, or 4) was also analyzed in relation to Paco<sub>2</sub> variables. In comparison with infants without IVH, infants with any-grade IVH had significantly higher maximal Paco<sub>2</sub> (any-grade IVH: 66 mm Hg; no IVH: 58 mm Hg; P < .001) and time-weighted average Paco<sub>2</sub> (any-grade IVH: 48 mm Hg; no IVH: 47 mm Hg; P < .05) values, whereas the minimal Paco<sub>2</sub> was significantly lower (any-grade IVH: 34 mm Hg; no IVH: 37 mm Hg; P < .001). However, these differences were mainly attributable to severe IVH, because no significant differences in Paco<sub>2</sub> were noted in infants with mild (grade 1 or 2) IVH, compared with infants without IVH (maximal Paco<sub>2</sub>: mild IVH: 59 mm Hg; no IVH: 58 mm Hg; P = .16; AUC: 0.54; 95% CI: 0.50–0.58; minimal Paco<sub>2</sub>: mild IVH: 36 mm Hg; no IVH: 37 mm Hg; P = .08; AUC: 0.55; 95% CI: 0.51–0.59; time-weighted average Paco<sub>2</sub>: mild IVH: 47 mm Hg; no IVH: 47 mm Hg; P = .71; AUC: 0.50; 95% CI: 0.46–0.54). Infants with PVL had significantly lower minimal Paco<sub>2</sub> values (33 vs 36 mm Hg; P < .05), but maximal and time-weighted average Paco<sub>2</sub> values were not different (66 vs 61 mm Hg and 48 vs 48 mm Hg, respectively).

## DISCUSSION

Our study indicates that extreme levels of Paco<sub>2</sub>, whether high or low, and wider variation in Paco<sub>2</sub> values for an individual neonate, as indicated by a larger SD or difference in Paco<sub>2</sub>, are associated with severe IVH in VLBW infants and this association persists even after adjustment for major perinatal variables. Although causality should not be inferred, it may be prudent to avoid extremes of Paco<sub>2</sub> during the period of risk for IVH.

There are limitations to this retrospective study, because of biases resulting from confounding by factors associated with the availability of data and imprecision of estimates resulting from lack of a standard clinical protocol and data collection procedures. Infants who are sicker may have more blood gas evaluations, with extremes in blood gas values being more likely to be detected. Paco<sub>2</sub> levels could not be controlled by clinicians for the 21% of the infants who did not receive IMV or CPAP. However, maximal Paco<sub>2</sub> and SD of Paco<sub>2</sub> were associated with severe IVH even in infants who did not receive IMV/CPAP, although the incidence of severe IVH

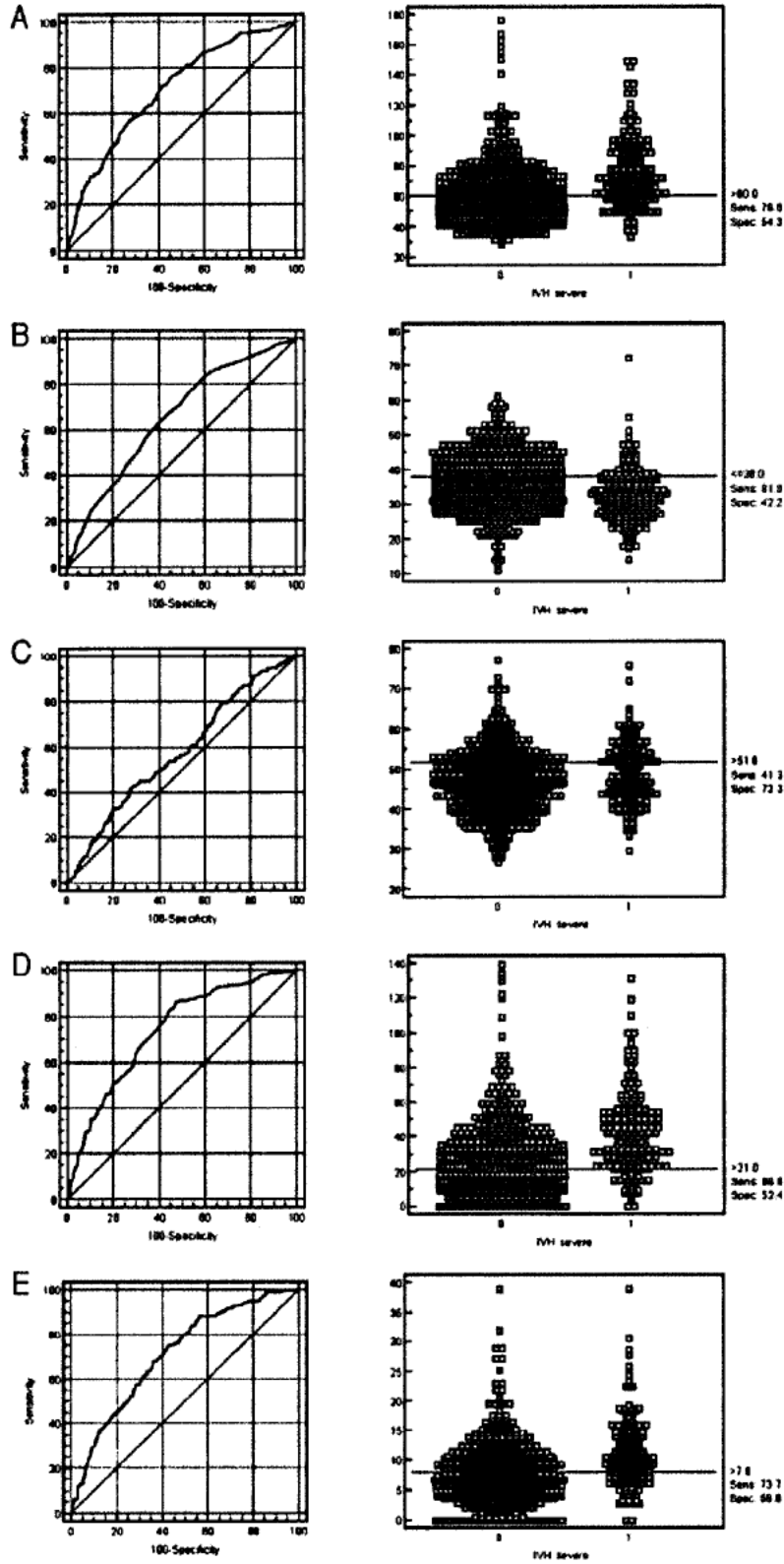


FIGURE 2

ROC curves (left) and dot plots (right) of maximal  $Paco_2$  (A), minimal  $Paco_2$  (B), time-weighted  $Paco_2$  (C),  $Paco_2$  maximum to minimum range (D), and SD of  $Paco_2$  (E) in relation to the outcome of severe IVH (Papile grades 3 or 4). The optimal threshold and the sensitivity (Sens) and specificity (Spec) for severe IVH are included for each dot plot.

**TABLE 4 Identification of Variables Associated With Severe IVH in Multivariate Logistic Regression Analysis**

	Odds Ratio	95% Confidence Interval	P
Gestational age (per 1 wk)	0.82	0.74–0.91	<.001
Pregnancy-induced hypertension	0.51	0.31–0.83	<.01
Premature rupture of membranes	0.60	0.36–1.00	<.05
Prenatal steroid use (any)	0.51	0.34–0.76	<.01
Apgar score at 5 min (per 1 unit)	0.87	0.78–0.96	<.01
Mechanical ventilation	2.04	1.07–3.89	<.05
Maximal Paco <sub>2</sub> of >60 mm Hg	1.97	1.23–3.15	<.01
Minimal Paco <sub>2</sub> of <39 mm Hg	2.51	1.53–4.12	<.001
Time-weighted Paco <sub>2</sub> of >52 mm Hg	1.92	1.19–3.10	<.01

was lower in that population. Arterial blood gas samples were drawn usually from indwelling arterial catheters, but a few infants, especially those not requiring IMV, did not have arterial access or the arterial catheters were removed within 1 or 2 days after birth. Therefore, some blood gas samples were arterialized capillary blood gas samples or blood gas samples obtained through direct arterial puncture. The 21% incidence of severe IVH in this study is possibly higher than expected, because of the center practice of aggressive resuscitation and very low rates of early death (2% of all live-born extremely low birth weight infants died within the first 24 hours after birth), which led to an increase in early survival rates and perhaps also an increase in the number of infants at risk for IVH.

Our study has many strengths. The sample size for this study and the number of blood gas samples analyzed are larger than those of many similar studies. In addition, data from all blood gas samples from the first 4 days were included, without limiting the analyses to selected time points. Our study did not rely solely on measurements of maximal Paco<sub>2</sub> but also included estimations of both low Paco<sub>2</sub> and time-weighted Paco<sub>2</sub> and identified optimal thresholds of both high and low Paco<sub>2</sub>.

Time-weighted Paco<sub>2</sub> did not predict severe IVH as well as either extreme level of Paco<sub>2</sub>. Time-weighted Paco<sub>2</sub> would not change much if the same infant has alternating periods (fluctuations) of high and low Paco<sub>2</sub>. The association of a larger SD or difference in Paco<sub>2</sub> with severe IVH suggests that this may indeed be the case. Because the average Paco<sub>2</sub> was not much increased, it is likely that infants with IVH were not harder to ventilate and therefore did not have much sicker lungs (suggesting a greater degree of immaturity), compared with those without IVH. Extremes and fluctuations of Paco<sub>2</sub> were associated with severe IVH (grades 3 and 4) but not with milder grades of IVH (grades 1 and 2). Therefore, it is possible that abnormal levels of Paco<sub>2</sub> are more likely involved in extension of preexisting hemorrhage, rather than initiation or development of IVH. It is also possible that severe IVH may lead to fluctuations in spontaneous respiratory effort, resulting in fluctuations and more ex-

tremes in Paco<sub>2</sub>. Unlike IVH, PVL was associated only with a lower minimal Paco<sub>2</sub> and not with high, time-weighted average, or fluctuating Paco<sub>2</sub>, which confirms previous observations.<sup>12,13,16,17</sup> This difference may be attributable to differences in the pathophysiologic features of IVH and PVL.

Our study suggests that careful and frequent or continuous monitoring of Paco<sub>2</sub> may be important and that extreme or widely fluctuating Paco<sub>2</sub> levels should be avoided for VLBW infants. In the routine NICU setting, oxygenation is monitored easily with pulse oximetry but Paco<sub>2</sub> is monitored only infrequently with blood gas analyses. Alternative methods to indicate trends in Paco<sub>2</sub> values, such as transcutaneous or end-tidal carbon dioxide measurements, are not used commonly. Although moderate hypercapnia seems to be safe,<sup>22–25</sup> more extreme levels of hypercapnia during the period of risk for IVH have not been proved to be safe.

The main finding from this study is that both extremes of Paco<sub>2</sub> are associated with increased risk of severe IVH in VLBW infants. The sensitivities and specificities of the extremes of Paco<sub>2</sub> for severe IVH are not high enough for use in clinical settings, but these thresholds may prove useful in characterization of the pathogenesis of severe IVH. Additional studies are necessary to determine the mechanisms through which low and fluctuating Paco<sub>2</sub> levels can lead to severe IVH. Possible mechanisms may include ischemia during the period of hypocapnia, followed by hemorrhage or extension of existing hemorrhage during the period of reperfusion. It is also necessary to confirm that marked fluctuations in Paco<sub>2</sub> and secondarily in CBF are associated with severe IVH. Clinical trials will be required to demonstrate that avoidance of hypocapnia and extreme fluctuations of arterial Paco<sub>2</sub> leads to reductions in severe IVH.

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**Both Extremes of Arterial Carbon Dioxide Pressure and the Magnitude of Fluctuations in Arterial Carbon Dioxide Pressure Are Associated With Severe Intraventricular Hemorrhage in Preterm Infants**  
Jorge Fabres, Waldemar A. Carlo, Vivien Phillips, George Howard and Namasivayam Ambalavanan  
*Pediatrics* 2007;119;299-305  
DOI: 10.1542/peds.2006-2434

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**From:** Shankaran, Seetha  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Neil  
**Cc:** Sood, Beena; Das, Abhik; Wade Rich  
**Subject:** RE: High flow nasal cannula  
**Date:** Saturday, March 03, 2007 9:22:16 AM

---

Rose and Neil  
This is most helpful

Beena, I already talked to the attending involved and clarified this.  
Thanks again  
Seetha

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Fri 3/2/2007 4:00 PM  
To: Shankaran, Seetha; Neil  
Cc: Sood, Beena; Das, Abhik; Wade Rich  
Subject: RE: High flow nasal cannula

Seetha

The short answer is "High flow canula is not allowed in the first 14 days."

The explanations are as follows with their locations (protocol, manual and technical memo):

Nasal SIMV is only allowed following extubation:  
protocol page 19-

#### 4.2 Delivery of Interventions

##### CPAP/PEEP in the DR

CPAP and positive pressure ventilation (PPV) in the delivery room for Treatment infants will be administered via a T-piece resuscitator, a neonatal ventilator or an equivalent device that is currently used by the site for the delivery of CPAP. (See 3.6).

##### Use of Nasal SIMV;

This approach is currently used by some Network units and has been previously established as being superior to CPAP following extubation in three prospective trials.<sup>56,57,58</sup> For uniformity nasal SIMV may be used in place of CPAP only following extubation for both

Treatment and Control infants.

High flow nasal cannula is not allowed in the first 14 days and is in the manual (page 5-1):

5.1.2 CPAP Group: Early Extubation and CPAP - Both Strata

5.1.3 Delivery Room Management

1) FiO<sub>2</sub>:

Standard of care

2) CPAP:

CPAP or ventilation with PEEP will be utilized if the infant requires positive pressure during resuscitation. CPAP will be continued until admission to the NICU using the Neopuff or equivalent device and a face mask or nasal prongs. Initial PPV will be at a PIP of 15-25 cm H<sub>2</sub>O and a PEEP/CPAP of 5 cm cmH<sub>2</sub>O. High flow nasal cannula (e.g. Vapotherm) may not be used as the primary mode of therapy for infants randomized to Early CPAP in the first 14 days.

Technical memo number 4 (11/2005) defines high flow cannula as follows:

1) High Flow Nasal Cannula, for purposes of this trial, is > 500cc/min.

a) An infant on >500cc/min of room air is considered to be on respiratory support.

b) An infant on >500cc/min of room air should not have his oximeter d/c'd.

---

From: Shankaran, Seetha [mailto:[sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)]  
Sent: Friday, March 02, 2007 1:22 PM  
To: Neil; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Sood, Beena  
Subject: High flow nasal cannula

Neil

What was the decision re high flow nasal cannula in first few days?

Thanks

Seetha

Seetha Shankaran, M.D.

Professor of Pediatrics

Wayne State University School of Medicine

Director, Neonatal-Perinatal Medicine

Children's Hospital of Michigan and

Hutzel Women's Hospital

Tel 313-745-1436

Fax 313-745-5867

Email [sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)

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**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Shankaran, Seetha  
**Cc:** Sood, Beena; Das, Abhik; Wade Rich  
**Subject:** RE: High flow nasal cannula  
**Date:** Friday, March 02, 2007 5:11:18 PM

---

Thanks Rose

We did not want to use Hi flow nasal cannula as they would represent a form of unmeasured CPAP and thus excluded them during the first 14 days during protocol zed respiratory management.

Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, March 02, 2007 1:00 PM  
**To:** Shankaran, Seetha; Neil Finer  
**Cc:** Sood, Beena; Das, Abhik; Wade Rich  
**Subject:** RE: High flow nasal cannula

Seetha

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protocol page 19-

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This approach is currently used by some Network units and has been previously established as being superior to CPAP following extubation in three prospective trials.<sup>56,57,58</sup>  
For

uniformity nasal SIMV may be used in place of CPAP *only following extubation for both Treatment and Control infants.*

High flow nasal canula is not allowed in the first 14 days and is in the manual (page 5-1):

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##### **5.1.3 Delivery Room Management**

###### **1) FiO2:**

Standard of care

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## Early CPAP in the first 14 days.

Technical memo number 4 (11/2005) defines high flow cannula as follows:

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  - a) An infant on >500cc/min of room air is considered to be on respiratory support.
  - b) An infant on >500cc/min of room air should not have his oximeter d/c'd.

---

**From:** Shankaran, Seetha [mailto:sshankar@med.wayne.edu]

**Sent:** Friday, March 02, 2007 1:22 PM

**To:** Neil; Higgins, Rosemary (NIH/NICHD) [E]

**Cc:** Sood, Beena

**Subject:** High flow nasal cannula

Neil

What was the decision re high flow nasal cannula in first few days?

Thanks

Seetha

Seetha Shankaran, M.D.

Professor of Pediatrics

Wayne State University School of Medicine

Director, Neonatal-Perinatal Medicine

Children's Hospital of Michigan and

Hutzel Women's Hospital

Tel 313-745-1436

Fax 313-745-5867

Email sshankar@med.wayne.edu

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**From:** [Abbot Laptook](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** FW: Support data  
**Date:** Friday, March 02, 2007 11:22:22 AM

---

fyi

---

**From:** Angelita Hensman  
**Sent:** Friday, March 02, 2007 11:06 AM  
**To:** Abbot Laptook  
**Subject:** RE: Support data

Yes, We did add this when the GDB forms were revised. I has a senior moment. Sorry about that.  
Angelita

---

**From:** Abbot Laptook  
**Sent:** Friday, March 02, 2007 10:58 AM  
**To:** Angelita Hensman  
**Subject:** FW: Support data

Angelita  
Can you confirm. tx, AL

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Friday, March 02, 2007 10:56 AM  
**To:** Abbot Laptook; [nfiner@ucsd.edu](mailto:nfiner@ucsd.edu)  
**Subject:** RE: Support data

Abbot  
Can you confirm with Angelita that NO gets picked up this way – I want to make sure as the coordinators oftentimes tell us what we think happens really doesn't happen.

Thanks  
rose

---

**From:** Abbot Laptook [<mailto:ALaptook@WIHRI.org>]  
**Sent:** Friday, March 02, 2007 10:54 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; [nfiner@ucsd.edu](mailto:nfiner@ucsd.edu)  
**Subject:** RE: Support data

excellant, tx, AL

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Friday, March 02, 2007 10:47 AM  
**To:** Abbot Laptook; [nfiner@ucsd.edu](mailto:nfiner@ucsd.edu)  
**Subject:** RE: Support data

HI  
This gets captured on the GDB NG03 Clinical outcome form:



6. Did infant receive inhaled nitric oxide? Y N  
a. If YES, Date of first exposure: \_\_\_ / \_\_\_ / \_\_\_\_\_

Thanks for asking  
Rose

---

**From:** Abbot Laptook [mailto:ALaptook@WIHRI.org]  
**Sent:** Friday, March 02, 2007 10:40 AM  
**To:** nfiner@ucsd.edu  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Support data

Neil

There are occasional Support infants that receive nitric oxide as part of therapy for hypoxic-respiratory failure either with or without documented pulmonary artery hypertension. In discussing this with Angelita, this is data that we do not capture. Are we going to want to know the exposure to NO in each group? AL

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; nfiner@ucsd.edu  
**Cc:** kzaterka@rti.org; Gaynelle Hensley; Pablo Sanchez; Walid Salhab  
**Subject:** Re: SUPPORT Protocol deviation  
**Date:** Thursday, March 01, 2007 5:13:06 PM

---

Dear Rose and Neil,

We have a baby that was randomized to the wrong gestational age group (b) (6). The protocol deviation was discovered 2 and a half hours later and the baby was then randomized to the correct group. The infant was 1st randomized to Surfactant and the orange oximeter, required intubation at delivery due to status (not just assignment) and got surfactant. With the second envelope, the infant was randomized to the CPAP arm and a blue oximeter. The oximeters were changed out and were never on the baby at the same time. The baby is still intubated (never on CPAP) and is on HFV. Do we download the first oximeter (orange) for the study or just discard the data?

Kris, the wrong randomization envelope was (b) (6).

Walid is still here if you have any urgent questions. Otherwise, I'll be back tomorrow.

Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206 (b) (6)

**From:** [Neil Finer](#)  
**To:** [Bradley Yoder](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: 2nd Study  
**Date:** Wednesday, February 28, 2007 6:12:07 PM

---

Thanks

I will review

Neil

---

**From:** Bradley Yoder [mailto:[Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu)]  
**Sent:** Wednesday, February 28, 2007 1:30 PM  
**To:** Neil Finer  
**Cc:** [higginr@mail.nih.gov](mailto:higginr@mail.nih.gov)  
**Subject:** RE: 2nd Study

Neil: I cannot comment on the question regarding IRB approval at UNM for babies being in both studies.

I have attached the protocol in use at LDS Hospital with highlights of the "Outcomes" and "Study Eligibility" areas.

Brad

---

**From:** Neil Finer [mailto:[nfiner@ucsd.edu](mailto:nfiner@ucsd.edu)]  
**Sent:** Tuesday, February 27, 2007 6:04 PM  
**To:** Bradley Yoder; [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)  
**Cc:** Roger Faix; Wade Rich  
**Subject:** RE: 2nd Study

Hi Brad

I would like to see this protocol. In addition, this site to my knowledge has not enrolled an infant in SUPPORT – at least as of the last monthly report.

Certainly the primary outcomes will compete, and one cannot argue the many centers are using darbepoietin. Has the IRB at UNM approved having babies in both trials?

Neil

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**From:** Bradley Yoder [mailto:[Bradley.Yoder@hsc.utah.edu](mailto:Bradley.Yoder@hsc.utah.edu)]  
**Sent:** Tuesday, February 27, 2007 1:16 PM  
**To:** [higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov); Neil Finer  
**Cc:** Roger Faix  
**Subject:** 2nd Study

I have been asked by Robin Ohls from NM to consider including babies we have randomized into the SUPPORT Trial to be allowed to also randomize into her blinded, RCT study comparing Darbepoietin,

erythropoietin and placebo. The primary outcomes of her trial are 1) number of transfusions and 2) neurodevelopmental outcome at 18-22 months.

It has been my understanding that we should not be enrolling one baby into two different RCT's; especially if the outcomes being studied are similar (i.e., ND outcome as primary in the Darbe study & secondary in the SUPPORT study). I bring this up because, after I informed Robin that we couldn't do 2 such studies in the same baby, she informed me that they are allowing both studies in the same baby at UNM.

Is this OK or not?

Brad

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**From:** [Shirley Cosby](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Zaterka-Baxter, Kristin](#)  
**Subject:** SUPPORT SAE  
**Date:** Wednesday, February 28, 2007 1:15:52 PM  
**Attachments:** [0228130349.pdf](#)

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Here is the SAE for pt (b) (6) from UAB

NICU Network	<b>The SURfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants</b>	SUPP08A Rel 1.0 January 4, 2005
<b>MEDWATCH FORM</b>		
Center: <u>116</u>	Site No: <u>(b) (6)</u>	Network No: <u>(b) (6)</u> Birth No: <u>1</u> Mother's Initials: <u>(b) (6)</u> Page 1 of 1

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For VOLUNTARY reporting by health professionals of adverse events and product problems

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Triage unit sequence #

Page 1 of 1

<p><b>A. Patient information</b></p> <p>1. Patient Identifier: In confidence (b) (6)</p> <p>2. Age at time of event: 18 days</p> <p>3. Sex: <input checked="" type="checkbox"/> female <input type="checkbox"/> male</p> <p>4. Weight: 4.95 lbs</p> <p><b>B. Adverse event or product problem</b></p> <p>1. <input checked="" type="checkbox"/> Adverse event and/or <input type="checkbox"/> Product problem (e.g., defects/malfunctions)</p> <p>2. Outcomes attributed to adverse event (check all that apply):  <input checked="" type="checkbox"/> death (b) (6)  <input type="checkbox"/> life-threatening  <input type="checkbox"/> hospitalization - initial or prolonged  <input type="checkbox"/> disability  <input type="checkbox"/> congenital anomaly  <input type="checkbox"/> required intervention to prevent permanent impairment/damage  <input type="checkbox"/> other: _____</p> <p>3. Date of event (month/year): (b) (6)</p> <p>4. Date of this report (month/year): (b) (6)</p> <p>5. Describe event or problem:                  Randomized at birth to early surfactant / Int. group. Received 5 total doses of Surfactant. Day of life 3 was switched to high frequency Ventilator. Had PIE per CXR. Remained in critical condition throughout hospitalization. Inhaled Nitric oxide added on day of life 17. Discontinued after no response. Renal failure occurred on day of life 17 as well. Despite maximum medical management, infant died on (b) (6) at 2356. Cause of death listed as RDS/sepsis/PIE and renal failure.</p> <p>6. Relevant tests/laboratory data, including dates:                  PIE per CXR (b) (6)                  BUN 45 (b) (6)                  Creat 2.4 (b) (6)                  Last documented ABG (b) (6) - 692/81/19/16</p> <p>7. Other relevant history, including preexisting medical conditions (e.g., allergies, race, pregnancy, smoking and alcohol use, hepatic/renal dysfunction, etc.):                  24 wk gestation white female infant with birth weight of 440 grams. Pregnancy complicated by pre-eclampsia. Mom received one course of steroids. Apgars were 2, 4.5. Infant was intubated in delivery.</p>	<p><b>C. Suspect medication(s)</b></p> <p>1. Name (give labeled strength &amp; mfr/labeler, if known):                  #1 _____                  #2 _____</p> <p>2. Dose, frequency &amp; route used:                  #1 _____                  #2 _____</p> <p>3. Therapy dates (if unknown, give duration) (month/year or best estimate):                  #1 _____                  #2 _____</p> <p>4. Diagnosis for use (Indication):                  #1 _____                  #2 _____</p> <p>5. Event abated after use stopped or dose reduced:                  #1 <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> doesn't apply                  #2 <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> doesn't apply</p> <p>6. Lot # (if known): #1 _____ #2 _____</p> <p>7. Exp. date (if known): #1 _____ #2 _____</p> <p>8. Event reappeared after reintroduction:                  #1 <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> doesn't apply                  #2 <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> doesn't apply</p> <p>9. NDC # (for product problems only): #1 _____ #2 _____</p> <p>10. Concomitant medical products and therapy dates (exclude treatment of event):                  Ampicillin Fortaz NaHCO3 Surventa                  Gentamycin Nystatin Dopamine Fluid boluses                  Vancomycin Versed PRBC's                  Amphotericin Fentanyl INO</p> <p><b>D. Suspect medical device</b></p> <p>1. Brand name: _____</p> <p>2. Type of device: _____</p> <p>3. Manufacturer name &amp; address: _____</p> <p>4. Operator of device:  <input type="checkbox"/> health professional  <input type="checkbox"/> lay user/patient  <input type="checkbox"/> other: _____</p> <p>5. Expiration date (month/year): _____</p> <p>6. If implanted, give date (month/year): _____</p> <p>7. If explanted, give date (month/year): _____</p> <p>8. If explanted, give date (month/year): _____</p> <p>9. Device available for evaluation? (Do not send to FDA)  <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> returned to manufacturer on _____ (month/year)</p> <p>10. Concomitant medical products and therapy dates (exclude treatment of event): _____</p> <p><b>E. Reporter (see confidentiality section on back)</b></p> <p>1. Name &amp; address: phone # 205 934 5771                  SHIRLEY COSBY                  619 19th St. S                  BIRMINGHAM, AL 35233</p> <p>2. Health professional? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no</p> <p>3. Occupation: RN</p> <p>4. Also reported to:  <input type="checkbox"/> manufacturer  <input type="checkbox"/> user facility  <input type="checkbox"/> distributor</p> <p>5. If you do NOT want your identity disclosed to the manufacturer, place an "X" in this box. <input checked="" type="checkbox"/></p>
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PLEASE TYPE OR USE BLACK INK



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Rockville, MD 20852-9787

or FAX to:  
1-800-FDA-0178

FDA Form 3500

Submission of a report does not constitute an admission that medical personnel or the product caused or contributed to the event.

