

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

Investigators: Dr. Wally Carlo and Dr. Namasivayan Ambalavanan

Sponsor: National Institute of Child Health and Development (NICHD)

You are being asked to give your permission for your baby to participate in a study designed to determine if using positive airway pressure during resuscitation after birth helps decrease the severity of lung disease in premature babies. We will also be looking at the ranges of oxygen saturation that are currently being used with these same babies. You and your baby were selected as possible participants because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at UAB, along with 15 other centers across the country, are participating in this project sponsored by the by the National Institute of Child Health and Human Development.

This consent form gives you information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risk of the procedures, and possible benefits. Once you are informed about this study, you will be asked if you want your baby to participate; if so, you will be asked to sign this form.

Introduction

Your baby will be born prematurely and is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny lung sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies, the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure after the baby breathes out (resting pressure) makes it easier for the baby to take the next breath. Sometimes a medication called *surfactant* is given to try to help keep the lung sacs expanded.

After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation bag over the baby's nose and mouth to provide oxygen and manual breaths. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated between breaths. This resting pressure is called continuous positive airway pressure or CPAP or PEEP.

UAB – IRB

Consent Form Approval 10-26-04

Expiration Date 09-22-05

Parents' Initials or Those of
Legally Authorized Representative

At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as; fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for a medication given in the babies lungs called surfactant. This study will begin in the delivery room and continue into the nursery to compare the use of CPAP/PEEP and early placement on the breathing machine along with the early use of surfactant to see if we can help lessen the severity of and even possibly prevent long term lung problems in premature infants.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use a machine called a **pulse oximeter** in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough it can cause blindness. It is known that ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950s, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. In going back and looking at how babies in the past were managed, is being suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

Expansion of Procedures

If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into a group that receives early CPAP/PEEP use in the delivery room **or** early placement on the breathing machine (intubation) with the use of surfactant. Both ways are currently used in our hospital and we hope to determine which is the better way for these premature babies.

If your baby is in the Early CPAP group, he/she will be treated with CPAP/PEEP in the delivery room and will remain on it upon admission to the nursery. If, at any time, your baby shows signs of needing intubation for resuscitation purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is in the Early Surfactant and Ventilation group, he/she will be placed on the breathing machine in the delivery room and will be given surfactant within the first hour of birth.

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Legally Authorized Representative

For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines also will help decide when to put them on and take them off of CPAP/PEEP.

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target saturation of 91-95%. All of these saturations are considered normal ranges for premature infants. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

Duration of Study

Your baby will be involved in the ventilation part of this study for the first 14 days after birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record once your baby has been discharged from the hospital. When your baby is 18-22 months old, he/she will be seen in the Newborn Follow Up Clinic for an evaluation.

We expect to include about 1310 babies in this study from all the NICHD Neonatal Research Network hospitals over a two year period.

Possible Benefits

The investigators do not promise or guarantee that your baby will receive direct benefit from being in the study. It will, however, benefit the medical community by providing information regarding lung disease in premature babies.

If he/she is in the group which receives CPAP/PEEP, he/she might benefit by not needing additional breathing support. He/she may not require surfactant to be given into the lungs.

It is possible that using lower pulse oximeter ranges will result in fewer babies with severe Retinopathy of Prematurity (ROP).

Possible Risks

The possible risks of using CPAP/PEEP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP/PEEP at the level used in this study does not increase the risk of collapsed lungs.

Parents' Initials or Those of
Legally Authorized Representative

Like with the use of CPAP/PEEP, a possible risk of being intubated (placed on the breathing machine) may include a temporary slowing of the heart rate or possibly the collapse of one or both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums, or airway.

Other potential risks during resuscitation after birth include the need for chest compressions, rescue medications, and even death. It is not thought that the use of either of these ways of delivering oxygen increases these risks.

Pulse oximeters are used routinely in thousands of premature infants in the United States every day. There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse moving the oximeter to another arm or leg a couple of times a day.

Alternative Procedures

If you do not want your baby to participate in this study, he/she will receive the routine care given in the delivery room and nursery which may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well.

Confidentiality

Information relating to this study, including your name, medical record number, date of birth and social security number may be shared with the billing office of UAB and UAB Health System-affiliated entities so that claims may be appropriately submitted to either the study sponsor or your insurance company for clinical services and procedures provided to you during the course of this study. The results of the treatment may be published for scientific purposes; however, your baby's identity will not be revealed.

If you or your baby receive services in University Hospital, or The Children's Health System as part of this trial, this informed consent will be placed in and made part of your permanent medical record at these facilities.

If your baby is transferred to another hospital or discharged before his/her eyes have reached maturity, then we will call the hospital or eye doctor to find out the results of eye exams that are done after discharge.

Information will be collected from your baby's chart by trained research personnel. It will be labeled with a code number and sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in North Carolina. The study log linking the code number to your baby's identity will be kept under lock and key in the UAB Division of Neonatology Research office. Any information that might identify your baby will not leave UAB. In addition, the NIH/NICHD, the UAB Institutional Review Board (IRB), or the Food and Drug

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Administration (FDA) may monitor the trial records and the individual conducting the review may see your name in the file folder. Otherwise, the records will remain confidential to the extent permitted by law.

Withdrawal Without Prejudice

Participation in this study is voluntary. If you do not wish to participate in this study, your baby will not lose benefits to which he/she is entitled. You are free to withdraw your consent and to discontinue your baby's participation in this project at any time without prejudice against future medical care he/she may receive at this institution. This means that withdrawing him/her will have not effect on the future care or treatment of your baby by physicians or by this institution.

In addition, if the study physician feels that it is in your baby's best interest to be withdrawn from the study, he will do so immediately.

Significant New Findings

Any significant new findings discovered during the course of this study, which may influence your decision to allow your baby to continue participation, will be made known to you.

Costs of Participation

The cost of your baby's standard medical care, including surfactant administration if your baby receives it, will be billed to you and/or your insurance company in the usual manner. The costs of the study will be covered by a research grant. There will be no additional cost to you or your insurance company for expenses related to this study.

Payment for Participating in Research

There will be no payment to you or your baby for participating in this research study.

Payment for Research Related Injuries

If, as a result of your baby's participation, he/she experiences injury from known or unknown risks of the research procedures as described, immediate care and treatment, including hospitalization if necessary, will be available. Neither UAB, The Children's Hospital of Alabama, nor the National Institutes of Health has made provision for monetary compensation in the event of injury resulting from the research, and in the event of such injury, treatment is provided, but is not free of charge. Further information regarding medical treatment can be obtained from Dr. Wally Carlo at 934-4680.

Questions

If you have questions about this study or experience any problems during the study, you should contact Dr. Wally Carlo at (205) 934-4680. You may also reach Monica Collins, RN, Shirley Cosby, RN, or Vivien Phillips, RN at (205) 934-5771. If you have questions about your baby's rights as a research participant, you may contact Ms. Sheila Moore, Director of the Office of Institutional Review Board for Human Use (IRB). Ms. Moore can be reached at (205) 934-3789

Parents' Initials or Those of
Legally Authorized Representative

or 1-800-822-8816, press the option for an operator/attendant and ask for extension 4-3789 between the hours of 8:00 a.m. and 5:00 p.m. CT, Monday through Friday.

Legal Rights

By signing this consent form, you are not waiving any of your or your child's legal rights.

Signatures

You are making a voluntary decision whether or not to let your baby participate in this study. Your signature below indicates that you have decided to let your baby participate, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction, and that you have received a copy of this signed consent form.

Signature of Parent or
Legally Authorized Representative

Date

Signature of Person Obtaining Consent
If other than the Principal Investigator

Date

Signature of Principal Investigator

Date

Signature of Witness

Date

WAIVER OF ASSENT

The assent of _____ (name of child) has been waived because of age.

Signature of Parent or
Legally Authorized Representative

Date



University of Alabama at Birmingham
AUTHORIZATION FOR USE/DISCLOSURE OF HEALTH INFORMATION
FOR RESEARCH

You are being asked to sign this form to serve as authorization for UAB to use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research. Once this information has been disclosed, it may be subject to redisclosure and no longer be protected by federal privacy regulations.

Participant Name: _____
Research Protocol: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

UAB IRB Protocol Number: F040910010
Principal Investigator: Wally Carlo, MD; Namasisvayan Ambalavanan, MD

Sponsor: National Institute of Child Health and Development (NICHD)

Persons/organizations providing the information (check all that apply):

- | | |
|--|---|
| <input checked="" type="checkbox"/> University Hospital | <input type="checkbox"/> UAB Clinics: _____ |
| <input type="checkbox"/> Kirklin Clinic/Health Services Foundation ("HSF") | <input type="checkbox"/> Callahan Eye Foundation Hospital ("CEFH") |
| <input checked="" type="checkbox"/> The Children's Hospital of Alabama | <input type="checkbox"/> Jefferson County Department of Public Health |
| <input type="checkbox"/> Other: _____ | |

Description of health information to be provided: All medical information and personal identifiers including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Persons/organizations receiving the information: The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, Children's, CEFH and the Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies such as the Food and Drug Administration.

Authorization Expiration: Completion of Research Protocol

Authorization Revocation: You or your legally authorized representative must read and initial the following:

Initials: _____ I understand that I may revoke this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If I revoke this Authorization, it will not have any effect to the extent UAB took action in reliance on the Authorization and any research data generated prior to revocation may still be used by the researcher.

Signature of participant: _____ Date: _____

OR

Signature of legally authorized representative: _____ Date: _____

Printed name of participant's representative: _____

Relationship to the participant: _____

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

Investigators: Dr. Wally Carlo and Dr. Namasivayan Ambalavanan

Sponsor: National Institute of Child Health and Development (NICHD)

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This consent form gives you information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risk of the procedures, and possible benefits. Once you are informed about this study, you will be asked if you want your baby to participate; if so, you will be asked to sign this form.

Introduction

Your baby will be born prematurely and is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny lung sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies, the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure after the baby breathes out (resting pressure) makes it easier for the baby to take the next breath. Sometimes a medication called *surfactant* is given to try to help keep the lung sacs expanded.

After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation bag over the baby's nose and mouth to provide oxygen and manual breaths. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated between breaths. This resting pressure is called continuous positive airway pressure or CPAP or PEEP.

UAB -- IRB

Consent Form Approval 02-22-05

Expiration Date 09-22-05

Parents' Initials or Those of
Legally Authorized Representative

At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as; fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for a medication given in the babies lungs called surfactant. This study will begin in the delivery room and continue into the nursery to compare the use of CPAP/PEEP and early placement on the breathing machine along with the early use of surfactant to see if we can help lessen the severity of and even possibly prevent long term lung problems in premature infants.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use a machine called a **pulse oximeter** in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough it can cause blindness. It is known that ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950s, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. In going back and looking at how babies in the past were managed, it is being suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

Expansion of Procedures

If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into a group that receives early CPAP/PEEP use in the delivery room **or** early placement on the breathing machine (intubation) with the use of surfactant. Both ways are currently used in our hospital and we hope to determine which is the better way for these premature babies.

If your baby is in the Early CPAP group, he/she will be treated with CPAP/PEEP in the delivery room and will remain on it upon admission to the nursery. If, at any time, your baby shows signs of needing intubation for resuscitation purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is in the Early Surfactant and Ventilation group, he/she will be placed on the breathing machine in the delivery room and will be given surfactant within the first hour of birth. For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to

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try and take them off the breathing machines. These guidelines also will help decide when to put them on and take them off of CPAP/PEEP.

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target saturation of 91-95%. All of these saturations are considered normal ranges for premature infants. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

If your baby is still receiving oxygen close to the time of discharge (at approximately 36 weeks corrected age) a test will be done to determine the severity of lung disease that may be present. During this test, the oxygen your baby is receiving will be decreased gradually while continuously measuring oxygen saturation with the pulse oximeter. If the saturation falls below an acceptable range, your baby will then be returned to the prior oxygen level.

Duration of Study

Your baby will be involved in the ventilation part of this study for the first 14 days after birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record once your baby has been discharged from the hospital. When your baby is 18-22 months old, he/she will be seen in the Newborn Follow Up Clinic for an evaluation.

We expect to include about 1310 babies in this study from all the NICHD Neonatal Research Network hospitals over a two year period.

Possible Benefits

The investigators do not promise or guarantee that your baby will receive direct benefit from being in the study. It will, however, benefit the medical community by providing information regarding lung disease in premature babies.

If he/she is in the group which receives CPAP/PEEP, he/she might benefit by not needing additional breathing support. He/she may not require surfactant to be given into the lungs.

It is possible that using lower pulse oximeter ranges will result in fewer babies with severe Retinopathy of Prematurity (ROP).

Possible Risks

The possible risks of using CPAP/PEEP include stomach bloating and a temporary slowing of

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Legally Authorized Representative

the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP/PEEP at the level used in this study does not increase the risk of collapsed lungs. Like with the use of CPAP/PEEP, a possible risk of being intubated (placed on the breathing machine) may include a temporary slowing of the heart rate or possibly the collapse of one or both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums, or airway.

Other potential risks during resuscitation after birth include; the need for chest compressions, rescue medications, and even death. It is not thought that the use of either of these ways of delivering oxygen increases these risks.

Pulse oximeters are used routinely in thousands of premature infants in the United States every day. There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse moving the oximeter to another arm or leg a couple of times a day.

Alternative Procedures

If you do not want your baby to participate in this study, he/she will receive the routine care given in the delivery room and nursery which may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well.

Confidentiality

Information relating to this study, including your name, medical record number, date of birth and social security number may be shared with the billing office of UAB and UAB Health System-affiliated entities so that claims may be appropriately submitted to either the study sponsor or your insurance company for clinical services and procedures provided to you during the course of this study. The results of the treatment may be published for scientific purposes; however, your baby's identity will not be revealed.

If you or your baby receive services in University Hospital, or The Children's Health System as part of this trial, this informed consent will be placed in and made part of your permanent medical record at these facilities.

If your baby is transferred to another hospital or discharged before his/her eyes have reached maturity, then we will call the hospital or eye doctor to find out the results of eye exams that are done after discharge.

Information will be collected from your baby's chart by trained research personnel. It will be labeled with a code number and sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in North Carolina. The study log linking the code number to your baby's identity will be kept under lock and key in the UAB Division of Neonatology

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Research office. Any information that might identify your baby will not leave UAB. In addition, the NIH/NICHD, the UAB Institutional Review Board (IRB), or the Food and Drug Administration (FDA) may monitor the trial records and the individual conducting the review may see your name in the file folder. Otherwise, the records will remain confidential to the extent permitted by law.

Withdrawal Without Prejudice

Participation in this study is voluntary. If you do not wish to participate in this study, your baby will not lose benefits to which he/she is entitled. You are free to withdraw your consent and to discontinue your baby's participation in this project at any time without prejudice against future medical care he/she may receive at this institution. This means that withdrawing him/her will have no effect on the future care or treatment of your baby by physicians or by this institution.

In addition, if the study physician feels that it is in your baby's best interest to be withdrawn from the study, he will do so immediately.

Significant New Findings

Any significant new findings discovered during the course of this study, which may influence your decision to allow your baby to continue participation, will be made known to you.

Costs of Participation

The cost of your baby's standard medical care, including surfactant administration if your baby receives it, will be billed to you and/or your insurance company in the usual manner. The costs of the study will be covered by a research grant. There will be no additional cost to you or your insurance company for expenses related to this study.

Payment for Participating in Research

There will be no payment to you or your baby for participating in this research study.

Payment for Research Related Injuries

If, as a result of your baby's participation, he/she experiences injury from known or unknown risks of the research procedures as described, immediate care and treatment, including hospitalization if necessary, will be available. Neither UAB, The Children's Hospital of Alabama, nor the National Institutes of Health has made provision for monetary compensation in the event of injury resulting from the research, and in the event of such injury, treatment is provided, but is not free of charge. Further information regarding medical treatment can be obtained from Dr. Wally Carlo at 934-4680.

Questions

If you have questions about this study or experience any problems during the study, you should contact Dr. Wally Carlo at (205) 934-4680. You may also reach Monica Collins, RN, Shirley Cosby, RN, or Vivien Phillips, RN at (205) 934-5771. If you have questions about your baby's

Parents' Initials or Those of
Legally Authorized Representative

rights as a research participant, you may contact Ms. Sheila Moore, Director of the Office of Institutional Review Board for Human Use (IRB). Ms. Moore can be reached at (205) 934-3789 or 1-800-822-8816, press the option for an operator/attendant and ask for extension 4-3789 between the hours of 8:00 a.m. and 5:00 p.m. CT, Monday through Friday.

Legal Rights

By signing this consent form, you are not waiving any of your or your child's legal rights.

Signatures

You are making a voluntary decision whether or not to let your baby participate in this study. Your signature below indicates that you have decided to let your baby participate, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction, and that you have received a copy of this signed consent form.

Signature of Parent or
Legally Authorized Representative

Date

Signature of Person Obtaining Consent
If other than the Principal Investigator

Date

Signature of Principal Investigator

Date

Signature of Witness

Date

WAIVER OF ASSENT

The assent of _____ (name of child) has been waived because of age.

Signature of Parent or
Legally Authorized Representative

Date



University of Alabama at Birmingham
AUTHORIZATION FOR USE/DISCLOSURE OF HEALTH INFORMATION
FOR RESEARCH

You are being asked to sign this form to serve as authorization for UAB to use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research. Once this information has been disclosed, it may be subject to redisclosure and no longer be protected by federal privacy regulations.

Participant Name: _____
Research Protocol: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

UAB IRB Protocol Number: F040910010
Principal Investigator: Wally Carlo, MD; Namasivayan Ambalavanan, MD

Sponsor: National Institute of Child Health and Development (NICHD)

Persons/organizations providing the information (check all that apply):

- | | |
|--|---|
| <input checked="" type="checkbox"/> University Hospital | <input type="checkbox"/> UAB Clinics: _____ |
| <input type="checkbox"/> Kirklin Clinic/Health Services Foundation ("HSF") | <input type="checkbox"/> Callahan Eye Foundation Hospital ("CEFH") |
| <input checked="" type="checkbox"/> The Children's Hospital of Alabama | <input type="checkbox"/> Jefferson County Department of Public Health |
| <input type="checkbox"/> Other: _____ | |

Description of health information to be provided: All medical information and personal identifiers including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Persons/organizations receiving the information: The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, Children's, CEFH and the Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies such as the Food and Drug Administration.

Authorization Expiration: Completion of Research Protocol

Authorization Revocation: You or your legally authorized representative must read and initial the following:

Initials: _____ I understand that I may revoke this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If I revoke this Authorization, it will not have any effect to the extent UAB took action in reliance on the Authorization and any research data generated prior to revocation may still be used by the researcher.

Signature of participant: _____ Date: _____

OR

Signature of legally authorized representative: _____ Date: _____

Printed name of participant's representative: _____

Relationship to the participant: _____

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

Investigators: Dr. Wally Carlo and Dr. Namasivayan Ambalavanan

Sponsor: National Institute of Child Health and Development (NICHD)

You are being asked to give your permission for your baby to participate in a study designed to determine if using positive airway pressure during resuscitation after birth helps decrease the severity of lung disease in premature babies. We will also be looking at the ranges of oxygen saturation that are currently being used with these same babies. You and your baby were selected as possible participants because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at UAB, along with 15 other centers across the country, are participating in this project sponsored by the by the National Institute of Child Health and Human Development.

This consent form gives you information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risk of the procedures, and possible benefits. Once you are informed about this study, you will be asked if you want your baby to participate; if so, you will be asked to sign this form.

Introduction

Your baby will be born prematurely and is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny air sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies, the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure in the lungs after the baby breathes out (resting pressure) makes it easier for the baby to take the next breath. Sometimes a medication called *surfactant* is given to try to help keep the lung sacs expanded.

After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation bag over the baby's nose and mouth to provide oxygen and manual breaths. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated between breaths. This resting pressure is called continuous positive airway pressure or CPAP or PEEP.

UAB – IRB

Consent Form Approval 8-10-05

Expiration Date 8-10-06

Parents' Initials or Those of
Legally Authorized Representative

At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as; fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for a medication given in the babies lungs called surfactant. This study will begin in the delivery room and continue into the nursery to compare the use of CPAP/PEEP and early placement on the breathing machine along with the early use of surfactant to see if we can help lessen the severity of and even possibly prevent long term lung problems in premature infants.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use a machine called a **pulse oximeter** in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough it can cause blindness. It is known that ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950s, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. In going back and looking at how babies in the past were managed, is being suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

Expansion of Procedures

If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into a group that receives early CPAP/PEEP use in the delivery room **or** early placement on the breathing machine (intubation) with the use of surfactant. Both ways are currently used in our hospital and we hope to determine which is the better way for these premature babies.

If your baby is in the Early CPAP group, he/she will be treated with CPAP/PEEP in the delivery room and will remain on it upon admission to the nursery. If, at any time, your baby shows signs of needing intubation for resuscitation purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is in the Early Surfactant and Ventilation group, he/she will be placed on the breathing machine in the delivery room and will be given surfactant within the first hour of birth. For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines will also help decide when to put them on and take them off of CPAP/PEEP.

Parents' Initials or Those of
Legally Authorized Representative

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target saturation of 91-95%. All of these saturations are considered normal ranges for premature infants. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

If your baby is still receiving oxygen close to the time of discharge (at approximately 36 weeks corrected age) a test will be done to determine the severity of lung disease that may be present. During this test, the oxygen your baby is receiving will be decreased gradually while continuously measuring oxygen saturation with the pulse oximeter. If the saturation falls below an acceptable range, your baby will then be returned to the prior oxygen level.

Duration of Study

Your baby will be involved in the ventilation part of this study for the first 14 days after birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record once your baby has been discharged from the hospital.

We expect to include about 1310 babies in this study from all the NICHD Neonatal Research Network hospitals over a two year period.

Long Term Follow-up

When your baby is 18-22 months old, he/she will be seen in the Newborn Follow Up Clinic for an evaluation. At this visit, we will ask you a few extra questions about your baby's health. It is also possible that you may be contacted in the future for further long term follow up for the study.

Possible Benefits

The investigators do not promise or guarantee that your baby will receive direct benefit from being in the study. It will, however, benefit the medical community by providing information regarding lung disease in premature babies.

If he/she is in the group which receives CPAP/PEEP, he/she might benefit by not needing additional breathing support. He/she may not require surfactant to be given into the lungs.

It is possible that using lower pulse oximeter ranges will result in fewer babies with severe Retinopathy of Prematurity (ROP).

Parents' Initials or Those of
Legally Authorized Representative

Possible Risks

The possible risks of using CPAP/PEEP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP/PEEP at the level used in this study does not increase the risk of collapsed lungs. Like with the use of CPAP/PEEP, a possible risk of being intubated (placed on the breathing machine) may include a temporary slowing of the heart rate or possibly the collapse of one or both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums, or airway.

Other potential risks during resuscitation after birth include; the need for chest compressions, rescue medications, and even death. It is not thought that the use of either of these ways of delivering oxygen to the baby's lungs increases these risks.

Pulse oximeters are used routinely in thousands of premature infants in the United States every day. There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse moving the oximeter to another arm or leg a couple of times a day.

Alternative Procedures

If you do not want your baby to participate in this study, he/she will receive the routine care given in the delivery room and nursery which may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well.

Confidentiality

Information relating to this study, including your name, medical record number, date of birth and social security number may be shared with the billing office of UAB and UAB Health System-affiliated entities so that claims may be appropriately submitted to either the study sponsor or your insurance company for clinical services and procedures provided to you during the course of this study. The results of the treatment may be published for scientific purposes; however, your baby's identity will not be revealed.

If you or your baby receive services in University Hospital, or The Children's Health System as part of this trial, this informed consent will be placed in and made part of your baby's permanent medical record at these facilities.

If your baby is transferred to another hospital or discharged before his/her eyes have reached maturity, then we will call the hospital or eye doctor to find out the results of eye exams that are done after discharge.

Information will be collected from your baby's chart by trained research personnel. It will be labeled with a code number and sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in North Carolina. The study log linking the code number to your baby's identity will be kept under lock and key in the UAB Division of Neonatology

Parents' Initials or Those of
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Research office. Any information that might identify your baby will not leave UAB. In addition, the NIH/NICHD, the UAB Institutional Review Board (IRB), or the Food and Drug Administration (FDA) may monitor the trial records and the individual conducting the review may see your name in the file folder. Otherwise, the records will remain confidential to the extent permitted by law.

Withdrawal Without Prejudice

Participation in this study is voluntary. If you do not wish to participate in this study, your baby will not lose benefits to which he/she is entitled. You are free to withdraw your consent and to discontinue your baby's participation in this project at any time without prejudice against future medical care he/she may receive at this institution. This means that withdrawing him/her will have no effect on the future care or treatment of your baby by physicians or by this institution.

In addition, if the study physician feels that it is in your baby's best interest to be withdrawn from the study, he will do so immediately.

Significant New Findings

Any significant new findings discovered during the course of this study, which may influence your decision to allow your baby to continue participation, will be made known to you.

Costs of Participation

The cost of your baby's standard medical care, including surfactant administration if your baby receives it, will be billed to you and/or your insurance company in the usual manner. The costs of the study will be covered by a research grant. There will be no additional cost to you or your insurance company for expenses related to this study.

Payment for Participating in Research

There will be no payment to you or your baby for participating in this research study.

Payment for Research Related Injuries

If, as a result of your baby's participation, he/she experiences injury from known or unknown risks of the research procedures as described, immediate care and treatment, including hospitalization if necessary, will be available. Neither UAB, The Children's Hospital of Alabama, nor the National Institutes of Health has made provision for monetary compensation in the event of injury resulting from the research, and in the event of such injury, treatment is provided, but is not free of charge. Further information regarding medical treatment can be obtained from Dr. Wally Carlo at 934-4680.

Questions

If you have questions about this study or experience any problems during the study, you should contact Dr. Wally Carlo at (205) 934-4680. You may also reach Monica Collins, RN, Shirley Cosby, RN, or Vivien Phillips, RN at (205) 934-5771. If you have questions about your baby's

Parents' Initials or Those of
Legally Authorized Representative

rights as a research participant, you may contact Ms. Sheila Moore, Director of the Office of Institutional Review Board for Human Use (IRB). Ms. Moore can be reached at (205) 934-3789 or 1-800-822-8816, press the option for an operator/attendant and ask for extension 4-3789 between the hours of 8:00 a.m. and 5:00 p.m. CT, Monday through Friday.

Legal Rights

By signing this consent form, you are not waiving any of your or your child's legal rights.

Signatures

You are making a voluntary decision whether or not to let your baby participate in this study. Your signature below indicates that you have decided to let your baby participate, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction, and that you have received a copy of this signed consent form.

Signature of Parent or
Legally Authorized Representative

Date

Signature of Person Obtaining Consent
If other than the Principal Investigator

Date

Signature of Principal Investigator

Date

Signature of Witness

Date

WAIVER OF ASSENT

The assent of _____ (name of child) has been waived because of age.

Signature of Parent or
Legally Authorized Representative

Date



University of Alabama at Birmingham

**Authorization for Use/Disclosure of Health Information
for Research**



What is the purpose of this form? You are being asked to sign this form so that UAB may use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research.

Participant name: _____ **UAB IRB Protocol Number:** F040910010

Research Protocol: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

Principal Investigators: Wally Carlo, MD;
Namasivayan Ambalavanan, MD

Sponsor: National Institute of Child Health and Development (NICHD)

What health information do the researchers want to use? All medical information and personal identifiers; including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Why do the researchers want my health information? The researchers want to use your health information as part of the research protocol listed above and described to you in the Informed Consent document.

Who will disclose, use and/or receive my health information? The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, The Children's Hospital of Alabama, Callahan Eye Foundation Hospital and the Jefferson County Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies, such as the Food and Drug Administration.

How will my health information be protected once it is given to others? Your health information that is given to the study sponsor will remain private to the extent possible, even though the study sponsor is not required to follow the federal privacy laws. However, once your information is given to other organizations that are not required to follow federal privacy laws, we cannot assure that the information will remain protected.

How long will this Authorization last? Your authorization for the uses and disclosures described in this Authorization does not have an expiration date.

Can I cancel the Authorization? You may cancel this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If you cancel this Authorization, the study doctor and staff will not use any new health information for research. However, researchers may continue to use the health information that was provided before you cancelled your authorization.

Can I see my health information? You have a right to request to see your health information. However, to ensure the scientific integrity of the research, you will not be able to review the research information until after the research protocol has been completed.

Signature of participant: _____ Date: _____
or participants' legally authorized representative: _____ Date: _____
Printed Name of participant's representative: _____
Relationship to the participant: _____

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT Study)

Title of Secondary Research: Neuroimaging and Neurodevelopmental Outcome (MRI Study)
Postnatal Growth of Infants Enrolled in SUPPORT Study (Growth Study)

Investigators: Dr. Wally Carlo and Dr. Namasivayan Ambalavanan

Sponsor: National Institute of Child Health and Development (NICHD)

You are being asked to give your permission for your baby to participate in a study designed to determine if using positive airway pressure during resuscitation after birth helps decrease the severity of lung disease in premature babies. We will also be looking at the ranges of oxygen saturation that are currently being used with these same babies. You and your baby were selected as possible participants because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at UAB, along with 15 other centers across the country, are participating in this project sponsored by the by the National Institute of Child Health and Human Development.

This consent form gives you information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risk of the procedures, and possible benefits. Once you are informed about this study, you will be asked if you want your baby to participate; if so, you will be asked to sign this form.

Introduction

If born prematurely, your baby is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny air sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies, the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure in the lungs after the baby breathes out (resting pressure) makes it easier for the baby to take the next breath. Sometimes a medication called *surfactant* is given to try to help keep the lung sacs expanded.

After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation bag over the baby's nose and mouth to provide oxygen and manual breaths. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated between breaths. This resting pressure is called continuous positive airway pressure or CPAP or PEEP.

At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as: fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for a medication given in the babies lungs called surfactant. This study will begin in the delivery room and continue into the nursery to compare the use of CPAP/PEEP and early placement on the breathing machine along with the early use of surfactant to see if we can help lessen the severity of and even possibly prevent long term lung problems in premature infants.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use a machine called a **pulse oximeter** in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough, it can cause blindness. It is known that ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950s, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. In going back and looking at how babies in the past were managed, it is being suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

Expansion of Procedures

SUPPORT Study: If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into a group that receives early CPAP/PEEP use in the delivery room **or** early placement on the breathing machine (intubation) with the use of surfactant. Both ways are currently used in our hospital and we hope to determine which is the better way for these premature babies.

If your baby is in the Early CPAP group, he/she will be treated with CPAP/PEEP in the delivery room and will remain on it upon admission to the nursery. If, at any time, your baby shows signs of needing intubation for resuscitation purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is in the Early Surfactant and Ventilation group, he/she will be placed on the breathing machine in the delivery room and will be given surfactant within the first hour of birth.

For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines will also help decide when to put babies on and take them off of CPAP/PEEP.

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target saturation of 91-95%. All of these saturations are considered normal ranges for premature infants. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

If your baby is still receiving oxygen close to the time of discharge (at approximately 36 weeks corrected age) a test will be done to determine the severity of lung disease that may be present. During this test, the oxygen your baby is receiving will be decreased gradually while continuously measuring oxygen saturation with the pulse oximeter. If the saturation falls below an acceptable range, your baby will then be returned to the prior oxygen level.

MRI Study: Part of your baby's regular care during the first few months after birth will include one or more head ultrasounds. The first one usually occurs during the first 2 weeks. There is also one done closer to the time of your baby's due date. In addition to the routine head ultrasound done close to your baby's due date, we would like to ask your permission to also do Magnetic Resonance Imaging (MRI) on your baby. The MRI is a common procedure that uses a magnetic field to make pictures of the inside of the head. It does this by taking a closer look at the tiny particles that are in the brain. Your baby will be placed on a narrow bed for about 20-30 minutes while the machine scans the brain and makes pictures. Your baby will not be exposed to any radiation when having the MRI done. The magnetic fields do not cause any known harmful effects at the levels used in the MRI machine. National and local guidelines have been developed for MRI machines, and these recommendations will be followed.

The ultrasound and MRI pictures of your baby's brain will be looked at by radiologists (doctors who are specialists in X-rays and other pictures of the body). Your doctors will tell you what they find. Because this study will be done in several hospitals across the United States, the ultrasound and MRI pictures from babies who participate will also be seen by other radiologists. They will look at all the pictures from all the babies.

Growth Study: It is routine care in the nursery to weigh and measure babies to watch their growth. With this secondary study to the SUPPORT Study, we will be collecting weight and measurements along with feeding information to take a closer look at how your baby grows.

Duration of Study

Your baby will be involved in the ventilation part of this study for the first 14 days after birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record throughout your baby's hospitalization.

We expect to include about 1310 babies in this study from all the NICHD Neonatal Research Network hospitals over a two year period.

Long Term Follow-up

When your baby is 18-22 months old, he/she will be seen in the Newborn Follow Up Clinic for an evaluation. At this visit, we will ask you a few extra questions about your baby's health. It is also possible that you may be contacted in the future for further long term follow up for the study.

Possible Benefits

The investigators do no promise or guarantee that your baby will receive any direct benefit from participating in the SUPPORT Study or any of the secondary studies. Participation will, however, benefit the medical community by providing valuable information which may help us treat babies in the future.

SUPPORT Study: If he/she is in the group which receives CPAP/PEEP, he/she might benefit by not needing additional breathing support. He/she may not require surfactant to be given into the lungs.

It is possible that using lower pulse oximeter ranges will result in fewer babies with severe Retinopathy of Prematurity (ROP).

MRI Study: There may be benefits to your baby directly, including findings of brain injury which will allow for earlier intervention than would normally occur.

Growth Study: There is no direct benefit to participating in this secondary study.

Possible Risks

SUPPORT Study: The possible risks of using CPAP/PEEP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP/PEEP at the level used in this study does not increase the risk of collapsed lungs.

Like with the use of CPAP/PEEP, a possible risk of being intubated (placed on the breathing machine) may include a temporary slowing of the heart rate or possibly the collapse of one or

both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums, or airway.

Other potential risks during resuscitation after birth include; the need for chest compressions, rescue medications, and even death. It is not thought that the use of either of these ways of delivering oxygen to the baby's lungs increases these risks.

There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse moving the oximeter to another arm or leg a couple of times a day.

CPAP/PEEP, intubation, and pulse oximetry are commonly used in the newborn intensive care (NICU). Study participation should not increase these risks because all procedures are carried out by experienced NICU staff.

MRI Study: The risks of participating in this secondary study are minimal. The head ultrasound is a routine part of the care of a premature baby, and the way it is performed will not be changed for this study, nor does it cause any discomfort for the baby. The MRI is often done on babies whenever the doctor feels that it will give him information he needs to treat the baby. For this study, all participants who agree to participate will have an MRI done after getting the approval of the attending physician. The "tapping" noise that the MRI machine makes may agitate your baby. To minimize this, your baby's ears will be covered while the MRI is being done.

Your baby may also need to be given medicine to make him/her drowsy for the MRI. A possible risk of sedation is breathing difficulty. Your baby's heart rate and breathing will be closely monitored by an experienced baby nurse to reduce this risk.

Growth Study: There are no risks to participating in this secondary study.

Alternative Procedures

If you do not want your baby to participate in this study, he/she will receive the routine care given in the delivery room and nursery. The routine care may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well. Routine care in the nursery may or may not include MRI.

Confidentiality

Information relating to this study, including your name, medical record number, date of birth and social security number may be shared with the billing office of UAB and UAB Health System-

affiliated entities so that claims may be appropriately submitted to either the study sponsor or your insurance company for clinical services and procedures provided to you during the course of this study. The results of the treatment may be published for scientific purposes; however, your baby's identity will not be revealed. If you or your baby receive services in University

Hospital, or The Children's Health System as part of this trial, this informed consent will be placed in and made part of your baby's permanent medical record at these facilities.

If your baby is transferred to another hospital or discharged before his/her eyes have reached maturity, then we will call the hospital or eye doctor to find out the results of eye exams that are done after discharge.

Information will be collected from your baby's chart by trained research personnel. It will be labeled with a code number and sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in North Carolina. The study log linking the code number to your baby's identity will be kept under lock and key in the UAB Division of Neonatology Research office. Any information that might identify your baby will not leave UAB. In addition, the NIH/NICHD, the UAB Institutional Review Board (IRB), or the Food and Drug Administration (FDA) may monitor the trial records and the individual conducting the review may see your name in the file folder. Otherwise, the records will remain confidential to the extent permitted by law.

Withdrawal Without Prejudice

Participation in this study is voluntary. If you do not wish to participate in this study, your baby will not lose benefits to which he/she is entitled. You are free to withdraw your consent and to discontinue your baby's participation in this project at any time without prejudice against future medical care he/she may receive at this institution. This means that withdrawing him/her will have no effect on the future care or treatment of your baby by physicians or by this institution.

In addition, if the study physician feels that it is in your baby's best interest to be withdrawn from the study, he will do so immediately.

Significant New Findings

Any significant new findings discovered during the course of this study, which may influence your decision to allow your baby to continue participation, will be made known to you.

Costs of Participation

The cost of your baby's standard medical care, including surfactant administration and head ultrasounds, will be billed to you and/or your insurance company in the usual manner. The costs of the study, including the MRI that will be done close to your baby's due date, will be covered by a research grant. If any other MRI's are ordered by your baby's doctor as part of clinical care, they will be billed to you or your insurance company. There will be no additional cost to you or your insurance company for expenses related to this study.

Payment for Participating in Research

There will be no payment to you or your baby for participating in this research study.

Payment for Research Related Injuries

If, as a result of your baby's participation, he/she experiences injury from known or unknown risks of the research procedures as described, immediate care and treatment, including

hospitalization if necessary, will be available. Neither UAB, The Children's Hospital of Alabama, nor the National Institutes of Health has made provision for monetary compensation in the event of injury resulting from the research, and in the event of such injury, treatment is provided, but is not free of charge. Further information regarding medical treatment can be obtained from Dr. Wally Carlo at 934-4680.

Questions

If you have questions about this study or experience any problems during the study, you should contact Dr. Wally Carlo at (205) 934-4680. You may also reach Monica Collins, RN, Shirley Cosby, RN, or Vivien Phillips, RN at (205) 934-5771. If you have questions about your baby's rights as a research participant, you may contact Ms. Sheila Moore, Director of the Office of Institutional Review Board for Human Use (IRB). Ms. Moore can be reached at (205) 934-3789 or 1-800-822-8816, press the option for an operator/attendant and ask for extension 4-3789 between the hours of 8:00 a.m. and 5:00 p.m. CT, Monday through Friday.

Legal Rights

By signing this consent form, you are not waiving any of your or your child's legal rights.

Optional Participation in Secondary Studies

Please sign your choice below:

Neuroimaging and Neurodevelopmental Outcome (MRI Study)

_____ I agree to allow my baby to participate in the MRI Secondary Study.

_____ I **Do Not** agree to allow my baby to participate in the MRI Secondary Study.

Postnatal Growth of Infants enrolled in the SUPPORT Study (Growth Study)

_____ I agree to allow my baby to participate in the Growth Secondary Study.

_____ I **Do Not** agree to allow my baby to participate in the Growth Secondary Study.

Signatures

You are making a voluntary decision whether or not to let your baby participate in this study. Your signature below indicates that you have decided to let your baby participate, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction. The consent form will remain in the files at UAB Division of Neonatology and a copy will be placed in your baby's medical record. You will receive a copy of this signed consent form.

Signature of Parent or
Legally Authorized Representative

Date

Signature of Person Obtaining Consent
If other than the Principal Investigator

Date

Signature of Principal Investigator

Date

Signature of Witness

Date

WAIVER OF ASSENT

The assent of _____ (name of child) has been waived because of age.

Signature of Parent or
Legally Authorized Representative

Date



University of Alabama at Birmingham

**Authorization for Use/Disclosure of Health Information
for Research**



What is the purpose of this form? You are being asked to sign this form so that UAB may use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research.

Participant name: _____

UAB IRB Protocol Number F040910010
F050922007 and X060418004

Research Protocol: *The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants; Secondary Studies: Neuroimaging and Neurodevelopmental Outcome and Postnatal Growth of Infants Enrolled in SUPPORT*

Principal Investigator: *Wally Carlo, MD, Namasivayan Ambalavanan, MD*

Sponsor: *National Institute of Child Health and Development (NICHD)*

What health information do the researchers want to use? All medical information and personal identifiers including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Why do the researchers want my health information? The researchers want to use your health information as part of the research protocol listed above and described to you in the Informed Consent document.

Who will disclose, use and/or receive my health information? The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, The Children's Hospital of Alabama, Callahan Eye Foundation Hospital and the Jefferson County Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies, such as the Food and Drug Administration.

How will my health information be protected once it is given to others? Your health information that is given to the study sponsor will remain private to the extent possible, even though the study sponsor is not required to follow the federal privacy laws. However, once your information is given to other organizations that are not required to follow federal privacy laws, we cannot assure that the information will remain protected.

How long will this Authorization last? Your authorization for the uses and disclosures described in this Authorization does not have an expiration date.

Can I cancel the Authorization? You may cancel this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If you cancel this Authorization, the study doctor and staff will not use any new health information for research. However, researchers may continue to use the health information that was provided before you cancelled your authorization.

Can I see my health information? You have a right to request to see your health information. However, to ensure the scientific integrity of the research, you will not be able to review the research information until after the research protocol has been completed.

Signature of participant: _____ Date: _____

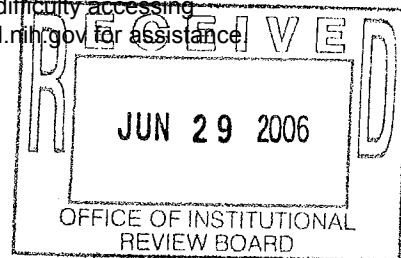
or participants' legally authorized representative: _____ Date: _____

Printed Name of participant's representative: _____

Relationship to the participant: _____



Department of Pediatrics
Division of Neonatology



DATE: June 29, 2006

TO: Institutional Review Board

FROM: Wally Carlo, MD
Shirley Cosby, RN

SUBJECT: **F040910010** -The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT); **F05092207**- Neuroimaging and Neurodevelopmental Outcome (MRI Study); and **X060418004**- Postnatal Growth of Infants Enrolled in SUPPORT Study (Growth Study)

To clarify the relationship between the SUPPORT Study and the two secondary studies (MRI Study and Growth Study):

Subjects will be recruited into the SUPPORT Study. During the consent process, it will be explained to the parents that the baby will also be eligible for the other two secondary studies (MRI Study and Growth Study) if he/she participates in the SUPPORT Study. These secondary studies are only for participants of the SUPPORT study and will be offered to the parents as optional studies. They will be asked to signify their decision by signing under the "Optional Participation in Secondary Studies" section. They may "opt out" of either or both of the optional studies if they so wish.

Please call if you have any questions regarding these studies.

RECEIVED AND NOTED

Denise Ball 07-05-06
IRB REVIEWER

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT Study)

Title of Secondary Research: Neuroimaging and Neurodevelopmental Outcome (MRI Study)
Postnatal Growth of Infants Enrolled in SUPPORT Study (Growth Study)

Investigators: Dr. Wally Carlo and Dr. Namasivayan Ambalavanan

Sponsor: National Institute of Child Health and Development (NICHD)

You are being asked to give your permission for your baby to participate in a study designed to determine if using positive airway pressure during resuscitation after birth helps decrease the severity of lung disease in premature babies. We will also be looking at the ranges of oxygen saturation that are currently being used with these same babies. You and your baby were selected as possible participants because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at UAB, along with 15 other centers across the country, are participating in this project sponsored by the by the National Institute of Child Health and Human Development.

This consent form gives you information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risk of the procedures, and possible benefits. Once you are informed about this study, you will be asked if you want your baby to participate; if so, you will be asked to sign this form.

Introduction

If born prematurely, your baby is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny air sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies, the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure in the lungs after the baby breathes out (resting pressure) makes it easier for the baby to take the next breath. Sometimes a medication called *surfactant* is given to try to help keep the lung sacs expanded.

UAB-IRB
Consent Form Approval 05-1707
Expiration Date 05-09-08

After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation bag over the baby's nose and mouth to provide oxygen and manual breaths. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated between breaths. This resting pressure is called continuous positive airway pressure or CPAP or PEEP.

At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as: fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for a medication given in the babies lungs called surfactant. This study will begin in the delivery room and continue into the nursery to compare the use of CPAP/PEEP and early placement on the breathing machine along with the early use of surfactant to see if we can help lessen the severity of and even possibly prevent long term lung problems in premature infants.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use a machine called a **pulse oximeter** in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough, it can cause blindness. It is known that ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950s, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. In going back and looking at how babies in the past were managed, it is being suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

Expansion of Procedures

SUPPORT Study: If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into a group that receives early CPAP/PEEP use in the delivery room **OR** early placement on the breathing machine (intubation) with the use of surfactant. Both ways are currently used in our hospital and we hope to determine which is the better way for these premature babies.

If your baby is in the Early CPAP group, he/she will be treated with CPAP/PEEP in the delivery room and will remain on it upon admission to the nursery. If, at any time, your baby shows signs of needing intubation for resuscitation purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is in the Early Surfactant and Ventilation group, he/she will be placed on the breathing machine in the delivery room and will be given surfactant within the first hour of birth.

For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines will also help decide when to put babies on and take them off of CPAP/PEEP.

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target saturation of 91-95%. All of these saturations are considered normal ranges for premature infants. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

If your baby is still receiving oxygen close to the time of discharge (at approximately 36 weeks corrected age) a test will be done to determine the severity of lung disease that may be present. During this test, the oxygen your baby is receiving will be decreased gradually while continuously measuring oxygen saturation with the pulse oximeter. If the saturation falls below an acceptable range, your baby will then be returned to the prior oxygen level.

MRI Study: Part of your baby's regular care during the first few months after birth will include one or more head ultrasounds. The first one usually occurs during the first 2 weeks. There is also one done closer to the time of your baby's due date. In addition to the routine head ultrasound done close to your baby's due date, we would like to ask your permission to also do Magnetic Resonance Imaging (MRI) on your baby. The MRI is a common procedure that uses a magnetic field to make pictures of the inside of the head. It does this by taking a closer look at the tiny particles that are in the brain. Your baby will be placed on a narrow bed for about 20-30 minutes while the machine scans the brain and makes pictures. Your baby will not be exposed to any radiation when having the MRI done. The magnetic fields do not cause any known harmful effects at the levels used in the MRI machine. National and local guidelines have been developed for MRI machines, and these recommendations will be followed.

The ultrasound and MRI pictures of your baby's brain will be looked at by radiologists (doctors who are specialists in X-rays and other pictures of the body). Your doctors will tell you what they find. Because this study will be done in several hospitals across the United States, the ultrasound and MRI pictures from babies who participate will also be seen by other radiologists. They will look at all the pictures from all the babies.

Growth Study: It is routine care in the nursery to weigh and measure babies to watch their growth. With this secondary study to the SUPPORT Study, we will be collecting weight and measurements along with feeding information to take a closer look at how your baby grows.

Duration of Study

Your baby will be involved in the ventilation part of this study for the first 14 days after birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record throughout your baby's hospitalization.

We expect to include about 1310 babies in this study from all the NICHD Neonatal Research Network hospitals over a two year period.

Long Term Follow-up

When your baby is 18-22 months old, he/she will be seen in the Newborn Follow Up Clinic for an evaluation. At this visit, we will ask you a few extra questions about your baby's health. It is also possible that you may be contacted in the future for further long term follow up for the study.

Possible Benefits

The investigators do not promise or guarantee that your baby will receive any direct benefit from participating in the SUPPORT Study or any of the secondary studies. Participation will, however, benefit the medical community by providing valuable information which may help us treat babies in the future.

SUPPORT Study: If he/she is in the group which receives CPAP/PEEP, he/she might benefit by not needing additional breathing support. He/she may not require surfactant to be given into the lungs.

It is possible that using lower pulse oximeter ranges will result in fewer babies with severe Retinopathy of Prematurity (ROP).

MRI Study: There may be benefits to your baby directly, including findings of brain injury which will allow for earlier intervention than would normally occur.

Growth Study: There is no direct benefit to participating in this secondary study.

Possible Risks

SUPPORT Study: The possible risks of using CPAP/PEEP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP/PEEP at the level used in this study does not increase the risk of collapsed lungs.

Like with the use of CPAP/PEEP, a possible risk of being intubated (placed on the breathing machine) may include a temporary slowing of the heart rate or possibly the collapse of one or

both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums, or airway.

Other potential risks during resuscitation after birth include; the need for chest compressions, rescue medications, and even death. It is not thought that the use of either of these ways of delivering oxygen to the baby's lungs increases these risks.

There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse moving the oximeter to another arm or leg a couple of times a day.

CPAP/PEEP, intubation, and pulse oximetry are commonly used in the newborn intensive care (NICU). Study participation should not increase these risks because all procedures are carried out by experienced NICU staff.

MRI Study: The risks of participating in this secondary study are minimal. The head ultrasound is a routine part of the care of a premature baby, and the way it is performed will not be changed for this study, nor does it cause any discomfort for the baby. The MRI is often done on babies whenever the doctor feels that it will give him information he needs to treat the baby. For this study, all participants who agree to participate will have an MRI done after getting the approval of the attending physician. The "tapping" noise that the MRI machine makes may agitate your baby. To minimize this, your baby's ears will be covered while the MRI is being done.

Your baby may also need to be given medicine to make him/her drowsy for the MRI. A possible risk of sedation is breathing difficulty. Your baby's heart rate and breathing will be closely monitored by an experienced baby nurse to reduce this risk.

Growth Study: There are no risks to participating in this secondary study.

Alternative Procedures

If you do not want your baby to participate in this study, he/she will receive the routine care given in the delivery room and nursery. The routine care may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well. Routine care in the nursery may or may not include MRI.

Confidentiality

Information relating to this study, including your name, medical record number, date of birth and social security number may be shared with the billing office of UAB and UAB Health System-

affiliated entities so that claims may be appropriately submitted to either the study sponsor or your insurance company for clinical services and procedures provided to you during the course of this study. The results of the treatment may be published for scientific purposes; however, your baby's identity will not be revealed. If you or your baby receive services in University

Hospital, or The Children's Health System as part of this trial, this informed consent will be placed in and made part of your baby's permanent medical record at these facilities.

If your baby is transferred to another hospital or discharged before his/her eyes have reached maturity, then we will call the hospital or eye doctor to find out the results of eye exams that are done after discharge.

Information will be collected from your baby's chart by trained research personnel. It will be labeled with a code number and sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in North Carolina. The study log linking the code number to your baby's identity will be kept under lock and key in the UAB Division of Neonatology Research office. Any information that might identify your baby will not leave UAB. In addition, the NIH/NICHD, the UAB Institutional Review Board (IRB), or the Food and Drug Administration (FDA) may monitor the trial records and the individual conducting the review may see your name in the file folder. Otherwise, the records will remain confidential to the extent permitted by law.

Withdrawal Without Prejudice

Participation in this study is voluntary. If you do not wish to participate in this study, your baby will not lose benefits to which he/she is entitled. You are free to withdraw your consent and to discontinue your baby's participation in this project at any time without prejudice against future medical care he/she may receive at this institution. This means that withdrawing him/her will have not effect on the future care or treatment of your baby by physicians or by this institution.

In addition, if the study physician feels that it is in your baby's best interest to be withdrawn from the study, he will do so immediately.

Significant New Findings

Any significant new findings discovered during the course of this study, which may influence your decision to allow your baby to continue participation, will be made known to you.

Costs of Participation

The cost of your baby's standard medical care, including surfactant administration and head ultrasounds, will be billed to you and/or your insurance company in the usual manner. The costs of the study, including the MRI that will be done close to your baby's due date, will be covered by a research grant. If any other MRI's are ordered by your baby's doctor as part of clinical care, they will be billed to you or your insurance company. There will be no additional cost to you or your insurance company for expenses related to this study.

Payment for Participating in Research

There will be no payment to you or your baby for participating in this research study.

Payment for Research Related Injuries

If, as a result of your baby's participation, he/she experiences injury from known or unknown risks of the research procedures as described, immediate care and treatment, including

hospitalization if necessary, will be available. Neither UAB, The Children's Hospital of Alabama, nor the National Institutes of Health has made provision for monetary compensation in the event of injury resulting from the research, and in the event of such injury, treatment is provided, but is not free of charge. Further information regarding medical treatment can be obtained from Dr. Wally Carlo at 934-4680.

Questions

If you have questions about this study or experience any problems during the study, you should contact Dr. Wally Carlo at (205) 934-4680. You may also reach Monica Collins, RN, Shirley Cosby, RN, or Vivien Phillips, RN at (205) 934-5771. If you have questions about your baby's rights as a research participant, you may contact Ms. Sheila Moore, Director of the Office of Institutional Review Board for Human Use (IRB). Ms. Moore can be reached at (205) 934-3789 or 1-800-822-8816, press the option for an operator/attendant and ask for extension 4-3789 between the hours of 8:00 a.m. and 5:00 p.m. CT, Monday through Friday.

Legal Rights

By signing this consent form, you are not waiving any of your or your child's legal rights.

Optional Participation in Secondary Studies

Please sign your choice below:

Neuroimaging and Neurodevelopmental Outcome (MRI Study)

_____ I agree to allow my baby to participate in the MRI Secondary Study.

_____ I **Do Not** agree to allow my baby to participate in the MRI Secondary Study.

Postnatal Growth of Infants enrolled in the SUPPORT Study (Growth Study)

_____ I agree to allow my baby to participate in the Growth Secondary Study.

_____ I **Do Not** agree to allow my baby to participate in the Growth Secondary Study.

Signatures

You are making a voluntary decision whether or not to let your baby participate in this study. Your signature below indicates that you have decided to let your baby participate, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction. The consent form will remain in the files at UAB Division of Neonatology and a copy will be placed in your baby's medical record. You will receive a copy of this signed consent form.

Signature of Parent or
Legally Authorized Representative

Date

Signature of Person Obtaining Consent
If other than the Principal Investigator

Date

Signature of Principal Investigator

Date

Signature of Witness

Date

WAIVER OF ASSENT

The assent of _____ (name of child) has been waived because of age.

Signature of Parent or
Legally Authorized Representative

Date



University of Alabama at Birmingham

**Authorization for Use/Disclosure of Health Information
for Research**



What is the purpose of this form? You are being asked to sign this form so that UAB may use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research.

Participant name: _____

UAB IRB Protocol Number F040910010
F050922007 and X060418004

Research Protocol: *The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants; Secondary Studies: Neuroimaging and Neurodevelopmental Outcome and Postnatal Growth of Infants Enrolled in SUPPORT*

Principal Investigator: *Wally Carlo, MD, Namasivayan Ambalavanan, MD*

Sponsor: *National Institute of Child Health and Development (NICHD)*

What health information do the researchers want to use? All medical information and personal identifiers including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Why do the researchers want my health information? The researchers want to use your health information as part of the research protocol listed above and described to you in the Informed Consent document.

Who will disclose, use and/or receive my health information? The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, The Children’s Hospital of Alabama, Callahan Eye Foundation Hospital and the Jefferson County Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies, such as the Food and Drug Administration.

How will my health information be protected once it is given to others? Your health information that is given to the study sponsor will remain private to the extent possible, even though the study sponsor is not required to follow the federal privacy laws. However, once your information is given to other organizations that are not required to follow federal privacy laws, we cannot assure that the information will remain protected.

How long will this Authorization last? Your authorization for the uses and disclosures described in this Authorization does not have an expiration date.

Can I cancel the Authorization? You may cancel this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If you cancel this Authorization, the study doctor and staff will not use any new health information for research. However, researchers may continue to use the health information that was provided before you cancelled your authorization.

Can I see my health information? You have a right to request to see your health information. However, to ensure the scientific integrity of the research, you will not be able to review the research information until after the research protocol has been completed.

Signature of participant: _____ Date: _____

or participants’ legally authorized representative: _____ Date: _____

Printed Name of participant’s representative: _____

Relationship to the participant: _____

Informed Consent

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT Study) (Multicenter Network of Neonatal ICU's)

Title of Secondary Research: Neuroimaging and Neurodevelopmental Outcome (MRI Study)

Postnatal Growth of Infants Enrolled in SUPPORT Study (Growth Study)

UAB IRB Protocol Numbers: F090522007, X060418004 and F050922007

Investigators: Dr. Wally Carlo and Dr. Namasivayan Ambalavanan

Sponsor: National Institute of Child Health and Development (NICHD)

You are being asked to give your permission for your baby to participate in a study designed to determine if using positive airway pressure during resuscitation after birth helps decrease the severity of lung disease in premature babies. We will also be looking at the ranges of oxygen saturation that are currently being used with these same babies. You and your baby were selected as possible participants because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at UAB, along with 15 other centers across the country, are participating in this project sponsored by the by the National Institute of Child Health and Human Development.

This consent form gives you information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risk of the procedures, and possible benefits. Once you are informed about this study, you will be asked if you want your baby to participate; if so, you will be asked to sign this form.

Introduction

If born prematurely, your baby is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny air sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies, the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure in the lungs after the baby

breathes out (resting pressure) makes it easier for the baby to take the next breath. Sometimes a medication called *surfactant* is given to try to help keep the lung sacs expanded. After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation bag over the baby's nose and mouth to provide oxygen and manual breaths. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated between breaths. This resting pressure is called continuous positive airway pressure or CPAP or PEEP.

At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as: fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for a medication given in the babies lungs called surfactant. This study will begin in the delivery room and continue into the nursery to compare the use of CPAP/PEEP and early placement on the breathing machine along with the early use of surfactant to see if we can help lessen the severity of and even possibly prevent long term lung problems in premature infants.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use a machine called a **pulse oximeter** in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough, it can cause blindness. It is known that ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950s, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. In going back and looking at how babies in the past were managed, it is being suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

Expansion of Procedures

SUPPORT Study: If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into a group that receives early CPAP/PEEP use in the delivery room **OR** early placement on the breathing machine (intubation) with the use of surfactant. Both ways are currently used in our hospital and we hope to determine which is the better way for these premature babies.

If your baby is in the Early CPAP group, he/she will be treated with CPAP/PEEP in the delivery room and will remain on it upon admission to the nursery. If, at any time, your baby shows signs of needing intubation for resuscitation purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is in the Early Surfactant and Ventilation group, he/she will be placed on the breathing machine in the delivery room and will be given surfactant within the first hour of birth. For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines will also help decide when to put babies on and take them off of CPAP/PEEP.

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target saturation of 91-95%. All of these saturations are considered normal ranges for premature infants. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

If your baby is still receiving oxygen close to the time of discharge (at approximately 36 weeks corrected age) a test will be done to determine the severity of lung disease that may be present. During this test, the oxygen your baby is receiving will be decreased gradually while continuously measuring oxygen saturation with the pulse oximeter. If the saturation falls below an acceptable range, your baby will then be returned to the prior oxygen level.

MRI Study: Part of your baby's regular care during the first few months after birth will include one or more head ultrasounds. The first one usually occurs during the first 2 weeks. There is also one done closer to the time of your baby's due date. In addition to the routine head ultrasound done close to your baby's due date, we would like to ask your permission to also do Magnetic Resonance Imaging (MRI) on your baby. The MRI is a common procedure that uses a magnetic field to make pictures of the inside of the head. It does this by taking a closer look at the tiny particles that are in the brain. Your baby will be placed on a narrow bed for about 20-30 minutes while the machine scans the brain and makes pictures. Your baby will not be exposed to any radiation when having the MRI done. The magnetic fields do not cause any known harmful effects at the levels used in the MRI machine. National and local guidelines have been developed for MRI machines, and these recommendations will be followed.

The ultrasound and MRI pictures of your baby's brain will be looked at by radiologists (doctors who are specialists in X-rays and other pictures of the body). Your doctors will tell you what they find. Because this study will be done in several hospitals across the United States, the ultrasound and MRI pictures from babies who participate will also be seen by other radiologists. They will look at all the pictures from all the babies.

Growth Study: It is routine care in the nursery to weigh and measure babies to watch their growth. With this secondary study to the SUPPORT Study, we will be collecting weight and measurements along with feeding information to take a closer look at how your baby grows.

Duration of Study

Your baby will be involved in the ventilation part of this study for the first 14 days after birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record throughout your baby's hospitalization.

We expect to include about 1310 babies in this study from all the NICHD Neonatal Research Network hospitals over a two year period.

Long Term Follow-up

When your baby is 18-22 months old, he/she will be seen in the Newborn Follow Up Clinic for an evaluation. At this visit, we will ask you a few extra questions about your baby's health. It is also possible that you may be contacted in the future for further long term follow up for the study.

Possible Benefits

The investigators do not promise or guarantee that your baby will receive any direct benefit from participating in the SUPPORT Study or any of the secondary studies. Participation will, however, benefit the medical community by providing valuable information which may help us treat babies in the future.

SUPPORT Study: If he/she is in the group which receives CPAP/PEEP, he/she might benefit by not needing additional breathing support. He/she may not require surfactant to be given into the lungs.

It is possible that using lower pulse oximeter ranges will result in fewer babies with severe Retinopathy of Prematurity (ROP).

MRI Study: There may be benefits to your baby directly, including findings of brain injury which will allow for earlier intervention than would normally occur.

Growth Study: There is no direct benefit to participating in this secondary study.

Possible Risks

SUPPORT Study: The possible risks of using CPAP/PEEP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP/PEEP at the level used in this study does not increase the risk of collapsed lungs.

Like with the use of CPAP/PEEP, a possible risk of being intubated (placed on the breathing machine) may include a temporary slowing of the heart rate or possibly the collapse of one or

both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums, or airway.

Other potential risks during resuscitation after birth include; the need for chest compressions, rescue medications, and even death. It is not thought that the use of either of these ways of delivering oxygen to the baby's lungs increases these risks.

There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse moving the oximeter to another arm or leg a couple of times a day.

CPAP/PEEP, intubation, and pulse oximetry are commonly used in the newborn intensive care (NICU). Study participation should not increase these risks because all procedures are carried out by experienced NICU staff.

MRI Study: The risks of participating in this secondary study are minimal. The head ultrasound is a routine part of the care of a premature baby, and the way it is performed will not be changed for this study, nor does it cause any discomfort for the baby. The MRI is often done on babies whenever the doctor feels that it will give him information he needs to treat the baby. For this study, all participants who agree to participate will have an MRI done after getting the approval of the attending physician. The "tapping" noise that the MRI machine makes may agitate your baby. To minimize this, your baby's ears will be covered while the MRI is being done.

Your baby may also need to be given medicine to make him/her drowsy for the MRI. A possible risk of sedation is breathing difficulty. Your baby's heart rate and breathing will be closely monitored by an experienced baby nurse to reduce this risk.

Growth Study: There are no risks to participating in this secondary study.

Alternative Procedures

If you do not want your baby to participate in this study, he/she will receive the routine care given in the delivery room and nursery. The routine care may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well. Routine care in the nursery may or may not include MRI.

Confidentiality

Information will be collected from your baby's chart by trained research personnel. It will be labeled with a code number and sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in North Carolina. The study log linking the code number to your baby's identity will be kept under lock and key in the UAB Division of Neonatology Research office. Any information that might identify your baby will not leave UAB. In addition, the NIH/NICHD, the UAB Institutional Review Board (IRB), the Food and Drug Administration (FDA), or the Office of Human Research Protections (OHRP) may monitor the

trial records and the individual conducting the review may see your name in the file folder. Otherwise, the records will remain confidential to the extent permitted by law.

Information relating to this study, including your name, medical record number, date of birth and social security number may be shared with the billing office of UAB and UAB Health System-affiliated entities so that claims may be appropriately submitted to either the study sponsor or your insurance company for clinical services and procedures provided to you during the course of this study. The results of the treatment may be published for scientific purposes; however, your baby's identity will not be revealed. If you or your baby receive services in University Hospital, or The Children's Health System as part of this trial, this informed consent will be placed in and made part of your baby's permanent medical record at these facilities.

If your baby is transferred to another hospital or discharged before his/her eyes have reached maturity, then we will call the hospital or eye doctor to find out the results of eye exams that are done after discharge.

Withdrawal Without Prejudice

Participation in this study is voluntary. If you do not wish to participate in this study, your baby will not lose benefits to which he/she is entitled. You are free to withdraw your consent and to discontinue your baby's participation in this project at any time without prejudice against future medical care he/she may receive at this institution. This means that withdrawing him/her will have not effect on the future care or treatment of your baby by physicians or by this institution.

In addition, if the study physician feels that it is in your baby's best interest to be withdrawn from the study, he will do so immediately.

Significant New Findings

Any significant new findings discovered during the course of this study, which may influence your decision to allow your baby to continue participation, will be made known to you.

Costs of Participation

The cost of your baby's standard medical care, including surfactant administration and head ultrasounds, will be billed to you and/or your insurance company in the usual manner. The costs of the study, including the MRI that will be done close to your baby's due date, will be covered by a research grant. If any other MRI's are ordered by your baby's doctor as part of clinical care, they will be billed to you or your insurance company. There will be no additional cost to you or your insurance company for expenses related to this study.

Payment for Participating in Research

There will be no payment to you or your baby for participating in this research study.

Payment for Research Related Injuries

If, as a result of your baby's participation, he/she experiences injury from known or unknown risks of the research procedures as described, immediate care and treatment, including

hospitalization if necessary, will be available. Neither UAB, The Children's Hospital of Alabama, nor the National Institutes of Health has made provision for monetary compensation in the event of injury resulting from the research, and in the event of such injury, treatment is provided, but is not free of charge. Further information regarding medical treatment can be obtained from Dr. Wally Carlo at 934-4680.

Questions

If you have questions about this study or experience any problems during the study, you should contact Dr. Wally Carlo at (205) 934-4680. You may also reach Monica Collins, RN, Shirley Cosby, RN, or Vivien Phillips, RN at (205) 934-5771. If you have questions about your baby's rights as a research participant, or concerns or complaints about the research, you may contact Ms. Sheila Moore. Ms. Moore is the Director of the Office of Institutional Review Board for Human Use (OIRB). Ms. Moore can be reached at (205) 934-3789 or 1-800-822-8816. If calling the toll-free number, press the option for "all other calls" or for an operator/attendant and ask for extension 4-3789. Regular hours for the Office of the IRB are 8:00 a.m. and 5:00 p.m. CT, Monday through Friday. You may also call this number in the event the research staff cannot be reached or you wish to talk to someone else.

Legal Rights

By signing this consent form, you are not waiving any of your or your child's legal rights.

Optional Participation in Secondary Studies

Please sign your choice below:

Neuroimaging and Neurodevelopmental Outcome (MRI Study)

_____	I agree to allow my baby to participate in the MRI Secondary Study.
_____	I Do Not agree to allow my baby to participate in the MRI Secondary Study.

Postnatal Growth of Infants enrolled in the SUPPORT Study (Growth Study)

_____	I agree to allow my baby to participate in the Growth Secondary Study.
_____	I Do Not agree to allow my baby to participate in the Growth Secondary Study.

Signatures

You are making a voluntary decision whether or not to let your baby participate in this study. Your signature below indicates that you have decided to let your baby participate, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction. The consent form will remain in the files at UAB Division of Neonatology and a copy will be placed in your baby's medical record. You will receive a copy of this signed consent form.

WAIVER OF ASSENT

The assent of _____ (name of child) has been waived because of age.

Signature of Parent or
Legally Authorized Representative

Date

Signature of Person Obtaining Consent

Date

Signature of Witness

Date



University of Alabama at Birmingham

**Authorization for Use/Disclosure of Health Information
for Research**



What is the purpose of this form? You are being asked to sign this form so that UAB may use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research.

Participant name: _____

UAB IRB Protocol Number: F040910010,
F050922007 and X060418004

Research Protocol:The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birthweight Infants; Secondary Studies: Neuroimaging and Neurodevelopmental Outcome and Postnatal Growth of Infants Enrolled in SUPPORT Study (Multicenter Network of Neonatal ICU's)

Principal Investigator: Wally Carlo, MD
Namasivayam Ambalavanan, MD;

Sponsor: National Institute of Child Health and Development (NICHD)

What health information do the researchers want to use? All medical information and personal identifiers; including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Why do the researchers want my health information? The researchers want to use your health information as part of the research protocol listed above and described to you in the Informed Consent document.

Who will disclose, use and/or receive my health information? The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, The Children's Hospital of Alabama, Callahan Eye Foundation Hospital and the Jefferson County Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies, such as the Food and Drug Administration.

How will my health information be protected once it is given to others? Your health information that is given to the study sponsor will remain private to the extent possible, even though the study sponsor is not required to follow the federal privacy laws. However, once your information is given to other organizations that are not required to follow federal privacy laws, we cannot assure that the information will remain protected.

How long will this Authorization last? Your authorization for the uses and disclosures described in this Authorization does not have an expiration date.

Can I cancel the Authorization? You may cancel this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If you cancel this Authorization, the study doctor and staff will not use any new health information for research. However, researchers may continue to use the health information that was provided before you cancelled your authorization.

Can I see my health information? You have a right to request to see your health information. However, to ensure the scientific integrity of the research, you will not be able to review the research information until after the research protocol has been completed.

Signature of parent or _____
legally authorized representative

Date _____

Printed Name of parent/participant's representative: _____

Relationship to the participant: _____

Informed Consent

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT Study) (Multicenter Network of Neonatal ICU's)

Title of Secondary Research: Neuroimaging and Neurodevelopmental Outcome (MRI Study)

Postnatal Growth of Infants Enrolled in SUPPORT Study (Growth Study)

UAB IRB Protocol Numbers: F040910010, X060418004 and F050922007

Investigators: Dr. Wally Carlo and Dr. Namasivayan Ambalavanan

Sponsor: National Institute of Child Health and Development (NICHD)

You are being asked to give your permission for your baby to participate in a study designed to determine if using positive airway pressure during resuscitation after birth helps decrease the severity of lung disease in premature babies. We will also be looking at the ranges of oxygen saturation that are currently being used with these same babies. You and your baby were selected as possible participants because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at UAB, along with 15 other centers across the country, are participating in this project sponsored by the by the National Institute of Child Health and Human Development.

This consent form gives you information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risk of the procedures, and possible benefits. Once you are informed about this study, you will be asked if you want your baby to participate; if so, you will be asked to sign this form.

Introduction

If born prematurely, your baby is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny air sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies, the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure in the lungs after the baby

breathes out (resting pressure) makes it easier for the baby to take the next breath. Sometimes a medication called *surfactant* is given to try to help keep the lung sacs expanded. After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation bag over the baby's nose and mouth to provide oxygen and manual breaths. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated between breaths. This resting pressure is called continuous positive airway pressure or CPAP or PEEP.

At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as: fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for a medication given in the babies lungs called surfactant. This study will begin in the delivery room and continue into the nursery to compare the use of CPAP/PEEP and early placement on the breathing machine along with the early use of surfactant to see if we can help lessen the severity of and even possibly prevent long term lung problems in premature infants.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use a machine called a **pulse oximeter** in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough, it can cause blindness. It is known that ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950s, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. In going back and looking at how babies in the past were managed, it is being suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

Expansion of Procedures

SUPPORT Study: If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into a group that receives early CPAP/PEEP use in the delivery room **or** early placement on the breathing machine (intubation) with the use of surfactant. Both ways are currently used in our hospital and we hope to determine which is the better way for these premature babies.

If your baby is in the Early CPAP group, he/she will be treated with CPAP/PEEP in the delivery room and will remain on it upon admission to the nursery. If, at any time, your baby shows signs of needing intubation for resuscitation purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is in the Early Surfactant and Ventilation group, he/she will be placed on the breathing machine in the delivery room and will be given surfactant within the first hour of birth. For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines will also help decide when to put babies on and take them off of CPAP/PEEP.

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target saturation of 91-95%. All of these saturations are considered normal ranges for premature infants. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

If your baby is still receiving oxygen close to the time of discharge (at approximately 36 weeks corrected age) a test will be done to determine the severity of lung disease that may be present. During this test, the oxygen your baby is receiving will be decreased gradually while continuously measuring oxygen saturation with the pulse oximeter. If the saturation falls below an acceptable range, your baby will then be returned to the prior oxygen level.