**From:** Angelita Hensman  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Abbot Laptook  
**Cc:** Das, Abhik; Marie Gantz  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Wednesday, February 28, 2007 9:59:12 AM

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(b) (6) appointment has been rescheduled by the mother three times since January. "No show" for the last rescheduled appointment on 2/12/07. Unable to reach parents. Phone (cell) keeps ringing but they don't answer. Follow up appointments not kept either.

(b) (6) 2/15/07 appointment kept. Per the office the Ophthalmologist will be in today and will complete the info needed and fax to us. Forms will be entered when we receive the information.

Thanks  
Angelita

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, February 23, 2007 3:44 PM  
**To:** Abbot Laptook; Angelita Hensman  
**Cc:** Das, Abhik; Marie Gantz  
**Subject:** SUPPORT ROP OUTCOMES

Center	Network	Message
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Hi,

We are missing the above two children for ROP outcome. I think they may be the two that did not return for their ophthalmology FU.

Thanks for all the effort!

Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** JANET MORGAN; Gaynelle Hensley; Pablo Sanchez; Walid Salhab  
**Subject:** Re: SUPPORT ROP DATA  
**Date:** Tuesday, February 27, 2007 11:39:46 AM

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Rose,  
All of those infants have been discharged.  
(b) (6) - Next eye appt. is 4/12/07  
(b) (6) - Missed multiple eye appts. Next 6/1/07  
(b) (6) - Keyed in SUPP10. Next appt. 3/22/07  
Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206-(b) (6)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 2/23/2007 2:26 PM >>>  
Hi

We are missing 50 week outcomes for ROP for the following infants:

Center

Network

Message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

4

(b) (6)

No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.



Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Betty Vohr  
**To:** Huitema, Carolyn Petrie; Das, Abhik; adusick@iupui.edu; jon.e.tyson@uth.tmc.edu; Myriam Peralta, M.D.; michael-acarregui@uiowa.edu; Roy.Heyne@utsouthwestern.edu; Kimberly Yolton; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Newman, Jamie  
**Subject:** RE: 18-22 month Follow Up Protocol  
**Date:** Tuesday, February 27, 2007 9:36:00 PM  
**Attachments:** 18moFU\_protocol\_013107a.doc

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I have worked on it a bit. It will need some group work to continue the update

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**From:** Huitema, Carolyn Petrie [mailto:petrie@rti.org]  
**Sent:** Tue 2/27/2007 11:12 AM  
**To:** Huitema, Carolyn Petrie; Betty Vohr; Das, Abhik; adusick@iupui.edu; jon.e.tyson@uth.tmc.edu; Myriam Peralta, M.D.; michael-acarregui@uiowa.edu; Roy.Heyne@utsouthwestern.edu; Kimberly Yolton; Rosemary Higgins (E-mail)  
**Cc:** Newman, Jamie  
**Subject:** RE: 18-22 month Follow Up Protocol

Please remember to submit your comments regarding the 18-22month Follow Up Protocol.

Thank you!!  
Carolyn

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**From:** Huitema, Carolyn Petrie  
**Sent:** Wednesday, February 21, 2007 4:59 PM  
**To:** 'Betty Vohr'; Das, Abhik; 'adusick@iupui.edu'; 'jon.e.tyson@uth.tmc.edu'; Myriam Peralta, M.D.; 'michael-acarregui@uiowa.edu'; ' (Roy.Heyne@utsouthwestern.edu)'; 'Kimberly Yolton'; Rosemary Higgins (E-mail)  
**Cc:** Newman, Jamie; Huitema, Carolyn Petrie  
**Subject:** 18-22 month Follow Up Protocol

To the Follow Up Protocol Development Subcommittee:

Attached is a rough draft of an 18-22 month Follow Up Protocol. We anticipate that centers' IRBs will require a protocol for this study. Therefore, we would like this protocol to reflect the current 18-22month Follow Up study.

For starters, if you could submit your comments to me by **Thursday, March 1<sup>st</sup>**, we can either move forward with another draft or have a conference call to discuss.

Thank you!

Carolyn Petrie Huitema  
Neonatal Research Network Coordinator  
RTI International  
6110 Executive Blvd  
Suite 902  
Rockville, MD 20852  
ph. (301) 230-4648  
fx. (301) 230-4646

**NICHD Neonatal Research Network  
Follow-Up Protocol for Infants 18 + 4 Months of Age (Corrected for Gestation)**

**January 31, 2007**

## ABSTRACT

The National Institute of Child Health and Human Development (NICHD) Neonatal Research Network (NRN) Follow-up Study examines 18 + 4 month outcomes among infants born between 401 and 1000 grams who are registered in the Network's Generic Database. Starting with a retrospective cohort assembled in 1993, the Follow-up Program of the NICHD NRN is a comprehensive study which addresses areas of concern in the growth, neurologic status, and development of extremely low birth weight (ELBW) infants (401-1000 grams). Data related to growth, physical/neurological status, and neurodevelopmental outcomes have been collected since 1994. The NRN currently includes 16 active Centers that collect data on perinatal/neonatal outcomes. Protocol development, data management, and analysis are the responsibility of the Data Coordinating Center located at Research Triangle Institute.

## INTRODUCTION

The NICHD initiated the NRN in 1986, to conduct multi-center clinical trials and observational studies in efforts to reduce infant morbidity and mortality and to improve the health of low birth weight and premature infants. The Network was created in large part because many of the treatment and management strategies in 1986 had become standards without being properly evaluated. The development of a uniform approach to collect follow-up information in the extremely low birth weight (ELBW) infant (less than 1000 grams) is an essential component of the NICHD NRN mission. Only by establishing a long-term outcome database can there be an evaluation of the risk and cost benefit of new technologies introduced in neonatal intensive care units.

This Follow-Up study addresses outcomes at a key developmental age, 18+4 months. Further follow-up to 30 months was conducted for the Glutamine Trial and 6-7 year outcomes are being assessed for the hypothermia trial milestone and is considered the first phase in the development of long-term follow-up into childhood. Outcome These data provide information that can be analyzed and used for assessment of quality of care, outcomes for clinical trials, assessment of center differences, assessment of time periods, and cost benefit analyses. The relationships among antenatal characteristics, neonatal characteristics and outcomes can be evaluated.

Data can be utilized for program initiatives by health care providers, policy makers, and health care planners.

These data allow an a

analysis of cost of neonatal care in relation to intact versus handicapped survival. During the genesis of the study in 1995, This study also provides the opportunity to develop study protocols, a study manual and forms and a uniform assessment battery were identified. The follow-up protocol has been modified and updated on several occasions that can be employed to assess new interventions and treatments in NICUs across the US. It also permits analysis of Center variability of outcome and relate it to perinatal and neonatal mortality and morbidity. Finally, the study has established the infrastructure including a core of follow-up principal investigators, psychologists, and study coordinators, the development of training protocols for examiners, the establishment of inter-rater reliability, and data collection methods for the 18 + 4 month (corrected age) follow-up assessment were developed, and has prepared for programs to follow ELBW infants to school age.

## PURPOSE OF STUDY

The purpose of the NRN Follow-Up Study is to track and successfully evaluate follow, at 18 + 4 months (corrected age),  $\geq 80\%$  of babies born 401-1000 grams born after January 1, 1993, in order to:

- Assess the outcomes of randomized control trials

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- Characterize the gross motor function, neurologic, cognitive, language, and behavior outcomes of development infants 401-1000 gram of the study population by standardized methods, in the areas of motor, cognitive, language, and behavior.
- Determine the 18 + 4 months mortality and the presence of specific medical morbidities in the ELBW infant at 18+4 months.
- Characterize the growth outcomes at 18+4 months.
- Assess resource utilization at 18+4 months.
- Assess the relationships among antenatal characteristics, neonatal characteristics, socioeconomic characteristics and outcomes at 18+4 months, and socioeconomic status in relations to neurodevelopmental outcomes.
- Assess the utilization of special support services and early intervention programs by this population.

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## BACKGROUND AND SIGNIFICANCE IN RELATION TO HUMAN HEALTH

Modern neonatal intensive care has had major therapeutic advances in the past 10

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years which resulted in a dramatic improvement in survival of extremely low birth weight infants (ELBW) (< 1000 grams).<sup>(1-4)</sup> This has been most significant among infants at the limits of viability (23-24 weeks).<sup>(3-5)</sup> These infants have increased neonatal morbidities,<sup>(6-10)</sup> increased complex medical morbidities (respiratory, gastrointestinal, feeding, growth failure), and increased neurodevelopmental morbidities (neurologic, sensory, developmental, and behavioral) after discharge from the neonatal intensive care unit.<sup>(7-13)</sup> Follow-up of these infants is clearly indicated to ensure that appropriate supports, resources, and interventions are in place for families. In addition, multicenter networks with their standardized protocols and large populations can complete randomized trials more quickly.

In spite of a large volume of literature focused on outcomes of ELBW infants, data are not available which clearly define the prevalence of handicapping conditions in this population during infancy or childhood. While it is apparent that mortality rates have declined dramatically over the past thirty years in this group of infants, it is not clear that morbidity has been affected similarly. Published studies offer conflicting results and conclusions. A variety of problems and limitations have been identified in many follow-up studies of the ELBW population. These include:

- Lack of uniformity in outcome measures and study definitions (lack of definition or agreement on handicap and abnormal outcome).
- Variable age at time of outcome assessment (often short duration of follow-up).
- Inadequately defined or described study populations.
- Small study populations, often single center samples.

- ~~Poor/inadequate follow-up rates (excessively high numbers of infants lost to follow-up).~~
  - Lack of appropriate comparison control groups.
  - Failure to consider other sibling, family, or environmental factors which may affect outcome independent of prematurity and medical complications.
  - Failure to quantify severity of illness in perinatal/neonatal periods.
  - Lack of adequate socio-economic and other health characteristics data collection of the study population.
  - Lack of consistency in correction for prematurity
  - Lack of accurate gestational age assessment, thus including SGA, LGA and AGA in some populations.
- ~~□ Outcome often reported as mean scores with inclusion of severely handicapped children (which will bias the mean score).~~

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The limits of viability as defined by gestational age and birthweight have continued to decrease, thereby prompting debate regarding the cost vs. benefit of newborn intensive care for this population. Because of the considerable resources utilized in the care of this group of infants, it is imperative that we have that accurate information regarding outcome data is collected so that discussions can take place based upon current and statistically valid data.

However, evaluation of outcome is complex and requires attention to several major areas.

- First, it is clear that outcome assessment must be performed early enough to directly reflect the perinatal-neonatal intensive care experienced by these infants, but at an age when accurate assessment of major neurodevelopmental outcome is assured. This will entail the use of standardized and uniform testing instruments, performed on a large population of surviving infants.
- Second, the correlation of specific neonatal and perinatal morbidities (eg. intraventricular hemorrhage) with developmental outcome should be evaluated.
- Third, the relationship of family resources and home environment to neurodevelopmental outcome must be assessed. This should include an evaluation of the quality of the family's interaction with the infant both with and without other special services (e.g. early infant stimulation programs).
- Finally, the perceptions of the child's caretakers should be evaluated and compared to the objective measures of child behavior and development as assessed by the developmental experts.

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~~This protocol describes a comprehensive follow-up program which incorporates the necessary tools to address each of these four major areas of importance. The Neonatal Research Network Follow-up Program has expanded and refined its protocol since its first retrospective studies of infants born in 1993 and 1994 provides a unique opportunity to establish and sustain such a follow-up program. Concentrated expertise in neurologic, developmental, behavioral, and growth evaluation and coordination follow-up is present at each of the 16 participating centers, and all have participated in the development of the follow up program procedures. Follow up through 18 + 4 months will serve to provide essential data on a continuous basis enabling the effectiveness of perinatal and neonatal intensive care to be monitored as it changes over the years. Longer term follow up into childhood will be essential to ultimately document the true functional outcomes of these and other high risk infants. Having a uniform protocol in place at each center will enable us to support additional studies of particular importance or interest to investigators at all or~~

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several of the Centers. Other high risk populations of term or near term infants involved in intervention trials can easily be followed by consistent and uniform assessment as well. Such follow up protocol testing can be applied to patients enrolled in the primary trials protocols as well as in any number of ancillary studies. The ability to perform consistent outcome assessment will enhance the research productivity of participating centers by facilitating the performance of ancillary studies of interest to specific centers. The benefits of establishing and sustaining this follow up program are deemed worthy of the investment of the necessary resources and personnel.

The primary goal of this follow up protocol is the ongoing assessment of physical, nutritional and neurodevelopmental outcome of the highest risk newborn intensive care population in the United States. Only through a multicenter cooperative effort can adequate numbers of infants be evaluated for meaningful and timely determination of outcome which can be related to current newborn intensive care practices. In order to accomplish such a cooperative effort, the protocol and instruments employed must be

- be relatively simple, achievable in a reasonable period of time (less than 3 hours),
- encompass major areas of physical and neurodevelopmental maturation,
- be reproducible within and between centers and investigators,
- be able to be administered by a variety of professional staff, and
- be standardized for the age at which evaluation will be performed.

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The protocol and instruments selected have a theoretical rationale but also are pragmatically driven. It is a balance between the ideal, comprehensive, and detailed assessment and what logistically can be accomplished given the constraints of the multicenter design and limited resources. In the following sections, hypotheses and study objectives are enumerated which derive from the ongoing collection of data on this extremely low birthweight population. The specific instruments which will be employed are described with a brief description of the rationale for their selection and both the strengths as well as the limitations of these instruments. While this protocol is not intended to be the best optimum comprehensive neurodevelopmental assessment instrument for this population at 18+4 months, it is hoped that the protocol will be refined over time so that it may evolve into a practical and comprehensive tool which may serve as one standard for within the time and cost restraints of the Network. outcome assessment of the ELBW infant. The resulting information from this ongoing effort is not intended to be a national reference for outcome of the ELBW infant. However, it will undoubtedly be a primary source of data regarding this population.

Control subjects are not obtainable outside of this group due to their uniqueness as ELBW babies, however, controls may be utilized for certain subgroups of babies. If there are unanticipated unusual outcomes, evaluation of in specific subcategories, we will then evaluate siblings will be considered as much as possible.

### SPECIFIC AIMS

The Follow-up Program of the NICHD NRN is a comprehensive study which addresses several areas of concern in the growth and development of ELBW infants:

- Outcome assessments that are performed early enough at 18 + 4 months corrected age (based on best obstetrical estimate) to directly reflect the perinatal-neonatal intensive care experienced by extremely low birth weight infants, and provide an but at an age when accurate assessment of major neurodevelopmental outcome is assured;

- ~~Assess relationship~~Correlation of specific neonatal and perinatal morbidities (e.g., intraventricular hemorrhage) with developmental outcomes;
- ~~Assess r~~Relationship of family resources and environment ~~with~~to neurodevelopmental outcome including an evaluation of the quality of the family's interaction with the infant, both with and without other special services (e.g., early infant stimulation programs);
- ~~Correlation~~ ~~Assess the relationship of caretaker~~ the perceptions of the child's caretakers with objective measures of child behavior and development, ~~as assessed by developmental experts;~~ and
- ~~Assess relationships of socioeconomic status, family characteristics, resource utilization and supports with outcomes.~~ Measures of the impact of an extremely low birth-weight infant on the integrity and resources of the family (e.g., incidence of bankruptcy, divorce rate, child abuse, etc.).

#### **HYPOTHESES Proposed: to be updated by group**

The following hypotheses shall be addressed by the follow up protocol:

1. Improved survival of ELBW infants is associated with no increase in neurodevelopmental morbidity.
2. Improved neurodevelopmental outcome is associated with increasing birthweight and gestational age.
3. Improved neurodevelopmental outcome is associated with increasing SES and increased neonatal morbidity.
4. Post hospital discharge mortality increases with decreasing SES.
5. Incidence and severity of growth failure increases with decreasing birthweight gestational age.
6. Poor neurodevelopmental outcome is associated with family instability.
7. Utilization of special services is directly related to neurodevelopmental impairment.

#### **STUDY OBJECTIVES**

The following objectives have been identified for the 18 + 4 months (corrected age) follow up program:

1. To track and successfully ~~evaluate~~follow at 18 + 4 months all of the ELBW babies enrolled into the NICHD Neonatal Research Network Generic Data Base registry (401-1000 gm).
2. To characterize development of the study population by standardized methods in the areas of motor skills, cognitive skills, neurologic status, language and behavior.
3. To determine the 18 + 4 months mortality and the prevalence of specific medical morbidities in ELBW infants.
4. To characterize growth outcome and its relationship to neurodevelopmental outcome in this population at 18 + 4 months.
5. To identify the socio-economic status of the families in this population and its relationship to developmental outcome.
6. To identify significant family stress in this population and its relationship to family integrity as well as compliance with medical and developmental care.
7. To assess the utilization of special support services and early intervention programs by this population.

#### **PREVIOUS WORK IN THIS AREA**

Description of ~~our~~ investigators goes here.

#### **METHODOLOGY AND PROCEDURES**

##### **Study Design**

Version KY013107



The NRN Generic Data Base (GDB) is a repository of perinatal/neonatal outcome data collected on all infants born or transferred to one of the participating Centers and weighing 401-1500 gm at birth. This observational study includes long term follow-up of all infants weighing 401- 1000 grams at birth who are admitted to the NICU of participating Centers after January 1, 1993, and who are part of this NRN GDB. An assessment, which includes all aspects of growth and development, will be undertaken for all infants at 18 + 4 months corrected age based on **best OB estimate**. (If the gestational age by best OB estimate is missing, the gestational age by Ballard should be used).

#### **Selection of Participants and Recruitment Study Population**

All infants weighing between 401-1000 grams at birth who are admitted to the NRN NICU Centers and enrolled in the NRN GDB registry for prenatal and perinatal/neonatal outcome are followed up at 18 + 4 months corrected age. Inclusion criteria include survival to hospital discharge and birth weight between 401 and 1000 grams. There are no exclusion criteria. Currently, there are 16 participating centers in the NRN and four collaborating centers across the United States. Infants who are born or who are hospitalized at the start of the study or after will have a Discharge SES Data Form (NF01) completed at the time of their discharge. Informed consent procedures are conducted within four weeks of discharge from the NICU during the first follow-up appointment to either their primary care physician or the High-Risk Follow-Up Clinic. Tracking information will be collected to enable study staff to keep in contact with the family until the time of the follow-up visit.

#### **STUDY PROCEDURES**

##### **Description of 18 + 4 Months Visit**

The 18 + 4 months follow-up visit includes the following assessments, each with its accompanying data forms. Forms are included in Appendix A.

- Demographics (NF03)
- Medical history including neurosensory outcomes (NF04)
- Physical and neurological examination (NF05)
- Neurodevelopmental and behavioral assessment with the Bayley Scales of Infant Development II and III (NF09, NF09A)
- Social/behavioral development with the Brief Infant Toddler Social Emotional Assessment – BITSEA (NF13)

Tracking information will be updated at the 18 + 4 months follow-up visit for future visits.

##### **Assessment Battery**

The data collection process has been designed to eliminate subjective answers as much as possible and to provide objective and quantitative information. A special effort has been made to develop an assessment battery which will minimize intercenter variability, assure uniformity in testing, and consistency in data collection.

##### **Demographics** (Appendix – Forms NF01, NF02, NF03)

Numerous studies have demonstrated the importance of family factors and the interaction between family factors and child characteristics as they relate to developmental and behavioral outcome. Socioeconomic status (SES) characteristics of the family have been shown to be predictive of outcome with increasing age.<sup>1</sup>In addition, more recent work has shown that characteristics of the family and home environment are significant predictors of outcome.<sup>2,3</sup> The demographic variables which have been chosen are based on prior studies confirming the importance of these

variables, and the diversity within and among centers. These variables will be analyzed for their potential relationship to the study's outcomes.

#### **History (Appendix – Form NF04)**

This section is designed to review problems at hospital discharge, resolution of those problems, as well as new problems since discharge, and resolution or persistence of these problems. It is designed to identify major morbidity, severity of medical conditions and the child's functional characteristics.

##### **a. Major morbidity**

The history questions have been designed to identify major morbidities and the frequency of morbidities. For example: Does the child have a history of seizures? If so, how often? How many times has the child been rehospitalized since initial discharge and what were the diagnoses for each hospitalization. Has the child had surgery? Morbidities will not be specified except for questions on seizures.

##### **b. Severity of medical conditions**

Grading of conditions as to mild, moderate and severe results in ambiguity and lack uniformity when done over a large group at scattered sites. To alleviate this problem, questions regarding the severity of conditions are explicit and focus on quantitative items such as: Is Oxygen needed? Is a ventilator required? Has the child had seizures? What medications have been prescribed? What equipment is in use? The use of medications and equipment will also reflect the duration and/ or persistence of severity of illnesses. Functional characteristics other than neurological findings have been designed to identify primarily feeding and motor functioning. Responses will identify the level of care that is required. For example: How does your child eat? The responses range from normal self-feeding through choices leading to a gastrostomy tube.

#### **Physical and Neurological Examination (Appendix – Form NF05)**

A thorough physical and neurological examination will be completed. The physical examination will begin with the weight, height, weight-height ratio and occipital-frontal circumference (OFC) measurements. These measurements will allow for the diagnosis of failure to thrive defined as a weight for height ratio less than the 10th percentile for adjusted age, short stature defined as the linear height less than the 5th percentile, microcephaly defined as an OFC less than the 5th percentile for adjusted age, and obesity defined as a weight to height ratio greater than the 90th percentile. These data will allow for follow-up of early growth parameters. They will also assist in clarifying the severity of medical conditions and level of nutritional intervention that is required.

Traditional developmental tests identify certain cognitive and intellectual developmental problems but do not include a neurological examination and therefore do not identify neurological deficits. Thus, a standardized neurological examination to identify neurological abnormalities and functional gross motor skills is included: the standardized recording of central motor deficit as described by Amiel-Tison and Stewart.<sup>4</sup> The examination is intended for international use and describes functional gross motor skills in an objective manner without need for extensive judgment by the clinical examiner. Each area of the body (head and neck, trunk, lower limbs, and upper limbs) is divided into 4 functional and sequential skill levels. The descriptions are clear and self-evident and will not require intertester reliability evaluation. Neurologic examination also involves the description of muscle tone and movement with the child

at rest and description of muscle tone and movement with excitement or goal directed movement. Severity of hypotonicity and hypertonicity, including identification of contractures, adductor spasm, and clonus, are quantified. The neurologic examination also includes evaluation of gross characteristics of oral motor skill development.

Sensory deficits are identified through specific questions concerning vision and hearing. For vision; the questions begin broad-based and become extremely specific, identifying the need for corrective lenses, presence of strabismus, and partial or complete blindness. For hearing, the severity of hearing deficit (if any) will be specified and characterized functionally as requirement of a hearing aid, unilateral or bilateral deafness, etc. These sensory parameters are essential in follow-up to determine major morbidities and severity of conditions as well characterized functional use for developmental and outcome. In addition, these will allow correlation of 18 + 4 months outcome with early assessment of retinopathy and auditory brainstem testing performed during the initial hospitalization.

Diagnoses: Major abnormal findings discovered on examination will be noted. These will include those abnormalities interfering with the child's growth and development. These findings will not be itemized in a traditional physical examination format, but listed as a diagnosis or as findings of the neurologic examination. The neurological findings will be summarized and classified into neurological syndromes/diagnoses. In conjunction with the developmental test, they will provide a complete picture of the child's current neurosensory as well as developmental status. Neurological and motor disorders are listed and will be identified by the physician examining the patient. Sensory deficit will be identified by the examining team and are only noted as present or absent in the Diagnostic section (Appendix – Form NF05-C-9).

**Bayley Scales of Infant Development** -Second and Third Editions (Appendix – Forms NF09, NF09A)

The Bayley II<sup>5</sup> has been used by the NRN Follow-Up Study since 1994. It will continue to be used for infants seen at 18 + 4 months who were born before January 1, 2006. For all infants born on or after January 1, 2006, and for those enrolled in studies with protocols that make a specification, the Bayley III<sup>6</sup> will be used. The Bayley Scales have had a long and productive history both clinically and in research and much valuable data has been gathered relevant to child development using these scales. The BSID-II and BSID-II are appropriate for children aged 1-42 months. They contain attractive stimulus materials that are appealing to children. Assessment requires approximately 45-60 minutes for completion. With the caregiver present, items are administered directly to children by an examiner who has been trained and certified in the uses of these tests. Completion of the Bayley II results in standardized scores including Mental Development Index, Motor Development Index, and Behavior Rating Scale percentiles. Use of the Bayley III for this study will include assessments of cognitive and language (receptive and expressive) development.

**BITSEA**

The Brief Infant-Toddler Emotional Assessment (BITSEA)<sup>7</sup> is designed as a first step in the early identification of 1- to 3-year-olds with social-emotional problems and/or delays in social competence. It consists of 44 questions that are administered by interview to the child's caregiver. This interview requires about 10 minutes. The survey results in standardized scores in the following domains: Externalizing, Internalizing, Dysregulation, Competence.

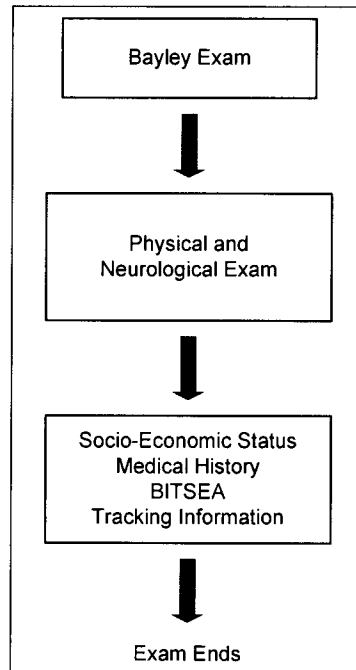
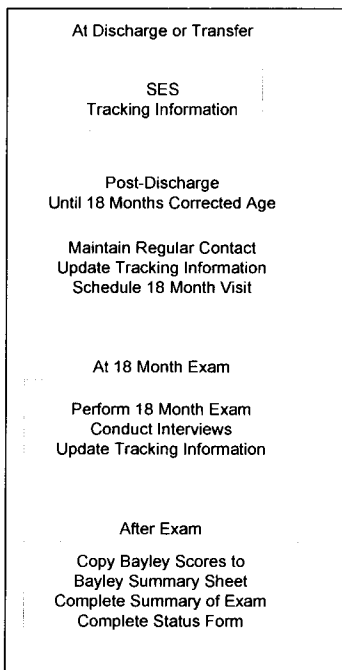
**STUDY and VISIT OVERVIEW**

An overview of the Follow-up Study Procedures is given in Figure 1 (page 10). A suggested order of procedures during the 18 + 4 months visit is given in Figure 2 (page 10). Although the exact order of procedures at this visit cannot be predetermined as it depends on the appropriate state of the child, if possible, the Bayley Scales of Infant Development (BSID) should be administered early in the clinic visit before medical procedures or interviews. Best performance may be compromised if the child is tired, hungry, or upset. The caregiver should be present for this exam. Following the Bayley exam, the physical and neurological exam can be

**Figure 1: Overview of the Follow-up Study**

**Figure 2: Overview of Follow-up Visit**

**Procedures**



conducted. The caregiver should be present for the exam. The interviews can take place after the exam. The SES and Medical History should be conducted first, followed by the Brief-Infant Toddler Social Emotional Assessment.