MRI Study: Part of your baby's regular care during the first few months after birth will include one or more head ultrasounds. The first one usually occurs during the first 2 weeks. There is also one done closer to the time of your baby's due date. In addition to the routine head ultrasound done close to your baby's due date, we would like to ask your permission to also do Magnetic Resonance Imaging (MRI) on your baby. The MRI is a common procedure that uses a magnetic field to make pictures of the inside of the head. It does this by taking a closer look at the tiny particles that are in the brain. Your baby will be placed on a narrow bed for about 20-30 minutes while the machine scans the brain and makes pictures. Your baby will not be exposed to any radiation when having the MRI done. The magnetic fields do not cause any known harmful effects at the levels used in the MRI machine. National and local guidelines have been developed for MRI machines, and these recommendations will be followed.

The ultrasound and MRI pictures of your baby's brain will be looked at by radiologists (doctors who are specialists in X-rays and other pictures of the body). Your doctors will tell you what they find. Because this study will be done in several hospitals across the United States, the ultrasound and MRI pictures from babies who participate will also be seen by other radiologists. They will look at all the pictures from all the babies.

Growth Study: It is routine care in the nursery to weigh and measure babies to watch their growth. With this secondary study to the SUPPORT Study, we will be collecting weight and measurements along with feeding information to take a closer look at how your baby grows.

Duration of Study

Your baby will be involved in the ventilation part of this study for the first 14 days after birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record throughout your baby's hospitalization.

We expect to include about 1310 babies in this study from all the NICHD Neonatal Research Network hospitals over a two year period.

Long Term Follow-up

When your baby is 18-22 months old, he/she will be seen in the Newborn Follow Up Clinic for an evaluation. At this visit, we will ask you a few extra questions about your baby's health. It is also possible that you may be contacted in the future for further long term follow up for the study.

Possible Benefits

The investigators do not promise or guarantee that your baby will receive any direct benefit from participating in the SUPPORT Study or any of the secondary studies. Participation will, however, benefit the medical community by providing valuable information which may help us treat babies in the future.

SUPPORT Study: If he/she is in the group which receives CPAP/PEEP, he/she might benefit by not needing additional breathing support. He/she may not require surfactant to be given into the lungs.

It is possible that using lower pulse oximeter ranges will result in fewer babies with severe Retinopathy of Prematurity (ROP).

MRI Study: There may be benefits to your baby directly, including findings of brain injury which will allow for earlier intervention than would normally occur.

Growth Study: There is no direct benefit to participating in this secondary study.

Possible Risks

SUPPORT Study: The possible risks of using CPAP/PEEP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP/PEEP at the level used in this study does not increase the risk of collapsed lungs.

Like with the use of CPAP/PEEP, a possible risk of being intubated (placed on the breathing machine) may include a temporary slowing of the heart rate or possibly the collapse of one or

both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums, or airway.

Other potential risks during resuscitation after birth include; the need for chest compressions, rescue medications, and even death. It is not thought that the use of either of these ways of delivering oxygen to the baby's lungs increases these risks.

There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse moving the oximeter to another arm or leg a couple of times a day.

CPAP/PEEP, intubation, and pulse oximetry are commonly used in the newborn intensive care (NICU). Study participation should not increase these risks because all procedures are carried out by experienced NICU staff.

MRI Study: The risks of participating in this secondary study are minimal. The head ultrasound is a routine part of the care of a premature baby, and the way it is performed will not be changed for this study, nor does it cause any discomfort for the baby. The MRI is often done on babies whenever the doctor feels that it will give him information he needs to treat the baby. For this study, all participants who agree to participate will have an MRI done after getting the approval of the attending physician. The "tapping" noise that the MRI machine makes may agitate your baby. To minimize this, your baby's ears will be covered while the MRI is being done.

Your baby may also need to be given medicine to make him/her drowsy for the MRI. A possible risk of sedation is breathing difficulty. Your baby's heart rate and breathing will be closely monitored by an experienced baby nurse to reduce this risk.

Growth Study: There are no risks to participating in this secondary study.

Alternative Procedures

If you do not want your baby to participate in this study, he/she will receive the routine care given in the delivery room and nursery. The routine care may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well. Routine care in the nursery may or may not include MRI.

Confidentiality

Information will be collected from your baby's chart by trained research personnel. It will be labeled with a code number and sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in North Carolina. The study log linking the code number to your baby's identity will be kept under lock and key in the UAB Division of Neonatology Research office. Any information that might identify your baby will not leave UAB. In addition, the NIH/NICHD, the UAB Institutional Review Board (IRB), the Food and Drug Administration (FDA), or the Office of Human Research Protections (OHRP) may monitor the

trial records and the individual conducting the review may see your name in the file folder. Otherwise, the records will remain confidential to the extent permitted by law.

Information relating to this study, including your name, medical record number, date of birth and social security number may be shared with the billing office of UAB and UAB Health System-affiliated entities so that claims may be appropriately submitted to either the study sponsor or your insurance company for clinical services and procedures provided to you during the course of this study. The results of the treatment may be published for scientific purposes; however, your baby's identity will not be revealed. If you or your baby receive services in University Hospital, or The Children's Health System as part of this trial, this informed consent will be placed in and made part of your baby's permanent medical record at these facilities.

If your baby is transferred to another hospital or discharged before his/her eyes have reached maturity, then we will call the hospital or eye doctor to find out the results of eye exams that are done after discharge.

Withdrawal Without Prejudice

Participation in this study is voluntary. If you do not wish to participate in this study, your baby will not lose benefits to which he/she is entitled. You are free to withdraw your consent and to discontinue your baby's participation in this project at any time without prejudice against future medical care he/she may receive at this institution. This means that withdrawing him/her will have not effect on the future care or treatment of your baby by physicians or by this institution.

In addition, if the study physician feels that it is in your baby's best interest to be withdrawn from the study, he will do so immediately.

Significant New Findings

Any significant new findings discovered during the course of this study, which may influence your decision to allow your baby to continue participation, will be made known to you.

Costs of Participation

The cost of your baby's standard medical care, including surfactant administration and head ultrasounds, will be billed to you and/or your insurance company in the usual manner. The costs of the study, including the MRI that will be done close to your baby's due date, will be covered by a research grant. If any other MRI's are ordered by your baby's doctor as part of clinical care, they will be billed to you or your insurance company. There will be no additional cost to you or your insurance company for expenses related to this study.

Payment for Participating in Research

There will be no payment to you or your baby for participating in this research study.

Payment for Research Related Injuries

If, as a result of your baby's participation, he/she experiences injury from known or unknown risks of the research procedures as described, immediate care and treatment, including

hospitalization if necessary, will be available. Neither UAB, The Children's Hospital of Alabama, nor the National Institutes of Health has made provision for monetary compensation in the event of injury resulting from the research, and in the event of such injury, treatment is provided, but is not free of charge. Further information regarding medical treatment can be obtained from Dr. Wally Carlo at 934-4680.

Questions

If you have questions about this study or experience any problems during the study, you should contact Dr. Wally Carlo at (205) 934-4680. You may also reach Monica Collins, RN, Shirley Cosby, RN, or Vivien Phillips, RN at (205) 934-5771. If you have questions about your baby's rights as a research participant, or concerns or complaints about the research, you may contact Ms. Sheila Moore. Ms. Moore is the Director of the Office of Institutional Review Board for Human Use (OIRB). Ms. Moore can be reached at (205) 934-3789 or 1-800-822-8816. If calling the toll-free number, press the option for "all other calls" or for an operator/attendant and ask for extension 4-3789. Regular hours for the Office of the IRB are 8:00 a.m. and 5:00 p.m. CT, Monday through Friday. You may also call this number in the event the research staff cannot be reached or you wish to talk to someone else.

Legal Rights

By signing this consent form, you are not waiving any of your or your child's legal rights.

Optional Participation in Secondary Studies

Please sign your choice below:

Neuroimaging and Neurodevelopmental Outcome (MRI Study)

_____ I agree to allow my baby to participate in the MRI Secondary Study.

_____ I **Do Not** agree to allow my baby to participate in the MRI Secondary Study.

Postnatal Growth of Infants enrolled in the SUPPORT Study (Growth Study)

_____ I agree to allow my baby to participate in the Growth Secondary Study.

_____ I **Do Not** agree to allow my baby to participate in the Growth Secondary Study.

Signatures

You are making a voluntary decision whether or not to let your baby participate in this study. Your signature below indicates that you have decided to let your baby participate, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction. The consent form will remain in the files at UAB Division of Neonatology and a copy will be placed in your baby's medical record. You will receive a copy of this signed consent form.

WAIVER OF ASSENT

The assent of _____ (name of child) has been waived because of age.

Signature of Parent or
Legally Authorized Representative

Date

Signature of Person Obtaining Consent

Date

Signature of Witness

Date



University of Alabama at Birmingham

**Authorization for Use/Disclosure of Health Information
for Research**



What is the purpose of this form? You are being asked to sign this form so that UAB may use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research.

Participant name: _____

UAB IRB Protocol Number: F040910010, F050922007 and X060418004

Research Protocol:The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birthweight Infants; Secondary Studies: Neuroimaging and Neurodevelopmental Outcome and Postnatal Growth of Infants Enrolled in SUPPORT Study (Multicenter Network of Neonatal ICU's)

Principal Investigator: Wally Carlo, MD Namasivayam Ambalavanan, MD;

Sponsor: National Institute of Child Health and Development (NICHD)

What health information do the researchers want to use? All medical information and personal identifiers; including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Why do the researchers want my health information? The researchers want to use your health information as part of the research protocol listed above and described to you in the Informed Consent document.

Who will disclose, use and/or receive my health information? The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, The Children's Hospital of Alabama, Callahan Eye Foundation Hospital and the Jefferson County Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies, such as the Food and Drug Administration.

How will my health information be protected once it is given to others? Your health information that is given to the study sponsor will remain private to the extent possible, even though the study sponsor is not required to follow the federal privacy laws. However, once your information is given to other organizations that are not required to follow federal privacy laws, we cannot assure that the information will remain protected.

How long will this Authorization last? Your authorization for the uses and disclosures described in this Authorization does not have an expiration date.

Can I cancel the Authorization? You may cancel this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If you cancel this Authorization, the study doctor and staff will not use any new health information for research. However, researchers may continue to use the health information that was provided before you cancelled your authorization.

Can I see my health information? You have a right to request to see your health information. However, to ensure the scientific integrity of the research, you will not be able to review the research information until after the research protocol has been completed.

Signature of parent or _____ Date _____
legally authorized representative

Printed Name of parent/participant's representative: _____

Relationship to the participant: _____

Informed Consent

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT Study) (Multicenter Network of Neonatal ICU's)

Title of Secondary Research: Neuroimaging and Neurodevelopmental Outcome (MRI Study)
Postnatal Growth of Infants Enrolled in SUPPORT Study (Growth Study)

UAB IRB Protocol Numbers: F040910010, X060418004 and F050922007

Investigators: Dr. Wally Carlo and Dr. Namasivayan Ambalavanan

Sponsor: Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)

You are being asked to give your permission for your baby to participate in a study designed to determine if using positive airway pressure during resuscitation after birth helps decrease the severity of lung disease in premature babies. We will also be looking at the ranges of oxygen saturation that are currently being used with these same babies. You and your baby were selected as possible participants because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at UAB, along with 15 other centers across the country, are participating in this project sponsored by the by the National Institute of Child Health and Human Development.

This consent form gives you information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risk of the procedures, and possible benefits. Once you are informed about this study, you will be asked if you want your baby to participate; if so, you will be asked to sign this form.

Introduction

If born prematurely, your baby is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny air sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies, the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure in the lungs after the baby

breathes out (resting pressure) makes it easier for the baby to take the next breath. Sometimes a medication called *surfactant* is given to try to help keep the lung sacs expanded. After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation bag over the baby's nose and mouth to provide oxygen and manual breaths. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated between breaths. This resting pressure is called continuous positive airway pressure or CPAP or PEEP.

At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as: fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for a medication given in the babies lungs called surfactant. This study will begin in the delivery room and continue into the nursery to compare the use of CPAP/PEEP and early placement on the breathing machine along with the early use of surfactant to see if we can help lessen the severity of and even possibly prevent long term lung problems in premature infants.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use a machine called a **pulse oximeter** in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough, it can cause blindness. It is known that ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950s, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. In going back and looking at how babies in the past were managed, it is being suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

Expansion of Procedures

SUPPORT Study: If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into a group that receives early CPAP/PEEP use in the delivery room **OR** early placement on the breathing machine (intubation) with the use of surfactant. Both ways are currently used in our hospital and we hope to determine which is the better way for these premature babies.

If your baby is in the Early CPAP group, he/she will be treated with CPAP/PEEP in the delivery room and will remain on it upon admission to the nursery. If, at any time, your baby shows signs of needing intubation for resuscitation purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is in the Early Surfactant and Ventilation group, he/she will be placed on the breathing machine in the delivery room and will be given surfactant within the first hour of birth. For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines will also help decide when to put babies on and take them off of CPAP/PEEP.

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target saturation of 91-95%. All of these saturations are considered normal ranges for premature infants. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

If your baby is still receiving oxygen close to the time of discharge (at approximately 36 weeks corrected age) a test will be done to determine the severity of lung disease that may be present. During this test, the oxygen your baby is receiving will be decreased gradually while continuously measuring oxygen saturation with the pulse oximeter. If the saturation falls below an acceptable range, your baby will then be returned to the prior oxygen level.

MRI Study: Part of your baby's regular care during the first few months after birth will include one or more head ultrasounds. The first one usually occurs during the first 2 weeks. There is also one done closer to the time of your baby's due date. In addition to the routine head ultrasound done close to your baby's due date, we would like to ask your permission to also do Magnetic Resonance Imaging (MRI) on your baby. The MRI is a common procedure that uses a magnetic field to make pictures of the inside of the head. It does this by taking a closer look at the tiny particles that are in the brain. Your baby will be placed on a narrow bed for about 20-30 minutes while the machine scans the brain and makes pictures. Your baby will not be exposed to any radiation when having the MRI done. The magnetic fields do not cause any known harmful effects at the levels used in the MRI machine. National and local guidelines have been developed for MRI machines, and these recommendations will be followed.

The ultrasound and MRI pictures of your baby's brain will be looked at by radiologists (doctors who are specialists in X-rays and other pictures of the body). Your doctors will tell you what they find. Because this study will be done in several hospitals across the United States, the ultrasound and MRI pictures from babies who participate will also be seen by other radiologists. They will look at all the pictures from all the babies.

Growth Study: It is routine care in the nursery to weigh and measure babies to watch their growth. With this secondary study to the SUPPORT Study, we will be collecting weight and measurements along with feeding information to take a closer look at how your baby grows.

Duration of Study

Your baby will be involved in the ventilation part of this study for the first 14 days after birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record throughout your baby's hospitalization.

We expect to include about 1310 babies in this study from all the NICHD Neonatal Research Network hospitals over a two year period.

Long Term Follow-up

When your baby is 18-22 months old, he/she will be seen in the Newborn Follow Up Clinic for an evaluation. At this visit, we will ask you a few extra questions about your baby's health. You will then be contacted in the future for further long term follow up for the study.

Benefits

The investigators do not promise or guarantee that your baby will receive any direct benefit from participating in the SUPPORT Study or any of the secondary studies. Participation will, however, benefit the medical community by providing valuable information which may help us treat babies in the future.

SUPPORT Study: If he/she is in the group which receives CPAP/PEEP, he/she might benefit by not needing additional breathing support. He/she may not require surfactant to be given into the lungs.

It is possible that using lower pulse oximeter ranges will result in fewer babies with severe Retinopathy of Prematurity (ROP).

MRI Study: There may be benefits to your baby directly, including findings of brain injury which will allow for earlier intervention than would normally occur.

Growth Study: There is no direct benefit to participating in this secondary study.

Risks and Discomforts

SUPPORT Study: The possible risks of using CPAP/PEEP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP/PEEP at the level used in this study does not increase the risk of collapsed lungs.

Like with the use of CPAP/PEEP, a possible risk of being intubated (placed on the breathing machine) may include a temporary slowing of the heart rate or possibly the collapse of one or

both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums, or airway.

Other potential risks during resuscitation after birth include; the need for chest compressions, rescue medications, and even death. It is not thought that the use of either of these ways of delivering oxygen to the baby's lungs increases these risks.

There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse moving the oximeter to another arm or leg a couple of times a day.

CPAP/PEEP, intubation, and pulse oximetry are commonly used in the newborn intensive care (NICU). Study participation should not increase these risks because all procedures are carried out by experienced NICU staff.

MRI Study: The risks of participating in this secondary study are minimal. The head ultrasound is a routine part of the care of a premature baby, and the way it is performed will not be changed for this study, nor does it cause any discomfort for the baby. The MRI is often done on babies whenever the doctor feels that it will give him information he needs to treat the baby. For this study, all participants who agree to participate will have an MRI done after getting the approval of the attending physician. The "tapping" noise that the MRI machine makes may agitate your baby. To minimize this, your baby's ears will be covered while the MRI is being done.

Your baby may also need to be given medicine to make him/her drowsy for the MRI. A possible risk of sedation is breathing difficulty. Your baby's heart rate and breathing will be closely monitored by an experienced baby nurse to reduce this risk.

Growth Study: There are no risks to participating in this secondary study.

Alternatives

If you do not want your baby to participate in this study, he/she will receive the routine care given in the delivery room and nursery. The routine care may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well. Routine care in the nursery may or may not include MRI.

Confidentiality

Information obtained about your baby for this study will be kept private to the extent allowed by law. However, research information that identifies your baby may be shared with the UAB Institutional Review Board (IRB) and others who are responsible for ensuring compliance with laws and regulations related to research, including people on behalf of the NICHD; the U.S. Food and Drug Administration (FDA); and the Office for Human Research Protections (OHRP). The results of the treatment may be published for scientific purposes. These results could include your lab tests and X-rays. However, your identity will not be given out.

If any part of this study takes place at University Hospital, or The Children's Hospital of Alabama (TCHA), this consent document will become part of your medical record chart. Information relating to this study, including your name, medical record number, date of birth and social security number may be shared with the billing office of UAB and UAB Health System-affiliated entities, along with the Children's Hospital of Alabama, the Children's Health System, and its billing agents so that claims may be appropriately submitted to either the study sponsor or your insurance company for clinical services and procedures provided to you during the course of this study.

If your baby is transferred to another hospital or discharged before his/her eyes have reached maturity, then we will call the hospital or eye doctor to find out the results of eye exams that are done after discharge.

Refusal or Withdrawal without Penalty

Your taking part in this study is your choice. There will be no penalty if you decide not to be in the study. If you decide not to be in the study, you will not lose any benefits you are otherwise owed. You are free to withdraw from this research study at any time. Your choice to leave the study will not affect your relationship with this institution.

You may be removed from the study without your consent if the sponsor ends the study or if the study doctor decides it is not in the best interest of your baby's health.

Significant New Findings

Any significant new findings discovered during the course of this study, which may influence your decision to allow your baby to continue participation, will be made known to you.

Cost of Participation

The cost of your baby's standard medical care, including surfactant administration and head ultrasounds, will be billed to you and/or your insurance company in the usual manner. The costs of the study, including the MRI that will be done close to your baby's due date, will be covered by a research grant. If any other MRI's are ordered by your baby's doctor as part of clinical care, they will be billed to you or your insurance company. There will be no additional cost to you or your insurance company for expenses related to this study.

Payment for Participation in Research

There will be no payment to you or your baby for participating in this research study.

Payment for Research Related Injuries

If, as a result of your baby's participation, he/she experiences injury from known or unknown risks of the research procedures as described, immediate care and treatment, including hospitalization if necessary, will be available. Neither UAB, The Children's Hospital of Alabama, nor the National Institutes of Health has made provision for monetary compensation in the event of injury resulting from the research, and in the event of such injury, treatment is provided, but is not free of charge. Further information regarding medical treatment can be obtained from Dr. Wally Carlo at 934-4680.

Questions

If you have questions about this study or experience any problems during the study, you should contact Dr. Wally Carlo at (205) 934-4680. You may also reach Monica Collins, RN, Shirley Cosby, RN, or Vivien Phillips, RN at (205) 934-5771. If you have questions about your baby’s rights as a research participant, or concerns or complaints about the research, you may contact Ms. Sheila Moore. Ms. Moore is the Director of the Office of Institutional Review Board for Human Use (OIRB). Ms. Moore can be reached at (205) 934-3789 or 1-800-822-8816. If calling the toll-free number, press the option for “all other calls” or for an operator/attendant and ask for extension 4-3789. Regular hours for the Office of the IRB are 8:00 a.m. and 5:00 p.m. CT, Monday through Friday. You may also call this number in the event the research staff cannot be reached or you wish to talk to someone else.

Legal Rights

By signing this consent form, you are not waiving any of your or your child’s legal rights.

Optional Participation in Secondary Studies

Please sign your choice below:

Neuroimaging and Neurodevelopmental Outcome (MRI Study)

_____ I agree to allow my baby to participate in the MRI Secondary Study.
_____ I **Do Not** agree to allow my baby to participate in the MRI Secondary Study.

Postnatal Growth of Infants enrolled in the SUPPORT Study (Growth Study)

_____ I agree to allow my baby to participate in the Growth Secondary Study.
_____ I **Do Not** agree to allow my baby to participate in the Growth Secondary Study.

Signatures

You are making a voluntary decision whether or not to let your baby participate in this study. Your signature below indicates that you have decided to let your baby participate, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction. The consent form will remain in the files at UAB Division of Neonatology and a copy will be placed in your baby's medical record. You will receive a copy of this signed consent form.

WAIVER OF ASSENT

The assent of _____ (name of child) has been waived because of age.

Signature of Parent or
Legally Authorized Representative

Date

Signature of Person Obtaining Consent

Date

Signature of Witness

Date



University of Alabama at Birmingham

**Authorization for Use/Disclosure of Health Information
for Research**



What is the purpose of this form? You are being asked to sign this form so that UAB may use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research.

Participant name: _____

UAB IRB Protocol Number: F040910010, F050922007 and X060418004

Research Protocol:The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birthweight Infants; Secondary Studies: Neuroimaging and Neurodevelopmental Outcome and Postnatal Growth of Infants Enrolled in SUPPORT Study (Multicenter Network of Neonatal ICU's)

Principal Investigator: Wally Carlo, MD Namasivayam Ambalavanan, MD;

Sponsor: Eunice Kennedy Shriver National Institute of Child Health Human Development (NICHD)

What health information do the researchers want to use? All medical information and personal identifiers; including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Why do the researchers want my health information? The researchers want to use your health information as part of the research protocol listed above and described to you in the Informed Consent document.

Who will disclose, use and/or receive my health information? The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, The Children's Hospital of Alabama, Callahan Eye Foundation Hospital and the Jefferson County Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies, such as the Food and Drug Administration.

How will my health information be protected once it is given to others? Your health information that is given to the study sponsor will remain private to the extent possible, even though the study sponsor is not required to follow the federal privacy laws. However, once your information is given to other organizations that are not required to follow federal privacy laws, we cannot assure that the information will remain protected.

How long will this Authorization last? Your authorization for the uses and disclosures described in this Authorization does not have an expiration date.

Can I cancel the Authorization? You may cancel this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If you cancel this Authorization, the study doctor and staff will not use any new health information for research. However, researchers may continue to use the health information that was provided before you cancelled your authorization.

Can I see my health information? You have a right to request to see your health information. However, to ensure the scientific integrity of the research, you will not be able to review the research information until after the research protocol has been completed.

Signature of parent or _____ Date _____
legally authorized representative

Printed Name of parent/participant's representative: _____

Relationship to the participant: _____

Informed Consent

TITLE OF RESEARCH: Extended Follow-up at School Age for the Support Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort (Cooperative Multicenter Neonatal Research Network)

IRB PROTOCOL: X120717008

TITLE OF SECONDARY RESEARCH: Risk of Obesity and Hypertension from 6 years 4 months to 7 years 2 months in Prematurely Born Infants in the SUPPORT Neuroimaging and Neurodevelopmental Outcomes Cohort (Cooperative Multicenter Neonatal Research Network)

IRB PROTOCOL: X120717009

INVESTIGATORS: Myriam Peralta-Carcelen, MD, Waldemar Carlo, MD

SPONSOR: Eunice Kennedy Shriver National Institute of Child Health & Human Development (NICHD)

For Children/Minors (persons under 19 years of age) participating in this study, the term *You* addresses both the participant ("you") and the parent or legally authorized representative ("your child").

Explanation of Procedures

Your child is invited to participate in a follow up visit between 6 years 4 months and 7 years 2 months of age (school age) for children who were enrolled in the SUPPORT Neuroimaging study. As you may recall, that study did an extra brain ultrasound at the the time that your child's near-term brain MRI was done for routine preemie care. The purpose was to compare the findings of early and near-term ultrasounds and near-term MRI to determine if one way of imaging gives more useful information than the other. Your child was selected as a potential school age participant because he/she was enrolled in the brain imaging part of the SUPPORT study. The purpose of this phase of the study is to examine participants at school age and determine whether near-term MRI is better than ultrasound in predicting physical and developmental outcome.

SUPPORT school age follow-up, funded by the NICHD, is being conducted at UAB and 14 other medical centers across the country. Nationwide, about 370 children and their parents are expected to participate. Ninety children are eligible to participate at UAB. It is anticipated that five years will be required to complete the project.

UAB IRB

Date of Approval 8-8-12

Not Valid On 8-8-13

Extended Follow-Up Study: Your child's participation in this study is entirely voluntary. If your child takes part in the study, his/her medical history will be reviewed, including details of the most recent vision and hearing tests; he/she will be weighed and measured; a detailed neurological examination will be done to look at muscle strength, coordination, balance, ability to walk, and so forth; a test of number skills and work identification called the Woodcock Johnson will be conducted; a test of problem solving with words, blocks, and pictures called the Wechsler Intelligence Scale for Children will be done; a test evaluating visual problem solving skills and ability to pay attention called the Neurological/Psychological test will be carried out; and, if your child cannot be evaluated by the last two tests, you will be asked to answer questions about the daily living activities of your child in the areas of self-care, mobility, communication, and understanding. In addition, you will be asked to complete questionnaires about your household and your child's overall health and functioning, education, activities away from home or school, demographic data, your education, information and concerns about your child. During the clinic visit, the interviews for you as a parent will take about 1 ½ - 2 hours and the time to evaluate your child will take at least 3 ½ hours, including breaks. The interviews with you will be at the same time your child is being tested so the whole visit will last at least 3 ½ hours.

In order to be eligible to participate in the next study, you must agree to participate in the Extended Follow Up Study.

Obesity and Hypertension Study: This is a secondary study to the Extended Follow Up Study. The purpose of this study is to examine the incidences of overweight, obesity, and rates of high blood pressure at 6 years 4 months to 7 years 2 months of age. Besides the weight, length and head measurement, your child's waist and subcutaneous skinfolds on the right side of his/her arm, back and abdomen will be measured twice on the right side. Your child will wear only undergarments when these measurements are being taken. These are standard assessments of obesity for children. In addition, your child's blood pressure will be taken twice 2 minutes apart. A brief questionnaire regarding your child's physical activity will be asked, such as the amount of time your child is involved in an organized sport/activity, the amount of time your child watches the television or plays the computer games. This part may last approximately 20 – 25 minutes. You are given a choice to let your child participate in the secondary study.

Please initial your choice below:

- I agree for my child to participate in the Obesity and Hypertension Study
 I do NOT agree for my child to participate in the Obesity and Hypertension Study.

Risks and Discomforts

There are no known risks to participating in the medical/neurological and developmental testing of this study. Some unknown risks may be learned during the study. You will be told of any important new information that is learned during the course of this research study that might affect your child's condition or your willingness to continue your child's participation in this study. The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential. You or your child may become fatigued, bored,

or irritable due to the length of the study visit. To minimize this, several “breaks” will be offered throughout the study visit according to your or your child’s needs. Your child may potentially feel embarrassed when we asked him/her to wear only undergarments for the measurement of chest, waist and hip circumferences.

Benefits

There is no guarantee of direct benefit to you or your child for participating in the study. However, the possible benefits to your child for taking part in this study are detection and treatment of any developmental problems, as well as referral to agencies or pediatric clinics for his/her continued medical care.

Alternatives

You may choose not to have your child participate in the study.

Confidentiality

Information obtained about you for this study will be kept confidential to the extent allowed by law. However, research information that identifies you may be shared with the UAB Institutional Review Board (IRB) and others who are responsible for ensuring compliance with laws and regulations related to research, including people on behalf of National Institute of Child Health and Human Development (NICHD) and the Office for Human Research Protections (OHRP). The results of the research may be published for scientific purposes. However, your identity will not be given out. If any part of this study takes place at University of Alabama Hospital OR The Children’s Hospital of Alabama (TCHA), this consent document will be placed in your child’s file at that facility. The document will become part of your medical record chart.

A description of this clinical trial is available on <http://www.ClinicalTrials.gov>, identifier NCT00233324, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

Refusal or Withdrawal without Penalty

Whether or not you take part in this study is your choice. There will be no penalty if you decide not to let your child be in the study. If you decide not to be in the study, you will not lose any benefits you are otherwise owed. You are free to withdraw from this research study at any time. Your choice to leave the study will not affect your relationship with this institution.

Cost of Participation

There will be no cost to you for taking part in this study. All exams and evaluations related to this study will be provided to you at no cost. The NICHD is providing financial support and/or

materials for this study. The costs of your standard medical care will be billed to you and/or your insurance company in the usual manner.

Payment for Participation in Research

There is no payment for participation in this study. However, to ensure your child's participation in this study, you will be able to receive travel reimbursement and payment will be made in cash at the time of study visit to the clinic. If you travel less than 100 miles, you will receive \$100 cash. If you travel greater than 200 miles, you will receive \$200 cash.

Payment for Research-Related Injuries

UAB and NICHD have not provided for any payment if you are harmed as a result of taking part in this study. If such harm occurs, treatment will be provided. However, this treatment will not be provided free of charge.

Significant New Findings

You will be told by your doctor or the study staff if new information becomes available and might affect your choice to stay in the study.

Questions

If you have any questions, concerns, or complaints about the research or a research-related injury including available treatments, please contact the Dr. Peralta or Vivien Phillips, RN. They will be glad to answer any of your questions. You can reach Dr. Peralta 205-934-4531 or Vivien Phillips at 205-934-5771. If after hours, Dr. Peralta may also be reached by paging her at 205-939-9100.

If you have questions about your rights as a research participant, or concerns or complaints about the research, you may contact the Office of the IRB (OIRB) at (205) 934-3789 or 1-800-822-8816. If calling the toll-free number, press the option for "all other calls" or for an operator/attendant and ask for extension 4-3789. Regular hours for the OIRB are 8:00 a.m. to 5:00 p.m. CT, Monday through Friday. You may also call this number in the event the research staff cannot be reached or you wish to talk to someone else.

Legal Rights

You are not waiving any of your child's legal rights by signing this informed consent document.

Signatures

You are making a voluntary decision whether or not to let your child participate in this study. Your signature below indicates that you agree to let your child participate in this study, that you have read (or been read) the information provided above, that you were given the opportunity to ask questions and that they have been answered to your satisfaction. You will receive a copy of this signed document.

Signature of Parent or Legally Authorized Representative

Date

Signature of Person Obtaining Consent

Date

Signature of Witness

Date

Waiver of Assent

The assent of _____ (name of child) was waived because of age or maturity.

Signature of Parent or Guardian

Date

Signature of Investigator or Person Obtaining Consent

Date

Signature of Witness

Date

University of Alabama at Birmingham
**AUTHORIZATION FOR USE/DISCLOSURE OF HEALTH INFORMATION
FOR RESEARCH**

What is the purpose of this form? You are being asked to sign this form so that UAB may use and release your health information for research. Participation in research is voluntary. If you choose to participate in the research, you must sign this form so that your health information may be used for the research.

Participant Name: _____

UAB IRB Protocol Number: X120717008

UAB IRB Protocol Number: X120717009

Research Protocol: Extended Follow –up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort; Secondary Research Protocol: Risk of Obesity and Hypertension from 6 years 4 months to 7 years 2 months in Prematurely Born Infants in the SUPPORT Neuroimaging and Neurodevelopmental Outcomes Cohort

Principal Investigators: Myriam Peralta-Carcelen, MD,
Waldemar Carlo, MD

Sponsor: NICHD

What health information do the researchers want to use? All medical information and personal identifiers including past, present, and future history, examinations, laboratory results, imaging studies and reports and treatments of whatever kind related to or collected for use in the research protocol.

Why do the researchers want my health information? The researchers want to use your health information as part of the research protocol listed above and described to you in the Informed Consent document.

Who will disclose, use and/or receive my health information? The physicians, nurses and staff working on the research protocol (whether at UAB or elsewhere); other operating units of UAB, HSF, UAB Highlands, The Children’s Hospital of Alabama, Callahan Eye Foundation Hospital and the Jefferson County Department of Public Health, as necessary for their operations; the IRB and its staff; the sponsor of the research and its employees; and outside regulatory agencies, such as the Food and Drug Administration.

How will my health information be protected once it is given to others? Your health information that is given to the study sponsor will remain private to the extent possible, even though the study sponsor is not required to follow the federal privacy laws. However, once your information is given to other organizations that are not required to follow federal privacy laws, we cannot assure that the information will remain protected.

How long will this Authorization last? Your authorization for the uses and disclosures described in this Authorization does not have an expiration date.

Can I cancel the Authorization? You may cancel this Authorization at any time by notifying the Director of the IRB, in writing, referencing the Research Protocol and IRB Protocol Number. If you cancel this Authorization, the study doctor and staff will not use any new health information for research. However, researchers may continue to use the health information that was provided before you cancelled your authorization.

Can I see my health information? You have a right to request to see your health information. However, to ensure the scientific integrity of the research, you will not be able to review the research information until after the research protocol has been completed.

Signature of participant: _____

Date: _____

or participant's legally authorized representative: _____

Date: _____

Printed Name of participant’s representative: _____

Relationship to the participant: _____

INFORMED CONSENT

Project Title: SUPPORT NEUROIMAGING SCHOOL AGE FOLLOW-UP STUDY. School Age Follow-up (6 years 4 months – 7 years 2 months) for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes Cohort

Section A: The nature, duration and purpose of study.

Your child is invited to participate in a single follow-up visit between the age of six years, four months and seven years, two months of age (school age) for children who were enrolled in the SUPPORT MRI study. As you may recall, that study did an extra brain ultrasound at the time that your child's near-term brain MRI was done for routine care. The purpose was to compare the findings of early and near-term ultrasounds and near-term MRI to determine if one way of imaging gives more useful information than the other. The primary purpose of the study is to examine the children at school age and determine whether near-term MRI is better than ultrasound in predicting developmental outcome. The second purpose is to evaluate the weight, height, body measurements and blood pressure. During the clinic visit, the interviews for you as a parent will take about 1 ½ - 2 hours and the time to evaluate your child will take about 3½ hours, including breaks. The interviews with you will be at the same time your child is being tested so the whole visit will last about 3½ hours.

SUPPORT school age follow-up, funded by the National Institutes of Health, is being conducted at Women and Infants Hospital and 14 other medical centers across the country. About 500 children and their parents are expected to participate. Sixty-one children are eligible to participate at Women and Infants Hospital.

Section B: The means by which it is conducted.

The evaluation will include:

For child:

- Weight and height will be measured using a standard scale, blood pressure will be obtained with the cuff method and the abdomen will be measured.
- A small measuring tool will be used to determine the thickness of the right arm, back and abdomen.
- A detailed neurological examination will be done to look at muscle strength, coordination, balance and ability to walk; a test of number skills and word identification will be conducted; a test of problem solving with words, blocks and pictures will be done; a test evaluating vision problem solving skills and ability to pay attention will be carried out.

For parent:

- If your child cannot be evaluated by the last two tests, you will be asked to answer questions about the daily living activities of your child in the areas of self-care, mobility, communication, and understanding.
- In addition, you will be asked to complete questionnaires about your household and your child's overall health, education, and activities away from school.
- You will be asked questions about your child's medical history, including the recent vision and hearing tests.

Section C. The possible benefit or lack of benefit to my child.

All results of the tests will be shared with you and forwarded to you or your child's personal physician if requested. You will be reimbursed \$25 for your time and your child will receive a small gift such as a book valued at ~ \$5.00.

Section D: The potential risks, and discomforts.

There are no known risks to participating in the medical/neurological and developmental testing of this study. Some unknown medical or neurodevelopmental findings may be learned during the study. You will be told of any important new information that is learned during the course of this research study that might affect your child's condition or your willingness to continue your child's participation in this study. Every effort will be made to keep your child's medical record confidential. If you or your child feels frustrated or uncomfortable with the testing or questions, either of you can refuse to answer or end testing. A summary of findings will be shared with your child's physician if you agree, including findings of high blood pressure if identified.

Section E: Alternatives

Routine care by your physician. The decision to be involved in the study will not affect your child's care.

1. I have been told about this study. The experimental procedures have been explained to me. I have had a chance to ask questions. My questions were answered to my satisfaction.
2. I agree that my child's and my confidential, protected health care information may be shared with people and groups associated with this study. My child's and my confidential health care information will be used only as necessary to participate in this study. Except when required by law my child and I will not be identified in the study records disclosed outside this Hospital. For example, names, social security number, address, telephone number or any other direct personal identifier will not be shared. For records disclosed outside this Hospital, the investigator or his staff will assign my child a unique identifying code. The key to this code will be kept in a locked file in Dr. Betty Vohr's office password protected computer file.
3. I agree that as part of the study that Dr. Betty Vohr and her study team may report the results of the study. These reports include developmental and behavioral tests, questionnaires, growth measurements and blood pressure measurements. The results of these tests will also be shared with and used by the NICHD Neonatal Network. No results will be released with my child's identity.

Information will only be released as required by law when reasonable cause is shown under government regulations, or proper judicial orders. It will also be released if requested to an official of the United States Food and Drug Administration, the United States Department of Health and Human Services, the United States Inspector General, the United States Office of Civil Rights, and the Women & Infants Hospital and its Institutional Review Board.

4. The principal investigator will keep the study records at least until the youngest subject in the study reaches the age of 23. At that time, the research information not already in my child's medical record will be destroyed or information identifying my child will be removed from such study records. Any research information in the medical record will be kept indefinitely.
5. Information from the study will be used for education or research purposes. No names or identifying information will be used.
6. I will be told of any changes to the risks or benefits of this study.
7. My child does not have to take part in this study.

I do not have to allow use of my child's confidential, protected health information. My agreement to share my child's protected, personal health information expires at least until the youngest child in this subject in the study reaches the age of 23.

8. I can withdraw my consent at anytime. My child may stop taking part in the study at any time. My child will still receive the best care possible. If I want to withdraw I will

contact Dr. Betty Vohr in writing and tell her that I am withdrawing. Her mailing address is Department of Pediatrics, Women and Infants Hospital, 101 Dudley Street, Providence, RI 02905. If I withdraw my consent or permission the information which has already been collected about my child by the Hospital or the researchers will be kept by the researchers or hospital. This information may be needed to complete reports of this research.

9. If I have questions about this study, I may call Betty Vohr, MD at 401-274-1122, ext. 7425. If I have questions about my rights as a research subject, I may call Barbara Riter, Director, IRB Administration, at (401) 453-7677.
10. My permission to allow the investigator and research staff to review my child's personal health information ends at the completion of this study.
11. I will be given a copy of this signed consent form.

In addition, I give permission for you to contact me in the future should there be additional follow-up in the SUPPORT study. Yes No

Name of Child (please print): _____

If not for self: relationship to patient: _____

Name of Translator (if used): _____

Translator's signature: _____

Person who explained study: _____ Date: _____

Signature

Printed name

**Project Title: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in
Extremely Low Birth Weight Infants**

A: The nature, duration and purpose of study.

You are being asked to give permission for your baby to participate in a research study designed to determine the best way to decrease the severity of the lung disease and eye disease common in premature babies by comparing two methods of treatment currently used in hospitals in the U.S.

1) Continuous Positive Airway Pressure or CPAP (the pressure used to keep the lungs inflated between breaths) after birth or 2) Ventilation (breathing machine) and *surfactant* (a liquid medication placed into the breathing tube) after birth.

We will also be studying the ranges of oxygen saturation that are currently being used with these same babies. You and your baby were selected as possible participants because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at Women & Infants' Hospital along with 15 other centers across the country, are participating in this project sponsored by the National Institute of Child Health and Development. The duration of the study is until the infant is discontinued from oxygen; however, your infant will be followed throughout his/her hospital stay. In order to see if your infant's breathing improves as a result of the treatment received in this study we will ask you a few questions prior to your infant's discharge from the hospital and also at 6, 12 and 18-22 months corrected age. These questions will take about 10-20 minutes to complete.

If your baby is born prematurely he/she will be at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny lung sacs; each one is supposed to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults. However, in premature babies, the lungs do not always work this way. Some lung sacs open and close normally and others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem with expanding breaths and pressure to keep the lungs slightly inflated between those breaths. Keeping a little air pressure after the baby breathes out (inflating pressure) makes it easier for the baby to take the next breath.

After your baby is born, if he/she needs help breathing, the doctor or respiratory therapist may place a breathing bag over the baby's nose and mouth to provide oxygen and manual breaths. Sometimes a device called a Neopuff is used to force air into the baby's lungs. This inflating pressure is called Continuous Positive Airway Pressure or CPAP. Some hospitals use CPAP at birth and others use ventilation and surfactant. If a baby needs to be ventilated (placed on a breathing machine) *surfactant* is usually given through a breathing tube into the baby's windpipe to try to help keep the lung sacs expanded.

Another part of the study will be looking at the ranges of oxygen saturation that are currently being used with premature infants and how it affects their eyes. Doctors, nurses and others taking care of your baby use a machine called a pulse oximeter in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges used in different institutions. In this part of the study we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough it can cause blindness. It is known that ROP is increased by prolonged use of supplemental oxygen. At the same time, not enough oxygen can affect growth and development. The study doctors are trying to find the best oxygen level to prevent lung and eye disease.

B: The means by which it is conducted.

If your baby is born before a gestational age of 28 weeks, he/she will be randomly (like the toss of a coin) assigned to one of 4 groups:- 1) Early CPAP/Low oxygen saturation ranges, 2) Early CPAP/High oxygen saturation ranges, 3) Early Ventilation and surfactant /Low oxygen saturation ranges and 4) Early Ventilation and surfactant/High oxygen saturation ranges.

If your baby is assigned to early CPAP he/she will be treated with CPAP in the delivery room and will remain on it upon admission to the nursery. If, at any time your baby shows signs of needing intubation (a breathing tube in the windpipe) for breathing purposes, then he/she will be intubated. If this happens within the first 48 hours he/she will also be given surfactant.

If your baby is assigned to early Ventilation and surfactant he/she will be placed on a ventilator (breathing machine) in the delivery room and will be given surfactant into the lung within the first hour of birth.

For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines will also help decide when to put them on and take them off of CPAP.

The babies in this study will also be randomly placed into a group monitored with lower oxygen saturations ranges or higher saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how saturated the baby's blood is with oxygen. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies assigned to the lower oxygen saturation range will have a target saturation of 85%-89%, while the babies in the higher oxygen saturation range will have a target saturation of 91% to 95%. All of these saturations are considered normal ranges for premature infants.

The pulse oximeters used in this trial are FDA approved and have been modified for research purposes. This modification makes the monitors show a value which is either slightly higher or slightly lower than the true oxygen level when values are between 85% and 95%. Outside those ranges, the oximeter works the same as the standard of care device. If the saturation falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down. This modification prevents the nursery staff from knowing which group your baby is in so that all infants are treated in an identical fashion.

If your baby is requiring oxygen therapy close to 36 weeks gestational age a test will be done to determine the severity of his or her lung disease. During this evaluation the oxygen given will be decreased gradually while continuously measuring the amount of oxygen in the blood using a standard pulse oximeter. If a saturation falls below an acceptable range, your child will be returned to the prior oxygen level.

You will also be contacted by a Follow-Up staff member at 6 and 12 months corrected age to ask you questions about your baby's breathing (especially coughing and wheezing), medication use, and visits to a doctor, Emergency Room, or Hospital for treatment of breathing problems. We will also ask you several questions about your family and yourself. As with all information we collect, the answers to these questions will be kept confidential and no names will be used.

Follow up at 18 months of age is essential for this study. The follow up visit will include a medical history, growth measurements, neurological exams including testing reflexes, developmental assessments and some questions about your baby's breathing and breathing symptoms similar to those asked at 6 and 12 months corrected age. This visit will take approximately 1.5 to 2 hours. Families who participate in this project are agreeing to remain in contact with the investigators and to return to the Neonatal Follow up Clinic with their child when he/she is 18 months of age. In order to successfully evaluate any eye disease your baby may develop the investigators will also want to follow up with your

baby's eye doctor after discharge and obtain the results of your baby's eye exams until the eye results are final.

C: The possible benefit

The investigators do not promise or guarantee that your baby will receive direct benefit from being in the study. There may be benefits to your baby directly, including a possible decrease in chronic lung disease (need for oxygen near discharge) and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because we do not know in advance which treatment strategies are most effective, it is also possible that your baby will receive no direct benefit. However, as noted above, each of the 4 possible combinations of treatments is considered by some units to represent their desired approach.

D: The potential risks, and discomforts.

Because all of the treatments proposed in this study are standards of care at different hospitals across the country there is no predictable increase in risk for your baby. Infants randomized to the Early CPAP group may, at some point in their care, require intubation and assisted ventilation (methods to help them breathe). Participation in this study will not affect this decision if the attending physician deems it necessary. Some unknown risks may be learned during the study. If this occurs, you will be informed by the study personnel.

E: Alternatives

If you do not want your baby to participate in this study, he/she will receive routine care given in the delivery room and nursery which may or may not include the use of CPAP and/or surfactant administration. He/she will most likely have oxygen saturation measured with a pulse oximeter as well.

Project Title: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

1. I have been told about this study. The experimental procedures have been discussed with me. I have had a chance to ask questions. My questions were answered to my satisfaction.
2. I authorize my confidential, protected health care information to be shared with individuals, persons and groups associated with this study. My confidential health care information will be used only as necessary to participate in this study. Except when required by law, I will not be identified in study records disclosed outside of Women & Infants' Hospital by name, social security number, address, telephone number, or any other direct personal identifier. For records disclosed outside of Women & Infants' Hospital the investigator or his staff will assign me a unique identifying code. The key to the code will be kept in a locked file in Dr. Laptook's research office.
3. I authorize as part of the study that Dr. Abbott Laptook and his study team) report the results of study related laboratory tests and x-rays to the study sponsor the National Institute of Child Health and Development(NICHD) and the Data Coordinating Center (Research Triangle Institute) . These would include laboratory tests such my baby's blood counts and tests to measure e.g; liver and kidney function and all x-rays or ultrasound, CT or MRI scans and the results of all my baby's eye exams. Information may have to be released when required by law when reasonable cause is shown under government regulations, or proper judicial orders. It may also be released to an official of the United States Food and Drug Administration, the United States Department of Health and Human Services, the United States Inspector General, the United States Office of Civil Rights, representatives of the NICHD and the Research Triangle Institute and the Women & Infants Hospital and its Institutional Review Board. If my research record is reviewed by any of these groups, they may also need to review my entire medical record. If disclosed by the sponsor, the information is no longer covered by the federal privacy regulations.
4. I authorize the retention of the study results in my child's research record (until the child reaches the age of 21). At the end of this retention period, either the research information not already in the child's record will be destroyed or information identifying the child will be removed from such study results. Any research information in the child's record will be kept indefinitely.
5. Any information from the study will be used for education or research purposes. My child's or my name will not be used.
6. I will be told of any changes to the risks or benefits of this study.
7. I do not have to take part in this study.
I do not have to authorize use of my confidential, protected health information.
My authorization to share my protected, personal health information expires after 21 years.
8. I am free to withdraw my consent at anytime. I am free to stop taking part in the study at any time. I will still receive the best care possible for me and/or my child. If I want to withdraw I should contact Dr. Abbott Laptook in writing and let him know I am withdrawing. His mailing address is Pediatric Suite, Women & Infants' Hospital, 101 Dudley Street, Providence, RI, 02905. If I withdraw my consent or permission the information which has already been collected about me or my child by the Hospital or the researchers will be kept by the researchers or hospital. This information may be needed to complete reports of this research.

**Project Title: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in
Extremely Low Birth Weight Infants**

9. In the event that injury occurs as result of this research, I am requested to notify the Principal Investigator Dr. Abbott Laptook at 401-274-1122, extension 1221.
Should I be injured in a research project, treatment will be provided at Women & Infants Hospital, or at another appropriate health care institution, at no cost to me beyond that which third party payers will cover.
Further information in regard to this may be obtained from Barbara Riter, Manager, Research Administration, whose telephone number is (401)-453-7677.
10. If I have questions about this study, I may call Dr. Abbott Laptook at 401-274-1122, extension 1221. If I have questions about my rights as a research subject, I may call Barbara Riter, Manager, Research Administration, at (401) 453-7677.
11. I will be given a copy of this signed consent form.

Future Contact: I have initialed whether I authorize the researchers to contact me:

_____ I authorize the researchers to contact me in the future for research purposes.

Signature: _____ Date: _____ Time: _____ AM / PM

Name (please print): _____

Name of Translator (if used): _____

Translator's signature: _____

If not for self: relationship to patient: _____

Person who explained study: _____ Date: _____

Hospital policy states that the signed original consent form is to be included in the subject's medical record. One copy of the original signed consent form is to be given to the subject. One copy of the signed original consent form should be retained in the investigator's files.

UNIVERSITY HOSPITALS CASE MEDICAL CENTER CONSENT FOR INVESTIGATIONAL STUDIES



IRB NUMBER: 04-29
IRB APPROVAL DATE: 08/15/2011
IRB EXPIRATION DATE: 06/15/2012

Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

Introduction

You have been admitted to MacDonald Women's Hospital and you are at risk for delivering your baby prematurely. If your baby is born early he/she may need help with his/her breathing immediately after birth in the delivery room and in the Neonatal Intensive Care Unit (NICU). Premature babies who need help with their breathing may also require extra amounts of oxygen. Many babies born before 28 weeks' gestation require this care.

You are being asked to allow your child to be considered for a research study will compare several ways which are normally used to help support breathing problems in infants who have premature lungs to see which is most helpful and least harmful. 1310 infants will be enrolled in this study.

You will need to be able to read and understand this consent form in order to allow your baby to be enrolled in this study. If you do not feel you are able to read and understand this consent, you should not sign to give your permission for your child to be enrolled in this study.

There are two common ways to help premature babies with breathing after birth. One common way is **CPAP** which stands for continuous positive airway pressure. A mask over the nose and mouth or soft nasal prongs placed into the tip of the nose may be used to provide air flow to help open the baby's lungs and give extra oxygen. Another common way is **Intubation** which is the placement of a breathing tube which is passed through the mouth into the airway and connected to a breathing machine (ventilator) to assist with respirations, give extra amounts of oxygen and give surfactant (a medication given into the lungs to help with breathing problems). Both ways are routinely used in the delivery room and in the NICU. The pediatric doctors, nurses and respiratory therapists will evaluate your baby's breathing immediately after birth and during his/her time in the NICU.

If a baby requires extra amounts of oxygen it is important that the concentration of oxygen in the blood (oxygen saturation) be monitored. A pulse oximeter is used to monitor the oxygen saturation. A sensor (the instrument that reads the oxygen saturation) is placed on the baby's hand, wrist or foot and is attached to the oximeter which then gives a continuous reading of the oxygen saturation.

It is important to keep the oxygen saturation in a certain range (85%-95%). Some doctors will want to keep the oxygen saturation level close to the upper part of the range. Some doctors prefer to keep the oxygen saturation close to the lower part of the range. Keeping the level in either end of the normal range is routinely used in the NICU for premature babies. If your baby requires extra amounts of oxygen when admitted to the NICU, an oximeter will be used in order to keep the oxygen within the normal range.

UNIVERSITY HOSPITALS CASE MEDICAL CENTER CONSENT FOR INVESTIGATIONAL STUDIES



Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

Purpose

There are two purposes for this research study:

The first purpose of this study is compare either using a mask or soft nasal prongs to assist your baby with his/her breathing immediately after birth and continuing in the NICU to using a breathing tube, mechanical ventilation and receiving a drug called surfactant into the breathing tube. We want to compare these two to see if there is a difference in the amount of breathing help your baby requires and how long he/she will continue to need this help during the first two weeks of life.

The second purpose of this study is to compare babies who have oxygen saturations kept in the high end of the normal range with babies who have oxygen saturations kept in the low end of the normal range. The doctors, nurses and respiratory therapists will use a study pulse oximeter to monitor your baby during the time he/she requires extra amounts of oxygen.

Study Procedures

Your baby will receive care from the doctors, nurses and respiratory therapists who specialize in newborns to help stabilize him/her in the delivery room.

Your baby will be randomized (assigned by chance similar to a flip of a coin) to 2 treatment assignments.

The first assignment will determine his/her care in the delivery room as follows:

If your baby participates in this study he/she will be randomized (assigned by chance similar to a flip of a coin) to ***either*** the CPAP group ***or*** Intubation group to manage his/her breathing immediately after birth. This will determine if a mask/soft nasal prongs ***or*** a breathing tube will be offered first in the delivery room.

If your baby is randomized to the CPAP group a mask or soft nasal prongs will be used immediately after birth to assist your baby with his/her breathing in the delivery room and continued when he/she is admitted to the NICU. If your baby requires more help with his/her breathing a breathing tube and the ventilator may be offered and your baby will receive all routine care for premature infants with breathing problems. This may include giving a medication called surfactant into the lungs through the breathing tube to help with his/her breathing problems.

If your baby is randomized to the Intubation group your baby will have a breathing tube placed in the delivery room and will be admitted to the NICU. Your baby will receive all routine care for premature babies with breathing problems. This will include giving a medication called surfactant into the lungs through the breathing tube to help with his/her breathing problems.

UNIVERSITY HOSPITALS CASE MEDICAL CENTER CONSENT FOR INVESTIGATIONAL STUDIES



Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

The second treatment assignment will determine which end of the normal oxygen saturation range (high or low end) as follows:

When your baby is admitted to the NICU, he/she will be randomized (assigned by chance similar to the flip of a coin) to be kept in a certain oxygen saturation range. This will determine if your baby will have his/her oxygen saturation level kept in the high **or** low part of the normal oxygen saturation range. The oximeter will be used for as long as your baby is requiring oxygen and until he/she has been in room air (no extra oxygen) for at least 3 days. Your baby will also have his/her oxygen monitored by other routine methods used in the NICU, which may include blood samples to measure the oxygen concentration when the doctors feel it is necessary.

Your infant will have all usual care for infants born before 28 weeks gestation. This includes measuring your child's weight several times weekly, as well as, measuring length and head circumference once each week. If your child is not on a breathing tube or CPAP, your child's length will be performed using a length board [laced inside his/her bed. The length board will remain in your child's bed only long enough to obtain the length measurement.

Usual care for premature infants in the NICU includes head ultrasound examinations to look at the brain. The head ultrasound is convenient, can be done at the bedside and does not require sedation. Routine ultrasounds are done during the first two weeks of life and again close to 36 weeks' corrected age or more often if the doctors feel it is necessary.

Another examination of the brain called an MRI (magnetic resonance imaging) can also give information about your child's brain. The doctors would like to compare results of the routine head ultrasounds to an MRI done close to 36 weeks' corrected age for infants who were treated with CPAP or Intubation and assigned to the high or low end of the normal oxygen saturation range. We will compare these results to see which test will best predict neuromotor (physical abilities such as walking, talking, vision and hearing) and neurodevelopmental (development of intelligence and language) outcome at 18-22 months' corrected age.

Your infant will be taken to the MRI department in a special transporter that provides a protective environment including warmth, oxygen, breathing assistance and IV fluids if necessary. Most often infants at this age will sleep during this test and will tolerate the MRI well. If your child does not sleep during the brain MRI, your child may need a mild sedative. If this is necessary, the doctors and nurses will monitor your child's response to the mild sedative.

Follow-up Procedures

In order to understand problems that some former premature infants experience after discharge, we conduct parent interviews in person and by telephone. The interviews ask about breathing problems, especially wheezing and the need for visits to the doctor and/or the hospital for breathing problems. We want to compare infants who are treated with CPAP or Intubation and who are assigned to the high

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IRB APPROVAL DATE: 08/15/2011
IRB EXPIRATION DATE: 06/15/2012

Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

or low end of the normal oxygen saturation range to better understand breathing problems during early childhood.

The first interview will be conducted in the hospital close to the time your child is scheduled for discharge. We will ask you questions about your home and whether breathing problems run in your family. The next three interviews will be conducted by telephone at 6, 12, and 18 months' corrected age. During each telephone interview we will ask about your child's breathing, especially wheezing and coughing and about your child's need for medical visits and treatments for breathing problems. We also ask how your child is adjusting to his/her new home. These telephone interviews will be scheduled at a time that is convenient for you.

Risks

Possible complications with using soft nasal prongs and/or the ventilator may include trauma to the airway, collapse of airway passages, abnormal lung damage by air getting into the tissues or lung collapse. However, the need for help with breathing may be necessary due to the premature birth.

The oxygen saturation ranges to be used are currently used for usual care in premature infants in the NICU. The known risks associated with the high end of the normal oxygen saturation range may include slow or abnormal growth of blood vessels in the eye causing vision problems. Known risks associated with the low end of the normal oxygen saturation range may include low amounts of oxygen delivered to the tissues.

Risks associated with the use of surfactant may include a temporary drop in the oxygen level during the time the medication is given, brief breathing difficulty while the surfactant is being given and bleeding from the lungs.

Premature babies who have lung problems have a risk of long term breathing problems which may require extra amounts of oxygen.

Risks associated with the MRI examination may include minor skin irritation from the tape used to apply monitoring electrodes (sensors that monitor vital signs during the MRI). If sedation is needed, risks may include less vigorous breathing and lower blood pressure which may require additional monitoring. An intravenous line (IV) may also be required to administer sedation, and if needed, the risk of an IV may include bruising, swelling or rarely an infection. The transport of your child to the MRI department may also represent a possible risk. However, only those patients considered stable for transport will have an MRI performed.

There are no known risks associated with head ultrasounds done in the NICU.

We anticipate no risk to you, your child and your family to participate in interviews in person and by telephone about continued breathing problems in former premature infants.

**UNIVERSITY HOSPITALS CASE MEDICAL CENTER
CONSENT FOR INVESTIGATIONAL STUDIES**



Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

There may be unforeseen risks associated with participation in this research study that are not known at this time.

Benefits

There may be no direct benefit to your child to participate in this research study.

Your child’s participation in this study may aid in the understanding of the use of a mask/nasal prongs or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It will also help the doctors to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation.

An MRI performed for the study may have potential benefit which may include a more detailed view of your child’s brain that could show abnormalities not seen with a head ultrasound. This would allow the early identification of possible problems for each individual child.

There will be no benefit to you, your child or your family for participation in the parent interviews. However, information from this study may determine the effect of the different ways to help premature babies with breathing and managing oxygen saturation levels on breathing problems in early childhood.

Participation

You may choose for your baby to have the MRI performed to look at the structure of his/her brain and help identify injury.

Yes, I would like my child to have an MRI performed for this study.* _____
Parent initials/ date

No, I do not want my child to have an MRI performed for this study.* _____
Parent initials/ date

You may choose to participate in the parent interviews before your child’s discharge and at 6, 12, and 18 months’ corrected age.

Yes, I would like to participate in the parent interviews.* _____
Parent initials/ date

No, I do not want to participate in the parent interviews.* _____
Parent initials/ date

*Your signature will also be required on the last page of this consent form.

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Early Withdrawal From the Study

You may choose to withdraw your child from this research study for any reason and at any time with no penalty or loss of benefit of care. Your child will continue to receive all routine care for premature infants which may include help with breathing, monitoring with a pulse oximeter, head ultrasound examinations and weekly measurements to monitor growth.

Alternatives to Participation

If you do not want your child to participate in this study he/she will not be randomized to soft nasal prongs or a breathing tube to assist with breathing immediately after birth in the delivery room and after admission to the NICU. Also, he/she will not be assigned to the high or low end of the normal oxygen saturation range.

All routine and usual care will be provided to your baby which may include help with his/her breathing in the delivery room and in the NICU. The doctors may use nasal prongs, a breathing tube and the ventilator and the oximeter to monitor my baby's oxygen saturation when they feel it is necessary. Usual care for premature infants includes head ultrasounds. An MRI test may be performed if the doctors feel it is necessary.

Financial Information

There will be no extra cost to you or your insurance company for your child's participation in this research study. You and your insurance company will be responsible for all usual care in the NICU which may include the use of nasal prongs, a breathing tube and the ventilator to assist with your child's breathing, surfactant to help with breathing problems and an oximeter to monitor oxygen saturation.

There is no additional cost to you or your insurance company and your insurance company will not be billed for the MRI done for the study. You and your insurance company will be responsible for all usual care which may include head ultrasounds or brain MRI when the doctors feel it necessary.

There is not cost to you or your insurance company for participation in the parent interview prior to discharge and at 6, 12, and 18 months' corrected age of your child. You and your child will not be paid for participation in this research study.

Confidentiality

Information collected for this study will be sent electronically to a central data center via a dedicated computer which is password sensitive. Your child will be identified by a study number and not by name or other identifying information.

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IRB APPROVAL DATE: 08/15/2011
IRB EXPIRATION DATE: 06/15/2012

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If it is necessary for the study personnel to contact you or your child at a later time, we will contact you at the address and/or telephone numbers you have provided. In the event that we cannot locate you at the address and/or telephone numbers you have provided, we may use other information in your medical record such as social security numbers, your child's pediatrician or other contact information.

Summary of your rights as a participant in a research study

Your participation in this research study is voluntary. Refusing to participate will not alter your usual health care or involve any penalty or loss of benefits to which you are otherwise entitled. If you decide to join the study, you may withdraw at any time and for any reason without penalty or loss of benefits. If information generated from this study is published or presented, your identity will not be revealed. In the event new information becomes available that may affect the risks or benefits associated with this study or your willingness to participate in it, you will be notified so that you can decide whether or not to continue participating. If you experience physical injury or illness as a result of participating in this research study, medical care is available at University Hospitals Case Medical Center (UHCMC) or elsewhere; however, UHCMC has no plans to provide free care or compensation for lost wages.

Disclosure of your study records

Efforts will be made to keep the personal information in your research record private and confidential, but absolute confidentiality cannot be guaranteed. The University Hospitals Case Medical Center Institutional Review Board may review your study records. If this study is regulated by the Food and Drug Administration (FDA), there is a possibility that the FDA might inspect your records. In addition, for treatment studies, the study sponsor and possibly foreign regulatory agencies may also review your records. If your records are reviewed your identity could become known.

Contact information

M.C. Walsh, A.A. Fanaroff, N. Newman, B. Siner has described to you what is going to be done, the risks, hazards, and benefits involved. The researchers conducting this study are M.C. Walsh, N. Newman and B. Siner. You may ask any questions you have now. If you have any questions, concerns or complaints about the study in the future, you may contact them at 216-844-3387. If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about; concerns regarding the study; research participant's rights; research-related injury; or other human subject issues, please contact University Hospitals Case Medical Center's Chief Medical Officer at (216) 844-3695 or write to:
The Chief Medical Officer, The Center for Clinical Research, University Hospitals Case Medical Center, 11100 Euclid Avenue, Lakeside 1400, Cleveland, Ohio, 44106-7061.

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Principal Investigator M. Walsh

Signature

Signing below indicates that you have been informed about the research study in which you voluntarily agree to participate; that you have asked any questions about the study that you may have; and that the information given to you has permitted you to make a fully informed and free decision about your participation in the study. By signing this consent form, you do not waive any legal rights, and the investigator(s) or sponsor(s) are not relieved of any liability they may have. A copy of this consent form will be provided to you.

Printed Name of Participant

Parent or Legal Guardian signature

Date

Relationship to Child

Signature of Person Obtaining Consent
(Must be study investigator or individual who has been designated in the Checklist to obtain consent.)

Date

Printed Name of Person Obtaining Consent

Second Parent signature

Date

Relationship to Child

Signature of Person Obtaining Consent
(Must be study investigator or individual who has been designated in the Checklist to obtain consent.)

Date

Printed Name of Person Obtaining Consent

If only one parent can sign this consent, indicate the reason that applies to the other parent.

- () deceased
- () unknown
- () legally incompetent
- () no legal responsibility for the care and custody of the child
- () not reasonably available - indicate why _____
(acceptable reasons for this category must not be based on convenience)

Signature of Principal Investigator
(Affirming subject eligibility for the Study and that informed consent has been obtained.)

Date

Printed Name of Principal Investigator

**UNIVERSITY HOSPITALS CASE MEDICAL CENTER
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Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY TRIAL IN EXTREMELY LOW BIRTHWEIGHT INFANTS- The SUPPORT Trial

Principal Investigator: M.C. Walsh

Consent signed and copy returned to parent/family. Date _____

Name of Person returning consent _____

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Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

Introduction

You have been admitted to MacDonald Women's Hospital and you are at risk for delivering your baby prematurely. If your baby is born early he/she may need help with his/her breathing immediately after birth in the delivery room and in the Neonatal Intensive Care Unit (NICU). Premature babies who need help with their breathing may also require extra amounts of oxygen. Many babies born before 28 weeks' gestation require this care.

You are being asked to allow your child to be considered for a research study will compare several ways which are normally used to help support breathing problems in infants who have premature lungs to see which is most helpful and least harmful. 1310 infants will be enrolled in this study.

You will need to be able to read and understand this consent form in order to allow your baby to be enrolled in this study. If you do not feel you are able to read and understand this consent, you should not sign to give your permission for your child to be enrolled in this study.

There are two common ways to help premature babies with breathing after birth. One common way is **CPAP** which stands for continuous positive airway pressure. A mask over the nose and mouth or soft nasal prongs placed into the tip of the nose may be used to provide air flow to help open the baby's lungs and give extra oxygen. Another common way is **Intubation** which is the placement of a breathing tube which is passed through the mouth into the airway and connected to a breathing machine (ventilator) to assist with respirations, give extra amounts of oxygen and give surfactant (a medication given into the lungs to help with breathing problems). Both ways are routinely used in the delivery room and in the NICU. The pediatric doctors, nurses and respiratory therapists will evaluate your baby's breathing immediately after birth and during his/her time in the NICU.

If a baby requires extra amounts of oxygen it is important that the concentration of oxygen in the blood (oxygen saturation) be monitored. A pulse oximeter is used to monitor the oxygen saturation. A sensor (the instrument that reads the oxygen saturation) is placed on the baby's hand, wrist or foot and is attached to the oximeter which then gives a continuous reading of the oxygen saturation.

It is important to keep the oxygen saturation in a certain range (85%-95%). Some doctors will want to keep the oxygen saturation level close to the upper part of the range. Some doctors prefer to keep the oxygen saturation close to the lower part of the range. Keeping the level in either end of the normal range is routinely used in the NICU for premature babies. If your baby requires extra amounts of oxygen when admitted to the NICU, an oximeter will be used in order to keep the oxygen within the normal range.

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Principal Investigator M. Walsh

Purpose

There are two purposes for this research study:

The first purpose of this study is compare either using a mask or soft nasal prongs to assist your baby with his/her breathing immediately after birth and continuing in the NICU to using a breathing tube, mechanical ventilation and receiving a drug called surfactant into the breathing tube. We want to compare these two to see if there is a difference in the amount of breathing help your baby requires and how long he/she will continue to need this help during the first two weeks of life.

The second purpose of this study is to compare babies who have oxygen saturations kept in the high end of the normal range with babies who have oxygen saturations kept in the low end of the normal range. The doctors, nurses and respiratory therapists will use a study pulse oximeter to monitor your baby during the time he/she requires extra amounts of oxygen.

Study Procedures

Your baby will receive care from the doctors, nurses and respiratory therapists who specialize in newborns to help stabilize him/her in the delivery room.

Your baby will be randomized (assigned by chance similar to a flip of a coin) to 2 treatment assignments.

The first assignment will determine his/her care in the delivery room as follows:

If your baby participates in this study he/she will be randomized (assigned by chance similar to a flip of a coin) to ***either*** the CPAP group ***or*** Intubation group to manage his/her breathing immediately after birth. This will determine if a mask/soft nasal prongs ***or*** a breathing tube will be offered first in the delivery room.

If your baby is randomized to the CPAP group a mask or soft nasal prongs will be used immediately after birth to assist your baby with his/her breathing in the delivery room and continued when he/she is admitted to the NICU. If your baby requires more help with his/her breathing a breathing tube and the ventilator may be offered and your baby will receive all routine care for premature infants with breathing problems. This may include giving a medication called surfactant into the lungs through the breathing tube to help with his/her breathing problems.

If your baby is randomized to the Intubation group your baby will have a breathing tube placed in the delivery room and will be admitted to the NICU. Your baby will receive all routine care for premature babies with breathing problems. This will include giving a medication called surfactant into the lungs through the breathing tube to help with his/her breathing problems.

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The second treatment assignment will determine which end of the normal oxygen saturation range (high or low end) as follows:

When your baby is admitted to the NICU, he/she will be randomized (assigned by chance similar to the flip of a coin) to be kept in a certain oxygen saturation range. This will determine if your baby will have his/her oxygen saturation level kept in the *high or low* part of the normal oxygen saturation range. The oximeter will be used for as long as your baby is requiring oxygen and until he/she has been in room air (no extra oxygen) for at least 3 days. Your baby will also have his/her oxygen monitored by other routine methods used in the NICU, which may include blood samples to measure the oxygen concentration when the doctors feel it is necessary.

Your infant will have all usual care for infants born before 28 weeks gestation. This includes measuring your child's weight several times weekly, as well as, measuring length and head circumference once each week. If your child is not on a breathing tube or CPAP, your child's length will be performed using a length board [laced inside his/her bed. The length board will remain in your child's bed only long enough to obtain the length measurement.

Usual care for premature infants in the NICU includes head ultrasound examinations to look at the brain. The head ultrasound is convenient, can be done at the bedside and does not require sedation. Routine ultrasounds are done during the first two weeks of life and again close to 36 weeks' corrected age or more often if the doctors feel it is necessary.

Another examination of the brain called an MRI (magnetic resonance imaging) can also give information about your child's brain. The doctors would like to compare results of the routine head ultrasounds to an MRI done close to 36 weeks' corrected age for infants who were treated with CPAP or Intubation and assigned to the high or low end of the normal oxygen saturation range. We will compare these results to see which test will best predict neuromotor (physical abilities such as walking, talking, vision and hearing) and neurodevelopmental (development of intelligence and language) outcome at 18-22 months' corrected age.

Your infant will be taken to the MRI department in a special transporter that provides a protective environment including warmth, oxygen, breathing assistance and IV fluids if necessary. Most often infants at this age will sleep during this test and will tolerate the MRI well. If your child does not sleep during the brain MRI, your child may need a mild sedative. If this is necessary, the doctors and nurses will monitor your child's response to the mild sedative.

Follow-up Procedures

In order to understand problems that some former premature infants experience after discharge, we conduct parent interviews in person and by telephone. The interviews ask about breathing problems, especially wheezing and the need for visits to the doctor and/or the hospital for breathing problems. We want to compare infants who are treated with CPAP or Intubation and who are assigned to the high

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or low end of the normal oxygen saturation range to better understand breathing problems during early childhood.

The first interview will be conducted in the hospital close to the time your child is scheduled for discharge. We will ask you questions about your home and whether breathing problems run in your family. The next three interviews will be conducted by telephone at 6, 12, and 18 months' corrected age. During each telephone interview we will ask about your child's breathing, especially wheezing and coughing and about your child's need for medical visits and treatments for breathing problems. We also ask how your child is adjusting to his/her new home. These telephone interviews will be scheduled at a time that is convenient for you.

Risks

Possible complications with using soft nasal prongs and/or the ventilator may include trauma to the airway, collapse of airway passages, abnormal lung damage by air getting into the tissues or lung collapse. However, the need for help with breathing may be necessary due to the premature birth.

The oxygen saturation ranges to be used are currently used for usual care in premature infants in the NICU. The known risks associated with the high end of the normal oxygen saturation range may include slow or abnormal growth of blood vessels in the eye causing vision problems. Known risks associated with the low end of the normal oxygen saturation range may include low amounts of oxygen delivered to the tissues.

Risks associated with the use of surfactant may include a temporary drop in the oxygen level during the time the medication is given, brief breathing difficulty while the surfactant is being given and bleeding from the lungs.

Premature babies who have lung problems have a risk of long term breathing problems which may require extra amounts of oxygen.

Risks associated with the MRI examination may include minor skin irritation from the tape used to apply monitoring electrodes (sensors that monitor vital signs during the MRI). If sedation is needed, risks may include less vigorous breathing and lower blood pressure which may require additional monitoring. An intravenous line (IV) may also be required to administer sedation, and if needed, the risk of an IV may include bruising, swelling or rarely an infection. The transport of your child to the MRI department may also represent a possible risk. However, only those patients considered stable for transport will have an MRI performed.

There are no known risks associated with head ultrasounds done in the NICU.

We anticipate no risk to you, your child and your family to participate in interviews in person and by telephone about continued breathing problems in former premature infants.

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Principal Investigator M. Walsh

There may be unforeseen risks associated with participation in this research study that are not known at this time.

Benefits

There may be no direct benefit to your child to participate in this research study.

Your child's participation in this study may aid in the understanding of the use of a mask/nasal prongs or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It will also help the doctors to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation.

An MRI performed for the study may have potential benefit which may include a more detailed view of your child's brain that could show abnormalities not seen with a head ultrasound. This would allow the early identification of possible problems for each individual child.

There will be no benefit to you, your child or your family for participation in the parent interviews. However, information from this study may determine the effect of the different ways to help premature babies with breathing and managing oxygen saturation levels on breathing problems in early childhood.

Participation

You may choose for your baby to have the MRI performed to look at the structure of his/her brain and help identify injury.

Yes, I would like my child to have an MRI performed for this study.* _____
Parent initials/ date

No, I do not want my child to have an MRI performed for this study.* _____
Parent initials/ date

You may choose to participate in the parent interviews before your child's discharge and at 6, 12, and 18 months' corrected age.

Yes, I would like to participate in the parent interviews.* _____
Parent initials/ date

No, I do not want to participate in the parent interviews.* _____
Parent initials/ date

*Your signature will also be required on the last page of this consent form.

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Early Withdrawal From the Study

You may choose to withdraw your child from this research study for any reason and at any time with no penalty or loss of benefit of care. Your child will continue to receive all routine care for premature infants which may include help with breathing, monitoring with a pulse oximeter, head ultrasound examinations and weekly measurements to monitor growth.

Alternatives to Participation

If you do not want your child to participate in this study he/she will not be randomized to soft nasal prongs or a breathing tube to assist with breathing immediately after birth in the delivery room and after admission to the NICU. Also, he/she will not be assigned to the high or low end of the normal oxygen saturation range.

All routine and usual care will be provided to your baby which may include help with his/her breathing in the delivery room and in the NICU. The doctors may use nasal prongs, a breathing tube and the ventilator and the oximeter to monitor my baby's oxygen saturation when they feel it is necessary. Usual care for premature infants includes head ultrasounds. An MRI test may be performed if the doctors feel it is necessary.

Financial Information

There will be no extra cost to you or your insurance company for your child's participation in this research study. You and your insurance company will be responsible for all usual care in the NICU which may include the use of nasal prongs, a breathing tube and the ventilator to assist with your child's breathing, surfactant to help with breathing problems and an oximeter to monitor oxygen saturation.

There is no additional cost to you or your insurance company and your insurance company will not be billed for the MRI done for the study. You and your insurance company will be responsible for all usual care which may include head ultrasounds or brain MRI when the doctors feel it necessary.

There is not cost to you or your insurance company for participation in the parent interview prior to discharge and at 6, 12, and 18 months' corrected age of your child. You and your child will not be paid for participation in this research study.

Confidentiality

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IRB APPROVAL DATE: 08/15/2011
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If it is necessary for the study personnel to contact you or your child at a later time, we will contact you at the address and/or telephone numbers you have provided. In the event that we cannot locate you at the address and/or telephone numbers you have provided, we may use other information in your medical record such as social security numbers, your child's pediatrician or other contact information.

Summary of your rights as a participant in a research study

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Disclosure of your study records

Efforts will be made to keep the personal information in your research record private and confidential, but absolute confidentiality cannot be guaranteed. The University Hospitals Case Medical Center Institutional Review Board may review your study records. If this study is regulated by the Food and Drug Administration (FDA), there is a possibility that the FDA might inspect your records. In addition, for treatment studies, the study sponsor and possibly foreign regulatory agencies may also review your records. If your records are reviewed your identity could become known.

Contact information

M.C. Walsh, A.A. Fanaroff, N. Newman, B. Siner has described to you what is going to be done, the risks, hazards, and benefits involved. The researchers conducting this study are M.C. Walsh, N. Newman and B. Siner. You may ask any questions you have now. If you have any questions, concerns or complaints about the study in the future, you may contact them at 216-844-3387. If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about; concerns regarding the study; research participant's rights; research-related injury; or other human subject issues, please contact University Hospitals Case Medical Center's Chief Medical Officer at (216) 844-3695 or write to:
The Chief Medical Officer, The Center for Clinical Research, University Hospitals Case Medical Center, 11100 Euclid Avenue, Lakeside 1400, Cleveland, Ohio, 44106-7061.

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Signature

Signing below indicates that you have been informed about the research study in which you voluntarily agree to participate; that you have asked any questions about the study that you may have; and that the information given to you has permitted you to make a fully informed and free decision about your participation in the study. By signing this consent form, you do not waive any legal rights, and the investigator(s) or sponsor(s) are not relieved of any liability they may have. A copy of this consent form will be provided to you.

Printed Name of Participant

Parent or Legal Guardian signature

Date

Relationship to Child

Signature of Person Obtaining Consent
(Must be study investigator or individual who has been designated in the Checklist to obtain consent.)

Date

Printed Name of Person Obtaining Consent

Second Parent signature

Date

Relationship to Child

Signature of Person Obtaining Consent
(Must be study investigator or individual who has been designated in the Checklist to obtain consent.)

Date

Printed Name of Person Obtaining Consent

If only one parent can sign this consent, indicate the reason that applies to the other parent.

- () deceased
- () unknown
- () legally incompetent
- () no legal responsibility for the care and custody of the child
- () not reasonably available - indicate why _____
(acceptable reasons for this category must not be based on convenience)

Signature of Principal Investigator
(Affirming subject eligibility for the Study and that informed consent has been obtained.)

Date

Printed Name of Principal Investigator

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Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY TRIAL IN EXTREMELY LOW BIRTHWEIGHT INFANTS- The SUPPORT Trial

Principal Investigator: M.C. Walsh

Consent signed and copy returned to parent/family. Date _____

Name of Person returning consent _____

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Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

Introduction

You have been admitted to MacDonald Women's Hospital and you are at risk for delivering your baby prematurely. If your baby is born early he/she may need help with his/her breathing immediately after birth in the delivery room and in the Neonatal Intensive Care Unit (NICU). Premature babies who need help with their breathing may also require extra amounts of oxygen. Many babies born before 28 weeks' gestation require this care.

You are being asked to allow your child to be considered for a research study will compare several ways which are normally used to help support breathing problems in infants who have premature lungs to see which is most helpful and least harmful. 1310 infants will be enrolled in this study.

You will need to be able to read and understand this consent form in order to allow your baby to be enrolled in this study. If you do not feel you are able to read and understand this consent, you should not sign to give your permission for your child to be enrolled in this study.

There are two common ways to help premature babies with breathing after birth. One common way is **CPAP** which stands for continuous positive airway pressure. A mask over the nose and mouth or soft nasal prongs placed into the tip of the nose may be used to provide air flow to help open the baby's lungs and give extra oxygen. Another common way is **Intubation** which is the placement of a breathing tube which is passed through the mouth into the airway and connected to a breathing machine (ventilator) to assist with respirations, give extra amounts of oxygen and give surfactant (a medication given into the lungs to help with breathing problems). Both ways are routinely used in the delivery room and in the NICU. The pediatric doctors, nurses and respiratory therapists will evaluate your baby's breathing immediately after birth and during his/her time in the NICU.

If a baby requires extra amounts of oxygen it is important that the concentration of oxygen in the blood (oxygen saturation) be monitored. A pulse oximeter is used to monitor the oxygen saturation. A sensor (the instrument that reads the oxygen saturation) is placed on the baby's hand, wrist or foot and is attached to the oximeter which then gives a continuous reading of the oxygen saturation.

It is important to keep the oxygen saturation in a certain range (85%-95%). Some doctors will want to keep the oxygen saturation level close to the upper part of the range. Some doctors prefer to keep the oxygen saturation close to the lower part of the range. Keeping the level in either end of the normal range is routinely used in the NICU for premature babies. If your baby requires extra amounts of oxygen when admitted to the NICU, an oximeter will be used in order to keep the oxygen within the normal range.

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Principal Investigator M. Walsh

Purpose

There are two purposes for this research study:

The first purpose of this study is compare either using a mask or soft nasal prongs to assist your baby with his/her breathing immediately after birth and continuing in the NICU to using a breathing tube, mechanical ventilation and receiving a drug called surfactant into the breathing tube. We want to compare these two to see if there is a difference in the amount of breathing help your baby requires and how long he/she will continue to need this help during the first two weeks of life.

The second purpose of this study is to compare babies who have oxygen saturations kept in the high end of the normal range with babies who have oxygen saturations kept in the low end of the normal range. The doctors, nurses and respiratory therapists will use a study pulse oximeter to monitor your baby during the time he/she requires extra amounts of oxygen.

Study Procedures

Your baby will receive care from the doctors, nurses and respiratory therapists who specialize in newborns to help stabilize him/her in the delivery room.

Your baby will be randomized (assigned by chance similar to a flip of a coin) to 2 treatment assignments.

The first assignment will determine his/her care in the delivery room as follows:

If your baby participates in this study he/she will be randomized (assigned by chance similar to a flip of a coin) to ***either*** the CPAP group ***or*** Intubation group to manage his/her breathing immediately after birth. This will determine if a mask/soft nasal prongs ***or*** a breathing tube will be offered first in the delivery room.

If your baby is randomized to the CPAP group a mask or soft nasal prongs will be used immediately after birth to assist your baby with his/her breathing in the delivery room and continued when he/she is admitted to the NICU. If your baby requires more help with his/her breathing a breathing tube and the ventilator may be offered and your baby will receive all routine care for premature infants with breathing problems. This may include giving a medication called surfactant into the lungs through the breathing tube to help with his/her breathing problems.

If your baby is randomized to the Intubation group your baby will have a breathing tube placed in the delivery room and will be admitted to the NICU. Your baby will receive all routine care for premature babies with breathing problems. This will include giving a medication called surfactant into the lungs through the breathing tube to help with his/her breathing problems.

UNIVERSITY HOSPITALS CASE MEDICAL CENTER CONSENT FOR INVESTIGATIONAL STUDIES



Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

The second treatment assignment will determine which end of the normal oxygen saturation range (high or low end) as follows:

When your baby is admitted to the NICU, he/she will be randomized (assigned by chance similar to the flip of a coin) to be kept in a certain oxygen saturation range. This will determine if your baby will have his/her oxygen saturation level kept in the high **or** low part of the normal oxygen saturation range. The oximeter will be used for as long as your baby is requiring oxygen and until he/she has been in room air (no extra oxygen) for at least 3 days. Your baby will also have his/her oxygen monitored by other routine methods used in the NICU, which may include blood samples to measure the oxygen concentration when the doctors feel it is necessary.

Your infant will have all usual care for infants born before 28 weeks gestation. This includes measuring your child's weight several times weekly, as well as, measuring length and head circumference once each week. If your child is not on a breathing tube or CPAP, your child's length will be performed using a length board [laced inside his/her bed. The length board will remain in your child's bed only long enough to obtain the length measurement.

Usual care for premature infants in the NICU includes head ultrasound examinations to look at the brain. The head ultrasound is convenient, can be done at the bedside and does not require sedation. Routine ultrasounds are done during the first two weeks of life and again close to 36 weeks' corrected age or more often if the doctors feel it is necessary.

Another examination of the brain called an MRI (magnetic resonance imaging) can also give information about your child's brain. The doctors would like to compare results of the routine head ultrasounds to an MRI done close to 36 weeks' corrected age for infants who were treated with CPAP or Intubation and assigned to the high or low end of the normal oxygen saturation range. We will compare these results to see which test will best predict neuromotor (physical abilities such as walking, talking, vision and hearing) and neurodevelopmental (development of intelligence and language) outcome at 18-22 months' corrected age.

Your infant will be taken to the MRI department in a special transporter that provides a protective environment including warmth, oxygen, breathing assistance and I fluids if necessary. Most often infants at this age will sleep during this test and will tolerate the MRI well. If your child does not sleep during the brain MRI, your child may need a mild sedative. If this is necessary, the doctors and nurses will monitor your child's response to the mild sedative.

Follow-up Procedures

In order to understand problems that some former premature infants experience after discharge, we conduct parent interviews in person and by telephone. The interviews ask about breathing problems, especially wheezing and the need for visits to the doctor and/or the hospital for breathing problems. We want to compare infants who are treated with CPAP or Intubation and who are assigned to the high

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IRB APPROVAL DATE: 08/15/2011
IRB EXPIRATION DATE: 06/15/2012

Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

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or low end of the normal oxygen saturation range to better understand breathing problems during early childhood.

The first interview will be conducted in the hospital close to the time your child is scheduled for discharge. We will ask you questions about your home and whether breathing problems run in your family. The next three interviews will be conducted by telephone at 6, 12, and 18 months' corrected age. During each telephone interview we will ask about your child's breathing, especially wheezing and coughing and about your child's need for medical visits and treatments for breathing problems. We also ask how your child is adjusting to his/her new home. These telephone interviews will be scheduled at a time that is convenient for you.

Risks

Possible complications with using soft nasal prongs and/or the ventilator may include trauma to the airway, collapse of airway passages, abnormal lung damage by air getting into the tissues or lung collapse. However, the need for help with breathing may be necessary due to the premature birth.

The oxygen saturation ranges to be used are currently used for usual care in premature infants in the NICU. The known risks associated with the high end of the normal oxygen saturation range may include slow or abnormal growth of blood vessels in the eye causing vision problems. Known risks associated with the low end of the normal oxygen saturation range may include low amounts of oxygen delivered to the tissues.

Risks associated with the use of surfactant may include a temporary drop in the oxygen level during the time the medication is given, brief breathing difficulty while the surfactant is being given and bleeding from the lungs.

Premature babies who have lung problems have a risk of long term breathing problems which may require extra amounts of oxygen.

Risks associated with the MRI examination may include minor skin irritation from the tape used to apply monitoring electrodes (sensors that monitor vital signs during the MRI). If sedation is needed, risks may include less vigorous breathing and lower blood pressure which may require additional monitoring. An intravenous line (IV) may also be required to administer sedation, and if needed, the risk of an IV may include bruising, swelling or rarely an infection. The transport of your child to the MRI department may also represent a possible risk. However, only those patients considered stable for transport will have an MRI performed.

There are no known risks associated with head ultrasounds done in the NICU.

We anticipate no risk to you, your child and your family to participate in interviews in person and by telephone about continued breathing problems in former premature infants.

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There may be unforeseen risks associated with participation in this research study that are not known at this time.

Benefits

There may be no direct benefit to your child to participate in this research study.

Your child's participation in this study may aid in the understanding of the use of a mask/nasal prongs or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It will also help the doctors to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation.

An MRI performed for the study may have potential benefit which may include a more detailed view of your child's brain that could show abnormalities not seen with a head ultrasound. This would allow the early identification of possible problems for each individual child.

There will be no benefit to you, your child or your family for participation in the parent interviews. However, information from this study may determine the effect of the different ways to help premature babies with breathing and managing oxygen saturation levels on breathing problems in early childhood.

Participation

You may choose for your baby to have the MRI performed to look at the structure of his/her brain and help identify injury.

Yes, I would like my child to have an MRI performed for this study.* _____
Parent initials/ date

No, I do not want my child to have an MRI performed for this study.* _____
Parent initials/ date

You may choose to participate in the parent interviews before your child's discharge and at 6, 12, and 18 months' corrected age.

Yes, I would like to participate in the parent interviews.* _____
Parent initials/ date

No, I do not want to participate in the parent interviews.* _____
Parent initials/ date

*Your signature will also be required on the last page of this consent form.

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IRB NUMBER: 04-29
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Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

Early Withdrawal From the Study

You may choose to withdraw your child from this research study for any reason and at any time with no penalty or loss of benefit of care. Your child will continue to receive all routine care for premature infants which may include help with breathing, monitoring with a pulse oximeter, head ultrasound examinations and weekly measurements to monitor growth.

Alternatives to Participation

If you do not want your child to participate in this study he/she will not be randomized to soft nasal prongs or a breathing tube to assist with breathing immediately after birth in the delivery room and after admission to the NICU. Also, he/she will not be assigned to the high or low end of the normal oxygen saturation range.

All routine and usual care will be provided to your baby which may include help with his/her breathing in the delivery room and in the NICU. The doctors may use nasal prongs, a breathing tube and the ventilator and the oximeter to monitor my baby's oxygen saturation when they feel it is necessary. Usual care for premature infants includes head ultrasounds. An MRI test may be performed if the doctors feel it is necessary.

Financial Information

There will be no extra cost to you or your insurance company for your child's participation in this research study. You and your insurance company will be responsible for all usual care in the NICU which may include the use of nasal prongs, a breathing tube and the ventilator to assist with your child's breathing, surfactant to help with breathing problems and an oximeter to monitor oxygen saturation.

There is no additional cost to you or your insurance company and your insurance company will not be billed for the MRI done for the study. You and your insurance company will be responsible for all usual care which may include head ultrasounds or brain MRI when the doctors feel it necessary.

There is not cost to you or your insurance company for participation in the parent interview prior to discharge and at 6, 12, and 18 months' corrected age of your child. You and your child will not be paid for participation in this research study.

Confidentiality

Information collected for this study will be sent electronically to a central data center via a dedicated computer which is password sensitive. Your child will be identified by a study number and not by name or other identifying information.

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If it is necessary for the study personnel to contact you or your child at a later time, we will contact you at the address and/or telephone numbers you have provided. In the event that we cannot locate you at the address and/or telephone numbers you have provided, we may use other information in your medical record such as social security numbers, your child's pediatrician or other contact information.

Summary of your rights as a participant in a research study

Your participation in this research study is voluntary. Refusing to participate will not alter your usual health care or involve any penalty or loss of benefits to which you are otherwise entitled. If you decide to join the study, you may withdraw at any time and for any reason without penalty or loss of benefits. If information generated from this study is published or presented, your identity will not be revealed. In the event new information becomes available that may affect the risks or benefits associated with this study or your willingness to participate in it, you will be notified so that you can decide whether or not to continue participating. If you experience physical injury or illness as a result of participating in this research study, medical care is available at University Hospitals Case Medical Center (UHCMC) or elsewhere; however, UHCMC has no plans to provide free care or compensation for lost wages.

Disclosure of your study records

Efforts will be made to keep the personal information in your research record private and confidential, but absolute confidentiality cannot be guaranteed. The University Hospitals Case Medical Center Institutional Review Board may review your study records. If this study is regulated by the Food and Drug Administration (FDA), there is a possibility that the FDA might inspect your records. In addition, for treatment studies, the study sponsor and possibly foreign regulatory agencies may also review your records. If your records are reviewed your identity could become known.

Contact information

M.C. Walsh, A.A. Fanaroff, N. Newman, B. Siner has described to you what is going to be done, the risks, hazards, and benefits involved. The researchers conducting this study are M.C. Walsh, N. Newman and B. Siner. You may ask any questions you have now. If you have any questions, concerns or complaints about the study in the future, you may contact them at 216-844-3387. If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about; concerns regarding the study; research participant's rights; research-related injury; or other human subject issues, please contact University Hospitals Case Medical Center's Chief Medical Officer at (216) 844-3695 or write to:
The Chief Medical Officer, The Center for Clinical Research, University Hospitals Case Medical Center, 11100 Euclid Avenue, Lakeside 1400, Cleveland, Ohio, 44106-7061.

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Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY IN EXTREMELY LOW BIRTHWEIGHT (ELBW) INFANTS- The SUPPORT Trial

Principal Investigator M. Walsh

Signature

Signing below indicates that you have been informed about the research study in which you voluntarily agree to participate; that you have asked any questions about the study that you may have; and that the information given to you has permitted you to make a fully informed and free decision about your participation in the study. By signing this consent form, you do not waive any legal rights, and the investigator(s) or sponsor(s) are not relieved of any liability they may have. A copy of this consent form will be provided to you.

Printed Name of Participant

Parent or Legal Guardian signature

Date

Relationship to Child

Signature of Person Obtaining Consent
(Must be study investigator or individual who has been designated in the Checklist to obtain consent.)

Date

Printed Name of Person Obtaining Consent

Second Parent signature

Date

Relationship to Child

Signature of Person Obtaining Consent
(Must be study investigator or individual who has been designated in the Checklist to obtain consent.)

Date

Printed Name of Person Obtaining Consent

If only one parent can sign this consent, indicate the reason that applies to the other parent.

- () deceased
- () unknown
- () legally incompetent
- () no legal responsibility for the care and custody of the child
- () not reasonably available - indicate why _____
(acceptable reasons for this category must not be based on convenience)

Signature of Principal Investigator
(Affirming subject eligibility for the Study and that informed consent has been obtained.)

Date

Printed Name of Principal Investigator

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Project Title: SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY TRIAL IN EXTREMELY LOW BIRTHWEIGHT INFANTS- The SUPPORT Trial

Principal Investigator: M.C. Walsh

Consent signed and copy returned to parent/family. Date _____

Name of Person returning consent _____

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IRB APPROVAL DATE: 11/19/2011
IRB EXPIRATION DATE: 11/17/2012

**UNIVERSITY HOSPITALS
CASE MEDICAL CENTER
CONSENT FOR INVESTIGATIONAL STUDIES**
(v. 08.2009)

Project Title: EXTENDED FOLLOW-UP AT SCHOOL AGE (6½ to 7½ years) FOR THE SUPPORT NEUROIMAGING AND NEURODEVELOPMENTAL OUTCOMES COHORT

Principal Investigator: Michele Walsh

Introduction/Purpose

You are being asked to allow your child to participate in an extended follow-up research study to evaluate school age children who were born premature (less than 28 weeks' gestation) and part of the SUPPORT Trial Neuroimaging (MRI) Secondary study. Your child will complete this follow-up visit when he/she is 6½ to 7½ years of age.

You will need to be able to understand this consent form in order to allow your child to participate in this follow-up research study. If you do not feel you are able to understand this consent you should not give consent for your child to be part of this study.

The purpose of this research study is to evaluate your child's neurodevelopmental outcomes (physical abilities such as walking, talking, vision and hearing, and intelligence and language skills) at 6½ to 7½ years of age. This information will be used to compare with the results of MRI and head ultrasound examinations performed when your child was in the NICU and step-down unit to find out which imaging examinations best predict outcomes at this age.

Five hundred and thirty premature infants at 16 centers who were part of the SUPPORT Trial Neuroimaging (MRI) Secondary study will be invited to participate in this extended follow-up research study. Sixty-five children from Rainbow Babies and Children's Hospital will be invited to participate. The study will be conducted by the doctors and staff from the Department of Pediatrics.

Study Procedures

As a participant in this study, you and child will be asked to return to University Hospitals Bolwell Health Center for the follow-up visit. During the visit, your child will undergo evaluations of his/her skills and abilities which will take about 3 hours. Also, while your child is being tested we will ask you to answer a series of questionnaires which will take less than 1½ hours.

When you and your child arrive for the follow-up visit, your child's growth measurements (weight, length, and head circumference) will be taken. Your child will have 6 evaluations during the visit as follows:

- The first evaluation will test his/her cognition (thinking and understanding) which will take 45-60 minutes.
- The second evaluation will test his/her manual dexterity, eye-hand coordination and balance which will take 20-30 minutes.
- The third evaluation will test reading and language and how your child figures out problems which will take 15 minutes.



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Principal Investigator: Michele Walsh

After a break to allow your child to rest and have a snack or lunch the evaluations will continue as follows:

- The fourth evaluation will test how well your child pays attention and makes decisions and his/her memory which will take 25 minutes.
- The fifth evaluation is a neurologic examination to test muscle movements and coordination and will take 15 minutes.
- The sixth evaluation will test how well your child is able to use his/her arms and legs together or separately when performing certain tasks and will take only 5 minutes.

During the evaluations, your child will be asked if he/she needs additional time for breaks to rest.

During the time your child is having his/her evaluations, you will be asked about your child's medical history, your living arrangements and about your family's lifestyle which will take 15 minutes.

Next you will be asked a series of 6 short questionnaires about your perception of your child's abilities and behaviors, if there are problems you feel your child is having in school or in the community and how you feel about your child's quality of life. These questionnaires will take about 1 hour.

Currently, there are no further follow-up research visits planned, however, if it is necessary for the study personnel to contact you or your child at a later time, we will contact you at the address and/or telephone numbers you have provided. In the event that we cannot locate you at the address and/or telephone numbers you have provided, we may use other information in the medical record such as social security numbers, your child's pediatrician or other contact information.

Risks

Participation in this study does not involve any known risks to you or your child. However, your child may be tired during or after the evaluations or feel uncomfortable if he/she cannot complete the evaluations.

Benefits

There may be no direct benefit to you or your child by participation in this research study. However, your child's participation in this research study may help doctors find out which imaging examinations of premature infants may best predict outcomes when they reach school age.

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Principal Investigator: Michele Walsh

Alternatives to Study Participation

Because of the nature of this research, the only alternative is to not participate in this study.

Financial Information

There is no cost to you or your insurance company for participation in this research study. You will not be paid for your participation in this study.

Confidentiality

Information collected for this follow-up study will be sent electronically to a central data center via a dedicated computer which is password sensitive. You and your child will be identified by a study number and not by name or other identifying information. Information collected for the study will be coded by your study number and will not include any personal information.

Privacy of Protected Health Information

The Health Insurance Portability & Accountability Act (HIPAA) is a Federal law that helps to protect the privacy of your child's health information and to whom this information may be shared within and outside of University Hospitals. This Authorization form is specifically for a research study entitled "EXTENDED FOLLOW-UP AT SCHOOL AGE (6½ TO 7½ years) FOR THE SUPPORT NEUROIMAGING AND NEURODEVELOPMENTAL OUTCOMES COHORT" and will tell you what health information (called Protected Health Information or PHI) will be collected for this research study, who will see your child's PHI and in what ways they can use the information. In order for the Principal Investigators, Dr. Michele Walsh and Dr. Dee Wilson-Costello, and the research study staff to collect and use your child's PHI, you must sign this authorization form. You will receive a copy of this signed Authorization for your records. If you do not sign this form, your child may not join this study. Your decision to allow the use and disclosure of your child's PHI is voluntary and will have no impact on your child's treatment at University Hospitals. By signing this form, you are allowing the researchers for this study to use and disclose your child's PHI in the manner described below.

Generally the Principal Investigator and study staff at University Hospitals and Case Western Reserve University who are working on this research project will know that your child is in a research study and will see and use your child's PHI. The researchers working on this study will collect the following PHI about your child: neurodevelopmental outcomes (physical abilities such as walking, talking, vision and hearing, and intelligence and language skills at 6½ to 7½ years of age), your opinion of your child's abilities and behaviors and how he/she is doing in school and in the community. This PHI will be used to compare your child's outcomes at 6½ to 7½ to results of



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Principal Investigator: Michèle Walsh

imaging examinations done when he/she was a patient in the NICU after birth. Your access to your child's PHI may be limited during the study to protect the study results.

Your child's PHI may also be shared with the following groups/persons associated with this research study or involved in the review of research: National Institutes of Health, National Institute of Child Health and Development, Research Triangle Institute, other staff from the Principal Investigator's medical practice group; University Hospitals, including the Center for Clinical Research and the Law Department; Government representatives or Federal agencies, when required by law.

Your permission to use and disclose your child's PHI does not expire. However, you have the right to change your mind at any time and revoke your authorization. If you revoke your authorization, the researchers will continue to use the information that they previously collected, but they will not collect any additional information. Also, if you revoke your authorization your child may no longer be able to participate in the research study. To revoke your permission, you must do so in writing by sending a letter to Dr. Michele Walsh, 11100 Euclid Avenue, Cleveland, OH 44106-6010. If you have a complaint or concerns about the privacy of your child's health information, you may also write to the UH Privacy Officer, Management Service Center, 3605 Warrensville Center, MSC 9105, Shaker Heights, OH 44122 or to the Federal Department of Health and Human Services (DHHS) at DHHS Regional Manager, Office of Civil Rights, US Department of Health and Human Services Government Center, JF Kennedy Federal Building, Room 1875, Boston, MA 02203. Complaints should be sent within 180 days of finding out about the problem.

The researchers and staff agree to protect your child's health information by using and disclosing it only as permitted by you in this Authorization and as directed by state and Federal law. University Hospitals is committed to protecting your child's confidentiality. Please understand that once your child's PHI has been disclosed to anyone outside of University Hospitals, there is a risk that your child's PHI may no longer be protected; however other Federal and State laws may provide continued protection of your child's information.

Summary of your rights as a participant in a research study

You and your child's participation in this research study are voluntary. Refusing to participate will not alter you and your child's usual health care or involve any penalty or loss of benefits to which you and your child are otherwise entitled. If you decide to join the study, you may withdraw at any time and for any reason without penalty or loss of benefits. If information generated from this study is published or presented, you and your child's identity will not be revealed. In the event



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Principal Investigator: Michele Walsh

new information becomes available that may affect the risks or benefits associated with this study or your willingness to participate in it, you will be notified so that you can decide whether or not to continue participating. If you or your child experience physical injury or illness as a result of participating in this research study, medical care is available at University Hospitals Case Medical Center (UHCMC) or elsewhere; however, UHCMC has no plans to provide free care or compensation for lost wages.

Disclosure of your study records

Efforts will be made to keep the personal information in your child's research record private and confidential, but absolute confidentiality cannot be guaranteed. The University Hospitals Case Medical Center Institutional Review Board may review your child's study records. If this study is regulated by the Food and Drug Administration (FDA), there is a possibility that the FDA might inspect your child's records. In addition, for treatment studies, the study sponsor and possibly foreign regulatory agencies may also review your child's records. If your child's records are reviewed your child's identity could become known.

Contact information

_____ has described to you what is going to be done, the risks, hazards, and benefits involved. The Principal Investigators, Dr. Michele Walsh and Dr. Dee Wilson-Costello, can also be contacted at (216)844-3387. If you have any questions, concerns or complaints about the study in the future, you may also contact them later. If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about concerns regarding the study; research participant's rights; research-related injury; or other human subject issues, please call the University Hospitals Case Medical Center's Research Subject Rights phone line at (216) 983-5633 or write to: The Chief Medical Officer, The Center for Clinical Research, University Hospitals Case Medical Center, 11100 Euclid Avenue, Lakeside 1400, Cleveland, Ohio, 44106-7061.



IRB APPROVAL DATE: 11/19/2011
IRB EXPIRATION DATE: 11/17/2012

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(v. 08.2009)

Project Title: EXTENDED FOLLOW-UP AT SCHOOL AGE (6½ to 7½ years) FOR THE SUPPORT NEUROIMAGING AND NEURODEVELOPMENTAL OUTCOMES COHORT

Principal Investigator: Michele Walsh

Signature

Signing below indicates that you have been informed about the research study in which you and your child voluntarily agree to participate; that you have asked any questions about the study that you may have; and that the information given to you has permitted you to make a fully informed and free decision about your participation in the study. By signing this consent form, you do not waive any legal rights, and the investigator(s) or sponsor(s) are not relieved of any liability they may have. A copy of this consent form will be provided to you.

<input checked="" type="checkbox"/>	
Signature of Participant	Date
<input checked="" type="checkbox"/>	
Printed name of minor if used to obtain assent	
<input checked="" type="checkbox"/>	
Signature of Parent/Legal Guardian	Date
<input checked="" type="checkbox"/>	
Printed name of Parent/Legal Guardian	
<input checked="" type="checkbox"/>	
If Legal Guardian, indicate relationship to child	



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Principal Investigator: Michele Walsh

Study personnel (only individuals designated on the checklist may obtain consent)

<input checked="" type="checkbox"/>	
Signature of person obtaining informed consent	Date
<input checked="" type="checkbox"/>	
Printed name of person obtaining informed consent	
<input checked="" type="checkbox"/>	
Signature of Principal Investigator	Date
<input checked="" type="checkbox"/>	
Printed name of Principal Investigator	

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(v. 08.2009)

Project Title: EXTENDED FOLLOW-UP AT SCHOOL AGE (6½ to 7½ years) FOR THE SUPPORT NEUROIMAGING AND NEURODEVELOPMENTAL OUTCOMES COHORT

Principal Investigator: Michele Walsh

Introduction/Purpose

You are being asked to allow your child to participate in an extended follow-up research study to evaluate school age children who were born premature (less than 28 weeks' gestation) and part of the SUPPORT Trial Neuroimaging (MRI) Secondary study. Your child will complete this follow-up visit when he/she is 6½ to 7½ years of age.

You will need to be able to understand this consent form in order to allow your child to participate in this follow-up research study. If you do not feel you are able to understand this consent you should not give consent for your child to be part of this study.

The purpose of this research study is to evaluate your child's neurodevelopmental outcomes (physical abilities such as walking, talking, vision and hearing, and intelligence and language skills) at 6½ to 7½ years of age. This information will be used to compare with the results of MRI and head ultrasound examinations performed when your child was in the NICU and step-down unit to find out which imaging examinations best predict outcomes at this age.

Five hundred and thirty premature infants at 16 centers who were part of the SUPPORT Trial Neuroimaging (MRI) Secondary study will be invited to participate in this extended follow-up research study. Sixty-five children from Rainbow Babies and Children's Hospital will be invited to participate. The study will be conducted by the doctors and staff from the Department of Pediatrics.

Study Procedures

As a participant in this study, you and child will be asked to return to the BioEnterprise Building, 11000 Cedar Avenue, Cleveland, OH 44106, 4th floor, Follow-up Research for the follow-up visit. During the visit, your child will undergo evaluations of his/her skills and abilities which will take about 3 hours. Also, while your child is being tested we will ask you to answer a series of questionnaires which will take less than 2 hours.

When you and your child arrive for the follow-up visit, your child's growth measurements (weight, length, and head circumference) will be taken. Your child will have 6 evaluations during the visit as follows:

- The first evaluation will test his/her cognition (thinking and understanding) which will take 45-60 minutes.
- The second evaluation will test his/her manual dexterity, eye-hand coordination and balance which will take 20-30 minutes.

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- The third evaluation will test reading and language and how your child figures out problems which will take 15 minutes.

After a break to allow your child to rest and have a snack or lunch the evaluations will continue as follows:

- The fourth evaluation will test how well your child pays attention and makes decisions and his/her memory which will take 25 minutes.
- The fifth evaluation is a neurologic examination to test muscle movements and coordination and will take 15 minutes.
- The sixth evaluation will test how well your child is able to use his/her arms and legs together or separately when performing certain tasks and will take only 5 minutes.

During the evaluations, your child will be asked if he/she needs additional time for breaks to rest.

During the time your child is having his/her evaluations, you will be asked about your child's medical history, your living arrangements and about your family's lifestyle which will take 15 minutes.

Next you will be asked a series of 6 short questionnaires about your perception of your child's abilities and behaviors, if there are problems you feel your child is having in school or in the community and how you feel about your child's quality of life. These questionnaires will take about 1 hour.

Currently, there are no further follow-up research visits planned, however, if it is necessary for the study personnel to contact you or your child at a later time, we will contact you at the address and/or telephone numbers you have provided. In the event that we cannot locate you at the address and/or telephone numbers you have provided, we may use other information in the medical record such as social security numbers, your child's pediatrician or other contact information.

Risks

Participation in this study does not involve any known risks to you or your child. However, your child may be tired during or after the evaluations or feel uncomfortable if he/she cannot complete the evaluations.

Benefits

There may be no direct benefit to you or your child by participation in this research study.

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However, your child’s participation in this research study may help doctors find out which imaging examinations of premature infants may best predict outcomes when they reach school age.

Alternatives to Study Participation

Because of the nature of this research, the only alternative is to not participate in this study.

Financial Information

There is no cost to you or your insurance company for participation in this research study. You will be paid \$100 for your participation in this study.

Confidentiality

Information collected for this follow-up study will be sent electronically to a central data center via a dedicated computer which is password sensitive. You and your child will be identified by a study number and not by name or other identifying information. Information collected for the study will be coded by your study number and will not include any personal information.

Privacy of Protected Health Information

The Health Insurance Portability & Accountability Act (HIPAA) is a Federal law that helps to protect the privacy of your child’s health information and to whom this information may be shared within and outside of University Hospitals. This Authorization form is specifically for a research study entitled “EXTENDED FOLLOW-UP AT SCHOOL AGE (6½ TO 7½ years) FOR THE SUPPORT NEUROIMAGING AND NEURODEVELOPMENTAL OUTCOMES COHORT” and will tell you what health information (called Protected Health Information or PHI) will be collected for this research study, who will see your child’s PHI and in what ways they can use the information. In order for the Principal Investigators, Dr. Michele Walsh and Dr. Dee Wilson-Costello, and the research study staff to collect and use your child’s PHI, you must sign this authorization form. You will receive a copy of this signed Authorization for your records. If you do not sign this form, your child may not join this study. Your decision to allow the use and disclosure of your child’s PHI is voluntary and will have no impact on your child’s treatment at University Hospitals. By signing this form, you are allowing the researchers for this study to use and disclose your child’s PHI in the manner described below.

Generally the Principal Investigator and study staff at University Hospitals and Case Western Reserve University who are working on this research project will know that your child is in a research study and will see and use your child’s PHI. The researchers working on this study will collect the following PHI about your child: neurodevelopmental outcomes (physical abilities such

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as walking, talking, vision and hearing, and intelligence and language skills at 6½ to 7½ years of age), your opinion of your child’s abilities and behaviors and how he/she is doing in school and in the community. This PHI will be used to compare your child’s outcomes at 6½ to 7½ to results of imaging examinations done when he/she was a patient in the NICU after birth. Your access to your child’s PHI may be limited during the study to protect the study results.

Your child’s PHI may also be shared with the following groups/persons associated with this research study or involved in the review of research: National Institutes of Health, National Institute of Child Health and Development, Research Triangle Institute, other staff from the Principal Investigator’s medical practice group; University Hospitals, including the Center for Clinical Research and the Law Department; Government representatives or Federal agencies, when required by law.

Your permission to use and disclose your child’s PHI does not expire. However, you have the right to change your mind at any time and revoke your authorization. If you revoke your authorization, the researchers will continue to use the information that they previously collected, but they will not collect any additional information. Also, if you revoke your authorization your child may no longer be able to participate in the research study. To revoke your permission, you must do so in writing by sending a letter to Dr. Michele Walsh, 11100 Euclid Avenue, Cleveland, OH 44106-6010. If you have a complaint or concerns about the privacy of your child’s health information, you may also write to the UH Privacy Officer, Management Service Center, 3605 Warrensville Center, MSC 9105, Shaker Heights, OH 44122 or to the Federal Department of Health and Human Services (DHHS) at DHHS Regional Manager, Office of Civil Rights, US Department of Health and Human Services Government Center, JF Kennedy Federal Building, Room 1875, Boston, MA 02203. Complaints should be sent within 180 days of finding out about the problem.

The researchers and staff agree to protect your child’s health information by using and disclosing it only as permitted by you in this Authorization and as directed by state and Federal law. University Hospitals is committed to protecting your child’s confidentiality. Please understand that once your child’s PHI has been disclosed to anyone outside of University Hospitals, there is a risk that your child’s PHI may no longer be protected; however other Federal and State laws may provide continued protection of your child’s information.

Summary of your rights as a participant in a research study

You and your child’s participation in this research study are voluntary. Refusing to participate will not alter you and your child’s usual health care or involve any penalty or loss of benefits to which

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you and your child are otherwise entitled. If you decide to join the study, you may withdraw at any time and for any reason without penalty or loss of benefits. If information generated from this study is published or presented, you and your child's identity will not be revealed. In the event new information becomes available that may affect the risks or benefits associated with this study or your willingness to participate in it, you will be notified so that you can decide whether or not to continue participating. If you or your child experience physical injury or illness as a result of participating in this research study, medical care is available at University Hospitals Case Medical Center (UHCMC) or elsewhere; however, UHCMC has no plans to provide free care or compensation for lost wages.

Disclosure of your study records

Efforts will be made to keep the personal information in your child's research record private and confidential, but absolute confidentiality cannot be guaranteed. The University Hospitals Case Medical Center Institutional Review Board may review your child's study records. If this study is regulated by the Food and Drug Administration (FDA), there is a possibility that the FDA might inspect your child's records. In addition, for treatment studies, the study sponsor and possibly foreign regulatory agencies may also review your child's records. If your child's records are reviewed your child's identity could become known.

Contact information

_____ has described to you what is going to be done, the risks, hazards, and benefits involved. The Principal Investigators, Dr. Michele Walsh and Dr. Dee Wilson-Costello, can also be contacted at (216)844-3387. If you have any questions, concerns or complaints about the study in the future, you may also contact them later. If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about concerns regarding the study; research participant's rights; research-related injury; or other human subject issues, please call the University Hospitals Case Medical Center's Research Subject Rights phone line at (216) 983-5633 or write to: The Chief Medical Officer, The Center for Clinical Research, University Hospitals Case Medical Center, 11100 Euclid Avenue, Lakeside 1400, Cleveland, Ohio, 44106-7061.



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Signature

Signing below indicates that you have been informed about the research study in which you and your child voluntarily agree to participate; that you have asked any questions about the study that you may have; and that the information given to you has permitted you to make a fully informed and free decision about your participation in the study. By signing this consent form, you do not waive any legal rights, and the investigator(s) or sponsor(s) are not relieved of any liability they may have. A copy of this consent form will be provided to you.

X	
	Date
X	
	Printed name of minor if used to obtain assent
X	
	Date
X	
	Printed name of Parent/Legal Guardian
X	
	If Legal Guardian, indicate relationship to child



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Study personnel (only individuals designated on the checklist may obtain consent)

X	
	Date
X	
	Printed name of person obtaining informed consent
X	
	Date
X	
	Printed name of Principal Investigator



CINCINNATI CHILDREN'S HOSPITAL MEDICAL CENTER CONSENT TO PARTICIPATE IN A RESEARCH STUDY

STUDY TITLE: THE SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY TRIAL IN EXTREMELY LOW BIRTH WEIGHT INFANTS (THE SUPPORT TRIAL)

SPONSOR NAME:

National Institutes of Health (NIH) /National Institute of Child Health and Human Development (NICHD)

INVESTIGATOR INFORMATION:

<u>Vivek Narendran, MD</u>	<u>(513)-803-0961</u>	<u>(513) 820-3879</u>
Principal Investigator Name	Telephone Number	24 hr Emergency Contact

Subject Name: _____ **Date of Birth:** ____/____/____

Throughout this document, references to "You" may stand for either the research study subject or for the parents or legal guardians of the research study subject if the subject is under 18 years of age or otherwise unable to legally give informed consent to participate in the research study. The signature(s) at the end will clarify whether the research study subject is signing this consent form on their own behalf or via a legal guardian or legal personal representative.

INTRODUCTION:

You have been asked to participate in a research study. Before agreeing to participate in this study, it is important that you read and understand the following explanation. It describes, in words that can be understood by a lay person, the purpose, procedures, benefits, risks and discomforts of the study and the precautions that will be taken. It also describes the alternatives available and the right to withdraw from the study at any time. No guarantee or assurance can be made as to the results of the study. Also, participation in the research study is completely voluntary. Refusal to participate will

involve no penalty or loss of benefits to which you are otherwise entitled. You may withdraw from the study at any time without penalty.

WHY IS THIS RESEARCH BEING DONE?

The purpose of this research study is to determine the best way to care for very premature infants to reduce the risk for lung disease and eye disease, and to see whether the treatment your infant receives, as part of this study, will improve breathing during the 6-22 months after his/her expected due date.

Very premature infants less than 28 weeks gestational age often develop lung disease and eye disease which may lead to long term disability or death. This lung disease and eye disease may be caused by the kind of treatment that is used normally in the delivery room and in the nursery. This current treatment can cause either collapse of the lungs or too much expansion of the lungs. This may cause injury to the lung leading to long term lung disease or possibly death.

Too much oxygen in the beginning days of life can cause the blood vessels in the eye to grow abnormally. At the same time, not enough oxygen can adversely affect an infant's growth and brain development. Your infant's oxygen is monitored by a machine called a pulse oximeter. This machine tells us how much oxygen is in the blood stream. The study doctors are trying to find the best oxygen level to prevent these lung and eye diseases.

WHY HAVE YOU BEEN ASKED TO TAKE PART IN THIS RESEARCH STUDY?

You are being asked to take part in this research study because you may deliver your infant early. Infants that are delivered early, or premature, are at a higher risk of developing lung disease and eye disease.

WHO SHOULD NOT BE IN THE RESEARCH STUDY?

- Anyone who delivers outside the hospital center
- Anyone who delivers before 24 weeks gestation or after 28 weeks gestation
- If your infant has a known birth defect

HOW LONG WILL YOUR INFANT BE IN THE RESEARCH STUDY?

Your infant's participation in this research study will last until the age of 22 months. The doctor who is caring for your infant may decide to take your infant off this research study at any time if he/she feels it is necessary.

During that time, we will gather information from your infant's medical record, including results of routine NICU assessments, such as head ultrasounds and ophthalmologic exams.

All infants with a birth weight of ≤ 1500 grams have an eye exam at 32 weeks post menstrual age or 5-6 weeks of age, whichever comes last. For purposes of the SUPPORT Trial, the results of these exams will be recorded until the infant's eyes reach final status. This may include exams after discharge home or transfer to another hospital.

The majority of this study will take place while your infant is in the hospital. Once he/she has been discharged, there will be one more assessment done at a routine 18 - 22 month follow-up visit at the High Risk clinic.

At the follow-up visit, your child will have a basic health check, as well as a neurological examination. After being weighed and measured, your child will meet with the developmental psychometrist, and the Bayley Scales of Infant Development will be administered. All tests are standard tests frequently used in the assessment of child development, child behavior, and neurological function.

The following questionnaires will be completed by the psychometrist through an interview with the caregiver:

- 1) Socio-Economic Status (SES) at nursery discharge.
- 2) Socio-Economic Status (SES) at 18 + 4 months of age.
- 3) Medical History
- 4) Family Resource Scale - measures the adequacy of different resources in the household.
- 5) The Brief Infant-Toddler Social and Emotional Assessment (BITSEA).
- 6) SUPPORT Trial Breathing Outcomes Study: 6 - 12 Month Interview (SUPF02 Rel 1.0)
- 7) SUPPORT Trial Breathing Outcomes Study: 8 - 22 Month Interview (SUPF03 Rel 1.0)

A more complete description of all these tests is available as an appendix to this consent form if requested. All these tests will be administered by a single developmental psychometrist. All children will be examined in the study program.

WHO IS CONDUCTING THE RESEARCH STUDY?

This study is sponsored by National Institutes of Health (NIH)/National Institutes of Child Health & Human Development (NICHD).

The study is directed by Vivek Narendran, MD, the researcher at Cincinnati Children's Hospital Medical Center.

HOW MANY PEOPLE WILL TAKE PART IN THE RESEARCH STUDY?

Approximately 1345 infants will be asked to take part in this study.

The NICHD Neonatal Research Network has 16 sites taking part in this study. The University Hospital, the Good Samaritan Hospital, and the Cincinnati Children's Hospital comprise the Cincinnati site within the Neonatal Research Network.

WHAT IS INVOLVED IN THE RESEARCH STUDY?

Neither you, nor the researcher conducting this study will know what group your infant will be assigned. Your infant will have a one in four chance of being placed in any group. However, in the event of an emergency, your study doctor will be able to find out which treatment you are receiving.

In the hospital:

If you agree to have your infant participate in this study, he/she will be assigned to one of the four study groups described below. A flip-of-the-coin method will be used to assign infants to a group.

The four study groups are as follow:

- Strong efforts will be made in this group to keep infants off the ventilator (breathing machine) and the infants will be assigned to a lower blood oxygen range of 85% to 89%.
- Strong efforts will be made in this group to keep infants off the ventilator (breathing machine) and the infants will be assigned to a slightly higher blood oxygen range of 91% to 95%.
- Routine standard care will be practiced in this group and infants will be assigned to a lower blood oxygen level of 85%-89%.
- Routine standard care will be practiced in this group and infants will be assigned to a higher blood oxygen level of 91%-95%.

Strong efforts to keep infants off the ventilator include the use of continuous positive airway pressure or CPAP. This provides some pressure to keep the lungs expanded, but allows the infant to breathe on his/her own. Routine standard care will include the use of a ventilator (breathing machine) and a medicine called surfactant. This medicine is put directly in the lungs through the breathing tube in your infant's throat and helps your infant to breathe easier.

Because oxygen affects how well infants grow, measurements of your infant's weight, length and head circumference will be taken from birth until hospital discharge. Nutrition information will also be collected.

Optional:

It is not known whether breathing extra oxygen as treatment for lung problems causes a depletion of anti-oxidants or a build up of oxidants. These substances may alter lung growth and development and make premature babies more likely to wheeze in early childhood. Anti-oxidant levels can be detected in the blood. One milliliter of blood from the placenta will be collected and analyzed for anti-oxidant levels. Two thirds of one milliliter of blood (0.67cc or 13 drops) will also be collected from your infant when he or she is 14 days and 28 days old. The total amount of blood is 1.3 milliliters (1.3 milliliters is equal to 24 drops or approximately one - fifth of a teaspoon) over a 1 month time period. This amount of blood is considered safe for purposes of research by the Federal Government's National Institute of Health. Every attempt will be made to draw these blood samples at the same time as blood testing that is done as part of routine care in the NICU. You may accept or decline this extra blood collection.

Accept

Decline

After discharge:

Once your infant is discharged, we will continue to stay in touch with you and your infant, by telephone, or in person, at one of your routine visits at the High Risk Infant Follow-Up Clinic at Children's Hospital, every six months over the next 6-22 months.

During this routine medical check-up, trained staff will meet with you and your child to ask you some questions, check your child's growth measurements, and check your child's level of development by interacting with him/ her.

There will be a total of 3 study visits or calls during this time. During these clinic visits and/ or telephone calls, we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a doctor, emergency room, or hospital for treatment of breathing problems. We will also ask you several questions about your family and yourself. Answering the study questions should take about 15 minutes of your time, less if your baby has had no breathing problems.

The telephone calls will be scheduled when your infant is 6, 12, and 18 months after his/her expected delivery at full term. We will schedule the calls at a time that is convenient to you.

The results from your infant's questionnaire will be combined with the results of other infants from around the country; however, your infant's name will not be used.

WHAT ARE THE RISKS AND DISCOMFORTS OF THE RESEARCH STUDY?

Trying to keep infants off the breathing machine, and on CPAP, may lead to: a) an increased respiratory effort, b) brief periods of a pause in their breathing (apnea), and c) higher carbon dioxide in their blood, and d) nasal septum breakdown. Safeguards are in place to monitor these side effects. This may include the use of a ventilator (breathing machine) when appropriate.

Trying to leave infants on the ventilator (breathing machine) may lead to: a) worsening lung injury due to the pressures used by the machine, b) mechanical complications such as obstruction or loss of airway, and c) prolonged hospital stay. Safeguards are in place to monitor these side effects. The doctor will make changes as needed.

For the optional portion of this study, every attempt will be made to draw the blood samples at the same time as blood testing for routine care. In the event that it is necessary to draw blood by venipuncture -- clinical personnel will take the small amount of blood from a vein in your baby's arm or leg by needle stick, or by heelstick. Risks associated with drawing blood from your baby's arm or leg include momentary discomfort and/or bruising. Infection, excess bleeding, clotting, and/or fainting are also possible, although unlikely.

There may be unknown or unforeseen risks associated with study participation.

One of the risks of participating in research is the loss of confidentiality. Please see confidentiality section.

ARE THERE DIRECT BENEFITS TO TAKING PART IN THE RESEARCH STUDY?

There may be a direct benefit to your child participating in this study, in that information about his/ her development may be learned during the 6 -22 month follow-up study period, following discharge from the hospital. This information will be gathered from the assessments and your child's interaction with study personnel during this period.

WHAT OTHER CHOICES ARE THERE?

You may decide to **not** allow your infant to take part in this research. You may choose to have your infant treated with the usual standard medical care as determined by the doctor. If you refuse participation in this study, it will not change your infant's care in the nursery.

If you decide to allow your infant to take part in this research, you will receive any new information during the course of the study concerning significant treatment findings. This may affect your willingness to continue your infant's participation and you may withdraw your infant from the study at any time.

HOW WILL INFORMATION ABOUT YOU BE KEPT PRIVATE AND CONFIDENTIAL?

Every effort will be made to maintain the confidentiality of your medical information and your infant's medical or research information. Medical record information and potentially identifying information such as your infant's name and birth date are classified as "Protected Health Information" or "PHI".

Protected Health Information is defined as health information, whether verbal or recorded in any form (such as on a piece of paper or entered into a computer), that identifies you, or your infant, as an individual, or offers a reasonable basis to believe that the information could be used to identify you or your infant.

Study records that identify your child will be kept confidential as required by law. Federal Privacy Regulations provide safeguards for privacy, security and authorized access. Except when required by law, your child will not be identified by name, social security number, address, telephone number, or any other direct personal identifier in study records disclosed outside of Cincinnati Children's Hospital Medical Center.

By signing this consent form you are giving permission for representatives of the Cincinnati Children's Hospital Medical Center ("CCHMC"), the investigator and CCHMC employees involved with the research study, including the Institutional Review Board and the Office for Research Compliance, and/ or their appointed agent, as well as the National Institutes of Health, to inspect sections of your medical records and your infant's medical and research records related to this study.

When a study is submitted to the FDA, the clinical investigator agrees to allow the FDA access to the study records. The FDA will treat the information as confidential, but on rare occasions disclosure to third parties may be required by law. Therefore, absolute protection of confidentiality cannot be promised or implied.

A Data and Safety Monitoring Board, an independent group of experts, will be reviewing the data from this research throughout the study. The investigator will tell you about new information from this or other studies that may affect your health, welfare, or willingness to stay in this study.

The information from the research study may be published; however, you will not be identified in such a publication. The publication will not contain information about you that would enable someone to determine your identity as a research participant without

your authorization.

Cincinnati Children's Hospital Medical Center and/or the Investigator will take the following precautionary measures to protect your privacy and confidentiality of your research and/or medical records: and those of your infant.

No information such as name, address, telephone number, etc. that could be used to easily identify your infant will be kept as part of the research records.

A copy of this consent form will be included in your infant's medical research record.

Your infant will be registered in the Cincinnati Children's Hospital Medical Center's computer system as a research subject which may be beneficial for future clinical care.

USE AND DISCLOSURE OF YOUR PROTECTED HEALTH INFORMATION

The Protected Health Information described in the section above will be used /disclosed for the purpose of research by CCHMC to the other persons or entities identified above.

"Use" of an individual's health information is defined as the sharing, examination or analysis (break down) of the information that is collected and maintained for the length of the research study.

"Disclosure" of an individual's health information is defined as the release, transfer, providing access to, or to reveal in any other manner, the information outside the persons or entity holding the information as described in the section "How Will Information About You Be Kept Private And Confidential" in this consent form.

Once your Protected Health Information is disclosed, the information may be subject to re-disclosure and may no longer be protected by the federal privacy regulations.

AVAILABILITY OF INFORMATION?

As indicated above, you will receive any new information during the course of the study concerning significant treatment findings.

WHAT ARE YOUR COSTS TO BE IN THIS STUDY?

The procedures of this study are standard methods of caring for premature infants and will be billed to your infant's hospital account. There will be no additional studies or assessments, including head ultrasounds, performed for study purposes only; all studies are clinically indicated.

Funds are not available to cover the costs of any ongoing medical care and you remain responsible for the cost of non-research care.

If you have questions about your medical bill relative to research participation, you may contact Dr. Vivek Narendran by calling (513) 558-0557.

WILL YOU BE PAID TO PARTICIPATE IN THIS RESEARCH STUDY?

There is no payment or reimbursement for participation in this research study.

WHAT COMPENSATION IS AVAILABLE IN CASE OF INJURY?

If you believe that you have been injured as a result of participation in biomedical or behavioral research you are to contact Dr. Vivek Narendran by calling (513) 558-0557 or the Director of Social Services (513-636-4711) to discuss your concerns. Cincinnati Children's Hospital Medical Center follows a policy of making all decisions concerning compensation and/or medical treatment for physical injuries occurring during or caused by participation in biomedical or behavioral research on an individual basis.

WHAT ARE YOUR RIGHTS AS A PARTICIPANT?

Your participation in this study is completely **voluntary**. You may choose either to take part or not to take part in this research study. Your decision whether or not to participate will not result in any penalty or loss of benefits to you and the standard medical care for your condition will remain available to you.

If you decide to take part in the research study, you are **free to withdraw** your consent and discontinue participation in this research study at any time. Leaving the study will not result in any penalty or loss of benefits to you.

You may revoke (choose to withdraw) this Authorization as provided under the Health Insurance Portability and Accountability Act of 1996 (HIPAA") at any time after you have signed it by providing Dr. Vivek Narendran with a written statement that you wish to withdraw this Authorization. Your withdrawal of this Authorization will be effective immediately and your Protected Health Information can no longer be used/disclosed for research purposes by CCHMC and the other persons or entities that are identified in the "Use or Disclosure of Your Protected Health Information" section of this consent, except to the extent that CCHMC and/or the other persons or entities identified above have already taken action in reliance upon your consent. In addition, your Protected Health Information may continue to be used / disclosed to preserve the integrity of this research study.

The investigators will tell you about significant new findings developed during the course of the research and new information that may affect your health, welfare, or willingness to stay in this study.

If you have questions about the study, you will have a chance to talk to one of the study staff or your regular doctor. Do not sign this form unless you have had the chance to ask questions and have received satisfactory answers.

Nothing in this consent form waives any legal rights you may have nor does it release the investigator, the sponsor, the institution, or its agents from liability for negligence.

For further information about your rights, please see CCHMC Notice of Privacy Practices. A copy of the CCHMC Notice of Privacy Practices may be obtained from any patient registration area or online at www.cincinnatichildrens.org (From the internet page select in the following order: About Us, Corporate Information, HIPAA). You may also contact our Privacy Officer at 513-636-4707 to obtain a copy.

ABILITY TO CONDITION TREATMENT ON PARTICIPATION IN THIS STUDY

You have a right to refuse to sign this consent to use/disclose your Protected Health Information for research purposes.

If you refuse to sign this consent, you may not be able to receive research-related treatment.

If you refuse to sign this consent, your rights concerning treatment, payment for services, and enrollment in a health plan or eligibility for benefits will not be affected.

WHOM DO YOU CALL IF YOU HAVE QUESTIONS OR PROBLEMS?

For questions about this research study or to report a research-related injury, you can contact the researcher Dr. Vivek Narendran at (513) 558-0557. Researchers are available to answer any questions you may have about the research at any time.

If you have general questions about your rights as a research participant in this research study, you may call the Cincinnati Children's Hospital Medical Center Institutional Review Board at (513) 636-8039.



CINCINNATI CHILDREN'S HOSPITAL MEDICAL CENTER CONSENT TO PARTICIPATE IN A RESEARCH STUDY

STUDY TITLE: THE SURFACTANT POSITIVE AIRWAY PRESSURE AND PULSE OXIMETRY TRIAL IN EXTREMELY LOW BIRTH WEIGHT INFANTS (THE SUPPORT TRIAL)

INVESTIGATOR INFORMATION:

<u>Vivek Narendran, MD</u>	<u>(513) 558-0557</u>	<u>(513) 820-3879</u>
Principal Investigator Name	Telephone Number	24 hr Emergency Contact

SIGNATURES:

I have read the information given above. The investigator or his/her designee have personally discussed with me the research study and have answered my questions. I am aware that, like in any research, the investigators cannot always predict what may happen or possibly go wrong. I have been given sufficient time to consider if I (or my child) should participate in this study. I hereby consent for myself (or my child) to take part in this study as a research study subject.

Parent/Legal Guardian (Signature) Date:_____

Parent/Legal Guardian (Signature) Date:_____

Investigator or specific individual who has been designated to obtain consent (Signature) Date:_____

Investigator (Signature) Date:_____

This research study and consent form have been reviewed and approved by the Cincinnati Children's Hospital Medical Center Institutional Review Board (telephone number 513-636-8039).

**The University of Texas Southwestern Medical Center at Dallas
Parkland Health & Hospital System and Children's Medical Center**

CONSENT TO PARTICIPATE IN RESEARCH

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

Sponsor: National Institute of Child Health and Human Development Neonatal Research Network

Investigators:	Telephone No. (regular office hours)	Telephone No. (other times)
Pablo J. Sánchez, MD	214-648-3753	972-206-9021
Nancy Miller, RN	214-648-3780	214-590-6500
Melissa Leps, RN	214-648-3780	214-590-6500
Roy Heyne, M.D.	214-648-3753	972-206-8791
Janet Morgan, RN	214-456-2585	972-206-9153
Andrea Duncan, MD	214-648-2098	972-451-1192
Arpitha Chiruvolu	214-648-2098	972-451-1193
Darryl Miao, MD	214-648-2098	972-206-9268
LaKeitha Foster, MD	214-648-2098	972-326-1689
Liaqat Khan, MD	214-648-2098	972-601-0011
David Lam, MD	214-648-2098	972-326-1690
Catrinel Marinescu, MD	214-648-2098	972-326-1691
Lilian St. John, MD	214-648-2098	972-206-8775
Nathan Sundgren, MD	214-648-2098	972-601-8701
Nimisha Gupta, MD	214-648-2098	972-326-1175

INVITATION: You/your newborn infant are invited to participate in this research because there is a possibility he/she will be born 12 to 16 weeks early and could possibly develop a lung problem called bronchopulmonary dysplasia (an abnormal formation of the lungs in premature infants leading to a need for oxygen treatment for a long time) and an eye problem called retinopathy of prematurity (an eye disease that may result in poor vision or loss of sight in premature infants), which may be caused by high oxygen treatment.

Medical research involves offering a plan of care to a group of patients, collecting and studying information about each patient's experience, and using that information to develop the best possible care for future patients.

NUMBER OF PARTICIPANTS: The sponsor plans to include 1300 newborn infants in the study from all the National Institute of Child Health and Human Development Neonatal Research Network hospitals over a two-year period.

PURPOSE: This study has three purposes and they are:

- 1) To compare newborn infants, in the delivery room, who receive breathing support through their nose with a cannula with newborn infants who have a tube placed in their windpipe (a process called intubation) and surfactant (a liquid which helps babies with immature lungs breathe easier by keeping their lungs from collapsing) given in the first hour of life.
- 2) To compare newborn infants, in the intensive care nursery, treated with low range (85-89%) oxygen saturation levels (a measure of the amount of oxygen in the blood) with newborn infants treated with high range oxygen saturation (91-95%) levels.
- 3) To measure the effects of the oxygen therapies used in the study on the growth of premature infants.

PROCEDURES

Breathing support through the nose with a cannula blowing air (also called nasal continuous positive airway pressure), or intubation with surfactant are both treatments currently used in the delivery room at Parkland Health and Hospital System. The decision to use one or the other on any newborn infant is made by the doctor who is in the delivery room.

Screening: The study doctor will ask you questions on whether you are admitted to the hospital in premature labor and whether we can approach you to be in this study.

Randomization:

If you agree for your newborn infant to be in this study, your infant will be randomized (chosen by chance like the flip of a coin) to one of two lung treatment groups:

- 1) Nasal continuous positive airway pressure through the nose or the mouth in the delivery room immediately after birth and continuing in the intensive care nursery, or
- 2) The placement of a tube in his/her windpipe in the delivery room followed by giving surfactant and mechanical ventilation (breathing for the baby using a machine).

After admission to the intensive care nursery, your newborn infant will also be randomized to a low or a high oxygen saturation group using a specially designed oximeter (a monitor that displays blood oxygen level).

Your infant will have a 1 in 4 chance of being in one of these groups:

- Group 1: the nasal continuous positive airway pressure /low saturation,
- Group 2: the nasal continuous positive airway pressure /high saturation,
- Group 3: oral intubation with surfactant/low saturation, or
- Group 4: oral intubation with surfactant/ high saturation.

Treatment:

Groups 1 and 2 (nasal continuous positive airway pressure):

Delivery Room Care: In the delivery room the doctor resuscitating your newborn infant will try using nasal continuous positive airway pressure on your baby. If your baby responds to nasal continuous positive airway pressure, he/she will continue on nasal continuous positive airway pressure and will be transferred to the intensive care nursery. If your baby does not improve with nasal continuous

positive airway pressure, the doctor resuscitating your baby will intubate your baby in the delivery room. If intubated in the delivery room, your infant will receive one dose of surfactant within one hour of life. Your infant may receive more than one dose of surfactant in his/her first day of life, but your infant's doctor, based on your infant's condition, will decide this.

Care in the Neonatal Intensive Care Nursery: The doctor may intubate your infant if he/she believes your infant is not doing well on the nasal continuous positive airway pressure. The study sponsor has guidelines for your infant intubation or extubation (the process of removing the tube from the windpipe) to safeguard your infant. Your infant's doctor will follow the sponsor guidelines for intubating or extubating your infant in the first two weeks of life. However, if your infant requires intubation three times, he/she will be out of the study and further intubations or extubations will be decided solely by your infant's doctor. After two weeks of life all intubations and extubations are decided only by your infant's doctor.

Groups 3 and 4 (oral intubation with surfactant):

Delivery Room Care: In the delivery room, the doctor resuscitating your newborn infant will place a tube in his/her windpipe after delivery and will give a dose of surfactant in the first hour of life. Your infant will be transported to the intensive care nursery on a breathing machine.

Care in the Neonatal Intensive Care Nursery: Your newborn infant will be admitted to the intensive care nursery on a breathing machine. The study sponsor has specified guidelines for the first two weeks of life at which your infant will be taken off the breathing machine and your infant's doctor will follow those criteria to decide on extubating your infant. Once your infant is extubated for the first time, further intubations or extubations will be decided only by his/her doctor.

All study infants will be placed on the study oximeter within two hours of birth. (An oximeter is an object placed on the skin to measure oxygen in the blood). Which oxygen saturation group your infant is randomized to will not be known to the nurse taking care of your infant, or his/her doctor. Only the study coordinator will know which group your infant is in. However, your infant will either be on the high end or the low end of the normal oxygen saturation that we normally use in our intensive care nursery. Your infant will remain on the study oximeter until he/she reaches 36 weeks adjusted age (e.g. 24 wks gestation plus 12 wks of age = 36 wks adjusted age) or until he/she is discharged home.

We will measure your infant's weight, length, and head at birth, day of life 7, 14, 21, 28, and at 32 and 36 wks of age and at home discharge to evaluate the effects of the study procedures on his/her growth.

All other care will be conducted as normal during your infant's participation in the study. The studies to be done on your baby's blood will be performed on blood already drawn in the standard care and no additional blood draws will be done for the research. Your baby will be followed in our infant follow-up clinic at Children's Medical Center after discharge from the intensive care nursery as we usually do for all babies his/her size.

Follow-up after discharge from the Neonatal Intensive Care Nursery:

At the time of a regular follow-up visit, following your infant's discharge from the NICU, our follow-up staff (Dr. Roy Heyne or his designee) will interview you (or your designee) to find out about your child's diet, breathing problems in the family, and things in the home that may increase your child's risk of breathing problems. This interview will take about 15 minutes and will include questions about the air quality at your home, your home location, your infant's exposure to infections, your family

history of asthma and allergies, and any recent hospital or doctor office visits. You do not need to answer any questions that make you uncomfortable. The follow-up staff will be in touch with you and your infant, either by telephone or in person at one of your follow-up visits every 6 months for a total of three times. At these times, they will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital for treatment of breathing problems. They will also ask you several questions about things in the home or day care setting that may affect your child's breathing. The entire call should take about 15 minutes of your time, less if your baby has had no breathing problems. If your infant is followed in the Low Birth Weight Clinic at Children's Medical Center, the follow-up staff will arrange to meet you during the clinic visit to ask you these questions. Otherwise, they will schedule the telephone calls at a time that is convenient for you. The telephone calls will occur when your infant is 6, 12, and 18 months after his/her expected delivery at full term. The results from your baby's questionnaire will be combined with those of other infants from around the country. However, your baby's name will not be used.

At 18-22 months of age your baby will receive, at no charge, a complete exam of their muscles, nerves, intelligence and motor function. We will also measure his/her weight, length, and head size. This exam is done at the Children's Medical Center Follow-up Clinic.

Evaluations During the Research:

Dr. Sanchez and his research staff will closely monitor your infant's response to the study in the delivery room and in the intensive care nursery. Dr. Sanchez and his research staff will review your infant's medical record to gather information on your infant's date, time and place of birth, delivery room events, birth weight, length, head circumference, age at birth, gender, results of lab tests performed by your infant's doctor, results of the physical exam performed by your infant's doctor, type and name of medicines your infant receives during his hospitalization, duration and type of respiratory support and mechanical ventilation, duration and degree of oxygen therapy, complications during hospitalization, amounts of milk and intravenous nutrition, duration of hospital stay, results of the head ultrasounds performed during the hospital stay (head ultrasounds, also called head sonograms, are pictures taken of the baby's brain by a special machine that is brought to the baby's bedside), results of the eye exam performed during the hospital stay, results of the neurologic exams and the Bayley tests performed in the follow-up clinic (the neurologic and Bayley tests are a complete evaluation of your infant's muscles, nerves, intelligence, and motor function). Dr. Roy Heyne and his research staff will review the results of the interview to gather information on your infant breathing problems and conditions that may affect his/her breathing following the study.

Investigational Procedures:

The oximeters (oxygen monitors) used in this trial are FDA approved oximeters, but have been modified for this study. The FDA is a government agency that oversees new drugs and medical equipment.

POSSIBLE RISKS

All the treatments in this study are currently used in the intensive care nursery and most infants born at the same age as your infant will receive all those treatments during their stay in the intensive care nursery.

The risk of intubation includes injury to your infant's throat and windpipe, but this is unusual. The risk of surfactant treatment includes bleeding in the lung but this is rare. Infants receiving nasal continuous positive airway pressure in the delivery room may have problems breathing and their heart-beat may abnormally slow down. If this happens to your infant, your infant's doctor in the delivery room will intubate your infant and place him/her on a breathing machine. Infants placed on nasal continuous

positive airway pressure for a long time, may have damage to their nose; our nurses and doctors are very aware of this possible problem and are careful to prevent it. The weight, length, and head measurements of your infant are performed by experienced nurses and do not add any risk. Some unknown risks may be learned during the study. If these occur, you will be informed by the study personnel.

Following discharge from the NICU, you (or your designee) will be involved in a series of interviews about factors related to your child's breathing; and while answering interview questions you may experience some anxiety or emotional discomfort; but you do not have to answer questions you do not feel comfortable responding to.

Another risk of this study is the risk to confidentiality. Every effort will be made to keep your infant's medical record confidential. There will be no name or other patient identification in any study report that may be published after the study is completed. Measures taken to protect you and your infant's identity are described in the confidentiality section.

Blood samples: Your infant will have the same amount of blood collected whether your infant receives standard medical care for your infant's health problems or participates in this research. Therefore, your infant's risk of complications from collecting the blood is the same.

Your infant may experience discomfort, bleeding and/or bruising. On a rare occasion, an infection could develop at the site where the blood was collected.

Unforeseen risks: A previously unknown problem could result from your newborn infant's participation in this research. It is not possible to estimate the changes of such problems or how serious problems could be.

POSSIBLE BENEFITS

Benefit to your infant: Your study doctor cannot guarantee that your newborn infant will benefit from participation in this research.

Benefit to other premature infants: The information learned from this study may help us better treat premature infants in the future. However, your infant's study doctor will not know whether there are benefits to other premature infants until all of the information obtained from this research has been collected and analyzed.

ALTERNATIVES TO YOUR INFANT'S PARTICIPATION IN THIS RESEARCH: Your infant does not have to participate in this research to receive care for your infant's medical problem. If you decide not to participate in this research, your infant will receive the standard of care at Parkland Health and Hospital System and Children's Medical Center intensive care nurseries. The standard of care at the Parkland Health and Hospital System and Children's Medical Center neonatal intensive care nurseries varies with the attending doctor taking care of your infant and may be similar to any of the above 4 groups of therapies that the research is studying.

Please ask your infant's study doctor as many questions as you wish. The doctor's answers to your questions could help you decide whether your infant will participate in this research or receive the standard care that is currently available for your infant's medical problem.

If you decide now that your infant will participate in research, and later change your mind, your infant may stop participation in the research then and receive the standard of care.