**DATA STORAGE and MANAGEMENT**

Each study subject has a data file including contact information and study forms. All materials are stored in a locked filing cabinet in the Data Center office located in the Medical Sciences Building on the campus of the University of Cincinnati. All data forms generated for the current study will be transported by hand to the Data Center. Data entry will be completed in this location and electronically transmitted via the Network computer system.

The NRN Data Coordinating Center, located at Research Triangle Institute in Research triangle Park, NC, is responsible for all aspects of statistical design and analysis as well as

data management of the study. In concert with the NRN Steering Committee, the DCC is responsible for the protocol, manual, and forms development, and testing. The DCC, in collaboration with the subcommittee, conducts all statistical analyses and collaborates with the other Steering Committee members in the preparation of reports based on the study results.

### **SAMPLE SIZE**

(Info specific to Cincinnati enrollment goes here)

As of December, 2006, enrollment in the NRN GDB in Cincinnati, including all infants born 401-1500 gm, was 5053 infants. Approximately 350-400 infants are included in the GDB each year from Cincinnati. The number of 18 + 4 months follow-up visits that have been completed in Cincinnati was 890 in December, 2006. Approximately 75-100 infants become eligible for enrollment in the 18 + 4 months Follow Up Study in Cincinnati each year.

### **POTENTIAL BENEFITS**

There are no anticipated direct benefits to participation in this study. However, there may be indirect benefit yielded by the administration of neurodevelopmental and physical/neurological assessment.

### **POTENTIAL RISKS, DISCOMFORTS, INCONVENIENCES AND PRECAUTIONS**

There are no known risks related to the assessments that will be completed for this observational research study. However, there may be some inconvenience related to traveling to the hospital for the follow-up visit.

A Data and Safety Monitoring Board is not necessary for this proposed study since the protocol involves minimal risk to participants.

### **PROPOSED RISK/BENEFIT ANALYSIS**

Based on the stated potential for benefit and the potential risks, we deem this study to meet the following designation:

#### **Minimal risk without the potential for direct benefit to the subjects**

### **WITHDRAWALS**

Any participant is permitted to withdraw from the study at any time without penalty. After consent, a written request will be required to withdraw from the study and eliminate any collected data from the proposed analyses. This request should come to the project PI.

### **PRIVACY and CONFIDENTIALITY**

Each study subject has a data file including contact information and study forms. All materials are stored in a locked filing cabinet in the Data Center office located in the Medical Sciences Building on the campus of the University of Cincinnati. All data forms generated for the current study will be transported by hand to the Data Center. Data entry will be completed in this location and electronically transmitted via the Network computer system.

### **PAYMENT FOR STUDIES**

Study subjects and their families receive no payment for participation in his study. Children are offered a developmentally appropriate toy for their participation.

### **INFORMED CONSENT**

Informed consent procedures are conducted within four weeks of discharge from the NICU during the first follow-up appointment to either their primary care physician or the High-Risk Follow-Up Clinic. Tracking information will be collected to enable study staff to keep in contact with the family until the time of the follow-up visit

## PARENTAL PERMISSION

Completion of consent procedures will require signature of one caregiver who has legal responsibility for the care and custody of the enrolled infant.

## (REFERENCES)

- ~~(I was unable to find actual citation of any of these references in the text. We could have cut them when slashing text. I will only be using the reference list at the end of this document. — KY)1.~~ National Institutes of Health (NIH) Consensus Development Conference: Effects of corticosteroids for fetal maturation on perinatal outcomes. *Am J Obstet* 1995;173:246-248.
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**From:** Gantz, Marie  
**To:** Brenda Poindexter; Wilson, Leslie Dawn; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Auman, Jeanette O.; Neil Finer  
**Subject:** RE: SUPPORT ROP OUTCOMES  
**Date:** Monday, February 26, 2007 7:27:03 PM

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Hi Brenda,

Thanks for making those points. We did know that the infant had died, however, if death occurs before final ROP status has been entered in the DMS, we still send out missing ROP notices to the centers to make sure that all ROP exams done on that patient are entered. The checks for missing ROP are very restrictive, so that staff can be assured that every last means was taken to obtain all eye exams for every patient right up until status was reached. When it is not possible to obtain final ROP status on an infant, we must get the infant "excused" by Dale Phelps before we can stop sending missing ROP reports (by "excused" we mean that we have verified that final ROP status is not obtainable). One exception is that, in cases where death occurs within 7 days of the last entered ROP exam, we can "excuse" the infant automatically. However, our current program that checks for missing ROP status does not compare death and exam dates, so even though there were only 3 days between the last ROP exam and the death of the infant, you still received the missing ROP report. That program is currently being amended to automatically exclude such infants from the missing ROP report. We are also changing the text of the message that is sent regarding infants who have died so that we do not give the centers the impression that we think the infant is still alive. I hope that helps!

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Brenda Poindexter [mailto:bpindex@iupui.edu]  
**Sent:** Monday, February 26, 2007 6:23 PM  
**To:** Gantz, Marie; Wilson, Leslie Dawn; Rosemary Higgins  
**Cc:** Das, Abhik; Auman, Jeanette O.; Neil Finer  
**Subject:** Re: SUPPORT ROP OUTCOMES

Thanks Marie - but I'm a bit perplexed that the death outcome was not already known by RTI from the usual status forms. Am I missing something? I also don't understand why he would be "excused" if he is dead - it would seem that "excused" would apply, for example, to an infant who was transferred to another hospital where an ophthalmologist wasn't available to perform the ROP exam. Another issue is that if you all thought that this baby was 50 weeks PMA instead of deceased, is it possible that he was also counted in some of the denominators for eligibility in secondary studies such as the MRI or breathing outcomes? I'm just trying to understand how the cross-checks for things like this are done. Brenda

On 2/26/07 5:26 PM, "Gantz, Marie" <mgantz@rti.org> wrote:

Thanks for responding with that information so quickly. Since the infant died less than a week after the last ROP exam, we will mark the infant as "excused" and no further action is necessary on your part.

Thanks,  
Marie

Marie Gantz, Ph.D.

Research Statistician  
RTI International  
mgantz@rti.org  
828-254-6255

---

**From:** Wilson, Leslie Dawn [mailto:ldw@iupui.edu]  
**Sent:** Monday, February 26, 2007 12:46 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Gantz, Marie; Poindexter, Brenda B  
**Subject:** RE: SUPPORT ROP OUTCOMES

Infant RHC'd (b) (6) Last ROP exam was 8/15/06-data for this report in system. Please forward me any outstanding info needed for this pt--thanks

*Leslie Dawn Wilson, RN, BSN*  
**Research Manager**  
**Neonatal Network Coordinator**  
**Riley Hospital RR 208**  
**ldw@iupui.edu (e-mail)**  
**699 West Dr**  
**Indianapolis, IN 46202**  
**317.274.8255 (phone)**  
**317.274.8963 (fax)**  
**317.312.(b) (6)(pager)**

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, February 23, 2007 3:39 PM  
**To:** Poindexter, Brenda B; Wilson, Leslie Dawn  
**Cc:** Das, Abhik; Marie Gantz  
**Subject:** SUPPORT ROP OUTCOMES

Hi, We are missing one infant's ROP outcome.

Center Network Message

12 (b) (6) 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

Thanks for all the effort!!  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Kathy J Auten  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Das, Abhik; Michael Cotten; Ronald N Goldberg; Marie Gantz  
**Subject:** Re: SUPPORT ROP OUTCOMES  
**Date:** Monday, February 26, 2007 9:14:19 AM

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I am continuing to arrange for copies of the reports to be sent to me from clinics in the area.

Kathy J. Auten, MSHS  
Project Manager  
NICHD Neonatal Research Network Trials  
Duke University Medical Center  
Box 3179  
Bell Building, Room 141  
Durham, NC 27710 USA  
919-681-5859 tel  
919-681-4868 fax  
kathy.auten@duke.edu

"Higgins, Rosemary \ (NIH/NICHD\ ) [E]" <higginsr@mail.nih.gov> wrote on 02/23/2007 04:01:59 PM:

> Center  
>  
> Network  
>  
> Message  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
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> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
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> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>

> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for the left eye.  
>  
> 19  
>  
> (b) (6)  
>  
> No SUPP10 records have been entered even though SUPP09 Question C1  
> indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
> 19  
>  
> (b) (6)  
>  
> No SUPP10 forms have been entered though 50 weeks PMA has been  
> reached and the infant did not die early.  
>  
> 19  
>  
> (b) (6)  
>  
> No SUPP10 records have been entered even though SUPP09 Question C1  
> indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
>  
> 19  
>  
> (b) (6)  
>  
> 50 weeks PMA has been reached and final ROP exam status has not been  
> reported on the SUPP10 for either eye.  
>  
>  
> HI,  
> We are missing the above ROP outcomes on the above children. Let us  
> know how you are doing.  
>  
> Thanks for all the effort!!  
> Rose

> Rosemary D. Higgins, M.D.  
> Program Scientist for the Neonatal Research Network  
> Pregnancy and Perinatology Branch  
> Center for Developmental Biology and Perinatal Medicine  
> NICHD, NIH  
> 6100 Executive Blvd., Room 4B03B  
> MSC 7510  
> Bethesda, MD 20892  
> (For overnight delivery, use Rockville, MD 20852)  
> 301-435-7909  
> 301-496-3790 (FAX)  
> higginsr@mail.nih.gov  
>

**From:** M. Bethany Ball  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** vanmeurs@leland.stanford.edu  
**Subject:** Re: SUPPORT ROP OUTCOMES  
**Date:** Friday, February 23, 2007 3:48:17 PM

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Funny, we're just working on that. It's an out-patient thing.  
MBB

>Hi,  
>We are missing one child's 50 week ROP outcome.  
>  
>Center  
>Network  
>Message  
>15  
>(b) (6)  
>50 weeks PMA has been reached and final ROP exam status has not been  
>reported on the SUPP10 for either eye.  
>  
>Thanks for all the help!!  
>Rose  
>Rosemary D. Higgins, M.D.  
>Program Scientist for the Neonatal Research Network  
>Pregnancy and Perinatology Branch  
>Center for Developmental Biology and Perinatal Medicine  
>NICHD, NIH  
>6100 Executive Blvd., Room 4B03B  
>MSC 7510  
>Bethesda, MD 20892  
>(For overnight delivery, use Rockville, MD 20852)  
>301-435-7909  
>301-496-3790 (FAX)  
><<mailto:higginsr@mail.nih.gov>>higginsr@mail.nih.gov  
>

--  
Bethany Ball  
Neonatal and Developmental Medicine  
Stanford University  
750 Welch Road, Suite 315  
Palo Alto, CA 94304

Tel (650) 725 8342  
Fax (650) 725 8351



**From:** Neil Finer  
**To:** Richard Ehrenkranz  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: Oximeter points  
**Date:** Thursday, February 22, 2007 4:22:18 PM

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Hi Richard

I hope the phone call helped. I think that going with SatShare cables will resolve your issues. You will be able to increase the effective averaging and add more alarm delays without changing the targets or the downloads.

Let me know how this works out.

Be well Old Man!!

Neil

-----Original Message-----

**From:** Richard Ehrenkranz [<mailto:richard.ehrenkranz@yale.edu>]  
**Sent:** Thursday, February 22, 2007 7:40 AM  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Wade Rich  
**Subject:** RE: Oximeter points

Neil:

We have 6 infants in a 10-bed room that are in the SUPPORT trial and the

staff are about to revolt primarily because of the high alarms. The averaging time of 16 secs compounded by the effect of the skewing algorithm

has resulted in the alarms binging almost constantly regardless of adjustments to the infants' FiO2 (most of the infants are in < 30% oxygen

and some are < 25%) and mean airway pressure. Unfortunately a small decrease in the FiO2 than often results in a low alarm. We are in the process of converting all our unit oximeters to Masimo Radical 7 instruments and plan to set the time averaging to 4 secs so that we can appreciate gradual changes in the SpO2 and so that the alarm will automatically reset more quickly. We do not want to upset the study's analytical plans, but can we change the time averaging to 4 secs to

be similar to our unit policy? Otherwise, I might not live long enough to enroll additional infants.

Richard

At 06:13 PM 2/21/2007, Neil Finer wrote:

>Hi Rose and Richard

>Because of the skew they may have more time at either setting as the  
>conversion from altered to real values will result in their being more  
>displayed values at either of these points. We don't believe that this  
>will lead to any unblinding'

>Hey Richard, Don't you have anything better to do?? Congrats on the  
>great enrollments last month!!!!

>Be well

>Neil

>



>-----Original Message-----

>From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]

>Sent: Wednesday, February 21, 2007 3:07 PM

>To: Neil Finer

>Cc: richard.ehrenkranz@yale.edu

>Subject: Oximeter points

>

>Neil

>Richard asked me today if the Masimo oximeters stay at 86 or 94 for a longer time than other numbers? I had not heard about this as of yet.

>It is not causing a problem, just an observation.

>

>Thanks

>Rose

>-----

>Sent from my BlackBerry Wireless Handheld

Richard A. Ehrenkranz, MD  
Department of Pediatrics  
Yale University School of Medicine  
333 Cedar Street  
PO Box 208064  
New Haven, CT 06520-8064  
tele: 203-688-2320  
fax: 203-688-5426

The information contained in this email may be privileged and confidential. If you are the intended recipient, you must maintain this message in a secure and confidential manner. If you are not the intended recipient, please notify the sender immediately and destroy this message. Thank you.

**From:** [Duara, Shahnaz](#)  
**To:** [Brenda Poindexter](#); [Neil Finer](#)  
**Cc:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Zaterka-Baxter, Kristin](#); [Navarrete, Cristina](#); [Everett, Ruth](#)  
**Subject:** RE: Growth secondary  
**Date:** Friday, February 16, 2007 2:25:49 PM

---

Hi Brenda,

I wasn't on the call and not aware of the discussion. This certainly makes sense and I agree that we should clarify it in the manual. Cristina's email is <[cnavarrete@miami.edu](mailto:cnavarrete@miami.edu)>.

Thanks  
Shahnaz

-----Original Message-----

From: Brenda Poindexter [<mailto:bpoindex@iupui.edu>]  
Sent: Friday, February 16, 2007 2:10 PM  
To: Neil Finer; Duara, Shahnaz  
Cc: Rosemary Higgins; Zaterka-Baxter, Kristin  
Subject: Growth secondary

Hi all. I couldn't find Kristina's email, so if someone could pass this on to her I would appreciate it. I just found out from one of our research nurses that they had been told on a conference call to only count parenteral nutrition for the growth study if the infant was receiving both amino acids and lipids. This is not correct - I suspect that most places are using a stock amino acid solution on the first day of life (dextrose and AA only); this should definitely be "counted" as PN. Most if not all of the data related to benefits of early nutritional support relate to early amino acids, so we would not want to exclude this as counting as PN. We will have to go back and edit our data because our research nurse was doing what she was told on the conference call. Sounds like the manual is a bit vague on this point - probably should be clarified. Let me know if you have questions - thanks, Brenda

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT oximeter issues  
**Date:** Friday, February 16, 2007 10:30:12 AM

---

Hi Rose

This was mentioned as a possibility if they pull out of the trial. For now I would like to try to help them stay in the trial.

Neil

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Friday, February 16, 2007 5:41 AM  
To: Neil Finer; Wade Rich  
Subject: RE: SUPPORT oximeter issues

Neil

I, too would be opposed to deleting the oximeter arm at a site. I will give him a call.

Thanks

Rose

-----Original Message-----

From: Neil Finer [<mailto:nfiner@ucsd.edu>]  
Sent: Thursday, February 15, 2007 10:17 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Wade Rich  
Subject: FW: SUPPORT oximeter issues

Rose

I spoke with Ed and Karen today after the coordinators call.

This is site specific and may staff specific. They appear to have some staff who are skeptical of the oximeters reading, especially on the low side, although thinks that these are real. They need SatShare which we have previously suggested, and discussed with Karen and Ed.

They will move on this.

Ed sounds somewhat desperate and asked if they could drop out of the oximeter side of the study. I said probably no, and that require your input. I am totally opposed to that. I also suggested that if they continue to have these problems we will organize a conference call with some other coordinators and RTs

I will stay tuned.

Neil

-----Original Message-----

From: Bell, Edward [<mailto:edward-bell@uiowa.edu>]  
Sent: Thursday, February 15, 2007 12:08 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Neil Finer  
Cc: Wade Rich  
Subject: RE: SUPPORT oximeter issues

I don't think so. Our issues are largely site specific.

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]

Sent: Thursday, February 15, 2007 1:15 PM  
To: Bell, Edward; Neil Finer  
Cc: Wade Rich  
Subject: RE: SUPPORT oximeter issues

Would it be helpful to have Monica Collins or Nancy Newman go on-site to explain what is done at two of the network sites???

Thanks  
Rose

-----Original Message-----

From: Bell, Edward [mailto:edward-bell@uiowa.edu]  
Sent: Thursday, February 15, 2007 12:19 PM  
To: Neil Finer  
Cc: Higgins, Rosemary (NIH/NICHD) [E]; Klein, Jonathan; Johnson, Karen; Wade Rich  
Subject: RE: SUPPORT oximeter issues

Neil,  
Can I call you? What's your number? It's time to move on to SatShare. We'll have to move quickly. I've already contacted Masimo to see if they can get us some SatShares by tomorrow. We've already lost equipoise, as you can see from the attached, which was presented to me this morning at an emergency meeting called by our nurses.  
Ed

<<Iowa nurse concerns about SUPPORT oximetry.doc>>

-----Original Message-----

From: Neil Finer [mailto:nfiner@ucsd.edu]  
Sent: Wednesday, January 31, 2007 9:17 PM  
To: Bell, Edward  
Cc: Rosemary Higgins (E-mail); Klein, Jonathan; Johnson, Karen; Wade Rich  
Subject: RE: SUPPORT oximeter issues

Hi Ed

This sounds like a way forward.  
If your staff are happy with the current arrangement stay with it. If you need to increase the averaging or delay using the Satshare this will not effect your download data. Wade and I will stay tuned - call if you have any questions - in addition have your coordinator or RT manager call Wade as he is qualified in both areas and knows more than anyone walking about these issues.

Be well  
Neil

-----Original Message-----

From: Bell, Edward [mailto:edward-bell@uiowa.edu]  
Sent: Wednesday, January 31, 2007 2:36 PM  
To: Neil Finer  
Cc: Rosemary Higgins (E-mail); Klein, Jonathan; Johnson, Karen; Wade Rich  
Subject: SUPPORT oximeter issues

Neil et al,

Our efforts seem to be helping. We lowered the low-sat alarm limit to 80 for all babies, and we have Don Mattern, a Masimo clinical specialist, here helping to educate the nursing staff about the Masimo. The standard in our NICU is to have the bedside oximeter (Nellcor) alarms on but to have the oximeter alarms off on the Philips monitor, both in the patient room and centrally. We think it would be too confusing to do the opposite with the study oximeters, and some nurses like the audible alarms on the Masimo box because the high and low alarms sound different (unlike the Nellcor or Philips alarms). The puzzling thing is that with the Masimo, but not the Nellcor, when we silence the Philips oximeter alarms, it silences the Philips alarm in the patient room but it still alarms at the central monitoring stations. No one can figure this out. We've decided not to go to SatShare yet for 2 reasons. First, we hope we won't have to use increased averaging interval or delay, which is the main advantage of SatShare. Second, when the Masimo is attached to the Philips via SatShare, the oximeter waveform on the Philips is apparently an artificial construct and not the true pulse waveform as it appears on the Masimo. VueLink transmits the true waveform. If we find we are still having an unacceptable number of alarms with the lower alarm limit, we will use SatShare, which will allow us to get rid of more nuisance alarms by increasing the averaging interval or the delay. I hope I've explained this accurately. Neil, I'm sure you're thought of this with some centers using SatShare and others not, but the information acted on by staff (i.e. alarms) is quite different when the signal is manipulated with SatShare to alter alarm frequency. The saving grace is that we randomize within centers, so findings will be broadly generalizable.

Cheers,

Ed

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Auman, Jeanette O.  
**Cc:** Das, Abhik  
**Subject:** RE: SUPPORT ROP  
**Date:** Thursday, February 15, 2007 12:35:24 PM

Great!

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
mgantz@rti.org  
301-515-2521

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Thursday, February 15, 2007 12:32 PM  
**To:** Auman, Jeanette O.; Gantz, Marie  
**Cc:** Das, Abhik  
**Subject:** FW: SUPPORT ROP

Looks like we have many of the missing Houston infants!  
Rose

**From:** Mcdavid, Georgia E [mailto:Georgia.E.McDavid@uth.tmc.edu]  
**Sent:** Thursday, February 15, 2007 12:18 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Morris, Brenda H; Tyson, Jon E  
**Subject:** RE: SUPPORT ROP

Rose,  
I am sorry it has taken so long but the ophthalmologists' office took a long time to respond. Some of the information was entered previously.  
Georgia

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, January 09, 2007 10:22 AM  
**To:** Tyson, Jon E; Morris, Brenda H; Mcdavid, Georgia E  
**Cc:** Das, Abhik; Marie Gantz  
**Subject:** SUPPORT ROP

CENTER	NETWORK	MISSING ROP MESSAGE
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT - let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Mcdavid, Georgia E  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Morris, Brenda H; Tyson, Jon E  
**Subject:** RE: SUPPORT ROP  
**Date:** Thursday, February 15, 2007 12:18:25 PM  
**Attachments:** ROE\_outcomes\_to\_NIH\_2-15-07.doc

Rose,  
I am sorry it has taken so long but the ophthalmologists' office took a long time to respond. Some of the information was entered previously.  
Georgia

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, January 09, 2007 10:22 AM  
**To:** Tyson, Jon E; Morris, Brenda H; Mcdavid, Georgia E  
**Cc:** Das, Abhik; Marie Gantz  
**Subject:** SUPPORT ROP

CENTER	NETWORK	MISSING ROP MESSAGE
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
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18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT – let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

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Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

CENTER NETWORK MISSING ROP MESSAGE

CENTER	NETWORK	MISSING ROP MESSAGE
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. This infant has not been seen again – did not come to scheduled appointments
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. This infant has not been seen again – did not come to scheduled appointment at one year of age
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. This infant has not been seen again – did not come to scheduled appointments
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. Seen – database updated
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. This infant has not been seen again – did not come to scheduled appointments
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. Seen – database updated
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early. Seen – database updated
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early. Pt expired- data entered
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early. Laser surgery prior to discharge – data entered
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early. Final status entered
18	(b) (6)	No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early. Pt expired- data entered
18	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. Seen – database updated



**From:** [Gantz, Marie](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Cc:** [Das, Abhik](#)  
**Subject:** ROP Missing Report  
**Date:** Thursday, February 15, 2007 12:29:51 PM  
**Attachments:** [Infants with missing ROP 02-14-07.xls](#)

---

Hi Rose,

Attached is the list of SUPPORT infants missing an ROP diagnosis this month. Do you to continue to send these out on a monthly basis?

Thanks,  
Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
[mgantz@rti.org](mailto:mgantz@rti.org)  
828-254-6255



(b) (6)

18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
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18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
18 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
18 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
18 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
18 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
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19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
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19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.  
19 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
19 No SUPP10 forms have been entered though 50 weeks PMA has been reached and the infant did not die early.  
19 No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.  
19 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
20 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
20 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.  
20 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

**From:** [Neil Finer](#)  
**To:** [Das, Abhik](#); [Higgins, Rosemary \(NIH/NICHD\)](#) [E]  
**Subject:** RE: SUPPORT enrollment  
**Date:** Thursday, February 15, 2007 11:50:36 AM

---

Hi

We are now including GDB eligibles from each site which this form does not capture. I think you should add a separate row for GDB eligibles to this to keep all of the data consistent. I assume that the current form uses SUPP02.

Neil

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Thursday, February 15, 2007 7:33 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Neil Finer  
**Subject:** RE: SUPPORT enrollment

Some of the info in the table already appears in the monthly report table 1.9.A. Should this be part of the monthly report (where it is probably lost in a crowd somewhat) or emailed out separately to all PIs and coordinators by you every month?

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, February 14, 2007 3:20 PM  
**To:** Das, Abhik  
**Cc:** nfiner@ucsd.edu  
**Subject:** RE: SUPPORT enrollment

Abhik

This is very helpful. I would get Neil's thoughts but this should be circulated each month to enhance recruitment and enrollment.

Thanks

Rose

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Wednesday, February 14, 2007 3:13 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** nfiner@ucsd.edu  
**Subject:** SUPPORT enrollment

Rose and Neil:

As you know, the DSMC (and specifically the NHLBI member) expressed some concern about slow enrollment in the trial. We are going to provide the attached as additional information to them (sites will be blinded), but I thought you may want to see this as well. The wide range of consent rates among the sites (11-73%) is very striking. Maybe we can produce and circulate this on a monthly basis to motivate sites?

Thanks

Abhik

<<Enrollment by center.doc>>

**Abhik Das, Ph.D.**  
**Senior Research Statistician**

---

**RTI International**  
**6110 Executive Blvd., Suite 902**  
**Rockville, MD 20852-3903**  
**e-mail: [adas@rti.org](mailto:adas@rti.org)**  
**Phone: 301-770-8214**  
**Fax: 301-230-4646**

**From:** Neil Finer  
**To:** Das, Abhik; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT enrollment  
**Date:** Wednesday, February 14, 2007 7:17:13 PM

---

Hi Das  
Excellent idea  
Neil

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Wednesday, February 14, 2007 12:13 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Neil Finer  
**Subject:** SUPPORT enrollment

Rose and Neil:

As you know, the DSMC (and specifically the NHLBI member) expressed some concern about slow enrollement in the trial. We are going to provide the attached as additional information to them (sites will be blinded), but I thought you may want to see this as well. The wide range of consent rates among the sites (11-73%) is very striking. Maybe we can produce and circulate this on a monthly basis to motivate sites?

Thanks

Abhik

<<Enrollment by center.doc>>

**Abhik Das, Ph.D.**  
**Senior Research Statistician**

---

**RTI International**  
**6110 Executive Blvd., Suite 902**  
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**Phone: 301-770-8214**  
**Fax: 301-230-4646**

**From:** [Das, Abhik](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [nfiner@ucsd.edu](mailto:nfiner@ucsd.edu)  
**Subject:** SUPPORT enrollment  
**Date:** Wednesday, February 14, 2007 3:12:57 PM  
**Attachments:** [Enrollment by center.doc](#)

---

Rose and Neil:

As you know, the DSMC (and specifically the NHLBI member) expressed some concern about slow enrollment in the trial. We are going to provide the attached as additional information to them (sites will be blinded), but I thought you may want to see this as well. The wide range of consent rates among the sites (11-73%) is very striking. Maybe we can produce and circulate this on a monthly basis to motivate sites?

Thanks

Abhik

<<Enrollment by center.doc>>

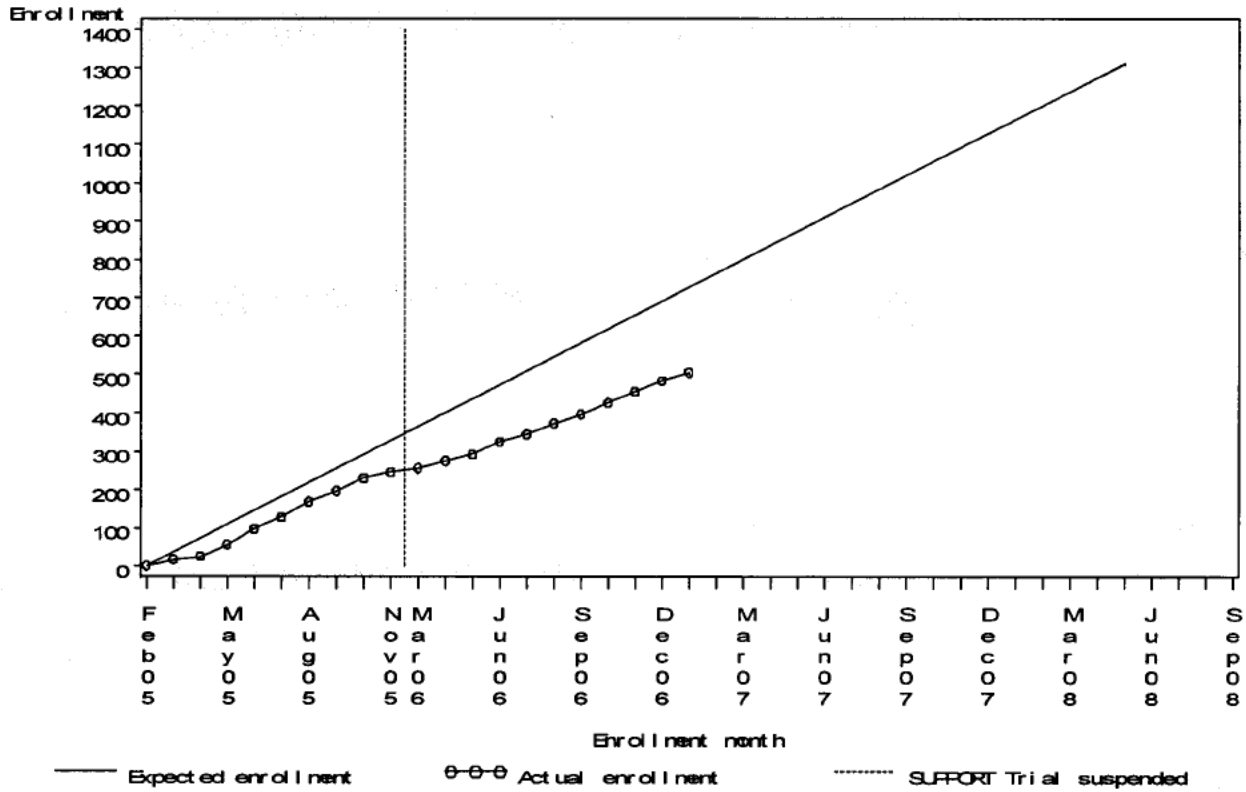
**Abhik Das, Ph.D.**  
**Senior Research Statistician**

---

**RTI International**  
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**Rockville, MD 20852-3903**  
**e-mail: [adas@rti.org](mailto:adas@rti.org)**  
**Phone: 301-770-8214**  
**Fax: 301-230-4646**

## Enrollment Progress in the SUPPORT Trial

Figure 1 Expected and Actual SUPPORT Trial Enrollment



Expected enrollment is 1310 infants over 36 months, with randomization starting in March 2005



**Table 1** Infants Screened, Eligible, Consented and Randomized, by Center

Infants screened	97	59	11	33	87	151	115	64	112	32	1193
% Eligible	94%	51%	100%	97%	90%	89%	80%	67%	73%	100%	83%
% Consented	57%	39%	64%	58%	41%	25%	22%	11%	46%	44%	43%
<b>Randomized</b>											
Number of infants	51	23	7	17	35	35	24	6	50	14	491
% of Screened	53%	39%	64%	52%	40%	23%	21%	9%	45%	44%	41%
% of Eligible	56%	77%	64%	53%	45%	26%	26%	14%	61%	44%	49%
% of Consented	93%	100%	100%	89%	97%	95%	96%	86%	96%	100%	95%
<b>Eligible, not randomized</b>											
Number of infants	40	7	4	15	43	99	68	37	32	18	504
% Parent unavailable	3%	0%	0%	13%	12%	34%	10%	22%	6%	22%	16%
% Consent not requested	60%	29%	0%	13%	44%	14%	53%	51%	44%	17%	35%
% Parent refusal	28%	71%	100%	60%	42%	49%	35%	24%	41%	61%	44%
% Physician refusal	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%
% Too old at delivery	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
% Parent w/drew consent	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% Other reason	8%	0%	0%	13%	2%	2%	1%	3%	6%	0%	3%

Infants screened	116	68	50	20	29	94	13	11	28	3	1193
% Eligible	96%	97%	92%	100%	28%	81%	69%	64%	93%	33%	83%
% Consented	73%	72%	54%	45%	28%	46%	31%	27%	43%	0%	43%
<b>Randomized</b>											
Number of infants	78	47	27	9	8	43	4	2	11	0	491
% of Screened	67%	69%	54%	45%	28%	46%	31%	18%	39%	0%	41%
% of Eligible	70%	71%	59%	45%	100%	57%	44%	29%	42%	0%	49%
% of Consented	92%	96%	100%	100%	100%	100%	100%	67%	92%	0%	95%
<b>Eligible, not randomized</b>											
Number of infants	33	19	19	11	0	33	5	5	15	1	504
% Parent unavailable	3%	5%	5%	9%	0%	36%	0%	0%	7%	0%	16%
% Consent not requested	18%	53%	16%	45%	0%	27%	0%	40%	53%	0%	35%
% Parent refusal	58%	32%	79%	45%	0%	36%	100%	40%	33%	100%	44%
% Physician refusal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% Too old at delivery	21%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
% Parent w/drew consent	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% Other reason	0%	5%	0%	0%	0%	0%	0%	20%	7%	0%	3%

**From:** Wade Rich  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: UCSD IRB approval for project 030766 expires in 75 days  
**Date:** Monday, February 12, 2007 12:26:22 PM

---

Rose,

After we do our last non-SUPPORT GDB subject, will be need to continue the F/U protocol ? We can't wait for completion or publication, because that is never...

Thanks !

wade

-----Original Message-----

**From:** Martha G. Fuller  
**Sent:** Monday, February 12, 2007 9:20 AM  
**To:** Wade Rich  
**Subject:** RE: UCSD IRB approval for project 030766 expires in 75 days

Are Support kids considered in this project (f/u) or in their own project? (Since support included f/u as part of the trial).

-----Original Message-----

**From:** Wade Rich  
**Sent:** Monday, February 12, 2007 8:31 AM  
**To:** Martha G. Fuller  
**Subject:** RE: UCSD IRB approval for project 030766 expires in 75 days

I just need # seen to date, and projected time we will be finished, understanding that the SUPPORT kids are in the program also, right?  
wade

-----Original Message-----

**From:** Martha Fuller [<mailto:mgfuller@ucsd.edu>]  
**Sent:** Monday, February 12, 2007 8:25 AM  
**To:** Wade Rich  
**Subject:** FW: UCSD IRB approval for project 030766 expires in 75 days

Do you have time to help me with this?  
We are no longer enrolling (duh!) but have patients to be seen until sometime in 2008... (the never ending study?!) I'll happily get whatever information is needed.

Thanks,  
Martha

Martha G. Fuller, RN, MSN  
Pediatric Nurse Practitioner  
UCSD Infant Special Care Follow-up Program  
(619) 543-3771

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contact the sender and delete the material from any computer.

-----Original Message-----

From: hrpp@ucsd.edu [mailto:hrpp@ucsd.edu]

Sent: Sunday, February 11, 2007 4:47 AM

To: mgfuller@ucsd.edu

Subject: UCSD IRB approval for project 030766 expires in 75 days

Dear Martha Fuller, M.S.N. :

As a courtesy, per your preferences on file with UCSD's Human Research Protections Program, the IRB approval will expire for Project 030766:

P.I. Yvonne Vaucher: Follow-up Study.

Please note: a NEW APPLICATION will be needed for this study at this time.

A specific Study Number may receive up to four IRB reviews (one initial and up to three continuing reviews). Your project has reached the maximum number of reviews under this study number. Therefore a NEW application is needed at this time if you wish to continue this study beyond its current expiration date.

**\*\*NOTE\*\*** If you have already submitted your NEW application for this study, no further action is required on your part at this time. The IRB will review and respond after review of your submission.

Federal regulations limit IRB approvals to periods of not more than 365 days.

You can initiate the new application process using the My Protocols at a Glance function, which is one of HRPP's e-IRB services at:  
<https://irb.ucsd.edu/eirb/login.shtml>

Submissions for project resubmission should be sent to HRPP at mailcode 0052 or uploaded to the <http://irb.ucsd.edu> website at least 45 days prior to expiration date to permit adequate time for scheduling and completion of IRB review.

If this study has been completed, you can use the Continuing Review function to submit a final report that includes number of subjects accrued and a note whether all adverse events have been reported to the IRB.

If you do not wish to receive e-mail reminders from HRPP, or wish to change the number of days before project expiration that you are sent e-mails of this type, go to <https://irb.ucsd.edu/eirb/login.shtml> and login with your e-IRB user name and password. Then select Edit Contact and Preferences information.

**\*\*You do NOT need to respond to this message, which is automatically generated by HRPP's project tracking system.\*\***

**From:** [Zaterka-Baxter, Kristin](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: SUpport reactivation letter  
**Date:** Monday, February 12, 2007 11:24:19 AM  
**Attachments:** [SUP.DSMCMemotosites\[11-22-05\].doc](#)

---

Sorry – here you go..

Thanks,

Kris

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Monday, February 12, 2007 11:20 AM  
**To:** Zaterka-Baxter, Kristin  
**Subject:** RE: SUpport reactivation letter

I got your message – I need the memo that Halted the trial that went to the site IRBs – I cannot find it anywhere. I did not receive any additional comments on the genomics protocol – just oks from Ron, Karen Johnson and Mike.

Thanks  
Rose

---

**From:** Zaterka-Baxter, Kristin [<mailto:kzaterka@rti.org>]  
**Sent:** Monday, February 12, 2007 11:15 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** SUpport reactivation letter

Please see attached. I'll have Dr. Alexander's letter posted along with the technical memo on the NRN web under the Support study.

Thanks,  
Kris



**DEPARTMENT OF HEALTH & HUMAN SERVICES**

National Institutes of Health

National Institute of Child Health  
and Human Development

November 22, 2005

**MEMORANDUM**

**TO:** Institutional Review Boards of the Neonatal Research Network (NRN) Sites

**FROM:** Gordon Avery, MD  
Chair of the Data Safety and Monitoring Committee (DSMC) of the NRN (as prepared by the Data Coordinating Center)

**SUBJECT:** Summary of the November 22, 2005 Data Safety and Monitoring Committee Conference Call

The DSMC for the Neonatal Research Network had a teleconference meeting at 11:00AM on November 22, 2005 to review data Oxygen Saturations Ranges from the SUPPORT Trial. Attached is a summary of the DSMC deliberations for this study.

**cc:** Rose Higgins  
Alan Jobe  
NICHD Neonatal Research Network PIs  
NICHD Neonatal Research Network Coordinators  
DSMC Members

Attachment

## **NEONATAL RESEARCH NETWORK**

### **DATA SAFETY AND MONITORING COMMITTEE**

#### **MINUTES**

**November 22, 1005**

The Data Safety and Monitoring Committee for the Neonatal Research Network met via teleconference at 11:00AM on November 22, 2005 to discuss and review data from the oxygen saturation arm of the SUPPORT Trial. The DSMC members in attendance were Drs. Avery (chair), Boyle, Gleason, Redmond, Willinger, Hunt and Allen. Drs. Das and Gantz and Ms. Hastings and Ms. Zarterka-Baxter from the Data Center were also present.

Tables representing the percent of time spent in each O2 range (days on supplemental O2 only) for each of the low and high treatment groups were previously e-mailed to the Committee prior to the call. These tables were based on study data as of November 7, 2005 (153 study subjects).

After reviewing and discussing these data, the DSMC expressed significant concern about the following two issues:

- There is a significant safety and exposure issue for the infants in the high saturation treatment group because an unacceptably high proportion of time was spent by these study subjects in the >95 range
- There is a futility concern for this arm of the trial in that there does not appear to be substantial separation between the two high and low saturation treatment groups, and the babies are not being kept in the target range the appropriate amount of time in order to meaningfully test the oxygen saturation intervention as originally designed.

Based on these two issues, the consensus of the Committee was to recommend stopping the oxygen saturation arms of the SUPPORT trial due to safety and futility concerns.

Dr Alexander, Director NICHD, reviewed the recommendation and discussed the specifics with Dr. Rose Higgins, Program Scientist for the Neonatal Research Network, and after thorough consideration of all of the issues, agreed with the recommendation and requested that enrollment be temporarily suspended into the trial until one can assure that the oxygen saturations are in the planned target range. Sites were notified on November 23, 2005 that enrollment should be temporarily suspended until further notice.

**From:** [Neil Finer](#)  
**To:** [Roger Faix](#); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Bradley Yoder](#); [Karen Osborne RN](#); [Jennifer Joan Jensen](#); [Kristien Lewis](#)  
**Subject:** RE: Query  
**Date:** Friday, February 09, 2007 10:28:23 AM

---

Hi Roger

I agree that the manual is not clear here – I would code for the primary reason for intubation #2 – ie resuscitation. Since the infant is now intubated, the time of surfactant administration will be indicated on SUPP03, question #7, unless the surf is given later in which case it would be indicated on question B3 of form SUPP 04. I know that you have arbitrarily determined a time for resuscitation as your infants are immediately brought to the NICU.

Hope this helps.

Keep up the great work!!!!

Neil

---

**From:** Roger Faix [<mailto:Roger.Faix@hsc.utah.edu>]  
**Sent:** Thursday, February 08, 2007 1:05 PM  
**To:** Neil Finer  
**Cc:** Bradley Yoder; Karen Osborne RN; Jennifer Joan Jensen; Kristien Lewis  
**Subject:** Query

Hi Neil! We have a question re: the SUPPORT study.

On form SUPP03 re: delivery room information, question 6 asks the indication for intubation. Four options are offered: 1) surfactant administration, 2) resuscitation, 3) other (specify), and 4) as required by randomization assignment. We have had a few kids who were randomized to the intubation/surf arm, but required chest compressions (and epi- in one case) and would have been intubated for resuscitation purposes no matter what their randomization assignment had been.

Should the indication for intubation in these kids be listed as 2) resuscitation, or 4) as required by randomization assignment? Upon our review of the manual of operations, this is not entirely clear, and consultation with other centers yielded conflicting answers (?!?!?). As the PI, what is your answer as to how we should assign the indication for intubation in these circumstances?

Thanks for your time and your thoughts.

Roger

**From:** [Walsh, Michele](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: SUPPORT Visit to New Mexico  
**Date:** Wednesday, February 07, 2007 1:16:48 PM

---

I have offered repeatedly but have not been invited.  
They are insistent that they want to enroll a baby first.  
I think enrollment is the biggest issue we can help them with. m

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, February 07, 2007 12:13 PM  
**To:** [mcw3@case.edu](mailto:mcw3@case.edu)  
**Subject:** SUPPORT Visit to New Mexico

Michele –  
Do you have plans for the SUPPORT visit to New Mexico?  
Thanks  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

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**From:** [Spong, Catherine \(NIH/NICHD\) \[E\]](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Re: SUPPORT  
**Date:** Tuesday, February 06, 2007 1:35:14 PM

---

Great

Work on getting ucsc and the other sites more focused before adding more

Have calls with the poorly recruiting sites

Put pressure on at the scms

Xoxoox

C

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Higgins, Rosemary (NIH/NICHD) [E]

**To:** Spong, Catherine (NIH/NICHD) [E]

**Sent:** Tue Feb 06 12:19:07 2007

**Subject:** SUPPORT

Cathy

The DSMC met and SUPPORT recruitment can continue.

The DSMC is concerned about slow recruitment. UCSD has been added; should we consider adding another site (Miami) – Dorothy Gail and I had briefly discussed this. We can discuss once you are back.

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

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301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Walid Salhab](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#); [Neil Finer](#); [Nancy Miller](#)  
**Cc:** [Abhik Das](#); [Wade Rich](#); [Gaynelle Hensley](#); [Pablo Sanchez](#)  
**Subject:** RE: SUPPORT question  
**Date:** Tuesday, February 06, 2007 9:26:53 AM

---

That is helpful, Thank you.  
Walid

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)> 02/06/07 7:59 AM >>>

Hi,

I wanted to check what we had in the protocol. "Known congenital anomaly" is an initial exclusion criteria. The protocol and the manual do not address "congenital anomaly following enrollment." Since the child is already randomized, I agree with Neil that he/she should stay in the oximeter arm. If the surgeons/neonatologists do not want CPAP used following repair of TEF (or even gastrostomy placement) due to the worry of blowing air into a wound or into the gut, simply document this. In addition, he/she may not necessarily follow the extubation criteria as care providers want to optimize extubation in a different management style for a child with TEF (they want to make sure the child is absolutely ready as reintubation should be avoided given the surgery to the airway).

Hope this helps!  
Rose

-----Original Message-----

From: Neil Finer [<mailto:nfiner@ucsd.edu>]  
Sent: Monday, February 05, 2007 9:48 PM  
To: Nancy Miller; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Gaynelle Hensley; Pablo Sanchez; Walid Salhab; Wade Rich  
Subject: RE: SUPPORT question

Hello Nancy

While I would probably prefer that this child be excluded for a congenital malformation, I think that he should stay in the study. If the CPAP is contraindicated because of the TEF, note this. However, I doubt that he will be ready for extubation by day 14 and this would leave him in the oximeter arm. The inclusion criteria state :Infants without known major congenital malformations. As this was not known, I would continue.

Neil

-----Original Message-----

From: Nancy Miller [<mailto:Nancy.Miller@UTSouthwestern.edu>]  
Sent: Monday, February 05, 2007 2:21 PM  
To: Rosemary (NIH/NICHD) [E] Higgins; Neil Finer  
Cc: Gaynelle Hensley; Pablo Sanchez; Walid Salhab  
Subject: Re: SUPPORT question

Rose and Neil,

We have a SUPPORT baby born (b) (6) who was just diagnosed with (b) (6). Should he stay in the study? He was randomized to the CPAP arm but was intubated in the DR. Surgery is tomorrow.

Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206-(b) (6)

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SUPPORT OUTCOMES  
**Date:** Monday, February 04, 2008 2:36:28 PM

---

Rose,

(b) (6) is completed and will be sent with the next transmission.

(b) (6) is waiting on an ophthalmology visit. This baby has been hospitalized several times and has missed appointments.

As far as follow up...if it's not transmitted with this next transmission I won't be able to answer the question. Our follow-up coordinator (b) (6) and we don't have anyone to really take her place. She was hoping she got everything done (b) (6). I'll keep you updated if it's going to be longer than that.

Thanks,

Nancy

Nancy A. Miller, R.N.  
Clinical Research Coordinator  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-404B  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206-(b) (6)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 2/4/2008 12:25 PM >>>

Hi,

We are missing a few SUPPORT outcomes. Please let us know how you are doing.

Thanks for all the effort!!

Rose

CENTER

NETWORK

ROP\_message

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

CENTER

NETWORK

FU\_message

4

(b) (6)

FU window has closed but NF05 and NF09a have not been completed

4

(b) (6)

FU window has closed but NF05 and NF09a have not been completed

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Duara, Shahnaz  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Phelps, Dale; Gantz, Marie; Everett-Thomas, Ruth; Holston, Laverne; Bauer, Charles R  
**Subject:** RE: SUPPORT OUTCOMES  
**Date:** Monday, February 04, 2008 2:29:20 PM

---

Rose,

I believe that the final ROP status on these babies was limited to finding a way to record the fact that they were never seen in ROP clinic at any time – we were unable to find any documentation of a follow up appointment when charts were reviewed at the time of developmental follow up. Dale, Ruth and I communicated over this issue late Nov and I thought the matter was closed. Has something new come up?

The follow up queries are new – we will move on those right away.

Thanks  
Shahnaz

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Monday, February 04, 2008 1:28 PM  
**To:** Duara, Shahnaz; Everett-Thomas, Ruth; Bauer, Charles R  
**Cc:** adas@rti.org; Gantz, Marie  
**Subject:** SUPPORT OUTCOMES

Hi,  
We are missing a few SUPPORT outcomes. Please let us know how you are doing.

Thanks for all the effort!!

Rose

CENTER	NETWORK	ROP_message
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
8	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
CENTER	NETWORK	FU_message
8	(b) (6)	FU window has closed but NF05 and NF09a have not been completed
8	(b) (6)	FU window has closed but NF05 and NF09a have not been completed
8	(b) (6)	FU window has closed but NF05 and NF09a have not been completed

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; bpoindex@iupui.edu  
**Cc:** Wade Rich  
**Subject:** RE: SUPPORT twins - transfer question  
**Date:** Friday, February 02, 2007 4:53:40 PM

---

Hi Brenda

I would indicate that these infants are transferred, and we will use the oximeter download data to that date. Transfer is not a protocol violation, and so if you can get additional outcomes and even a physiologic challenge that will be great, if not, hopefully we can determine if there were in Oxygen at 36 weeks.

It would be great to get the protocol approved there even if it takes some time.

Thanks for all your efforts.

Neil

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Friday, February 02, 2007 1:41 PM  
**To:** Neil Finer  
**Subject:** FW: SUPPORT twins - transfer question

Neil

I spoke to Brenda - there has been no SUPPORT in-servicing at this referral hospital. The children will come off the oximeters (at about (b) (6) age) and they will obtain clinical data, but we won't have the oximeter data.

Rose

-----Original Message-----

**From:** Brenda Poindexter [mailto:bpoindex@iupui.edu]  
**Sent:** Friday, February 02, 2007 4:18 PM  
**To:** Neil Finer; Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Wilson, Leslie Dawn  
**Subject:** SUPPORT twins - transfer question

Neil,

We have a set of twins who were enrolled in SUPPORT about (b) (6) ago

-

both are on CPAP and full feeds and doing well. Due to some circumstances beyond my control, arrangements were made for them to be transferred to one

of our suburban NICUs - our group covers this hospital, but this NICU is not

part of the Network nor do I have approval to do any studies there. So, obviously the babies will have to come off of the study oximeters prematurely (they won't be 36 weeks until (b) (6)). I can still

get outcome data since it is our group (I even work at this hospital) - so

how do I handle this? They are not withdrawing from the study per se.

As

you can imagine, I was not at all happy about this - and would never have



even suggested to this family that moving to the other unit was an option - but my colleagues didn't consider the implications for the study and were thinking that it would be good for the family (closer to home, private rooms, etc.). Thoughts on how to handle this, what to call this, etc.?  
Thanks so much,  
Brenda

**From:** Neil Finer  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT  
**Date:** Tuesday, January 30, 2007 12:00:35 PM

---

Hi Rose

I have spoken to Ed yesterday and today and Wade and I had a mini conference call with Ed and his Unit Director. We discussed the use of Sat Share, and lowering the alarm limits. I think that this will get worked out. I also discussed using the OWL approach, and Ed says that they are already doing this.

(b) (6)

Neil

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, January 30, 2007 6:24 AM  
**To:** Bell, Edward  
**Cc:** Neil Finer  
**Subject:** RE: SUPPORT

Ed

Thanks for letting me know. I would guess that you have tried the satshare cables. The UCSD site has the most experience with these oximeters and their use.

Is this one particular infant or many infants with the alarm issues? The type of infant with multiple alarms that many sites have encountered are those that tend to be "unstable" from an oxygen requirement standpoint. They desaturate, get their inspired oxygen turned up, then overshoot on the saturation target. This continues over days and leads to a lot of frustration on the part of the bedside providers. Is this the issue that you have encountered?

Thanks  
Rose

---

**From:** Bell, Edward [mailto:edward-bell@uiowa.edu]  
**Sent:** Monday, January 29, 2007 10:48 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Finer, Neil  
**Subject:** SUPPORT

Rose,

We're having some problems with acceptance of SUPPORT by our NICU staff nurses. When we moved to our new NICU with single rooms 2 years ago, we went to central monitoring as a back up for the bedside monitors. We use Nellcor oximeters linked to our HP monitors, which feed into the central monitoring system. At first, there were so many oximeter alarms, that we programmed our Nellcors to alarm only for sat-seconds [% sat hi or low X seconds] above 25. The Masimos alarm so much it is driving the nurses crazy, and they worry that they will miss real alarms. We obviously underestimated the impact of the Masimo oximeters on the bedside nurses. Our lack of familiarity with the Masimo hasn't helped. I've been talking with Neil and Marybeth Sayre from Masimo. We're working on some possible solutions. I just wanted you to be aware.

Ed

**From:** Das, Abhik  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT ROP  
**Date:** Monday, January 29, 2007 2:51:48 PM

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Thanks. We are going to send the report out to the DSMC later today; so I don't think this will get into the analysis this time around.