THE STUDY DOCTOR'S DECISION TO STOP YOUR INFANT'S PARTICIPATION: Your infant's study doctor or the sponsor may stop your infant's participation in this research without your or your infant's permission under any one of the following conditions:

- Your infant's study doctor believes participation in the research is no longer safe for your infant.
- Your infant's study doctor believes that other treatments may be more helpful.
- The sponsor or the FDA stops the research for the safety of the participants.
- The sponsor cancels the research.

PROCEDURES AFTER STOPPING PARTICIPATION IN THIS RESEARCH: If you, the study doctor, or the sponsor stops your infant's participation in the research, it is your responsibility to do the following:

- Let the study doctor know immediately that you wish that your infant withdraw from the research.
- Return to the research center for tests that may be needed for your infant's safety.
- Discuss your infant's future medical care with the study doctor and/or your infant's regular doctor.

INCENTIVE TO TAKE PART IN THIS RESEARCH: You will not be paid for your infant's participation in this research.

COSTS TO YOU: The sponsor will pay the expenses for the neurodevelopmental testing (tests that evaluate the function of nerves, muscles and intelligence of your infant) that is part of the research.

Expenses related to standard medical care for prematurity are your responsibility (or the responsibility of your insurance provider or government program). Since nasal continuous positive airway pressure, intubation, mechanical ventilation, surfactant treatment, and the use of a pulse oximeter are all part of the routine care of preterm infants, the research will not pay for those therapies.

You, your insurance or your government program will be responsible for the cost of delivery room care, the costs of the day-to-day care in the intensive care nursery, the using cost of all respiratory equipments (mechanical ventilation machine, nasal continuous positive airway machine, pulse oximeter) used in the day-to-day care of your infant, and the costs of the daily physician care.

COMPENSATION FOR INJURY: Compensation for an injury resulting from your infant's participation in this research is not available from the University of Texas Southwestern Medical Center at Dallas, Children's Medical Center, or Parkland Health & Hospital System. You and your infant retain your legal rights during your infant's participation in this research.

VOLUNTARY PARTICIPATION IN RESEARCH: You and your infant have the right to agree to or refuse participation in this research. If you decide that your infant will participate and later change your mind, you are free to discontinue participation in the research at any time.

Your refusal to participate in this research will involve no penalty or loss of benefits to which you and

your infant are otherwise entitled. Your refusal to participate in this research will not affect your legal rights or the quality of health care that you and your infant receive at this center.

NEW INFORMATION: Any new information which becomes available during your infant's participation in the research and may affect your infant's health and safety or your willingness for your infant to continue in the research will be given to you.

RECORDS OF YOUR INFANT'S PARTICIPATION IN THIS RESEARCH: You and your infant have the right to privacy. Any information about you or your infant that is collected for this research will remain confidential as required by law. In addition to this consent form, you will be asked to sign an "Authorization for Use and Disclosure of Protected Health Information for Research Purposes."

YOUR QUESTIONS: Your infant's study doctor, Dr. Pablo J. Sánchez, or his research nurse, Nancy Miller, RN, are available to answer your questions about this research; and Dr. Roy Heyne and his research nurse, Janet Morgan, RN, are available to answer questions about the breathing interview. The Chairman of the IRB is available to answer questions about your rights and your infant's rights as a participant in research or to answer your questions about an injury or other complication resulting from your infant's participation in this research. You may telephone the Chairman of the IRB during regular office hours at 214-648-3060.

YOU WILL HAVE A COPY OF THIS CONSENT FORM TO KEEP.

Your signature below certifies the following:

- You have read (or been read) the information provided above.
- You have received answers to all of your questions.
- You have freely decided that your infant may participate in this research.
- You understand that you and your infant are not giving up any of your legal rights.

Participant's Name (printed)

Legally authorized representative's name (printed)

Legally authorized representative's signature

Date

Legally authorized representative's name (printed)

Legally authorized representative's signature

Date

IRB File # 012005-019
Approved: MAR 24 2010
Expires: DEC 20 2010

Name of person obtaining consent (printed)

Signature of person obtaining consent

Date

IRB File # 012005 - 019
Approved: MAR 24 2010
Expires: DEC 20 2010

The University of Texas Southwestern Medical Center at Dallas
Parkland Health & Hospital System and Children's Medical Center

CONSENT TO PARTICIPATE IN RESEARCH

Title of Research: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

Sponsor: National Institute of Child Health and Human Development Neonatal Research Network

Investigators:	Telephone No. (regular office hours)	Telephone No. (other times)
Pablo J. Sánchez, MD	214-648-3753	972-206-9021
Luc P. Brion, MD	214-648-2060	972-326-1145
Lijun Chen, RN, PhD Diana Vasil, RNC-NIC	214-648-3780 214-648-3789	214-590-6500 972-206-9148
Lizette Torres, RN	214-456-2585	972-206-9174
Roy Heyne, MD	214-648-3753	972-206-8791
Jaclyn LeVan, MD	214-648-2098	972-601-0011
Alicia Guzman	214-456-8041	972-206-9458

INVITATION: You/your newborn infant are invited to participate in this research because there is a possibility he/she will be born 12 to 16 weeks early and could possibly develop a lung problem called bronchopulmonary dysplasia (an abnormal formation of the lungs in premature infants leading to a need for oxygen treatment for a long time) and an eye problem called retinopathy of prematurity (an eye disease that may result in poor vision or loss of sight in premature infants), which may be caused by high oxygen treatment.

Medical research involves offering a plan of care to a group of patients, collecting and studying information about each patient's experience, and using that information to develop the best possible care for future patients.

NUMBER OF PARTICIPANTS: The sponsor plans to include 1300 newborn infants in the study from all the National Institute of Child Health and Human Development Neonatal Research Network hospitals over a two-year period.

PURPOSE: This study has three purposes and they are:

- 1) To compare newborn infants, in the delivery room, who receive breathing support through their nose with a cannula with newborn infants who have a tube placed in their windpipe (a process called intubation) and surfactant (a liquid which helps babies with immature lungs breathe easier by keeping their lungs from collapsing) given in the first hour of life.
- 2) To compare newborn infants, in the intensive care nursery, treated with low range (85-89%) oxygen saturation levels (a measure of the amount of oxygen in the blood) with newborn infants treated with high range oxygen saturation (91-95%) levels.
- 3) To measure the effects of the oxygen therapies used in the study on the growth of premature infants.

PROCEDURES

Breathing support through the nose with a cannula blowing air (also called nasal continuous positive airway pressure), or intubation with surfactant are both treatments currently used in the delivery room at Parkland Health and Hospital System. The decision to use one or the other on any newborn infant is made by the doctor who is in the delivery room.

Screening: The study doctor will ask you questions on whether you are admitted to the hospital in premature labor and

whether we can approach you to be in this study.

Randomization: If you agree for your newborn infant to be in this study, your infant will be randomized (chosen by chance like the flip of a coin) to one of two lung treatment groups:

- 1) Nasal continuous positive airway pressure through the nose or the mouth in the delivery room immediately after birth and continuing in the intensive care nursery, or
- 2) The placement of a tube in his/her windpipe in the delivery room followed by giving surfactant and mechanical ventilation (breathing for the baby using a machine).

After admission to the intensive care nursery, your newborn infant will also be randomized to a low or a high oxygen saturation group using a specially designed oximeter (a monitor that displays blood oxygen level).

Your infant will have a 1 in 4 chance of being in one of these groups:

- Group 1: the nasal continuous positive airway pressure /low saturation,
- Group 2: the nasal continuous positive airway pressure /high saturation,
- Group 3: oral intubation with surfactant/low saturation, or
- Group 4: oral intubation with surfactant/ high saturation.

Treatment:

Groups 1 and 2 (nasal continuous positive airway pressure):

Delivery Room Care: In the delivery room the doctor resuscitating your newborn infant will try using nasal continuous positive airway pressure on your baby. If your baby responds to nasal continuous positive airway pressure, he/she will continue on nasal continuous positive airway pressure and will be transferred to the intensive care nursery. If your baby does not improve with nasal continuous positive airway pressure, the doctor resuscitating your baby will intubate your baby in the delivery room. If intubated in the delivery room, your infant will receive one dose of surfactant within one hour of life. Your infant may receive more than one dose of surfactant in his/her first day of life, but your infant's doctor, based on your infant's condition, will decide this.

Care in the Neonatal Intensive Care Nursery: The doctor may intubate your infant if he/she believes your infant is not doing well on the nasal continuous positive airway pressure. The study sponsor has guidelines for your infant intubation or extubation (the process of removing the tube from the windpipe) to safeguard your infant. Your infant's doctor will follow the sponsor guidelines for intubating or extubating your infant in the first two weeks of life. However, if your infant requires intubation three times, he/she will be out of the study and further intubations or extubations will be decided solely by your infant's doctor. After two weeks of life all intubations and extubations are decided only by your infant's doctor.

Groups 3 and 4 (oral intubation with surfactant):

Delivery Room Care: In the delivery room, the doctor resuscitating your newborn infant will place a tube in his/her windpipe after delivery and will give a dose of surfactant in the first hour of life. Your infant will be transported to the intensive care nursery on a breathing machine.

Care in the Neonatal Intensive Care Nursery: Your newborn infant will be admitted to the intensive care nursery on a breathing machine. The study sponsor has specified guidelines for the first two weeks of life at which your infant will be taken off the breathing machine and your infant's doctor will follow those criteria to decide on extubating your infant. Once your infant is extubated for the first time, further intubations or extubations will be decided only by his/her doctor.

All study infants will be placed on the study oximeter within two hours of birth. (An oximeter is an object placed on the skin to measure oxygen in the blood). Which oxygen saturation group your infant is randomized to will not be known to the nurse taking care of your infant, or his/her doctor. Only the study coordinator will know which group your infant is in. However, your infant will either be on the high end or the low end of the normal oxygen saturation that we normally use in our intensive care nursery. Your infant will remain on the study oximeter until he/she reaches 36 weeks adjusted age (e.g. 24 wks gestation plus 12 wks of age = 36 wks adjusted age) or until he/she is discharged home.

We will measure your infant's weight, length, and head at birth, day of life 7, 14, 21, 28, and at 32 and 36 wks of age and at home discharge to evaluate the effects of the study procedures on his/her growth.

All other care will be conducted as normal during your infant's participation in the study. The studies to be done on your baby's blood will be performed on blood already drawn in the standard care and no additional blood draws will be done for the research. Your baby will be followed in our infant follow-up clinic at Children's Medical Center after discharge from the intensive care nursery as we usually do for all babies his/her size.

Follow-up after discharge from the Neonatal Intensive Care Nursery: At the time of a regular follow-up visit, following your infant's discharge from the NICU, our follow-up staff (Dr. Roy Heyne or his designee) will interview you (or your designee) to find out about your child's diet, breathing problems in the family, and things in the home that may increase your child's risk of breathing problems. This interview will take about 15 minutes and will include questions about the air quality at your home, your home location, your infant's exposure to infections, your family history of asthma and allergies, and any recent hospital or doctor office visits. You do not need to answer any questions that make you uncomfortable. The follow-up staff will be in touch with you and your infant, either by telephone or in person at one of your follow-up visits every 6 months for a total of three times. At these times, they will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital for treatment of breathing problems. They will also ask you several questions about things in the home or day care setting that may affect your child's breathing. The entire call should take about 15 minutes of your time, less if your baby has had no breathing problems. If your infant is followed in the Low Birth Weight Clinic at Children's Medical Center, the follow-up staff will arrange to meet you during the clinic visit to ask you these questions. Otherwise, they will schedule the telephone calls at a time that is convenient for you. The telephone calls will occur when your infant is 6, 12, and 18 months after his/her expected delivery at full term. The results from your baby's questionnaire will be combined with those of other infants from around the country. However, your baby's name will not be used.

At 18-22 months of age your baby will receive, at no charge, a complete exam of their muscles, nerves, intelligence and motor function. We will also measure his/her weight, length, and head size. This exam is done at the Children's Medical Center Follow-up Clinic.

Evaluations during the Research: Dr. Sánchez and his research staff will closely monitor your infant's response to the study in the delivery room and in the intensive care nursery. Dr. Sánchez and his research staff will review your infant's medical record to gather information on your infant's date, time and place of birth, delivery room events, birth weight, length, head circumference, age at birth, gender, results of lab tests performed by your infant's doctor, results of the physical exam performed by your infant's doctor, type and name of medicines your infant receives during his hospitalization, duration and

type of respiratory support and mechanical ventilation, duration and degree of oxygen therapy, complications during hospitalization, amounts of milk and intravenous nutrition, duration of hospital stay, results of the head ultrasounds performed during the hospital stay (head ultrasounds, also called head sonograms, are pictures taken of the baby's brain by

a special machine that is brought to the baby's bedside), results of the eye exam performed during the hospital stay, results of the neurologic exams and the Bayley tests performed in the follow-up clinic (the neurologic and Bayley tests are a complete evaluation of your infant's muscles, nerves, intelligence, and motor function). Dr. Roy Heyne and his research staff will review the results of the interview to gather information on your infant breathing problems and conditions that may affect his/her breathing following the study.

Investigational Procedures: The oximeters (oxygen monitors) used in this trial are FDA approved oximeters, but have been modified for this study. The FDA is a government agency that oversees new drugs and medical equipment.

POSSIBLE RISKS

All the treatments in this study are currently used in the intensive care nursery and most infants born at the same age as your infant will receive all those treatments during their stay in the intensive care nursery.

The risk of intubation includes injury to your infant's throat and windpipe, but this is unusual. The risk of surfactant treatment includes bleeding in the lung but this is rare. Infants receiving nasal continuous positive airway pressure in the delivery room may have problems breathing and their heart-beat may abnormally slow down. If this happens to your infant, your infant's doctor in the delivery room will intubate your infant and place him/her on a breathing machine. Infants placed on nasal continuous positive airway pressure for a long time, may have damage to their nose; our nurses and doctors are very aware of this possible problem and are careful to prevent it. The weight, length, and head measurements of your infant are performed by experienced nurses and do not add any risk. Some unknown risks may be learned during the study. If these occur, you will be informed by the study personnel.

Following discharge from the NICU, you (or your designee) will be involved in a series of interviews about factors related to your child's breathing; and while answering interview questions you may experience some anxiety or emotional discomfort; but you do not have to answer questions you do not feel comfortable responding to.

Another risk of this study is the risk to confidentiality. Every effort will be made to keep your infant's medical record confidential. There will be no name or other patient identification in any study report that may be published after the study is completed. Measures taken to protect you and your infant's identity are described in the confidentiality section.

Blood samples: Your infant will have the same amount of blood collected whether your infant receives standard medical care for your infant's health problems or participates in this research. Therefore, your infant's risk of complications from collecting the blood is the same.

Your infant may experience discomfort, bleeding and/or bruising. On a rare occasion, an infection could develop at the site where the blood was collected.

Unforeseen risks: A previously unknown problem could result from your newborn infant's participation in this research. It is not possible to estimate the changes of such problems or how serious problems could be.

POSSIBLE BENEFITS

Benefit to your infant: Your study doctor cannot guarantee that your newborn infant will benefit from participation in this research.

Benefit to other premature infants: The information learned from this study may help us better treat premature infants in the future. However, your infant's study doctor will not know whether there are benefits to other premature infants until all of the information obtained from this research has been collected and analyzed.

ALTERNATIVES TO YOUR INFANT'S PARTICIPATION IN THIS RESEARCH: Your infant does not have to participate in this research to receive care for your infant's medical problem. If you decide not to participate in this research, your infant will receive the standard of care at Parkland Health and Hospital System and Children's Medical Center intensive care nurseries. The standard of care at the Parkland Health and Hospital System and Children's Medical Center neonatal intensive care nurseries varies with the attending doctor taking care of your infant and may be similar to any of the above 4 groups of therapies that the research is studying.

Please ask your infant's study doctor as many questions as you wish. The doctor's answers to your questions could help you decide whether your infant will participate in this research or receive the standard care that is currently available for your infant's medical problem.

If you decide now that your infant will participate in research, and later change your mind, your infant may stop participation in the research then and receive the standard of care.

THE STUDY DOCTOR'S DECISION TO STOP YOUR INFANT'S PARTICIPATION: Your infant's study doctor or the sponsor may stop your infant's participation in this research without your or your infant's permission under any one of the following conditions:

- Your infant's study doctor believes participation in the research is no longer safe for your infant.
- Your infant's study doctor believes that other treatments may be more helpful.
- The sponsor or the FDA stops the research for the safety of the participants.
- The sponsor cancels the research.

PROCEDURES AFTER STOPPING PARTICIPATION IN THIS RESEARCH: If you, the study doctor, or the sponsor stops your infant's participation in the research, it is your responsibility to do the following:

- Let the study doctor know immediately that you wish that your infant withdraw from the research.
- Return to the research center for tests that may be needed for your infant's safety.
- Discuss your infant's future medical care with the study doctor and/or your infant's regular doctor.

INCENTIVE TO TAKE PART IN THIS RESEARCH: You will not be paid for your infant's participation in this research.

COSTS TO YOU: The sponsor will pay the expenses for the neurodevelopmental testing (tests that evaluate the function of nerves, muscles and intelligence of your infant) which are part of the research.

Expenses related to standard medical care for prematurity are your responsibility (or the responsibility of your insurance provider or government program). Since nasal continuous positive airway pressure, intubation, mechanical ventilation, surfactant treatment, and the use of a pulse oximeter are all part of the routine care of preterm infants, the research will not pay for those therapies.

You, your insurance or your government program will be responsible for the cost of delivery room care, the costs of the day-to-day care in the intensive care nursery, the using cost of all respiratory equipments (mechanical ventilation machine, nasal continuous positive airway machine, pulse oximeter) used in the day-to-day care of your infant, and the costs of the daily physician care.

COMPENSATION FOR INJURY: Compensation for an injury resulting from your infant's participation in this research is not available from the University of Texas Southwestern Medical Center at Dallas, Children's Medical Center, or Parkland Health & Hospital System. You and your infant retain your legal rights during your infant's participation in this research.

VOLUNTARY PARTICIPATION IN RESEARCH: You and your infant have the right to agree to or refuse participation in this research. If you decide that your infant will participate and later change your mind, you are free to discontinue participation in the research at any time.

Your refusal to participate in this research will involve no penalty or loss of benefits to which you and your infant are otherwise entitled. Your refusal to participate in this research will not affect your legal rights or the quality of health care that you and your infant receive at this center.

NEW INFORMATION: Any new information which becomes available during your infant's participation in the research and may affect your infant's health and safety or your willingness for your infant to continue in the research will be given to you.

RECORDS OF YOUR INFANT'S PARTICIPATION IN THIS RESEARCH: You and your infant have the right to privacy. Any information about you or your infant that is collected for this research will remain confidential as required by law. In addition to this consent form, you will be asked to sign an "Authorization for Use and Disclosure of Protected Health Information for Research Purposes."

YOUR QUESTIONS: Your infant's study doctor, Dr. Pablo J. Sánchez and his research staff are available to answer your questions about this research; and Dr. Roy Heyne and his research nurse, Lizette Torres, RN, are available to answer questions about the breathing interview. The Chairman of the IRB is available to answer questions about your rights and your infant's rights as a participant in research or to answer your questions about an injury or other complication resulting from your infant's participation in this research. You may telephone the Chairman of the IRB during regular office hours at 214-648-3060.

YOU WILL HAVE A COPY OF THIS CONSENT FORM TO KEEP.

Your signature below certifies the following:

- You have read (or been read) the information provided above.
- You have received answers to all of your questions.
- You have freely decided that your infant may participate in this research.
- You understand that you and your infant are not giving up any of your legal rights.

Participant's Name (printed)

Legally authorized representative's name (printed)

Legally authorized representative's signature

Date

Name of person obtaining consent (printed)

Signature of person obtaining consent

Date

The University of Texas Southwestern Medical Center at Dallas
Children's Medical Center of Dallas, Parkland Health & Hospital System
Retina Foundation of the Southwest, Texas Scottish Rite Hospital for Children
The University of Texas Southwestern Moncrief Cancer Center

**Authorization for Use and Disclosure of
Health Information for Research Purposes**

NAME OF RESEARCH PARTICIPANT: _____

What is the purpose of this form?

This authorization describes how information about you and your health will be used and shared by Dr. Roy Heyne and his staff when you participate in the research study: Neuroimaging and Neurodevelopmental Outcome: A Secondary to Surfactant Positive Airway Pressure and Pulse Oximetry Trial (SUPPORT) - Health information is considered "protected health information" when it may directly identify you as an individual. By signing this form you are agreeing to permit the researchers and others (described in detail below) to have access to and share this information. If you have questions, please ask a member of the research team.

Who will be able to use or share my health information?

Parkland Health & Hospital System & Children's Medical Center may use or share your health information with Dr. Roy Heyne and his staff at UT Southwestern Medical Center for the purpose of this research study.

Will my protected health information be shared with someone other than the Researchers?

Yes, the Researchers may share your health information with others who may be working with the Researchers on the Research Project for purposes directly related to the conduct of this research study or as required by law. These other people or entities include:

- Eunice Kennedy Shriver National Institutes of Child Health and Human Development (NICHD) of the National Institute of Health (NIH). The sponsor includes any people, entities, groups or companies working for or with the sponsor or owned by the sponsor. The sponsor will receive written reports about your participation in the research. The sponsor may look at your health information to assure the quality of the information used in the research.
- Neonatal Research Network. These are other research facilities that are working with UT Southwestern on the Research Project.
- Research Triangle Institute (RTI), Data Safety Monitoring Board. These organizations need access to your health information to assist the Researchers in the Research Project.
- The UT Southwestern Institutional Review Board (IRB). This is a group of people who are responsible for assuring that the rights of participants in research are respected. Members and staff of the IRB at UT Southwestern may review the records of your participation in this research. A representative of the IRB may contact you for information about your experience with this research. If you do not want to answer their questions, you may refuse to do so.



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.

- Representatives of domestic and foreign governmental and regulatory agencies may be granted direct access to your health information for oversight, compliance activities, and determination of approval for new medicines, devices, or procedures.

Medical information collected during this study and the results of any test or procedure done may be included in your medical record and this information may be available to health care providers and authorized persons including your insurance company.

How will my health information be protected?

Whenever possible your health information will be kept confidential as required by law. Federal privacy laws may not apply to other institutions, companies or agencies collaborating with UT Southwestern on this research project. There is a risk that the Recipients could share your information with others without your permission. UT Southwestern cannot guarantee the confidentiality of your health information after it has been shared with the Recipients.

Why is my personal contact being used?

Your personal contact information is important for the UT Southwestern Medical Center research team to contact you during the study. However, your personal contact information will not be released without your permission.

What health information will be collected, used and shared (disclosed)?

The Researchers will collect the following information from the child's medical records and/or caregivers: Name(patient, mother), medical record number, birth history, vital signs, audiology results, ophthalmology results, medications, surgeries, physical and mental history, radiology results, hospitalizations, ER visits, clinic visits, developmental exams, imaging results and nutrition information.

Will my health information be used in a research report?

Yes, the research team may fill out a research report. (This is sometimes called "a case report".) The research report will not include your name, address, or telephone or social security number. The research report may include your date of birth, initials, dates you received medical care and a tracking code. The research report will also include information the research team collects for the study.

Will my health information be used for other purposes?

Yes, the Researchers and Recipients may use your health information to create research data that does not identify you. Research data that does not identify you may be used and shared by the Researchers and Recipients in a publication about the results of the Research Project or for other research purposes not related to the Research Project.

Do I have to sign this authorization?

No, this authorization is voluntary. Your health care providers will continue to provide you with health care services even if you choose not to sign this authorization. However, if you choose not to sign this authorization, you cannot take part in this Research Project.

How long will my permission last?

This authorization has no expiration date. You may cancel this authorization at any time. If you decide to cancel this authorization, you will no longer be able to take part in the Research Project. The Researchers may still use and share the health information that they have already collected



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. before you canceled the authorization. To cancel this authorization, you must make this request in writing to: Roy Heyne, MD, 5323 Harry Hines Blvd. Dallas, TX 75390-9063. Phone 214-648-3753

Will I receive a copy of this authorization?

Yes, a copy of this authorization will be provided to you.

Signatures:

By signing this document you are permitting UT Southwestern Medical Center to use and disclose health information about you for research purposes as described above.

Signature of Research Participant

Date

For Legal Representatives of Research Participants (if applicable):

Printed Name of Legal Representative: _____

Relationship to Research Participant: _____

I certify that I have the legal authority under applicable law to make this Authorization on behalf of the Research Participant identified above. The basis for this legal authority is:

(e.g. parent, legal guardian, person with legal power of attorney, etc.)

Signature of Legal Representative

Date



The University of Texas Southwestern Medical Center at Dallas
Parkland Health & Hospital System
Children's Medical Center
Texas Scottish Rite Hospital for Children

CONSENT TO PARTICIPATE IN RESEARCH

Title of Research: Neuroimaging and Neurodevelopmental Outcome: A Secondary to Surfactant Positive Airway Pressure and Pulse Oximetry Trial (SUPPORT)- Extended SUPPORT NEURO School Age Follow-up Study

Sponsor: National Institute of Child Health and Human Development (NICHD) Neonatal Research Network (NRN)

Study Doctors: Pablo J. Sánchez, MD
Roy Heyne, M.D.

Research Personnel: Lizette Torres, RN
Alicia Guzmán

You may call these study doctors or research personnel during regular office hours at 214-456-6000. At other times, you may call them at 214-456-7000.

Note: If you are a parent or guardian of a minor and have been asked to read and sign this form, the "you" in this document refers to the minor with regards to evaluations involving the child participation and to yourself with regards to evaluations involving you as a parent/guardian.

Instructions:

Please read this consent form carefully and take your time making a decision about whether to participate. As the researchers discuss this consent form with you, please ask him/her to explain any words or information that you do not clearly understand. The purpose of the study, risks, inconveniences, discomforts, and other important information about the study are listed below. If you decide to participate, you will be given a copy of this form to keep.

Why is this study being done?

This study is being done to see how children, who participated in the earlier trial of neuroimaging and neurodevelopmental outcome: a secondary to surfactant positive airway pressure and pulse oximetry Trial (SUPPORT), are now doing at school age. The purpose of this phase of the study is to examine participants at school age and determine whether near-term MRI is better than ultrasound in predicting physical and developmental outcome. We will also be assessing how body size and growth relate to blood pressure at school age in premature born infants.



Why am I being asked to take part in this research study?

You are being asked to take part in this study because your child participated in the brain imaging part of the SUPPORT study.

How many people will take part in this study?

About 45 children (and their parents/caretakers) will take part in this study at Children's Medical Center. This study also is taking place at a number of other medical facilities around the country. There will be a total of about 370 children (and their parents/caretakers) participating in this research study throughout the United States and/or other countries.

What is involved in the study?

If you agree to be in this study, you will be asked to sign this consent form and will have the following tests and procedures.

Procedures and Evaluations during the Research:

At the study visit, you, as parent/caretaker, will be asked to:

1. Provide general information like the child's age and birth date, medical history household makeup, and parent/caretaker education and occupation;
2. Answer questions concerning the child's health, observed behaviors, and the child's day to day activities, including questionnaires of health-related quality of life, specific motor behaviors that can be observed in an everyday setting,
3. Answer questions that assess: attention, problem solving, and planning difficulties, and related learning, behavior, and emotional problems in children,
4. If your child is unable to complete the Weschler Intelligence Scale for Children 4th Edition (WISC-IV), then you will be asked to complete the Pediatric Evaluation of Disability Inventory (PEDI) which includes questions about your child's ability to care for him/herself, to move about, and interact socially.

At the same study visit, your child will undergo the following examinations:

1. Growth measurements, skinfold measurements, blood pressure, and pulse;
2. A test of skills in English (only for Spanish speaking children)
3. A test of child abilities called the WISC-IV (in English or Spanish which involves doing problem solving with words, blocks and pictures;
4. A detailed neurological evaluation by a certified medical examiner, including tests of sensation, manual dexterity, aiming and catching, balance, strength, reflexes, coordination, and ability to walk;
5. The Neurological/Psychological test (NEPSY), a test of your child's ability to pay attention and to solve visual problems;
6. The Woodcock-Johnson III (in English) or the Bateria III Woodcock-Muñoz (in Spanish) a test designed to measure academic achievement.

During the clinic visit, the interviews for you as a parent will take about 1½-2 hours and the time to evaluate your child will take about 3½ hours, including breaks. Some children may take



longer. The interview with you will be at the same time your child is being tested so the whole visit will last about 3½ - 4hours.

The above procedures are being done primarily for research, not for medical purposes. Even though the researchers are not looking at your results of these tests to find or treat a medical problem, you will be given a summary of how your child performed. You and your regular doctor can decide together whether to follow up with more tests or treatment.

How long can I expect to be in this study?

This study will only last for one visit, unless your child is not able to complete all the tests in one visit, in which case we will arrange with you another time to complete the evaluations.

You can choose to stop participating for any reason at any time. However, if you decide to stop participating in the study, we encourage you to tell the researchers. You may be asked if you are willing to complete some study termination tests.

What are the risks of the study?

There are no know risks to the child or responsible adult to participating in the medical/neurological and developmental/psychological testing of this study, through testing may be tiring to some.

Psychological Stress

Some of the questions we will ask you as part of this study may make you feel uncomfortable. You may refuse to answer any of the questions, take a break or stop your participation in this study at any time.

Loss of Confidentiality

Any time information is collected; there is a potential risk of loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed.

Other Risks

There may possibly be other side effects that are unknown at this time. If you are concerned about other, unknown side effects, please discuss this with the researchers.

What are the possible benefits of this study?

If you agree to take part in this study, there may be possible benefits to your child for taking part in this study are identification of possible neurological or developmental problems, and summary information about such, which you may share with the child's regular doctor or another doctor of choice. This may in turn lead to further evaluation and/or treatment as decided by the child's doctor/s. However, the researchers cannot guarantee that you will benefit from participation in this research.

We hope the information learned from this study will benefit others who are born prematurely and may help us treat infants in the future.



What options are available if I decide not to take part in this research study?

This is not a treatment study. You do not, have to be part of it to get treatment for your condition.

Will I be paid if I take part in this research study?

Yes. You will be given a \$150.00 at the end of the study visit if you take part in this research. If you stop taking part in this study or are withdrawn by the research team, you will not receive payment.

Your social security number (SSN) will be given to The University of Texas Southwestern Medical Center in order to process your payment as required by law. This information will remain confidential unless you give your permission to share it with others, or if we are required by law to release it.

If you are an employee of UT Southwestern, your payment will be added to your regular paycheck and income tax will be deducted.

UT Southwestern, as a State agency, will not be able to make any payments to you for your participation in this research if the State Comptroller has issued a “hold” on all State payments to you. Such a “hold” could result from your failure to make child support payments or pay student loans, etc. If this happens, UT Southwestern will be able to pay you for your taking part in this research 1) after you have made the outstanding payments and 2) the State Comptroller has issued a release of the “hold.”

You will be reimbursed for transportation to and from the research center (for example cab or bus fare) if needed. In order to receive reimbursement you will need to turn in all your receipts to the research coordinator.

Will my insurance provider or I be charged for the costs of any part of this research study?

No. Neither you, nor your insurance provider, will be charged for anything done only for this research study (i.e., the Screening Procedures, Experimental Procedures, or Monitoring/Follow-up Procedures described above).

What will happen if I am harmed as a result of taking part in this study?

It is important that you report any illness or injury to the research team listed at the top of this form immediately.

Compensation for an injury resulting from your participation in this research is not available from the University of Texas Southwestern Medical Center, Children’s Medical Center, Parkland Health & Hospital System, and/or Texas Scottish Rite Hospital for Children.

You retain your legal rights during your participation in this research

Can I stop taking part in this research study?



Yes. If you decide to participate and later change your mind, you are free to stop taking part in the research study at any time.

If you decide to stop taking part in this research study, it will not affect your relationship with the UT Southwestern staff or doctors. Whether you participate or not will have no effect on your legal rights or the quality of your health care.

If you are a medical student, fellow, faculty, or staff at the Medical Center, your status will not be affected in any way.

Your doctor may be a research investigator in this study. He is interested in both your medical care and the conduct of this research study. At any time, you may discuss your care with another doctor who is not part of this research study. You do not have to take part in any research study offered by your doctor.

Will my information be kept confidential?

Medical information collected during this study and the results of any test or procedure done may be included in your medical record and this information may be available to health care providers and authorized persons including your insurance company.

You should know that certain organizations that may look at and/or copy your medical records for research, quality assurance, and data analysis include:

- National Institutes of Child Health and Human Development;
- Representatives of government agencies, like the Food and Drug Administration (FDA), involved in keeping research safe for people, and
- The UT Southwestern Institutional Review Board.

In addition to this consent form, you will be asked to sign an "Authorization for Use and Disclosure of Protected Health Information." This authorization will give more details about how your information will be used for this research study, and who may see and/or get copies of your information.

Will I be contacted in the future?

You have the option to elect to be contacted in the future in order to obtain follow-up information or to ask you to take part in more research. (A "no" answer will not disqualify you from this research.)

Yes _____ initials

No _____ initials

If you elect "yes", please keep in touch with Dr. Sanchez and maintain a current address and telephone number on file. Please notify Dr. Sanchez if your legal name changes.

Whom do I call if I have questions or problems?

For questions about the study, contact Pablo Sanchez, M.D. or Roy Heyne, M.D. at 214-648-



3753 during regular business hours and at 214-456-7000 after hours and on weekends and holidays.

For questions about your rights as a research participant, contact the UT Southwestern Institutional Review Board (IRB) Office at 214-648-3060.

SIGNATURES:

YOU WILL BE GIVEN A COPY OF THIS CONSENT FORM TO KEEP.

Your signature below certifies the following:

- You have read (or been read) the information provided above.
- You have received answers to all of your questions and have been told who to call if you have any more questions.
- You have freely decided to participate in this research.
- You understand that you are not giving up any of your legal rights.

Participant's Name (printed)

Legally authorized representative's Name (printed)

Legally authorized representative's Signature

Date & Time

Name of person obtaining consent (printed)

Signature of person obtaining consent

Date & Time





DUKE UNIVERSITY HEALTH SYSTEM

Minor's Consent To Participate In A Research Study The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The SUPPORT Trial

IRB #: 6921-07-4R2

Introduction:

You are being asked to allow your child to be in this study because there is a possibility he/she will be born between 12 and 16 weeks early (24-28 weeks gestational age). Dr. Michael Cotten and the Neonatology clinical research group at Duke Medical Center and colleagues at the 16 centers in the National Institutes for Child Health and Human Development (NICHD) Neonatal Research Network are conducting a research study to determine the best way to help extremely premature babies breathe better after they are born. This study will compare the effectiveness, risks and benefits of two different types of treatment for premature lung disease. The two methods being compared are CPAP (positive pressure applied with a face mask or nasal prongs to help keep the lungs inflated) in the delivery room and reduced use of a breathing machine to assist the baby's breathing *versus* intubation (using a breathing tube placed in the trachea or windpipe) in the delivery room and more aggressive use of mechanical ventilation (breathing for the baby using a machine). This study is also being done to learn the appropriate levels of oxygen saturation (oxygen levels in the blood) that should be maintained in extremely premature babies while they are being treated in the hospital. Dr Cotten and the Neonatology clinical research group are receiving salary support from the NICHD to conduct this study.

Purpose of the Study:

- 1) To compare the outcome of infants who receive delivery room CPAP and who have restrictive guidelines for having a breathing tube placed for mechanical ventilation with infants who have the tube placed and surfactant (a liquid which helps babies with immature lungs breath easier by helping keep their lungs from collapsing) given in the delivery room and have less strict guidelines for maintaining a breathing tube and mechanical ventilation.
- 2) To compare low range (85-89%) oxygen saturation levels with high range (91-95%) levels to determine if a lower range results in decreased ROP (Retinopathy of Prematurity, an eye disease that may result in impairment of vision or even blindness) which may be caused by excessive levels of oxygen.)

Duration of the Study: We expect to include about 1300 babies in the study from the 16 NICHD Neonatal Research Network hospitals around the country over a two year period. 60 babies will take part at Duke.

Background:

CPAP vs. Intubation/Surfactant. Research studies of surfactant treatment along with intubation and mechanical ventilation reduced mortality versus intubation and mechanical ventilation with no surfactant treatment. Other studies have suggested that many extremely premature babies may not need intubation or treatment with surfactant if they are treated with CPAP in the delivery room. Research studies suggest that avoiding intubation may help babies avoid lung damage associated with premature birth and subsequent mechanical ventilation, even if surfactant is used. Delivery room intubation and surfactant treatment has never been compared to CPAP treatment started in the delivery room.



DUKE UNIVERSITY HEALTH SYSTEM

Minor's Consent To Participate In A Research Study The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The SUPPORT Trial

IRB #: 6921-07-4R2

Some hospitals in the United States that provide care for extremely preterm infants like yours use CPAP in the delivery room, while other similar hospitals intubate every baby in the first hour of life and give all the infants between 24 and 28 weeks gestation surfactant. The decision as to which to use is currently made by the physician attending the delivery. This study will help doctors find out if it is better to intubate in the delivery room and treat infants like yours with surfactant in the first hour of life, or to start them on CPAP in the delivery room and try to limit the chance that they will need intubation.

Oxygen Level Study. The current alarm limits for oxygen saturation monitors in many neonatal intensive care units (NICU's) in the United States are set at 85% and 95%. The aim in many units is to keep oxygen saturations between 88 and 92%. This goal is based on research suggesting high levels of oxygen (> 95% saturation) in the first weeks of life are related to later development of ROP and damage to the lungs. We are not sure how much lower we should set the goal for oxygen saturation in extremely preterm infants and still avoid increasing the risk of developmental delay. Previous studies have suggested that risk of ROP decreases when oxygen saturation goals were set with a lower limit of 80% without any increase in risk in neurodevelopmental impairment in the first year after discharge. Currently in the United States, some hospital NICU's target oxygen levels in the lower end of the 85 – 95% range, while others target the higher range. Both treatment groups in this study (85-89% and 91-95%) fall within the alarm range currently used at Duke. The study will attempt to keep babies in one of these two ranges.

Each of the 4 possible combinations of treatments is considered standard care by some units in the United States.

Study Procedures:

Prior to delivery, and after your permission is given, your baby will be randomized (chosen by chance like the flip of a coin) to one of two lung treatment strategies. The treatments are as follows:

- 1) *CPAP* in the delivery room immediately after birth and continuing in the NICU, *or*
- 2) *Intubation* (placement of a tube in his/her trachea or windpipe) in the delivery room followed by surfactant administration and mechanical ventilation.

In addition to being randomly assigned to one of the two groups described above, your baby will be randomized to a High reading or Low reading oxygen saturation monitor, also known as an "oximeter" (a monitor that displays how much oxygen is in the blood). The oximeters used in this study are FDA approved, and they have been modified for research purposes. This modification makes the monitors show a value which is either slightly higher or slightly lower than the true oxygen level when values are between 85 and 95%. Outside those ranges, the oximeter works the same as the standard of care oximeter.

Form
M0345



DUKE UNIVERSITY HEALTH SYSTEM

Minor's Consent To Participate In A Research Study The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The **SUPPORT** Trial

IRB #: 6921-07-4R2

Only the study coordinator will know which oxygen group your baby is in. Neither you nor the doctors, nurses, and respiratory therapists taking care of your baby will know which oximeter group your baby is in. Within the alarm range of the usual oxygen saturation monitors which we normally use, your baby will either be on the high end of normal or the low end. He/she will remain on this device until he/she reaches 36 weeks adjusted age (for example, 24 wks gestation plus 12 weeks of age = 36 weeks adjusted age). In the case of an emergency, the study doctor can quickly find out which oxygen saturation group your baby is in.

We will also collect information on how well your baby gains weight and grows. Other care will be conducted as normal during his/her participation in the study. Your baby will be followed periodically in our Special Infant Care Clinic (SICC) during the first 2 to 3 years of life. At these visits we check your baby's health and development. For this study, we will ask you to allow us to report the results of your baby's neurologic evaluation and developmental testing at the 18-22 months corrected age follow-up clinic visit.

Your baby will have routine ultrasounds of his/her head during his/her stay in the NICU. A copy of the head ultrasounds conducted between 4-14 days of life and at the time of the original expected due date will be collected for this study. If your baby's head ultrasound at the time of the expected due date occurs before 35 weeks post-menstrual age, your baby will receive another head ultrasounds for the purpose of this study between 35-42 weeks post-menstrual age. In addition, your baby will have a MRI (Magnetic Resonance Imaging) for the purpose of this research study between 35-42 weeks post-menstrual age. Neither the head ultrasound nor the MRI is experimental and both are currently used on infants at Duke University Medical Center. If conducted for the purpose of this study, the head ultrasound and /or MRI will be paid for by the grant. If your baby is still in the NICU, your baby will need to be transported to the MRI suite in order to have the procedure. Only those patients considered stable for transport will undergo an MRI. If your baby is discharged home prior to 35-42 weeks PMA, you will be asked to return to Duke University Medical Center for the head ultrasound and MRI procedures. The MRI will be conducted after your baby is swaddled while sleeping following a feeding and with the use of a jacket-like device that allows the baby to lie still without using sedation. A physician at the hospital in which you receive the head ultrasound and MRI will provide you with an interpretation of the results of the tests. Neither the ultrasound nor the MRI involves exposure to radiation. Please initial your choice below.

Yes, I agree to be contacted.

No, I do not agree to be contacted.

Risks :



**Minor's Consent To Participate In A Research Study
The Surfactant Positive Airway Pressure and Pulse
Oximetry Trial in Extremely Low Birth Weight Infants:
The SUPPORT Trial**

IRB #: 6921-07-4R2

Participation in this study may involve some added risks or discomforts. All of the treatments (CPAP in the delivery room, delivery room intubation plus surfactant, lower oxygen range, and higher oxygen range) proposed in this study are standard of care at various hospitals like Duke in the United States, so there are no predictable increases in risk for your baby.

Infants randomized to the CPAP group may, at some point in their care, require intubation and assisted ventilation (use of a breathing machine). The study provides guidelines for this, but if the attending physician deems this necessary at any time, participation in the study will not affect this decision regardless of the study guideline. With CPAP, there is a small risk of skin damage to the nose. Your baby's nurses and doctors will closely monitor your baby's nose while he/she is on CPAP. Risks of surfactant therapy include slowing of the heart and a decrease in oxygen saturation during dosing as the surfactant liquid passes through the breathing tube into the lungs. Surfactant treatment may cause a rapid increase in how much the lungs expand with each breath. Trained respiratory therapists, nurses and physicians will monitor your baby for these effects during and after surfactant dosing.

The risks of higher versus lower oxygen saturation levels in the two ranges to be used in this study are unknown. Lower oxygen range may help infants avoid ROP and chronic lung disease (need for supplemental oxygen at 36 weeks post-conception or discharge) which has been associated with neurodevelopmental delay and higher oxygen levels may or may not have an effect on the risk of neurodevelopmental delay. It is unclear which oxygen level, if any, will help babies grow better. Both ranges are within the alarm limits set in infants like yours in the Duke NICU. Some unknown risks may be learned during the study. If these occur, you will be informed by the study personnel.

The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential. There will be no name or other patient identification in any study report that may be published after the study is completed. Measures taken to protect you and your baby's identity are described in the confidentiality section of this document.

Benefits:

There may be benefits to your child directly from participation in this study. The knowledge gained from this study may help us improve treatment of babies in the future.

Data Handling and Confidentiality:

Clinical information will be collected from your baby's chart by Duke Neonatology Clinical Research study personnel. Information will be labeled with a code number. Coded information will be sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in Research Triangle Park, North Carolina. The study log linking the code number with your baby's identity will be kept under lock and key at Duke. Information directly identifying your baby will not leave Duke. Research records will be kept confidential to the extent provided by law, and will be maintained in the study record until your child reaches the age of 21 years or six years after the study is complete, whichever is longest. Your baby's study record may be reviewed in order to meet federal or state



DUKE UNIVERSITY HEALTH SYSTEM

Minor's Consent To Participate In A Research Study The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The **SUPPORT Trial**

IRB #: 6921-07-4R2

regulations. Reviewers of your child's study record may include representatives from the Food and Drug Administration, representatives of the National Institutes of Health (NIH) and the Duke Institutional Review Board (IRB, the hospital committee that supervises research in human beings). When research results from this study are reported in a professional setting, such as in a medical journal or at a scientific meeting, the identity of research subjects taking part in the study is withheld. If disclosed by the sponsor, the information is no longer covered by the federal privacy regulations.

Costs and Compensation:

There is no charge to you or your child for participating in this research. You or your child's insurance will be responsible for paying the cost of routine medical care for your child's condition. The costs for your child's routine care will appear on his/her hospital bill. Although there is no compensation for allowing your child to participate in this project, we will give you \$25 and a parking pass to help with travel expenses to the clinic for the 18 - 22 month visit.

Injuries:

Immediate necessary medical care is available at Duke University Medical Center in the event that your child is injured as a result of participation in this research study. However, there is no commitment by Duke University, Duke University Health System, Inc., or your child's Duke physicians to provide monetary compensation or free medical care to your child in the event of a study-related injury. For questions about the study or a research-related injury, contact Dr. Mike Cotten at 919-681-0630 during regular business hours and at 919-970-4381 after hours and on weekends and holidays.



DUKE UNIVERSITY HEALTH SYSTEM

Minor's Consent To Participate In A Research Study The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The SUPPORT Trial

IRB #: 6921-07-4R2

Alternatives to Participation:

As an alternative to participation in this study, you may decide to have your baby's doctor decide which treatment your baby will receive. If you decide not to include your child in this study, none of his/her medical information will be included in the study data. Participation in research is entirely voluntary.

Right not to Participate or to Withdraw:

You may choose for your child not to be in the study, or, if you agree for your child to be in the study, you may withdraw him/her from the study at any time. If you withdraw him/her from the study, no new data will be collected for study purposes unless the data concern an adverse event (bad effect) related to the study. If such an adverse event occurs, we may need to review your child's entire medical record. All data that have already been collected for study purposes, and any new information about an adverse event related to the study, will be sent to the sponsor.

Your decision for your child not to participate or to withdraw from the study will not involve any penalty or loss of benefits to which you or your child are entitled, and will not affect your access to health care at Duke. If you do decide for your child to withdraw, we ask that you contact Dr. Cotten in writing and let him know that you are withdrawing from the study. His mailing address is: DUMC Box 3179, Durham, North Carolina, 27710. If you withdraw your child from the study, the attending physician will decide whether to maintain current treatment or change it, based on your child's needs at the time of the decision.

In addition, your child's doctor may decide to take him/her off this study if her/his condition gets worse, he/she has serious side effects, or the study doctor determines that it is no longer in your child's best interest to continue. The sponsor or regulatory agencies may stop this study at anytime without your consent. If this occurs, you will be notified and your child's study doctor will discuss other options with you. We will tell you about new information that may affect your child's health, welfare, or willingness to stay in this study.

Whom to Call with Questions or Problems:

For questions about the study or a research-related injury, contact Dr. Cotten at 919-681-6025 during regular business hours and at 919-970-4381 (pager) or the Duke paging operator, 919-684-8111 after hours and on weekends and holidays. During regular business hours, you may also call the clinical research pager at 919-970-1425 and speak to a member of the Neonatology Clinical Research team. For questions about your child's rights as a research participant, contact the Duke University Health System Institutional Review Board (IRB) Office at (919) 668-5111.

Form
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DUKE UNIVERSITY HEALTH SYSTEM

Minor's Consent To Participate In A Research Study The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The SUPPORT Trial

IRB #: 6921-07-4R2

Temporary Restriction of Access to Study Records:

Some information collected about your child only for this research study may be kept in a research study record separate from your child's medical record, and some research information may also be part of your child's medical record. You will not have access to this research information until the end of the study. However, it will be available to your child's physicians if needed for your child's care.

Statement of Consent:

"The purpose of this study, procedures to be followed, risks and benefits have been explained to me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have additional questions. I have read this consent form and agree for my child to be in this study, with the understanding that I may withdraw him/her at any time. I have been told that I will be given a signed copy of this consent form."

Signature of Parent/Guardian

Date

Signature of Person Obtaining Consent

Date

Consent tracking #:

SUP



Consent To Participate In A Research Study

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

Introduction:

You are being asked to allow your child to be in this study because there is a possibility he/she will be born between 12 and 16 weeks early (24-28 weeks gestational age). Dr. Michael Cotten and the Neonatology clinical research group at Duke Medical Center and colleagues at the 16 centers in the National Institutes for Child Health and Human Development (NICHD) Neonatal Research Network are conducting a research study to determine the best way to help extremely premature babies breathe better after they are born. This study will compare the effectiveness, risks and benefits of two different types of treatment for premature lung disease. The two methods being compared are CPAP (positive pressure applied with a face mask or nasal prongs to help keep the lungs inflated) in the delivery room and reduced use of a breathing machine to assist the baby's breathing *versus* intubation (using a breathing tube placed in the trachea or windpipe) in the delivery room and more aggressive use of mechanical ventilation (breathing for the baby using a machine). This study is also being done to learn the appropriate levels of oxygen saturation (oxygen levels in the blood) that should be maintained in extremely premature babies while they are being treated in the hospital. Dr Cotten and the Neonatology clinical research group are receiving salary support from the NICHD to conduct this study.

Purpose of the Study:

1) To compare the outcome of infants who receive delivery room CPAP and who have restrictive guidelines for having a breathing tube placed for mechanical ventilation with infants who have the tube placed and surfactant (a liquid which helps babies with immature lungs breath easier by helping keep their lungs from collapsing) given in the delivery room and have less strict guidelines for maintaining a breathing tube and mechanical ventilation.

2) To compare low range (85-89%) oxygen saturation levels with high range (91-95%) levels to determine if a lower range results in decreased ROP (Retinopathy of Prematurity, an eye disease that may result in impairment of vision or even blindness) which may be caused by excessive levels of oxygen.)

Duration of the Study: We expect to include about 1300 babies in the study from the 16 NICHD Neonatal Research Network hospitals around the country over a two year period. 60 babies will take part at Duke.

Background:

CPAP vs. Intubation/Surfactant. Research studies of surfactant treatment along with intubation and mechanical ventilation reduced mortality versus intubation and mechanical ventilation with no surfactant treatment. Other studies have suggested that many extremely premature babies may not need intubation or treatment with surfactant if they are treated with CPAP in the delivery room. Research studies suggest that avoiding intubation may help babies avoid lung damage associated with premature birth and subsequent mechanical ventilation, even if surfactant is used. Delivery room intubation and surfactant treatment has never been compared to CPAP treatment started in the delivery room.



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Some hospitals in the United States that provide care for extremely preterm infants like yours use CPAP in the delivery room, while other similar hospitals intubate every baby in the first hour of life and give all the infants between 24 and 28 weeks gestation surfactant. The decision as to which to use is currently made by the physician attending the delivery. This study will help doctors find out if it is better to intubate in the delivery room and treat infants like yours with surfactant in the first hour of life, or to start them on CPAP in the delivery room and try to limit the chance that they will need intubation.

Oxygen Level Study. The current alarm limits for oxygen saturation monitors in many neonatal intensive care units (NICU's) in the United States are set at 85% and 95%. The aim in many units is to keep oxygen saturations between 88 and 92%. This goal is based on research suggesting high levels of oxygen (> 95% saturation) in the first weeks of life are related to later development of ROP and damage to the lungs. We are not sure how much lower we should set the goal for oxygen saturation in extremely preterm infants and still avoid increasing the risk of developmental delay. Previous studies have suggested that risk of ROP decreases when oxygen saturation goals were set with a lower limit of 80% without any increase in risk in neurodevelopmental impairment in the first year after discharge. Currently in the United States, some hospital NICU's target oxygen levels in the lower end of the 85 – 95% range, while others target the higher range. Both treatment groups in this study (85-89% and 91-95%) fall within the alarm range currently used at Duke. The study will attempt to keep babies in one of these two ranges.

Each of the 4 possible combinations of treatments is considered standard care by some units in the United States.

Study Procedures:

Prior to delivery, and after your permission is given, your baby will be randomized (chosen by chance like the flip of a coin) to one of two lung treatment strategies. The treatments are as follows:

- 1) *CPAP* in the delivery room immediately after birth and continuing in the NICU, *or*
- 2) *Intubation* (placement of a tube in his/her trachea or windpipe) in the delivery room followed by surfactant administration and mechanical ventilation.

In addition to being randomly assigned to one of the two groups described above, your baby will be randomized to a High reading or Low reading oxygen saturation monitor, also known as an “oximeter” (a monitor that displays how much oxygen is in the blood). The oximeters used in this study are FDA approved, and they have been modified for research purposes. This modification makes the monitors show a value which is either slightly higher or slightly lower than the true oxygen level when values are between 85 and 95%. Outside those ranges, the oximeter works the same as the standard of care oximeter.



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Only the study coordinator will know which oxygen group your baby is in. Neither you nor the doctors, nurses, and respiratory therapists taking care of your baby will know which oximeter group your baby is in. Within the alarm range of the usual oxygen saturation monitors which we normally use, your baby will either be on the high end of normal or the low end. He/she will remain on this device until he/she reaches 36 weeks adjusted age (for example, 24 wks gestation plus 12 weeks of age = 36 weeks adjusted age). In the case of an emergency, the study doctor can quickly find out which oxygen saturation group your baby is in.

We will also collect information on how well your baby gains weight and grows. Other care will be conducted as normal during his/her participation in the study. Your baby will be followed periodically in our Special Infant Care Clinic (SICC) during the first 2 to 3 years of life. At these visits we check your baby's health and development. For this study, we will ask you to allow us to report the results of your baby's neurologic evaluation and developmental testing at the 18-22 months corrected age follow-up clinic visit.

Your baby will have routine ultrasounds of his/her head during his/her stay in the NICU. A copy of the head ultrasounds conducted between 4-14 days of life and at the time of the original expected due date will be collected for this study. If your baby's head ultrasound at the time of the expected due date occurs before 35 weeks post-menstrual age, your baby will receive another head ultrasounds for the purpose of this study between 35-42 weeks post-menstrual age. In addition, your baby will have a MRI (Magnetic Resonance Imaging) for the purpose of this research study between 35-42 weeks post-menstrual age. Neither the head ultrasound nor the MRI is experimental and both are currently used on infants at Duke University Medical Center. The MRI is a specialized brain scan that takes detailed pictures of the brain structure and can detect normal and abnormal brain tissue. If conducted for the purpose of this study, the head ultrasound and /or MRI will be paid for by the grant. If your baby is still in the NICU, your baby will need to be transported to the MRI suite in order to have the procedure. Only those patients considered stable for transport will undergo an MRI. If your baby is discharged home prior to 35-42 weeks PMA, you maybe asked to return to Duke University Medical Center for the head ultrasound and MRI procedures. The MRI will be conducted after your baby is swaddled while sleeping following a feeding and with the use of a jacket-like device that allows the baby to lie still without using sedation. A physician at the hospital in which you receive the head ultrasound and MRI will provide you with an interpretation of the results of the tests. Neither the ultrasound nor the MRI involves exposure to radiation. Please initial your choice below.

Yes, I agree to allow my baby to receive an MRI.

No, I do not agree to allow my baby to receive an MRI.



Consent To Participate In A Research Study

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

We know that many babies born as early as your baby are at risk for breathing problems, especially wheezing and coughing during early childhood, after discharge from the NICU. The purpose of Breathing Outcomes Study described here is to determine the effect of the SUPPORT Study treatment on your baby's respiratory health in early childhood, during the first 18-22 months after his/her expected due date if he or she was to have been born at full term.

You and your infant's participation will begin with an interview at the time of your baby's first regular follow-up visit with the Special Infant Care Clinic (SICC). At this interview Dr. Goldstein or one of her research associates will ask you questions about your family, including questions about family history of breathing problems, and questions about your home, including things that may increase your child's risk of breathing problems. You do not need to answer any questions that make you uncomfortable. The interview will take about 15 minutes.

We will continue to stay in touch with you and your infant by telephone or in person at one of your subsequent SICC visits. The main study center at the University of Rochester has trained interviewers who will call you by telephone every 6 months over the next 18-22 months, a total of three times. At these times, they will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a doctor, emergency room, or hospital visits for treatment of breathing problems. They will also ask you several questions about your family and yourself. The entire call should take about 15 minutes of your time, less if your baby has had no breathing problems.

They will schedule the telephone calls at a time that is convenient for you. The telephone calls will occur when your infant is 6, 12, and 18 months after his/her expected delivery at full term.

The results from your baby's questionnaire will be combined with other infants from around the country. However, your baby's name will never be included in any information that leaves Duke. Please initial your choice below.

Yes, I agree to be contacted.

No, I do not agree to be contacted

Risks :

Participation in this study may involve some added risks or discomforts. All of the treatments (CPAP in the delivery room, delivery room intubation plus surfactant, lower oxygen range, and higher oxygen range) proposed in this study are standard of care at various hospitals like Duke in the United States, so there are no predictable increases in risk for your baby.

Infants randomized to the CPAP group may, at some point in their care, require intubation and assisted ventilation (use of a breathing machine). The study provides guidelines for this, but if the attending physician deems this necessary at any time, participation in the study will not affect this decision.



Consent To Participate In A Research Study

**The Surfactant Positive Airway Pressure and Pulse
Oximetry Trial in Extremely Low Birth Weight Infants:
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regardless of the study guideline. With CPAP, there is a small risk of skin damage to the nose. Your baby's nurses and doctors will closely monitor your baby's nose while he/she is on CPAP. Risks of surfactant therapy include slowing of the heart and a decrease in oxygen saturation during dosing as the surfactant liquid passes through the breathing tube into the lungs. Surfactant treatment may cause a rapid increase in how much the lungs expand with each breath. Trained respiratory therapists, nurses and physicians will monitor your baby for these effects during and after surfactant dosing.

The risks of higher versus lower oxygen saturation levels in the two ranges to be used in this study are unknown. Lower oxygen range may help infants avoid ROP and chronic lung disease (need for supplemental oxygen at 36 weeks post-conception or discharge) which has been associated with neurodevelopmental delay and higher oxygen levels may or may not have an effect on the risk of neurodevelopmental delay. It is unclear which oxygen level, if any, will help babies grow better. Both ranges are within the alarm limits set in infants like yours in the Duke NICU. Some unknown risks may be learned during the study. If these occur, you will be informed by the study personnel.

There are no known effects from exposure to magnetic fields (MRI). Temporary minor skin irritation from tape used to apply MRI-compatible monitoring electrodes may occur, but this risk is unlikely.

The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential. There will be no name or other patient identification in any study report that may be published after the study is completed. Measures taken to protect you and your baby's identity are described in the confidentiality section of this document.

Benefits:

There may be benefits to your child directly from participation in this study. The knowledge gained from this study may help us improve treatment of babies in the future.

Data Handling and Confidentiality:

Clinical information will be collected from your baby's chart by Duke Neonatology Clinical Research study personnel. Information will be labeled with a code number. Coded information will be sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in Research Triangle Park, North Carolina. The study log linking the code number with your baby's identity will be kept under lock and key at Duke. Information directly identifying your baby will not leave Duke. Research records will be kept confidential to the extent provided by law, and will be maintained in the study record until your child reaches the age of 21 years or six years after the study is complete, whichever is longest. Your baby's study record may be reviewed in order to meet federal or state regulations. Reviewers of your child's study record may include representatives from the Food and Drug Administration, representatives of the National Institutes of Health (NIH) and the Duke Institutional Review Board (IRB, the hospital committee that supervises research in human beings). When research results from this study are reported in a professional setting, such as in a medical journal or at a scientific meeting, the identity of research subjects taking part in the study is withheld. If disclosed by the sponsor, the information is no longer covered by the federal privacy regulations.



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Costs and Compensation:

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Injuries:

Immediate necessary medical care is available at Duke University Medical Center in the event that your child is injured as a result of participation in this research study. However, there is no commitment by Duke University, Duke University Health System, Inc., or your child's Duke physicians to provide monetary compensation or free medical care to your child in the event of a study-related injury. For questions about the study or a research –related injury, contact Dr. Mike Cotten at 919-681-0630 during regular business hours and at 919-970-4381 after hours and on weekends and holidays.

Alternatives to Participation:

As an alternative to participation in this study, you may decide to have your baby's doctor decide which treatment your baby will receive. If you decide not to include your child in this study, none of his/her medical information will be included in the study data. Participation in research is entirely voluntary.

Right not to Participate or to Withdraw:

You may choose for your child not to be in the study, or, if you agree for your child to be in the study, you may withdraw him/her from the study at any time. If you withdraw him/her from the study, no new data will be collected for study purposes unless the data concern an adverse event (bad effect) related to the study. If such an adverse event occurs, we may need to review your child's entire medical record. All data that have already been collected for study purposes, and any new information about an adverse event related to the study, will be sent to the sponsor.

Your decision for your child not to participate or to withdraw from the study will not involve any penalty or loss of benefits to which you or your child are entitled, and will not affect your access to health care at Duke. If you do decide for your child to withdraw, we ask that you contact Dr. Cotten in writing and let him know that you are withdrawing from the study. His mailing address is: DUMC Box 3179, Durham, North Carolina, 27710. If you withdraw your child from the study, the attending physician will decide whether to maintain current treatment or change it, based on your child's needs at the time of the decision.

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DUKE UNIVERSITY HEALTH SYSTEM

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The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The SUPPORT Trial

Whom to Call with Questions or Problems:

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Statement of Consent:

"The purpose of this study, procedures to be followed, risks and benefits have been explained to me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have additional questions. I have read this consent form and agree for my child to be in this study, with the understanding that I may withdraw him/her at any time. I have been told that I will be given a signed copy of this consent form."

Signature of Parent/Guardian

Date

Signature of Person Obtaining Consent

Date



Consent To Participate In A Research Study

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1) To compare the outcome of infants who receive delivery room CPAP and who have restrictive guidelines for having a breathing tube placed for mechanical ventilation with infants who have the tube placed and surfactant (a liquid which helps babies with immature lungs breath easier by helping keep their lungs from collapsing) given in the delivery room and have less strict guidelines for maintaining a breathing tube and mechanical ventilation.

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CPAP vs. Intubation/Surfactant. Research studies of surfactant treatment along with intubation and mechanical ventilation reduced mortality versus intubation and mechanical ventilation with no surfactant treatment. Other studies have suggested that many extremely premature babies may not need intubation or treatment with surfactant if they are treated with CPAP in the delivery room. Research studies suggest that avoiding intubation may help babies avoid lung damage associated with premature birth and subsequent mechanical ventilation, even if surfactant is used. Delivery room intubation and surfactant treatment has never been compared to CPAP treatment started in the delivery room.



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The SUPPORT Trial**

Some hospitals in the United States that provide care for extremely preterm infants like yours use CPAP in the delivery room, while other similar hospitals intubate every baby in the first hour of life and give all the infants between 24 and 28 weeks gestation surfactant. The decision as to which to use is currently made by the physician attending the delivery. This study will help doctors find out if it is better to intubate in the delivery room and treat infants like yours with surfactant in the first hour of life, or to start them on CPAP in the delivery room and try to limit the chance that they will need intubation.

Oxygen Level Study. The current alarm limits for oxygen saturation monitors in many neonatal intensive care units (NICU's) in the United States are set at 85% and 95%. The aim in many units is to keep oxygen saturations between 88 and 92%. This goal is based on research suggesting high levels of oxygen (> 95% saturation) in the first weeks of life are related to later development of ROP and damage to the lungs. We are not sure how much lower we should set the goal for oxygen saturation in extremely preterm infants and still avoid increasing the risk of developmental delay. Previous studies have suggested that risk of ROP decreases when oxygen saturation goals were set with a lower limit of 80% without any increase in risk in neurodevelopmental impairment in the first year after discharge. Currently in the United States, some hospital NICU's target oxygen levels in the lower end of the 85 – 95% range, while others target the higher range. Both treatment groups in this study (85-89% and 91-95%) fall within the alarm range currently used at Duke. The study will attempt to keep babies in one of these two ranges.

Each of the 4 possible combinations of treatments is considered standard care by some units in the United States.

Study Procedures:

Prior to delivery, and after your permission is given, your baby will be randomized (chosen by chance like the flip of a coin) to one of two lung treatment strategies. The treatments are as follows:

- 1) *CPAP* in the delivery room immediately after birth and continuing in the NICU, *or*
- 2) *Intubation* (placement of a tube in his/her trachea or windpipe) in the delivery room followed by surfactant administration and mechanical ventilation.

In addition to being randomly assigned to one of the two groups described above, your baby will be randomized to a High reading or Low reading oxygen saturation monitor, also known as an "oximeter" (a monitor that displays how much oxygen is in the blood). The oximeters used in this study are FDA approved, and they have been modified for research purposes. This modification makes the monitors show a value which is either slightly higher or slightly lower than the true oxygen level when values are between 85 and 95%. Outside those ranges, the oximeter works the same as the standard of care oximeter.



DUKE UNIVERSITY HEALTH SYSTEM

Consent To Participate In A Research Study

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The SUPPORT Trial

Only the study coordinator will know which oxygen group your baby is in. Neither you nor the doctors, nurses, and respiratory therapists taking care of your baby will know which oximeter group your baby is in. Within the alarm range of the usual oxygen saturation monitors which we normally use, your baby will either be on the high end of normal or the low end. He/she will remain on this device until he/she reaches 36 weeks adjusted age (for example, 24 wks gestation plus 12 weeks of age = 36 weeks adjusted age). In the case of an emergency, the study doctor can quickly find out which oxygen saturation group your baby is in.

We will also collect information on how well your baby gains weight and grows. Other care will be conducted as normal during his/her participation in the study. Your baby will be followed periodically in our Special Infant Care Clinic (SICC) during the first 2 to 3 years of life. At these visits we check your baby's health and development. For this study, we will ask you to allow us to report the results of your baby's neurologic evaluation and developmental testing at the 18-22 months corrected age follow-up clinic visit.

Your baby will have routine ultrasounds of his/her head during his/her stay in the NICU. A copy of the head ultrasounds conducted between 4-14 days of life and at the time of the original expected due date will be collected for this study. If your baby's head ultrasound at the time of the expected due date occurs before 35 weeks post-menstrual age, your baby will receive another head ultrasounds for the purpose of this study between 35-42 weeks post-menstrual age. In addition, your baby will have a MRI (Magnetic Resonance Imaging) for the purpose of this research study between 35-42 weeks post-menstrual age. Neither the head ultrasound nor the MRI is experimental and both are currently used on infants at Duke University Medical Center. The MRI is a specialized brain scan that takes detailed pictures of the brain structure and can detect normal and abnormal brain tissue. If conducted for the purpose of this study, the head ultrasound and /or MRI will be paid for by the grant. If your baby is still in the NICU, your baby will need to be transported to the MRI suite in order to have the procedure. Only those patients considered stable for transport will undergo an MRI. If your baby is discharged home prior to 35-42 weeks PMA, you maybe asked to return to Duke University Medical Center for the head ultrasound and MRI procedures. The MRI will be conducted after your baby is swaddled while sleeping following a feeding and with the use of a jacket-like device that allows the baby to lie still without using sedation. A physician at the hospital in which you receive the head ultrasound and MRI will provide you with an interpretation of the results of the tests. Neither the ultrasound nor the MRI involves exposure to radiation. Please initial your choice below.

Yes, I agree to allow my baby to receive an MRI.

No, I do not agree to allow my baby to receive an MRI.



DUKE UNIVERSITY HEALTH SYSTEM

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The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The SUPPORT Trial

We know that many babies born as early as your baby are at risk for breathing problems, especially wheezing and coughing during early childhood, after discharge from the NICU. The purpose of Breathing Outcomes Study described here is to determine the effect of the SUPPORT Study treatment on your baby's respiratory health in early childhood, during the first 18-22 months after his/her expected due date if he or she was to have been born at full term.

You and your infant's participation will begin with an interview at the time of your baby's first regular follow-up visit with the Special Infant Care Clinic (SICC). At this interview Dr. Goldstein or one of her research associates will ask you questions about your family, including questions about family history of breathing problems, and questions about your home, including things that may increase your child's risk of breathing problems. You do not need to answer any questions that make you uncomfortable. The interview will take about 15 minutes.

We will continue to stay in touch with you and your infant by telephone or in person at one of your subsequent SICC visits. The main study center at the University of Rochester has trained interviewers who will call you by telephone every 6 months over the next 18-22 months, a total of three times. At these times, they will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a doctor, emergency room, or hospital visits for treatment of breathing problems. They will also ask you several questions about your family and yourself. The entire call should take about 15 minutes of your time, less if your baby has had no breathing problems.

They will schedule the telephone calls at a time that is convenient for you. The telephone calls will occur when your infant is 6, 12, and 18 months after his/her expected delivery at full term.

The results from your baby's questionnaire will be combined with other infants from around the country. However, your baby's name will never be included in any information that leaves Duke. Please initial your choice below.

Yes, I agree to be contacted.

No, I do not agree to be contacted

Risks :

Participation in this study may involve some added risks or discomforts. All of the treatments (CPAP in the delivery room, delivery room intubation plus surfactant, lower oxygen range, and higher oxygen range) proposed in this study are standard of care at various hospitals like Duke in the United States, so there are no predictable increases in risk for your baby.

Infants randomized to the CPAP group may, at some point in their care, require intubation and assisted ventilation (use of a breathing machine). The study provides guidelines for this, but if the attending physician deems this necessary at any time, participation in the study will not affect this decision



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regardless of the study guideline. With CPAP, there is a small risk of skin damage to the nose. Your baby's nurses and doctors will closely monitor your baby's nose while he/she is on CPAP. Risks of surfactant therapy include slowing of the heart and a decrease in oxygen saturation during dosing as the surfactant liquid passes through the breathing tube into the lungs. Surfactant treatment may cause a rapid increase in how much the lungs expand with each breath. Trained respiratory therapists, nurses and physicians will monitor your baby for these effects during and after surfactant dosing.

The risks of higher versus lower oxygen saturation levels in the two ranges to be used in this study are unknown. Lower oxygen range may help infants avoid ROP and chronic lung disease (need for supplemental oxygen at 36 weeks post-conception or discharge) which has been associated with neurodevelopmental delay and higher oxygen levels may or may not have an effect on the risk of neurodevelopmental delay. It is unclear which oxygen level, if any, will help babies grow better. Both ranges are within the alarm limits set in infants like yours in the Duke NICU. Some unknown risks may be learned during the study. If these occur, you will be informed by the study personnel.

There are no known effects from exposure to magnetic fields (MRI). Temporary minor skin irritation from tape used to apply MRI-compatible monitoring electrodes may occur, but this risk is unlikely.

The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential. There will be no name or other patient identification in any study report that may be published after the study is completed. Measures taken to protect you and your baby's identity are described in the confidentiality section of this document.

Benefits:

There may be benefits to your child directly from participation in this study. The knowledge gained from this study may help us improve treatment of babies in the future.

Data Handling and Confidentiality:

Clinical information will be collected from your baby's chart by Duke Neonatology Clinical Research study personnel. Information will be labeled with a code number. Coded information will be sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in Research Triangle Park, North Carolina. The study log linking the code number with your baby's identity will be kept under lock and key at Duke. Information directly identifying your baby will not leave Duke. Research records will be kept confidential to the extent provided by law, and will be maintained in the study record until your child reaches the age of 21 years or six years after the study is complete, whichever is longest. Your baby's study record may be reviewed in order to meet federal or state regulations. Reviewers of your child's study record may include representatives from the Food and Drug Administration, representatives of the National Institutes of Health (NIH) and the Duke Institutional Review Board (IRB, the hospital committee that supervises research in human beings). When research results from this study are reported in a professional setting, such as in a medical journal or at a scientific meeting, the identity of research subjects taking part in the study is withheld. If disclosed by the sponsor, the information is no longer covered by the federal privacy regulations.



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Consent To Participate In A Research Study

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants: The SUPPORT Trial

Costs and Compensation:

There is no charge to you or your child for participating in this research. You or your child's insurance will be responsible for paying the cost of routine medical care for your child's condition. The costs for your child's routine care will appear on his/her hospital bill. Although there is no compensation for allowing your child to participate in this project, we will give you \$25 and a parking pass to help with travel expenses to the clinic for the 18 – 22 month visit.

Injuries:

Immediate necessary medical care is available at Duke University Medical Center in the event that your child is injured as a result of participation in this research study. However, there is no commitment by Duke University, Duke University Health System, Inc., or your child's Duke physicians to provide monetary compensation or free medical care to your child in the event of a study-related injury. For questions about the study or a research –related injury, contact Dr. Mike Cotten at 919-681-0630 during regular business hours and at 919-970-4381 after hours and on weekends and holidays.

Alternatives to Participation:

As an alternative to participation in this study, you may decide to have your baby's doctor decide which treatment your baby will receive. If you decide not to include your child in this study, none of his/her medical information will be included in the study data. Participation in research is entirely voluntary.

Right not to Participate or to Withdraw:

You may choose for your child not to be in the study, or, if you agree for your child to be in the study, you may withdraw him/her from the study at any time. If you withdraw him/her from the study, no new data will be collected for study purposes unless the data concern an adverse event (bad effect) related to the study. If such an adverse event occurs, we may need to review your child's entire medical record. All data that have already been collected for study purposes, and any new information about an adverse event related to the study, will be sent to the sponsor.

Your decision for your child not to participate or to withdraw from the study will not involve any penalty or loss of benefits to which you or your child are entitled, and will not affect your access to health care at Duke. If you do decide for your child to withdraw, we ask that you contact Dr. Cotten in writing and let him know that you are withdrawing from the study. His mailing address is: DUMC Box 3179, Durham, North Carolina, 27710. If you withdraw your child from the study, the attending physician will decide whether to maintain current treatment or change it, based on your child's needs at the time of the decision.

In addition, your child's doctor may decide to take him/her off this study if her/his condition gets worse, he/she has serious side effects, or the study doctor determines that it is no longer in your child's best interest to continue. The sponsor or regulatory agencies may stop this study at anytime without your consent. If this occurs, you will be notified and your child's study doctor will discuss other options with you. We will tell you about new information that may affect your child's health, welfare, or willingness to stay in this study.



DUKE UNIVERSITY HEALTH SYSTEM

Consent To Participate In A Research Study
**The Surfactant Positive Airway Pressure and Pulse
Oximetry Trial in Extremely Low Birth Weight Infants:
The SUPPORT Trial**

Whom to Call with Questions or Problems:

For questions about the study or a research-related injury, contact Dr. Cotten at 919-681-6025 during regular business hours and at 919-970-4381 (pager) or the Duke paging operator, 919-684-8111 after hours and on weekends and holidays. During regular business hours, you may also call the clinical research pager at 919-970-1425 and speak to a member of the Neonatology Clinical Research team. For questions about your child's rights as a research participant, contact the Duke University Health System Institutional Review Board (IRB) Office at (919) 668-5111.

Statement of Consent:

"The purpose of this study, procedures to be followed, risks and benefits have been explained to me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have additional questions. I have read this consent form and agree for my child to be in this study, with the understanding that I may withdraw him/her at any time. I have been told that I will be given a signed copy of this consent form."

Signature of Parent/Guardian

Date

Signature of Person Obtaining Consent

Date



Consent To Participate In A Research Study
**Extended Follow-up at School Age for the SUPPORT
Neuroimaging and Neurodevelopmental Outcomes
(NEURO) Cohort**

You are being asked to allow your child to participate in a follow-up visit when your child is between 6 years, 4 months and 7 years, 2 months of age (school age). Your child was selected as a potential school age follow-up participant because he/she was enrolled in the brain imaging part of the SUPPORT study. As you may recall, that study did an extra brain ultrasound at the time that your child's near-term brain MRI was done for routine premie care. The purpose was to compare the findings of early and near-term ultrasounds and near-term MRI to determine if one way of imaging gives more useful information than the other. The purpose of this phase of the study is to examine participants at school age and determine whether near-term MRI is better than ultrasound in predicting physical and developmental outcome.

Dr. C. Michael Cotten and the Neonatal/Perinatal Research Unit at Duke University Medical Center (DUMC) and National Institutes for Child Health and Human Development (NICHD) Neonatal Research Network are conducting this study. A grant from the National Institutes of Health (NIH) will sponsor this study, and these funds may reimburse part of Dr. Cotten's salary.

A description of this clinical trial is available on <http://www.clinicaltrials.gov>. as required by U.S. Law. This website will not include information that can identify you. You can search this website at any time to find out information about this trial. This trial is registered under the number NCT00233324.

WHO WILL BE MY CHILD'S DOCTOR ON THIS STUDY?

If you decide to allow your child to participate, Dr. Cotten will be your child's doctor for the study and will be in contact with your child's regular health care provider throughout the time that your child is in the study and afterwards, if needed.

WHY IS THE STUDY BEING DONE?

The study is designed to compare the brain imaging (ultrasound and MRI) of children who were born very early to see if the ways of imaging give information that better predicts outcome at school age. The study will also check to see if there is a difference in outcome at school age between the breathing management and oxygen groups in the original SUPPORT project.

WHAT IS INVOLVED IN THIS STUDY?

Your child's participation in this study is entirely voluntary. If your child takes part in the study,

- his/her medical history will be reviewed, including details of the most recent vision and hearing tests;
- he/she will be weighed, measured and have a blood pressure check;
- a detailed neurological examination will be done to look at muscle strength, coordination, balance, ability to walk, and so forth;
- a test of number skills and word identification called the Woodcock Johnson will be conducted;



Consent To Participate In A Research Study
**Extended Follow-up at School Age for the SUPPORT
Neuroimaging and Neurodevelopmental Outcomes
(NEURO) Cohort**

- a test of problem solving with words, blocks and pictures called the Wechsler Intelligence Scale for Children will be done;
- a test evaluating visual problem solving skills and ability to pay attention called the Neurological/Psychological test will be carried out; and,
- if your child cannot be evaluated by the last two tests, you will be asked to answer questions about the daily living activities of your child in the areas of self-care, mobility, communication, and understanding.
- you will also be asked to complete questionnaires about your household and your child's overall health, education, and activities away from school.

HOW LONG WILL MY CHILD BE IN THIS STUDY?

During the study visit, the interviews for you as a parent will take about 1½-2 hours and the time to evaluate your child will take about 3½ hours, including breaks. The interviews with you will be at the same time your child is being tested so the whole visit will last about 3½ hours.

WHAT ARE THE RISKS OR SIDE EFFECTS OF BEING IN THIS STUDY?

There are no known risks to participating in the medical/neurological and developmental testing of this study. Some unknown risks may be learned during the study. You will be told of any important new information that is learned during the course of this research study that might affect your child's condition or your willingness to continue your child's participation in this study. The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

WHAT ARE THE BENEFITS TO BEING IN THIS STUDY?

The possible benefits to your child for taking part in this study are detection and treatment of any developmental problems as well as referral to agencies or pediatric clinics for his/her continued medical care. We cannot guarantee or promise that your child will receive any benefits from this study.

WHAT OTHER CHOICES DO I HAVE IF I DO NOT ALLOW MY CHILD TO TAKE PART IN THIS STUDY?

The alternative to having you and your child participate in this project is not to participate. You should not feel obligated to agree to allow your child to participate and your child should not feel obligated to participate. Your questions should be answered clearly and to your satisfaction. Your decision whether or not to participate will not prejudice your child or your child's medical care. If you decide to allow your child to participate, you are free to withdraw your consent, and to discontinue participation at any time without prejudice to your child or effect on your child's medical care.

WILL MY CHILD'S INFORMATION BE KEPT CONFIDENTIAL?

Clinical information will be collected from both your medical chart and your child's chart by a member of the Duke Neonatal-Perinatal Research Unit's team. Study records that identify your child will be



Consent To Participate In A Research Study
**Extended Follow-up at School Age for the SUPPORT
Neuroimaging and Neurodevelopmental Outcomes
(NEURO) Cohort**

kept confidential as required by law. Federal Privacy Regulations provide safeguards for privacy, security, and authorized access. Except when required by law, your child will not be identified by name, social security number, address, telephone number, or any other direct personal identifier in study records disclosed outside of Duke University Health System (DUHS). For records disclosed outside of DUHS, your child will be assigned a unique code number. The key to the code will be kept in a locked file in the research team's office. As part of the study, Dr. Cotten and his study team will report your child's study data to NIH through their data collection center, Research Triangle Institute.

To meet federal, state and institutional regulations or for reasons related to this research, the study investigator may share a copy of this consent form and records that identify your child with the following people and/or their representatives:

- The sponsor (NICHD);
- The sponsor's agents, the Research Triangle Institute;
- The Department of Health and Human Services;
- Regulatory agencies such as the Food and Drug Administration (FDA),
- NIH;
- The Duke University Health System Institutional Review Board.

If any of these groups review your child's research record, they may also need to review the entire medical record. This information may be further disclosed by the sponsor of this study, NICHD. If disclosed by the sponsor, the information is no longer covered by the federal privacy regulations. If this information is disclosed to outside reviewers for audit purposes, it may be further disclosed by them and may not be covered by the federal privacy regulations.

Research records will be kept confidential to the extent provided by law, and will be maintained in the study record, at minimum, until your child reaches the age of 21 years or for 6 years after the research is complete, whichever is longer. When research results from this study are reported in a professional setting, such as in a medical journal or at a scientific meeting, the identity of any child taking part in the study is withheld.

WHAT ARE THE COSTS OF TAKING PART IN THIS STUDY?

There will be no additional costs to your child as a result of being in this study.

WHAT ABOUT RESEARCH RELATED INJURIES?

Immediate necessary medical care is available at Duke University Medical Center in the event that your child is injured as a result of his/her participation in this research study. However, there is no commitment by Duke University, Duke University Health System, Inc., or your child's Duke Physicians to provide monetary compensation or free medical care to your child in the event of a study-related injury.



Consent To Participate In A Research Study
**Extended Follow-up at School Age for the SUPPORT
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IS THERE COMPENSATION FOR TAKING PART IN THIS STUDY?

You will receive \$100.00 to help cover travel expenses (meals, parking, transportation, etc.) at the study visit.

WHAT ABOUT MY RIGHTS TO DECLINE PARTICIPATION OR WITHDRAW MY CHILD FROM THE STUDY?

Participation is voluntary. You may choose not to be in the study, or, if you agree to the study, you may withdraw your child from the study at any time. If you withdraw your child from the study, no new data about your child will be collected for study purposes unless the data concern an adverse event (a bad effect) related to the study. If such an adverse event occurs, we may need to review your child's entire medical record. All data that have already been collected for study purposes, and any new information about an adverse event related to the study, will be sent to the study sponsor.

Your decision not to participate or to withdraw your child from the study will not involve any penalty or loss of benefits to which you or your child are entitled, and will not affect your child's access to health care at Duke. If you do decide to withdraw your child, we ask that you contact Dr. Cotten in writing and let him know that you are withdrawing your child from the study. His mailing address is: 2424 Erwin Road, Suite 504, DUMC Box 2739, Durham, North Carolina, 27705.

Your child's doctor may decide to take your child off this study if the study is ended early, or if the study doctor determines that it is no longer in your child's best interest to continue. The sponsor or regulatory agencies may stop this study at any time without your consent. We will tell you about new information that may affect your child's health, welfare, or willingness to stay in this study.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

For questions about the study or a research-related injury, or if you have complaints, concerns or suggestions about the research, contact Dr. Cotten at 919-681-6024 during regular business hours and at pager 919-970-4381 (Cotten) after hours and on weekends and holidays. After business hours and on weekends and holidays, you may also page the clinical research team at 919-970-1425 and speak to a member of the Neonatology Clinical Research team.

For questions about your child's rights as a research participant, or to discuss problems, concerns or suggestions related to the research, contact the Duke University Health System Institutional Review Board (IRB) Office at (919) 668-5111.



DUKE UNIVERSITY HEALTH SYSTEM

Consent To Participate In A Research Study **Extended Follow-up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort**

STATEMENT OF CONSENT

"The purpose of this study, procedures to be followed, risks and benefits have been explained to my child and me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have questions, to discuss problems, concerns, or suggestions related to the research, or to obtain information or offer input about the research. I have read this consent form and agree for my child to be in this study, with the understanding that I may withdraw my child at any time. We have discussed the study with my child, who agrees to be in the study. I have been told that I will be given a signed and dated copy of this consent form."

Signature of Parent or Legal Guardian

Date

Signature of Person Obtaining Consent

Date



Consent To Participate In A Research Study
**Extended Follow-up at School Age for the SUPPORT
Neuroimaging and Neurodevelopmental Outcomes
(NEURO) Cohort**

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Consent To Participate In A Research Study
**Extended Follow-up at School Age for the SUPPORT
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WHAT ARE THE RISKS OR SIDE EFFECTS OF BEING IN THIS STUDY?

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**Extended Follow-up at School Age for the SUPPORT
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kept confidential as required by law. Federal Privacy Regulations provide safeguards for privacy, security, and authorized access. Except when required by law, your child will not be identified by name, social security number, address, telephone number, or any other direct personal identifier in study records disclosed outside of Duke University Health System (DUHS). For records disclosed outside of DUHS, your child will be assigned a unique code number. The key to the code will be kept in a locked file in the research team's office. As part of the study, Dr. Cotten and his study team will report your child's study data to NIH through their data collection center, Research Triangle Institute.

To meet federal, state and institutional regulations or for reasons related to this research, the study investigator may share a copy of this consent form and records that identify your child with the following people and/or their representatives:

- The sponsor (NICHD);
- The sponsor's agents, the Research Triangle Institute;
- The Department of Health and Human Services;
- Regulatory agencies such as the Food and Drug Administration (FDA),
- NIH;
- The Duke University Health System Institutional Review Board.

If any of these groups review your child's research record, they may also need to review the entire medical record. This information may be further disclosed by the sponsor of this study, NICHD. If disclosed by the sponsor, the information is no longer covered by the federal privacy regulations. If this information is disclosed to outside reviewers for audit purposes, it may be further disclosed by them and may not be covered by the federal privacy regulations.

Research records will be kept confidential to the extent provided by law, and will be maintained in the study record, at minimum, until your child reaches the age of 21 years or for 6 years after the research is complete, whichever is longer. When research results from this study are reported in a professional setting, such as in a medical journal or at a scientific meeting, the identity of any child taking part in the study is withheld.

WHAT ARE THE COSTS OF TAKING PART IN THIS STUDY?

There will be no additional costs to your child as a result of being in this study.

WHAT ABOUT RESEARCH RELATED INJURIES?

Immediate necessary medical care is available at Duke University Medical Center in the event that your child is injured as a result of his/her participation in this research study. However, there is no commitment by Duke University, Duke University Health System, Inc., or your child's Duke Physicians to provide monetary compensation or free medical care to your child in the event of a study-related injury.



Consent To Participate In A Research Study
**Extended Follow-up at School Age for the SUPPORT
Neuroimaging and Neurodevelopmental Outcomes
(NEURO) Cohort**

IS THERE COMPENSATION FOR TAKING PART IN THIS STUDY?

You will receive \$100.00 to help cover travel expenses (meals, parking, transportation, etc.) at the study visit.

WHAT ABOUT MY RIGHTS TO DECLINE PARTICIPATION OR WITHDRAW MY CHILD FROM THE STUDY?

Participation is voluntary. You may choose not to be in the study, or, if you agree to the study, you may withdraw your child from the study at any time. If you withdraw your child from the study, no new data about your child will be collected for study purposes unless the data concern an adverse event (a bad effect) related to the study. If such an adverse event occurs, we may need to review your child's entire medical record. All data that have already been collected for study purposes, and any new information about an adverse event related to the study, will be sent to the study sponsor.

Your decision not to participate or to withdraw your child from the study will not involve any penalty or loss of benefits to which you or your child are entitled, and will not affect your child's access to health care at Duke. If you do decide to withdraw your child, we ask that you contact Dr. Cotten in writing and let him know that you are withdrawing your child from the study. His mailing address is: 2424 Erwin Road, Suite 504, DUMC Box 2739, Durham, North Carolina, 27705.

Your child's doctor may decide to take your child off this study if the study is ended early, or if the study doctor determines that it is no longer in your child's best interest to continue. The sponsor or regulatory agencies may stop this study at any time without your consent. We will tell you about new information that may affect your child's health, welfare, or willingness to stay in this study.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

For questions about the study or a research-related injury, or if you have complaints, concerns or suggestions about the research, contact Dr. Cotten at 919-681-6024 during regular business hours and at pager 919-970-4381 (Cotten) after hours and on weekends and holidays. After business hours and on weekends and holidays, you may also page the clinical research team at 919-970-1425 and speak to a member of the Neonatology Clinical Research team.

For questions about your child's rights as a research participant, or to discuss problems, concerns or suggestions related to the research, contact the Duke University Health System Institutional Review Board (IRB) Office at (919) 668-5111.



DUKE UNIVERSITY HEALTH SYSTEM

Consent To Participate In A Research Study **Extended Follow-up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort**

STATEMENT OF CONSENT

"The purpose of this study, procedures to be followed, risks and benefits have been explained to my child and me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have questions, to discuss problems, concerns, or suggestions related to the research, or to obtain information or offer input about the research. I have read this consent form and agree for my child to be in this study, with the understanding that I may withdraw my child at any time. We have discussed the study with my child, who agrees to be in the study. I have been told that I will be given a signed and dated copy of this consent form."

Signature of Parent or Legal Guardian

Date

Signature of Person Obtaining Consent

Date

Emory University School of Medicine Consent to be a Research Subject

Title: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

Principal Investigator: Susie Buchter, M.D., P.I.
Barbara J. Stoll, M.D., Co-P.I.

Sponsor's Name: National Institute of Child Health and Human Development (NICHD)

Introduction/Purpose:

You are being asked to volunteer your baby for a research study. There is a possibility that your baby will be born between 16 and 12 weeks early (24-28 weeks gestational age). Babies born this early usually have difficulty breathing. Their lungs are not mature enough to work well so that the babies can breathe on their own. Most all babies born at this early age will need assistance breathing and or extra oxygen. If needed, this support begins at birth in the delivery room.

This study will look at the use of CPAP in the delivery room. CPAP is positive pressure applied with a facemask to help keep the lungs inflated. This study will also look at the levels of oxygen saturation (oxygen levels in the blood) in premature babies.

It is known that the breathing problems of babies can be improved by putting a liquid in the lungs (surfactant). This liquid is put into the lungs by placing a tube in the windpipe (intubation). Afterwards, breathing is supported with a breathing machine and or extra oxygen.

However, when babies get this support for a long time, their lungs can become injured. This may cause the baby to be dependent upon the extra support for a long time. Studies from Europe have suggested that early CPAP can reduce the need for intubation in very premature infants.

There is no standard way to use CPAP/Positive End Expiratory Pressure for resuscitation in the delivery room for tiny premature infants. This pressure is given using a mask placed on the baby's face. The pressure may also be given using prongs placed in the infant's nostrils. The pressure is produced using current breathing machines. There are also special devices that are designed to deliver such pressures.

Studies have suggested that the use of early CPAP and trying not to use a breathing machine may have a better outcome for babies. These babies may also have a decreased need for surfactant therapy. These babies may also have a decreased need for additional oxygen. The current commonly used treatment is surfactant administration. Surfactant is produced by the normal lung. It is lacking in very preterm infants. Its use has been connected with a decrease in death and respiratory problems. Both the uses of CPAP and surfactant may be good. There has not been a study to compare the use of CPAP with surfactant treatment begins after delivery and continues in the NICU.

Retinopathy of Prematurity (ROP) is a common eye problem in tiny premature infants. Blood vessels that nourish the preterm infant's eyes are not fully developed. Small vessels in the retina (part of the eye) may have periods of increased or rapid and wild growth. Over time ROP can get

better or get worse. Usually ROP will heal without any problems. If the ROP is worse than usual, there is a chance that the blood vessels will grow out of control. If this happens, surgery may be needed to prevent scars inside the eye. These scars can cause severe vision loss.

Getting extra oxygen for a long time can also damage the baby's eyes. Another study has shown that less eye surgery was needed in special nurseries using lower oxygen limits.

There are two purposes of this study. First of all, we will compare two different types of care in the delivery room. We will compare infants who receive delivery room CPAP and those who have a breathing tube and surfactant given. Secondly, we will compare low range (85-89%) oxygen saturation levels with a high range (91-95%). We want to know if a lower oxygen level in babies can prevent this bad eye problem.

This study is being performed at Grady Memorial Hospital and Crawford W. Long Hospital. Fifteen other medical centers in the U.S. are also part of this study. The National Institute of Child Health and Human Development (NICHD) sponsors this research. Your baby will only be eligible for this study if you deliver between 24 and 27 weeks. The study will last about two years and will enroll about 1300 infants nationally. About 100 babies will be studied at Emory.

Procedures:

If you agree to this study and give consent for your baby, the following will happen. Prior to delivery, your baby will be assigned to one of two treatments. Assignment will be random (like flipping a coin). In the first treatment group, your baby would be placed on CPAP in the delivery room to help with their breathing. If your baby is in the second treatment group, a tube will be placed in his/her trachea (windpipe) to help with their breathing. After the tube is placed, a dose of Surfactant will be given in the tube. Both of these treatment groups are current standards of care for preterm babies in the delivery room.

At the same time that your baby is assigned to the above treatment group, he/she will also be randomly (like flipping a coin) assigned to a high or low oxygen monitoring group. Your baby will be treated using either a lower (85-89%) or higher (91-95%) oxygen saturation range. We will start this monitoring of oxygen saturation by 2 hours of age. Both of the ranges for oxygen used in this study are within the range that we currently use in our NICU. In this study we will try to maintain your baby within one of these 2 ranges. Each of these 4 possible treatment groups is considered the standard of care in the NICU at Emory. The study will take place during the entire time your baby is on oxygen while he/she is in the NICU.

A final eye exam will be done at 3 months corrected age (3 months after your due date for this baby). If your baby has been discharged from the hospital prior to this, an outpatient eye appointment will be scheduled. This eye appointment is part of standard of care. As part of the study, we will collect information about the eye exam. We may need to request a copy of your baby's eye exam if it is done after discharge.

As part of this study we will follow your baby's growth. A research nurse will measure your baby's length and the measurement around their head. We will collect your baby's weight from their chart. We will collect information about feedings your baby receives from the baby's chart. This information will be collected up to eight different times beginning on the day your baby is born and ending the day your baby is discharged to go home with you. We want to know if babies in this study grow at different rates or the same rate.

We want to know if your baby has breathing problems after they go home. We also want to know if your baby needs extra care to help them with their breathing. As part of this study we will follow your baby and collect information from you at discharge and after the baby goes home. We will call you by phone to get information when your baby is about 6, 12, and 18 months old. Each phone call will take about 15 minutes of your time. A member of the research team will ask you questions about the health of different people your baby comes in contact with. You will be asked questions about your baby's breathing. You will be asked questions about any visits your baby might have to the doctor, clinic, emergency room and hospital admissions. We will give you a brochure to help you record the information we will need about your baby.

Your baby will be followed for this study until he/she is discharged from the hospital. As part of standard of care the Emory Developmental Progress Clinic (DCP) will follow your baby. At 18 months of age, he/she will be seen in the DPC as part of our routine follow-up program. At the 18 month visit you will be asked to allow your baby to be part of a follow up study. You will be asked to sign a separate consent. Information will be shared with the NICHD Follow-up Study of very tiny premature babies. At that time we will look at your baby's growth. We will also perform physical and neurological testing and developmental testing.

Risks:

The treatments talked about in this study are all standard of care. However, intubation, administration of surfactant and CPAP are not without risk. Risks of intubation may include improper placement of tube and windpipe damage from the tube. Risks of surfactant could be unequal distribution of the liquid and bleeding into the lungs. Another risk could be delayed surfactant use while CPAP is being used. Risks of CPAP could be damage to the nose and overinflation of the lungs. There is no predictable increase in risks above standard of care for your baby. Some unknown risks may be learned during the study. If this happens, the research team will let you know.

Benefits:

If either treatment group is found to be a better way to treat babies, your baby may benefit from the study. But taking part in this study may not benefit your baby. Doctors may learn new things that may help babies in the future.

Alternatives:

You may choose not to have your baby take part in this study and your baby will continue to get the standard of care. The current standard of care at Grady and Crawford Long is to assess the baby's breathing at birth. The majority of babies born at this early date will be intubated and given surfactant. A few will receive CPAP in the delivery room or later in the intensive care nursery. Both of the ranges for oxygen used in this study are within the range that we currently use in our NICU.

Confidentiality:

People other than those doing the study may look at both medical charts and study records. Agencies that make rules and policy about how research is done have the right to review these records. So do agencies that pay for the study. Those with the right to look at your baby's study records include the Food and Drug Administration, the Office for Human Research Protections, National Institute of Child Health and Human Development, the Emory University Institutional Review Board, and Grady's Research Oversight Committee. Records can also be opened by court order. We will keep your baby's records private to the extent allowed by law. We will do this

even if outside review occurs. We will use a study number rather than your baby's name on study records where we can. Your baby's name and other facts that might point to him/her will not appear when we present this study or publish its results.

If you are or have been a patient at an Emory Healthcare facility, then you will have an Emory Healthcare medical record. If you are not and have never been a patient at an Emory Healthcare facility then no Emory Healthcare medical record will be created for you just because you are participating in a research study.

Results from study tests and procedures that are performed, analyzed and/or read at or for Emory Healthcare facilities that can be used for healthcare purposes will be placed in any medical record that you have with Emory Healthcare facilities. In addition, a copy of the informed consent form and HIPAA authorization form that you sign will be placed in any Emory Healthcare medical record you may have. Persons who have access to your medical record will be able to have access to all results and documents that are placed there, and the results/documents may be used by Emory Healthcare facilities to help provide you with medical care. Any results and documents that are kept as part of your medical record are not covered by certain state and federal laws and regulations that may prevent the disclosure of, research data. However, the confidentiality of the results and other documents in the medical record will be governed by laws such as HIPAA that concern medical records.

Emory University does not have any control over results from tests and procedures performed and/or analyzed or read at non-Emory Healthcare facilities. These results are NOT routinely included in medical records at Emory Healthcare facilities, and they will not necessarily be available to Emory Healthcare providers. Emory University also does not have control over any other medical records that you may have with other healthcare providers and will not send any test or procedure results from the study to these providers. It is up to you to let these healthcare providers know that you are participating in a clinical trial.

Some tests and procedures that may be performed during this study by Emory Healthcare or other facilities or persons **MAY NOT BE LOOKED AT OR READ FOR ANY HEALTHCARE TREATMENT OR DIAGNOSTIC PURPOSES. THESE TESTS AND PROCEDURES WILL ONLY BE LOOKED AT FOR RESEARCH PURPOSES AND THE RESULTS WILL NOT BE REVIEWED TO MAKE DECISIONS ABOUT YOUR PERSONAL HEALTH OR TREATMENT.** The specific types of tests or procedures, if any, that fall within this category are listed below: NONE

Costs and Compensation:

There will be no cost to you or your baby for being in this study. You will not be paid for being in this study. If your baby is injured as a result of this research, medical care will be available. However, Emory University (including Crawford Long Hospital) and the Grady Health System have not set aside funds to pay for this care or to compensate you if a mishap occurs. If you believe your baby has been injured by this research, you should contact Dr. Susie Buchter, the investigator in charge at 404-778-1450.

Contact Persons:

Call Dr. Susie Buchter at (404) 778-1450 if you have questions about this study or if you feel your baby has been harmed from being in this study. If you have any questions or concerns about your rights as a participant in this research study, contact Colleen Dilorio, Ph.D., Chairman, Emory University Institutional Review Board, at (404) 712-0720. If your baby is a patient at Grady

Hospital you may contact Dr. Curtis Lewis, Senior Vice President for Medical Affairs, at (404) 616-4261.

New Findings:

We may learn new things during the study that you may need to know. We can also learn about things that might make you want to stop participating in the study. If so, you will be notified about any new information.

Voluntary Participation and Withdrawal:

Participation in the study is voluntary. You have the right to refuse to let your baby be in this study. If you decide to let your baby be in this study and change your mind, you have the right to drop out at any time. This decision will not affect in any way your baby's current or future medical care. This decision will not affect any other benefits to which you are otherwise given.

Although your infant will be treated according to a specific plan (protocol), individual circumstances may arise. In such cases, your infant's health will always be considered more important than strictly following the study. Changes will be discussed before they are made whenever possible.

We will give you a copy of this consent form to keep.

If you're willing to volunteer your baby for this research, please sign below.

Subject's name

Subject's legally authorized representative

Date

Time

Person Obtaining Consent

Date

Time

IRB#: 1158-2004
Consent Form Approval Period
FROM: 9/25/07 TO: 9/24/08
AUTHORIZATION: nm

Emory University School of Medicine

Research Subject HIPAA Authorization to Use or Disclose Health Information that Identifies You for a Research Study

Name of Study: **The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants** Study Number: 1158-2004

Name of Principal Investigator: Susie Buchter, MD, Principal Investigator
Barbara J. Stoll, MD, Co-Principal Investigator

Subject Name: _____

The privacy of your health information is important to us. In protecting your health information that identifies you, we will follow all requirements of the Health Insurance Portability and Accountability Act ("HIPAA" for short) that apply. This form will let you know how we will use any health information that you give us for this study that identifies you.

Please read this form carefully and if you agree with it, sign it at the end.

Research Study: This study is being conducted by the National Institute of Child Health and Human Development (NICHD). The purpose of this study is to compare infants who receive delivery room CPAP and who have strict guidelines for having a breathing tube placed with infants who have the tube placed and surfactant given in the delivery room. This study will also compare low range oxygen saturation levels with a high range to determine if a lower range results in decreased threshold eye disease and/or need for eye surgery.

People That Will Use or Disclose Your Health Information that Identifies You and Purpose of Use/Disclosure:

The following people and groups will use and disclose your health information in connection with the study. In this form, all of these people and groups are called the "Information Users":

The principal investigator, his/her research staff and people and organizations that he uses to help him conduct the Research Study will use and disclose your health information to do this work.

The National Institute of Child Health and Human Development is the sponsor of this Research. The sponsor and all other people and organizations that the sponsor retain to help it conduct and oversee the Research Study may use and disclose your health information to make sure that the research is being done correctly and to collect and analyze the results of the research.

There are a number of University persons/units, government agencies and other individuals and organizations that may use and disclose your health information to make sure that the Research Study is being conducted correctly and safely, and to monitor and regulate the research or public health issues. These people and organizations include the following: the Emory University Institutional Review Board; Grady Research Oversight

Committee (ROC); the Emory University Clinical Trials Office; the Emory University Office of Research Compliance; Research Triangle Institute (RTI); research monitors and reviewers; data safety monitoring boards; any government agencies who regulate the research including the Office of Human Subjects Research Protections; National Institute of Child Health and Human Development; and Department of Pediatrics University of Rochester.

By signing this document you agree to allow any of these Information Users to use or disclose your health information that identifies you in order to conduct the Research Study, or to monitor or regulate research. In addition, we will comply with any laws that require us to disclose your health information, such as laws that require us to report child abuse or elder abuse. We also will comply with legal requests, or orders that require us to disclose your health information, such as subpoenas or court orders. Finally, we may share your health information with a public health authority that the law authorizes to collect or receive such information for the purpose of preventing or controlling disease, injury or disability and/or conducting public health surveillance, investigations or interventions.

Description of Health Information that Identifies You that Will be Used or Disclosed

The Information Users may use or disclose the following health information about you: medical record; laboratory results; radiology reports; eye examinations; answers to survey questions; and study results.

Revoking your Authorization:

You do not have to sign this Authorization. In addition, if you sign this Authorization, later, you may change your mind at any time and revoke (take back) this Authorization. If you want to revoke this Authorization you must write to:

Dr. Susie Buchter
P.O. Box 26015, 80 Jesse Hill, Jr. Drive
Atlanta, GA 30303.

If you revoke your Authorization, the Researchers will not collect any more health information that identifies you, but they may use or disclose identifiable information that you already gave them in order to notify any of the other Information Users that you have taken back your authorization; to maintain the integrity or reliability of the Research Study; and to comply with any law that they are required to obey.

Other Items You Should Know:

HIPAA only applies to people or organizations that are health care providers, health care payers or healthcare clearinghouses. HIPAA may not apply to all Information Users. If HIPAA doesn't apply to an Information User, then that User doesn't have to follow HIPAA requirements when it uses or discloses your health information..

You do not have to sign this authorization form, but if you do not, you may not participate in the Research Study or receive research-related treatment. You may still receive non-research related treatment.

We will put a copy of your signed informed consent form for the Research Study and your signed HIPAA Authorization form into any medical record that you may have with

Emory Healthcare facilities. Laboratory and medical procedure results received from Emory Healthcare facilities may also be placed in any medical record that you have with Emory Healthcare facilities.

If the Research Study involves medical treatment, then, in order to maintain the integrity of the research study, you generally will not have access to your personal health information related to this Research Study until the study is complete. When the study is complete, then, at your request, you may generally have access to any of your personal health information related to the research that makes up a part of the medical information and/or other records that your health care providers use to make decisions about you. If access to this information is needed before the end of the Research Study for your treatment, then the information may be provided to your physician.

If your identifying information is removed from your health information, then the information that remains will not be subject to this authorization or covered by HIPAA, and it may be used or disclosed to other persons or organizations, and/or for other purposes.

Expiration Date: This authorization will expire at the end of the research period and all related record-keeping periods.

As a study participant, if you any questions regarding the study, you may call Dr. Susie Buchter the study's Principal Investigator at (404) 778-1450. If you have any questions regarding your rights as a study subject, you may call Dr. Colleen DiIorio, Chair of the Emory University Institutional Review Board at (404) 712-0720.

A copy of this authorization form will be given to you.

Signature of Study Subject OR Subject's Legal Authorized Representative –

Date _____ ---Time _____

Printed Name of Study Subject OR Subject's Legally Authorized Representative

If Representative, Relationship to Study Subject: _____

Signature of Person Obtaining Authorization

_____ Date -----Time

IRB#: 1158-2004
Consent Form Approval Period
FROM: 9/25/07 TO: 9/24/08
AUTHORIZATION: nm

Institutional Review Board
1256 Briarcliff Road, 307-N
Atlanta, GA 30306

Phone (404) 712-0720
Fax (404) 727-1358
<http://www.emory.edu/IRB>

K11

REQUEST FOR MODIFICATION

Modification #: 11

Section I. Investigator Information		RECEIVED	
IRB Number 1158-2004	Title The Surfactant Positive Pressure and Pulse Oximetry Trial on Extremely Low Birth Weight Infants	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p style="font-size: 24px; margin: 0;">OCT 16 2007</p> </div>	
Principal Investigator Susie Buchter, MD	Interoffice Address (Include Department, Bldg, Room, or mail stop number) PO Box 26015 80 Jesse Hill, Jr. Dr. Atlanta, GA 30030		
Contact Name Ellen Hale, RN	Email ehale@emory.edu		
Phone 404-616-4218	Fax 404-524-3953		
Section II. Type of Modification		REVIEW BOARD	
<input type="checkbox"/> Amendment	(Attach a Narrative and Supporting documentation) Amendment # _____ Date of Amendment _____	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="font-size: 18px; margin: 0;">EMORY INSTITUTIONAL REVIEW BOARD</p> </div>	
<input type="checkbox"/> New Procedures	Describe how the change affects the risk/benefit: (Attach a description of the procedures)		
<input type="checkbox"/> Change in Study Personnel	<input type="checkbox"/> add <input type="checkbox"/> delete <input type="checkbox"/> change Include role of personnel, address, phone, fax, email for additions – REMEMBER, all persons on a study must have current CITI certification.		
<input type="checkbox"/> Change of Site	<input type="checkbox"/> add <input type="checkbox"/> delete <input type="checkbox"/> modify (Attach a narrative that lists the resulting sites)		
<input type="checkbox"/> Change in Enrollment	(Attach narrative justifying the change) increase # _____ decrease # _____ resulting total _____ to be enrolled		
<input checked="" type="checkbox"/> Consent Change <input type="checkbox"/> New Consent	Version Date: <u>10/04/2007</u> ^{8/14/2007 RP} Highlighted changes and Additions Date: _____ Targeted Population: _____	Clean copy must be attached	
<input type="checkbox"/> Advertisement	Select All that apply and attach copies of ad or announcement <input type="checkbox"/> Newspaper Ad – Name of Paper _____ <input type="checkbox"/> Radio Announcement – Station _____ <input type="checkbox"/> Internet Posting – Web-site _____ <input type="checkbox"/> Post on Clinical Trials Web site (www.emoryhealthcare.org/clinicaltrials) <input type="checkbox"/> Television Announcement – Station _____ <input type="checkbox"/> Flyer – Distributed where _____ <input type="checkbox"/> Information Brochure - Distributed how _____ <input type="checkbox"/> Other - Describe: _____ Has this ad been approved by the sponsor? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
<input type="checkbox"/> Clinical Investigator's Brochure	Select one: <input type="checkbox"/> Addendum <input type="checkbox"/> Updated <input type="checkbox"/> New Date: _____ Date: _____ Date: _____	Should consent be changed based upon this revision? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Funding	<input type="checkbox"/> Add Agency Name: _____ <input type="checkbox"/> Delete Agency Name: _____		
<input type="checkbox"/> Site	List all sites this amendment applies to:		
<input type="checkbox"/> Other	(e.g., Annual Report, Package Insert, General Correspondence) Describe and attach a narrative.		

Supporting documentation is attached. (e.g., Narrative, highlighted consent, form 1572, etc.) MANDATORY

PI Signature Susie Buchter, MD / Ellen Halera Date 10/13/07

Faculty Advisor (if PI is student) _____ Date _____

NARRATIVE: Please, find attached the Spanish translation of the informed consent and HIPAA authorization that was translated from the English version and was approved by the IRB on October 5, 2007. (The changes to the Spanish version are the same as the ones that were approved for the English version.) We currently do not have an approved Spanish version of these documents and request approval as soon as possible so that we may not miss approaching any families for this very important study.

Thank you for your continued support.

Section III. IRB USE ONLY

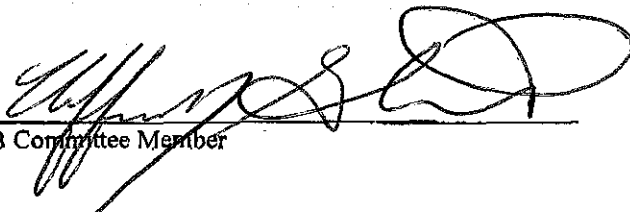
* Protocol expiration is not changed by the approval of this modification*

The Modification has been approved.

The Correspondence has been acknowledged.

Consent(s) and/or HIPAA Authorization dated 4 Oct 07 has been approved.

Subjects currently enrolled must sign the new consent.


IRB Committee Member

Approval Date: 18 Oct 07 Approval Type: 14 AUG 07 RD Full Expedited

Section below for Research Studies Performed at the Atlanta VA

Section IV. RESEARCH & DEVELOPMENT COMMITTEE USE ONLY

Modification has been approved by the R&D Committee

R&D Committee Chair _____ Approval Date _____

Universidad Emory – Escuela de Medicina
Consentimiento para ser Sujeto de Investigación

Título: El Surfactante Presión Positiva de Vía Aérea y Ensayo de Pulso Oximetría en Infantes de Bajo Peso Extremo al Nacer

Investigador Principal: Susie Buchter, M.D., I.P.
Barbara J. Stoll, M.D., Co-I.P.

Nombre del Patrocinador: Instituto Nacional de la Salud de Niño/a y Desarrollo Humano (NICHD) (en Inglés)

Introducción/Propósito:

A usted se le ha preguntado si voluntariamente permitiría que su bebé participe en un estudio de investigación. Hay la posibilidad de que su bebé nazca de 16 a 12 semanas antes (24-28 semanas de edad gestacional). Los bebés que nacen con esta anticipación, generalmente tienen dificultad en respirar. Los pulmones no están suficientemente maduros para trabajar bien y permitir la respiración independientemente. La mayoría de los bebés que nacen con esta anticipación necesitan ayuda para respirar y/o oxígeno adicional. Si necesitaría, esta ayuda empieza el momento del nacimiento en la sala de partos.

Este estudio examinará el uso de CPAP en la sala de partos. CPAP es una presión positiva aplicada con una máscara en la cara para ayudar a mantener los pulmones inflados. Este estudio también examinará los niveles de saturación de oxígeno (niveles de oxígeno en la sangre) en bebés prematuros.

Es sabido que los problemas de respiración de los bebés pueden mejorar al poner un líquido en sus pulmones (surfactante). Este líquido se pone en los pulmones colocando un tubo en la tráquea (entubación). Luego, la respiración es mantenida con una máquina para respirar y/o oxígeno extra.

Sin embargo, cuando los bebés tienen este apoyo por mucho tiempo, esto empieza a hacer daño a sus pulmones. Esto puede ser causa de que el bebé sea dependiente de este apoyo extra por largo tiempo. Estudios realizados en Europa han sugerido que el uso temprano de CPAP puede reducir la necesidad de entubación en bebés muy prematuros.

No hay una forma establecida para el uso de CPAP/Presión positiva de la presión expiratoria para resucitación en la sala de partos para infantes prematuros diminutos. Esta presión es dada usando una máscara puesta sobre la cara del bebé. La presión puede también ser dada usando unas puntas colocadas en la nariz del bebé. La presión se produce usando máquinas de respiración comunes. Hay también dispositivos especiales que son designados para transmitir tal presión.

Estudios han sugerido que el uso temprano de CPAP y tratar de no usar una máquina de respiración puede tener mejores resultados para los bebés. Estos bebés podrían tener también una disminución en la necesidad de la terapia con surfactante. Estos bebés podrían también tener una disminución en la necesidad de oxígeno adicional. El tratamiento corriente comunmente usado es la administración de surfactante. Surfactante es producido por el pulmón normal. Surfactante es carente en los infantes muy prematuros. El uso de surfactante ha sido asociado con la disminución de muertes y problemas respiratorios. Ambos, el uso de CPAP y

de surfactante pueden ser buenos. No ha habido un estudio para comparar el uso de CPAP con el tratamiento con surfactante que empiece luego del nacimiento y continúe en la unidad de cuidados intensivos (NICU) .

Retinopatía de la Prematuridad (ROP) es un problema común en los ojos de los infantes prematuros diminutos. Los vasos sanguíneos que nutren los ojos del infante prematuro no están desarrollados totalmente. Vasos pequeños en la retina (parte del ojo) pueden tener períodos de aumento o crecimiento rápido y agresivo. Con el tiempo la ROP puede mejorar o empeorar. Usualmente la ROP sanará sin ningún problema. Si la ROP es peor que lo usual, hay la posibilidad de que los vasos sanguíneos crezcan fuera de control. Si esto pasa, una cirugía puede ser necesaria para prevenir cicatrices dentro del ojo. Estas cicatrices pueden causar una pérdida de visión severa.

Recibir extra oxígeno por largo tiempo, puede también dañar los ojos del bebé. Otro estudio ha indicado que menos cirugías de los ojos fueron necesarias usando bajos límites de oxígeno.

Hay dos propósitos para este estudio. Primero, nosotros compararemos dos tipos de cuidado diferentes en la sala de partos. Compararemos infantes que reciben CPAP en la sala de partos y los que tienen un tubo para respirar y que se les administra surfactante. Segundo, nosotros compararemos una escala baja (85-89%) nivel de saturación de oxígeno, con una escala alta (91-95%). Queremos saber si un bajo nivel de oxígeno en los bebés puede prevenir este problema grave en los ojos.

Este estudio se lleva a cabo en los Hospitales Grady Memorial Hospital y Crawford W. Long. Otros quince centros médicos en los Estados Unidos son también parte de este estudio. El Instituto Nacional de la Salud del Niño y Desarrollo Humano (NICHD) patrocina esta investigación. Su bebé será elegible para participar en este estudio solamente si nace entre las semanas 24 y 27. Este estudio durará al rededor de dos años y se inscribirán aproximadamente 1.300 infantes a nivel nacional. Más o menos 100 bebés serán estudiados en Emory.

Procedimientos:

Si usted está de acuerdo con este estudio y autoriza la participación de su bebé, debe hacer lo siguiente: Antes del parto su bebé será asignado a uno de los dos tratamientos. Esto será al azar (como lanzar una moneda). En el primer grupo de tratamiento, su bebé podría recibir CPAP en la sala de partos para ayudarlo con la respiración. Si su bebé es parte del segundo grupo de tratamiento, un tubo será puesto en la tráquea del bebé para ayudarlo a respirar. Después de que el tubo es instalado, una dosis de surfactante será administrada a través del tubo. Los dos grupos de tratamientos son criterios comunes del cuidado de los bebés prematuros en la sala de partos.

Al mismo tiempo que su bebé es asignado a un grupo de tratamiento, él o ella será asignado al azar (como lanzar una moneda) a un grupo de monitoreo de oxígeno alto o bajo. Su bebé será tratado usando un nivel de saturación del oxígeno ya sea bajo (85-89%) o alto (91-95%). Nosotros empezaremos el monitoreo de saturación del oxígeno a las 2 horas de edad. Los dos niveles de oxígeno usados en este estudio son en los mismos niveles que usamos en nuestras unidades de cuidados intensivos (NICU) actualmente. En este estudio nosotros trataremos de mantener a su bebé en uno de estos dos niveles. Cada uno de estos 4 grupos posibles de tratamiento es considerado cuidado establecido en las unidades de cuidado intensivo (NICU) en Emory. El estudio se llevará a cabo durante el tiempo completo que su bebé esté con oxígeno, mientras él o ella está en la unidad de cuidados intensivos (NICU).

Un exámen de los ojos final será realizado a los 3 meses de edad corregida (3 meses después de la fecha asignada para el nacimiento del bebé). Si su bebé ha sido dado de alta del hospital antes de esta fecha, una cita para el control de los ojos como paciente externo será programada. Esta cita para el control de los ojos es parte del cuidado regular. Como parte del estudio nosotros recogeremos información del exámen de los ojos. Podremos necesitar una copia del examen de los ojos de su bebé, si se lo hace despues de haberle dado el alta.

Como parte de este estudio nosotros controlaremos el crecimiento de su bebé. La enfermera encargada de la investigación medirá el largo del bebé y el diametro de su cabeza. Nosotros obtendremos la información del peso del bebé de los registro médicos. Obtendremos información acerca de la alimentación que el bebé recibe, de su registro médico. Esta información será recogida durante ocho diferentes veces empezando el día de nacimiento del bebé y finalizando el día que el bebé es dado de alta para ir a casa con usted. Queremos saber si la tasa de crecimiento de los bebés en este estudio es diferente o similar.

Queremos saber si su bebé tiene problemas respiratorios después de lo que fue dado de alta para ir a casa. También queremos saber si su bebé necesita cuidado extra para ayudarle a respirar. Como parte de este estudio nosotros seguiremos muy de cerca la evolución de su bebé obteniendo información de usted el momento que sea dado de alta y luego cuando él/ella esté en casa. Nosotros le llamaremos a usted por teléfono para recibir información, cuando el bebé tenga 6, 12, y 18 meses de edad. Cada llamada telefónica durará alrededor de 15 minutos de su tiempo. Un miembro del grupo de investigadores le hará preguntas acerca de la salud de las diferentes personas con las que su bebé tiene contacto . Usted será preguntado acerca de la respiración de su bebé. Se le preguntará acerca de las visitas que su bebé podría hacer al doctor, a la clínica, al departamento de emergencia o al hospital. Nosotros le daremos un folleto para ayudarle a coleccionar la información que nosotros necesitaremos acerca de su bebé.

Su bebé sera controlado por este estudio hasta que él o ella sea dado de alta del hospital. Como parte del cuidado establecido la Clínica Emory del Progreso Desarrollado (DCP en Inglés) seguirá la evolución de su bebé. A los 18 meses de edad, él o ella será examinado en la Clínica DPC como parte de un programa de seguimiento. En la visita de los 18 meses a usted se le solicitará que permita a su bebé ser parte de estudio de seguimiento. Se le solicitará a usted que firme un consentimiento separado. Esta información será compartida con el Estudio de seguimiento de todos los bebes prematuros diminutos NICHD. En ese momento nosotros controlaremos el crecimiento de su bebé. Nosotros también realizaremos exámenes físico, neurológico y de desarrollo.

Riesgos:

Los tratamientos de los cuales se han hablado en este estudio son de cuidado estandar. Sin embargo, entubación, administración de surfactante y CPAP tienen su riesgo. Riesgos por la entubación pueden incluir: inadecuada instalación del tubo y daño en la traquea por el tubo. Riesgos por el sufactante pueden ser: desigual distribución del liquido y sangrado en los pulmones. Otro riesgo podria ser efecto retardado del uso del surfactante mientras CPAP es usado. Riesgos del CPAP podrian ser daño de la nariz y demasiada inflación de los pulmones. No hay aumento previsible en riesgo sobre el cuidado estandar de su bebe. Algunos riesgos no conocidos podrían ser aprendidos durante el estudio. Si esto pasa, el grupo de investigadores le harán saber

Beneficios:

Si cualquier tratamiento de grupo es encontrado como un medio para tratar de mejor manera a los bebés, su bebé podría ser beneficiado por el estudio. Pero tomar parte en este estudio puede no beneficiar a su bebé. Los doctors pueden aprender nuevas cosas que pueden ayudar a los bebés en el futuro.

Alternativas:

Usted puede escoger que su bebé no sea parte de este estudio y su bebé continuará recibiendo un cuidado establecido de salud. El cuidado básico establecido en Grady y Crawford Long es evaluar la respiración del bebé al nacer. La mayoría de los bebés muy prematuros son entubados y reciben surfactane. Pocos recibirán CPAP en la sala de partos o más tarde en la unidad de cuidados intensivos. Las escalas de oxígeno usadas en este estudio, son las mismas escalas que se usan en nuestra Unidad de Cuidados Intensivos.

Confidencialidad:

Otras personas además de los que están realizando el estudio, pueden revisar tanto los registros médicos como los registros del estudio. Agencias que hacen las reglas y políticas acerca de cómo la investigación está hecha tienen derecho de revisar los registros. También las agencias que pagan por el estudio. Todos aquellos con derecho de revisar los registros de estudio de su bebé son: Administración de Alimentos y Medicinas, la Oficina para la Protección de Investigación Humana, el Instituto Nacional de la Salud del Niño y Desarrollo Humano, la Junta de Revisión Institucional de la Universidad Emory, el Comité Grady que controla las Equivocaciones en la Investigación. Los registros pueden ser abiertos por la orden de un juzgado. Nosotros guardaremos los registros de su bebé en privado en todo lo permitido por la ley. Nosotros haremos esto aún si la revisión es por personas u organizaciones externas. Nosotros usaremos un número de estudio en lugar del nombre de su bebé en los registros del estudio donde nosotros podamos. El nombre de su bebé y otros datos que puedan señalar que se trata de él o ella no aparecerán cuando nosotros presentemos este estudio o publiquemos los resultados.

Si usted es o ha sido un paciente de los hospitales de Emory, usted debe tener registros médicos en los hospitales de Emory. Si usted no es y nunca ha sido un paciente de los hospitales de Emory, no se creará ningún registro médico solo por su participación en este estudio de investigación.

Los resultados de los exámenes de este estudio y procedimientos que se han llevado a cabo, analizado y/o leído en o para los hospitales de Emory, y que pueden ser usados con propósitos del cuidado de la salud serán puestos en los registros médicos que usted tienen con los hospitales de Emory. Además una copia del formulario de consentimiento y el formulario de autorización HIPPA que usted firmó, serán puestos con todos sus registros médicos que usted tenga en los hospitales de Emory. Las personas que tienen acceso a sus registros médicos, tendrán acceso a todos los resultados y documentos puestos en los registros, y los resultados y documentos pueden ser utilizados por los hospitales de Emory como ayuda para proveerle a usted de cuidado médico. Cualquier resultado y documento que son guardados como parte de su registro médico no son cubiertos por ciertas leyes federales y estatales y regulaciones que pueden impedir la revelación de los datos de investigación. Sin embargo, la confidencialidad de los resultados y otros documentos en el registro médico será dictada por leyes tales como HIPPA que involucra registros médicos.

La Universidad Emory no tiene ningún control sobre los resultados de exámenes y procedimientos llevados a cabo y/o analizados o leídos en instalaciones que no son de los Hospitales de Emory. Estos resultados NO son rutinariamente incluidos en los registros médicos de los hospitales de Emory, y no estarán disponibles necesariamente para los proveedores de salud de Emory. La Universidad Emory tampoco tiene control sobre otro registro médico que usted pueda tener con otros proveedores del cuidado de la salud y no enviará ningún resultado de examene o procedimientos de este estudio a esos proveedores. Es su decisión dejar saber a estos proveedores de salud de su participación es este ensayo clínico.

Algunos exámenes y procedimientos que pueden ser llevados a cabo durante este estudio por los hospitales de Emory u otros hospitales y personas NO PODRAN SER EXAMINADOS NI LEIDOS PARA NINGUN PROPOSITO DE TRATAMIENTO O DIAGNOSTICO DEL CUIDADO DE SALUD. ESTOS EXAMENES Y PROCEDIMIENTOS SOLO SERAN EXAMINADOS CON PROPOSITOS DE LA INVESTIGACION Y LOS RESULTADOS NO SERAN REVISADOS PARA HACER DECISIONES ACERCA DE SU SALUD PERSONAL O TRATAMIENTO. Tipos específicos de exámenes o procedimientos, si hay alguno, que es parte de esta categoría son listados debajo:
NINGUNO

Costos y Compensación:

No habrá ningún costo para usted o su bebé por participar en este estudio. No se le pagará a usted por estar en este estudio. Si su bebé es lesionado como resultado de esta investigación, habrá cuidado médico disponible. Sin embargo la Universidad Emory (incluyendo el Hospital Crawford Long) y el Sistema de Salud de Grady no han reservado fondos para pagarle por este cuidado o compensarle si ocurre este percance. Si usted cree que su bebé ha sido lesionado por esta investigación, usted debería contactar a la Dra. Susie Buchter, la investigadora a cargo del estudio, al número de teléfono: 404-778-1450.

Persona a quien contactar:

Llame a la Dra. Susie Buchter al número de teléfono (404) 778-1450 si tiene preguntas acerca de este estudio o si siente que su bebé ha sido perjudicado por estar en éste estudio. Si usted tiene alguna pregunta o preocupación acerca de sus derechos como participante en el estudio, llame a Colleen Dilorio, Ph.D., Presidenta de la Junta Institucional de Revisión de la Universidad Emory al número de teléfono (404) 712-0720. Si su bebé es un paciente del Hospital Grady, usted puede llamar al Dr. Curtis Lewis, Vice Presidente Superior de los Asuntos Médicos, al número de teléfono (404) 616-4261.

Nuevos Encuentros:

Nosotros nos podemos enterar de nuevas cosas durante el estudio que usted puede necesitar saber. Nosotros nos podemos enterar también de cosas que podrían hacer que usted quiera dejar de participar en el estudio. Si eso pasa, le notificaremos cualquier información nueva.

Participación Voluntaria y Abstinencia:

La participación en este estudio es voluntaria. Usted tienen el derecho de rechazar la participación de su bebe en este estudio. Si usted decide dejar que su bebé participe en el estudio y cambia de manera de pensar, usted tiene el derecho de retirarse en cualquier momento. Esta decisión no afectará de ninguna manera el cuidado médico presente y futuro de su bebé. Esta decisión no afectará ningún otro beneficio que se le haya dado.

A pesar que su bebé será tratado de acuerdo a un plan específico (protocolo), circunstancias individuales pueden surgir. En tales casos, la salud de su bebé siempre será considerada más importante que seguir el estudio estrictamente. Cambios serán discutidos antes de ser realizados cuando sea posible.

Nosotros le daremos una copia de este formulario de consentimiento para que lo guarde.

Si usted está dispuesto a ofrecer la participación de su bebé en esta investigación, por favor firme debajo.

Nombre del Sujeto

Representante Legal del Sujeto

Fecha

Hora

Persona que Obtiene el Consentimiento

Fecha

Hora

IRB#: 1158-2004

Consent Form Approval Period

FROM: 10-18-07 TO: 9-24-08

AUTHORIZATION: RD

Universidad Emory – Escuela de Medicina

Sujeto de Investigación, Autorización HIPAA para el Uso o Revelación de Información Médica que lo identifique a usted para un Estudio de Investigación

Nombre del Estudio: **El Surfactante Presión Positiva de Vía Aérea y Ensayo de Pulso Oximetry en Infantes de Bajo Peso Extremo al Nacer**

Número del Estudio: 1158-2004

Nombre del Investigador Principal: Susie Buchter, MD, Investigador Principal

Barbara J. Stoll, MD, Co-Investigador Principal

Nombre del Sujeto: _____

La privacidad de su información médica es importante para nosotros. Para proteger su información médica que lo identifica a usted, nosotros seguiremos todos los requerimientos que aplica el Decreto de Responsabilidad y Portabilidad del Seguro Médico (“HIPAA” siglas en Inglés). Este formulario le hará saber a usted como usaremos cualquier información médica que le identifique a usted y que usted nos proporcione para este estudio.

Por favor lea este formulario con cuidado y si está de acuerdo con lo que dice, firme al final.

Estudio de Investigación: Este estudio lo lleva a cabo el Instituto Nacional de la Salud de Niño y el Desarrollo Humano (NICHD en Inglés). El propósito de este estudio es comparar infantes que reciben CPAP en la sala de partos y quienes tienen pautas estrictas por tener instalado un tubo para poder respirar, con infantes que tienen instalado el tubo y se les administra surfactante en la sala de partos. Este estudio también comparará el bajo alcance de los niveles de saturación del oxígeno con un alto alcance para determinar si el resultado del alcance bajo resulta en la disminución de los límites de la enfermedad de los ojos y/o la necesidad de una cirugía de los ojos.

Personas que Usarán o Revelarán su Información Médica y Propósitos de éste Uso o Revelación:

La siguientes personas y grupos usarán y revelarán su información médica en relación con este estudio. En este formulario, todas estas personas y grupos son llamados los “Usuarios de Información”:

El Investigador Principal, su personal de investigadores, y personas y organizaciones que él o ella usa como ayuda para llevar a cabo este estudio de investigación usarán y revelarán su información médica para hacer este trabajo. .

El Instituto Nacional de la Salud del Niño y Desarrollo Humano es el patrocinador de esta investigación. El Patrocinador, y todas las otras persona y organizaciones que el patrocinador contrata como ayuda para dirigir y supervisar el Estudio de Investigación pueden usar o revelar su información médica para estar seguros de que la investigación ha sido hecha correctamente y para recoger y analizar los resultados de la investigación.

Hay un número de personas y unidades de la Universidad, agencias del gobierno, y otros individuos y organizaciones que pueden usar y revelar su información médica para estar seguros de que el Estudio de Investigación se esta llevando a cabo en una forma correcta y segura, y para controlar y regular la investigación o asuntos de salud pública. Entre estas personas y organizaciones se incluyen las siguientes: La Junta de Revisión Institucional de la Universida Emory; El Comité Grady que controla las Equivocaciones en la Investigación (ROC en Inglés); La Oficina de Ensayos Clínicos de la Universida Emory; la Oficina de Adaptabilidad de la Investigación de la Universidad Emory; El Instituto de Investigación Triangular (RTI en Inglés); controladores y críticos de la investigación; juntas que controlan la segurida de los datos; cualquier agencia de gobierno que regule la investigación, incluyendo la Ofinica de Protección de Investigación con Humanos; el Instituo Nacional de la Salud del Niño y Desarrollo Humano; y el Departamento de Pediatría de la Universida de Rochester.

Al firmar este document usted está de acuerdo en permitir a cualquiera de estos Usuarios de Información el uso o revelación de su información médica que lo identifica, para llevar a cabo este Estudio de Investigación, o para controlar o regular la investigación. Además nosotros acataremos toda ley que requiere que nosotros revelemos su información médica, tales leyes como las que requieren que nosotros reportemos abuso de menores, o de ancianos. También nosotros acataremos solicitudes legales u ordenes que requieren que nosotros revelemos su información médica tales como citaciones u ordenes de un juzgado. Finalmente nosotros podemos compartir su información médica con una autoridad de salud pública que la ley autorise para recoger o recibir tal información con el propósito de controlar o prevenir enfermedades, lesiones, o incapacidad y/o conducir vigilancias, investigaciones o intervenciones de salud pública

Descripción de la Información Médica que lo identifica y que será usada o revelada.

La Información: Los usuarios pueden usar o revelar la siguiente información médica acerca de usted: registro médico, resultados de exámenes de laboratorio, reportes radiológicos, exámenes de los ojos, respuestas a las preguntas de la encuesta, y resultados del estudio.

Revocando su Autorización:

Usted no tiene que firmar esta autorización. Además, si usted firma esta autorización, luego usted puede cambiar su manera de pensar en cualquier momento y revocar (retractarse) de esta Autorización. Si usted quiere revocar esta autorización usted debe escribir a :

Dra. Susie Buchter
P.O. Box 26015, 80 Jesse Hill, Jr. Drive
Atlanta, GA 30303.

Si usted revoca su Autorización, los investigadores no recogerán más información médica suya, pero ellos puede usar o reveler información identificable que usted ya les haya dado a ellos para notificar a cualquiera de los otros usuarios que usted ha revocado su autorizacion; para mantener la integridad y confiabilidad del Estudio de Investigación y para cumplir con cualquier ley que es requisito obedecer.

Otros Puntos que Usted Debería Saber:

HIPAA aplica solo a personas y organizaciones que son proveedores del servicio médico, los que pagan por los servicios médicos o para intercambio de información de los servicios médicos. HIPAA puede no aplicar a todos los Usuarios de Información. Si HIPAA no aplica a un Usuario de Información, entonces ese usuario no tiene que seguir los requerimientos de HIPAA cuando usa o revela su información médica.

Usted no tiene que firmar este formulario de autorización, pero si usted no firma, usted puede no participar en el Estudio de Investigación o recibir tratamiento relacionado a la investigación. Pero usted puede todavía recibir tratamiento no- relacionado a la investigación.

Nosotros pondremos una copia de su informe de consentimiento firmado para el Estudio de Investigación y el formulario de su Autorización HIPPA firmada en todo registro médico que usted pueda tener con los Hospitales de Emory. Los resultados de procedimientos médicos y de laboratorio recibidos de los hospitales de Emory podrían ser puestos en los registros médicos que usted tiene con los Hospitales de Emory.

Si el estudio de investigación incluye tratamiento médico, entonces para mantener la integridad del estudio de Investigación, usted generalmente no tendrá acceso a su información médica personal relacionada con el estudio de investigación hasta que se complete el estudio. Cuando se complete el estudio, entonces, si usted solicita, usted puede tener acceso a alguna de su información médica personal relacionada con la investigación que completa una parte de la información médica y /o otros registros que su proveedor de cuidado de su salud usa para hacer decisiones acerca de usted. Si el acceso a esta información es necesaria antes de finalizar el Estudio de Investigación para su tratamiento, entonces esta información será facilitada a su médico.

Si la información que lo identifica es quitada de su información médica, entonces la información que queda no será sujeto de esta autorización, ni será cubierta por HIPPA, y esta puede ser usada o revelada a otras personas u organizaciones y/o para otros propósitos.

Fecha de Expiración: Esta autorización expirará al finalizar el período de investigación y todos los períodos relacionados con el mantenimiento de registros.

Como participante en el estudio, si usted tiene alguna pregunta relacionada con el estudio, usted puede llama a la Dra. Susie Buchter, Investigadora Principal del Estudio al número de teléfono (404) 778-1450. Si usted tiene alguna pregunta referente a sus derechos como sujeto del estudio, usted puede llamar a la Dra. Colleen DiIorio, Presidenta de la Junta de Revisión Institucional de la Universidad Emory, al número de teléfono (404) 712-0720.

Una copia de este formulario de autorización le será dada a usted.

Firma del Sujeto de Estudio O Representante Legal Autorizado del Sujeto

IRB#: 1158-2004

Fecha _____ Hora _____

Consent Form Approval Period

FROM: 10-18-07 TO: 9-24-08

AUTHORIZATION: RD

Nombre Impreso del Sujeto de Estudio O Representante Legal Autorizado del Sujeto

Si es el Representante, Cuál es la Relación con el Sujeto del Estudio:

Firma de la Persona que Obtiene la Autorización

Fecha _____ Hora _____

IRB#: 1158-2004

Consent Form Approval Period

FROM: 10-18-07 TO: 9-24-08

AUTHORIZATION: RD

**THE SURFACTANT POSITIVE AIRWAY PRESSURES AND PULSE OXIMETRY TRIAL IN
EXTREMELY LOW BIRTH WEIGHT INFANTS**

The SUPPORT Trial of the NICHD Neonatal Research Network

INVITATION TO TAKE PART

You are invited to enter your infant into a research study conducted at the University of Texas Health Science Center and Memorial Hermann Children's Hospital (MHCH). You are being asked to allow your infant to be in the study because there is a possibility he/she will be born between 16 and 12 weeks early (24-27 weeks gestational age).

Dr. Kathleen Kennedy and Dr. Jon Tyson (doctors who specialize in the care of sick or premature infants) and the National Institutes for Child Health and Human Development (NICHD) Neonatal Research Network are conducting this research study. Your decision to allow your infant to take part is voluntary and may be withdrawn at any time. Refusal to take part in this study or withdrawal at a later date will not affect the care given to your infant by the doctors or any other health professionals. You may refuse to answer any questions asked or written on any forms. This study has been approved by the Committee for the Protection of Human Subjects (CPHS) for the University of Texas Medical School at Houston as HSC-MS-04-415. The CPHS is an independent committee to help make sure that research studies are safe and properly performed.

DESCRIPTION OF RESEARCH

Purpose:

In the delivery room here at MHCH, most infants that are less than 28 weeks gestation routinely have a breathing tube placed and receive a dose of surfactant (a medicine which helps infants with immature lungs breath easier by helping keep their lungs from collapsing). Upon admission into the Neonatal Intensive Care Unit, they are placed on a breathing machine or ventilator which delivers oxygen and mechanical breaths. Additional doses of surfactant may also be given to these infants during the first two days of life. As many as half of the infants that receive this treatment go on to have a significant problem called Bronchopulmonary Dysplasia (BPD). BPD is caused by prematurity and long term exposure to the ventilator. A number of studies have suggested that the use of early CPAP (pressure applied with a face mask/prongs to help keep the lungs inflated) may result in improved outcomes, including a decreased need for mechanical ventilation, a decreased need for surfactant therapy, and a decrease in the amount of extra oxygen the infant requires.

Although additional oxygen is very necessary to the survival of premature babies with very under-developed lungs, studies have shown that too much oxygen can also be harmful. One of the problems that may occur in these tiny premature infants is retinopathy of prematurity or ROP. This eye disease may result in impairment of vision or even blindness and is associated with excessive oxygen therapy. We do not know at what blood oxygen levels ROP occurs.

Growth is another concern for the doctors who care for your infant. Infants that do not have enough oxygen grow poorly however infants that have too much oxygen are predisposed to a breathing problem called bronchopulmonary dysplasia (BPD) which has been linked to poor growth.

It is also thought that high amounts of oxygen may actually cause damage to the lungs that could result in impaired growth of the airways. This could predispose infants to having increased respiratory problems during and after hospitalization.

Your infant's doctors have to balance the benefit and risk of using oxygen. We follow the oxygen level in the blood with a machine called an Oxygenation Saturation Monitor. The higher the monitor is reading the more oxygen is in the infant's blood. The highest a monitor can read is 100%. We keep our saturation monitors between 85% and 95% for our premature infants. Studies have suggested that the use of lower saturation ranges may result in a lower risk of severe ROP and BPD. However, oxygen saturations which are too low may result in poor neurological outcomes such as learning disabilities or uncoordinated muscle movements. Currently there is no agreement on the accepted saturation monitor ranges for managing premature infants from birth.

The purposes of this trial are the following:

- 1) To compare infants who receive delivery room CPAP and who have strict guidelines for having a breathing tube placed with infants who have the tube placed and surfactant given in the delivery room to determine if the use of CPAP from birth results in a decrease in bronchopulmonary dysplasia. Bronchopulmonary dysplasia or BPD happens

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. when the lungs grows abnormally because of exposure to high doses of oxygen and mechanical ventilation (breathing machine).

2) To compare low range (85-89%) oxygen saturation levels with high range (91-95%) levels to determine if a lower range results in a decrease in ROP.

3) To compare growth from birth to 18 months adjusted age in the high versus low saturation groups.

4) To compare breathing outcomes at discharge to 18 months adjusted age in the high versus low saturation groups.

DESCRIPTION OF THE STUDY

Procedure:

If you agree for your infant to take part in this study, the following will happen to him/her: If you consent to take part in the study and your infant delivers between 24 and 27 6/7 weeks gestation he/she will be randomized (chosen by chance like the flip of a coin) at the delivery to one of two treatment strategies. At the same time your infant will also be randomized to a "high" or "low" oxygen saturation monitor group. Please note that if you deliver twins, triplets etc they will all be randomized to the same treatment group and oxygen saturation group.

The treatments are as follows:

1) CPAP in the delivery room immediately after birth and continuing in the NICU, or

2) The placement of a tube in his/her trachea in the delivery room followed by a dose of surfactant and ventilation (breathing for the infant using a machine).

We will know if your infant was randomized to receive the breathing tube or CPAP.

The oxygen saturation monitor your infant has been randomized to will be started after he/she gets to the Neonatal ICU. He/she will be placed on either a "High" reading or "Low" reading saturation monitor. Within the range of oxygen which we normally use, your infant will either be on the high end of normal or the low end of normal. We will not know what saturation monitor your infant gets. The saturation monitors used in this trial are FDA approved saturation monitors which have been modified for research purposes. This modification makes the monitors show a value which is either slightly higher or slightly lower than the true oxygen level when values are between 85 and 95%. Outside those ranges, the saturation monitor works the same as other oxygen saturation monitors.

Usually all infants in the nursery are weighed daily. Each week as part of routine care your infant's measurements (height and head circumference) are done. The research staff will be doing these measurements at age 1, 2, 3, and 4 weeks, at 32 weeks and 36 weeks adjusted age and at discharge.

To assess your infant's breathing outcomes from discharge until 18 months adjusted age 4 interviews/questionnaires will be conducted by phone or in person in the follow-up clinic.

If you decide to sign this consent and let your infant be in this study, we will collect information from your infant's medical record about his/her medical care and how he/she does throughout his/her hospital stay.

OPTIONAL STUDY COMPARING MRI AND HEAD ULTRASOUND

Premature infants, like yours, have a higher risk for brain injury. Although the way we will be providing breathing support (breathing machine or CPAP) and oxygen are routinely used in our nursery, the doctors in the Neonatal ICU (and those doing the study) do not know if either method could cause brain injury. For this reason a sub-study has been added. It is also not known if the brain ultrasound or the MRI is better at predicting your infant's outcome. Both have been used as part of routine care in neonatal units to help counsel parents and better predict the outcome of high risk infants like yours. You may decide whether you agree to allow your infant to take part in this sub-study by checking one of the boxes below.

Part of your infant's routine care during the first few weeks after birth will include one or more head ultrasounds. Head ultrasounds are done at your infant's bedside and take less than 15 minutes to complete. Also, within about four weeks of your infant's planned due-date, a MRI of the brain is done as part of his/her routine care. The ultrasounds and MRI studies show images (pictures) of the brain which are used to look for brain injury. Infant's who take part in this study will have an extra head ultrasound at the time the MRI is done so the doctors doing the study can compare the findings and see if one way of imaging gives better information than the other. This is another question this sub-study will be able to answer. There are no additional risks, time commitments, or costs to you if you allow your infant to take part in this sub-study. Because your infant would receive both a brain ultrasound and a MRI, you can be sure that he/she is receiving the best diagnostic tests available. His/her doctors

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Place an X in the box to indicate if you agree or do not agree to allow your infant to take part in this sub-study. If you decide not to take part in the sub-study you can still take part in the main study.

Yes, I agree to allow my infant to take part in the sub-study

No, I do not agree to allow my infant to take part in the sub-study

TIME COMMITMENT

This study begins in the delivery room when your infant is born and if he/she is between 24 0/7 to 27 6/7 weeks gestation. The CPAP/breathing tube part of the study will continue for 14 days. Your infant will remain on the saturation monitor until he/she reaches 36 weeks adjusted age. (e.g. 24 wks gestation plus 12 weeks of age = 36 weeks adjusted age.)

Your infant will be followed in our Infant Follow-up clinic at 6 and 12 months as standard of care for small infant. These visits will take approximately two hours. At 18-22 months corrected age your infant will receive a complete exam. A neonatologist or pediatrician will do a complete physical exam. Also a developmental specialist will do an assessment of his/her muscle movements and learning skills. On this day the evaluation will take approximately 3 hours. Again, this follow-up visit is considered standard of care for small infants.

The breathing outcome interviews will be conducted prior to discharge, and at 6, 12 and 18 months adjusted age. These interviews will be conducted by phone or in the clinic. The interview/questionnaire will be asking about doctor visits, hospitalizations or emergency room visits, medications, diet, and a breathing problems assessment. These interviews should take 15-20 minutes each.