Abhik

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Monday, January 29, 2007 2:48 PM  
To: Yao, Qing; Das, Abhik  
Subject: Fw: SUPPORT ROP

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Nancy Miller <Nancy.Miller@UTSouthwestern.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Mon Jan 29 14:39:48 2007  
Subject: RE: SUPPORT ROP

Rose,  
I still don't have anything on (b) (6) but I have two more kids that are fully vascularized (b) (6) (on 1/10/07) and (b) (6) (on 1/16/07).  
Nancy

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 1/9/2007

>>> 12:49 PM >>>  
The meeting is 2/6/07  
Thanks  
Rose

-----Original Message-----

From: Nancy Miller [mailto:Nancy.Miller@UTSouthwestern.edu]  
Sent: Tuesday, January 09, 2007 1:25 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: Re: SUPPORT ROP

Rose,  
(b) (6) had an ophthalmology appt. on 10/24/06 which was missed. The next appt. is scheduled for 1/19/07. All of the data is keyed in so far. Is the DSMC meeting before or after the 19th?  
Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine

UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206 (b) (6)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
1/9/2007 10:02 AM >>>  
CENTER

NETWORK

MISSING ROP MESSAGE

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

We are missing the above ROP outcome for SUPPORT - let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Neil Finer](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Wade Rich](#)  
**Date:** Wednesday, January 24, 2007 4:50:53 PM

---

Hi Rose,

Since we are not on the NRN/RTI computer system due to old equipment, I wanted to update you on our status. We have approached 7 mothers for SUPPORT, consented 3 and enrolled 3 as of today, since January 11th.

We were also wondering when we might expect to see the funding for the trial.

Be well  
Neil

**From:** Neil Finer  
**To:** Bell, Edward  
**Cc:** Wade Rich; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT oximeter issues  
**Date:** Tuesday, January 23, 2007 5:29:35 PM

---

It was never the intent to have dual alarms for infants in SUPPORT. I would recommend that you use the bedside monitor as the monitor which alarms with the appropriate delays etc. The Masimo will collect the data needed for SUPPORT and by connecting it to the bedside HP you will still keep the infant in the target range. I can understand that the nurses are quite flustered by the dual alarms. We would be as well. I would turn off the Masimo alarms. Our own Masimos are actually placed behind the infant and we do not even use the Masimo screen except to look at the trend plots every 12 hours. Hope this helps  
Neil

-----Original Message-----

From: Bell, Edward [mailto:edward-bell@uiowa.edu]  
Sent: Tuesday, January 23, 2007 2:23 PM  
To: Neil Finer  
Subject: RE: SUPPORT oximeter issues

I think the answer is yes. What do you mean by the bedside oximeter alarms? Do you mean the alarm from the HP monitor to which the oximeter is attached? We have redundant alarms. The oximeter alarms at the bedside, and the HP alarms in the patient room and centrally.  
Ed

-----Original Message-----

From: Neil Finer [mailto:nfiner@UCSD.Edu]  
Sent: Tuesday, January 23, 2007 3:51 PM  
To: Bell, Edward  
Subject: RE: SUPPORT oximeter issues

Hi Ed  
If you disable the Masimo alarms you will still have the bedside Oximeter alarms. Is your normal practice to have the oximeter and the bedside both alarm for SpO2 deviations?  
Neil

-----Original Message-----

From: Bell, Edward [mailto:edward-bell@uiowa.edu]  
Sent: Tuesday, January 23, 2007 12:44 PM  
To: Neil Finer  
Cc: Wade Rich; Higgins, Rosemary (NIH/NICHD) [E]; Johnson, Karen; Klein, Jonathan  
Subject: RE: SUPPORT oximeter issues

Neil,  
We are using Sat Share cables, but we are reluctant to disable the bedside alarms, as that would be a departure from our standard of care for the NICU. I guess we'll just manage the best we can.  
Ed

-----Original Message-----

From: Neil Finer [mailto:nfiner@ucsd.edu]  
Sent: Tuesday, January 23, 2007 2:33 PM  
To: Bell, Edward  
Cc: Wade Rich; Higgins, Rosemary (NIH/NICHD) [E]  
Subject: RE: SUPPORT oximeter issues

Hi Ed

We believe that the use of Sat Share cables would alleviate this situation as you can set the alarm parameters on your bedside monitor and disable the Masimo alarms and displays. We use Phillips Monitors, and this works. We do not have a central station, and I would guess that if you Sat Share your Masimo to the bedside, and then set the bedside with the appropriate alarms and delays, that your central station would reflect these changes.

Would you like to talk with Wade? His number is 619 543 3759

He has a lot of experience with these issues.

Hope this is helpful

Neil

-----Original Message-----

From: Bell, Edward [mailto:edward-bell@uiowa.edu]  
Sent: Monday, January 22, 2007 1:15 PM  
To: Neil Finer  
Cc: Abbot Laptook (E-mail); Rosemary Higgins (E-mail); Johnson, Karen; Klein, Jonathan  
Subject: SUPPORT oximeter issues

Neil,

We have been dealing with some unhappiness among our NICU staff nurses with the use of the study oximeters. Here are the key concerns and some thoughts we have about the source of the concerns. I would appreciate your thoughts and any suggestions.

Concerns:

1. The study oximeters alarm much more often than our standard Nellcor oximeters.
2. Silencing the study oximeters does not silence the oximeter alarms on our H-P central monitoring system, so the alarm stops at the bedside but continues throughout the NICU. All our oximeters are attached to the unit's central alarm system through the bedside H-P monitors.
3. The nurses report abnormal saturations that they do not believe, e.g. very low sat but baby looks fine; this is a big concern because, on one occasion, the nurse and fellow decided to put on a Nellcor oximeter to see "what was really going on."

Thoughts:

1. Our Nellcors are set to employ a 25-sat-second alarm delay. This has greatly reduced nuisance alarms in our NICU. Is there a way to do anything like this with the Massimos and still be in compliance with the study protocol? Also, our NICU protocol for setting oximeter alarm limits results in a wider range than what is used in SUPPORT (see attached protocol). Nuisance alarms are a big issue here because our patients are in single rooms and the nurses have to clean their hands and put on gloves to silence an alarm.
2. Our Nellcors are attached to our H-P monitors using Vuelink so that



silencing an alarm at the bedside also silences the corresponding alarm on the central system. Our Bioengineering guys tell us the Massimo doesn't work this way. When you silence it at the bedside, it continues to talk to the H-P system. The only way we have found to solve this is to have the nurse silence both the Massimo oximeter and the H-P monitor (more work = more resentment).

We would appreciate any thoughts or suggestions.  
Ed

<<Iowa Preterm Oximeter Protocol.doc>>

**From:** Wade Rich  
**To:** msayre@masimo.com  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** SUPPORT oximeter issues  
**Date:** Tuesday, January 23, 2007 3:58:04 PM

---

Maribeth,

Can you contact Dr. Bell or Karen Johnson at Iowa and help them understand how best to integrate the Masimo into their system?

Thanks,  
wade

-----Original Message-----

**From:** Bell, Edward [mailto:edward-bell@uiowa.edu]  
**Sent:** Tuesday, January 23, 2007 12:44 PM  
**To:** Neil Finer  
**Cc:** Wade Rich; Higgins, Rosemary (NIH/NICHD) [E]; Johnson, Karen; Klein, Jonathan  
**Subject:** RE: SUPPORT oximeter issues

Neil,

We are using Sat Share cables, but we are reluctant to disable the bedside alarms, as that would be a departure from our standard of care for the NICU. I guess we'll just manage the best we can.  
Ed

-----Original Message-----

**From:** Neil Finer [mailto:nfiner@ucsd.edu]  
**Sent:** Tuesday, January 23, 2007 2:33 PM  
**To:** Bell, Edward  
**Cc:** Wade Rich; Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT oximeter issues

Hi Ed

We believe that the use of Sat Share cables would alleviate this situation as you can set the alarm parameters on your bedside monitor and disable the Masimo alarms and displays. We use Phillips Monitors, and this works. We do not have a central station, and I would guess that if you Sat Share your Masimo to the bedside, and then set the bedside with the appropriate alarms and delays, that your central station would reflect these changes.

Would you like to talk with Wade? His number is 619 543 3759 He has a lot of experience with these issues.

Hope this is helpful  
Neil

-----Original Message-----

**From:** Bell, Edward [mailto:edward-bell@uiowa.edu]  
**Sent:** Monday, January 22, 2007 1:15 PM  
**To:** Neil Finer  
**Cc:** Abbot Laptook (E-mail); Rosemary Higgins (E-mail); Johnson, Karen; Klein, Jonathan  
**Subject:** SUPPORT oximeter issues

Neil,

We have been dealing with some unhappiness among our NICU staff nurses with the use of the study oximeters. Here are the key concerns and some thoughts we have about the source of the concerns. I would appreciate your thoughts and any suggestions.

Concerns:

1. The study oximeters alarm much more often than our standard Nellcor oximeters.
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3. The nurses report abnormal saturations that they do not believe, e.g. very low sat but baby looks fine; this is a big concern because, on one occasion, the nurse and fellow decided to put on a Nellcor oximeter to see "what was really going on."

Thoughts:

1. Our Nellcors are set to employ a 25-sat-second alarm delay. This has greatly reduced nuisance alarms in our NICU. Is there a way to do anything like this with the Massimos and still be in compliance with the study protocol? Also, our NICU protocol for setting oximeter alarm limits results in a wider range than what is used in SUPPORT (see attached protocol). Nuisance alarms are a big issue here because our patients are in single rooms and the nurses have to clean their hands and put on gloves to silence an alarm.
2. Our Nellcors are attached to our H-P monitors using Vuelink so that silencing an alarm at the bedside also silences the corresponding alarm on the central system. Our Bioengineering guys tell us the Masimo doesn't work this way. When you silence it at the bedside, it continues to talk to the H-P system. The only way we have found to solve this is to have the nurse silence both the Massimo oximeter and the H-P monitor (more work = more resentment).

We would appreciate any thoughts or suggestions.

Ed

<<Iowa Preterm Oximeter Protocol.doc>>

From: Auman, Jeanette O.  
To: Phelps, Dale; Angelita Hensman; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Gantz, Marie; Das, Abhik; Abbot Laptook; Zaterka-Baxter, Kristin  
Subject: RE: SUPPORT ROP OUTCOMES  
Date: Thursday, January 18, 2007 3:50:00 PM

Ok, I'll hard code it in the program to excuse this case. Thanks!

From: Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
Sent: Thursday, January 18, 2007 3:48 PM  
To: Angelita Hensman; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Gantz, Marie; Das, Abhik; Abbot Laptook; Auman, Jeanette O.; Zaterka-Baxter, Kristin  
Subject: RE: SUPPORT ROP OUTCOMES

This particular case for (b) (6) should be "excused." Number (b) (6).  
There will be no further 'acute ROP' data.

The analysis decision about how the outcome is used (based on my previous e-mail about this case) will have to be made at the time of doing data analysis.

Dale Phelps, MD

From: Angelita Hensman [mailto:AHensman@WIHRI.org]  
Sent: Thursday, January 18, 2007 11:00 AM  
To: Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Marie Gantz; Das, Abhik; Abbot Laptook; Auman, Jeanette O.; Zaterka-Baxter, Kristin  
Subject: RE: SUPPORT ROP OUTCOMES

I followed up with the ophthalmologist (b) (6) this morning on (b) (6). He said the baby was too big for a retinal exam unless he did it under anesthesia which he does not plan to do. If he had to choose one he would pick a "favorable" outcome vs "unfavorable" but he could not definitely say it was favorable. Since the baby is (b) (6) months old it has not been possible to see up to the ora serrata in all clock hours. There are no follow up exams planned other than a possible "routine" exam in a year from now (last 2 visits were on 09/25/06 and 01/04/07 with the same results-).

Question: Do we need to have this case excused? How should we code it so that no further exams are expected in the DMS.

Thanks  
Angelita

From: Angelita Hensman  
Sent: Wednesday, January 17, 2007 2:56 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Abbot Laptook  
Cc: Marie Gantz; Das, Abhik; Abbot Laptook; Phelps, Dale  
Subject: RE: SUPPORT ROP OUTCOMES

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, January 09, 2007 11:21 AM  
To: Angelita Hensman; Abbot Laptook  
Cc: Marie Gantz; Das, Abhik  
Subject: SUPPORT ROP OUTCOMES

CENTER NETWORK MISSING ROP MESSAGE

14	(b) (6)	Rescheduled 01/12/07 appointment to 01/25/07. 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	Next appointment on 02/15/07. 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
14	(b) (6)	Last appointment on 01/04/07. Baby "too big to do a depressed retinal exam. Macula flat and attached". No Follow up scheduled. 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye. Will need to clarify how we should code this.
14	(b) (6)	Last exam on 01/12/07, waiting for results to be faxed from office. No F/U scheduled. 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT – let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

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**From:** [Monica Konstantino](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** (no subject)  
**Date:** Thursday, January 18, 2007 12:30:37 PM  
**Attachments:** [For the SUPPORT GROWTH SECONDARY Study.doc](#)

---

For the SUPPORT GROWTH SECONDARY Study, there was significant discussion at the Steering Committee regarding the specific days for measurements. Please send me a vote by **January 22** on whether you think the measurements should be on the day with either of the following parameter choices:

  X   +/- 1 day preferred but would compromise with +/- 3 days at Yale

       +/- 4 days

**ONLY 1 VOTE PER SITE**

**From:** [Tyson, Jon E](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** FW: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Thursday, January 18, 2007 11:55:35 AM

---

Jon E. Tyson, MD, MPH  
Center for Clinical Research & Evidence-Based Medicine  
UT Medical School at Houston  
6431 Fannin St., MSB 2.106  
Houston, TX 77030  
voice 713-500-5651  
fax 713-500-0519

---

**From:** Morris, Brenda H  
**Sent:** Wednesday, January 17, 2007 7:24 PM  
**To:** Tyson, Jon E  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]; Mcdavid, Georgia E  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY

We would vote for +/- 4 days. Brenda and Georgia

---

**From:** Tyson, Jon E  
**Sent:** Wed 1/17/2007 6:47 PM  
**To:** Morris, Brenda H  
**Cc:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** FW: SUPPORT GROWTH SECONDARY STUDY

Brenda, since you are directing in our site, please vote for us.

Jon E. Tyson, MD, MPH  
Center for Clinical Research & Evidence-Based Medicine  
UT Medical School at Houston  
6431 Fannin St., MSB 2.106  
Houston, TX 77030  
voice 713-500-5651  
fax 713-500-0519

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, January 17, 2007 12:42 PM  
**To:** [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [5-06595](mailto:Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; papile@unm.edu; Poole Kenneth (E-mail); Roger Faix; Ronald GOLdberg; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson, Jon E; walid.salhab@utsouthwestern.edu; Karen.Osborne@hsc.utah.edu; Angelita Hensman; afurey@tufts-nemc.org; Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; Diane Wilson; Ellen Hale; Mcdavid, Georgia E; karen-johnson@uiowa.edu; Kathy Auten; Leslie Wilson; Monica Collins; monica.konstantino@yale.edu; Nancy Miller; Nancy Newman; susan.tepper@hsc.utah.edu</a><br/><b>Cc:</b> Zaterka-Baxter, Kristin; Huiterna, Carolyn Petrie; Duara, Shahnaz; CNavarrete@med.miami.edu; Neil</p></div><div data-bbox=)

Finer

**Subject:** SUPPORT GROWTH SECONDARY STUDY

Hi,

For the SUPPORT GROWTH SECONDARY Study, there was significant discussion at the Steering Committee regarding the specific days for measurements. Please send me a vote by **January 22** on whether you think the measurements should be on the day with either of the following parameter choices:

\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 4 days

**ONLY 1 VOTE PER SITE**

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

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301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)



**From:** [nancy.s.newman](mailto:nancy.s.newman)  
**To:** [Higgins, Rosemary \(NIH/NICHD\)](mailto:Higgins.Rosemary@NIH/NICHD) [E]  
**Cc:** "[Walsh, Michele](mailto:Walsh.Michele)"  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Thursday, January 18, 2007 9:01:44 AM

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CASE WESTERN- no change +/-4d.....NN

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, January 17, 2007 4:06 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); Abhik Das; [ambal@uab.edu](mailto:ambal@uab.edu); [aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu); [Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu); Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu); Michelle Walsh; MIckey Caplan; Oh William (E-mail); Pablo Sanchez; [papile@unm.edu](mailto:papile@unm.edu); Poole Kenneth (E-mail); Roger Faix; Ronald GOLDBERG; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail); [walid.salhab@utsouthwestern.edu](mailto:walid.salhab@utsouthwestern.edu); [Karen.Osborne@hsc.utah.edu](mailto:Karen.Osborne@hsc.utah.edu); Angelita Hensman; [afurey@tufts-nemc.org](mailto:afurey@tufts-nemc.org); Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; Diane Wilson; Ellen Hale; Georgia McDavid; [karen-johnson@uiowa.edu](mailto:karen-johnson@uiowa.edu); Kathy Auten; Leslie Wilson; Monica Collins; [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); Nancy Miller; Nancy Newman; [susan.tepper@hsc.utah.edu](mailto:susan.tepper@hsc.utah.edu)  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; Duara, Shahnaz; [CNavarrete@med.miami.edu](mailto:CNavarrete@med.miami.edu); Neil Finer  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY

I have had a couple of requests to include +/- 3 days, so here is a new ballot:

- \_\_\_\_\_ +/- 1 day
- \_\_\_\_\_ +/- 3 days
- \_\_\_\_\_ +/- 4 days

For those that voted, you may cast another vote if you prefer the new choice.

Thanks  
Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Wednesday, January 17, 2007 1:42 PM  
**To:** Abbot Laptook ([alaptook@WIHRI.org](mailto:alaptook@WIHRI.org)); 'Abhik Das'; Ambal ([ambal@uab.edu](mailto:ambal@uab.edu)); Av Fanaroff ([aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu)); Brad Yoder ([Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu)); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [[kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org)]); Michael Cotten ([cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu)); 'Michelle Walsh'; 'MIckey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; [papile@unm.edu](mailto:papile@unm.edu); 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald GOLDBERG'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'; [Walid Salhab \(walid.salhab@utsouthwestern.edu\)](mailto:Walid.Salhab@utsouthwestern.edu); ([Karen.Osborne@hsc.utah.edu](mailto:Karen.Osborne@hsc.utah.edu)); Angelita Hensman; Anne Furey ([afurey@tufts-nemc.org](mailto:afurey@tufts-nemc.org)); Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; 'Diane Wilson'; Ellen Hale; Georgia McDavid; Karen Johnson ([karen-johnson@uiowa.edu](mailto:karen-johnson@uiowa.edu)); Kathy Auten; 'Leslie Wilson'; Monica Collins; [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); Nancy Miller; Nancy Newman; [susan.tepper@hsc.utah.edu](mailto:susan.tepper@hsc.utah.edu)  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; 'Duara, Shahnaz'; [CNavarrete@med.miami.edu](mailto:CNavarrete@med.miami.edu); 'Neil Finer'  
**Subject:** SUPPORT GROWTH SECONDARY STUDY

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For the SUPPORT GROWTH SECONDARY Study, there was significant discussion at the Steering Committee regarding the specific days for measurements. Please send me a vote by **January 22** on whether you think the measurements should be on the day with either of the following parameter choices:

\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 4 days

### **ONLY 1 VOTE PER SITE**

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Wally Carlo, M.D.](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 9:41:26 PM

---

+/- 4 days would give the most flexibility.

wally

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, January 17, 2007 3:06 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [Abhik Das](mailto:Abhik Das); [ambal@uab.edu](mailto:ambal@uab.edu); [aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu); [Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu); [Brenda Poindexter](#); [Wally Carlo, M.D.](#); [Ed Bell](#); [Ed Donovan](#); [Ehrenkranz Richard \(E-mail\)](#); [Ivan Frantz](#); [Kennedy, Kathleen A](#); [Krisa VanMeurs \(VanMeurs, Krisa\)](#); [Kristi Watterberg](#); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu); [Michelle Walsh](#); [MIckey Caplan](#); [Oh William \(E-mail\)](#); [Pablo Sanchez](#); [papile@unm.edu](mailto:papile@unm.edu); [Poole Kenneth \(E-mail\)](#); [Roger Faix](#); [Ronald GOLdberg](#); [Seetha Shankaran](#); [Stevenson David \(E-mail\)](#); [Stoll Barbara \(E-mail\)](#); [Tyson Jon \(E-mail\)](#); [walid.salhab@utsouthwestern.edu](mailto:walid.salhab@utsouthwestern.edu); [Karen.Osborne@hsc.utah.edu](mailto:Karen.Osborne@hsc.utah.edu); [Angelita Hensman](#); [afurey@tufts-nemc.org](mailto:afurey@tufts-nemc.org); [Becky bara](#); [Bethany Ball](#); [Cathy Grisby](#); [Conra Backstrom](#); [Diane Wilson](#); [Ellen Hale](#); [Georgia McDavid](#); [karen-johnson@uiowa.edu](mailto:karen-johnson@uiowa.edu); [Kathy Auten](#); [Leslie Wilson](#); [Monica Collins](#); [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); [Nancy Miller](#); [Nancy Newman](#); [susan.tepper@hsc.utah.edu](mailto:susan.tepper@hsc.utah.edu)  
**Cc:** [Zaterka-Baxter, Kristin](#); [Huitema, Carolyn Petrie](#); [Duara, Shahnaz](#); [CNavarrete@med.miami.edu](mailto:CNavarrete@med.miami.edu); [Neil Finer](#)  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY

I have had a couple of requests to include +/- 3 days, so here is a new ballot:

\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 3 days

\_\_\_\_\_ +/- 4 days

For those that voted, you may cast another vote if you prefer the new choice.

Thanks  
Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Wednesday, January 17, 2007 1:42 PM  
**To:** [Abbot Laptook \(alaptook@WIHRI.org\)](mailto:Abbot Laptook); ['Abhik Das'](#); [Ambal \(ambal@uab.edu\)](mailto:Ambal (ambal@uab.edu)); [Av Fanaroff \(aaf2@po.cwru.edu\)](#); [Brad Yoder \(Bradley.yoder@hsc.utah.edu\)](mailto:Brad Yoder (Bradley.yoder@hsc.utah.edu)); ['Brenda Poindexter'](#); ['Carlo Waldemar \(E-mail\)'](#); ['Ed Bell'](#); ['Ed Donovan'](#); ['Ehrenkranz Richard \(E-mail\)'](#); ['Ivan Frantz'](#); [Kennedy, Kathleen A](#); [Krisa VanMeurs \(VanMeurs, Krisa\)](#); ['Kristi Watterberg'](#); [Kurt Schibler \(Kurt Schibler \[kurt.schibler@cchmc.org\]\)](#); [Michael Cotten \(cotte010@mc.duke.edu\)](mailto:Michael Cotten (cotte010@mc.duke.edu)); ['Michelle Walsh'](#); ['MIckey Caplan'](#); ['Oh William \(E-mail\)'](#); ['Pablo Sanchez'](#); [papile@unm.edu](mailto:papile@unm.edu); ['Poole Kenneth \(E-mail\)'](#); ['Roger Faix'](#); ['Ronald GOLdberg'](#); ['Seetha Shankaran'](#); ['Stevenson David \(E-mail\)'](#); ['Stoll Barbara \(E-mail\)'](#); ['Tyson Jon \(E-mail\)'](#); [Walid Salhab \(walid.salhab@utsouthwestern.edu\)](mailto:Walid Salhab (walid.salhab@utsouthwestern.edu)); [\(Karen.Osborne@hsc.utah.edu\)](mailto:(Karen.Osborne@hsc.utah.edu)); [Angelita Hensman](#); [Anne Furey \(afurey@tufts-nemc.org\)](mailto:Anne Furey (afurey@tufts-nemc.org)); [Becky bara](#); [Bethany Ball](#); [Cathy Grisby](#); [Conra Backstrom](#); ['Diane Wilson'](#); [Ellen Hale](#); [Georgia McDavid](#); [Karen Johnson \(karen-johnson@uiowa.edu\)](mailto:Karen Johnson (karen-johnson@uiowa.edu)); [Kathy Auten](#); ['Leslie Wilson'](#); [Monica Collins](#); [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); [Nancy Miller](#); [Nancy Newman](#); [susan.tepper@hsc.utah.edu](mailto:susan.tepper@hsc.utah.edu)  
**Cc:** [Zaterka-Baxter, Kristin](#); [Huitema, Carolyn Petrie](#); ['Duara, Shahnaz'](#); [CNavarrete@med.miami.edu](mailto:CNavarrete@med.miami.edu); ['Neil Finer'](#)  
**Subject:** SUPPORT GROWTH SECONDARY STUDY

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\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 4 days

## **ONLY 1 VOTE PER SITE**

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

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NICHD, NIH

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Mcdavid, Georgia E  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 7:12:27 PM

---

UT Houston votes for +/- 4 days  
thanks

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, January 17, 2007 3:06 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; MIckey Caplan; Oh William (E-mail); Pablo Sanchez; papile@unm.edu; Poole Kenneth (E-mail); Roger Faix; Ronald GOLdberg; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson, Jon E; walid.salhab@utsouthwestern.edu; Karen.Osborne@hsc.utah.edu; Angelita Hensman; afurey@tufts-nemc.org; Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; Diane Wilson; Ellen Hale; Mcdavid, Georgia E; karen-johnson@uiowa.edu; Kathy Auten; Leslie Wilson; Monica Collins; monica.konstantino@yale.edu; Nancy Miller; Nancy Newman; susan.tepper@hsc.utah.edu  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; Duara, Shahnaz; CNavarrete@med.miami.edu; Neil Finer  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY

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\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 3 days

\_\_\_X\_\_\_ +/- 4 days

For those that voted, you may cast another vote if you prefer the new choice.