BENEFITS

There may or may not be a benefit to your infant for taking part in this study. Possible benefits to your infant include; a possible decrease in bronchopulmonary dysplasia (need for extra oxygen near discharge) and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because we do not know in advance the actual strategies chosen for your infant, or which of the treatment strategies is the most effective, it is also possible that your infant will receive no direct benefit. The knowledge learned from this study may help us treat infants in the future. However, each of the 4 possible combinations of treatments is currently used by some NICUs as their primary approach to treating premature infants.

RISKS AND/OR DISCOMFORTS

Taking part in a study may involve some added risks or discomforts. Because all of the treatments proposed in this study are standard of care, there is no expected increase in risk for your infant.

Infants randomized to the CPAP group may, at some point in their care, require a breathing tube and ventilation. If the attending doctor deems this necessary, being part of this study will not affect this decision. Some unknown risks may be learned during the study. If these occur, you will be informed by the study personnel.

ALTERNATIVES

This study is voluntary. If you choose not to have your infant take part in the project, he/she will continue to receive routine care.

STUDY WITHDRAWAL

You may withdraw your infant from the study at any time by contacting one of the Research Team at 713-500-5734.

COSTS, REIMBURSEMENT AND COMPENSATION

There will be no additional costs to you or your infant for taking part in this research study

IN CASE OF INJURY

If your infant suffers an injury as a result of taking part in this research study, please understand that nothing has been arranged to provide free treatment of the injury or any other type of payment. However, all needed facilities, emergency treatment, and professional services will be available to your infant, just as they are to the community in

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. general. You should report any injury to Dr. Kathleen Kennedy at 713-500-5734 and to the Committee for the Protection of Human Subjects at 713-500-7943.

CONFIDENTIALITY

You, or your infant, will not be personally identified in any reports or publications that may result from this study. Any personal information about your infant that is gathered during this study will remain confidential to every extent or the law. A special number will be used to identify your infant in the study and only the investigator(s) at UT Medical School and Hermann Children's Hospital will know your infant's name. Please understand that representatives of the Food and Drug Administration (FDA), the Committee for the Protection of Human Subjects (CPHS), and the sponsor of this research may review your infant's research and/or medical records for the purposes of verifying research data. The FDA representative can see personal identifiers in your infant's record; however his/her identity will be shielded from the view of the sponsor's representative. Your infant's name will not be seen by the sponsor unless the CPHS gives its permission for you to be contacted. You or your infant will not be personally identified in any reports or publications that may result from this study. There is a separate authorization form that you will be asked to sign which details the use and disclosure of your infant's protected health information.

QUESTIONS

You are making a decision whether or not to voluntarily take part in this study. You should not sign until you understand all the information presented in the previous pages and until all your questions about the research have been answered to your satisfaction. If you have any additional questions regarding this study Dr. Kathleen Kennedy or one of the research nurses will be available to answer them for you at any time. You may contact them at 713-500-5734 or 713-704-2900.

SIGNATURES

Sign below only if you understand the information given to you about the research and choose to take part. Make sure that any questions have been answered and that you understand the study. If you have any questions or concerns about your rights as a research subject, call the Committee for the Protection of Human Subjects at 713-500-7943. If you decide for your infant to take part in this research study, a copy of this document will be given to you.

_____ Parent/guardian signature	_____ Date	_____ Time
_____ Printed name of Parent/guardian		
_____ Person obtaining consent	_____ Date	_____ Time
_____ Printed name of person obtaining consent		
_____ Witness	_____ Date	_____ Time

This study (HSC-MS-04-415) has been reviewed by the Committee for the Protection of Human Subjects (CPHS) for the University of Texas Houston Health Science Center. For any inquiries regarding research subject's rights, or to report any research related injury, call the CPHS at (713) 500-7943.



IRB NUMBER: HSC-MS-04-415
IRB APPROVAL DATE: 7/15/2009
IRB EXPIRATION DATE: 6/30/2010



INFORMED CONSENT FORM TO TAKE PART IN RESEARCH

Extended Follow-up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort
HSC-MS-12-0405

INVITATION TO TAKE PART

Your child is invited to take part in a research project, called the SUPPORT Neuroimaging School Age Follow-up Study, conducted by Dr. Patrick Jones, of the University of Texas Health Science Center at Houston. For this research project, he will be called the Principal Investigator or PI. This follow-up study requires a clinic visit that will occur when your child is between the ages of 6 years, 4 months and 7 years, 2 months (school age).

As you may recall, before your child was born he/she was enrolled into the SUPPORT Neuroimaging Study (HSC-MS-04-415). All children enrolled into the SUPPORT Neuroimaging Study at birth are invited to participate in this school age follow-up study.

Your decision to take part is voluntary. You may refuse to have your child take part or choose to stop your child from taking part, at any time. A decision not to take part or to stop being a part of the research project will not change the services available to your child from your physician, hospital, or service agency.

You and your child may refuse to answer any questions asked or written on any forms. This research project has been reviewed by the Committee for the Protection of Human Subjects (CPHS) of the University of Texas Health Science Center at Houston as HSC-MS-12-0405.

PURPOSE

In the original SUPPORT Neuroimaging Study, an extra head ultrasound was done at the time that your child's near-term brain MRI was done for routine premie care. The purpose was to compare the results of the near-term ultrasound and near-term MRI to see if one way of taking pictures of the brain gives more useful information than the other. To evaluate this, your child was seen in the High Risk Infant Clinic at 18 to 22 months corrected age for measurement of growth, physical and neurological (brain) testing, and developmental testing.

The purpose of the SUPPORT Neuroimaging School Age follow-up study is to examine this same group of children between the ages of 6 years, 4 months and 7 years, 2 months, and determine whether near-term MRI is better than ultrasound in predicting physical and developmental outcome when children are school age.

Your child has been invited to join this research study because of the SUPPORT Neuroimaging Study that he/she previously took part in. All children enrolled into the SUPPORT Neuroimaging Study at birth are invited to participate in this school age follow-up study.

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. This is a national study with 15 locations across the country. Nationwide, about 500 children and their parents are expected to take part. Fifty children are eligible to take part at UT Houston. The National Institute of Child Health and Human Development is paying for this study to be completed.

PROCEDURES

If you agree for your child to be in this study he/she will undergo the following procedures:

1. Vital signs: He/she will be weighed, height will be measured and blood pressure check will be done.
2. Wechsler Intelligence Scale for Children (WISC-IV): test that looks at problem solving with words, blocks and pictures; this is an IQ test.
3. Movement ABC-II: This test looks at muscle strength, coordination, balance, ability to walk, etc.
4. Neurological exam: This exam looks at the child's movements and how their brain is working.
5. Developmental NEuroPSYchological Assessment (NEPSY-II): This test looks at the child's memory, problem solving skills, and ability to pay attention
6. Woodcock Johnson exam: This exam tests number skills and word identification.
7. ****No further neuroimaging (MRI or head ultrasound) is done****

While the child is being tested on the above exams, you will answer the following questionnaires:

1. Medical History
2. Socioeconomic status at school age – This asks questions about the family and child environment.
3. Questionnaire for Identifying Children with Chronic Conditons (QUICCC)
4. Movement ABC Checklist – This is used to identify children likely to have movement difficulty.
5. Pediatric Quality of Life Inventory (PEDsQL) – This looks at health-related quality of life in children.
6. Strengths and Difficulties Questionnaire – This asks questions about the child's behaviors and emotions.
7. Parent Conners 3rd Edition Short Form – This looks at attention-deficit/hyperactivity disorder (ADHD) and related learning, behavior, and emotional problems in children.
8. Social Communication Questionnaire – This screens for autism spectrum disorder (ASD).
9. Behavior Rating Inventory of Executive Function (BRIEF) – Parent Version: This looks at the child's cognitive processing (memory, attention span, problem solving, planning, etc.).
10. Pediatric Evaluation of Disability Inventory (PEDI): This will only need to be done if your child is unable to complete the WISC-IV.

The 6 year, 4 month to 7 year, 2 month clinic visit is the end point for this study; however, we would like your permission to continue to keep in contact with you and your child beyond this time in case the study analysis shows a need/opportunity for additional follow-up.

In order to contact you after this school age visit, we will ask for your contact information including mailing address, home and cell phone numbers, email address, and your permission to use public internet social and search pages.

Please initial below if you agree or do not agree for us to continue to keep in contact after the school age visit:

_____ I agree to allow continued contact after the study endpoint

_____ I do not agree to allow continued contact after the study endpoint

INVITATION TO TAKE PART IN A SECONDARY STUDY

The study investigators have designed a secondary study to the SUPPORT Neuroimaging School Age Follow-up Study. The study will look at the following:

- What are the rates of obesity and high blood pressure in children ages 6 years 4 months to 7 years 2 months?
- How fast have children gained weight from birth to school age, and how does this affect their current weight and blood pressure?
- Do neonatal head ultrasound and neonatal MRI abnormalities predict an elevated blood pressure?
- Are maternal and neonatal risk factors related to obesity and hypertension?
- Do activity levels affect current weight or blood pressure?

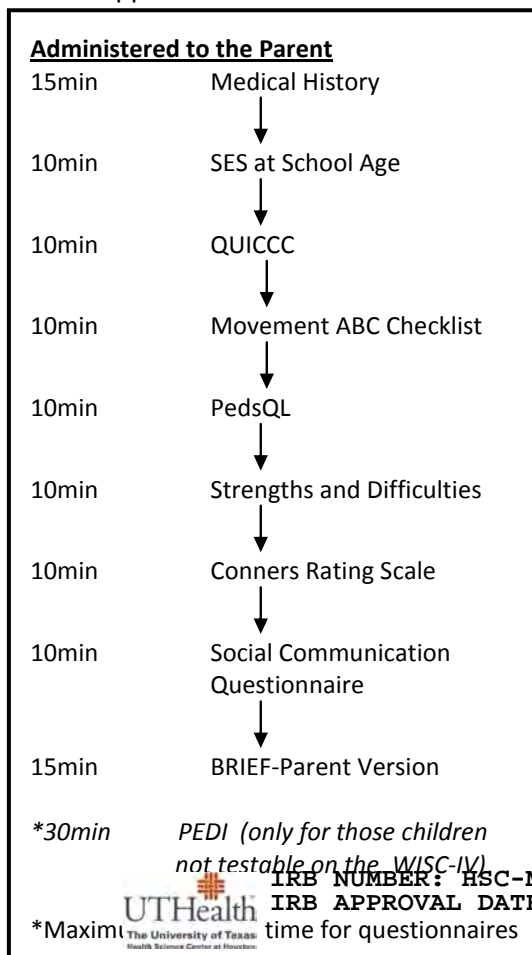
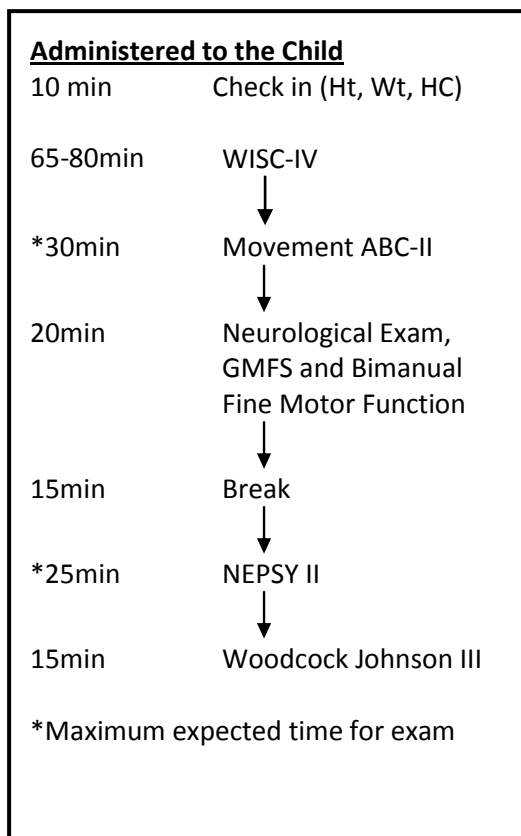
If you decide to allow your child to take part in this secondary study, a member of the research team will measure and record your child's blood pressure, weight, height, head size, and waist size. Measurements of skinfolds on the arm, back and stomach will also be taken. You will also be asked to complete a short questionnaire on your child's day to day activities.

Please initial below if you agree or do not agree to allow your child to take part in this secondary study. If you decide not to take part in this sub study, you can still take part in the main study:

_____ I agree to allow my child to take part in the secondary study
 _____ I do not agree to allow my child to take part in the secondary study

TIME COMMITMENT

The time for the questionnaires to be filled out is roughly 2 hours, and the time to evaluate the child will take roughly 3 ½ hours, including breaks. The interviews/questionnaires with you will happen at the same time the child is being tested, so the whole visit will take about 3 ½ hours.



BENEFITS

There may be no benefit to your infant for taking part in this study. However, infants in the future may receive better treatment because of the information this study gives to the medical and surgical teams. Also, because of his/her problems at birth he/she is at risk of having problems with development and learning. If any abnormality is found by the tests, appropriate referrals for continued care and treatment will be made.

RISKS AND/OR DISCOMFORTS

There are no known risks associated with the tests or questionnaires that will be administered in this study. Some unknown risks may be learned during the study. You will be told of any important new information that is learned during the course of this research study that might affect your child's condition or your willingness to continue your child's participation in this study. The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

ALTERNATIVES

The alternative to having your child take part in this study is to not take part. You should not feel like you have to allow your child to take part in this study. Your questions should be answered clearly and to your satisfaction.

STUDY WITHDRAWAL

Your decision to allow your child to take part is voluntary. You may decide to stop your child from taking part in the study at any time. A decision not to take part or to stop being a part of the research project will not change the services available to your child from your physician, hospital, or service agency. If you do take part in this study and later decide to withdraw your child you may do so by calling the research office at 713-500-6813. Your child's health information will no longer be used or disclosed in this study.

Also, there may be instances where the PI may withdraw your child from the research study. They include the study being canceled or for some unforeseen reason.

IN CASE OF INJURY

If you suffer any injury as a result of taking part in this research study, please understand that nothing has been arranged to provide free treatment of the injury or any other type of payment. However, all needed facilities, emergency treatment and professional services will be available to you, just as they are to the community in general. You should report any injury to Dr. Patrick Jones at 713-500-6813 and to the Committee for the Protection of Human Subjects at (713) 500-7943. You will not give up any of your legal rights by signing this consent form.

COSTS, REIMBURSEMENT AND COMPENSATION

If you decide to take part in this research study, neither you nor your insurance will incur any additional costs.

You will be paid for taking part in this research study with a \$100 gift card to Wal*Mart, and we will pay for your parking. Also, the evaluations/tests administered to your child would usually cost several thousand dollars, but will be provided at no cost.

If you receive a bill that you believe is related to your taking part in this research study, please contact Dr. Patrick Jones at 713-500-6813 with any questions.

If you receive payment for taking part in this study please be informed that you will be asked to complete a copy W-9 form that will be forwarded to the accounting department as a requirement by the Internal Revenue Service. You will also be issued a 1099-Misc form from this study for tax reporting purposes.

CONFIDENTIALITY

Please understand that representatives of the Food and Drug Administration (FDA), the Committee for the Protection of Human Subjects (CPHS), the National Institutes of Health (NIH), the National Institute of Child & Human Development (NICHD), the Research Triangle Institute (RTI), other participating centers of the NRN, and the sponsor of this research may review your research and/or medical records for the purposes of verifying research data, and will see personal identifiers. However, identifying information will not appear on records retained by the sponsor, with the exception of the date of birth, subject initials, and treatment/service dates. You will not be personally identified in any reports or publications that may result from this study. There is a separate authorization form that you will be asked to sign which details the use and disclosure of your protected health information.

Clinical Trials.Gov Language:

A description of this clinical trial will be available on <http://www.ClinicalTrials.gov>, as required by U.S. Law, under NCT00233324. This Web site will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

NEW INFORMATION

While taking part in this study, the study team will notify you of new information that may become available and could affect your willingness to stay in the study. They will notify you of this information via phone call, letter or email.

The results of the study will not be available until all children enrolled in the study have completed their school age clinic visit and the research paper is published. You can obtain those results from the research office at 713-500-6813.

QUESTIONS

If you have questions at any time about this research study, please feel free to contact Dr. Patrick Jones at 713-500-6813, as he will be glad to answer your questions. You can also contact the study team to discuss problems, voice concerns, obtain information, and offer input in addition to asking questions about the research.

SIGNATURES

Sign below only if you understand the information given to you about the research and choose to take part. Make sure that any questions have been answered and that you understand the study. If you have any questions or concerns about your rights as a research subject, call the Committee for the Protection of Human Subjects at (713) 500-7943. You may also call the Committee if you wish to discuss problems, concerns, and questions; obtain information about the research; and offer input about current or past participation in a research study. If you decide to take part in this research study, a copy of this signed consent form will be given to you.

Printed Name of Subject or Legally Authorized Representative

Signature of Subject or Legally Authorized Representative

Date

Time

Printed Name of Person Obtaining Informed Consent

Signature of Person Obtaining Informed Consent

Date

Time

CPHS STATEMENT: This study (HSC-MS-12-0405) has been reviewed by the Committee for the Protection of Human Subjects (CPHS) of the University of Texas Health Science Center at Houston. For any questions about research subject's rights, or to report a research-related injury, call the CPHS at (713) 500-7943.

IUPUI and CLARIAN INFORMED CONSENT STATEMENT FOR

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

STUDY PURPOSE:

You are invited to have your baby participate in a research study looking at two ways in which babies are treated for breathing problems. Your baby was selected as a possible participant because you are less than 28 weeks pregnant and your baby may be born early. Most babies born this early need some type of help to breathe. Doctors have two different ways they use to help these small babies breathe. Some doctors insert a breathing tube down into your baby's lungs, give a medication called surfactant, and attach a machine to the breathing tube that will breathe for your baby. This machine is called a ventilator or respirator. Other doctors use a special piece of equipment called continuous positive airway pressure, or CPAP, that is placed over the baby's nose and mouth and applies air pressure thru the mouth and nose into the baby's lungs. With CPAP, the baby is breathing on his/her own; some babies who are placed on CPAP eventually get tired and need to be placed on a respirator. This study is trying to determine if using CPAP versus using a ventilator and surfactant immediately after birth will help decrease the severity of lung disease in babies who are born early. This study is also looking at the ranges of oxygen saturation that are currently being used with premature babies. Doctors, nurses, and others taking care of your baby use a machine called a pulse oximeter in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as eye disease, called Retinopathy of Prematurity (ROP). This eye disease happens when there is unusual growth of blood vessels in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough it can cause blindness. It is known that ROP is increased by the prolonged use of extra oxygen. The benefit of higher versus lower levels of oxygenation in babies, especially premature babies, is not known. This study hopes to determine what specific range is the best. Another goal of the study is to (delete also) compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when your infant would have been born at full-term, to determine if one method of imaging gives more useful information than the other. The results will then be compared to the physical and developmental exams your infant will have when he/she is 18-22 months old and may help to determine which oxygen range is best for premature babies. Finally, to determine the effect of the SUPPORT Study treatment on your infant's breathing health, phone interviews will be conducted after your infant's discharge from the hospital. During these interviews, you will be asked questions about whether your baby has experienced any breathing difficulties since being discharged from the hospital.

NUMBER OF PEOPLE TAKING PART IN THE STUDY:

If you agree to participate, your baby will be one of 1310 babies who will be participating in this research nationally, and one of 150 babies locally.

PROCEDURE FOR THE STUDY:

If you agree for your baby to be in the study, your baby will be treated in one of four ways. If your baby is born before you reach your 28th week of pregnancy he/she will randomly (like a flip of a coin) be placed into a group that receives CPAP use in the delivery room or into a group that receives placement of the breathing tube, medication (surfactant), and then placed on the breathing machine. Both ways are currently used in our hospitals and we hope to find out which is the better way for these tiny babies.

If your baby is in the CPAP group, he/she will be treated with CPAP immediately after birth and will remain on it upon admission to the nursery. If your baby shows signs of needing the breathing tube and machine at any time, then your baby's doctor will provide this for him/her. If this happens within the first 48 hours of life your baby will also receive the surfactant medication.

If your baby is in the breathing tube/medication group, he/she will have the tube placed and will be placed on the breathing machine in the delivery room and will be given the surfactant medication with the first hour after birth.

For your baby's first 14 days of life, there will be guidelines for the doctors in the intensive care nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines also will help decide when to put them on or take them off of CPAP. These guidelines have been agreed upon by all the doctors taking care of your baby.

The babies in this study will also be placed randomly (again, like a flip of the coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how much oxygen is in the baby's blood. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target range of 91-95%. All of these saturations are considered normal ranges for premature babies. If the saturation falls below 85% or higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

Your baby will be involved in the CPAP or breathing tube part of the study for the first 14 days after his/her birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record once your baby has been discharged from the hospital. When your baby is 18-22 months old, he/she will be seen in the Newborn Follow-up Clinic for an evaluation. This evaluation will include a complete examination of the muscles, nerves, and mental and motor skills. This examination will be given by specially trained developmental pediatricians and psychologists who are experts at providing care for former premature babies. After this evaluation, your baby's participation in this study will end.

Part of your infant's regular care during the first few months after birth will include one or more head ultrasounds to check for brain injury, including at about the time he/she would normally have been born. If you decide to allow your infant to be in this study, he/she will also have a brain MRI and another head ultrasound within about a month of his/her intended due date. MRI is a method of making pictures of both normal and abnormal changes within the body. It is based on the relationship between atoms within the body when placed inside a large magnet. MRI uses a magnetic field to make images of the inside of the body. Your infant will be placed on a long narrow couch for 20 to 30 minutes while the machine gathers data. During this time, your infant will not be exposed to radiation or X-rays but, rather, a strong magnetic field and radiofrequency magnetic fields. Your baby will not feel either. Your baby will, however, hear repetitive tapping noises that arise from the gradient coils of the MRI machine. We will provide earmuffs that your baby will wear. Generally, infants who are fed, wrapped in warm blankets, and have earmuffs in place, sleep through MRIs. The ultrasound and MRI pictures of your baby's brain will be looked at by radiologists at your baby's hospital (doctors who are specialists in X-rays and other pictures of the body). Your doctors will tell you what they find. Because this is a study that involves babies from many hospitals across the United States, all of the ultrasound and MRI pictures of the brain from all the babies who participate in this study will also be seen by other radiologists who will look at all the pictures from all the babies.

Many children who were born prematurely and needed help to breathe continue to have breathing problems such as wheezing and coughing in the first two years of life. We would like to stay in touch with you by telephone when your baby goes home and continuing every 6 months for a total of four times. At these times, we will ask questions about your child's breathing, medication use, and visits to a doctor, emergency room or hospital for treatment of breathing problems. We will also ask several questions about you and your family. Each call should take about 15 minutes. You do not need to answer any questions that make you uncomfortable.

The results from your baby's questionnaire will be combined with other infants from around the country. However, your infant's name will not be used.

RISKS OF TAKING PART IN THE STUDY:

The possible risks of using CPAP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP at the level used in this study does not increase the risk of collapsed lungs. These risks are present during the routine use of CPAP; involvement in this study does not increase these risks.

Like with the use of CPAP, a possible risk of placing a breathing tube and machine may include a temporary slowing of the heart rate or possibly the collapse of one or both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums or airway. Again, these risks are present during routine use of the breathing tube and machine. Involvement in this study does not increase these risks.

Other potential risks during the time immediately after birth include the need for chest compressions, rescue medications, and even death. The use of either of these procedures (CPAP or the breathing tube) will not increase these risks.

Pulse oximeters are used routinely in thousands of intensive care nurseries all across the country every day. There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse, moving the sensor to another arm or foot a few times a day. The pulse oximeter will be used for your baby whether or not your baby is in the study.

All of the imaging proposed in this study is within standard of care; there is no predictable increase in risk for your baby. Some unknown risks may be learned during the study. You will be told of any new information that is learned which may affect your child's condition or influence your willingness to have him/her continue participation in this study. The only other risk of this study is risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

BENEFITS OF TAKING PART IN THE STUDY:

There may or may not be any extra benefit to your baby taking part in this study. It is possible that group that receives CPAP might benefit by not needing additional breathing support. He/she may not require the surfactant medication. It is also possible that using the lower part of the normal saturation ranges will result in fewer babies with severe eye problems.

All infants in the study may benefit from the MRI that is conducted. Infants may benefit if they detect brain injury, which will allow for earlier intervention than would normally occur. It is also possible that your baby will receive no direct benefit. The knowledge learned from this study may help us treat babies in the future.

ALTERNATIVES TO TAKING PART IN THE STUDY:

If you do not want your baby to participate in this study, he/she will receive the routine care for premature infants. This may or may not include use of CPAP, the breathing tube/machine and the surfactant medication. He/she will also have oxygen saturation measured by a pulse oximeter in the ranges of 85-95% as well.

CONFIDENTIALITY:

Efforts will be made to keep your baby's personal information confidential. We cannot guarantee absolute confidentiality. Your baby's personal information may be disclosed if required by law. Your baby's identity will be held in confidence in reports in which the study may be published.

Organizations that may inspect and/or copy your baby's research records for quality assurance and data analysis include groups such as the investigator and his/her research associates, the IUPUI/Clarian Institutional Review Board or its designees, the National Institutes of Health (NIH) and the data coordinating center, Research Triangle Institute.

COSTS/COMPENSATION:

Taking part in this study will not lead to added costs to you or your baby's insurance company. The cost of the MRI and head ultrasound procedures for the sole purpose of research is paid for by the National Institute of Health (NIH), the study sponsor.

You will not receive payment for taking part in this study.

In the event of physical injury resulting from your baby's participation in this research, necessary medical treatment will be provided to your baby and billed as part of your baby's medical expenses. Costs not covered by your baby's health care insurer will be your responsibility. Also, it is your responsibility to determine the extent of your baby's health care coverage. There is no program in place for other monetary compensation for such injuries. However, your baby is not giving up any legal rights or benefits to which your baby is otherwise entitled.

CONTACTS FOR QUESTIONS OR PROBLEMS:

For questions about the study or a research-related injury, contact the researcher Brenda B. Poindexter MD at 317-274-4716. If you cannot reach the researcher during regular business hours (i.e. 8:00AM-5:00PM), please call the IUPUI/Clarian Research Compliance Administration office at 317/278-3458 or 800/696-2949. After business hours, please call the neonatologist on call at 317-274-6648.

In the event of an emergency, you may contact the neonatologist on-call at 317-274-6648.

For questions about your baby's rights as a research participant or complaints about a research study, contact the IUPUI/Clarian Research Compliance Administration office at 317/278-3458 or 800/696-2949.

VOLUNTARY NATURE OF STUDY:

Taking part in this study is voluntary. You may choose for your baby not to take part or your baby may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which your baby is entitled.

SUBJECT'S CONSENT:

In consideration of all of the above, I give my consent for my baby to participate in this research study.

I acknowledge receipt of a copy of this informed consent statement.

BABY'S NAME: _____ Date: _____

SIGNATURE OF PARENT: _____ Date: _____

SIGNATURE OF PARENT: _____ Date: _____

SIGNATURE OF PERSON OBTAINING CONSENT: _____ Date: _____

IRB Approval Date: DEC 4 2007
Continuing Review Due: SEP 19 2008

IUPUI-CLARIAN

AUTHORIZATION FOR THE RELEASE OF HEALTH INFORMATION FOR RESEARCH

Introduction: You have the right to decide who may review or use your Protected Health Information ("PHI"). The type of information that may be used is described below. When you consider taking part in a research study, you must give permission for your PHI to be released from your doctors, clinics, and hospitals to the research team, for the specific purpose of this research study.

What does this authorization relate to? This authorization relates to the following study:

Brenda Poindexter, MD, MS

PRINCIPAL INVESTIGATOR (in charge of Research Team) **IRB PROTOCOL # 0412-26**

SPONSOR # **U10HD27856**

NAME OF RESEARCH PARTICIPANT

BIRTHDATE

STREET ADDRESS

CITY, STATE & ZIP CODE

What information will be used for research purposes?

The PHI that will be used for research purposes may include some or all of your health records. This includes, but is not limited to: information provided by you directly to the Research Team, hospital records and reports; admission histories, and physicals; X-ray films and reports; operative reports; laboratory reports; treatment and test results; immunizations; allergy reports; prescriptions; consultations; clinic notes; and any other medical or dental records needed by the Research Team.

Specific Authorizations:

I understand that this release also pertains to records concerning hospitalization or treatment that may include the categories listed below. I have the right to specifically request that records NOT be released from my health care providers to the Research Team. However, I understand that if I limit access to any of the records listed below, I may not be able to be in this research study. Check limitations, if any, below:

- Mental health records
- Psychotherapy Notes
- HIV (AIDS)

- Sexually transmitted diseases
- Alcohol / Substance abuse
- Other: _____

Who will be allowed to release this information?

I authorize the following persons, groups or organizations to disclose the information described in this Release of Information/Authorization for the above referenced research study:

- Treating providers**
- Hospitals, clinics or other places where I have received treatment**
- Other:** _____
- The Principal Investigator and the Research Staff**

Who can access your PHI for the study?

The people and entities listed above may share my PHI (or the PHI of the individual(s) whom I have the authority to represent), with the following persons or groups for the research study: the Research Team, Institutional Review Board, Research Sponsor and its representatives, Research Organizations, the Department of Health & Human Services or other US or foreign government agencies as required by law, and to the Food and Drug Administration (FDA) or a person subject to the jurisdiction of the FDA in order to audit or monitor the quality, safety or effectiveness of the product or activity.

The **Research Team** includes the Principal Investigator, his/her staff, research coordinators, research technicians and other staff members who provide assistance to the Research Team. If there is a **Research Sponsor(s)**, this shall include: the National Institutes of Health and any **Research Organizations** who provided assistance to the **Research Sponsor(s)** including, but not limited to: the data coordinating center which is the Research Triangle Institute.

IUPUI-CLARIAN

AUTHORIZATION FOR THE RELEASE OF HEALTH INFORMATION FOR RESEARCH

Expiration date of this Authorization: This authorization is valid until the following date or event:

- Specify Date ___/___/___
- End of the Study
- None
- Other: _____
- Indefinitely, or until such time as authorized by the sponsor to destroy study documents

Efforts will be made to ensure that your PHI will not be shared with other people outside of the research study. However, your PHI may be disclosed to others as required by law and/or to individuals or organizations that oversee the conduct of research studies, and these individuals or organizations may not be held to the same legal privacy standards as are doctors and hospitals. Thus, the Research Team cannot guarantee absolute confidentiality and privacy.

I have the right:

1. To refuse to sign this form. Not signing the form will not affect my regular health care including treatment, payment, or enrollment in a health plan or eligibility for health care benefits. However, not signing the form will prevent me from participating in the research study above.
2. To review and obtain a copy of my personal health information collected during the study. However, it may be important to the success and integrity of the study that persons who participate in the study not be given access until the study is complete. The Principal Investigator has discretion to refuse to grant access to this information if it will affect the integrity of the study data during the course of the study. Therefore, my request for information may be delayed until the study is complete.
3. To cancel this release of information/authorization at any time. If I choose to cancel this release of information/authorization, I must notify the Principal Investigator for this study **in writing** at: 699 Riley Hospital Dr, RR 208, Indianapolis, IN 46202. However, even if I cancel this release of information/authorization, the Research Team, Research Sponsor(s) and/or the Research Organizations may still use information about me that was collected as part of the research project between the date I signed the current form and the date I cancel the authorization. This is to protect the quality of the research results. I understand that canceling this authorization may end my participation in this study.
4. To receive a copy of this form.

I have had the opportunity to review and ask questions regarding this release of information/authorization form. By signing this release of information/authorization, I am confirming that it reflects my wishes.

Printed name of Individual/Legal Representative

Signature of Individual/Legal Representative *Date*

**If signed by a legal representative; state the relationship and identify below the authority to act on behalf of the individual's behalf.*

***Individual is:** a Minor Incompetent Disabled Deceased

***Legal Authority:**
 Custodial Parent Legal Guardian Executor of Estate of the Deceased
 Power of Attorney Healthcare Authorized Legal Representative
 Other: _____

**CONSENTIMIENTO INFORMADO DE IUPUI y CLARIAN PARA EL ESTUDIO LLAMADO
SUPPORT (SURfactant Positive Airway Pressure and Pulse Oximetry Trial) (Estudio con surfactante, presión
positiva en la vía aérea y oximetría de pulso) en lactantes con peso extremadamente bajo al nacer**

PROPÓSITO DEL ESTUDIO:

Lo invitamos a que permita que su bebé participe en un estudio de investigación en el que se analizarán dos formas de tratamiento para bebés con problemas respiratorios. Su bebé fue seleccionado como posible participante porque usted tiene menos de 28 semanas de embarazo y su bebé podría nacer antes de tiempo. La mayoría de los bebés que nacen con esa anticipación necesitan algún tipo de ayuda para respirar. Los médicos cuentan con dos maneras diferentes para ayudar a esos bebés pequeños a respirar. Algunos médicos insertan un tubo para respirar en los pulmones del bebé, le administran una medicación llamada surfactante y conectan una máquina al tubo para respirar que respira por el bebé. Esa máquina se llama ventilador o respirador. Otros médicos usan un equipo especial para un tratamiento llamado presión positiva continua en la vía aérea, o CPAP (continuous positive airway pressure), que se coloca sobre la nariz y la boca del bebé y administra aire a presión a través de la boca y la nariz en los pulmones del bebé. Con la CPAP, el bebé respira por sus propios medios; después de un tiempo, algunos bebés tratados con CPAP se cansan y necesitan que se les coloque un respirador. Con este estudio, se intentará determinar si el uso de CPAP inmediatamente después del nacimiento ayuda a disminuir la gravedad de la enfermedad pulmonar en bebés que nacen antes de término en comparación con el uso de un respirador y surfactante. En el estudio también se analizarán los rangos de saturación de oxígeno que se están usando en la actualidad con bebés prematuros. Los médicos, el personal de enfermería y otros encargados de cuidar a su bebé usan un aparato llamado oxímetro de pulso en la atención de rutina como ayuda para regular el oxígeno necesario para satisfacer las necesidades del bebé. Algunas veces se usan rangos más altos y otras, rangos más bajos. Todos los rangos que se usan son aceptables. En esta parte del estudio, queremos establecer con precisión cuál es el rango exacto que se debería utilizar para prevenir algunos de los problemas que se presentan en los bebés prematuros, como una enfermedad ocular llamada retinopatía del prematuro (Retinopathy of Prematurity, ROP) Esta enfermedad ocular se produce cuando hay un crecimiento inusual de los vasos sanguíneos en los ojos, y lleva a la formación de tejido cicatrizal alrededor de la retina y, si tracciona de la retina con suficiente fuerza, puede provocar ceguera. Se sabe que el uso prolongado de oxígeno extra aumenta la incidencia de la ROP. Se desconoce cuál es el beneficio de usar niveles más altos o más bajos de oxigenación en los bebés, en especial los prematuros. Con este estudio, se espera determinar cuál es el rango específico óptimo.

NÚMERO DE PERSONAS QUE PARTICIPARÁN EN EL ESTUDIO:

Si decide participar, su bebé será uno de los 1310 bebés que participarán en esta investigación a nivel nacional y uno de los 150 bebés a nivel local.

PROCEDIMIENTO QUE SE SEGUIRÁ EN ESTE ESTUDIO:

Si decide que su bebé participe en el estudio, el bebé recibirá uno de cuatro tratamientos posibles. Si su bebé nace antes de que usted llegue a la semana 28 del embarazo, será asignado al azar (como si se lanzara una moneda) a un grupo que recibirá CPAP en la sala de parto o a un grupo al que se le colocará un tubo para respirar y se le administrará medicación (surfactante) y luego se lo colocará en el respirador. En la actualidad, los dos métodos se usan en nuestro hospital y esperamos hallar cuál es el mejor para estos bebés tan pequeños.

Si su bebé está en el grupo que recibe CPAP, será tratado con CPAP inmediatamente después de nacer y seguirá recibiendo ese tratamiento hasta que se lo admita en neonatología. Si su bebé presenta signos de que necesita el tubo para respirar y el respirador en algún momento, el médico le administrará ese tratamiento. Si eso sucede durante las primeras 48 horas de vida del bebé, también recibirá el surfactante.

Si su bebé está en el grupo tratado con el tubo para respirar y la medicación, se le colocará el tubo y luego se lo conectará al respirador en la sala de parto y se le administrará el surfactante durante la primera hora de vida.

Durante los primeros 14 días de vida de su bebé, los médicos seguirán una serie de pautas en la sala de cuidados intensivos neonatales. Esas pautas ayudan a los médicos a decidir cuándo es necesario colocar a los bebés el respirador y cuándo deben tratar de sacarles el respirador. Esas pautas también les ayudarán a decidir

cuándo deben administrar CPAP a los bebés o suspenderla. Todos los médicos que atienden a su bebé han acordado esas pautas.

Los bebés que participen en este estudio también serán asignados al azar (una vez más, como si se lanzara una moneda) a un grupo monitorizado con rangos de saturación de oxígeno más bajos o más altos. La saturación del oxígeno del bebé se mide con un aparato llamado oxímetro de pulso, que utiliza un pequeño sensor que se coloca en la mano o el pie del bebé y puede proporcionar a los médicos una medición de la cantidad de oxígeno que hay en la sangre del niño. Los oxímetros de pulso no son dolorosos y pueden proporcionar mediciones de la saturación del oxígeno las 24 horas del día. El nivel de saturación que se intentará alcanzar en los bebés asignados al rango más bajo será de 85-89%, mientras que en los bebés asignados al rango más alto se intentará alcanzar un nivel de 91-95%. Todas esas saturaciones se consideran rangos normales para los bebés prematuros. Si la saturación disminuye a menos de 85% o sube a más de 95%, el oxímetro de pulso emitirá una señal de alerta para que los médicos y enfermeros sepan cuándo deben aumentar o disminuir la cantidad de oxígeno de su bebé.

Su bebé participará en la parte del tratamiento con CPAP o tubo para respirar del estudio durante los primeros 14 días de vida. Después de los primeros 14 días, se lo seguirá monitorizando con el monitor de saturación mientras siga recibiendo oxígeno extra. Una vez que su bebé haya pasado 72 horas sin oxígeno suplementario, se desconectará el monitor de la saturación. Se recolectará información del registro médico una vez que su bebé haya recibido el alta del hospital. Cuando su bebé tenga entre 18 y 22 meses de edad, lo revisarán en la Clínica de seguimiento de recién nacidos para realizar una evaluación. En esa evaluación se incluirá un examen completo de los músculos, nervios y destrezas motoras y mentales. Ese examen lo realizarán pediatras con entrenamiento especial en desarrollo y psicólogos especialistas en la atención de bebés que nacieron prematuros. Después de esa evaluación, la participación de su bebé en este estudio terminará.

RIESGOS DE PARTICIPAR EN EL ESTUDIO:

Los riesgos posibles del uso de CPAP incluyen que el estómago se distienda y que la frecuencia cardiaca se vuelva más lenta temporalmente. Otro riesgo posible es el colapso de uno de los pulmones o de los dos. El uso de CPAP en el nivel que se empleará en este estudio no aumenta el riesgo de colapso de los pulmones. Esos riesgos están presentes durante el uso de rutina de la CPAP; la participación en este estudio no aumenta esos riesgos.

Al igual que con el uso de la CPAP, uno de los posibles riesgos de colocar un tubo para respirar y un respirador es que puede hacer que la frecuencia cardiaca se vuelva más lenta temporalmente o que uno o los dos pulmones colapsen. Otro riesgo es la posibilidad de que se produzca una lesión punzante en la vía aérea. Otros riesgos posibles son los hematomas o cortes en la lengua, las encías o la vía aérea. Una vez más, esos riesgos forman parte del uso de rutina del tubo para respirar y el respirador, y la participación en este estudio no aumenta esos riesgos.

Otros riesgos potenciales durante el período inmediatamente posterior al nacimiento incluyen la necesidad de compresiones torácicas, medicación de rescate e incluso la muerte. El uso de cualquiera de estos procedimientos (CPAP o el tubo para respirar) no aumentará esos riesgos.

Los oxímetros de pulso se utilizan de forma rutinaria en miles de salas de cuidado intensivo neonatal en todo el país todos los días. No existen riesgos conocidos para su bebé derivados de la monitorización con los oxímetros de pulso utilizados en este estudio. El personal de enfermería que atienda a su bebé minimizará el posible riesgo de lacerar la piel en el sitio de colocación cambiando el sensor de brazo o de pie a lo largo del día. El oxímetro de pulso se utilizará en su bebé ya sea que participe del estudio o no.

BENEFICIOS DE PARTICIPAR EN EL ESTUDIO:

Su bebé puede recibir un beneficio adicional o no con su participación en este estudio. Es posible que el grupo que recibe CPAP se beneficie ya que quizás no necesite un soporte respiratorio adicional. Es posible que no sea

necesario medicar a su bebé con surfactante. También es posible que el uso que los valores más bajos de los rangos de saturación normal se traduzca en que menos bebés sufran problemas oculares graves.

OPCIONES EN CUANTO A PARTICIPAR EN EL ESTUDIO:

Si no desea que su bebé participe en este estudio, el niño recibirá la atención de rutina que se brinda en la sala de parto inmediatamente después del nacimiento y permanecerá en la sala de cuidado intensivo neonatal, lo cual puede incluir el uso de CPAP, tubo para respirar/respirador y surfactante o no. También se medirá la saturación del oxígeno del bebé con un oxímetro de pulso en los rangos de 85-95%.

CONFIDENCIALIDAD:

Se tomarán medidas para guardar la información personal de su bebé de forma confidencial. No podemos garantizar la confidencialidad absoluta. Puede que la información personal de su bebé se divulgue si así lo requiere la ley. La identidad de su bebé se tratará de forma confidencial en los informes en que se publique el estudio.

Hay organizaciones y entidades que llevan el control de la calidad y otras que realizarán análisis de datos, a las cuales se permitirá estudiar y copiar los registros del estudio que tienen que ver con su bebé y que pueden incluir, entre otras: la investigadora y sus auxiliares, la Junta Institucional Examinadora de IUPUI/Clarian y sus designados y los Institutos Nacionales de la Salud (National Institutes of Health, NIH).

COSTOS/COMPENSACIÓN:

Participar en este estudio no acarreará costos adicionales para usted o la compañía de seguros del bebé.

No se le pagará por participar en este estudio.

Si su produjera una lesión como resultado de la participación de su bebé en esta investigación, se le suministrará el tratamiento médico necesario. Los costos de dicho tratamiento se facturan con el resto de sus gastos médicos de su bebé. Usted debe pagar los costos que no cubra el seguro médico de su bebé. Además, a usted le corresponde averiguar qué cubre el seguro médico de su bebé. No tenemos un programa para ofrecer otro tipo de compensación económica por ese tipo de lesiones. No obstante, su bebé no renuncia a ningún derecho o prestación a los que de otra forma tendría derecho.

PERSONAS A QUIENES DIRIGIRSE SI TIENE PREGUNTAS O SURGE ALGÚN PROBLEMA:

Si tiene preguntas acerca del estudio o acerca de una lesión debida a su participación en el mismo, comuníquese con la investigadora Dra. Brenda B. Poindexter al 317 -274-4716. Si no puede comunicarse con la investigadora durante horas de oficina (de 8:00 am a 5:00 pm), se le ruega que llame a la oficina llamada IUPUI/Clarian Research Compliance Administration (entidad que se ocupa de que los estudios de investigación se rijan por ciertas pautas) al 317/278-3458 o al 800/696-2949. Si necesita comunicarse fuera de las horas de oficina, se le ruega que llame al neonatólogo de guardia al 317-274-6648.

Si se trata de una emergencia, puede comunicarse con el neonatólogo de guardia al 317-274-6648.

Si tiene preguntas acerca de los derechos de los que goza su bebé en calidad de participante de un estudio de investigación o si necesita reportar una queja, comuníquese con la oficina llamada IUPUI/Clarian Research Compliance Administration (entidad que se ocupa de que los estudios de investigación se rijan por ciertas pautas) al 317/278-3458 o al 800/696-2949.

CARÁCTER VOLUNTARIO DE LA PARTICIPACIÓN EN EL ESTUDIO:

La participación en este estudio es voluntaria. Puede optar por no permitir que su bebé participe del estudio o bien que se retire en cualquier momento que desee hacerlo. En caso de retirarse, no se le sancionará ni perderá los beneficios a los que su bebé tenga derecho.

CONSENTIMIENTO DEL PARTICIPANTE EN EL ESTUDIO:

En virtud de lo expuesto en este documento, doy mi consentimiento para que mi hijo participe en este estudio de investigación.

Acuso recibo de una copia de este consentimiento informado.

NOMBRE DEL BEBÉ: _____ Fecha: _____

FIRMA DEL PADRE O DE LA MADRE: _____ Fecha: _____

FIRMA DEL PADRE O DE LA MADRE: _____ Fecha: _____

FIRMA DE LA PERSONA QUE OBTUVO EL CONSENTIMIENTO: _____ Fecha: _____

IRB Approval Date: <u>Aug 27, 2008</u>
Continuing Review Date: <u>Aug 27, 2009</u>

IUPUI and CLARIAN INFORMED CONSENT STATEMENT FOR

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

STUDY PURPOSE:

You are invited to have your baby participate in a research study looking at two ways in which babies are treated for breathing problems. Your baby was selected as a possible participant because you are less than 28 weeks pregnant and your baby may be born early. Most babies born this early need some type of help to breathe. Doctors have two different ways they use to help these small babies breathe. Some doctors insert a breathing tube down into your baby's lungs, give a medication called surfactant, and attach a machine to the breathing tube that will breathe for your baby. This machine is called a ventilator or respirator. Other doctors use a special piece of equipment called continuous positive airway pressure, or CPAP, that is placed over the baby's nose and mouth and applies air pressure thru the mouth and nose into the baby's lungs. With CPAP, the baby is breathing on his/her own; some babies who are placed on CPAP eventually get tired and need to be placed on a respirator. This study is trying to determine if using CPAP versus using a ventilator and surfactant immediately after birth will help decrease the severity of lung disease in babies who are born early. This study is also looking at the ranges of oxygen saturation that are currently being used with premature babies. Doctors, nurses, and others taking care of your baby use a machine called a pulse oximeter in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as eye disease, called Retinopathy of Prematurity (ROP). This eye disease happens when there is unusual growth of blood vessels in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough it can cause blindness. It is known that ROP is increased by the prolonged use of extra oxygen. The benefit of higher versus lower levels of oxygenation in babies, especially premature babies, is not known. This study hopes to determine what specific range is the best. Another goal of the study is to (delete also) compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when your infant would have been born at full-term, to determine if one method of imaging gives more useful information than the other. The results will then be compared to the physical and developmental exams your infant will have when he/she is 18-22 months old and may help to determine which oxygen range is best for premature babies. Finally, to determine the effect of the SUPPORT Study treatment on your infant's breathing health, phone interviews will be conducted after your infant's discharge from the hospital. During these interviews, you will be asked questions about whether your baby has experienced any breathing difficulties since being discharged from the hospital.

NUMBER OF PEOPLE TAKING PART IN THE STUDY:

If you agree to participate, your baby will be one of 1310 babies who will be participating in this research nationally, and one of 150 babies locally.

PROCEDURE FOR THE STUDY:

If you agree for your baby to be in the study, your baby will be treated in one of four ways. If your baby is born before you reach your 28th week of pregnancy he/she will randomly (like a flip of a coin) be placed into a group that receives CPAP use in the delivery room or into a group that receives placement of the breathing tube, medication (surfactant), and then placed on the breathing machine. Both ways are currently used in our hospitals and we hope to find out which is the better way for these tiny babies.

If your baby is in the CPAP group, he/she will be treated with CPAP immediately after birth and will remain on it upon admission to the nursery. If your baby shows signs of needing the breathing tube and machine at any time, then your baby's doctor will provide this for him/her. If this happens within the first 48 hours of life your baby will also receive the surfactant medication.

If your baby is in the breathing tube/medication group, he/she will have the tube placed and will be placed on the breathing machine in the delivery room and will be given the surfactant medication with the first hour after birth.

For your baby's first 14 days of life, there will be guidelines for the doctors in the intensive care nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines also will help decide when to put them on or take them off of CPAP. These guidelines have been agreed upon by all the doctors taking care of your baby.

The babies in this study will also be placed randomly (again, like a flip of the coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how much oxygen is in the baby's blood. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target range of 91-95%. All of these saturations are considered normal ranges for premature babies. If the saturation falls below 85% or higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

Your baby will be involved in the CPAP or breathing tube part of the study for the first 14 days after his/her birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record once your baby has been discharged from the hospital. When your baby is 18-22 months old, he/she will be seen in the Newborn Follow-up Clinic for an evaluation. This evaluation will include a complete examination of the muscles, nerves, and mental and motor skills. This examination will be given by specially trained developmental pediatricians and psychologists who are experts at providing care for former premature babies. After this evaluation, your baby's participation in this study will end.

Part of your infant's regular care during the first few months after birth will include one or more head ultrasounds to check for brain injury, including at about the time he/she would normally have been born. If you decide to allow your infant to be in this study, he/she will also have a brain MRI and another head ultrasound within about a month of his/her intended due date. MRI is a method of making pictures of both normal and abnormal changes within the body. It is based on the relationship between atoms within the body when placed inside a large magnet. MRI uses a magnetic field to make images of the inside of the body. Your infant will be placed on a long narrow couch for 20 to 30 minutes while the machine gathers data. During this time, your infant will not be exposed to radiation or X-rays but, rather, a strong magnetic field and radiofrequency magnetic fields. Your baby will not feel either. Your baby will, however, hear repetitive tapping noises that arise from the gradient coils of the MRI machine. We will provide earmuffs that your baby will wear. Generally, infants who are fed, wrapped in warm blankets, and have earmuffs in place, sleep through MRIs. The ultrasound and MRI pictures of your baby's brain will be looked at by radiologists at your baby's hospital (doctors who are specialists in X-rays and other pictures of the body). Your doctors will tell you what they find. Because this is a study that involves babies from many hospitals across the United States, all of the ultrasound and MRI pictures of the brain from all the babies who participate in this study will also be seen by other radiologists who will look at all the pictures from all the babies.

Many children who were born prematurely and needed help to breathe continue to have breathing problems such as wheezing and coughing in the first two years of life. We would like to stay in touch with you by telephone when your baby goes home and continuing every 6 months for a total of four times. At these times, we will ask questions about your child's breathing, medication use, and visits to a doctor, emergency room or hospital for treatment of breathing problems. We will also ask several questions about you and your family. Each call should take about 15 minutes. You do not need to answer any questions that make you uncomfortable.

The results from your baby's questionnaire will be combined with other infants from around the country. However, your infant's name will not be used.

RISKS OF TAKING PART IN THE STUDY:

The possible risks of using CPAP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP at the level used in this study does not increase the risk of collapsed lungs. These risks are present during the routine use of CPAP; involvement in this study does not increase these risks.

Like with the use of CPAP, a possible risk of placing a breathing tube and machine may include a temporary slowing of the heart rate or possibly the collapse of one or both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums or airway. Again, these risks are present during routine use of the breathing tube and machine. Involvement in this study does not increase these risks.

Other potential risks during the time immediately after birth include the need for chest compressions, rescue medications, and even death. The use of either of these procedures (CPAP or the breathing tube) will not increase these risks.

Pulse oximeters are used routinely in thousands of intensive care nurseries all across the country every day. There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse, moving the sensor to another arm or foot a few times a day. The pulse oximeter will be used for your baby whether or not your baby is in the study.

All of the imaging proposed in this study is within standard of care; there is no predictable increase in risk for your baby. Some unknown risks may be learned during the study. You will be told of any new information that is learned which may affect your child's condition or influence your willingness to have him/her continue participation in this study. The only other risk of this study is risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

BENEFITS OF TAKING PART IN THE STUDY:

There may or may not be any extra benefit to your baby taking part in this study. It is possible that group that receives CPAP might benefit by not needing additional breathing support. He/she may not require the surfactant medication. It is also possible that using the lower part of the normal saturation ranges will result in fewer babies with severe eye problems.

All infants in the study may benefit from the MRI that is conducted. Infants may benefit if they detect brain injury, which will allow for earlier intervention than would normally occur. It is also possible that your baby will receive no direct benefit. The knowledge learned from this study may help us treat babies in the future.

ALTERNATIVES TO TAKING PART IN THE STUDY:

If you do not want your baby to participate in this study, he/she will receive the routine care for premature infants. This may or may not include use of CPAP, the breathing tube/machine and the surfactant medication. He/she will also have oxygen saturation measured by a pulse oximeter in the ranges of 85-95% as well.

CONFIDENTIALITY:

Efforts will be made to keep your baby's personal information confidential. We cannot guarantee absolute confidentiality. Your baby's personal information may be disclosed if required by law. Your baby's identity will be held in confidence in reports in which the study may be published.

Organizations that may inspect and/or copy your baby's research records for quality assurance and data analysis include groups such as the investigator and his/her research associates, the IUPUI/Clarian Institutional Review Board or its designees, the National Institutes of Health (NIH) and the data coordinating center, Research Triangle Institute.

COSTS/COMPENSATION:

Taking part in this study will not lead to added costs to you or your baby's insurance company. The cost of the MRI and head ultrasound procedures for the sole purpose of research is paid for by the National Institute of Health (NIH), the study sponsor.

You will not receive payment for taking part in this study.

In the event of physical injury resulting from your baby's participation in this research, necessary medical treatment will be provided to your baby and billed as part of your baby's medical expenses. Costs not covered by your baby's health care insurer will be your responsibility. Also, it is your responsibility to determine the extent of your baby's health care coverage. There is no program in place for other monetary compensation for such injuries. However, your baby is not giving up any legal rights or benefits to which your baby is otherwise entitled.

CONTACTS FOR QUESTIONS OR PROBLEMS:

For questions about the study or a research-related injury, contact the researcher Brenda B. Poindexter MD at 317-274-4716. If you cannot reach the researcher during regular business hours (i.e. 8:00AM-5:00PM), please call the IUPUI/Clarian Research Compliance Administration office at 317/278-3458 or 800/696-2949. After business hours, please call the neonatologist on call at 317-274-6648.

In the event of an emergency, you may contact the neonatologist on-call at 317-274-6648.

For questions about your baby's rights as a research participant or complaints about a research study, contact the IUPUI/Clarian Research Compliance Administration office at 317/278-3458 or 800/696-2949.

VOLUNTARY NATURE OF STUDY:

Taking part in this study is voluntary. You may choose for your baby not to take part or your baby may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which your baby is entitled.

SUBJECT'S CONSENT:

In consideration of all of the above, I give my consent for my baby to participate in this research study.

I acknowledge receipt of a copy of this informed consent statement.

BABY'S NAME: _____ Date: _____

SIGNATURE OF PARENT: _____ Date: _____

SIGNATURE OF PARENT: _____ Date: _____

SIGNATURE OF PERSON OBTAINING CONSENT: _____ Date: _____

Approval Date: <u>Nov 14, 2008</u>
Continuing Review Date: <u>August 27, 2009</u>

AUTORIZACION PARA OBTENER INFORMACION SOBRE SALUD PARA INVESTIGACION

Usted tiene el derecho de decidir quien puede revisar o usar la Información de su Salud, la cual está protegida (“PHI”). El tipo de información que se podría usar se describe a continuación. Esta información se encuentra generalmente en su historia médica y se refiere a: su dirección y número de teléfono, resultados de laboratorio, historia médica y reportes de Rayos X. Cuando usted considera tomar parte de un estudio de investigación, debe dar permiso para que su información de salud protegida sea compartida por sus doctores, clínicas y hospitales, con el equipo de investigación, para el propósito exclusivo de ese estudio de investigación. Esta autorización se refiere al siguiente estudio:

Brenda B Poindexter M.D.

0412-26

INVESTIGADOR PRINCIPAL (encargado del Equipo de Investigación) PROTOCOLO DE IRB #

NOMBRE DEL INVESTIGADOR PARTICIPANTE

FECHA DE NACIMIENTO

DIRECCION

CIUDAD, ESTADO, CODIGO POSTAL

La información sobre su salud protegida que usted autoriza para que sea usada por motivos de investigación podría incluir algo o toda su historia médica, incluyendo aunque sin limitarse a: información y reportes del hospital; información sobre la admisión y estado físico; placas de rayos X y reportes, reportes de operación, reportes de laboratorio, tratamiento y resultados de análisis, vacunaciones, reportes de alergias, medicinas, consultas, notas de la clínica y cualquier otra información médica que el **Equipo de Investigación** necesite.

Yo entiendo que este documento también se refiere a documentos médicos referentes a hospitalización o tratamiento, incluyendo aunque sin limitarse a la información referente a tratamiento por alcoholismo o abuso de sustancias, virus de inmunodeficiencia adquirida(HIV), o por tratamiento o consejería siquiátrica. Yo tengo el derecho de pedir que documentos específicos listados a continuación NO sean compartidos por parte de mi proveedor de servicios médicos hacia el equipo de investigación; sin embargo yo entiendo que si limito el acceso a mi información listada a continuación es posible que no pueda participar en esta investigación.

Limitaciones:

Información sobre Salud Mental

Enfermedades transmitidas sexualmente

Información sobre Psicoterapia

Abuso de Alcohol / Sustancias

SIDA(HIV - AIDS)

Otros: _____

Usted autoriza a las siguientes personas, grupos u organizaciones a compartir la información descrita en esta Autorización para Compartir Información para el estudio de investigación mencionado con anterioridad en este documento:

Nombre de la(s) persona(s) o grupo de personas que proveen la información; Por ejemplo, podría decir “Dr. X y su personal de investigación”; “Clarian Health Partners”, “Wishard Memorial Hospital”; “VA Hospital”, proveedores de servicios médicos, etc.

Las personas, grupos u organizaciones mencionadas anteriormente pueden compartir mi PHI (o el PHI de individuo(s) de quien yo tengo la autoridad de representar), con las siguientes personas o grupos (es decir Equipo de Investigación):

Nombre de la persona(s) o grupos de personas; Por ejemplo, "Dr. X y su personal trabajando en la investigación sobre diabetes".

Fecha de expiración de esta Autorización: Esta autorización es válida hasta la siguiente fecha o evento: Fecha; Final del Estudio; Ninguna; Otra:

Se hará todo lo posible en asegurar que su información de salud protegida no será compartida con otras personas que no estén involucradas con este estudio de investigación. Sin embargo, su información de salud protegida podría ser compartida por otros si es requerido por la ley y/o individuos u organizaciones que supervisen el desarrollo de los estudios de investigación, y esos individuos u organizaciones podrían no tener los mismos estándares legales sobre su privacidad como los doctores y hospitales. Por lo que el Equipo de Investigación no puede garantizar una absoluta confidencialidad y privacidad.

Yo tengo el derecho de:

1. No firmar esta forma. El hecho de no firmar esta forma no afectara la atención médica regular incluyendo tratamiento, pago o inscripción en planes de salud o la elegibilidad para beneficios de cuidado médico. Sin embargo el no firmar la forma me descalificará de participar en el estudio de investigación arriba mencionado.
2. Cancelar este documento en cualquier momento. Si yo decido cancelar este documento para autorizar compartir mi información, debo notificar a: _____ (incluir nombre u organización, dirección de la oficina o teléfono del Investigador Principal) por escrito que yo estoy pidiendo la cancelación de este documento que autoriza compartir información. Sin embargo aunque yo cancele este documento que autoriza compartir mi información, el Equipo de Investigación podría todavía usar mi información que fue recopilada como parte del proyecto de investigación entre la fecha que yo firme el documento y la fecha de cuando yo cancelo el documento. Esto es para proteger la calidad de los resultados de la investigación.
3. Recibir copia de esta documento.

Yo he tenido la oportunidad de revisar y hacer preguntas referentes a este documento que autoriza compartir información. Al firmar este documento que autoriza compartir información, yo confirmo que esto expresa mis deseos.

Nombre del Individuo/Representante Legal

Firma del Individuo/Representante Legal

Fecha

**Si esta firmado por un representante legal, especificar la relación e identificar a continuación la autoridad para actuar como representante de los intereses del individuo*

***El individuo es:**

Menor de edad Incompetente Discapacitado Fallecido

***Autoridad Legal :**

Padre/Madre con custodia con Guardián Legal Ejecutor del Testamento del Difunto del Poder Notarial sobre el del cuidado de la salud

Representante Legal Autorizad Otro: _____

IRB APPROVED

IUPUI-CLARIAN

AUTHORIZATION FOR THE RELEASE OF MINOR'S HEALTH INFORMATION FOR RESEARCH

Introduction: As the parent and/or legal guardian of _____ (the "Child"), you have the right to decide who may review or use the Child's Protected Health Information ("PHI"). The type of information that may be used is described below. When you consider allowing the Child to take part in a research study, you must give permission as the parent and/or legal guardian to allow the Child's PHI to be released from the Child's doctors, clinics, and hospitals to the research team, for the specific purpose of this research study.

What does this authorization relate to? This authorization relates to the following study:

Brenda B. Poindexter

PRINCIPAL INVESTIGATOR (in charge of Research Team) *IRB PROTOCOL # 0412-26*

SPONSOR #

NAME OF CHILD - RESEARCH PARTICIPANT

BIRTHDATE

STREET ADDRESS

CITY, STATE & ZIP CODE

What information will be used for research purposes? The PHI that will be used for research purposes may include some or all of the Child's health records. This includes, but is not limited to: information provided by you or the Child directly to the Research Team, hospital records and reports; admission histories, and physicals; X-ray films and reports; operative reports; laboratory reports; treatment and test results; immunizations; allergy reports; prescriptions; consultations; clinic notes; and any other medical or dental records needed by the Research Team.

Specific Authorizations: I understand that this release also pertains to the Child's records concerning hospitalization or treatment that may include the categories listed below. I have the right to specifically request that the Child's records NOT be released from his/her health care providers to the Research Team. However, I understand that if I limit access to any of the Child's records listed below, the Child may not be able to be in this research study. Check limitations, if any, below:

- Mental health records
- Psychotherapy Notes
- HIV (AIDS)

- Sexually transmitted diseases
- Alcohol / Substance abuse
- Other: _____

Who will be allowed to release this information?

I authorize the following persons, groups or organizations to disclose the Child's information described in this Release of Information/Authorization for the above referenced research study:

- Treating providers**
- Hospitals, clinics or other places where I have received treatment**
- Other:** _____
- The Principal Investigator and the Research Staff**

Who can access your PHI for the study? The people and entities listed above may share the Child's PHI with the following persons or groups for the research study: the Research Team, Institutional Review Board, Research Sponsor and its representatives, Research Organizations, the Department of Health & Human Services or other US or foreign government agencies as required by law, and to the Food and Drug Administration (FDA) or a person subject to the jurisdiction of the FDA in order to audit or monitor the quality, safety or effectiveness of the product or activity.

The **Research Team** includes the Principal Investigator, his/her staff, research coordinators, research technicians and other staff members who provide assistance to the Research Team. The Research Sponsor is the National

IUPUI-CLARIAN

AUTHORIZATION FOR THE RELEASE OF MINOR'S HEALTH INFORMATION FOR RESEARCH

Institutes of Health and the Research Organization who provided assistance to the Research Sponsor including, but not limited to: the data coordinating center which is the Research Triangle Institute.

Expiration date of this Authorization: This authorization is valid until the following date or event:

- Specify Date ___/___/___ End of the Study None
 Other: _____ Indefinitely, or until such time as authorized by the sponsor to destroy study documents

Efforts will be made to ensure that the Child's PHI will not be shared with other people outside of the research study. However, the Child's PHI may be disclosed to others as required by law and/or to individuals or organizations that oversee the conduct of research studies, and these individuals or organizations may not be held to the same legal privacy standards as are doctors and hospitals. Thus, the Research Team cannot guarantee absolute confidentiality and privacy.

As the Child's parent and/or legal guardian, I have the right:

1. To refuse to sign this form. Not signing the form will not affect the Child's regular health care including treatment, payment, or enrollment in a health plan or eligibility for health care benefits. However, not signing the form will prevent the Child from participating in the research study above.
2. To review and obtain a copy of the Child's personal health information collected during the study. However, it may be important to the success and integrity of the study that persons who participate in the study and their parents and/or legal guardians not be given access until the study is complete. The Principal Investigator has discretion to refuse to grant access to this information if it will affect the integrity of the study data during the course of the study. Therefore, my request for information may be delayed until the study is complete.
3. To cancel this release of information/authorization at any time. If I choose to cancel this release of information/authorization, I must notify Brenda B. Poindexter MD for this study **in writing** at: 699 West Dr. RR 208 Indianapolis IN 46202. However, even if I cancel this release of information/authorization, the Research Team, Research Sponsor(s) and/or the Research Organizations may still use information about the Child that was collected as part of the research project between the date I signed the current form and the date I cancel the authorization. This is to protect the quality of the research results. I understand that canceling this authorization may end the Child's participation in this study.
4. To receive a copy of this form.

I have had the opportunity to review and ask questions regarding this release of information/authorization form. By signing this release of information/authorization, I am confirming that I have the authority to execute this authorization on behalf of the Child.

Printed name of Parent and/or Legal Representative

Signature of Parent and/or Legal Representative

Date

**If signed by a legal representative, state the relationship and identify below the authority to act on behalf of the individual's behalf.*

***Individual is:** a Minor Incompetent Disabled Deceased

***Legal Authority:**

- Custodial Parent Legal Guardian Executor of Estate of the Deceased
 Power of Attorney Healthcare Authorized Legal Representative
 Other: _____

IRB APPROVED

August 27, 2008

IUPUI-CLARIAN

**AUTORIZACIÓN PARA LA DIVULGACIÓN DE INFORMACIÓN MÉDICA
PARA FINES DE UNA INVESTIGACIÓN CIENTÍFICA**

Introducción: Usted tiene derecho a decidir quién puede ver o usar su información médica protegida (PHI, por sus siglas en inglés). En este documento se describe el tipo de información que podría utilizarse para este estudio científico. Para cualquier estudio científico, el que desee participar deberá dar permiso para que sus médicos y los hospitales y clínicas donde haya recibido tratamiento le divulguen al Equipo de Investigación la información médica protegida requerida para poder cumplir con los fines particulares del estudio.

¿A qué estudio se refiere esta autorización? Se refiere al siguiente estudio:

Brenda Poindexter, MD, MS

0412-26

INVESTIGADOR PRINCIPAL (a cargo del Equipo de Investigación) **NÚMERO DEL PROTOCOLO DE IRB**

NÚMERO DE LA ENTIDAD QUE SUBVENCIONA EL ESTUDIO: U10HD27856

NOMBRE DE LA PERSONA QUE PARTICIPA EN EL ESTUDIO CIENTÍFICO **FECHA DE NACIMIENTO**

DOMICILIO

CIUDAD, ESTADO Y CÓDIGO POSTAL

¿Qué información se utilizará para fines del estudio científico? Puede que algunos o todos los informes contenidos en su historial médico formen parte de la información médica protegida que se utilice para fines del estudio científico; entre otros: información que usted mismo le suministre al Equipo de Investigación; registros e informes de hospitales donde lo hayan tratado; historias médicas y exámenes médicos de rutina; placas e informes de radiografía; informes de operaciones; informes de laboratorio; resultados de tratamientos y de pruebas; inmunizaciones; informes de alergia; recetas médicas; consultas; apuntes clínicos; y cualquier otro registro médico o dental que necesite el Equipo de Investigación.

Autorizaciones especiales: Entiendo que en este permiso también se incluyen los registros médicos de hospitalizaciones o tratamientos de trastornos incluidos en alguna de las categorías que figuran en esta sección del formulario. Tengo derecho a pedir que los médicos y otras entidades que suministran servicios médicos NO le divulguen al Equipo de Investigación ciertos registros e informes. Sin embargo, entiendo que si limito el acceso a algún registro médico, puede que no se me permita participar en el estudio científico. Indique si tiene objeción a que se divulguen registros médicos correspondientes a trastornos y enfermedades de alguna de las siguientes categorías:

- Historial de Salud Mental
- Apuntes de psicoterapia
- VIH (SIDA)

- Enfermedades de transmisión sexual
- Abuso de alcohol o de drogas
- Otros: _____

¿A quién se le permitirá divulgar esta información?

Yo autorizo a las siguientes personas, grupos u organizaciones para que divulguen la información que se describe en esta Autorización para la divulgación de información para el estudio científico cuyas señas se dan en este documento.

Médicos y otras entidades

Hospitales, clínicas y otros lugares donde ha recibido tratamiento

Otro: _____

El Investigador Principal y el Equipo de Investigación

IUPUI-CLARIAN

**AUTORIZACIÓN PARA LA DIVULGACIÓN DE INFORMACIÓN MÉDICA
PARA FINES DE UNA INVESTIGACIÓN CIENTÍFICA**

¿Quién tendrá acceso a la información médica protegida que se necesite para cumplir con los fines del estudio? Las personas y entidades que figuran en la sección anterior de este documento podrán divulgarle mi información médica protegida (o la de la persona o personas a quienes yo debidamente represento) a las siguientes personas y grupos para que se utilice para fines del estudio científico: el Equipo de Investigación, la Junta Institucional Examinadora (Institutional Review Board), la entidad que subvenciona el estudio y sus representantes, organizaciones que llevan a cabo estudios científicos, el Departamento de Salud y Servicios Humanos de Estados Unidos u otras entidades federales o de algún gobierno extranjero, según lo exija la ley, y la Administración de Drogas y Alimentos y los representantes bajo su jurisdicción que cumplen con tareas de vigilancia y control respecto a la calidad, seguridad o eficacia del producto o actividad.

El **Equipo de Investigación** consta del Investigador o Investigadora Principal, su personal, los coordinadores y técnicos del estudio científico, y demás miembros del personal de apoyo del Equipo de Investigación. Si alguna **entidad subvenciona el estudio**, también constará de: sus designados y los Institutos Nacionales de la Salud (The National Institutes of Health), y de aquellas **organizaciones que llevan a cabo estudios científicos** y que le proporcionan apoyo a la entidad o entidades que lo subvencionan: and their data coordinating center, entre otras.

Fecha en que caduca esta Autorización: Esta Autorización guardará vigencia hasta la fecha o eventualidad que aquí se indica:

- Fecha en que debe caducar ___/___/___ Cuando finalice el estudio No hay fecha
 Otra: _____ Indefinidamente, o para la fecha establecida por la entidad que subvenciona el estudio para que se destruyan los documentos del mismo

Se tomarán medidas para asegurar que su información médica protegida no se le divulgue a terceros que no formen parte del Equipo de Investigación. Sin embargo, puede que la ley exija que se le divulgue a individuos o a organizaciones encargados de vigilar la forma en que se realizan los estudios científicos. Puede que dichos individuos y organizaciones no se rijan por las mismas normas respecto a la privacidad por las cuales se rigen los médicos y los hospitales. Es por eso que el Equipo de Investigación no puede garantizarle confidencialidad y privacidad absolutas.

Tengo derecho a:

1. Rehusarme a firmar este formulario. Si no firmo el formulario no habrá cambios en la atención médica que recibo. Es decir, que no habrá cambios en cuanto a los tratamientos médicos, a los costos, a los requisitos que debo reunir para inscribirme en un seguro médico ni a las prestaciones que el seguro médico me pueda ofrecer. Sin embargo, si no firmo el formulario no podré participar en el estudio científico que aquí se describe.
2. Repasar y obtener copia de la información médica que se recoja acerca de mi persona en el transcurso del estudio. No obstante, para que el estudio tenga éxito y para preservar la integridad del mismo puede que a los participantes no se les permita ver ni recibir copias de dicha información hasta que no concluya el estudio. El Investigador Principal puede rehusar su permiso si considera que el acceso a la información puede poner a riesgo la integridad del mismo. Por lo tanto, si pido información, puede que no la reciba sino hasta que concluya el estudio.
3. Cancelar en cualquier momento esta autorización para la divulgación de información médica. Si decido cancelar esta autorización para la divulgación de información médica, deberé darle la notificación **por escrito** al Investigador Principal en: 699 Riley Hospital Dr, RR 208, Indianapolis, IN 46202. Tengo presente que, aunque yo cancele esta autorización para la divulgación de información médica, el Equipo de Investigación, la entidad o entidades que subvencionan el estudio científico y las organizaciones que llevan a cabo estudios científicos tienen permiso para usar la información acerca de mi persona que hayan recolectado como parte del proyecto de investigación entre la fecha en que yo firme este formulario de autorización y la fecha en que lo

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**AUTORIZACIÓN PARA LA DIVULGACIÓN DE INFORMACIÓN MÉDICA
PARA FINES DE UNA INVESTIGACIÓN CIENTÍFICA**

cancelo. Esto se hace para proteger la calidad de los resultados del estudio. Entiendo que si cancelo la autorización puede que no se me permita continuar participando en el estudio.

4. Recibir copia de este formulario.

Se me ha dado la oportunidad de revisar este formulario de autorización para la divulgación de información médica y de hacer preguntas acerca del mismo. Con mi firma en esta Autorización para la divulgación de información médica, ratifico que en el documento se expresan mis deseos.

Nombre de la persona o de su representante legal (en letra de bloque)

Firma de la persona o de su representante legal

Fecha

**Si el formulario lo firma el representante legal, por favor indique cuál es el parentesco con el participante y bajo qué autoridad tiene permiso para responder por la persona.*

***La persona:** Es menor de edad Es incompetente Está incapacitada Ha fallecido

***Autoridad judicial:**

Padre que tiene la custodia Tutela judicial

Apoderado para fines de atención sanitaria

Otra: _____

Albacea de la herencia del difunto

Representante debidamente autorizado

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AUTHORIZATION FOR THE RELEASE OF HEALTH INFORMATION FOR RESEARCH

Introduction: You have the right to decide who may review or use your Protected Health Information ("PHI"). The type of information that may be used is described below. When you consider taking part in a research study, you must give permission for your PHI to be released from your doctors, clinics, and hospitals to the research team, for the specific purpose of this research study.

What does this authorization relate to? This authorization relates to the following study:

Brenda Poindexter, MD, MS

PRINCIPAL INVESTIGATOR (in charge of Research Team) **IRB PROTOCOL # 0412-26**

SPONSOR # **U10HD27856**

NAME OF RESEARCH PARTICIPANT **BIRTHDATE**

STREET ADDRESS **CITY, STATE & ZIP CODE**

What information will be used for research purposes? The PHI that will be used for research purposes may include some or all of your health records. This includes, but is not limited to: information provided by you directly to the Research Team, hospital records and reports; admission histories, and physicals; X-ray films and reports; operative reports; laboratory reports; treatment and test results; immunizations; allergy reports; prescriptions; consultations; clinic notes; and any other medical or dental records needed by the Research Team.

Specific Authorizations: I understand that this release also pertains to records concerning hospitalization or treatment that may include the categories listed below. I have the right to specifically request that records NOT be released from my health care providers to the Research Team. However, I understand that if I limit access to any of the records listed below, I may not be able to be in this research study. Check limitations, if any, below:

- | | |
|--|--|
| <input type="checkbox"/> Mental health records | <input type="checkbox"/> Sexually transmitted diseases |
| <input type="checkbox"/> Psychotherapy Notes | <input type="checkbox"/> Alcohol / Substance abuse |
| <input type="checkbox"/> HIV (AIDS) | <input type="checkbox"/> Other: _____ |

Who will be allowed to release this information?

I authorize the following persons, groups or organizations to disclose the information described in this Release of Information/Authorization for the above referenced research study:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Treating providers | <input checked="" type="checkbox"/> Hospitals, clinics or other places where I have received treatment |
| <input type="checkbox"/> Other: _____ | <input checked="" type="checkbox"/> The Principal Investigator and the Research Staff |

Who can access your PHI for the study? The people and entities listed above may share my PHI (or the PHI of the individual(s) whom I have the authority to represent), with the following persons or groups for the research study: the Research Team, Institutional Review Board, Research Sponsor and its representatives, Research Organizations, the Department of Health & Human Services or other US or foreign government agencies as required by law, and to the Food and Drug Administration (FDA) or a person subject to the jurisdiction of the FDA in order to audit or monitor the quality, safety or effectiveness of the product or activity.

The **Research Team** includes the Principal Investigator, his/her staff, research coordinators, research technicians and other staff members who provide assistance to the Research Team. If there is a **Research Sponsor(s)**, this shall include: the National Institutes of Health and any **Research Organizations** who provided assistance to the **Research Sponsor(s)** including, but not limited to: the data coordinating center which is the Research Triangle Institute.

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AUTHORIZATION FOR THE RELEASE OF HEALTH INFORMATION FOR RESEARCH

Expiration date of this Authorization: This authorization is valid until the following date or event:

- Specify Date ___/___/___ End of the Study None
 Other: _____ Indefinitely, or until such time as authorized by the sponsor to destroy study documents

Efforts will be made to ensure that your PHI will not be shared with other people outside of the research study. However, your PHI may be disclosed to others as required by law and/or to individuals or organizations that oversee the conduct of research studies, and these individuals or organizations may not be held to the same legal privacy standards as are doctors and hospitals. Thus, the Research Team cannot guarantee absolute confidentiality and privacy.

I have the right:

1. To refuse to sign this form. Not signing the form will not affect my regular health care including treatment, payment, or enrollment in a health plan or eligibility for health care benefits. However, not signing the form will prevent me from participating in the research study above.
2. To review and obtain a copy of my personal health information collected during the study. However, it may be important to the success and integrity of the study that persons who participate in the study not be given access until the study is complete. The Principal Investigator has discretion to refuse to grant access to this information if it will affect the integrity of the study data during the course of the study. Therefore, my request for information may be delayed until the study is complete.
3. To cancel this release of information/authorization at any time. If I choose to cancel this release of information/authorization, I must notify the Principal Investigator for this study **in writing** at: 699 Riley Hospital Dr, RR 208, Indianapolis, IN 46202. However, even if I cancel this release of information/authorization, the Research Team, Research Sponsor(s) and/or the Research Organizations may still use information about me that was collected as part of the research project between the date I signed the current form and the date I cancel the authorization. This is to protect the quality of the research results. I understand that canceling this authorization may end my participation in this study.
4. To receive a copy of this form.

I have had the opportunity to review and ask questions regarding this release of information/authorization form. By signing this release of information/authorization, I am confirming that it reflects my wishes.

Printed name of Individual/Legal Representative

Signature of Individual/Legal Representative *Date*

**If signed by a legal representative; state the relationship and identify below the authority to act on behalf of the individual's behalf.*

***Individual is:** a Minor Incompetent Disabled Deceased

***Legal Authority:**
 Custodial Parent Legal Guardian Executor of Estate of the Deceased
 Power of Attorney Healthcare Authorized Legal Representative
 Other: _____

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AUTORIZACIÓN PARA LA DIVULGACIÓN DE INFORMACIÓN MÉDICA
PARA FINES DE UNA INVESTIGACIÓN CIENTÍFICA

Introducción: Usted tiene derecho a decidir quién puede ver o usar su información médica protegida (PHI, por sus siglas en inglés). En este documento se describe el tipo de información que podría utilizarse para este estudio científico. Para cualquier estudio científico, el que desee participar deberá dar permiso para que sus médicos y los hospitales y clínicas donde haya recibido tratamiento le divulguen al Equipo de Investigación la información médica protegida requerida para poder cumplir con los fines particulares del estudio.

¿A qué estudio se refiere esta autorización? Se refiere al siguiente estudio:

Brenda Poindexter, MD, MS

0412-26

INVESTIGADOR PRINCIPAL (a cargo del Equipo de Investigación) **NÚMERO DEL PROTOCOLO DE IRB**

NÚMERO DE LA ENTIDAD QUE SUBVENCIONA EL ESTUDIO: U10HD27856

NOMBRE DE LA PERSONA QUE PARTICIPA EN EL ESTUDIO CIENTÍFICO **FECHA DE NACIMIENTO**

DOMICILIO

CIUDAD, ESTADO Y CÓDIGO POSTAL

¿Qué información se utilizará para fines del estudio científico? Puede que algunos o todos los informes contenidos en su historial médico formen parte de la información médica protegida que se utilice para fines del estudio científico; entre otros: información que usted mismo le suministre al Equipo de Investigación; registros e informes de hospitales donde lo hayan tratado; historias médicas y exámenes médicos de rutina; placas e informes de radiografía; informes de operaciones; informes de laboratorio; resultados de tratamientos y de pruebas; inmunizaciones; informes de alergia; recetas médicas; consultas; apuntes clínicos; y cualquier otro registro médico o dental que necesite el Equipo de Investigación.

Autorizaciones especiales: Entiendo que en este permiso también se incluyen los registros médicos de hospitalizaciones o tratamientos de trastornos incluidos en alguna de las categorías que figuran en esta sección del formulario. Tengo derecho a pedir que los médicos y otras entidades que suministran servicios médicos NO le divulguen al Equipo de Investigación ciertos registros e informes. Sin embargo, entiendo que si limito el acceso a algún registro médico, puede que no se me permita participar en el estudio científico. Indique si tiene objeción a que se divulguen registros médicos correspondientes a trastornos y enfermedades de alguna de las siguientes categorías:

- Historial de Salud Mental
- Apuntes de psicoterapia
- VIH (SIDA)

- Enfermedades de transmisión sexual
- Abuso de alcohol o de drogas
- Otros: _____

¿A quién se le permitirá divulgar esta información?

Yo autorizo a las siguientes personas, grupos u organizaciones para que divulguen la información que se describe en esta Autorización para la divulgación de información para el estudio científico cuyas señas se dan en este documento.

Médicos y otras entidades

Hospitales, clínicas y otros lugares donde ha recibido tratamiento

Otro: _____

El Investigador Principal y el Equipo de Investigación

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AUTORIZACIÓN PARA LA DIVULGACIÓN DE INFORMACIÓN MÉDICA
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¿Quién tendrá acceso a la información médica protegida que se necesite para cumplir con los fines del estudio? Las personas y entidades que figuran en la sección anterior de este documento podrán divulgarle mi información médica protegida (o la de la persona o personas a quienes yo debidamente represento) a las siguientes personas y grupos para que se utilice para fines del estudio científico: el Equipo de Investigación, la Junta Institucional Examinadora (Institutional Review Board), la entidad que subvenciona el estudio y sus representantes, organizaciones que llevan a cabo estudios científicos, el Departamento de Salud y Servicios Humanos de Estados Unidos u otras entidades federales o de algún gobierno extranjero, según lo exija la ley, y la Administración de Drogas y Alimentos y los representantes bajo su jurisdicción que cumplen con tareas de vigilancia y control respecto a la calidad, seguridad o eficacia del producto o actividad.

El **Equipo de Investigación** consta del Investigador o Investigadora Principal, su personal, los coordinadores y técnicos del estudio científico, y demás miembros del personal de apoyo del Equipo de Investigación. Si alguna **entidad subvenciona el estudio**, también constará de: sus designados y los Institutos Nacionales de la Salud (The National Institutes of Health), y de aquellas **organizaciones que llevan a cabo estudios científicos** y que le proporcionan apoyo a la entidad o entidades que lo subvencionan: and their data coordinating center, entre otras.

Fecha en que caduca esta Autorización: Esta Autorización guardará vigencia hasta la fecha o eventualidad que aquí se indica:

- Fecha en que debe caducar ___/___/___ Cuando finalice el estudio No hay fecha
 Otra: _____ Indefinidamente, o para la fecha establecida por la entidad que subvenciona el estudio para que se destruyan los documentos del mismo

Se tomarán medidas para asegurar que su información médica protegida no se le divulgue a terceros que no formen parte del Equipo de Investigación. Sin embargo, puede que la ley exija que se le divulgue a individuos o a organizaciones encargados de vigilar la forma en que se realizan los estudios científicos. Puede que dichos individuos y organizaciones no se rijan por las mismas normas respecto a la privacidad por las cuales se rigen los médicos y los hospitales. Es por eso que el Equipo de Investigación no puede garantizarle confidencialidad y privacidad absolutas.

Tengo derecho a:

1. Rehusarme a firmar este formulario. Si no firmo el formulario no habrá cambios en la atención médica que recibo. Es decir, que no habrá cambios en cuanto a los tratamientos médicos, a los costos, a los requisitos que debo reunir para inscribirme en un seguro médico ni a las prestaciones que el seguro médico me pueda ofrecer. Sin embargo, si no firmo el formulario no podré participar en el estudio científico que aquí se describe.
2. Repasar y obtener copia de la información médica que se recoja acerca de mi persona en el transcurso del estudio. No obstante, para que el estudio tenga éxito y para preservar la integridad del mismo puede que a los participantes no se les permita ver ni recibir copias de dicha información hasta que no concluya el estudio. El Investigador Principal puede rehusar su permiso si considera que el acceso a la información puede poner a riesgo la integridad del mismo. Por lo tanto, si pido información, puede que no la reciba sino hasta que concluya el estudio.
3. Cancelar en cualquier momento esta autorización para la divulgación de información médica. Si decido cancelar esta autorización para la divulgación de información médica, deberé darle la notificación **por escrito** al Investigador Principal en: 699 Riley Hospital Dr, RR 208, Indianapolis, IN 46202. Tengo presente que, aunque yo cancele esta autorización para la divulgación de información médica, el Equipo de Investigación, la entidad o entidades que subvencionan el estudio científico y las organizaciones que llevan a cabo estudios científicos tienen permiso para usar la información acerca de mi persona que hayan recolectado como parte del proyecto de investigación entre la fecha en que yo firme este formulario de autorización y la fecha en que lo

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AUTORIZACIÓN PARA LA DIVULGACIÓN DE INFORMACIÓN MÉDICA
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cancelo. Esto se hace para proteger la calidad de los resultados del estudio. Entiendo que si cancelo la autorización puede que no se me permita continuar participando en el estudio.

4. Recibir copia de este formulario.

Se me ha dado la oportunidad de revisar este formulario de autorización para la divulgación de información médica y de hacer preguntas acerca del mismo. Con mi firma en esta Autorización para la divulgación de información médica, ratifico que en el documento se expresan mis deseos.

Nombre de la persona o de su representante legal (en letra de bloque)

Firma de la persona o de su representante legal *Fecha*

**Si el formulario lo firma el representante legal, por favor indique cuál es el parentesco con el participante y bajo qué autoridad tiene permiso para responder por la persona.*

***La persona:** Es menor de edad Es incompetente Está incapacitada Ha fallecido

***Autoridad judicial:**

- | | | |
|---|--|---|
| <input type="checkbox"/> Padre que tiene la custodia | <input type="checkbox"/> Tutela judicial | <input type="checkbox"/> Albacea de la herencia del difunto |
| <input type="checkbox"/> Apoderado para fines de atención sanitaria | | <input type="checkbox"/> Representante debidamente autorizado |
| <input type="checkbox"/> Otra: _____ | | |

AUTORIZACION PARA OBTENER INFORMACION SOBRE SALUD PARA INVESTIGACION

Usted tiene el derecho de decidir quien puede revisar o usar la Información de su Salud, la cual está protegida ("PHI"). El tipo de información que se podría usar se describe a continuación. Esta información se encuentra generalmente en su historia médica y se refiere a: su dirección y número de teléfono, resultados de laboratorio, historia médica y reportes de Rayos X. Cuando usted considera tomar parte de un estudio de investigación, debe dar permiso para que su información de salud protegida sea compartida por sus doctores, clínicas y hospitales, con el equipo de investigación, para el propósito exclusivo de ese estudio de investigación. Esta autorización se refiere al siguiente estudio:

Brenda B Poindexter M.D.	0412-26
<i>INVESTIGADOR PRINCIPAL (encargado del Equipo de Investigación)</i>	<i>PROTOCOLO DE IRB #</i>

<i>NOMBRE DEL INVESTIGADOR PARTICIPANTE</i>	<i>FECHA DE NACIMIENTO</i>
<i>DIRECCION</i>	<i>CIUDAD, ESTADO, CODIGO POSTAL</i>

La información sobre su salud protegida que usted autoriza para que sea usada por motivos de investigación podría incluir algo o toda su historia médica, incluyendo aunque sin limitarse a: información y reportes del hospital; información sobre la admisión y estado físico; placas de rayos X y reportes, reportes de operación, reportes de laboratorio, tratamiento y resultados de análisis, vacunaciones, reportes de alergias, medicinas, consultas, notas de la clínica y cualquier otra información médica que el **Equipo de Investigación** necesite.

Yo entiendo que este documento también se refiere a documentos médicos referentes a hospitalización o tratamiento, incluyendo aunque sin limitarse a la información referente a tratamiento por alcoholismo o abuso de sustancias, virus de inmunodeficiencia adquirida(HIV), o por tratamiento o consejería siquiátrica. Yo tengo el derecho de pedir que documentos específicos listados a continuación NO sean compartidos por parte de mi proveedor de servicios médicos hacia el equipo de investigación; sin embargo yo entiendo que si limito el acceso a mi información listada a continuación es posible que no pueda participar en esta investigación. Limitaciones:

- | | |
|---|--|
| <input type="checkbox"/> Información sobre Salud Mental | <input type="checkbox"/> Enfermedades transmitidas sexualmente |
| <input type="checkbox"/> Información sobre Psicoterapia | <input type="checkbox"/> Abuso de Alcohol / Substancias |
| <input type="checkbox"/> SIDA(HIV - AIDS) | <input type="checkbox"/> Otros: _____ |

Usted autoriza a las siguientes personas, grupos u organizaciones a compartir la información descrita en esta Autorización para Compartir Información para el estudio de investigación mencionado con anterioridad en este documento:

Nombre de la(s) persona(s) o grupo de personas que proveen la información; Por ejemplo, podría decir "Dr. X y su personal de investigación"; "Clarian Health Partners", "Wishard Memorial Hospital"; "VA Hospital", proveedores de servicios médicos, etc.

Las personas, grupos u organizaciones mencionadas anteriormente pueden compartir mi PHI (o el PHI de individuo(s) de quien yo tengo la autoridad de representar), con las siguientes personas o grupos (es decir Equipo de Investigación):

Nombre de la persona(s) o grupos de personas; Por ejemplo, "Dr. X y su personal trabajando en la investigación sobre diabetes".

Fecha de expiración de esta Autorización: Esta autorización es válida hasta la siguiente fecha o evento: Fecha; Final del Estudio; Ninguna; Otra:

Se hará todo lo posible en asegurar que su información de salud protegida no será compartida con otras personas que no estén involucradas con este estudio de investigación. Sin embargo, su información de salud protegida podría ser compartida por otros si es requerido por la ley y/o individuos u organizaciones que supervisen el desarrollo de los estudios de investigación, y esos individuos u organizaciones podrían no tener los mismos estándares legales sobre su privacidad como los doctores y hospitales. Por lo que el Equipo de Investigación no puede garantizar una absoluta confidencialidad y privacidad.

Yo tengo el derecho de:

1. No firmar esta forma. El hecho de no firmar esta forma no afectara la atención médica regular incluyendo tratamiento, pago o inscripción en planes de salud o la elegibilidad para beneficios de cuidado médico. Sin embargo el no firmar la forma me descalificará de participar en el estudio de investigación arriba mencionado.
2. Cancelar este documento en cualquier momento. Si yo decido cancelar este documento para autorizar compartir mi información, debo notificar a: _____ (incluir nombre u organización, dirección de la oficina o teléfono del Investigador Principal) por escrito que yo estoy pidiendo la cancelación de este documento que autoriza compartir información. Sin embargo aunque yo cancele este documento que autoriza compartir mi información, el Equipo de Investigación podría todavía usar mi información que fue recopilada como parte del proyecto de investigación entre la fecha que yo firme el documento y la fecha de cuando yo cancelo el documento. Esto es para proteger la calidad de los resultados de la investigación.
3. Recibir copia de esta documento.

Yo he tenido la oportunidad de revisar y hacer preguntas referentes a este documento que autoriza compartir información. Al firmar este documento que autoriza compartir información, yo confirmo que esto expresa mis deseos.

Nombre del Individuo/Representante Legal

Firma del Individuo/Representante Legal

Fecha

**Si esta firmado por un representante legal, especificar la relación e identificar a continuación la autoridad para actuar como representante de los intereses del individuo*

***El individuo es:**

Menor de edad Incompetente Discapacitado Fallecido

***Autoridad Legal :**

Padre/Madre con custodia Guardián Legal Ejecutor del Testamento del Difunto Poder Notarial sobre el del cuidado de la salud

Representante Legal Autorizad Otro: _____

IRB APPROVED

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AUTHORIZATION FOR THE RELEASE OF MINOR'S HEALTH INFORMATION FOR RESEARCH

Introduction: As the parent and/or legal guardian of _____ (the "Child"), you have the right to decide who may review or use the Child's Protected Health Information ("PHI"). The type of information that may be used is described below. When you consider allowing the Child to take part in a research study, you must give permission as the parent and/or legal guardian to allow the Child's PHI to be released from the Child's doctors, clinics, and hospitals to the research team, for the specific purpose of this research study.

What does this authorization relate to? This authorization relates to the following study:

Brenda B. Poindexter

PRINCIPAL INVESTIGATOR (in charge of Research Team) IRB PROTOCOL # 0412-26

SPONSOR #

NAME OF CHILD - RESEARCH PARTICIPANT

BIRTHDATE

STREET ADDRESS

CITY, STATE & ZIP CODE

What information will be used for research purposes? The PHI that will be used for research purposes may include some or all of the Child's health records. This includes, but is not limited to: information provided by you or the Child directly to the Research Team, hospital records and reports; admission histories, and physicals; X-ray films and reports; operative reports; laboratory reports; treatment and test results; immunizations; allergy reports; prescriptions; consultations; clinic notes; and any other medical or dental records needed by the Research Team.

Specific Authorizations: I understand that this release also pertains to the Child's records concerning hospitalization or treatment that may include the categories listed below. I have the right to specifically request that the Child's records NOT be released from his/her health care providers to the Research Team. However, I understand that if I limit access to any of the Child's records listed below, the Child may not be able to be in this research study. Check limitations, if any, below:

- Mental health records
- Psychotherapy Notes
- HIV (AIDS)

- Sexually transmitted diseases
- Alcohol / Substance abuse
- Other: _____

Who will be allowed to release this information?

I authorize the following persons, groups or organizations to disclose the Child's information described in this Release of Information/Authorization for the above referenced research study:

- Treating providers
- Hospitals, clinics or other places where I have received treatment
- Other: _____
- The Principal Investigator and the Research Staff

Who can access your PHI for the study? The people and entities listed above may share the Child's PHI with the following persons or groups for the research study: the Research Team, Institutional Review Board, Research Sponsor and its representatives, Research Organizations, the Department of Health & Human Services or other US or foreign government agencies as required by law, and to the Food and Drug Administration (FDA) or a person subject to the jurisdiction of the FDA in order to audit or monitor the quality, safety or effectiveness of the product or activity.

The **Research Team** includes the Principal Investigator, his/her staff, research coordinators, research technicians and other staff members who provide assistance to the Research Team. The Research Sponsor is the National

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Institutes of Health and the Research Organization who provided assistance to the Research Sponsor including, but not limited to: the data coordinating center which is the Research Triangle Institute.

Expiration date of this Authorization: This authorization is valid until the following date or event:

- | | | |
|---|--|-------------------------------|
| <input type="checkbox"/> Specify Date ___/___/___ | <input type="checkbox"/> End of the Study | <input type="checkbox"/> None |
| <input type="checkbox"/> Other: _____ | <input checked="" type="checkbox"/> Indefinitely, or until such time as authorized by the sponsor to destroy study documents | |

Efforts will be made to ensure that the Child's PHI will not be shared with other people outside of the research study. However, the Child's PHI may be disclosed to others as required by law and/or to individuals or organizations that oversee the conduct of research studies, and these individuals or organizations may not be held to the same legal privacy standards as are doctors and hospitals. Thus, the Research Team cannot guarantee absolute confidentiality and privacy.

As the Child's parent and/or legal guardian, I have the right:

1. To refuse to sign this form. Not signing the form will not affect the Child's regular health care including treatment, payment, or enrollment in a health plan or eligibility for health care benefits. However, not signing the form will prevent the Child from participating in the research study above.
2. To review and obtain a copy of the Child's personal health information collected during the study. However, it may be important to the success and integrity of the study that persons who participate in the study and their parents and/or legal guardians not be given access until the study is complete. The Principal Investigator has discretion to refuse to grant access to this information if it will affect the integrity of the study data during the course of the study. Therefore, my request for information may be delayed until the study is complete.
3. To cancel this release of information/authorization at any time. If I choose to cancel this release of information/authorization, I must notify Brenda B. Poindexter MD for this study **in writing** at: 699 West Dr. RR 208 Indianapolis IN 46202. However, even if I cancel this release of information/authorization, the Research Team, Research Sponsor(s) and/or the Research Organizations may still use information about the Child that was collected as part of the research project between the date I signed the current form and the date I cancel the authorization. This is to protect the quality of the research results. I understand that canceling this authorization may end the Child's participation in this study.
4. To receive a copy of this form.

I have had the opportunity to review and ask questions regarding this release of information/authorization form. By signing this release of information/authorization, I am confirming that I have the authority to execute this authorization on behalf of the Child.

Printed name of Parent and/or Legal Representative

Signature of Parent and/or Legal Representative

Date

**If signed by a legal representative, state the relationship and identify below the authority to act on behalf of the individual's behalf.*

***Individual is:** a Minor Incompetent Disabled Deceased

***Legal Authority:**

- | | | |
|---|--|---|
| <input type="checkbox"/> Custodial Parent | <input type="checkbox"/> Legal Guardian | <input type="checkbox"/> Executor of Estate of the Deceased |
| <input type="checkbox"/> Power of Attorney Healthcare | <input type="checkbox"/> Authorized Legal Representative | |
| <input type="checkbox"/> Other: _____ | | |

IRB APPROVED

August 27, 2008

CONSENTIMIENTO INFORMADO DE IUPUI y CLARIAN PARA EL ESTUDIO LLAMADO SUPPORT (SURfactant Positive Airway Pressure and Pulse Oximetry Trial) (Estudio con surfactante, presión positiva en la vía aérea y oximetría de pulso) en lactantes con peso extremadamente bajo al nacer

PROPÓSITO DEL ESTUDIO:

Lo invitamos a que permita que su bebé participe en un estudio de investigación en el que se analizarán dos formas de tratamiento para bebés con problemas respiratorios. Su bebé fue seleccionado como posible participante porque usted tiene menos de 28 semanas de embarazo y su bebé podría nacer antes de tiempo. La mayoría de los bebés que nacen con esa anticipación necesitan algún tipo de ayuda para respirar. Los médicos cuentan con dos maneras diferentes para ayudar a esos bebés pequeños a respirar. Algunos médicos insertan un tubo para respirar en los pulmones del bebé, le administran una medicación llamada surfactante y conectan una máquina al tubo para respirar que respira por el bebé. Esa máquina se llama ventilador o respirador. Otros médicos usan un equipo especial para un tratamiento llamado presión positiva continua en la vía aérea, o CPAP (continuous positive airway pressure), que se coloca sobre la nariz y la boca del bebé y administra aire a presión a través de la boca y la nariz en los pulmones del bebé. Con la CPAP, el bebé respira por sus propios medios; después de un tiempo, algunos bebés tratados con CPAP se cansan y necesitan que se les coloque un respirador. Con este estudio, se intentará determinar si el uso de CPAP inmediatamente después del nacimiento ayuda a disminuir la gravedad de la enfermedad pulmonar en bebés que nacen antes de término en comparación con el uso de un respirador y surfactante. En el estudio también se analizarán los rangos de saturación de oxígeno que se están usando en la actualidad con bebés prematuros. Los médicos, el personal de enfermería y otros encargados de cuidar a su bebé usan un aparato llamado oxímetro de pulso en la atención de rutina como ayuda para regular el oxígeno necesario para satisfacer las necesidades del bebé. Algunas veces se usan rangos más altos y otras, rangos más bajos. Todos los rangos que se usan son aceptables. En esta parte del estudio, queremos establecer con precisión cuál es el rango exacto que se debería utilizar para prevenir algunos de los problemas que se presentan en los bebés prematuros, como una enfermedad ocular llamada retinopatía del prematuro (Retinopathy of Prematurity, ROP) Esta enfermedad ocular se produce cuando hay un crecimiento inusual de los vasos sanguíneos en los ojos, y lleva a la formación de tejido cicatrizal alrededor de la retina y, si tracciona de la retina con suficiente fuerza, puede provocar ceguera. Se sabe que el uso prolongado de oxígeno extra aumenta la incidencia de la ROP. Se desconoce cuál es el beneficio de usar niveles más altos o más bajos de oxigenación en los bebés, en especial los prematuros. Con este estudio, se espera determinar cuál es el rango específico óptimo.

NÚMERO DE PERSONAS QUE PARTICIPARÁN EN EL ESTUDIO:

Si decide participar, su bebé será uno de los 1310 bebés que participarán en esta investigación a nivel nacional y uno de los 150 bebés a nivel local.

PROCEDIMIENTO QUE SE SEGUIRÁ EN ESTE ESTUDIO:

Si decide que su bebé participe en el estudio, el bebé recibirá uno de cuatro tratamientos posibles. Si su bebé nace antes de que usted llegue a la semana 28 del embarazo, será asignado al azar (como si se lanzara una moneda) a un grupo que recibirá CPAP en la sala de parto o a un grupo al que se le colocará un tubo para respirar y se le administrará medicación (surfactante) y luego se lo colocará en el respirador. En la actualidad, los dos métodos se usan en nuestro hospital y esperamos hallar cuál es el mejor para estos bebés tan pequeños.

Si su bebé está en el grupo que recibe CPAP, será tratado con CPAP inmediatamente después de nacer y seguirá recibiendo ese tratamiento hasta que se lo admita en neonatología. Si su bebé presenta signos de que necesita el tubo para respirar y el respirador en algún momento, el médico le administrará ese tratamiento. Si eso sucede durante las primeras 48 horas de vida del bebé, también recibirá el surfactante.

Si su bebé está en el grupo tratado con el tubo para respirar y la medicación, se le colocará el tubo y luego se lo conectará al respirador en la sala de parto y se le administrará el surfactante durante la primera hora de vida.

Durante los primeros 14 días de vida de su bebé, los médicos seguirán una serie de pautas en la sala de cuidados intensivos neonatales. Esas pautas ayudan a los médicos a decidir cuándo es necesario colocar a los bebés el respirador y cuándo deben tratar de sacarles el respirador. Esas pautas también les ayudarán a decidir

cuándo deben administrar CPAP a los bebés o suspenderla. Todos los médicos que atienden a su bebé han acordado esas pautas.

Los bebés que participen en este estudio también serán asignados al azar (una vez más, como si se lanzara una moneda) a un grupo monitorizado con rangos de saturación de oxígeno más bajos o más altos. La saturación del oxígeno del bebé se mide con un aparato llamado oxímetro de pulso, que utiliza un pequeño sensor que se coloca en la mano o el pie del bebé y puede proporcionar a los médicos una medición de la cantidad de oxígeno que hay en la sangre del niño. Los oxímetros de pulso no son dolorosos y pueden proporcionar mediciones de la saturación del oxígeno las 24 horas del día. El nivel de saturación que se intentará alcanzar en los bebés asignados al rango más bajo será de 85-89%, mientras que en los bebés asignados al rango más alto se intentará alcanzar un nivel de 91-95%. Todas esas saturaciones se consideran rangos normales para los bebés prematuros. Si la saturación disminuye a menos de 85% o sube a más de 95%, el oxímetro de pulso emitirá una señal de alerta para que los médicos y enfermeros sepan cuándo deben aumentar o disminuir la cantidad de oxígeno de su bebé.

Su bebé participará en la parte del tratamiento con CPAP o tubo para respirar del estudio durante los primeros 14 días de vida. Después de los primeros 14 días, se lo seguirá monitorizando con el monitor de saturación mientras siga recibiendo oxígeno extra. Una vez que su bebé haya pasado 72 horas sin oxígeno suplementario, se desconectará el monitor de la saturación. Se recolectará información del registro médico una vez que su bebé haya recibido el alta del hospital. Cuando su bebé tenga entre 18 y 22 meses de edad, lo revisarán en la Clínica de seguimiento de recién nacidos para realizar una evaluación. En esa evaluación se incluirá un examen completo de los músculos, nervios y destrezas motoras y mentales. Ese examen lo realizarán pediatras con entrenamiento especial en desarrollo y psicólogos especialistas en la atención de bebés que nacieron prematuros. Después de esa evaluación, la participación de su bebé en este estudio terminará.

RIESGOS DE PARTICIPAR EN EL ESTUDIO:

Los riesgos posibles del uso de CPAP incluyen que el estómago se distienda y que la frecuencia cardíaca se vuelva más lenta temporalmente. Otro riesgo posible es el colapso de uno de los pulmones o de los dos. El uso de CPAP en el nivel que se empleará en este estudio no aumenta el riesgo de colapso de los pulmones. Esos riesgos están presentes durante el uso de rutina de la CPAP; la participación en este estudio no aumenta esos riesgos.

Al igual que con el uso de la CPAP, uno de los posibles riesgos de colocar un tubo para respirar y un respirador es que puede hacer que la frecuencia cardíaca se vuelva más lenta temporalmente o que uno o los dos pulmones colapsen. Otro riesgo es la posibilidad de que se produzca una lesión punzante en la vía aérea. Otros riesgos posibles son los hematomas o cortes en la lengua, las encías o la vía aérea. Una vez más, esos riesgos forman parte del uso de rutina del tubo para respirar y el respirador, y la participación en este estudio no aumenta esos riesgos.

Otros riesgos potenciales durante el período inmediatamente posterior al nacimiento incluyen la necesidad de compresiones torácicas, medicación de rescate e incluso la muerte. El uso de cualquiera de estos procedimientos (CPAP o el tubo para respirar) no aumentará esos riesgos.

Los oxímetros de pulso se utilizan de forma rutinaria en miles de salas de cuidado intensivo neonatal en todo el país todos los días. No existen riesgos conocidos para su bebé derivados de la monitorización con los oxímetros de pulso utilizados en este estudio. El personal de enfermería que atienda a su bebé minimizará el posible riesgo de lacerar la piel en el sitio de colocación cambiando el sensor de brazo o de pie a lo largo del día. El oxímetro de pulso se utilizará en su bebé ya sea que participe del estudio o no.

BENEFICIOS DE PARTICIPAR EN EL ESTUDIO:

Su bebé puede recibir un beneficio adicional o no con su participación en este estudio. Es posible que el grupo que recibe CPAP se beneficie ya que quizás no necesite un soporte respiratorio adicional. Es posible que no sea

necesario medicar a su bebé con surfactante. También es posible que el uso que los valores más bajos de los rangos de saturación normal se traduzca en que menos bebés sufran problemas oculares graves.

OPCIONES EN CUANTO A PARTICIPAR EN EL ESTUDIO:

Si no desea que su bebé participe en este estudio, el niño recibirá la atención de rutina que se brinda en la sala de parto inmediatamente después del nacimiento y permanecerá en la sala de cuidado intensivo neonatal, lo cual puede incluir el uso de CPAP, tubo para respirar/respirador y surfactante o no. También se medirá la saturación del oxígeno del bebé con un oxímetro de pulso en los rangos de 85-95%.

CONFIDENCIALIDAD:

Se tomarán medidas para guardar la información personal de su bebé de forma confidencial. No podemos garantizar la confidencialidad absoluta. Puede que la información personal de su bebé se divulgue si así lo requiere la ley. La identidad de su bebé se tratará de forma confidencial en los informes en que se publique el estudio.

Hay organizaciones y entidades que llevan el control de la calidad y otras que realizarán análisis de datos, a las cuales se permitirá estudiar y copiar los registros del estudio que tienen que ver con su bebé y que pueden incluir, entre otras: la investigadora y sus auxiliares, la Junta Institucional Examinadora de IUPUI/Clarian y sus designados y los Institutos Nacionales de la Salud (National Institutes of Health, NIH).

COSTOS/COMPENSACIÓN:

Participar en este estudio no acarreará costos adicionales para usted o la compañía de seguros del bebé.

No se le pagará por participar en este estudio.

Si su produjera una lesión como resultado de la participación de su bebé en esta investigación, se le suministrará el tratamiento médico necesario. Los costos de dicho tratamiento se facturan con el resto de sus gastos médicos de su bebé. Usted debe pagar los costos que no cubra el seguro médico de su bebé. Además, a usted le corresponde averiguar qué cubre el seguro médico de su bebé. No tenemos un programa para ofrecer otro tipo de compensación económica por ese tipo de lesiones. No obstante, su bebé no renuncia a ningún derecho o prestación a los que de otra forma tendría derecho.

PERSONAS A QUIENES DIRIGIRSE SI TIENE PREGUNTAS O SURGE ALGÚN PROBLEMA:

Si tiene preguntas acerca del estudio o acerca de una lesión debida a su participación en el mismo, comuníquese con la investigadora Dra. Brenda B. Poindexter al 317 -274-4716. Si no puede comunicarse con la investigadora durante horas de oficina (de 8:00 am a 5:00 pm), se le ruega que llame a la oficina llamada IUPUI/Clarian Research Compliance Administration (entidad que se ocupa de que los estudios de investigación se rijan por ciertas pautas) al 317/278-3458 o al 800/696-2949. Si necesita comunicarse fuera de las horas de oficina, se le ruega que llame al neonatólogo de guardia al 317-274-6648.

Si se trata de una emergencia, puede comunicarse con el neonatólogo de guardia al 317-274-6648.

Si tiene preguntas acerca de los derechos de los que goza su bebé en calidad de participante de un estudio de investigación o si necesita reportar una queja, comuníquese con la oficina llamada IUPUI/Clarian Research Compliance Administration (entidad que se ocupa de que los estudios de investigación se rijan por ciertas pautas) al 317/278-3458 o al 800/696-2949.

CARÁCTER VOLUNTARIO DE LA PARTICIPACIÓN EN EL ESTUDIO:

La participación en este estudio es voluntaria. Puede optar por no permitir que su bebé participe del estudio o bien que se retire en cualquier momento que desee hacerlo. En caso de retirarse, no se le sancionará ni perderá los beneficios a los que su bebé tenga derecho.

CONSENTIMIENTO DEL PARTICIPANTE EN EL ESTUDIO:

En virtud de lo expuesto en este documento, doy mi consentimiento para que mi hijo participe en este estudio de investigación.

Acuso recibo de una copia de este consentimiento informado.

NOMBRE DEL BEBÉ: _____ Fecha: _____

FIRMA DEL PADRE O DE LA MADRE: _____ Fecha: _____

FIRMA DEL PADRE O DE LA MADRE: _____ Fecha: _____

FIRMA DE LA PERSONA QUE OBTUVO EL CONSENTIMIENTO: _____ Fecha: _____

IRB Approval Date: <u>Aug 27, 2008</u>
Continuing Review Date: <u>Aug 27, 2009</u>

IUPUI and CLARIAN INFORMED CONSENT STATEMENT FOR

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

STUDY PURPOSE:

You are invited to have your baby participate in a research study looking at two ways in which babies are treated for breathing problems. Your baby was selected as a possible participant because you are less than 28 weeks pregnant and your baby may be born early. Most babies born this early need some type of help to breathe. Doctors have two different ways they use to help these small babies breathe. Some doctors insert a breathing tube down into your baby's lungs, give a medication called surfactant, and attach a machine to the breathing tube that will breathe for your baby. This machine is called a ventilator or respirator. Other doctors use a special piece of equipment called continuous positive airway pressure, or CPAP, that is placed over the baby's nose and mouth and applies air pressure thru the mouth and nose into the baby's lungs. With CPAP, the baby is breathing on his/her own; some babies who are placed on CPAP eventually get tired and need to be placed on a respirator. This study is trying to determine if using CPAP versus using a ventilator and surfactant immediately after birth will help decrease the severity of lung disease in babies who are born early. This study is also looking at the ranges of oxygen saturation that are currently being used with premature babies. Doctors, nurses, and others taking care of your baby use a machine called a pulse oximeter in routine daily care to help them adjust the oxygen to meet the baby's needs. Sometimes higher ranges are used and sometimes lower ranges are used. All of them are acceptable ranges. In this part of the study, we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as eye disease, called Retinopathy of Prematurity (ROP). This eye disease happens when there is unusual growth of blood vessels in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough it can cause blindness. It is known that ROP is increased by the prolonged use of extra oxygen. The benefit of higher versus lower levels of oxygenation in babies, especially premature babies, is not known. This study hopes to determine what specific range is the best. Another goal of the study is to (delete also) compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when your infant would have been born at full-term, to determine if one method of imaging gives more useful information than the other. The results will then be compared to the physical and developmental exams your infant will have when he/she is 18-22 months old and may help to determine which oxygen range is best for premature babies. Finally, to determine the effect of the SUPPORT Study treatment on your infant's breathing health, phone interviews will be conducted after your infant's discharge from the hospital. During these interviews, you will be asked questions about whether your baby has experienced any breathing difficulties since being discharged from the hospital.

NUMBER OF PEOPLE TAKING PART IN THE STUDY:

If you agree to participate, your baby will be one of 1310 babies who will be participating in this research nationally, and one of 150 babies locally.

PROCEDURE FOR THE STUDY:

If you agree for your baby to be in the study, your baby will be treated in one of four ways. If your baby is born before you reach your 28th week of pregnancy he/she will randomly (like a flip of a coin) be placed into a group that receives CPAP use in the delivery room or into a group that receives placement of the breathing tube, medication (surfactant), and then placed on the breathing machine. Both ways are currently used in our hospitals and we hope to find out which is the better way for these tiny babies.

If your baby is in the CPAP group, he/she will be treated with CPAP immediately after birth and will remain on it upon admission to the nursery. If your baby shows signs of needing the breathing tube and machine at any time, then your baby's doctor will provide this for him/her. If this happens within the first 48 hours of life your baby will also receive the surfactant medication.

If your baby is in the breathing tube/medication group, he/she will have the tube placed and will be placed on the breathing machine in the delivery room and will be given the surfactant medication with the first hour after birth.

For your baby's first 14 days of life, there will be guidelines for the doctors in the intensive care nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines also will help decide when to put them on or take them off of CPAP. These guidelines have been agreed upon by all the doctors taking care of your baby.

The babies in this study will also be placed randomly (again, like a flip of the coin) into a group monitored with lower oxygen saturation ranges or higher oxygen saturation ranges. Oxygen saturation is measured on a baby with a machine called a pulse oximeter. It uses a tiny sensor on the hand or foot of the baby and can give the doctors a measurement of how much oxygen is in the baby's blood. Oximeters are not painful and can provide oxygen saturation measurements 24 hours a day. The babies in the lower range group will have a target saturation of 85-89%, while the babies in the higher range group will have a target range of 91-95%. All of these saturations are considered normal ranges for premature babies. If the saturation falls below 85% or higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby's oxygen up or down.

Your baby will be involved in the CPAP or breathing tube part of the study for the first 14 days after his/her birth. After the first 14 days, he/she will still be monitored with the saturation monitor as long as he/she is receiving extra oxygen. Once your baby has been off of oxygen for 72 hours, then the saturation monitor may be discontinued. Information will be gathered from the medical record once your baby has been discharged from the hospital. When your baby is 18-22 months old, he/she will be seen in the Newborn Follow-up Clinic for an evaluation. This evaluation will include a complete examination of the muscles, nerves, and mental and motor skills. This examination will be given by specially trained developmental pediatricians and psychologists who are experts at providing care for former premature babies. After this evaluation, your baby's participation in this study will end.

Part of your infant's regular care during the first few months after birth will include one or more head ultrasounds to check for brain injury, including at about the time he/she would normally have been born. If you decide to allow your infant to be in this study, he/she will also have a brain MRI and another head ultrasound within about a month of his/her intended due date. MRI is a method of making pictures of both normal and abnormal changes within the body. It is based on the relationship between atoms within the body when placed inside a large magnet. MRI uses a magnetic field to make images of the inside of the body. Your infant will be placed on a long narrow couch for 20 to 30 minutes while the machine gathers data. During this time, your infant will not be exposed to radiation or X-rays but, rather, a strong magnetic field and radiofrequency magnetic fields. Your baby will not feel either. Your baby will, however, hear repetitive tapping noises that arise from the gradient coils of the MRI machine. We will provide earmuffs that your baby will wear. Generally, infants who are fed, wrapped in warm blankets, and have earmuffs in place, sleep through MRIs. The ultrasound and MRI pictures of your baby's brain will be looked at by radiologists at your baby's hospital (doctors who are specialists in X-rays and other pictures of the body). Your doctors will tell you what they find. Because this is a study that involves babies from many hospitals across the United States, all of the ultrasound and MRI pictures of the brain from all the babies who participate in this study will also be seen by other radiologists who will look at all the pictures from all the babies.

Many children who were born prematurely and needed help to breathe continue to have breathing problems such as wheezing and coughing in the first two years of life. We would like to stay in touch with you by telephone when your baby goes home and continuing every 6 months for a total of four times. At these times, we will ask questions about your child's breathing, medication use, and visits to a doctor, emergency room or hospital for treatment of breathing problems. We will also ask several questions about you and your family. Each call should take about 15 minutes. You do not need to answer any questions that make you uncomfortable.

The results from your baby's questionnaire will be combined with other infants from around the country. However, your infant's name will not be used.

RISKS OF TAKING PART IN THE STUDY:

The possible risks of using CPAP include stomach bloating and a temporary slowing of the heart rate. Another possible risk is collapsing one or both of the lungs. Use of the CPAP at the level used in this study does not increase the risk of collapsed lungs. These risks are present during the routine use of CPAP; involvement in this study does not increase these risks.

Like with the use of CPAP, a possible risk of placing a breathing tube and machine may include a temporary slowing of the heart rate or possibly the collapse of one or both lungs. Another risk is the possibility of the airway being punctured. Other possible risks include bruising or cutting of the tongue, gums or airway. Again, these risks are present during routine use of the breathing tube and machine. Involvement in this study does not increase these risks.

Other potential risks during the time immediately after birth include the need for chest compressions, rescue medications, and even death. The use of either of these procedures (CPAP or the breathing tube) will not increase these risks.

Pulse oximeters are used routinely in thousands of intensive care nurseries all across the country every day. There is no known risk to your baby from monitoring with the pulse oximeters used for this study. The possible risk of skin breakdown at the site will be minimized by your baby's nurse, moving the sensor to another arm or foot a few times a day. The pulse oximeter will be used for your baby whether or not your baby is in the study.

All of the imaging proposed in this study is within standard of care; there is no predictable increase in risk for your baby. Some unknown risks may be learned during the study. You will be told of any new information that is learned which may affect your child's condition or influence your willingness to have him/her continue participation in this study. The only other risk of this study is risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

BENEFITS OF TAKING PART IN THE STUDY:

There may or may not be any extra benefit to your baby taking part in this study. It is possible that group that receives CPAP might benefit by not needing additional breathing support. He/she may not require the surfactant medication. It is also possible that using the lower part of the normal saturation ranges will result in fewer babies with severe eye problems.

All infants in the study may benefit from the MRI that is conducted. Infants may benefit if they detect brain injury, which will allow for earlier intervention than would normally occur. It is also possible that your baby will receive no direct benefit. The knowledge learned from this study may help us treat babies in the future.

ALTERNATIVES TO TAKING PART IN THE STUDY:

If you do not want your baby to participate in this study, he/she will receive the routine care for premature infants. This may or may not include use of CPAP, the breathing tube/machine and the surfactant medication. He/she will also have oxygen saturation measured by a pulse oximeter in the ranges of 85-95% as well.

CONFIDENTIALITY:

Efforts will be made to keep your baby's personal information confidential. We cannot guarantee absolute confidentiality. Your baby's personal information may be disclosed if required by law. Your baby's identity will be held in confidence in reports in which the study may be published.

Organizations that may inspect and/or copy your baby's research records for quality assurance and data analysis include groups such as the investigator and his/her research associates, the IUPUI/Clarian Institutional Review Board or its designees, the National Institutes of Health (NIH) and the data coordinating center, Research Triangle Institute.

COSTS/COMPENSATION:

Taking part in this study will not lead to added costs to you or your baby's insurance company. The cost of the MRI and head ultrasound procedures for the sole purpose of research is paid for by the National Institute of Health (NIH), the study sponsor.

You will not receive payment for taking part in this study.

In the event of physical injury resulting from your baby's participation in this research, necessary medical treatment will be provided to your baby and billed as part of your baby's medical expenses. Costs not covered by your baby's health care insurer will be your responsibility. Also, it is your responsibility to determine the extent of your baby's health care coverage. There is no program in place for other monetary compensation for such injuries. However, your baby is not giving up any legal rights or benefits to which your baby is otherwise entitled.

CONTACTS FOR QUESTIONS OR PROBLEMS:

For questions about the study or a research-related injury, contact the researcher Brenda B. Poindexter MD at 317-274-4716. If you cannot reach the researcher during regular business hours (i.e. 8:00AM-5:00PM), please call the IUPUI/Clarian Research Compliance Administration office at 317/278-3458 or 800/696-2949. After business hours, please call the neonatologist on call at 317-274-6648.

In the event of an emergency, you may contact the neonatologist on-call at 317-274-6648.

For questions about your baby's rights as a research participant or complaints about a research study, contact the IUPUI/Clarian Research Compliance Administration office at 317/278-3458 or 800/696-2949.

VOLUNTARY NATURE OF STUDY:

Taking part in this study is voluntary. You may choose for your baby not to take part or your baby may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which your baby is entitled.

SUBJECT'S CONSENT:

In consideration of all of the above, I give my consent for my baby to participate in this research study.

I acknowledge receipt of a copy of this informed consent statement.

BABY'S NAME: _____ Date: _____

SIGNATURE OF PARENT: _____ Date: _____

SIGNATURE OF PARENT: _____ Date: _____

SIGNATURE OF PERSON OBTAINING CONSENT: _____ Date: _____

Approval Date: <u>Nov 14, 2008</u>
Continuing Review Date: <u>August 27, 2009</u>



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

DEPARTMENT OF PEDIATRICS

SECTION OF NEONATAL-
PERINATAL MEDICINE

James Whitcomb Riley
Hospital for Children
699 West Drive, RR 208
Indianapolis, Indiana
46202-5119

317-274-4716
Fax: 317-274-2065

To the Parents/Guardian of _____,

We thank you, again, for your support in our research here at Riley Children's Hospital and Riley at Methodist Hospital. We are continually learning from all of the research we do here, as well as continuing the research we've started to achieve long term outcome data. I am requesting permission for you to allow us to contact your family when your child is between 6-7 years corrected age for further follow up to the SUPPORT Trial. There is a potential for additional research regarding this study, so signing this form gives permission for us to continue to keep in touch, maintain up to date contact information, and discuss those opportunities. By signing this permission form, you are only allowing us to contact your family, not enrolling in any studies. Please don't hesitate to contact me with any questions or concerns. Thank you for your dedication to research and we look forward to joining with your family again in the future.

Sincerely,

Faithe Hamer

NICHD Follow-Up Coordinator

fahamer@iupui.edu

Ph: 317-278-7364

Pager: 312-2687

If you would like to participate, please sign and date the enclosed form and return it in the postage-paid envelope.



INDIANA
UNIVERSITY
SCHOOL OF
MEDICINE

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

I give permission for Riley Children's Hospital neonatal research staff to maintain contact with my family for potential research opportunities in connection with the SUPPORT trial.

Printed Name of Parent/Guardian: _____

Signature of Parent/Guardian: _____ Date _____

Signature of staff upon receipt: _____ Date _____

Best Contact Information:

Address: _____

Phone: _____ (Home)
_____ (Moms Cell)
_____ (Dads Cell)

Closest Contact Person/Relative:

Name: _____

Phone: _____

Patient's Name: _____

Patient's MRN: _____

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 05/19/08
EXPIRATION DATE: 05/19/09

INFORMED CONSENT DOCUMENT

Project Title: **The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants**

Research Team: **Edward Bell, MD**
Michael Acarregui, MD
Gretchen Cress, BSN, RN
Karen Johnson, BSN, RN
Laura Knosp, BSN, RN
Nancy Krutzfield, MSN
Ruthann Schrock, BSN
John Widness, MD
Sara Scott, BSN, RN

This consent form describes the research study to help you decide if you want to participate and allow your child to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not sign this form unless the study research team has answered your questions and you decide that you want to be part of this study.
- Your decision will not affect your infant's right to medical care that is not research-related.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We are inviting you and your child to participate in this research study because there is a possibility that he/she will be born 12-16 weeks early (at 24 to 28 weeks of pregnancy).

There are 5 purposes of this research study:

- The first is to compare two ways of helping babies who were born prematurely and have difficulty breathing. One way is by using a mask or tube in the baby's nose, called CPAP (continuous positive airway pressure) to assist the baby with his/her breathing immediately after birth and continuing in the NICU. The second way is using a breathing tube in the baby's windpipe, mechanical ventilation and a drug called surfactant, which is given into the breathing tube. We will compare these two to see if there is a difference in the amount of breathing help the babies require and how long they will continue to need this help during the first two weeks of life.
- The second purpose is to compare babies who have oxygen saturations kept in the high end of the normal range with babies who have oxygen saturations kept in the low end of the normal range.
- The third purpose is to compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when a baby would normally be born, to determine if one method of imaging gives more useful information than the other.

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- The fourth purpose is to compare outcomes of babies in the two oxygen saturation ranges after they go home, particularly in regards to any wheezing or chronic coughing they might have.
- The fifth purpose is to compare outcomes of babies in the two oxygen saturation ranges after they go home, particularly in regards to their growth.

HOW MANY PEOPLE WILL PARTICIPATE?

Approximately 75 babies and their mothers will take part in this study at the University of Iowa. This study is being conducted at 15 other centers, and the total number of babies and mothers in all the centers combined will be approximately 1300.

HOW LONG WILL I BE IN THIS STUDY?

If you agree for yourself and your baby to take part in this study, your involvement will last until your baby is 18-22 months old.

WHAT WILL HAPPEN DURING THIS STUDY?

A few minutes before your baby is born, (s)he will be randomly assigned, like the flip of a coin, to either the “CPAP” group or “Intubation” group to manage his/her breathing immediately after birth.

The first assignment will determine his/her care in the delivery room as follows:

If your baby is randomized to the CPAP group, a mask or tube in the nose will be used immediately after birth to assist your baby with his/her breathing in the delivery room and continued when he/she is admitted to the NICU. If your baby requires more help with his/her breathing, a breathing tube will be placed in the windpipe and the ventilator used. Your baby will receive all routine care for premature babies with breathing problems. This may include giving a medication called surfactant into the lungs through the breathing tube.

If your baby is randomized to the Intubation group, your baby will have a breathing tube placed in the windpipe in the delivery room and will be admitted to the NICU. Your baby will receive all routine care for premature babies with breathing problems. This will include giving a medication called surfactant into the lungs through the breathing tube.

The second treatment assignment will determine which end of the normal oxygen saturation range (high or low end) will be used as follows:

When your baby is admitted to the NICU, he/she will be randomized (assigned by chance similar to the flip of a coin) to be kept in a certain oxygen saturation range. This will determine if your baby will have his/her oxygen saturation level kept in the high or low part of the normal oxygen saturation range. The study oximeter (blood oxygen monitor) will be used for as long as your baby is requiring oxygen and until he/she has been in room air (no extra oxygen) for at least 3 days. We don't know which level is best for premature infants and that is why we're doing the study.

Other aspects of your infant's care will be the standard treatments for premature babies in the UIHC

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NICU.

All babies in the study will have the following:

We will measure your baby's weight (using the scale routinely used), length (using a special board to measure premature babies), and head circumference (using the paper measuring tape routinely used) when he/she is 7, 14, 21 and 28 days old, at the time your baby is 32 weeks gestation (about 8 weeks before his/her due date), at the time your baby is 36 weeks gestation (about 4 weeks before his/her due date) and right before he/she is discharged.

All babies born prematurely at UIHC routinely have ultrasounds of their heads. Your baby will have the routine ultrasounds of his/her head as well as a test called a MRI (Magnetic Resonance Imaging) study. The ultrasound is a painless procedure where a probe is placed on your baby's soft spot and a picture is made by sound waves. The MRI is a specialized brain scan that takes detailed pictures of the brain structure and can detect normal and abnormal brain tissue. It is very likely that we will need to sedate your baby (giving medication to help relax him/her) during the procedure. The MRI will be done around the time when your baby would normally have been born. Your baby will be swaddled and monitored throughout the procedure.

All babies who participate in the project will return to the UIHC High Risk Infant Follow-up Clinic at regular intervals during the first two years. When the children enrolled in this study return for their 18-22 month old assessments of growth and development, the study will collect information at that visit. The information collected will include who takes care of your baby, what their marital status is, what their income and medical insurance are, who lives in the household with the baby, the baby's medical history, and the results of the physical exam and developmental testing.

To learn about the breathing outcomes of babies in the study, we will interview you before your baby is discharged from the hospital. At this interview, we will ask you questions about your family, including questions about family history of breathing problems, and questions about your home, including things that may increase your child's risk of breathing problems. The interview will take about 15 minutes.

We will continue to stay in touch with you and your infant by telephone or in person at one of your visits every 6 months over the next 18-22 months, a total of three times. At these times, we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask you several questions about your family and yourself. You do not need to answer any questions that make you uncomfortable. The entire call should take about 15 minutes of your time, less if your baby has had no breathing problems.

We will schedule the telephone calls at a time that is convenient for you. The telephone calls will occur when your infant is 6, 12, and 18 months after his/her expected delivery at full term.

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The following chart is a summary of what will happen and when:

At Delivery	Days of Life 7, 14, 21, 28, 32 weeks, 36 weeks
CPAP or Intubation with Surfactant Higher or lower oxygen saturation assignment Ends at 14 days of life	Measurements (weight, length, head)
35 to 42 weeks gestation (around "term")	At discharge
Head ultrasound and MRI	Measurements (weight, length, head)
6 months of age, 12 months of age	18-22 months of age
Interview (by phone or in person)	Interview (by phone or in person) High Risk Infant Follow-up Clinic visit

WHAT ARE THE RISKS OF THIS STUDY?

There may be some risks from being in this study. The use of CPAP and intubation in managing infants' breathing are within usual standard of care at UIHC NICU. CPAP and intubation with ventilation have the risk of trauma to the airway, abnormal lung damage by air getting into the tissues, and the possibility that the tube may cause air to get into the stomach.

During the brain MRI we will need to attach monitors to your infant to keep track of his or her heart rate and respiration. The tape we use to attach the electrodes may cause temporary minor skin irritation. The MRI makes a loud, banging noise while it is taking pictures. A set of special earmuffs will be placed over your child's ears to help with the noise. There are no known harmful effects from exposure to magnetic fields (MRI). However, some patients undergoing this procedure become anxious. If sedation is necessary, risks from the medication used include decreased blood pressure and the possibility of breathing difficulty. Your baby's heart rate and respiration will be closely monitored.

Some of the interview questions may make you uncomfortable. You may choose not to answer any or all of the questions

Are there any Unforeseen Risks?

In addition to the risks described above, there may be unknown risks, or risks that we did not anticipate, associated with being in this study.

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WHAT ARE THE BENEFITS OF THIS STUDY?

We don't know if you or your baby will benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because the knowledge learned may help in the understanding of the use of CPAP or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It may also help us to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation. We may also gain knowledge about using MRI to detect brain injuries. Finally, knowledge may be gained about the effects of CPAP and oxygen on breathing and growth outcomes of premature infants.

WHAT OTHER TREATMENT OPTIONS ARE THERE?

Before you decide whether or not you want your baby to be in this study, your doctor will discuss the other options that are available to you. Instead of being in this study, you could choose to have your baby treated in the routine way, which may include help with his/her breathing in the delivery room and NICU using the mask, tube in the nose or breathing tube in the windpipe with a ventilator, surfactant and an oximeter to monitor oxygen saturations.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You and your baby will not have any additional costs for being in this research study.

You and/or your medical/hospital insurance carrier will remain responsible for your and your baby's regular medical care expenses.

WILL I BE PAID FOR PARTICIPATING?

You and your baby will not be paid for being in this research study.

WHO IS FUNDING THIS STUDY?

The National Institute of Health, NICHD Neonatal Research Network is funding this research study. This means that the University of Iowa is receiving payments from The National Institute of Health, NICHD Neonatal Research Network to support the activities that are required to conduct the study. No one on the research team will receive a direct payment or increase in salary from The National Institute of Health, NICHD Neonatal Research Network for conducting this study.

WHAT IF I AM INJURED AS A RESULT OF THIS STUDY?

- If either you or your baby is injured or becomes ill from taking part in this study, medical treatment is available at the University of Iowa Hospitals and Clinics.

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- No compensation for treatment of research-related illness or injury is available from the University of Iowa unless it is proven to be the direct result of negligence by a University employee.
- If either you or your baby experiences a research-related illness or injury, you and/or your medical or hospital insurance carrier will be responsible for the cost of treatment.

WHAT ABOUT CONFIDENTIALITY?

We will keep your and your baby's participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your or your baby's participation in this study. For example, federal government regulatory agencies, The National Institute of Health, NICHD Neonatal Research Network, auditing departments of the University of Iowa and the University of Iowa Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you or your baby.

To help protect your and your baby's confidentiality, we will label information with a code number. The study logs linking the code number with your infant's identity will be kept in a locked office, in a locked file cabinet and password-protected computer files. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you and your baby cannot be directly identified.

A copy of this Informed Consent Document will be placed in your and your baby's medical record.

WILL MY HEALTH INFORMATION BE USED DURING THIS STUDY?

The Federal Health Insurance Portability and Accountability Act (HIPAA) requires University of Iowa Health Care to obtain your permission for the research team to access or create "protected health information" about you for purposes of this research study. Protected health information is information that personally identifies you and your baby and relates to your and your baby's past, present, or future physical or mental health condition or care. We will access or create health information about you and your baby, as described in this document, for purposes of this research and for your baby's treatment. Once University of Iowa Health Care has disclosed your protected health information to us, it may no longer be protected by the Federal HIPAA privacy regulations, but we will continue to protect your and your baby's confidentiality as described under "Confidentiality."

We may share your health information related to this study with other parties including federal government regulatory agencies, the University of Iowa Institutional Review Boards and support staff, and The National Institute of Health, NICHD Neonatal Research Network. You and your baby cannot participate in this study unless you permit us to use your and your baby's protected health information. If you choose *not* to allow us to use your protected health information, we will discuss any non-research alternatives available to you. Your decision will not affect your right to medical care that is not research-related. Your signature on this Consent Document authorizes University of Iowa Health Care to give us permission to use or create health information about you and your baby.

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Although you may not be allowed to see study information until after this study is over, you may be given access to your and your baby's health care records by contacting your health care provider. Your permission for us to access or create protected health information about you and your baby for purposes of this study has no expiration date. You may withdraw your permission for us to use your and your baby's health information for this research study by sending a written notice to: Dr. Edward Bell
University of Iowa Hospitals & Clinics
200 Hawkins Drive
Dept. of Pediatrics, 8811 JPP
Iowa City, Iowa 52242

However, we may still use your and your baby's health information that was collected before withdrawing your permission. Also, if we have sent your and your baby's health information to a third party, such as the study sponsor, or we have removed your identifying information, it may not be possible to prevent its future use. You will receive a copy of this signed document.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose for you and/or your baby not to take part at all. If you choose for your baby to be in this study, you may stop your and his/her participation at any time. If you decide not to have you and/or your child be in this study, or if you decide to stop you or your baby from participating at any time, you and your baby won't be penalized or lose any benefits for which you otherwise qualify.

Will I Receive New Information About the Study while Participating?

If we obtain any new information during this study that might affect your willingness to continue participating or to let your baby continue participating in the study, we'll promptly provide you with that information.

Can Someone Else End my Participation in this Study?

Under certain circumstances, the researchers or the study sponsor might decide to end your and your baby's participation in this research study earlier than planned. This might happen because your baby needs to be treated in a way outside the study protocol or because funding for the research study is ended.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Dr. Edward Bell at (319)356-4006 or Karen Johnson, R.N. at (319)356-2924.

If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contact the Human Subjects Office, 340 College of Medicine Administration Building, The University of Iowa, Iowa City, Iowa, 52242, (319) 335-6564, or e-mail irb@uiowa.edu. General information about being a research subject can be found by clicking "Info for Public" on the Human Subjects Office web site, <http://research.uiowa.edu/hso>.

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This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by signing this Informed Consent Document. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Parent Subject's Name (printed): _____

(Signature of Parent Subject)

(Date)

Parent/Guardian or Legally Authorized Representative's Name and Relationship to Subject:

Child Subject's Name (printed): _____

(Parent/Guardian Name - printed)

(Relationship to Subject - printed)

(Signature of Parent/Guardian or Legally Authorized Representative)

(Date)

Statement of Person Who Obtained Consent

I have discussed the above points with the subject or, where appropriate, with the subject's legally authorized representative. It is my opinion that the subject understands the risks, benefits, and procedures involved with participation in this research study.

(Signature of Person who Obtained Consent)

(Date)

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IRB ID #: 200605740
APPROVAL DATE: 04/29/10
EXPIRATION DATE: 04/29/11

INFORMED CONSENT DOCUMENT

Project Title: **The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants -- Follow Up**

Research Team: **Edward Bell, MD**
Michael Acarregui, MD
Gretchen Cress, BSN, RN
Karen Johnson, BSN, RN
Laura Knosp, BSN, RN
Nancy Krutzfield, MSN
Ruthann Schrock, BSN
John Widness, MD
Sara Scott, BSN, RN

This consent form describes the research study to help you decide if you want to participate and allow your child to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not sign this form unless the study research team has answered your questions and you decide that you want to be part of this study.
- Your decision will not affect your infant's right to medical care that is not research-related.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We are inviting you and your child to participate in this research study because he/she was born 12-16 weeks early (at 24 to 28 weeks of pregnancy), and was enrolled in the Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants.

We would like to stay in contact with you until your child is 6-7 years old

The purpose is to compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when a baby would normally be born, to determine if one method of imaging gives more useful information than the other.

HOW MANY PEOPLE WILL PARTICIPATE?

Seventeen babies and their mothers will take part in this part of the study at the University of Iowa. This study is being conducted at 15 other centers, and the total number of babies and mothers in all the centers combined will be approximately 1300.

HOW LONG WILL I BE IN THIS STUDY?

If you agree for yourself and your baby to take part in this study, your involvement will last until your

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baby is 6-7 years old. It is possible that we will ask you to bring him or her back for one more follow-up visit at that time.

WHAT WILL HAPPEN DURING THIS STUDY?

We would like to stay in contact with you until your child is 6-7 years old. Therefore, we will collect your address, phone number, email address and those of another person that you choose. If we get funding, we will ask you to bring your child back to UIHC when he or she is between 6 and 7 years old for a clinic visit. At that time we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask you several questions about your family and yourself. You do not need to answer any questions that make you uncomfortable..

You will be asked to provide your or your baby's social security number on a form that will be kept in a locked file by the UI research team. In case we lose contact with you in the future, we may also use your and your baby's social security number to attempt to locate you for scheduling the follow-up visit. The collection of your social security number is strictly optional and is not required for participation in the study.

I allow you to collect and use my social security number for the purposes outlined above.

I do NOT allow you to collect or use my social security number for the purposes outlined above.

(Initial your choice above)

WHAT ARE THE RISKS OF THIS STUDY?

Some of the interview questions asked at the 6-7 year follow up visit may make you uncomfortable. You may choose not to answer any or all of the questions.

Are there any Unforeseen Risks?

In addition to the risks described above, there may be unknown risks, or risks that we did not anticipate, associated with being in this study.

WHAT ARE THE BENEFITS OF THIS STUDY?

We don't know if you or your baby will benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because the knowledge learned may help in the understanding of the use of CPAP or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It may also help us to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation. We may also gain knowledge about using MRI to detect brain injuries. Finally, knowledge may be gained about the effects of CPAP and oxygen on breathing and growth outcomes of premature infants.

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WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You and your baby will not have any additional costs for being in this research study.

You and/or your medical/hospital insurance carrier will remain responsible for your and your baby's regular medical care expenses.

WILL I BE PAID FOR PARTICIPATING?

You and your baby will not be paid for being in this research study, however you will be reimbursed for your travel expenses (\$50 VISA gift card and \$50 by check in mail after the visit) if we ask you to return when your child is 6-7 years old. You will need to provide your social security number (SSN) in order for us to reimburse you. You may choose to participate without being reimbursed if you do not wish to provide your social security number (SSN) for this purpose. You may also need to provide your address if a check will be mailed to you.

WHO IS FUNDING THIS STUDY?

The National Institute of Health, NICHD Neonatal Research Network is funding this research study. This means that the University of Iowa is receiving payments from The National Institute of Health, NICHD Neonatal Research Network to support the activities that are required to conduct the study. No one on the research team will receive a direct payment or increase in salary from The National Institute of Health, NICHD Neonatal Research Network for conducting this study.

WHAT ABOUT CONFIDENTIALITY?

We will keep your and your baby's participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your or your baby's participation in this study. For example, federal government regulatory agencies, The National Institute of Health, NICHD Neonatal Research Network, auditing departments of the University of Iowa and the University of Iowa Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you or your baby.

To help protect your and your baby's confidentiality, we will label information with a code number. The study logs linking the code number with your infant's identity will be kept in a locked office, in a locked file cabinet and password-protected computer files. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you and your baby cannot be directly identified.

A copy of this Informed Consent Document will be placed in your and your baby's medical record.

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WILL MY HEALTH INFORMATION BE USED DURING THIS STUDY?

The Federal Health Insurance Portability and Accountability Act (HIPAA) requires University of Iowa Health Care to obtain your permission for the research team to access or create “protected health information” about you for purposes of this research study. Protected health information is information that personally identifies you and your baby and relates to your and your baby’s past, present, or future physical or mental health condition or care. We will access or create health information about you and your baby, as described in this document, for purposes of this research and for your baby’s treatment. Once University of Iowa Health Care has disclosed your protected health information to us, it may no longer be protected by the Federal HIPAA privacy regulations, but we will continue to protect your and your baby’s confidentiality as described under “Confidentiality.”

We may share your health information related to this study with other parties including federal government regulatory agencies, the University of Iowa Institutional Review Boards and support staff, and The National Institute of Health, NICHD Neonatal Research Network. You and your baby cannot participate in this study unless you permit us to use your and your baby’s protected health information. If you choose *not* to allow us to use your protected health information, we will discuss any non-research alternatives available to you. Your decision will not affect your right to medical care that is not research-related. Your signature on this Consent Document authorizes University of Iowa Health Care to give us permission to use or create health information about you and your baby.

Although you may not be allowed to see study information until after this study is over, you may be given access to your and your baby’s health care records by contacting your health care provider. Your permission for us to access or create protected health information about you and your baby for purposes of this study has no expiration date. You may withdraw your permission for us to use your and your baby’s health information for this research study by sending a written notice to: Dr. Edward Bell

University of Iowa Hospitals & Clinics
200 Hawkins Drive
Dept. of Pediatrics, 8811 JPP
Iowa City, Iowa 52242

However, we may still use your and your baby’s health information that was collected before withdrawing your permission. Also, if we have sent your and your baby’s health information to a third party, such as the study sponsor, or we have removed your identifying information, it may not be possible to prevent its future use. You will receive a copy of this signed document.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose for you and/or your baby not to take part at all. If you choose for your baby to be in this study, you may stop your and his/her participation at any time. If you decide not to have you and/or your child be in this study, or if you decide to stop you or your baby from participating at any time, you and your baby won’t be penalized or lose any benefits for which you otherwise qualify.

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Will I Receive New Information About the Study while Participating?

If we obtain any new information during this study that might affect your willingness to continue participating or to let your baby continue participating in the study, we'll promptly provide you with that information.

Can Someone Else End my Participation in this Study?

Under certain circumstances, the researchers or the study sponsor might decide to end your and your baby's participation in this research study earlier than planned. This might happen because funding for the research study is ended.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Dr. Edward Bell at (319)356-4006 or Karen Johnson, R.N. at (319)356-2924.

If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contact the Human Subjects Office, 340 College of Medicine Administration Building, The University of Iowa, Iowa City, Iowa, 52242, (319) 335-6564, or e-mail irb@uiowa.edu. General information about being a research subject can be found by clicking "Info for Public" on the Human Subjects Office web site, <http://research.uiowa.edu/hso>.

This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by signing this Informed Consent Document. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

OR IRB USE ONLY
APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 04/29/10
EXPIRATION DATE: 04/29/11

Parent Subject's Name (printed): _____

(Signature of Parent Subject)

(Date)

Parent/Guardian or Legally Authorized Representative's Name and Relationship to Subject:

Child Subject's Name (printed): _____

(Parent/Guardian Name - printed)

(Relationship to Subject - printed)

(Signature of Parent/Guardian or
Legally Authorized Representative)

(Date)

Statement of Person Who Obtained Consent

I have discussed the above points with the subject or, where appropriate, with the subject's legally authorized representative. It is my opinion that the subject understands the risks, benefits, and procedures involved with participation in this research study.