Thanks  
Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Wednesday, January 17, 2007 1:42 PM  
**To:** Abbot Laptook (alaptook@WIHRI.org); 'Abhik Das'; Ambal (ambal@uab.edu); Av Fanaroff (aaf2@po.cwru.edu); Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); Michael Cotten (cotte010@mc.duke.edu); 'Michelle Walsh'; 'MIckey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; papile@unm.edu; 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald GOLdberg'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'; Walid Salhab (walid.salhab@utsouthwestern.edu); (Karen.Osborne@hsc.utah.edu); Angelita Hensman; Anne Furey (afurey@tufts-nemc.org); Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; 'Diane Wilson'; Ellen Hale; Georgia McDavid; Karen Johnson (karen-johnson@uiowa.edu); Kathy Auten; 'Leslie Wilson'; Monica Collins; monica.konstantino@yale.edu; Nancy Miller; Nancy Newman; susan.tepper@hsc.utah.edu  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; 'Duara, Shahnaz'; CNavarrete@med.miami.edu; 'Neil Finer'  
**Subject:** SUPPORT GROWTH SECONDARY STUDY

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\_\_\_\_\_ +/- 4 days

### **ONLY 1 VOTE PER SITE**

Thanks

Rose

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Pregnancy and Perinatology Branch

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Ronald N Goldberg  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 6:07:00 PM

---

Thanks

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: "Higgins, Rosemary (NIH/NICHD) [E]" [higginsr@mail.nih.gov]  
Sent: 01/17/2007 05:29 PM  
To: Ronald Goldberg  
Subject: Re: SUPPORT GROWTH SECONDARY STUDY

(b) (6)  
Take care  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Ronald N Goldberg <goldb008@mc.duke.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Wed Jan 17 17:27:50 2007  
Subject: Re: SUPPORT GROWTH SECONDARY STUDY

(b) (6)

This is pretty exhausting.  
Ron

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: "Higgins, Rosemary (NIH/NICHD) [E]" [higginsr@mail.nih.gov]  
Sent: 01/17/2007 05:21 PM  
To: Ronald Goldberg  
Subject: Re: SUPPORT GROWTH SECONDARY STUDY

Ron - good to hear from you - I hope things are ok.  
Take care  
Rose

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Ronald N Goldberg <goldb008@mc.duke.edu>  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Wed Jan 17 17:16:13 2007  
Subject: Re: SUPPORT GROWTH SECONDARY STUDY

+/- 4 days for us

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: "Higgins, Rosemary \ (NIH/NICHD) [E]" [higginsr@mail.nih.gov]  
Sent: 01/17/2007 04:05 PM  
To: "Higgins, Rosemary \ (NIH/NICHD) [E]" <higginsr@mail.nih.gov>; <alaptook@WIHRI.org>; "Abhik Das" <adas@rti.org>; <ambal@uab.edu>; <aaf2@po.cwru.edu>; <Bradley.yoder@hsc.utah.edu>; "Brenda Poindexter" <bpoindex@iupui.edu>; "Carlo Waldemar \ (E-mail)" <wcarlo@peds.uab.edu>; "Ed Bell" <Edward-bell@uiowa.edu>; "Ed Donovan" <edward.donovan@cchmc.org>; "Ehrenkranz Richard \ (E-mail)" <richard.ehrenkranz@yale.edu>; "Ivan Frantz" <IFrantz@Tufts-NEMC.org>; "Kennedy, Kathleen A" <Kathleen.A.Kennedy@uth.tmc.edu>; "Krisa VanMeurs \ (VanMeurs, Krisa)" <vanmeurs@leland.stanford.edu>; "Kristi Watterberg" <kwatterberg@salud.unm.edu>; <kurt.schibler@cchmc.org>; Michael Cotten; "Michelle Walsh" <mcw3@po.cwru.edu>; "Mickey Caplan" <mca113@Northwestern.edu>; "Oh William \ (E-mail)" <william\_oh@brown.edu>; "Pablo Sanchez" <Pablo.Sanchez@UTSouthwestern.edu>; <papile@unm.edu>; "Poole Kenneth \ (E-mail)" <poo@rti.org>; "Roger Faix" <Roger.Faix@hsc.utah.edu>; Ronald Goldberg; "Seetha Shankaran" <sshankar@med.wayne.edu>; "Stevenson David \ (E-mail)" <dstevenson@stanford.edu>; "Stoll Barbara \ (E-mail)" <barbara\_stoll@oz.ped.emory.edu>; "Tyson Jon \ (E-mail)" <Jon.E.Tyson@uth.tmc.edu>; <walid.salhab@UTSouthwestern.edu>; <Karen.Osborne@hsc.utah.edu>; "Angelita Hensman" <ahensman@WIHRI.org>; <afurey@Tufts-NEMC.org>; "Becky bara" <ae5357@wayne.edu>; "Bethany Ball" <mbball@leland.stanford.edu>; "Cathy Grisby" <grisbyca@email.uc.edu>; "Conra Backstrom" <CBackstrom@salud.unm.edu>; "Diane Wilson" <dhwilson@iupui.edu>; "Ellen Hale" <ellen\_hale@oz.ped.emory.edu>; "Georgia McDavid" <Georgia.E.McDavid@uth.tmc.edu>; <karen-johnson@uiowa.edu>; Kathy Auten; "Leslie Wilson" <ldw@iupui.edu>; "Monica Collins" <mcollins@peds.uab.edu>; <monica.konstantino@yale.edu>; "Nancy Miller" <Nancy.Miller@UTSouthwestern.edu>; "Nancy Newman" <nxs5@cwru.edu>; <susan.tepper@hsc.utah.edu>  
Cc: "Zaterka-Baxter, Kristin" <kzaterka@rti.org>; "Huitema, Carolyn Petrie" <petrie@rti.org>; "Duara, Shahnaz" <SDuara@med.miami.edu>; <CNavarrete@med.miami.edu>; "Neil Finer" <nfiner@ucsd.edu>  
Subject: RE: SUPPORT GROWTH SECONDARY STUDY

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\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 3 days

\_\_\_\_\_ +/- 4 days



For those that voted, you may cast another vote if you prefer the new choice.

Thanks  
Rose

---

From: Higgins, Rosemary (NIH/NICHD) [E]  
Sent: Wednesday, January 17, 2007 1:42 PM  
To: Abbot Laptook (alaptook@WIHRI.org); 'Abhik Das'; Ambal (ambal@uab.edu); Av Fanaroff (aaf2@po.cwru.edu); Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); Michael Cotten (cotte010@mc.duke.edu); 'Michelle Walsh'; 'Mickey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; papile@unm.edu; 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald Goldberg'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'; Walid Salhab (walid.salhab@utsouthwestern.edu); (Karen.Osborne@hsc.utah.edu); Angelita Hensman; Anne Furey (afurey@tufts-nemc.org); Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; 'Diane Wilson'; Ellen Hale; Georgia McDavid; Karen Johnson (karen-johnson@uiowa.edu); Kathy Auten; 'Leslie Wilson'; Monica Collins; monica.konstantino@yale.edu; Nancy Miller; Nancy Newman; susan.tepper@hsc.utah.edu  
Cc: Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; 'Duara, Shahnaz'; CNavarrete@med.miami.edu; 'Neil Finer'  
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ONLY 1 VOTE PER SITE

Thanks  
Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Krisa Van Meurs](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [mbball@stanford.edu](mailto:mbball@stanford.edu)  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 5:22:03 PM

---

Stanford votes for +/- 4 days.  
Krisa and Beth

I have had a couple of requests to include +/- 3 days, so here is a new ballot:

\_\_\_\_\_ +/- 1 day

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**To:** Abbot Laptok ([alaptok@WIHRI.org](mailto:alaptok@WIHRI.org)); 'Abhik Das'; Ambal ([ambal@uab.edu](mailto:ambal@uab.edu)); Av Fanaroff ([aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu)); Brad Yoder ([Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu)); Brenda Poindexter; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [[kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org)]); Michael Cotten ([cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu)); 'Michelle Walsh'; 'Mickey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; [papile@unm.edu](mailto:papile@unm.edu); 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald GOLdberg'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'; Walid Salhab ([walid.salhab@utsouthwestern.edu](mailto:walid.salhab@utsouthwestern.edu)); (Karen.Osborne@hsc.utah.edu); Angelita Hensman; Anne Furey ([afurey@tufts-nemc.org](mailto:afurey@tufts-nemc.org)); Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; 'Diane Wilson'; Ellen Hale; Georgia McDavid; Karen Johnson ([karen-johnson@uiowa.edu](mailto:karen-johnson@uiowa.edu)); Kathy Auten; 'Leslie Wilson'; Monica Collins; [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); Nancy Miller; Nancy Newman; [susan.tepper@hsc.utah.edu](mailto:susan.tepper@hsc.utah.edu)  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; 'Duara, Shahnaz'; [CNavarrete@med.miami.edu](mailto:CNavarrete@med.miami.edu); 'Neil Finer'  
**Subject:** SUPPORT GROWTH SECONDARY STUDY

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\_\_\_\_\_ +/- 4 days

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Rosemary D. Higgins, M.D.

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[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

--

Professor of Pediatrics

**Division of Neonatal and Developmental Medicine**  
**Stanford University School of Medicine and Lucile Salter Packard Children's Hospital**  
**750 Welch Road, Suite 315 - Palo Alto, CA 94304**  
**tel (650) 723-5711 | fax (650) 725-8351**

**From:** Shankaran, Seetha  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 4:35:07 PM

---

Rose

I had a meeting with my group today and told them already that it was 3 + or -!

Please see my vote

Seetha

Seetha Shankaran, M.D.  
Professor of Pediatrics  
Wayne State University School of Medicine  
Director, Neonatal-Perinatal Medicine  
Children's Hospital of Michigan and  
Hutzel Women's Hospital

Tel 313-745-1436  
Fax 313-745-5867

Email sshankar@med.wayne.edu

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---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, January 17, 2007 4:06 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; papile@unm.edu; Poole Kenneth (E-mail); Roger Faix; Ronald Goldberg; Shankaran, Seetha; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail); walid.salhab@UTSouthwestern.edu; Karen.Osborne@hsc.utah.edu; Angelita Hensman; afurey@Tufts-NEMC.org; Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; Diane Wilson; Ellen Hale; Georgia McDavid; karen-johnson@uiowa.edu; Kathy Auten; Leslie Wilson; Monica Collins; monica.konstantino@yale.edu; Nancy Miller; Nancy Newman; susan.tepper@hsc.utah.edu  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; Duara, Shahnaz; CNavarrete@med.miami.edu; Neil Finer  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY

I have had a couple of requests to include +/- 3 days, so here is a new ballot:

\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ x \_\_\_\_\_ +/- 3 days

\_\_\_\_\_ +/- 4 days

For those that voted, you may cast another vote if you prefer the new choice.

Thanks  
Rose

---

**From:** Higgins, Rosemary (NIH/NICHD) [E]  
**Sent:** Wednesday, January 17, 2007 1:42 PM  
**To:** Abbot Laptook (alaptook@WIHRI.org); 'Abhik Das'; Ambal (ambal@uab.edu); Av Fanaroff (aaf2@po.cwru.edu); Brad Yoder (Bradley.yoder@hsc.utah.edu); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [kurt.schibler@cchmc.org]); Michael Cotten (cotte010@mc.duke.edu); 'Michelle Walsh'; 'Mickey Caplan'; 'Oh William (E-mail)'; 'Pablo Sanchez'; papile@unm.edu; 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald Goldberg'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'; Walid Salhab (walid.salhab@utsouthwestern.edu); (Karen.Osborne@hsc.utah.edu); Angelita Hensman; Anne Furey (afurey@tufts-nemc.org); Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; 'Diane Wilson'; Ellen Hale; Georgia McDavid; Karen Johnson (karen-johnson@uiowa.edu); Kathy Auten; 'Leslie Wilson'; Monica Collins; monica.konstantino@yale.edu; Nancy Miller; Nancy Newman; susan.tepper@hsc.utah.edu  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; 'Duara, Shahnaz'; CNavarrete@med.miami.edu; 'Neil Finer'  
**Subject:** SUPPORT GROWTH SECONDARY STUDY

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\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 4 days

### ONLY 1 VOTE PER SITE

Thanks  
Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
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(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Wilson, Leslie Dawn](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Cc:** [Poindexter, Brenda B](#)  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 4:09:08 PM

---

My vote will stay the same-- +/- 4 days-thanks

*Leslie Dawn Wilson, RN, BSN*  
**Research Manager**  
**Neonatal Network Coordinator**  
**Riley Hospital RR 208**  
**[ldw@iupui.edu](mailto:ldw@iupui.edu) (e-mail)**  
**699 West Dr**  
**Indianapolis, IN 46202**  
**317.274.8255 (phone)**  
**317.274.8963 (fax)**  
**317.312.(b) (pager)**

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, January 17, 2007 4:06 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); Abhik Das; [ambal@uab.edu](mailto:ambal@uab.edu); [aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu); [Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu); Poindexter, Brenda B; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu); Michelle Walsh; MIckey Caplan; Oh William (E-mail); Pablo Sanchez; [papile@unm.edu](mailto:papile@unm.edu); Poole Kenneth (E-mail); Roger Faix; Ronald Goldberg; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail); [walid.salhab@UTSouthwestern.edu](mailto:walid.salhab@UTSouthwestern.edu); Karen.Osborne@hsc.utah.edu; Angelita Hensman; [afurey@Tufts-NEMC.org](mailto:afurey@Tufts-NEMC.org); Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; Herron, Dianne E; Ellen Hale; Georgia McDavid; karen-johnson@uiowa.edu; Kathy Auten; Wilson, Leslie Dawn; Monica Collins; [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); Nancy Miller; Nancy Newman; [susan.tepper@hsc.utah.edu](mailto:susan.tepper@hsc.utah.edu)  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; Duara, Shahnaz; [CNavarrete@med.miami.edu](mailto:CNavarrete@med.miami.edu); Neil Finer  
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\_\_\_\_\_ +/- 4 days

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Thanks  
Rose

---

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**Sent:** Wednesday, January 17, 2007 1:42 PM  
**To:** Abbot Laptook ([alaptook@WIHRI.org](mailto:alaptook@WIHRI.org)); 'Abhik Das'; Ambal ([ambal@uab.edu](mailto:ambal@uab.edu)); Av Fanaroff ([aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu)); Brad Yoder ([Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu)); 'Brenda Poindexter'; 'Carlo Waldemar (E-mail)'; 'Ed Bell'; 'Ed Donovan'; 'Ehrenkranz Richard (E-mail)'; 'Ivan Frantz'; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); 'Kristi Watterberg'; Kurt Schibler (Kurt Schibler [[kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org)]); Michael Cotten ([cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu)); 'Michelle Walsh'; 'MIckey Caplan';



'Oh William (E-mail)'; 'Pablo Sanchez'; papile@unm.edu; 'Poole Kenneth (E-mail)'; 'Roger Faix'; 'Ronald Goldberg'; 'Seetha Shankaran'; 'Stevenson David (E-mail)'; 'Stoll Barbara (E-mail)'; 'Tyson Jon (E-mail)'; Walid Salhab (walid.salhab@utsouthwestern.edu); (Karen.Osborne@hsc.utah.edu); Angelita Hensman; Anne Furey (afurey@tufts-nemc.org); Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; 'Diane Wilson'; Ellen Hale; Georgia McDavid; Karen Johnson (karen-johnson@uiowa.edu); Kathy Auten; 'Leslie Wilson'; Monica Collins; monica.konstantino@yale.edu; Nancy Miller; Nancy Newman; susan.tepper@hsc.utah.edu

**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; 'Duara, Shahnaz'; CNavarrete@med.miami.edu; 'Neil Finer'

**Subject:** SUPPORT GROWTH SECONDARY STUDY

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\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 4 days

## **ONLY 1 VOTE PER SITE**

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Kurt Schibler  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 2:33:38 PM

---

Hi Rose,  
We vote for  $\pm$  4 days.  
Thanks,  
Kurt

On 1/17/07 1:42 PM, "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> wrote:

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Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Frantz, Ivan  
**To:** Higgins, Rosemary (NIH/NICHHD) [E]  
**Cc:** Mackinnon, Brenda  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 2:24:31 PM

---

Brenda and I vote +/- 4 days.

I think we need to hear from the investigator what is important in terms of her hypotheses, as opposed to what is easiest for us to collect.

Anne Furey's email address does not seem to have been replaced by Brenda MacKinnon's ([bmackinnon@tufts-nemc.org](mailto:bmackinnon@tufts-nemc.org)) in some of your lists and some of those from RTI.

---

**From:** Higgins, Rosemary (NIH/NICHHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, January 17, 2007 1:42 PM  
**To:** alaptook@WIHRI.org; Abhik Das; ambal@uab.edu; aaf2@po.cwru.edu; Bradley.yoder@hsc.utah.edu; Brenda Poindexter; Carlo Waldemar (E-mail); Ed Bell; Ed Donovan; Ehrenkranz Richard (E-mail); Ivan Frantz; Kennedy, Kathleen A; Krisa VanMeurs (VanMeurs, Krisa); Kristi Watterberg; kurt.schibler@cchmc.org; cotte010@mc.duke.edu; Michelle Walsh; Mickey Caplan; Oh William (E-mail); Pablo Sanchez; papile@unm.edu; Poole Kenneth (E-mail); Roger Faix; Ronald GOLDBERG; Seetha Shankaran; Stevenson David (E-mail); Stoll Barbara (E-mail); Tyson Jon (E-mail); walid.salhab@utsouthwestern.edu; Karen.Osborne@hsc.utah.edu; Angelita Hensman; afurey@tufts-nemc.org; Becky bara; Bethany Ball; Cathy Grisby; Conra Backstrom; Diane Wilson; Ellen Hale; Georgia McDavid; karen-johnson@uiowa.edu; Kathy Auten; Leslie Wilson; Monica Collins; monica.konstantino@yale.edu; Nancy Miller; Nancy Newman; susan.tepper@hsc.utah.edu  
**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; Duara, Shahnaz; CNavarrete@med.miami.edu; Neil Finer  
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301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

\*\*\*\*\*

**Confidentiality Notice**

\*\*\*\*\*

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**From:** Barbara Stoll  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Ellen Hale  
**Subject:** SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 2:24:14 PM

---

\*\*\*\*~~sent~~ 4 days

**ONLY 1 VOTE PER SITE**

Thanks

Rose

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Barbara J. Stoll, MD

George W. Brumley, Jr., Professor and Chair, Department of Pediatrics

Medical Director, Children's Healthcare of Atlanta at Egleston

Office: 404-727-2456 Fax: 404-727-5737

[barbara\\_stoll@oz.ped.emory.edu](mailto:barbara_stoll@oz.ped.emory.edu)

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**From:** [nancy\\_s\\_newman](mailto:nancy_s_newman)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins.Rosemary@NIH/NICHD)  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 1:53:51 PM

---

CASE WESTERN-- +/- 4 days.....NN

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, January 17, 2007 1:42 PM  
**To:** [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [Abhik Das; ambal@uab.edu](mailto:Abhik.Das@uab.edu); [aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu); [Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu); [Brenda Poindexter](mailto:Brenda.Poindexter@hsc.utah.edu); [Carlo Waldemar \(E-mail\)](mailto:Carlo.Waldemar@hsc.utah.edu); [Ed Bell](mailto:Ed.Bell@hsc.utah.edu); [Ed Donovan](mailto:Ed.Donovan@hsc.utah.edu); [Ehrenkranz Richard \(E-mail\)](mailto:Ehrenkranz.Richard@hsc.utah.edu); [Ivan Frantz](mailto:Ivan.Frantz@hsc.utah.edu); [Kennedy, Kathleen A](mailto:Kennedy.Kathleen.A@hsc.utah.edu); [Krisa VanMeurs \(VanMeurs, Krisa\)](mailto:Krisa.VanMeurs@hsc.utah.edu); [Kristi Watterberg](mailto:Kristi.Watterberg@hsc.utah.edu); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu); [Michelle Walsh](mailto:Michelle.Walsh@hsc.utah.edu); [MIckey Caplan](mailto:MIckey.Caplan@hsc.utah.edu); [Oh William \(E-mail\)](mailto:Oh.William@hsc.utah.edu); [Pablo Sanchez](mailto:Pablo.Sanchez@hsc.utah.edu); [papile@unm.edu](mailto:papile@unm.edu); [Poole Kenneth \(E-mail\)](mailto:Poole.Kenneth@hsc.utah.edu); [Roger Faix](mailto:Roger.Faix@hsc.utah.edu); [Ronald Goldberg](mailto:Ronald.Goldberg@hsc.utah.edu); [Seetha Shankaran](mailto:Seetha.Shankaran@hsc.utah.edu); [Stevenson David \(E-mail\)](mailto:Stevenson.David@hsc.utah.edu); [Stoll Barbara \(E-mail\)](mailto:Stoll.Barbara@hsc.utah.edu); [Tyson Jon \(E-mail\)](mailto:Tyson.Jon@hsc.utah.edu); [walid.salhab@utsouthwestern.edu](mailto:walid.salhab@utsouthwestern.edu); [Karen.Osborne@hsc.utah.edu](mailto:Karen.Osborne@hsc.utah.edu); [Angelita Hensman](mailto:Angelita.Hensman@hsc.utah.edu); [afurey@tufts-nemc.org](mailto:afurey@tufts-nemc.org); [Becky bara](mailto:Becky.bara@hsc.utah.edu); [Bethany Ball](mailto:Bethany.Ball@hsc.utah.edu); [Cathy Grisby](mailto:Cathy.Grisby@hsc.utah.edu); [Conra Backstrom](mailto:Conra.Backstrom@hsc.utah.edu); [Diane Wilson](mailto:Diane.Wilson@hsc.utah.edu); [Ellen Hale](mailto:Ellen.Hale@hsc.utah.edu); [Georgia McDavid](mailto:Georgia.McDavid@hsc.utah.edu); [karen-johnson@uiowa.edu](mailto:karen-johnson@uiowa.edu); [Kathy Auten](mailto:Kathy.Auten@hsc.utah.edu); [Leslie Wilson](mailto:Leslie.Wilson@hsc.utah.edu); [Monica Collins](mailto:Monica.Collins@hsc.utah.edu); [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); [Nancy Miller](mailto:Nancy.Miller@hsc.utah.edu); [Nancy Newman](mailto:Nancy.Newman@hsc.utah.edu); [susan.tepper@hsc.utah.edu](mailto:susan.tepper@hsc.utah.edu)  
**Cc:** [Zaterka-Baxter, Kristin](mailto:Zaterka-Baxter@hsc.utah.edu); [Huitema, Carolyn Petrie](mailto:Huitema@hsc.utah.edu); [Duara, Shahnaz](mailto:Duara@hsc.utah.edu); [CNavarrete@med.miami.edu](mailto:CNavarrete@med.miami.edu); [Neil Finer](mailto:Neil.Finer@hsc.utah.edu)  
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301-435-7909  
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[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Das, Abhik  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 1:53:09 PM

---

Since the first measures are weekly, I think that +/-4 days may be too wide an interval.

Thanks

Abhik

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, January 17, 2007 1:46 PM  
**To:** Das, Abhik  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY

The group had said make it 4 – if others respond and want 3, I can resend it.

Thanks

Rose

---

**From:** Das, Abhik [mailto:adas@rti.org]  
**Sent:** Wednesday, January 17, 2007 1:45 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY

Should we also have an option of +/- 3 days?

---

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**Cc:** Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie; Duara, Shahnaz; CNavarrete@med.miami.edu; Neil Finer  
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Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

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301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)



**From:** [Wilson, Leslie Dawn](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** RE: SUPPORT GROWTH SECONDARY STUDY  
**Date:** Wednesday, January 17, 2007 1:45:50 PM

---

+/- 4 days is my vote--thanks

*Leslie Dawn Wilson, RN, BSN*  
**Research Manager**  
**Neonatal Network Coordinator**  
**Riley Hospital RR 208**  
**[ldw@iupui.edu](mailto:ldw@iupui.edu) (e-mail)**  
**699 West Dr**  
**Indianapolis, IN 46202**  
**317.274.8255 (phone)**  
**317.274.8963 (fax)**  
**317.312.(b) (pager)**

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
**Sent:** Wednesday, January 17, 2007 1:42 PM  
**To:** [alaptook@WIHRI.org](mailto:alaptook@WIHRI.org); [Abhik Das](mailto:Abhik Das); [ambal@uab.edu](mailto:ambal@uab.edu); [aaf2@po.cwru.edu](mailto:aaf2@po.cwru.edu); [Bradley.yoder@hsc.utah.edu](mailto:Bradley.yoder@hsc.utah.edu); [Poindexter, Brenda B](mailto:Poindexter, Brenda B); [Carlo Waldemar](mailto:Carlo Waldemar) (E-mail); [Ed Bell](mailto:Ed Bell); [Ed Donovan](mailto:Ed Donovan); [Ehrenkranz Richard](mailto:Ehrenkranz Richard) (E-mail); [Ivan Frantz](mailto:Ivan Frantz); [Kennedy, Kathleen A](mailto:Kennedy, Kathleen A); [Krisa VanMeurs](mailto:Krisa VanMeurs) (VanMeurs, Krisa); [Kristi Watterberg](mailto:Kristi Watterberg); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [cotte010@mc.duke.edu](mailto:cotte010@mc.duke.edu); [Michelle Walsh](mailto:Michelle Walsh); [MIckey Caplan](mailto:MIckey Caplan); [Oh William](mailto:Oh William) (E-mail); [Pablo Sanchez](mailto:Pablo Sanchez); [papile@unm.edu](mailto:papile@unm.edu); [Poole Kenneth](mailto:Poole Kenneth) (E-mail); [Roger Faix](mailto:Roger Faix); [Ronald Goldberg](mailto:Ronald Goldberg); [Seetha Shankaran](mailto:Seetha Shankaran); [Stevenson David](mailto:Stevenson David) (E-mail); [Stoll Barbara](mailto:Stoll Barbara) (E-mail); [Tyson Jon](mailto:Tyson Jon) (E-mail); [walid.salhab@UTSouthwestern.edu](mailto:walid.salhab@UTSouthwestern.edu); [Karen.Osborne@hsc.utah.edu](mailto:Karen.Osborne@hsc.utah.edu); [Angelita Hensman](mailto:Angelita Hensman); [afurey@Tufts-NEMC.org](mailto:afurey@Tufts-NEMC.org); [Becky bara](mailto:Becky bara); [Bethany Ball](mailto:Bethany Ball); [Cathy Grisby](mailto:Cathy Grisby); [Conra Backstrom](mailto:Conra Backstrom); [Herron, Dianne E](mailto:Herron, Dianne E); [Ellen Hale](mailto:Ellen Hale); [Georgia McDavid](mailto:Georgia McDavid); [karen-johnson@uiowa.edu](mailto:karen-johnson@uiowa.edu); [Kathy Auten](mailto:Kathy Auten); [Wilson, Leslie Dawn](mailto:Wilson, Leslie Dawn); [Monica Collins](mailto:Monica Collins); [monica.konstantino@yale.edu](mailto:monica.konstantino@yale.edu); [Nancy Miller](mailto:Nancy Miller); [Nancy Newman](mailto:Nancy Newman); [susan.tepper@hsc.utah.edu](mailto:susan.tepper@hsc.utah.edu)  
**Cc:** [Zaterka-Baxter, Kristin](mailto:Zaterka-Baxter, Kristin); [Huitema, Carolyn Petrie](mailto:Huitema, Carolyn Petrie); [Duaara, Shahnaz](mailto:Duaara, Shahnaz); [CNavarrete@med.miami.edu](mailto:CNavarrete@med.miami.edu); [Neil Finer](mailto:Neil Finer)  
**Subject:** SUPPORT GROWTH SECONDARY STUDY

Hi,

For the SUPPORT GROWTH SECONDARY Study, there was significant discussion at the Steering Committee regarding the specific days for measurements. Please send me a vote by **January 22** on whether you think the measurements should be on the day with either of the following parameter choices:

\_\_\_\_\_ +/- 1 day

\_\_\_\_\_ +/- 4 days

## ONLY 1 VOTE PER SITE

Thanks  
Rose  
Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B

MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Shankaran, Seetha  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]; Sood, Beena; Becky  
**Cc:** Das, Abhik; Sood, Beena; Pappas, Athina; kathymw@wayne.edu  
**Subject:** RE: SUPPORT ROP  
**Date:** Wednesday, January 10, 2007 7:47:08 PM

---

Marie

What I meant was we cannot keep this openended---if an infant misses appointments when does this window close and it becomes "missing" data---we can review at subcommittee tomorrow

Thanks

SS

---

From: Gantz, Marie [<mailto:mgantz@rti.org>]  
Sent: Wed 1/10/2007 1:17 PM  
To: Shankaran, Seetha; Higgins, Rosemary (NIH/NICHD) [E]; Sood, Beena; Becky  
Cc: Das, Abhik; Sood, Beena; Pappas, Athina; kathymw@wayne.edu  
Subject: RE: SUPPORT ROP

Hi Seetha,

50 weeks is the grace period (we only send out missing ROP reports after 50 weeks). ROP exams can still be done after 50 weeks.

Marie

Marie Gantz, Ph.D.

Research Statistician

RTI International

P.O. Box 12194

Research Triangle Park, NC 27709-2194

Telephone (919) 485-7780

Fax (919) 485-7762

[mgantz@rti.org](mailto:mgantz@rti.org)

-----Original Message-----

From: Shankaran, Seetha [<mailto:sshankar@med.wayne.edu>]  
Sent: Wednesday, January 10, 2007 12:58 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]; Sood, Beena; Becky

Cc: Das, Abhik; Gantz, Marie; Sood, Beena; Pappas, Athina; kathymw@wayne.edu  
Subject: RE: SUPPORT ROP

Hi all

Is 50 weeks the final cut off ? because we were unclear on this. We have met with our Ophthalmologist and are working out a system to get him to document this and also to reimburse him for his time.

Thanks

Seetha

Seetha Shankaran, M.D.

Professor of Pediatrics

Wayne State University School of Medicine

Director, Neonatal-Perinatal Medicine

Children's Hospital of Michigan and

Hutzel Women's Hospital

Tel 313-745-1436

Fax 313-745-5867

Email [sshankar@med.wayne.edu](mailto:sshankar@med.wayne.edu)

This message and any files transmitted with it may contain information that is privileged, confidential and exempt from disclosure. It is intended for use only by the person to whom it is addressed. If you have received this in error, please (1) do not forward or use this information in any way, (2) delete or destroy this message and its attachments and (3) please contact me immediately.

---

From: Higgins, Rosemary (NIH/NICHD) [E] [<mailto:higginsr@mail.nih.gov>]  
Sent: Tuesday, January 09, 2007 11:03 AM

To: Shankaran, Seetha; Sood, Beena; Becky  
Cc: Das, Abhik; Marie Gantz  
Subject: SUPPORT ROP

CENTER

NETWORK

MISSING ROP MESSAGE

5

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

5

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

5

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

5

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT - let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Das, Abhik  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Auman, Jeanette O.; Gantz, Marie; Zaterka-Baxter, Kristin  
**Subject:** FW: SUPPORT ROP  
**Date:** Wednesday, January 10, 2007 4:25:48 PM

FYI. Do you want to let them know this?

Thanks

Abhik

---

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Wednesday, January 10, 2007 4:24 PM  
**To:** Auman, Jeanette O.  
**Cc:** Das, Abhik; Gantz, Marie; Zaterka-Baxter, Kristin  
**Subject:** RE: SUPPORT ROP

Hi Jenny,

For the four kids in question, I agree that the 4<sup>th</sup> is excused (withdrew/refused) ... except just maybe they may change their minds as follow up into the second year goes on. They should raise the question when they do long term follow up.

The rest I say as follows:

Clearly there are no exams to enter and therefore we have to 'excuse' the infant from entering more exams. However, the center should still work to get the infant to return for an eye examination. The infant is either blind, or sighted. If he can see, it will be important to determine if he needs glasses. This can be done at 6 months to 1 year or so. It is poor medical care not to have this occur. The infant's primary care provider should be recruited to help get it done.

At the 18-22 month follow up, the questions can be asked about vision and glasses and eye surgery then.

Dale Phelps

---

**From:** Auman, Jeanette O. [mailto:joa@rti.org]  
**Sent:** Wednesday, January 10, 2007 1:24 PM  
**To:** Phelps, Dale  
**Cc:** Das, Abhik; Gantz, Marie; Zaterka-Baxter, Kristin  
**Subject:** FW: SUPPORT ROP

Hi Dale,

See below the patients listed from Cincinnati where they stated no more eye exams will be entered. Specifically, Network IDs (b) (6) Can I have your approval to excuse these cases? Let me know if you need anymore information regarding their keyed data.

FYI, I have (b) (6) as being excused in my code.

Thanks!

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, January 10, 2007 10:43 AM  
**To:** Auman, Jeanette O.; Gantz, Marie; Das, Abhik  
**Subject:** FW: SUPPORT ROP

---

**From:** CATHY A. GRISBY [mailto:grisbyca@email.uc.edu]  
**Sent:** Wednesday, January 10, 2007 10:28 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SUPPORT ROP

Hi,

Here is the FINAL status on all of these infants.

(b) (6)--received permission from the parents to obtain eye exam info from non participating hospital. Just got all exams from medical records and eye clinic and SUPP 10 has been entered.

(b) (6)--received permission from the parents to obtain eye exam info from non participating hospital. Just got all exams from medical records and eye clinic and SUPP 10 has been entered.

(b) (6)--parent did not follow up with eye exams. No more eye exams will be entered.

(b) (6)--parent did not follow up with eye exams. No more eye exams will be entered.

(b) (6)--received permission from the parents to obtain eye exam info from non participating hospital. Just got all exams from medical records and eye clinic and SUPP 10 has been entered.

(b) (6)--parent did not follow up with eye exams. No more eye exams will be entered.

(b) (6)--parent withdrew from all studies and would not allow data collection. No eye exams will be entered.

Thanks,

Cathy

----- Original message -----

**Date:** Tue, 9 Jan 2007 11:15:54 -0500  
**From:** "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
**Subject:** SUPPORT ROP  
**To:** "Kurt Schibler" <kurt.schibler@cchmc.org>, <grisbyca@email.uc.edu>  
**Cc:** "Das, Abhik" <adas@rti.org>, "Marie Gantz" <mgantz@rti.org>

#MiraWebMsgDiv  
st1\.\*(behavior.url(#default#ieooui) )

CENTER NETWORK MISSING ROP MESSAGE

CENTER	NETWORK	MISSING ROP MESSAGE
11	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
11	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
11	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
11	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
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11	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
11	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT – let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network



Pregnancy and Perinatology Branch

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

From: Auman, Jeanette O.  
To: Higgins, Rosemary (NIH/NICHD) [E]; Gantz, Marie; Das, Abhik  
Subject: RE: SUPPORT ROP  
Date: Wednesday, January 10, 2007 10:55:20 AM

We'll have to run these by Dale and get her final ok, to hard code them as excused in our system.

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Wednesday, January 10, 2007 10:43 AM  
To: Auman, Jeanette O.; Gantz, Marie; Das, Abhik  
Subject: FW: SUPPORT ROP

From: CATHY A. GRISBY [mailto:grisbyca@email.uc.edu]  
Sent: Wednesday, January 10, 2007 10:28 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: Re: SUPPORT ROP

Hi,

Here is the FINAL status on all of these infants.

(b) (6) --received permission from the parents to obtain eye exam info from non participating hospital. Just got all exams from medical records and eye clinic and SUPP 10 has been entered.

(b) (6) --received permission from the parents to obtain eye exam info from non participating hospital. Just got all exams from medical records and eye clinic and SUPP 10 has been entered.

(b) (6) --parent did not follow up with eye exams. No more eye exams will be entered.

(b) (6) --parent did not follow up with eye exams. No more eye exams will be entered.

(b) (6) --received permission from the parents to obtain eye exam info from non participating hospital. Just got all exams from medical records and eye clinic and SUPP 10 has been entered.

(b) (6) --parent did not follow up with eye exams. No more eye exams will be entered.

(b) (6) --parent withdrew from all studies and would not allow data collection. No eye exams will be entered.

Thanks,

Cathy

----- Original message -----

Date: Tue, 9 Jan 2007 11:15:54 -0500  
From: "Higgins, Rosemary (NIH/NICHD)" [E] <higginsr@mail.nih.gov>  
Subject: SUPPORT ROP  
To: "Kurt Schibler" <kurt.schibler@cchmc.org>, <grisbyca@email.uc.edu>  
Cc: "Das, Abhik" <adas@rti.org>, "Marie Gantz" <mgantz@rti.org>

#MiraWebMsgDiv  
st1:.\*{behavior:url(#default#ieooui) }

MISSING ROP MESSAGE  
CENTER NETWORK

11 (b) (6) 50 weeks PMA has been reached and final  
ROP exam status has not been reported on the SUPP10 for either eye.

11 (b) (6) 50 weeks PMA has been reached and final  
ROP exam status has not been reported on the SUPP10 for either eye.

11 (b) (6) 50 weeks PMA has been reached and final  
ROP exam status has not been reported on the SUPP10 for either eye.

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11 50 weeks PMA has been reached and final  
ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT – let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!

Rose

Rosemary D. Higgins, M.D.

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Das, Abhik  
**Subject:** RE: SUPPORT ROP  
**Date:** Wednesday, January 10, 2007 10:31:16 AM

We do not have a Zone III entry for infant (b) (6) -- the lowest zone for any vessels is II for both eyes, both exams.

For infant (b) (6) it does appear that there was surgery, so the child does have a ROP determination. The last two exams for this infant were entered after the data was processed for the report, so that is why it was not reflected.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
P.O. Box 12194  
Research Triangle Park, NC 27709-2194  
Telephone (919) 485-7780  
Fax (919) 485-7762  
mgantz@rti.org

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Wednesday, January 10, 2007 9:08 AM  
**To:** Gantz, Marie; Das, Abhik  
**Subject:** FW: SUPPORT ROP

It sounds like (b) (6) will have more data.

(b) (6) -- do you have a Zone III entry for this child??

(b) (6) -- sounds like this child had surgery, which would put the child in an outcome group, correct?

Thanks  
Rose

**From:** Nancy Peters [mailto:npeters@wfubmc.edu]  
**Sent:** Tuesday, January 09, 2007 5:14 PM  
**To:** Gantz, Marie; Higgins, Rosemary (NIH/NICHD) [E]; Michael O' Shea  
**Cc:** Das, Abhik  
**Subject:** RE: SUPPORT ROP

(b) (6) There are 10 entries for this child. At the last visit in October 2006 the impression was that this child had ROP and was to return in three months. That would be a January 2007 visit and I do not have that information at this time.

(b) (6) The are two entries for this child. I don't know what else to answer for this child: The lowest zone for vessels is zone II; there is no ROP and the peds ophth will not see this child again until preschool F/U

(b) (6) There are 10 entries for this child. I had sent the following e-mail to Jenny last week with my questions about data entry and this child and she said that Kris would check on it (e-mail response on 01/02/2007). I had entered a 6 and a 9 in the highest stage in any zone for exams 9 and 10 and had put an asterick in the "highest stage in lowest zone" as the program will not let you leave a blank field. As you can see, my question was this: I do have a question about the SUPP10. If a child has had eye surgery then we are instructed on page 15-2 of the manual not to use the "Highest stage in lowest zone" in section 4, and for 5. "Highest stage in any zone" it says "not to be used if eye has had surgery", but there is a Code 6 for "post laser/cro and 9 to use for old scars, but no active ROP. Do we just leave the highest stage in lowest zone blank if the child has had surgery? Do we leave the Highest stage in any zone blank if the child has had surgery or do we use Code 6 or 9 if they are appropriate?

Please advise as I feel that I have either provided the requested information or have raised the questions that I had about the scoring. (I will check my e-mail again this evening but after that it will be several days before I will have e-mail access.)

Nancy

Hi Nancy,

Kris is double checking, but we believe you can use a '6' for post laser/cryo. We'll let you know.

Thanks!  
Jenny

**From:** Nancy Peters [mailto:npeters@wfubmc.edu]  
**Sent:** Thursday, December 28, 2006 5:11 PM  
**To:** Auman, Jeanette O.  
**Cc:** Das, Abhik  
**Subject:** RE: question for ROP forms/SUPPORT

Well, I learned that I cannot leave it blank. I assume that I would have to put an asterick in this spot if there was no information to put in that data point. Please confirm or let me know what is appropriate. This form would be a good one for the F5 or F9 notes to be perused when you were preparing for the DSMB meetings.

Nancy

**From:** Nancy Peters  
**Sent:** Thursday, December 28, 2006 4:25 PM  
**To:** Auman, Jeanette O.  
**Cc:** Das, Abhik  
**Subject:** question for ROP forms/SUPPORT

I am trying to get finished up with our edits and missing forms -- the ones currently outstanding. I do have a question about the SUPP10. If a child has had eye surgery then we are instructed on page 15-2 of the manual not to use the "Highest stage in lowest zone" in section 4, and for 5. "Highest stage in any zone" it says "not to be used if eye has had surgery", but there is a Code 6 for "post laser/foro and 9 to use for old scars, but no active ROP.

Do we just leave the highest stage in lowest zone blank if the child has had surgery? Do we leave the Highest stage in any zone blank if the child has had surgery or do we use Code 6 or 9 if they are appropriate?

Nancy

**From:** Gantz, Marie [mailto:mgantz@rti.org]  
**Sent:** Tuesday, January 09, 2007 12:27 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Michael O' Shea; Nancy Peters  
**Cc:** Das, Abhik  
**Subject:** RE: SUPPORT ROP

Please disregard the missing ROP message for infant (b) (6). We do have the outcome for that baby. I apologize for the error.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
P.O. Box 12194

Research Triangle Park, NC 27709-2194  
Telephone (919) 485-7780  
Fax (919) 485-7762  
mgantz@ni.org

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, January 09, 2007 11:32 AM  
**To:** Michael O' Shea; Nancy Peters  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT ROP

CENTER	NETWORK	MISSING ROP MESSAGE
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT - let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
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301-435-7909  
301-466-3790 (FAX)  
[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** Ellen Hale  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Barbara Stoll; Susie Buchter; Das, Abhik; Marie Gantz  
**Subject:** Re: SUPPORT ROP  
**Date:** Wednesday, January 10, 2007 10:31:31 AM

---

Rose,

This is what we currently know:

(b) (6)

Susie and I both are in contact with this mom trying to get her an appointment.

This is the child who moved back to Mexico (previously reported) and lost.

See 1/04/07 and eyes are mature (data entered)

This mom has an appointment 3/22/07.

Ellen



> 19

>

> (b) (6)

>

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

>

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

>

> 19

>

> (b) (6)

>

> No SUPP10 records have been entered even though SUPP09 Question C1 indicates that an exam for ROP was performed. 50 weeks PMA has been reached.

>

> 19

>

> (b) (6)

>

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

> 19

>

> (b) (6)

>

> 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

>

>

> We are missing the above ROP outcome for SUPPORT - let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

>

> Thanks for all the effort!

> Rose

>

> Rosemary D. Higgins, M.D.

> Program Scientist for the Neonatal Research Network

> Pregnancy and Perinatology Branch

> Center for Developmental Biology and Perinatal Medicine

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> MSC 7510

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> (For overnight delivery, use Rockville, MD 20852)

> 301-435-7909

> 301-496-3790 (FAX)

> higginsr@mail.nih.gov

>



**From:** Pablo Sanchez  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: Requests to use SUPPORT Pulmonary outcomes questionnaire  
**Date:** Wednesday, January 09, 2008 9:24:59 PM

---

yes-pablo

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov> 1/8/08 8:41:01 AM >>>

Hi,

I have two requests for investigators to use the pulmonary outcomes questionnaire for studies in development. Robert Ballard requests to use this instrument in her TOLSURF Trial and Rich Parad and Jon Davis request to use this in their recombinant SOD trial. I have attached summaries from both studies. The Investigators from the Tucson Asthma study had given us permission to use and modify their questionnaire and have also granted permission for further use by these two investigative teams. Please send me a yes/no vote by January 18.

Thanks

Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd., Room 4B03B

MSC 7510

Bethesda, MD 20892

(For overnight delivery, use Rockville, MD 20852)

301-435-7909

301-496-3790 (FAX)

higginsr@mail.nih.gov

**From:** Nancy Miller  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT ROP  
**Date:** Tuesday, January 09, 2007 2:29:58 PM

---

Rose,  
There are at least 4 ROP exams scheduled around Jan.16th. I'll update you on results as soon as I can.  
Nancy

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
1/9/2007 12:49 PM >>>  
The meeting is 2/6/07  
Thanks  
Rose

-----Original Message-----  
From: Nancy Miller [mailto:Nancy.Miller@UTSouthwestern.edu]  
Sent: Tuesday, January 09, 2007 1:25 PM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: Re: SUPPORT ROP

Rose,  
(b) (6) had an ophthalmology appt. on 10/24/06 which was missed. The next appt. is scheduled for 1/19/07. All of the data is keyed in so far. Is the DSMC meeting before or after the 19th?  
Thanks,  
Nancy

Nancy A. Miller, R.N.  
Department of Pediatrics  
Division of Neonatal-Perinatal Medicine  
UT Southwestern Medical Center at Dallas  
5323 Harry Hines Blvd. E3-502  
Dallas, Texas 75390-9063  
214-648-3780  
pager 972-206 (b) (6)

>>> "Higgins, Rosemary (NIH/NICHD) [E]" <higginsr@mail.nih.gov>  
1/9/2007 10:02 AM >>>  
CENTER

NETWORK

MISSING ROP MESSAGE

4

(b) (6)

50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the right eye.

We are missing the above ROP outcome for SUPPORT - let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

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301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

**From:** [Zaterka-Baxter, Kristin](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** All Centers 2006 Race Gender Tables  
**Date:** Tuesday, January 09, 2007 1:20:27 PM  
**Attachments:** [AllCenters2006RaceGenderTables.doc](#)

---

Hi,  
Please find attached the 2006 Race Gender Enrollment Table for all NRN Centers per Study  
Thanks,  
Kris

**Neonatal Research Network  
2006 Race/Gender Tables  
Ethnicity and Race Information (All GDB)**

Table of Ethnicity by Gender				
Ethnic Category	Gender			Total
	Unknown	Male	Female	
Hispanic or Latino	1	385	351	737
Not Hispanic or Latino	0	1442	1451	2893
Unknown or Not Reported	0	11	13	24
<b>Total</b>	<b>1</b>	<b>1838</b>	<b>1815</b>	<b>3654</b>

Table of Race by Gender				
Racial Category	Gender			Total
	Unknown	Male	Female	
Black	0	660	701	1361
White	1	1065	998	2064
American Indian	0	20	17	37
Asian	0	62	67	129
Native Hawaiian	0	3	2	5
More than 1 race	0	5	11	16
Unknown or Not Reported	0	23	19	42
<b>Total</b>	<b>1</b>	<b>1838</b>	<b>1815</b>	<b>3654</b>

Table of Hispanic/Latino Race by Gender				
Race for Hispanic/Latino	Gender			Total
	Unknown	Male	Female	
Black	0	12	19	31
White	1	352	314	667
American Indian	0	2	0	2
Asian	0	3	2	5
More than 1 race	0	0	4	4
Unknown or Not Reported	0	16	12	28
<b>Total</b>	<b>1</b>	<b>385</b>	<b>351</b>	<b>737</b>

**Neonatal Research Network  
2006 Race/Gender Tables  
Ethnicity and Race Information (Candidiasis – All Centers)**

Ethnicity (Ethnic Category)	Gender (Gender)			Total
	Male	Female	Unknown or not reported	
Hispanic or Latino	28	35	0	63
Not Hispanic or Latino	144	141	1	286
Unknown or not reported	2	1	0	3
<b>Total</b>	<b>174</b>	<b>177</b>	<b>1</b>	<b>352</b>

Race (Race)	Gender (Gender)			Total
	Male	Female	Unknown or not reported	
Black	62	74	0	136
White	104	95	1	200
American Indian or Alaska Native	2	0	0	2
Asian	2	6	0	8
More than one race	1	0	0	1
Unknown or not reported	3	2	0	5
<b>Total</b>	<b>174</b>	<b>177</b>	<b>1</b>	<b>352</b>

Race for Hispanic/Latino	Gender (Gender)		
	Male	Female	Total
Black	2	3	5
White	25	32	57
Unknown or not reported	1	0	1
<b>Total</b>	<b>28</b>	<b>35</b>	<b>63</b>

**Neonatal Research Network  
2006 Race/Gender Tables  
Ethnicity and Race Information  
Free-Standing aEEG – All Centers**

<b>Table of Ethnicity by Gender</b>			
<b>Ethnicity</b>	<b>Gender</b>		
	<b>Female</b>	<b>Male</b>	<b>Total</b>
<b>Hispanic</b>	9	20	29
<b>Not Hispanic</b>	28	37	65
<b>Unknown</b>	2	0	2
<b>Total</b>	39	57	96

<b>Table of Race by Gender</b>			
<b>Race</b>	<b>Gender</b>		
	<b>Female</b>	<b>Male</b>	<b>Total</b>
<b>Asian Pacific Islander</b>	0	1	1
<b>Black</b>	16	13	29
<b>White</b>	21	43	64
<b>Unknown</b>	2	0	2
<b>Total</b>	39	57	96

<b>Table of Hispanic/Latino Race by Gender</b>			
<b>Race for Hispanic/Latino</b>	<b>Gender</b>		
	<b>Female</b>	<b>Male</b>	<b>Total</b>
<b>Hispanic White</b>	9	20	29
<b>Total</b>	9	20	29

**Neonatal Research Network**  
**2006 Race/Gender Tables**  
**Ethnicity and Race Information (EOS - All Centers)**

Ethnicity	Gender		
	Male	Female	Total
Hispanic or Latino	11	11	22
Not Hispanic or Latino	31	27	58
<b>Total</b>	<b>42</b>	<b>38</b>	<b>80</b>

Race	Gender		
	Male	Female	Total
Black	20	14	34
White	19	20	39
American Indian	1	0	1
Asian	0	3	3
More than 1 race	1	0	1
Unknown or Not Reported	1	1	2
<b>Total</b>	<b>42</b>	<b>38</b>	<b>80</b>

Race for Hispanic/Latino	Gender		
	Male	Female	Total
White	10	10	20
Unknown or Not Reported	1	1	2
<b>Total</b>	<b>11</b>	<b>11</b>	<b>22</b>



**Neonatal Research Network  
2006 Race/Gender Tables  
Ethnicity and Race Information (All Inositol Single Dose)**

Table of Ethnicity by Gender			
Ethnic Category	Gender		Total
	Male	Female	
Hispanic or Latino	0	1	1
Not Hispanic or Latino	7	7	14
<b>Total</b>	<b>7</b>	<b>8</b>	<b>15</b>

Table of Race by Gender			
Racial Category	Gender		Total
	Male	Female	
Black	1	3	4
White	5	4	9
Asian	0	1	1
More than 1 race	1	0	1
<b>Total</b>	<b>7</b>	<b>8</b>	<b>15</b>

Table of Hispanic/Latino Race by Gender			
Race for Hispanic/Latino	Gender		Total
	Male	Female	
White	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>

**Neonatal Research Network  
2006 Race/Gender Tables  
Ethnicity and Race Information (All PCV-7)**

Ethnicity	Gender		
	Male	Female	Total
Hispanic or Latino	12	7	19
Not Hispanic or Latino	33	28	61
<b>Total</b>	<b>45</b>	<b>35</b>	<b>80</b>

Race	Gender		
	Male	Female	Total
Black	24	17	41
White	20	17	37
Asian	1	1	2
<b>Total</b>	<b>45</b>	<b>35</b>	<b>80</b>

Race for Hispanic/Latino	Gender		
	Male	Female	Total
Black	1	0	1
White	11	7	18
<b>Total</b>	<b>12</b>	<b>7</b>	<b>19</b>

**Neonatal Research Network  
2006 Race/Gender Tables  
Ethnicity and Race Information (Support - All Centers)**

Ethnicity (Ethnic Category)	Gender (Gender)			Total
	Male	Female	Unknown or not reported	
Hispanic or Latino	25	10	0	35
Not Hispanic or Latino	107	82	0	189
Unknown or not reported	0	0	4	4
<b>Total</b>	<b>132</b>	<b>92</b>	<b>4</b>	<b>228</b>

Race (Race)	Gender (Gender)			Total
	Male	Female	Unknown or not reported	
Black	47	56	0	103
White	81	35	0	116
Asian	1	1	0	2
More than one race	1	0	0	1
Unknown or not reported	2	0	4	6
<b>Total</b>	<b>132</b>	<b>92</b>	<b>4</b>	<b>228</b>

Race (of Hispanic/Latino)	Gender (Gender)		
	Male	Female	Total
Black	0	1	1
White	23	9	32
Unknown or not reported	2	0	2
<b>Total</b>	<b>25</b>	<b>10</b>	<b>35</b>

From: Auman, Jeanette O.  
To: reverett@med.miami.edu  
Cc: Higgins, Rosemary (NIH/NICHD) [E]  
Subject: FW: SUPPORT ROP  
Date: Tuesday, January 09, 2007 12:30:43 PM

Hi Ruth,

Have you already transmitted these cases or are you planning to do so tonight? I will rerun the missing ROP report once you do.

If you do not have eye exams for patients, the reason why they were not done needs to be cleared through Dale Phelps and then we will change the programming code that reports these to you. This is a very important outcome and Dale is attempting to make sure that all avenues were taken to obtain any missing eye exams.

Thanks!  
Jenny

---

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, January 09, 2007 11:54 AM  
To: Auman, Jeanette O.  
Subject: FW: SUPPORT ROP

Jenny  
Can you help?

---

From: Everett, Ruth [mailto:REverett@med.miami.edu]  
Sent: Tuesday, January 09, 2007 11:46 AM  
To: Higgins, Rosemary (NIH/NICHD) [E]  
Cc: Duara, Shahnaz  
Subject: RE: SUPPORT ROP

We put in the report for 7 of the 16 infants who had a ROP exam post hospital discharge and they will be included in this weeks transmission, the other 9 infants were not seen.

-----Original Message-----

From: Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
Sent: Tuesday, January 09, 2007 11:04 AM  
To: Duara, Shahnaz; Everett, Ruth  
Cc: Das, Abhik; Marie Gantz  
Subject: SUPPORT ROP

CENTER NETWORK MISSING ROP MESSAGE

(b) (6)

8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
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8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.  
8 50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT – let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Gantz, Marie  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Michael O'Shea; Nancy Peters  
**Cc:** Das, Abhik  
**Subject:** RE: SUPPORT ROP  
**Date:** Tuesday, January 09, 2007 12:27:23 PM

Please disregard the missing ROP message for infant (b) (6). We do have the outcome for that baby. I apologize for the error.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
P.O. Box 12194  
Research Triangle Park, NC 27709-2194  
Telephone: (919) 485-7780  
Fax: (919) 485-7762  
mgantz@rti.org

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, January 09, 2007 11:32 AM  
**To:** Michael O'Shea; Nancy Peters  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** SUPPORT ROP

CENTER	NETWORK	MISSING ROP MESSAGE
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.
20	(b) (6)	50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for either eye.

We are missing the above ROP outcome for SUPPORT – let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7609  
301-496-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Gantz, Marie  
**To:** Phelps, Dale; Higgins, Rosemary (NIH/NICHD) [E]; Larola, Nirupama; Reubens, Linda  
**Cc:** Das, Abhik  
**Subject:** RE: SUPPORT ROP  
**Date:** Tuesday, January 09, 2007 12:26:00 PM

---

Hi Dale,

It was a glitch and we do have the outcome for that infant. Thanks for checking it out, and I apologize for the error.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
P.O. Box 12194  
Research Triangle Park, NC 27709-2194  
Telephone (919) 485-7780  
Fax (919) 485-7762  
mgantz@rti.org

-----Original Message-----

**From:** Phelps, Dale [mailto:Dale\_Phelps@URMC.Rochester.edu]  
**Sent:** Tuesday, January 09, 2007 11:53 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]; Larola, Nirupama; Reubens, Linda  
**Cc:** Das, Abhik; Gantz, Marie  
**Subject:** RE: SUPPORT ROP

We checked the forms and in the computer and the final status and entered form are showing in the computer here.  
There must be an odd glitch somewhere.

Dale

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, January 09, 2007 11:32 AM  
**To:** Phelps, Dale; Larola, Nirupama; Reubens, Linda  
**Cc:** Das, Abhik; Marie Gantz  
**Subject:** SUPPORT ROP

CENTER NETWORK MISSING ROP MESSAGE  
21  50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

We are missing the above ROP outcome for SUPPORT – let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
NICHD, NIH  
6100 Executive Blvd., Room 4B03B  
MSC 7510  
Bethesda, MD 20892  
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301-435-7909  
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higginsr@mail.nih.gov

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**From:** Auman, Jeanette O.  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** Gantz, Marie  
**Subject:** RE: SUPPORT ROP  
**Date:** Tuesday, January 09, 2007 12:25:33 PM

---

We do have the final ROP exam for both eyes for this patient in the data.

---

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, January 09, 2007 11:54 AM  
**To:** Auman, Jeanette O.  
**Subject:** FW: SUPPORT ROP

---

**From:** Reubens, Linda [mailto:Linda\_Reubens@URMC.Rochester.edu]  
**Sent:** Tuesday, January 09, 2007 11:51 AM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** RE: SUPPORT ROP

Hi Rose,

We checked our form and the computer data base and this data was entered. This baby was mature for both eyes. I don't know why it is not showing up for you.

Linda

-----Original Message-----

**From:** Higgins, Rosemary (NIH/NICHD) [E] [mailto:higginsr@mail.nih.gov]  
**Sent:** Tuesday, January 09, 2007 11:32 AM  
**To:** Phelps, Dale; Larok, Nirupama; Reubens, Linda  
**Cc:** Das, Abhik; Marie Gantz  
**Subject:** SUPPORT ROP

CENTER	NETWORK	MISSING ROP MESSAGE
21		50 weeks PMA has been reached and final ROP exam status has not been reported on the SUPP10 for the left eye.

We are missing the above ROP outcome for SUPPORT - let us know the status if you have it. We would like complete outcome information for the DSMC meeting.

Thanks for all the effort!  
Rose

Rosemary D. Higgins, M.D.  
Program Scientist for the Neonatal Research Network  
Pregnancy and Perinatology Branch  
Center for Developmental Biology and Perinatal Medicine  
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6100 Executive Blvd., Room 4B03B  
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Bethesda, MD 20892  
(For overnight delivery, use Rockville, MD 20852)  
301-435-7909  
301-498-3790 (FAX)  
higginsr@mail.nih.gov

**From:** Neil Finer  
**To:** [Bradley Yoder](mailto:Bradley.Yoder); [mcw3@case.edu](mailto:mcw3@case.edu); [nxs5@case.edu](mailto:nxs5@case.edu); [kurt.schibler@cchmc.org](mailto:kurt.schibler@cchmc.org); [Roger Faix](mailto:Roger.Faix); [Higgins, Rosemary \(NIH/NICHD\) \[E\]](mailto:Higgins.Rosemary.(NIH/NICHD).[E]); [WCarlo@peds.uab.edu](mailto:WCarlo@peds.uab.edu); [adas@rti.org](mailto:adas@rti.org); [mgantz@rti.org](mailto:mgantz@rti.org); [poo@rti.org](mailto:poo@rti.org); [ALaptook@wihri.org](mailto:ALaptook@wihri.org)  
**Cc:** [Gantz, Marie](mailto:Gantz.Marie); [Petrie, Carolyn](mailto:Petrie.Carolyn)  
**Subject:** FW: SUPPORT updates  
**Date:** Monday, January 08, 2007 2:52:40 PM  
**Attachments:** [SUPPORT Protocol Deviations by center 01-04-07.doc](#)  
[SUPPORT Protocol Deviations 01-4-07.doc](#)  
[SUPPORT Adverse Events 01-04-07.doc](#)  
[SUPPORT Enrollment 01-04-2007.doc](#)

---

Hello Everyone

Please find attached the most recent enrollment information for SUPPORT.

We will discuss the following at the NRN Steering Committee:

- 1> Enrollments and current time lines.
- 2> Status of Secondaries – Breathing Outcomes ( Tim Stevens), MRI ( Susan Hintz), Feeding ( Christine Navarrete)
- 3> Other issues – Protocol Deviations etc.

Please let me know if you have other issues that you would like discussed.

Look forward to talking with you.

Safe travels

Neil

---

**From:** Gantz, Marie [<mailto:mgantz@rti.org>]  
**Sent:** Friday, January 05, 2007 8:28 AM  
**To:** Neil Finer  
**Cc:** Das, Abhik; Poole, W. Kenneth; Zaterka-Baxter, Kristin; Huitema, Carolyn Petrie  
**Subject:** SUPPORT updates

Hi Neil,

Happy new year!

Attached are updated enrollment, AE and protocol deviation reports for SUPPORT. James is working on processing the pulse oximeter data, so I we should be able to send out updated reports to the centers early next week.

Marie

Marie Gantz, Ph.D.  
Research Statistician  
RTI International  
P.O. Box 12194  
Research Triangle Park, NC 27709-2194  
Telephone (919) 485-7780  
Fax (919) 485-7762  
[mgantz@rti.org](mailto:mgantz@rti.org)



**SUPPORT Trial Protocol Deviations, by Center, Reported as of 01/04/2007**

Type of protocol deviation	Center																				Total
	3	4	5	8	9	11	12	13	14	15	16	18	19	20	21	22	23	24	25		
CPAP not initiated if required by protocol											1									1	
Surfactant not given in the first hour	3	1				2	1		1											8	
Oximeter not started within 2 hours						1				1	3	1								6	
Infant placed on study oximeter for incorrect treatment	1			1							4									6	
Failure to use study oximeter at times required by protocol	5	3			2	3			4		3	1	2	1					1	25	
Non-study (unmasked) oximeter used at same time as study ox.						1	1								1					3	
NSIMV initiated in infant not previously intubated		1									3									4	
Extubation (excluding unplanned) for other than study criteria						2					1				1					4	
Failure to extubate CPAP infant if all criteria met		1														2				3	
Failure to extubate surfactant infant if all criteria met						1														1	
High flow nasal cannula used within first 14 days of life					1	4			5			1				1			5	17	
Infant received postnatal steroids in first 21 days of life									4		2					4				10	
Head ultrasound done outside 4-21 day window											1									1	
Consent errors		1										1								2	
Randomization errors					3															3	
Other					1	1			1											3	
<b>Total</b>	<b>9</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>15</b>	<b>2</b>	<b>0</b>	<b>15</b>	<b>1</b>	<b>18</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>103</b>	

### SUPPORT Trial Protocol Deviations Reported as of 01/04/2007

Type of protocol deviation	Number
CPAP not initiated if required by protocol	1
Surfactant not given in the first hour	8
Oximeter not started within 2 hours	6
Infant placed on study oximeter for incorrect treatment	6
Failure to use study oximeter at times required by protocol	25
Non-study (unmasked) oximeter used at same time as study oximeter	3
NSIMV initiated in infant not previously intubated	4
Extubation (excluding unplanned) for other than study criteria	4
Failure to extubate CPAP infant if all criteria met	3
Failure to extubate surfactant infant if all criteria met	1
High flow nasal cannula used within first 14 days of life	17
Infant received postnatal steroids in first 21 days of life	10
Head ultrasound done outside 4-21 day window	1
Consent errors	2
Randomization errors	9
Other	3
<b>Total</b>	<b>103</b>

Type of protocol deviation	Number
Assigned arm not implemented within required amount of time	15
Infant placed on study oximeter for incorrect treatment	6
Failure to use study oximeter at times required by protocol	25
Non-study (unmasked) oximeter used at same time as study oximeter	3
NSIMV initiated in infant not previously intubated	4
Extubation (excluding unplanned) for other than study criteria	4
Failure to extubate infant if all criteria met	4
High flow nasal cannula used within first 14 days of life	17
Infant received postnatal steroids in first 21 days of life	10
Head ultrasound done outside 4-21 day window	1
Consent errors	2
Randomization errors	9
Other	3
<b>Total</b>	<b>103</b>

**Percent of SUPPORT infants with selected adverse events as of 01/04/2007\***

Type of adverse event	All infants	24-25 wks	26-27 wks
Chest compressions/epinephrine in DR	5.5	8.5	3.5
Air leak	6.1	7.1	5.5
Pulmonary hemorrhage	5.2	7.1	3.9
Severe IVH (grades III-IV)	12.8	17.8	9.3

Note: Table includes SUPPORT infants who are still hospitalized and at risk for additional AEs

**Percent of GDB infants with selected adverse events and range across NRN centers\*  
(Includes infants born at NRN centers at 24-27 weeks GA in 2002-2004)**

Type of adverse event	All infants		24-25 wks		26-27 wks	
	Percent	Range	Percent	Range	Percent	Range
Chest compressions/epinephrine in DR	11.2	3.2 - 31.8	13.9	2.8 - 42.1	9.1	3.2 - 23.2
Air leak	8.2	1.9 - 16.1	11.0	2.9 - 20.6	6.1	1.1 - 13.0
Pulmonary hemorrhage	9.0	3.4 - 29.3	12.3	2.5 - 32.0	6.5	1.1 - 26.9
Severe IVH (grades III-IV)	16.9	8.4 - 26.4	24.2	14.0 - 38.9	11.7	2.3 - 20.8

\*Denominator for chest compressions is number of infants with delivery room information, denominator for air leak and pulmonary hemorrhage is number of infants who survived 12 hours, denominator for severe IVH is number of infants with head ultrasound.

### SUPPORT Enrollment as of 01/04/2007

#### Total Enrolled

	N	% of total (1310)
Enrolled	475	36%
With primary outcomes	291	22%

#### Enrollment by Center March 2006 – December 2006

Center	Mar06	Apr06	May06	Jun06	Jul-06	Aug06	Sep06	Oct06	Nov06	Dec06	Total
3	5	6	4	2	1	3	1	0	1	3	26
4	0	1	1	3	0	3	1	3	0	1	13
5	2	1	0	1	0	0	1	1	0	1	7
9	0	3	2	4	2	1	1	6	1	1	21
11	0	0	0	1	1	7	2	3	2	0	16
12	0	0	4	2	1	0	2	1	0	2	12
13	0	0	1	1	0	1	0	0	0	1	4
14	0	2	2	7	3	0	4	3	1	4	26
15	0	1	1	0	2	0	2	1	1	0	8
16	0	0	0	6	6	7	0	1	15	2	37
18	0	5	1	3	1	5	4	4	2	2	27
19	0	0	1	3	3	1	0	1	3	0	12
21	1	0	0	0	0	0	0	0	0	0	1
23	0	0	0	0	0	0	0	2	2	0	4
24	0	0	0	0	0	0	0	1	0	1	2
25	0	0	0	0	0	0	6	3	1	0	10
<b>Total</b>	8	19	17	33	20	28	24	30	29	18	226
<b># Enrolling</b>	3	7	9	11	9	8	10	13	10	10	
<b>Avg/center</b>	2.7	2.7	1.9	3.0	2.2	3.5	2.4	2.3	2.9	1.8	

#### Average Enrollment Per Center Per Month

Time period	Total enrolled	Average # of centers enrolling	Average per center per month
Apr06-Dec06	218	9.7	2.5
Jul06-Dec06	149	10.0	2.5

#### Months Needed to Enroll Remaining 835 Patients

Average per center per month	Number of centers enrolling									
	8	9	10	11	12	13	14	15	16	17
2	53	47	42	38	35	33	30	28	27	25
2.5	42	38	34	31	28	26	24	23	21	20
3	35	31	28	26	24	22	20	19	18	17

**From:** Susan Hintz  
**To:** neil finer  
**Cc:** Higgins, Rosemary (NIH/NICHD) [F]; petrie@rti.org  
**Subject:** SUPPORT neuroimaging update  
**Date:** Friday, January 05, 2007 6:10:01 PM  
**Attachments:** Jan2007Update.doc

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Hi Neil,

I am attaching the SUPPORT neuroimaging secondary update for next week's meeting - I will be joining on January 11th by phone. I am encouraged by the fact that 142 patients have been enrolled thus far, that Iowa, Utah and Tufts are all using embedded consents (so I expect great things there), and that UCSD is enrolling again! Alabama is the big enroller so far with 37 patients enrolled. Indiana is the site that has IRB approval but has not yet enrolled a patient. In my last email correspondence, they were awaiting a few SUPPORT patients to get closer to 36 weeks to approach families. Neither Wayne nor New Mexico have IRB approval yet, although both are still indicating that they will participate. As you know, Emory, Cincinnati and Yale are not participating.

Pat Barnes is doing rolling readings - I am having Kris at RTI send me MRI's every few weeks as they receive them. I bring them over to Dr. Barnes who completes the readings, then I send them back. He has completed about 25 readings. I have been in contact with the cranial US central readers - I think they would prefer to do 2 or 3 "big" readings in a central location. I think that would actually work out best in that case because I don't like the idea of sending studies all over the country/getting lost/etc.

Thanks again for being so supportive of this secondary, Neil. Let me know if you have any questions or comments or concerns.

Susan

--

Susan R. Hintz, M.D., M.S. Epi  
Assistant Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351

SUPPORT Neuroimaging secondary update  
NICHD NRN Steering Committee Meeting

SUSAN HINTZ  
JANUARY 2007

1) Site participation update

- **14 sites** are now participating or plan to participate in Neuroimaging secondary
  - Two sites still have not received IRB approval
  - One site with approval has not yet enrolled any patients
  - UCSD enrolling again as of December 2006
- 9 sites using separate consent, 5 sites using embedded consent

2) Enrollment update

- Queries sent to sites last month regarding secondary enrollment, completion of 35-42 week neuroimaging, etc.
  - A total of **142 patients** have been enrolled thus far
    - **81 patients:** 35-42 week neuroimaging is complete
    - **39 patients:** enrolled, but too early to get 35-42 week imaging
    - **14 patients:** enrolled, but died before 35-42 week imaging
    - **5 patients:** in “late” window, awaiting imaging
    - **3 patients:** late CUS or MRI “missed”
  - MRI central reader is reading MRI’s in “rolling” fashion after they are sent to RTI from sites, logged in, and sent out – approximately 25 MRI’s have been interpreted and returned to RTI.

3) Tracking

- Thank you to all the sites for their prompt responses to our email queries!
  - **We will be sending email queries to sites every 2-3 months**

4) Reminder: Please remember send copies of CUS and MRI routinely to RTI (every 2-3 months depending on volume of enrollment).

5) Please call or email me with questions, comments, suggestions!

Susan Hintz  
650-723-5711 (office)  
email: [rhintz@stanford.edu](mailto:rhintz@stanford.edu)

I am also very happy to put you or your neuroradiologist in touch with our technologists or with Dr. Barnes.

**THANKS TO ALL THE SITES FOR THEIR HARD WORK ON THIS PROTOCOL!**

**From:** [Monica Konstantino](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** Re: SUPPORT ROP OUTCOME  
**Date:** Monday, January 08, 2007 9:19:51 AM

---

Higgins, Rosemary (NIH/NICHD) [E] wrote:

Thanks

Rose

**From:** Monica Konstantino [<mailto:monica.konstantino@yale.edu>]  
**Sent:** Friday, January 05, 2007 12:17 PM  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SUPPORT ROP OUTCOME

Higgins, Rosemary (NIH/NICHD) [E] wrote:

No SUPP10 forms have been entered though 50 weeks PMA has been 13 (b) (6) reached and the infant did not die early.

We are missing the above SUPPORT ROP outcome. The DSMC will meet in early February and we would like to have all of the ROP outcome data that are available.

Thanks for all your hard work!!  
Rose

Rosemary D. Higgins, M.D.

Program Scientist for the Neonatal Research Network

Pregnancy and Perinatology Branch

Center for Developmental Biology and Perinatal Medicine

NICHD, NIH

6100 Executive Blvd. , Room 4B03B

MSC 7510

Bethesda , MD 20892

(For overnight delivery, use Rockville , MD 20852 )

301-435-7909

301-496-3790 (FAX)

[higginsr@mail.nih.gov](mailto:higginsr@mail.nih.gov)

I am not sure if you received the information from the SUPP10 ROP form that was entered on the day you requested the info. The last exam we have was performed on 8/3/2006 inpatient. Those results are bilateral stage 0, no ROP stage 4 mature. We do have noted in the chart that the baby will be having another exam this month but its not clear why if the vessels were mature. I hope that this is enough info but if you need anything else let me know.

Monica

I just realized that I wrote stage 4, when I meant zone 4. Its recorded correctly in the SUPP10, stage 0,zone 4 bilaterally, mature vessels. sorry about that.

Monica



**From:** Monica Collins  
**To:** Frantz, Ivan; Huitema, Carolyn Petrie; Cbackstrom@salud.unm.edu; mball@leland.stanford.edu; rbara@med.wayne.edu; Mackinnon, Brenda; grisbyca@email.uc.edu; ellen\_hale@oz.ped.emory.edu; ahensman@wihri.org; karen-johnson@uiowa.edu; Georgia.E.McDavid@uth.tmc.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; Karen.Osborne@hsc.utah.edu; dhwilson@iupui.edu; lucmille@iupui.edu; monica.konstantino@yale.edu; auten002@mc.duke.edu; Zaterka-Baxter, Kristin; cotte010@mc.duke.edu; WOh@Lifespan.org; papile@unm.edu; dstevenson@stanford.edu; Walid.Salhab@UTsouthwestern.edu; ambal@sprynet.com; Newman, Jamie; srhintz@stanford.edu; bvohr@wihri.org; Auman, Jeanette O.; Gantz, Marie; McDonald, Scott A.; Schendel, Diana (CDC); Brinkley, Margo E.; Schaefer, Scott E.; Pickett, James; BENJA005@dcri.duke.edu; Carl\_Dangio@urmc.rochester.edu; Brenda.H.Morris@uth.tmc.edu; dale\_phelps@urmc.rochester.edu; nfiner@ucsd.edu; edward-bell@uiowa.edu; Wally Carlo, M.D.; richard.ehrenkranz@yale.edu; Roger.Faix@hsc.utah.edu; Higgins, Rosemary (NIH/NICHD) [E]; alaptook@WIHRI.org; Pablo.Sanchez@UTSouthwestern.edu; kurt.schibler@cchmc.org; sshankar@med.wayne.edu; [SCRN] Stoll, Barbara; jon.e.tyson@uth.tmc.edu; vanmeurs@leland.stanford.edu; mcw3@cwru.edu; kwatterberg@salud.unm.edu; bpoindex@iupui.edu; goldb008@mc.duke.edu; Das, Abhik; mca113@northwestern.edu; Marsha Sumner; gonza025@mc.duke.edu; Karen.Kirby@UTSouthwestern.edu; Ktownsen@med.wayne.edu; lisa.joo@stanford.edu; [SCRN] Dunbar-Scott, Renee; Alice.J.Reardon@uth.tmc.edu; jrose@wihri.org; axt25@po.cwru.edu; debra.camputaro@yale.edu; bvecchio@careNE.org; christina.hayden@duke.edu; cameyer@iupui.edu  
**Subject:** RE: SUPPORT- Last and First  
**Date:** Tuesday, January 02, 2007 2:17:45 PM

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(b) (6) . No HIPPA violation, I am surmising that these are them!  
Monica

---

**From:** Frantz, Ivan [mailto:IFrantz@tufts-nemc.org]  
**Sent:** Tue 1/2/2007 10:15 AM  
**To:** 'Huitema, Carolyn Petrie'; Cbackstrom@salud.unm.edu; mball@leland.stanford.edu; rbara@med.wayne.edu; Monica Collins; Mackinnon, Brenda; grisbyca@email.uc.edu; ellen\_hale@oz.ped.emory.edu; ahensman@wihri.org; karen-johnson@uiowa.edu; Georgia.E.McDavid@uth.tmc.edu; Nancy.Miller@UTSouthwestern.edu; nxs5@cwru.edu; Karen.Osborne@hsc.utah.edu; dhwilson@iupui.edu; lucmille@iupui.edu; monica.konstantino@yale.edu; auten002@mc.duke.edu; Zaterka-Baxter, Kristin; cotte010@mc.duke.edu; WOh@Lifespan.org; papile@unm.edu; dstevenson@stanford.edu; Walid.Salhab@UTsouthwestern.edu; (b) (6) Newman, Jamie; srhintz@stanford.edu; bvohr@wihri.org; Auman, Jeanette O.; Gantz, Marie; McDonald, Scott A.; dcs6@cdc.gov; Brinkley, Margo F.; Schaefer, Scott E.; Pickett, James; BENJA005@dcri.duke.edu; Carl\_Dangio@urmc.rochester.edu; Brenda.H.Morris@uth.tmc.edu; dale\_phelps@urmc.rochester.edu; nfiner@ucsd.edu; edward-bell@uiowa.edu; Wally Carlo, M.D.; richard.ehrenkranz@yale.edu; Roger.Faix@hsc.utah.edu; Frantz, Ivan; higginsr@mail.nih.gov; alaptook@WIHRI.org; Pablo.Sanchez@UTSouthwestern.edu; kurt.schibler@cchmc.org; sshankar@med.wayne.edu; [SCRN] Stoll, Barbara; jon.e.tyson@uth.tmc.edu; vanmeurs@leland.stanford.edu; mcw3@cwru.edu; kwatterberg@salud.unm.edu; bpoindex@iupui.edu; goldb008@mc.duke.edu; Das, Abhik; mca113@northwestern.edu; Marsha Sumner; gonza025@mc.duke.edu; Karen.Kirby@UTSouthwestern.edu; Ktownsen@med.wayne.edu; lisa.joo@stanford.edu; [SCRN] Dunbar-Scott, Renee; Alice.J.Reardon@uth.tmc.edu; jrose@wihri.org; axt25@po.cwru.edu; debra.camputaro@yale.edu; bvecchio@careNE.org; christina.hayden@duke.edu; cameyer@iupui.edu  
**Subject:** SUPPORT- Last and First

I'm pleased to inform you that I believe the Tufts center enrolled the last SUPPORT subject of 2006 and the first of 2007 (b) (6) Happy new year.

\*\*\*\*\*

Confidentiality Notice

\*\*\*\*\*

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If you received this e-mail in error, please contact the sender and delete the e-mail and any attached material immediately. Thank you.

**From:** Susan Hintz  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Subject:** Re: SUPPORT neuroimaging study  
**Date:** Tuesday, January 02, 2007 12:01:58 PM

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I'll talk to you Wednesday - hope the cruise was fun (?) or at least not too stressful.

Susan

>Both responded quickly that they were working on it. We should have  
>them in the next couple of days. I will forward them to you if I  
>get them.  
>I hope you survived the holidays. I will not be in the office until  
>Wednesday this week as the government has been closed in honor of  
>Gerald Ford.

>  
>Take care  
>Rose

>-----  
>Sent from my BlackBerry Wireless Handheld

>  
>  
>----- Original Message -----

>From: Susan Hintz <srhintz@stanford.edu>  
>To: Higgins, Rosemary (NIH/NICHD) [E]  
>Sent: Mon Jan 01 16:51:47 2007  
>Subject: SUPPORT neuroimaging study

>  
>Hi Rose

>  
>I did get the Duke response - I am still waiting for the Alabama and  
>Tufts information. Have you received anything yet?

>  
>Thanks

>  
>Susan

>--  
>Susan R. Hintz, M.D., M.S.  
>Assistant Professor of Pediatrics  
>Division of Neonatal and Developmental Medicine  
>Stanford University School of Medicine  
>750 Welch Road, Suite 315  
>Palo Alto, CA 94304  
>ph: 650-723-5711  
>fax: 650-725-8351

**From:** M.Bethany Ball  
**To:** Higgins, Rosemary (NIH/NICHD) [E]  
**Cc:** vanmeurs@stanford.edu; sr\_hintz  
**Subject:** Re: SUPPORT MRI STUDY  
**Date:** Tuesday, January 02, 2007 12:39:30 AM

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Hi,

The office is undergoing renovations and we don't have access to all study files but here's my best recollection:

13 patients (all) consented for the MRI secondary  
2 died before the window  
4 have not reached the window  
2 are pending (in the window but not imaged yet)  
1 was discharged without an MRI (I think, but it may have been the HUS or it may have been that there was no late imaging at all)  
1 had an MRI but the HUS was done outside the window  
3 are complete

No imaging studies have been shipped to RTI yet.

Best,

Beth

>HI - A couple things for the SUPPORT MRI Study -

>

>Please respond to the following questions by DECEMBER 30TH, 2006

>

>1) How many patients have been enrolled to date in the SUPPORT

>Neuroimaging secondary at your site?

>

>2) How many have completed 35-42 week neuroimaging studies (MRI and CUS)

>

>3) If you have enrolled patients that have not completed 35-42 week

>neuroimaging, please tell us:

> a) How many died before reaching the 35-42 week window?

>b) How many have not yet reached the window?

> c) How many have reached the window, but have not yet been imaged?

> d) How many "missed"/were unsuccessful with a neuroimaging study?

>Please describe: \_\_\_\_\_

>e) Other issues?

>Please describe: \_\_\_\_\_

>

>4) How many of the following neuroimaging studies have been copied

>and sent to RTI?

> Early cranial US? \_\_\_\_\_

> Late cranial US? \_\_\_\_\_

> Brain MRI? \_\_\_\_\_

>

>\*\*Thank you for your hard work and dedication on SUPPORT and the

>Neuroimaging Secondary!\*\*

>

>

>

>

>Rosemary D. Higgins, M.D.

>Program Scientist for the Neonatal Research Network

>Pregnancy and Perinatology Branch  
>Center for Developmental Biology and Perinatal Medicine  
>NICHD, NIH  
>6100 Executive Blvd., Room 4B03B  
>MSC 7510  
>Bethesda, MD 20892  
>(For overnight delivery, use Rockville, MD 20852)  
>301-435-7909  
>301-496-3790 (FAX)  
><<mailto:higginsr@mail.nih.gov>>higginsr@mail.nih.gov  
>

**From:** [Susan Hintz](#)  
**To:** [Higgins, Rosemary \(NIH/NICHD\) \[E\]](#)  
**Subject:** SUPPORT neuroimaging study  
**Date:** Monday, January 01, 2007 4:51:51 PM

---

Hi Rose

I did get the Duke response - I am still waiting for the Alabama and Tufts information. Have you received anything yet?

Thanks

Susan

--

Susan R. Hintz, M.D., M.S.  
Assistant Professor of Pediatrics  
Division of Neonatal and Developmental Medicine  
Stanford University School of Medicine  
750 Welch Road, Suite 315  
Palo Alto, CA 94304  
ph: 650-723-5711  
fax: 650-725-8351