(Signature of Person who Obtained Consent)

(Date)

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 04/04/11
EXPIRATION DATE: 04/03/12

INFORMED CONSENT DOCUMENT

Project Title: **The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants -- Follow Up**

Principal Investigator: Edward Bell, MD

Research Team Contact: Karen Johnson, RN (319)356-2924

This consent form describes the research study to help you decide if you want to participate and allow your child to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not sign this form unless the study research team has answered your questions and you decide that you want to be part of this study.
- Your decision will not affect your infant's right to medical care that is not research-related.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We are inviting you and your child to participate in this research study because he/she was born 12-16 weeks early (at 24 to 28 weeks of pregnancy), and was enrolled in the Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants.

We would like to stay in contact with you until your child is 6-7 years old

The purpose is to compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when a baby would normally be born, to determine if one method of imaging gives more useful information than the other.

HOW MANY PEOPLE WILL PARTICIPATE?

Seventeen babies and their mothers will take part in this part of the study at the University of Iowa. This study is being conducted at 15 other centers, and the total number of babies and mothers in all the centers combined will be approximately 1300.

HOW LONG WILL I BE IN THIS STUDY?

If you agree for yourself and your baby to take part in this study, your involvement will last until your baby is 6-7 years old. It is possible that we will ask you to bring him or her back for one more follow-up visit at that time.

WHAT WILL HAPPEN DURING THIS STUDY?

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 04/04/11
EXPIRATION DATE: 04/03/12

We would like to stay in contact with you until your child is 6-7 years old. Therefore, we will collect your address, phone number, email address and those of another person that you choose. If we get funding, we will ask you to bring your child back to UIHC when he or she is between 6 and 7 years old for a clinic visit. At that time we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask you several questions about your family and yourself. You do not need to answer any questions that make you uncomfortable..

You will be asked to provide your or your baby's social security number on a form that will be kept in a locked file by the UI research team. In case we lose contact with you in the future, we may also use your and your baby's social security number to attempt to locate you for scheduling the follow-up visit. The collection of your social security number is strictly optional and is not required for participation in the study.

I allow you to collect and use my social security number for the purposes outlined above.

I do NOT allow you to collect or use my social security number for the purposes outlined above.

(Initial your choice above)

WHAT ARE THE RISKS OF THIS STUDY?

Some of the interview questions asked at the 6-7 year follow up visit may make you uncomfortable. You may choose not to answer any or all of the questions.

Are there any Unforeseen Risks?

In addition to the risks described above, there may be unknown risks, or risks that we did not anticipate, associated with being in this study.

WHAT ARE THE BENEFITS OF THIS STUDY?

We don't know if you or your baby will benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because the knowledge learned may help in the understanding of the use of CPAP or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It may also help us to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation. We may also gain knowledge about using MRI to detect brain injuries. Finally, knowledge may be gained about the effects of CPAP and oxygen on breathing and growth outcomes of premature infants.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You and your baby will not have any additional costs for being in this research study.

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EXPIRATION DATE: 04/03/12

You and/or your medical/hospital insurance carrier will remain responsible for your and your baby's regular medical care expenses.

WILL I BE PAID FOR PARTICIPATING?

You and your baby will not be paid for being in this research study, however you will be reimbursed for your travel expenses (\$50 VISA gift card and \$50 by check in mail after the visit) if we ask you to return when your child is 6-7 years old. You will need to provide your social security number (SSN) in order for us to reimburse you. You may choose to participate without being reimbursed if you do not wish to provide your social security number (SSN) for this purpose. You may also need to provide your address if a check will be mailed to you.

WHO IS FUNDING THIS STUDY?

The National Institute of Health, NICHD Neonatal Research Network is funding this research study. This means that the University of Iowa is receiving payments from The National Institute of Health, NICHD Neonatal Research Network to support the activities that are required to conduct the study. No one on the research team will receive a direct payment or increase in salary from The National Institute of Health, NICHD Neonatal Research Network for conducting this study.

WHAT ABOUT CONFIDENTIALITY?

We will keep your and your baby's participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your or your baby's participation in this study. For example, federal government regulatory agencies, The National Institute of Health, NICHD Neonatal Research Network, auditing departments of the University of Iowa and the University of Iowa Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you or your baby.

To help protect your and your baby's confidentiality, we will label information with a code number. The study logs linking the code number with your infant's identity will be kept in a locked office, in a locked file cabinet and password-protected computer files. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you and your baby cannot be directly identified.

A copy of this Informed Consent Document will be placed in your and your baby's medical record.

WILL MY HEALTH INFORMATION BE USED DURING THIS STUDY?

The Federal Health Insurance Portability and Accountability Act (HIPAA) requires University of Iowa

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Health Care to obtain your permission for the research team to access or create “protected health information” about you for purposes of this research study. Protected health information is information that personally identifies you and your baby and relates to your and your baby’s past, present, or future physical or mental health condition or care. We will access or create health information about you and your baby, as described in this document, for purposes of this research and for your baby’s treatment. Once University of Iowa Health Care has disclosed your protected health information to us, it may no longer be protected by the Federal HIPAA privacy regulations, but we will continue to protect your and your baby’s confidentiality as described under “Confidentiality.”

We may share your health information related to this study with other parties including federal government regulatory agencies, the University of Iowa Institutional Review Boards and support staff, and The National Institute of Health, NICHD Neonatal Research Network.

You and your baby cannot participate in this study unless you permit us to use your and your baby’s protected health information. If you choose *not* to allow us to use your protected health information, we will discuss any non-research alternatives available to you. Your decision will not affect your right to medical care that is not research-related. Your signature on this Consent Document authorizes University of Iowa Health Care to give us permission to use or create health information about you and your baby.

Although you may not be allowed to see study information until after this study is over, you may be given access to your and your baby’s health care records by contacting your health care provider. Your permission for us to access or create protected health information about you and your baby for purposes of this study has no expiration date. You may withdraw your permission for us to use your and your baby’s health information for this research study by sending a written notice to: Dr. Edward Bell

University of Iowa Hospitals & Clinics
200 Hawkins Drive
Dept. of Pediatrics, 8811 JPP
Iowa City, Iowa 52242

However, we may still use your and your baby’s health information that was collected before withdrawing your permission. Also, if we have sent your and your baby’s health information to a third party, such as the study sponsor, or we have removed your identifying information, it may not be possible to prevent its future use. You will receive a copy of this signed document.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose for you and/or your baby not to take part at all. If you choose for your baby to be in this study, you may stop your and his/her participation at any time. If you decide not to have you and/or your child be in this study, or if you decide to stop you or your baby from participating at any time, you and your baby won’t be penalized or lose any benefits for which you otherwise qualify.

Will I Receive New Information About the Study while Participating?

If we obtain any new information during this study that might affect your willingness to continue participating or to let your baby continue participating in the study, we’ll promptly provide you with that information.

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Can Someone Else End my Participation in this Study?

Under certain circumstances, the researchers or the study sponsor might decide to end your and your baby’s participation in this research study earlier than planned. This might happen because funding for the research study is ended.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Dr. Edward Bell at (319)356-4006 or Karen Johnson, R.N. at (319)356-2924.

If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contact the Human Subjects Office, 105 Hardin Library for the Health Sciences, 600 Newton Road, University of Iowa, Iowa City, IA 52242-1098, (319) 335-6564, or e-mail irb@uiowa.edu. General information about being a research subject can be found by clicking “Info for Public” on the Human Subjects Office web site, <http://research.uiowa.edu/hso>.

This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by signing this Informed Consent Document. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Parent Subject's Name (printed): _____

(Signature of Parent Subject)

(Date)

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APPROVAL DATE: 04/04/11
EXPIRATION DATE: 04/03/12

Parent/Guardian or Legally Authorized Representative's Name and Relationship to Subject:

Child Subject's Name (printed): _____

(Parent/Guardian Name - printed)

(Relationship to Subject - printed)

(Signature of Parent/Guardian or
Legally Authorized Representative)

(Date)

Statement of Person Who Obtained Consent

I have discussed the above points with the subject or, where appropriate, with the subject's legally authorized representative. It is my opinion that the subject understands the risks, benefits, and procedures involved with participation in this research study.

(Signature of Person who Obtained Consent)

(Date)

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

INFORMED CONSENT DOCUMENT

Project Title: **The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants -- Follow Up**

Principal Investigator: Edward Bell, MD

Research Team Contact: Karen Johnson, RN (319)356-2924

This consent form describes the research study to help you decide if you want to participate and allow your child to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not sign this form unless the study research team has answered your questions and you decide that you want to be part of this study.
- Your decision will not affect your infant's right to medical care that is not research-related.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We are inviting you and your child to participate in this research study because he/she was born 12-16 weeks early (at 24 to 28 weeks of pregnancy), and was enrolled in the Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants.

We would like to stay in contact with you until your child is 6-7 years old

The purpose is to compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when a baby would normally be born, to determine if one method of imaging gives more useful information than the other.

HOW MANY PEOPLE WILL PARTICIPATE?

Seventeen babies and their mothers will take part in this part of the study at the University of Iowa. This study is being conducted at 15 other centers, and the total number of babies and mothers in all the centers combined will be approximately 1300.

HOW LONG WILL I BE IN THIS STUDY?

If you agree for yourself and your baby to take part in this study, your involvement will last until your baby is 6-7 years old. It is possible that we will ask you to bring him or her back for one more follow-up visit at that time.

WHAT WILL HAPPEN DURING THIS STUDY?

OR IRB USE ONLY
APPROVED BY: IRB-01
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APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

We would like to stay in contact with you until your child is 6-7 years old. Therefore, we will collect your address, phone number, email address and those of another person that you choose. If we get funding, we will ask you to bring your child back to UIHC when he or she is between 6 and 7 years old for a clinic visit. At that time we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask you several questions about your family and yourself. You do not need to answer any questions that make you uncomfortable..

You will be asked to provide your or your baby's social security number on a form that will be kept in a locked file by the UI research team. In case we lose contact with you in the future, we may also use your and your baby's social security number to attempt to locate you for scheduling the follow-up visit. The collection of your social security number is strictly optional and is not required for participation in the study.

I allow you to collect and use my social security number for the purposes outlined above.

I do NOT allow you to collect or use my social security number for the purposes outlined above.

(Initial your choice above)

WHAT ARE THE RISKS OF THIS STUDY?

Some of the interview questions asked at the 6-7 year follow up visit may make you uncomfortable. You may choose not to answer any or all of the questions.

Are there any Unforeseen Risks?

In addition to the risks described above, there may be unknown risks, or risks that we did not anticipate, associated with being in this study.

WHAT ARE THE BENEFITS OF THIS STUDY?

We don't know if you or your baby will benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because the knowledge learned may help in the understanding of the use of CPAP or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It may also help us to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation. We may also gain knowledge about using MRI to detect brain injuries. Finally, knowledge may be gained about the effects of CPAP and oxygen on breathing and growth outcomes of premature infants.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You and your baby will not have any additional costs for being in this research study.

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APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

You and/or your medical/hospital insurance carrier will remain responsible for your and your baby's regular medical care expenses.

WILL I BE PAID FOR PARTICIPATING?

You and your baby will not be paid for being in this research study, however you will be reimbursed for your travel expenses (\$50 VISA gift card and \$50 by check in mail after the visit) if we ask you to return when your child is 6-7 years old. You will need to provide your social security number (SSN) in order for us to reimburse you. You may choose to participate without being reimbursed if you do not wish to provide your social security number (SSN) for this purpose. You may also need to provide your address if a check will be mailed to you.

WHO IS FUNDING THIS STUDY?

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WHAT ABOUT CONFIDENTIALITY?

We will keep your and your baby's participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your or your baby's participation in this study. For example, federal government regulatory agencies, The National Institute of Health, NICHD Neonatal Research Network, auditing departments of the University of Iowa and the University of Iowa Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you or your baby.

To help protect your and your baby's confidentiality, we will label information with a code number. The study logs linking the code number with your infant's identity will be kept in a locked office, in a locked file cabinet and password-protected computer files. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you and your baby cannot be directly identified.

A copy of this Informed Consent Document will be placed in your and your baby's medical record.

WILL MY HEALTH INFORMATION BE USED DURING THIS STUDY?

The Federal Health Insurance Portability and Accountability Act (HIPAA) requires University of Iowa

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Health Care to obtain your permission for the research team to access or create “protected health information” about you for purposes of this research study. Protected health information is information that personally identifies you and your baby and relates to your and your baby’s past, present, or future physical or mental health condition or care. We will access or create health information about you and your baby, as described in this document, for purposes of this research and for your baby’s treatment. Once University of Iowa Health Care has disclosed your protected health information to us, it may no longer be protected by the Federal HIPAA privacy regulations, but we will continue to protect your and your baby’s confidentiality as described under “Confidentiality.”

We may share your health information related to this study with other parties including federal government regulatory agencies, the University of Iowa Institutional Review Boards and support staff, and The National Institute of Health, NICHD Neonatal Research Network.

You and your baby cannot participate in this study unless you permit us to use your and your baby’s protected health information. If you choose *not* to allow us to use your protected health information, we will discuss any non-research alternatives available to you. Your decision will not affect your right to medical care that is not research-related. Your signature on this Consent Document authorizes University of Iowa Health Care to give us permission to use or create health information about you and your baby.

Although you may not be allowed to see study information until after this study is over, you may be given access to your and your baby’s health care records by contacting your health care provider. Your permission for us to access or create protected health information about you and your baby for purposes of this study has no expiration date. You may withdraw your permission for us to use your and your baby’s health information for this research study by sending a written notice to: Dr. Edward Bell

University of Iowa Hospitals & Clinics
200 Hawkins Drive
Dept. of Pediatrics, 8811 JPP
Iowa City, Iowa 52242

However, we may still use your and your baby’s health information that was collected before withdrawing your permission. Also, if we have sent your and your baby’s health information to a third party, such as the study sponsor, or we have removed your identifying information, it may not be possible to prevent its future use. You will receive a copy of this signed document.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose for you and/or your baby not to take part at all. If you choose for your baby to be in this study, you may stop your and his/her participation at any time. If you decide not to have you and/or your child be in this study, or if you decide to stop you or your baby from participating at any time, you and your baby won’t be penalized or lose any benefits for which you otherwise qualify.

Will I Receive New Information About the Study while Participating?

If we obtain any new information during this study that might affect your willingness to continue participating or to let your baby continue participating in the study, we’ll promptly provide you with that information.

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IRB ID #: 200605740
APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

Can Someone Else End my Participation in this Study?

Under certain circumstances, the researchers or the study sponsor might decide to end your and your baby’s participation in this research study earlier than planned. This might happen because funding for the research study is ended.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Dr. Edward Bell at (319)356-4006 or Karen Johnson, R.N. at (319)356-2924.

If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contact the Human Subjects Office, 105 Hardin Library for the Health Sciences, 600 Newton Road, University of Iowa, Iowa City, IA 52242-1098, (319) 335-6564, or e-mail irb@uiowa.edu. General information about being a research subject can be found by clicking “Info for Public” on the Human Subjects Office web site, <http://research.uiowa.edu/hso>.

This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by signing this Informed Consent Document. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Parent Subject's Name (printed): _____

(Signature of Parent Subject)

(Date)

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

Parent/Guardian or Legally Authorized Representative's Name and Relationship to Subject:

Child Subject's Name (printed): _____

(Parent/Guardian Name - printed)

(Relationship to Subject - printed)

(Signature of Parent/Guardian or
Legally Authorized Representative)

(Date)

Statement of Person Who Obtained Consent

I have discussed the above points with the subject or, where appropriate, with the subject's legally authorized representative. It is my opinion that the subject understands the risks, benefits, and procedures involved with participation in this research study.

(Signature of Person who Obtained Consent)

(Date)

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 05/19/08
EXPIRATION DATE: 05/19/09

INFORMED CONSENT DOCUMENT

Project Title: **The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants**

Research Team: **Edward Bell, MD**
Michael Acarregui, MD
Gretchen Cress, BSN, RN
Karen Johnson, BSN, RN
Laura Knosp, BSN, RN
Nancy Krutzfield, MSN
Ruthann Schrock, BSN
John Widness, MD
Sara Scott, BSN, RN

This consent form describes the research study to help you decide if you want to participate and allow your child to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not sign this form unless the study research team has answered your questions and you decide that you want to be part of this study.
- Your decision will not affect your infant's right to medical care that is not research-related.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We are inviting you and your child to participate in this research study because there is a possibility that he/she will be born 12-16 weeks early (at 24 to 28 weeks of pregnancy).

There are 5 purposes of this research study:

- The first is to compare two ways of helping babies who were born prematurely and have difficulty breathing. One way is by using a mask or tube in the baby's nose, called CPAP (continuous positive airway pressure) to assist the baby with his/her breathing immediately after birth and continuing in the NICU. The second way is using a breathing tube in the baby's windpipe, mechanical ventilation and a drug called surfactant, which is given into the breathing tube. We will compare these two to see if there is a difference in the amount of breathing help the babies require and how long they will continue to need this help during the first two weeks of life.
- The second purpose is to compare babies who have oxygen saturations kept in the high end of the normal range with babies who have oxygen saturations kept in the low end of the normal range.
- The third purpose is to compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when a baby would normally be born, to determine if one method of imaging gives more useful information than the other.

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APPROVAL DATE: 05/19/08
EXPIRATION DATE: 05/19/09

- The fourth purpose is to compare outcomes of babies in the two oxygen saturation ranges after they go home, particularly in regards to any wheezing or chronic coughing they might have.
- The fifth purpose is to compare outcomes of babies in the two oxygen saturation ranges after they go home, particularly in regards to their growth.

HOW MANY PEOPLE WILL PARTICIPATE?

Approximately 75 babies and their mothers will take part in this study at the University of Iowa. This study is being conducted at 15 other centers, and the total number of babies and mothers in all the centers combined will be approximately 1300.

HOW LONG WILL I BE IN THIS STUDY?

If you agree for yourself and your baby to take part in this study, your involvement will last until your baby is 18-22 months old.

WHAT WILL HAPPEN DURING THIS STUDY?

A few minutes before your baby is born, (s)he will be randomly assigned, like the flip of a coin, to either the “CPAP” group or “Intubation” group to manage his/her breathing immediately after birth.

The first assignment will determine his/her care in the delivery room as follows:

If your baby is randomized to the CPAP group, a mask or tube in the nose will be used immediately after birth to assist your baby with his/her breathing in the delivery room and continued when he/she is admitted to the NICU. If your baby requires more help with his/her breathing, a breathing tube will be placed in the windpipe and the ventilator used. Your baby will receive all routine care for premature babies with breathing problems. This may include giving a medication called surfactant into the lungs through the breathing tube.

If your baby is randomized to the Intubation group, your baby will have a breathing tube placed in the windpipe in the delivery room and will be admitted to the NICU. Your baby will receive all routine care for premature babies with breathing problems. This will include giving a medication called surfactant into the lungs through the breathing tube.

The second treatment assignment will determine which end of the normal oxygen saturation range (high or low end) will be used as follows:

When your baby is admitted to the NICU, he/she will be randomized (assigned by chance similar to the flip of a coin) to be kept in a certain oxygen saturation range. This will determine if your baby will have his/her oxygen saturation level kept in the high or low part of the normal oxygen saturation range. The study oximeter (blood oxygen monitor) will be used for as long as your baby is requiring oxygen and until he/she has been in room air (no extra oxygen) for at least 3 days. We don't know which level is best for premature infants and that is why we're doing the study.

Other aspects of your infant's care will be the standard treatments for premature babies in the UIHC

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NICU.

All babies in the study will have the following:

We will measure your baby's weight (using the scale routinely used), length (using a special board to measure premature babies), and head circumference (using the paper measuring tape routinely used) when he/she is 7, 14, 21 and 28 days old, at the time your baby is 32 weeks gestation (about 8 weeks before his/her due date), at the time your baby is 36 weeks gestation (about 4 weeks before his/her due date) and right before he/she is discharged.

All babies born prematurely at UIHC routinely have ultrasounds of their heads. Your baby will have the routine ultrasounds of his/her head as well as a test called a MRI (Magnetic Resonance Imaging) study. The ultrasound is a painless procedure where a probe is placed on your baby's soft spot and a picture is made by sound waves. The MRI is a specialized brain scan that takes detailed pictures of the brain structure and can detect normal and abnormal brain tissue. It is very likely that we will need to sedate your baby (giving medication to help relax him/her) during the procedure. The MRI will be done around the time when your baby would normally have been born. Your baby will be swaddled and monitored throughout the procedure.

All babies who participate in the project will return to the UIHC High Risk Infant Follow-up Clinic at regular intervals during the first two years. When the children enrolled in this study return for their 18-22 month old assessments of growth and development, the study will collect information at that visit. The information collected will include who takes care of your baby, what their marital status is, what their income and medical insurance are, who lives in the household with the baby, the baby's medical history, and the results of the physical exam and developmental testing.

To learn about the breathing outcomes of babies in the study, we will interview you before your baby is discharged from the hospital. At this interview, we will ask you questions about your family, including questions about family history of breathing problems, and questions about your home, including things that may increase your child's risk of breathing problems. The interview will take about 15 minutes.

We will continue to stay in touch with you and your infant by telephone or in person at one of your visits every 6 months over the next 18-22 months, a total of three times. At these times, we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask you several questions about your family and yourself. You do not need to answer any questions that make you uncomfortable. The entire call should take about 15 minutes of your time, less if your baby has had no breathing problems.

We will schedule the telephone calls at a time that is convenient for you. The telephone calls will occur when your infant is 6, 12, and 18 months after his/her expected delivery at full term.

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The following chart is a summary of what will happen and when:

At Delivery	Days of Life 7, 14, 21, 28, 32 weeks, 36 weeks
CPAP or Intubation with Surfactant Higher or lower oxygen saturation assignment Ends at 14 days of life	Measurements (weight, length, head)
35 to 42 weeks gestation (around "term")	At discharge
Head ultrasound and MRI	Measurements (weight, length, head)
6 months of age, 12 months of age	18-22 months of age
Interview (by phone or in person)	Interview (by phone or in person) High Risk Infant Follow-up Clinic visit

WHAT ARE THE RISKS OF THIS STUDY?

There may be some risks from being in this study. The use of CPAP and intubation in managing infants' breathing are within usual standard of care at UIHC NICU. CPAP and intubation with ventilation have the risk of trauma to the airway, abnormal lung damage by air getting into the tissues, and the possibility that the tube may cause air to get into the stomach.

During the brain MRI we will need to attach monitors to your infant to keep track of his or her heart rate and respiration. The tape we use to attach the electrodes may cause temporary minor skin irritation. The MRI makes a loud, banging noise while it is taking pictures. A set of special earmuffs will be placed over your child's ears to help with the noise. There are no known harmful effects from exposure to magnetic fields (MRI). However, some patients undergoing this procedure become anxious. If sedation is necessary, risks from the medication used include decreased blood pressure and the possibility of breathing difficulty. Your baby's heart rate and respiration will be closely monitored.

Some of the interview questions may make you uncomfortable. You may choose not to answer any or all of the questions

Are there any Unforeseen Risks?

In addition to the risks described above, there may be unknown risks, or risks that we did not anticipate, associated with being in this study.

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IRB ID #: 200605740
APPROVAL DATE: 05/19/08
EXPIRATION DATE: 05/19/09

WHAT ARE THE BENEFITS OF THIS STUDY?

We don't know if you or your baby will benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because the knowledge learned may help in the understanding of the use of CPAP or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It may also help us to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation. We may also gain knowledge about using MRI to detect brain injuries. Finally, knowledge may be gained about the effects of CPAP and oxygen on breathing and growth outcomes of premature infants.

WHAT OTHER TREATMENT OPTIONS ARE THERE?

Before you decide whether or not you want your baby to be in this study, your doctor will discuss the other options that are available to you. Instead of being in this study, you could choose to have your baby treated in the routine way, which may include help with his/her breathing in the delivery room and NICU using the mask, tube in the nose or breathing tube in the windpipe with a ventilator, surfactant and an oximeter to monitor oxygen saturations.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You and your baby will not have any additional costs for being in this research study.

You and/or your medical/hospital insurance carrier will remain responsible for your and your baby's regular medical care expenses.

WILL I BE PAID FOR PARTICIPATING?

You and your baby will not be paid for being in this research study.

WHO IS FUNDING THIS STUDY?

The National Institute of Health, NICHD Neonatal Research Network is funding this research study. This means that the University of Iowa is receiving payments from The National Institute of Health, NICHD Neonatal Research Network to support the activities that are required to conduct the study. No one on the research team will receive a direct payment or increase in salary from The National Institute of Health, NICHD Neonatal Research Network for conducting this study.

WHAT IF I AM INJURED AS A RESULT OF THIS STUDY?

- If either you or your baby is injured or becomes ill from taking part in this study, medical treatment is available at the University of Iowa Hospitals and Clinics.

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- No compensation for treatment of research-related illness or injury is available from the University of Iowa unless it is proven to be the direct result of negligence by a University employee.
- If either you or your baby experiences a research-related illness or injury, you and/or your medical or hospital insurance carrier will be responsible for the cost of treatment.

WHAT ABOUT CONFIDENTIALITY?

We will keep your and your baby's participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your or your baby's participation in this study. For example, federal government regulatory agencies, The National Institute of Health, NICHD Neonatal Research Network, auditing departments of the University of Iowa and the University of Iowa Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you or your baby.

To help protect your and your baby's confidentiality, we will label information with a code number. The study logs linking the code number with your infant's identity will be kept in a locked office, in a locked file cabinet and password-protected computer files. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you and your baby cannot be directly identified.

A copy of this Informed Consent Document will be placed in your and your baby's medical record.

WILL MY HEALTH INFORMATION BE USED DURING THIS STUDY?

The Federal Health Insurance Portability and Accountability Act (HIPAA) requires University of Iowa Health Care to obtain your permission for the research team to access or create "protected health information" about you for purposes of this research study. Protected health information is information that personally identifies you and your baby and relates to your and your baby's past, present, or future physical or mental health condition or care. We will access or create health information about you and your baby, as described in this document, for purposes of this research and for your baby's treatment. Once University of Iowa Health Care has disclosed your protected health information to us, it may no longer be protected by the Federal HIPAA privacy regulations, but we will continue to protect your and your baby's confidentiality as described under "Confidentiality."

We may share your health information related to this study with other parties including federal government regulatory agencies, the University of Iowa Institutional Review Boards and support staff, and The National Institute of Health, NICHD Neonatal Research Network. You and your baby cannot participate in this study unless you permit us to use your and your baby's protected health information. If you choose *not* to allow us to use your protected health information, we will discuss any non-research alternatives available to you. Your decision will not affect your right to medical care that is not research-related. Your signature on this Consent Document authorizes University of Iowa Health Care to give us permission to use or create health information about you and your baby.

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 05/19/08
EXPIRATION DATE: 05/19/09

Although you may not be allowed to see study information until after this study is over, you may be given access to your and your baby's health care records by contacting your health care provider. Your permission for us to access or create protected health information about you and your baby for purposes of this study has no expiration date. You may withdraw your permission for us to use your and your baby's health information for this research study by sending a written notice to: Dr. Edward Bell
University of Iowa Hospitals & Clinics
200 Hawkins Drive
Dept. of Pediatrics, 8811 JPP
Iowa City, Iowa 52242

However, we may still use your and your baby's health information that was collected before withdrawing your permission. Also, if we have sent your and your baby's health information to a third party, such as the study sponsor, or we have removed your identifying information, it may not be possible to prevent its future use. You will receive a copy of this signed document.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose for you and/or your baby not to take part at all. If you choose for your baby to be in this study, you may stop your and his/her participation at any time. If you decide not to have you and/or your child be in this study, or if you decide to stop you or your baby from participating at any time, you and your baby won't be penalized or lose any benefits for which you otherwise qualify.

Will I Receive New Information About the Study while Participating?

If we obtain any new information during this study that might affect your willingness to continue participating or to let your baby continue participating in the study, we'll promptly provide you with that information.

Can Someone Else End my Participation in this Study?

Under certain circumstances, the researchers or the study sponsor might decide to end your and your baby's participation in this research study earlier than planned. This might happen because your baby needs to be treated in a way outside the study protocol or because funding for the research study is ended.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Dr. Edward Bell at (319)356-4006 or Karen Johnson, R.N. at (319)356-2924.

If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contact the Human Subjects Office, 340 College of Medicine Administration Building, The University of Iowa, Iowa City, Iowa, 52242, (319) 335-6564, or e-mail irb@uiowa.edu. General information about being a research subject can be found by clicking "Info for Public" on the Human Subjects Office web site, <http://research.uiowa.edu/hso>.

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IRB ID #: 200605740
APPROVAL DATE: 05/19/08
EXPIRATION DATE: 05/19/09

This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by signing this Informed Consent Document. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Parent Subject's Name (printed): _____

(Signature of Parent Subject)

(Date)

Parent/Guardian or Legally Authorized Representative's Name and Relationship to Subject:

Child Subject's Name (printed): _____

(Parent/Guardian Name - printed)

(Relationship to Subject - printed)

(Signature of Parent/Guardian or
Legally Authorized Representative)

(Date)

Statement of Person Who Obtained Consent

I have discussed the above points with the subject or, where appropriate, with the subject's legally authorized representative. It is my opinion that the subject understands the risks, benefits, and procedures involved with participation in this research study.

(Signature of Person who Obtained Consent)

(Date)

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IRB ID #: 200605740
APPROVAL DATE: 02/28/13
EXPIRATION DATE: 02/28/14

INFORMED CONSENT DOCUMENT

Project Title: **The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants -- Follow Up**

Principal Investigator: Edward Bell, MD

Research Team Contact: Karen Johnson, RN (319)356-2924

This consent form describes the research study to help you decide if you want to participate and allow your child to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not sign this form unless the study research team has answered your questions and you decide that you want to be part of this study.
- Your decision will not affect your infant's right to medical care that is not research-related.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We are inviting you and your child to participate in this research study because he/she was born 12-16 weeks early (at 24 to 28 weeks of pregnancy), and was enrolled in the Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants.

We would like to stay in contact with you until your child is 6-7 years old

The purpose is to compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when a baby would normally be born, to determine if one method of imaging gives more useful information than the other.

HOW MANY PEOPLE WILL PARTICIPATE?

Seventeen babies and their mothers will take part in this part of the study at the University of Iowa. This study is being conducted at 15 other centers, and the total number of babies and mothers in all the centers combined will be approximately 1300.

HOW LONG WILL I BE IN THIS STUDY?

If you agree for yourself and your baby to take part in this study, your involvement will last until your baby is 6-7 years old. It is possible that we will ask you to bring him or her back for one more follow-up visit at that time.

WHAT WILL HAPPEN DURING THIS STUDY?

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APPROVED BY: IRB-01
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APPROVAL DATE: 02/28/13
EXPIRATION DATE: 02/28/14

We would like to stay in contact with you until your child is 6-7 years old. Therefore, we will collect your address, phone number, email address and those of another person that you choose. If we get funding, we will ask you to bring your child back to UIHC when he or she is between 6 and 7 years old for a clinic visit. At that time we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask you several questions about your family and yourself. You do not need to answer any questions that make you uncomfortable..

You will be asked to provide your or your baby's social security number on a form that will be kept in a locked file by the UI research team. In case we lose contact with you in the future, we may also use your and your baby's social security number to attempt to locate you for scheduling the follow-up visit. The collection of your social security number is strictly optional and is not required for participation in the study.

I allow you to collect and use my social security number for the purposes outlined above.

I do NOT allow you to collect or use my social security number for the purposes outlined above.

(Initial your choice above)

WHAT ARE THE RISKS OF THIS STUDY?

Some of the interview questions asked at the 6-7 year follow up visit may make you uncomfortable. You may choose not to answer any or all of the questions.

Are there any Unforeseen Risks?

In addition to the risks described above, there may be unknown risks, or risks that we did not anticipate, associated with being in this study.

WHAT ARE THE BENEFITS OF THIS STUDY?

We don't know if you or your baby will benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because the knowledge learned may help in the understanding of the use of CPAP or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It may also help us to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation. We may also gain knowledge about using MRI to detect brain injuries. Finally, knowledge may be gained about the effects of CPAP and oxygen on breathing and growth outcomes of premature infants.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You and your baby will not have any additional costs for being in this research study.

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APPROVAL DATE: 02/28/13
EXPIRATION DATE: 02/28/14

You and/or your medical/hospital insurance carrier will remain responsible for your and your baby's regular medical care expenses.

WILL I BE PAID FOR PARTICIPATING?

You and your baby will not be paid for being in this research study, however you will be reimbursed for your travel expenses (\$50 VISA gift card and \$50 by check in mail after the visit) if we ask you to return when your child is 6-7 years old. You will need to provide your social security number (SSN) in order for us to reimburse you. You may choose to participate without being reimbursed if you do not wish to provide your social security number (SSN) for this purpose. You may also need to provide your address if a check will be mailed to you.

WHO IS FUNDING THIS STUDY?

The National Institute of Health, NICHD Neonatal Research Network is funding this research study. This means that the University of Iowa is receiving payments from The National Institute of Health, NICHD Neonatal Research Network to support the activities that are required to conduct the study. No one on the research team will receive a direct payment or increase in salary from The National Institute of Health, NICHD Neonatal Research Network for conducting this study.

WHAT ABOUT CONFIDENTIALITY?

We will keep your and your baby's participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your or your baby's participation in this study. For example, federal government regulatory agencies, The National Institute of Health, NICHD Neonatal Research Network, auditing departments of the University of Iowa and the University of Iowa Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you or your baby.

To help protect your and your baby's confidentiality, we will label information with a code number. The study logs linking the code number with your infant's identity will be kept in a locked office, in a locked file cabinet and password-protected computer files. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you and your baby cannot be directly identified.

A copy of this Informed Consent Document will be placed in your and your baby's medical record.

WILL MY HEALTH INFORMATION BE USED DURING THIS STUDY?

The Federal Health Insurance Portability and Accountability Act (HIPAA) requires University of Iowa

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Health Care to obtain your permission for the research team to access or create “protected health information” about you for purposes of this research study. Protected health information is information that personally identifies you and your baby and relates to your and your baby’s past, present, or future physical or mental health condition or care. We will access or create health information about you and your baby, as described in this document, for purposes of this research and for your baby’s treatment. Once University of Iowa Health Care has disclosed your protected health information to us, it may no longer be protected by the Federal HIPAA privacy regulations, but we will continue to protect your and your baby’s confidentiality as described under “Confidentiality.”

We may share your health information related to this study with other parties including federal government regulatory agencies, the University of Iowa Institutional Review Boards and support staff, and The National Institute of Health, NICHD Neonatal Research Network.

You and your baby cannot participate in this study unless you permit us to use your and your baby’s protected health information. If you choose *not* to allow us to use your protected health information, we will discuss any non-research alternatives available to you. Your decision will not affect your right to medical care that is not research-related. Your signature on this Consent Document authorizes University of Iowa Health Care to give us permission to use or create health information about you and your baby.

Although you may not be allowed to see study information until after this study is over, you may be given access to your and your baby’s health care records by contacting your health care provider. Your permission for us to access or create protected health information about you and your baby for purposes of this study has no expiration date. You may withdraw your permission for us to use your and your baby’s health information for this research study by sending a written notice to: Dr. Edward Bell

University of Iowa Hospitals & Clinics
200 Hawkins Drive
Dept. of Pediatrics, 8811 JPP
Iowa City, Iowa 52242

However, we may still use your and your baby’s health information that was collected before withdrawing your permission. Also, if we have sent your and your baby’s health information to a third party, such as the study sponsor, or we have removed your identifying information, it may not be possible to prevent its future use. You will receive a copy of this signed document.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose for you and/or your baby not to take part at all. If you choose for your baby to be in this study, you may stop your and his/her participation at any time. If you decide not to have you and/or your child be in this study, or if you decide to stop you or your baby from participating at any time, you and your baby won’t be penalized or lose any benefits for which you otherwise qualify.

Will I Receive New Information About the Study while Participating?

If we obtain any new information during this study that might affect your willingness to continue participating or to let your baby continue participating in the study, we’ll promptly provide you with that information.

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APPROVAL DATE: 02/28/13
EXPIRATION DATE: 02/28/14

Can Someone Else End my Participation in this Study?

Under certain circumstances, the researchers or the study sponsor might decide to end your and your baby’s participation in this research study earlier than planned. This might happen because funding for the research study is ended.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Dr. Edward Bell at (319)356-4006 or Karen Johnson, R.N. at (319)356-2924.

If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contact the Human Subjects Office, 105 Hardin Library for the Health Sciences, 600 Newton Road, University of Iowa, Iowa City, IA 52242-1098, (319) 335-6564, or e-mail irb@uiowa.edu. General information about being a research subject can be found by clicking “Info for Public” on the Human Subjects Office web site, <http://research.uiowa.edu/hso>.

This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by signing this Informed Consent Document. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Parent Subject's Name (printed): _____

(Signature of Parent Subject)

(Date)

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APPROVAL DATE: 02/28/13
EXPIRATION DATE: 02/28/14

Parent/Guardian or Legally Authorized Representative's Name and Relationship to Subject:

Child Subject's Name (printed): _____

(Parent/Guardian Name - printed)

(Relationship to Subject - printed)

(Signature of Parent/Guardian or
Legally Authorized Representative)

(Date)

Statement of Person Who Obtained Consent

I have discussed the above points with the subject or, where appropriate, with the subject's legally authorized representative. It is my opinion that the subject understands the risks, benefits, and procedures involved with participation in this research study.

(Signature of Person who Obtained Consent)

(Date)

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

INFORMED CONSENT DOCUMENT

Project Title: **The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants -- Follow Up**

Principal Investigator: Edward Bell, MD

Research Team Contact: Karen Johnson, RN (319)356-2924

This consent form describes the research study to help you decide if you want to participate and allow your child to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not sign this form unless the study research team has answered your questions and you decide that you want to be part of this study.
- Your decision will not affect your infant's right to medical care that is not research-related.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We are inviting you and your child to participate in this research study because he/she was born 12-16 weeks early (at 24 to 28 weeks of pregnancy), and was enrolled in the Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants.

We would like to stay in contact with you until your child is 6-7 years old

The purpose is to compare brain imaging by ultrasound and magnetic resonance imaging (MRI), done around the time when a baby would normally be born, to determine if one method of imaging gives more useful information than the other.

HOW MANY PEOPLE WILL PARTICIPATE?

Seventeen babies and their mothers will take part in this part of the study at the University of Iowa. This study is being conducted at 15 other centers, and the total number of babies and mothers in all the centers combined will be approximately 1300.

HOW LONG WILL I BE IN THIS STUDY?

If you agree for yourself and your baby to take part in this study, your involvement will last until your baby is 6-7 years old. It is possible that we will ask you to bring him or her back for one more follow-up visit at that time.

WHAT WILL HAPPEN DURING THIS STUDY?

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APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

We would like to stay in contact with you until your child is 6-7 years old. Therefore, we will collect your address, phone number, email address and those of another person that you choose. If we get funding, we will ask you to bring your child back to UIHC when he or she is between 6 and 7 years old for a clinic visit. At that time we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask you several questions about your family and yourself. You do not need to answer any questions that make you uncomfortable..

You will be asked to provide your or your baby's social security number on a form that will be kept in a locked file by the UI research team. In case we lose contact with you in the future, we may also use your and your baby's social security number to attempt to locate you for scheduling the follow-up visit. The collection of your social security number is strictly optional and is not required for participation in the study.

I allow you to collect and use my social security number for the purposes outlined above.

I do NOT allow you to collect or use my social security number for the purposes outlined above.

(Initial your choice above)

WHAT ARE THE RISKS OF THIS STUDY?

Some of the interview questions asked at the 6-7 year follow up visit may make you uncomfortable. You may choose not to answer any or all of the questions.

Are there any Unforeseen Risks?

In addition to the risks described above, there may be unknown risks, or risks that we did not anticipate, associated with being in this study.

WHAT ARE THE BENEFITS OF THIS STUDY?

We don't know if you or your baby will benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because the knowledge learned may help in the understanding of the use of CPAP or a breathing tube to help premature babies with breathing immediately after birth and in the NICU. It may also help us to learn more about premature infants managed in the high and low ends of the normal range of oxygen saturation. We may also gain knowledge about using MRI to detect brain injuries. Finally, knowledge may be gained about the effects of CPAP and oxygen on breathing and growth outcomes of premature infants.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You and your baby will not have any additional costs for being in this research study.

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

You and/or your medical/hospital insurance carrier will remain responsible for your and your baby's regular medical care expenses.

WILL I BE PAID FOR PARTICIPATING?

You and your baby will not be paid for being in this research study, however you will be reimbursed for your travel expenses (\$50 VISA gift card and \$50 by check in mail after the visit) if we ask you to return when your child is 6-7 years old. You will need to provide your social security number (SSN) in order for us to reimburse you. You may choose to participate without being reimbursed if you do not wish to provide your social security number (SSN) for this purpose. You may also need to provide your address if a check will be mailed to you.

WHO IS FUNDING THIS STUDY?

The National Institute of Health, NICHD Neonatal Research Network is funding this research study. This means that the University of Iowa is receiving payments from The National Institute of Health, NICHD Neonatal Research Network to support the activities that are required to conduct the study. No one on the research team will receive a direct payment or increase in salary from The National Institute of Health, NICHD Neonatal Research Network for conducting this study.

WHAT ABOUT CONFIDENTIALITY?

We will keep your and your baby's participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your or your baby's participation in this study. For example, federal government regulatory agencies, The National Institute of Health, NICHD Neonatal Research Network, auditing departments of the University of Iowa and the University of Iowa Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you or your baby.

To help protect your and your baby's confidentiality, we will label information with a code number. The study logs linking the code number with your infant's identity will be kept in a locked office, in a locked file cabinet and password-protected computer files. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you and your baby cannot be directly identified.

A copy of this Informed Consent Document will be placed in your and your baby's medical record.

WILL MY HEALTH INFORMATION BE USED DURING THIS STUDY?

The Federal Health Insurance Portability and Accountability Act (HIPAA) requires University of Iowa

OR IRB USE ONLY
APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

Health Care to obtain your permission for the research team to access or create “protected health information” about you for purposes of this research study. Protected health information is information that personally identifies you and your baby and relates to your and your baby’s past, present, or future physical or mental health condition or care. We will access or create health information about you and your baby, as described in this document, for purposes of this research and for your baby’s treatment. Once University of Iowa Health Care has disclosed your protected health information to us, it may no longer be protected by the Federal HIPAA privacy regulations, but we will continue to protect your and your baby’s confidentiality as described under “Confidentiality.”

We may share your health information related to this study with other parties including federal government regulatory agencies, the University of Iowa Institutional Review Boards and support staff, and The National Institute of Health, NICHD Neonatal Research Network.

You and your baby cannot participate in this study unless you permit us to use your and your baby’s protected health information. If you choose *not* to allow us to use your protected health information, we will discuss any non-research alternatives available to you. Your decision will not affect your right to medical care that is not research-related. Your signature on this Consent Document authorizes University of Iowa Health Care to give us permission to use or create health information about you and your baby.

Although you may not be allowed to see study information until after this study is over, you may be given access to your and your baby’s health care records by contacting your health care provider. Your permission for us to access or create protected health information about you and your baby for purposes of this study has no expiration date. You may withdraw your permission for us to use your and your baby’s health information for this research study by sending a written notice to: Dr. Edward Bell

University of Iowa Hospitals & Clinics
200 Hawkins Drive
Dept. of Pediatrics, 8811 JPP
Iowa City, Iowa 52242

However, we may still use your and your baby’s health information that was collected before withdrawing your permission. Also, if we have sent your and your baby’s health information to a third party, such as the study sponsor, or we have removed your identifying information, it may not be possible to prevent its future use. You will receive a copy of this signed document.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose for you and/or your baby not to take part at all. If you choose for your baby to be in this study, you may stop your and his/her participation at any time. If you decide not to have you and/or your child be in this study, or if you decide to stop you or your baby from participating at any time, you and your baby won’t be penalized or lose any benefits for which you otherwise qualify.

Will I Receive New Information About the Study while Participating?

If we obtain any new information during this study that might affect your willingness to continue participating or to let your baby continue participating in the study, we’ll promptly provide you with that information.

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APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

Can Someone Else End my Participation in this Study?

Under certain circumstances, the researchers or the study sponsor might decide to end your and your baby’s participation in this research study earlier than planned. This might happen because funding for the research study is ended.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Dr. Edward Bell at (319)356-4006 or Karen Johnson, R.N. at (319)356-2924.

If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contact the Human Subjects Office, 105 Hardin Library for the Health Sciences, 600 Newton Road, University of Iowa, Iowa City, IA 52242-1098, (319) 335-6564, or e-mail irb@uiowa.edu. General information about being a research subject can be found by clicking “Info for Public” on the Human Subjects Office web site, <http://research.uiowa.edu/hso>.

This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by signing this Informed Consent Document. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Parent Subject's Name (printed): _____

(Signature of Parent Subject)

(Date)

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APPROVED BY: IRB-01
IRB ID #: 200605740
APPROVAL DATE: 03/22/12
EXPIRATION DATE: 03/22/13

Parent/Guardian or Legally Authorized Representative's Name and Relationship to Subject:

Child Subject's Name (printed): _____

(Parent/Guardian Name - printed)

(Relationship to Subject - printed)

(Signature of Parent/Guardian or
Legally Authorized Representative)

(Date)

Statement of Person Who Obtained Consent

I have discussed the above points with the subject or, where appropriate, with the subject's legally authorized representative. It is my opinion that the subject understands the risks, benefits, and procedures involved with participation in this research study.

(Signature of Person who Obtained Consent)

(Date)

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RESEARCH SUBJECT INFORMATION AND CONSENT FORM

TITLE: The SURfactant Positive Airway Pressure and Pulse Oximetry Trial
in Extremely Low Birth Weight Infants

PROTOCOL NO.: None
WIRB® Protocol #20050156

SPONSOR: National Institute of Child Health and
Human Development (NICHD)
Bethesda, Maryland
United States

INVESTIGATOR: Shahnaz Duara, M.D.
Holtz Center (ET5005)
1611 NW 12th Avenue
Miami, Florida 33136
United States

SITE(S): University of Miami
Holtz Center (ET5005)
1611 NW 12th Avenue
Miami, Florida 33136
United States

**STUDY-RELATED
PHONE NUMBER(S):** Shahnaz Duara, M.D.
305-585-6408
305-585-5140 (24 Hours)

PURPOSE

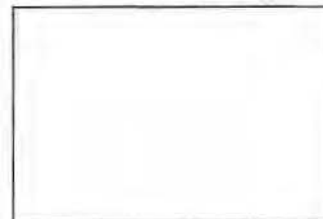
You are being asked to allow your baby to participate in a clinical research study at the University of Miami/Jackson Medical Center, sponsored by the National Institute of Child Health and Human Development (NICHD).

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3-1-79
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Please read this consent form and ask your study doctor or study staff as many questions as you need to about the study before you decide to be part of the study or not. If there is any word or information that you don't understand, your study doctor or study staff will explain them to you. If after reading this consent form you agree to allow your baby to participate in the study you will be asked to sign this consent form. You may keep an unsigned copy of this consent form to think about or discuss with family or friends before making your decision.

If your baby is born prematurely, he/she will need some assistance breathing and will need to be given supplemental oxygen because his/her lungs may not be mature enough. All babies born at 27 weeks gestational age (3 months before due date) will need some help when they are born. A team of nurses, doctors, and respiratory therapists will evaluate and assist your baby within the first minutes of life. If your baby continues to need support for breathing for more than the first few moments of life, he/she may need to be intubated. This involves having a tube placed through the mouth and wind-pipe (trachea) to better deliver oxygen to the lungs. The mechanical ventilation machine will better deliver extra (supplemental) oxygen to the baby and if needed deliver surfactant (the substance that is lacking in these babies lungs because of their immaturity). All babies born prematurely at extremely low birth weights will need supplemental oxygen. However, too much or too little oxygen may be dangerous to immature organs, causing unwanted illnesses that may have life-long effects during the developmental stages of life.

This study has two aims:

AIM 1:

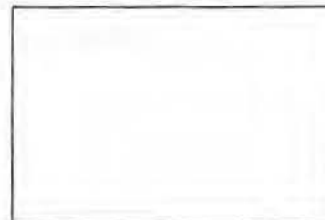
We want to find out if using Continuous Positive Airway Pressure (CPAP) / Positive End Expiratory Pressure (PEEP) (air pressure given to your baby to keep your baby's lung open) will reduce the need for intubation, the need for surfactant and/or the need for mechanical ventilation (the use of a machine to breathe for your baby) during the first 14 days of life.

AIM 2:

We want to determine what is the best level of oxygen saturation (SpO2) (the amount of oxygen that the blood carries to the organs of the body) required for these very small babies. The current normal levels range from 85% to 95% and this study will allow the comparison of a lower oxygen saturation range (85 to 89%) with a higher O2 saturation range (91% to 95%) until your infant no longer requires oxygen and has matured to within 4 weeks of his/her due date.

Your baby will be one of 1320 babies participating in this study at different hospitals within the United States, and one of 150 babies at the University of Miami/Jackson Children's Hospital.

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PROCEDURES

If your baby is born prematurely and you allow your child to participate in this study, immediately after birth the resuscitation will follow usual guidelines. Once your baby is stabilized, your baby will be randomly (by chance, like the flip of a coin) assigned to one of two study groups. Your baby has an equal chance of being in either of the study groups.

TO EVALUATE AIM 1: YOUR BABY WILL BE ASSIGNED A TREATMENT GROUP (CPAP GROUP) OR A CONTROL GROUP (EARLY SURFACTANT GROUP):

A. Treatment Group: (CPAP Group)

These infants will be managed as follow:

Delivery Room Management

If your baby requires positive pressure during resuscitation, CPAP or ventilation with (PEEP) will be used. CPAP will be continued until admission to the Neonatal Intensive Care Unit (NICU). Intubation will be done if your baby requires it.

If your baby requires intubation for resuscitation, he/she will receive surfactant within 60 minutes of birth. The other aspects of the resuscitation will be managed according to the Neonatal Resuscitation Program (NRP) guidelines and follow current practice.

NICU Management

If your baby is in the treatment group, while in the NICU, your baby will be managed on nasal CPAP. If your baby needs intubation, specific requirements for intubation (tube insertion), extubation (tube removal) and reintubation (reinsertion of the tube) have been developed and will continue in effect for a minimum of 14 days of life.

If your baby is intubated in the first 48 hours for respiratory distress, he/she will be given a minimum of one dose of surfactant. Up to 4 doses of surfactant may be given if needed.

B. Control Group: (Early surfactant and ventilation)

If your baby is in the control group, he/she will be treated using an approach considered similar to current standards of care. It is anticipated that a majority of these infants will be intubated and receive surfactant in the delivery room.

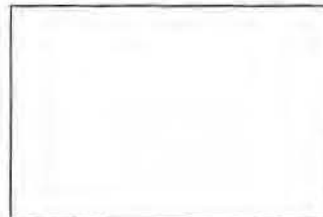
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Infants in this group will be managed as follows:

Delivery Room Management

Infants will be intubated in the delivery room and given surfactant or receive surfactant within 60 minutes of birth. The other aspects of the resuscitation will be managed according to the NRP guidelines and follow current practice for the NICU.

NICU Management

Infants will continue to receive mechanical ventilation until it is no longer needed. These requirements will continue in effect for a minimum of 14 days for all infants.

TO EVALUATE AIM 2: (LOW VERSUS HIGH SPO2 RANGE)

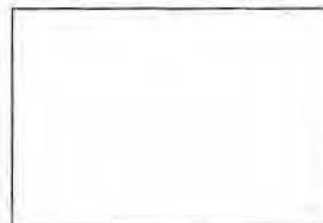
In addition, once your baby is in the NICU, he/she will be randomly assigned to have the high level of oxygenation (91 to 95%) or the low level of oxygenation (85 to 89%). Your baby has an equal chance of being assigned to either study group. Both groups are within the range of usual standard of care for the NICU. Your baby will remain in the group he/she is assigned to as long as he/she requires oxygen.

The study pulse oximeter (a device used to measure your baby's oxygen level) will be applied to your baby within two hours after going to the NICU. The assigned pulse oximeter will remain on your baby and will be removed once your baby has been in room air and off ventilatory support or CPAP for 72 hours. If oxygen is required later on, the same oxygen levels will be used until 36 weeks gestational age.

The assigned oximeter will be used as long as the baby is receiving ventilator support. The oximeters will alarm if they are too low (84%) or too high (96%).

Once your baby is admitted to the NICU, he/she will receive the standard care according to the policies and procedures set by the NICU.

An ultrasound of your baby's head will be done between days 4 and 21, if one has not already been done. All babies will be seen at about 2 years of age for developmental assessment.



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RISKS

The major risk of this study is that your baby may not receive surfactant as early. Early surfactant is known to reduce disease severity and the chance of death. It also reduces lung damage.

Potential risks to the use of CPAP and/or PEEP include collapsed lung, decreased heart rate, blood pressure problems, and distention of the stomach. The risks of ventilation include damage to the airways or lungs, damage from the tube moving or becoming plugged. There may also be heart rate and blood pressure problems.

Prolonged exposure to very high levels of oxygen may cause complications to your baby such as damage to the eyes which can result in blindness. Complications of too little oxygen may include problems with childhood development.

There may be risks or side effects which are unknown at this time.

Your baby's condition may not get better or may become worse while he/she is in this study.

NEW FINDINGS

You will be told about any new information that might change your decision to allow your child to be in this study.

BENEFITS

The consequences of your baby's breathing problems may be improved because of participating in this study, however, this cannot be guaranteed. It is possible that there may be no direct medical benefit to your baby for participating. The information learned in this study may benefit other babies having similar problems in the future.

COST TO YOU

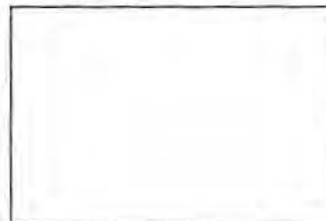
There is no cost to you for participating in this study.

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ALTERNATIVES

You have the alternative not to participate in this study and have your baby receive standard care after delivery. If you choose not to allow your baby to participate in the study, he or she will receive the standard care used at this institution. Ask the study doctor to discuss this with you.

CONFIDENTIALITY

Information from this study will be given to the sponsor. "Sponsor" includes any persons or companies which are contracted by the sponsor to have access to the research information during and after the study.

The information will also be given to the U.S. Food and Drug Administration (FDA). It may be given to governmental agencies in other countries where the study drug may be considered for approval. Medical records which identify your baby and the consent form signed by you will be looked at and/or copied for research or regulatory purposes by:

- the sponsor;
- Research Triangle Institute, an agent for the sponsor;

and may be looked at and/or copied for research or regulatory purposes by:

- the FDA;
- Department of Health and Human Services (DHHS) agencies;
- governmental agencies in other countries;
- the University of Miami; and
- the Western Institutional Review Board® (WIRB®).

Absolute confidentiality cannot be guaranteed because of the need to give information to these parties. The results of this research study may be presented at meetings or in publications. Your baby's identity will not be disclosed in those presentations.

Finally, if you should seek treatment at Jackson Health System, information from this study may be given to the treating physicians and other medical staff at Jackson Health System. In turn, the treating physicians and other medical staff at Jackson Health Systems may provide information about your baby's treatment and care to the study doctor and/or agents for the study doctor.

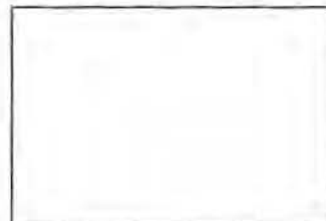
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COMPENSATION FOR INJURY

Your baby may be exposed to risk of injury from participation in this study. If injury occurs, treatment will in most cases be available. If you have insurance, your insurance company may or may not pay these costs. If you do not have insurance, or if your insurance company refuses to pay, you will be billed for these costs. Funds to compensate for pain, expenses, and other damages caused by injury are not routinely available.

SOURCE OF FUNDING

Funding for this research study will be provided by National Institute of Child Health and Human Development (NICHD).

VOLUNTARY PARTICIPATION/WITHDRAW

Your agreement to have your infant participate in this study is voluntary. You have the right to withdraw your consent or take your baby out of the study at any time. If you do decide to take your baby out of the study, he/she will continue to receive the same level of care that the hospital and the doctors provide. If you decide not to allow your baby to participate, or if you decide to stop participating at any time, there will be no penalty, nor loss of benefits, nor loss of medical care to which you or your baby are otherwise entitled.

The study doctor, Dr. Shahnaz Duara, or the sponsor of this study may decide to remove your baby from the study at any time without your consent if it is felt to be in the best interest of your baby.

QUESTIONS

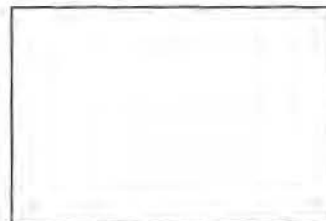
You may ask questions, and request information about this research study at any time during the study. Dr. Shahnaz Duara or her study assistants will be available to answer any questions you may have at 305-585-6408 between 8:00am to 5:00pm or the physician on call in the NICU at 305-585-5140 (24 Hours).

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3-1-79
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If you have any questions about your rights, or the rights of your infants, as a research subject you may contact:

Western Institutional Review Board® (WIRB®)
3535 Seventh Avenue, SW
Olympia, Washington 98502
Telephone: 1-800-562-4789.

WIRB is a group of people who perform independent review of research.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

If you agree to allow your baby to participate in this study, you will receive a signed and dated copy of this consent form for your records.

CONSENT

I have read the information in this consent form (or it has been read to me). I have discussed this study and the information provided with the study doctor. All my questions about the study and my baby's participation in it have been answered. I freely consent to allow my baby to participate in this research study.

I authorize the release of my baby's medical records for research or regulatory purposes to the sponsor, Research Triangle Institute, the FDA, DHHS agencies, governmental agencies in other countries, the University of Miami, and WIRB®.

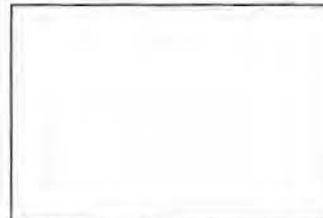
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JACKSON MEMORIAL HOSPITAL
Miami, FLORIDA

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3-1-79

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By signing this consent form, I have not waived any of the legal rights which I or my child otherwise would have as a subject in a research study.

Printed Name of Subject

Signature of Mother

Date

Signature of Father (if available)

Date

OR

Signature of Legally Authorized Representative

Date

Authority of Subject's Legally Authorized Representative or Relationship to Subject

Signature of Witness

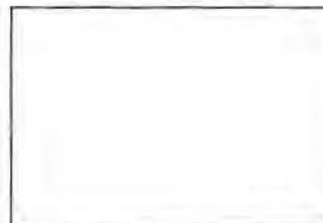
Date

Signature of Person Conducting
Informed Consent Discussion

Date

Print name

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----- Use the following only if applicable -----

If this consent form is read to the subject because the legally authorized representative is unable to read the form, an impartial witness not affiliated with the research or investigator must be present for the consent and sign the following statement:

I confirm that the information in the consent form and any other written information was accurately explained to, and apparently understood by, the subject's legally authorized representative. The subject's legally authorized representative freely consented to participate in the research study.

Signature of Impartial Witness

Date

Note: This signature block cannot be used for translations into another language. A translated consent form is necessary for enrolling subjects who do not speak English.

Study Doctor: Shahnaz Duara, M.D.
Telephone: 305-585-6408 (office)
 305-585-5140 (nights and weekends)

SUBJECT IMPRINT

Study Title ("the Research"): The Surfactant Positive Airway Pressure and pulse oximetry in extremely low birth weight infants

HIPAA Research Authorization Template – Form B AUTHORIZATION TO USE AND DISCLOSE HEALTH INFORMATION

I agree to permit the University of Miami Jackson Health System both, and any of my doctors or other health care providers (together "Providers"), Principal Investigator and [his /her/their/its] collaborators and staff (together "Researchers"), to obtain, use and disclose health information about me as described below.

- The health information that may be used and disclosed includes:** all information collected during the research and procedures described in the Informed Consent Form for
 - ("the Research"); and
 - health information in my medical records that is relevant to the Research, includes my past medical history including medical information from my primary care physician and other medical information relating to my participation in the study.
- The Providers may disclose health information in my medical records to:**
 - the Researchers;
 - representatives of government agencies, review boards, and other persons who watch over the safety, effectiveness, and conduct of research; and
 - the sponsor of the Research, , National Institutes for Child Health Devel and
(Print Sponsor Name)
its agents and contractors (together "Sponsor").
- The Researchers may use and share my health information:**
 - among themselves, with the Sponsor, and with other participating Researchers to conduct the Research; and
 - as permitted by the Informed Consent Form.
- The Sponsor may use and share my health information** for purposes of the Research and as permitted by the consent form.
- Once my health information has been disclosed to a third party,** federal privacy laws may no longer protect it from further disclosure.
- Please note that:**
You do not have to sign this Authorization, but if you do not, you may not participate in the Research. If you do not sign this authorization, your right to other medical treatment will not be affected.

University of Miami - Office of HIPAA Privacy and Security
PO BOX 019132 (M879) hipaaprivacy@med.miami.edu
Miami, FL 33101 (305) 243-5000

AUTHORIZATION TO USE AND DISCLOSE HEALTH INFORMATION



Form
D3901001E

Revised
01/09/06

Required Information: Please Complete.

NAME: _____

MRN: _____ IDX SMS

SS # DL # PASSPORT # OTHER _____

ID#: _____

AGE: _____ DOB: ____/____/____

DATE OF SERVICE: ____/____/____

Study Title ("the Research"): The Surfactant Positive Airway Pressure and pulse oximetry in extremely low birth weight infants

You may change your mind and revoke (take back) this Authorization at any time and for any reason. To revoke this Authorization, you must write to either of the following:

***Research Study Personnel Name:** Shahnaz Duara, MD or Ruth Everett, RN

Address: Department of Pediatrics/Neonatology (R-131) P.O. Box 016960

Tel. No.: 305 585-6408

Human Subjects Research Office

Address: 1500 NW 12th AVE, Suite 1002 Miami, FL 33136

Tel. No.: (305) 243-3195

However, if you revoke this Authorization, you will not be allowed to continue taking part in the Research. Also, even if you revoke this Authorization, the Providers, Researchers and the Sponsor may continue to use and disclose the information they have already collected to protect the integrity of the research or as permitted by the Informed Consent Form.

While the Research is in progress, you may not be allowed to see your health information that is created or collected by the *University of Miami* *Jackson Health System* *both*, in the course of the Research. After the Research is finished, however, you may see this information as described in the *University of Miami* *Jackson Health System* *both*, Notice of Privacy Practices.

*Study personnel must send copies of participant revocations to:
Office of HIPAA Privacy and Security AND the Human Subjects Research Office.

- 7. **This Authorization does not have an expiration (ending) date.**
- 8. **You will be given a copy of this Authorization after you have signed it.**

Signature of participant or participant's legal representative

Date

Printed name of participant

Printed name of legal representative (if applicable)

Representative's relationship to participant

Study personnel must send copy with signature to the Office of HIPAA Privacy and Security
For questions, contact the Human Subjects Research Office at 305-243-3195.

University of Miami - Office of HIPAA Privacy and Security
PO BOX 019132 (M879) hipaaprivacy@med.miami.edu
Miami, FL 33101 (305) 243-5000

**AUTHORIZATION TO USE AND DISCLOSE
HEALTH INFORMATION**

Form
D3901001E

Revised
01/09/06

Required Information: Swipe Keyplate if available and leave the box blank.

NAME: _____
MRN: _____ (U) (S) (M)
BY: _____
DATE: _____
TITLE/DEPARTMENT: _____
© 2003 University of Miami

WIRB[®]

(360) 252-2500
FAX: (360) 252-2498
1-800-562-4789

Western Institutional Review Board[®]

Western International Review Board[®]

3535 SEVENTH AVENUE, SW, OLYMPIA, WA 98502-5010
P.O. BOX 12029, OLYMPIA, WA 98508-2029

*Certificate
of
Approval*

THE FOLLOWING WERE APPROVED:

INVESTIGATOR: Shahnaz Duara M.D.
Holtz Center (ET5005)
1611 NW 12th Avenue
Miami, Florida 33136

BOARD ACTION DATED: 04/14/2005

PANEL: 6

STUDY APPROVAL EXPIRES: 03/25/2006

STUDY NUM: 1065012

WIRB PRO NUM: 20050156

INVEST NUM: 112349

WO NUM: 1-312412-1

SPONSOR: National Institute of Child Health and Human Development (NICHD)

PROTOCOL NUM: None

AMD. PRO. NUM:

TITLE:

The SURfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

APPROVAL INCLUDES:

Consent Form [IN0]

WIRB APPROVAL IS GRANTED SUBJECT TO:

All subjects who will be enrolled in the future for this study must sign the most current WIRB-approved consent form(s).

IF YOU HAVE ANY QUESTIONS, CONTACT WIRB AT 1-800-562-4789

This is to certify that the information contained herein is true and correct as reflected in the records of the Western Institutional Review Board (WIRB). WE CERTIFY THAT WIRB IS IN FULL COMPLIANCE WITH GOOD CLINICAL PRACTICES AS DEFINED UNDER THE U.S. FOOD AND DRUG ADMINISTRATION (FDA) REGULATIONS AND THE INTERNATIONAL CONFERENCE ON HARMONISATION (ICH) GUIDELINES.



Theodore D. Schultz, J.D., Chairman

4/15/2005

(Date)

This document electronically reviewed and approved by Orive, Otto on 4/15/2005 7:07:38AM PST. For more information call Client Services at 1-360-252-2500

ALL WIRB APPROVED INVESTIGATORS MUST COMPLY WITH THE FOLLOWING:

1. Conduct the research in accordance with the protocol, applicable laws and regulations, and the principles of research ethics as set forth in the Belmont Report.
2. Unless consent has been waived, conduct the informed consent process without coercion or undue influence, and provide the potential subject sufficient opportunity to consider whether or not to participate.
 - a. Use only the most current consent form bearing the WIRB "APPROVED" stamp.
 - b. Provide non-English speaking subjects with a certified translation of the approved consent form in the subject's first language. The translation must be approved by WIRB.
 - c. Obtain pre-approval from WIRB for use of recruitment materials and other materials provided to subjects.
3. Obtain pre-approval from WIRB for any planned deviations and any changes in the research activity. The only exception is when changes are necessary to eliminate apparent immediate hazards to subjects. Immediately report to WIRB any such emergency changes implemented.
4. Promptly report to WIRB any new information that may adversely affect the safety of the subjects or the conduct of the trial.
 - a. Report to WIRB all adverse events that are serious, unexpected and related, within 10 days of the investigator becoming aware of them. Other unexpected adverse events that involve risks to study subjects or others are to be submitted with continuing review reports.
 - b. Promptly report to WIRB other unanticipated problems involving risks to human subjects or others. These events do not readily fit the formal definition of Adverse Event, but could impact human subject safety and/or rights. Examples include theft of a computer containing private identifiable subject information, or study staff getting ill from inhaling a study agent.
 - c. Provide reports to WIRB concerning the progress of the research, when requested.
5. Report to WIRB any unplanned protocol variance that could adversely affect the safety or welfare of subjects, or the integrity of the research data, within 10 days of becoming aware of the variance. Other unplanned variances may be recorded on a log and submitted with continuing review reports.

Federal regulations require that WIRB conduct continuing review of approved research. You will receive Continuing Review Report forms from WIRB. These reports must be returned even though your study may not have started.

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Contact

Translations Department, WIRB
Jorge, Josie
Duara, Shahnaz M.D.
Everett, Ruth R.N.
Poole, Kenneth Ph.D.

Company Name

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University of Miami
University of Miami
Research Triangle Institute

SITES:

Address

Holtz Center (ET5005), 1611 NW 12th Avenue, Miami, Florida 33136



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(360) 252-2500 • 1-800-562-4789 • FAX (360) 252-2498

NOTICE: CONSENT FORM CORRECTION

Enclosed is a corrected version of your consent form and a new Certificate of Approval. Also enclosed is a “redlined” copy of the consent form, provided for your reference, which indicates the changes made by the Board. Items shown with a line through them have been deleted; items shown with a double underline have been added by WIRB.

The “clean” copy with the latest WIRB stamp is the official approved version. **ONLY THE CONSENT FORM VERSION WITH THE MOST RECENT APPROVAL STAMP MAY BE USED TO CONSENT YOUR SUBJECTS.**

We apologize for the inconvenience. If you have any questions, please contact us.

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RESEARCH SUBJECT INFORMATION AND CONSENT FORM

TITLE: The SURfactant Positive Airway Pressure and Pulse Oximetry Trial
in Extremely Low Birth Weight Infants

PROTOCOL NO.: None
WIRB® Protocol #20050156

SPONSOR: National Institute of Child Health and
Human Development (NICHD)
Bethesda, Maryland
United States

INVESTIGATOR: Shahnaz Duara, M.D.
Holtz Center (ET5005)
1611 NW 12th Avenue
Miami, Florida 33136
United States

SITE(S): University of Miami
Holtz Center (ET5005)
1611 NW 12th Avenue
Miami, Florida 33136
United States

**STUDY-RELATED
PHONE NUMBER(S):** Shahnaz Duara, M.D.
305-585-6408
305-585-5140 (24 Hours)

PURPOSE

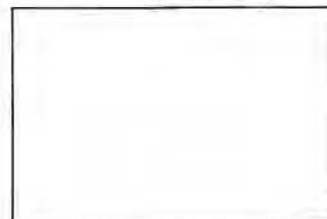
You are being asked to allow your baby to participate in a clinical research study at the University of Miami/Jackson Medical Center, sponsored by the National Institute of Child Health and Human Development (NICHD).

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JMHP 01-0305-1
3-1-79
C-640 CLINICAL RESEARCH CONSENT FORM

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Please read this consent form and ask your study doctor or study staff as many questions as you need to about the study before you decide to be part of the study or not. If there is any word or information that you don't understand, your study doctor or study staff will explain them to you. If after reading this consent form you agree to allow your baby to participate in the study you will be asked to sign this consent form. You may keep an unsigned copy of this consent form to think about or discuss with family or friends before making your decision.

If your baby is born prematurely, he/she will need some assistance breathing and will need to be given supplemental oxygen because his/her lungs may not be mature enough. All babies born at 27 weeks gestational age (3 months before due date) will need some help when they are born. A team of nurses, doctors, and respiratory therapists will evaluate and assist your baby within the first minutes of life. If your baby continues to need support for breathing for more than the first few moments of life, he/she may need to be intubated. This involves having a tube placed through the mouth and wind-pipe (trachea) to better deliver oxygen to the lungs. The mechanical ventilation machine will better deliver extra (supplemental) oxygen to the baby and if needed deliver surfactant (the substance that is lacking in these babies lungs because of their immaturity). All babies born prematurely at extremely low birth weights will need supplemental oxygen. However, too much or too little oxygen may be dangerous to immature organs, causing unwanted illnesses that may have life-long effects during the developmental stages of life.

This study has two aims:

AIM 1:

We want to find out if using Continuous Positive Airway Pressure (CPAP) / Positive End Expiratory Pressure (PEEP) (air pressure given to your baby to keep your baby's lung open) will reduce the need for intubation, the need for surfactant and/or the need for mechanical ventilation (the use of a machine to breathe for your baby) during the first 14 days of life.

AIM 2:

We want to determine what is the best level of oxygen saturation (SpO2) (the amount of oxygen that the blood carries to the organs of the body) required for these very small babies. The current normal levels range from 85% to 95% and this study will allow the comparison of a lower oxygen saturation range (85 to 89%) with a higher O2 saturation range (91% to 95%) until your infant no longer requires oxygen and has matured to within 4 weeks of his/her due date.

Your baby will be one of 1320 babies participating in this study at different hospitals within the United States, and one of 150 babies at the University of Miami/Jackson Children's Hospital.

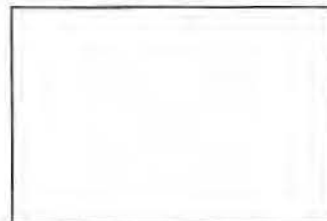
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PROCEDURES

If your baby is born prematurely and you allow your child to participate in this study, immediately after birth the resuscitation will follow usual guidelines. Once your baby is stabilized, your baby will be randomly (by chance, like the flip of a coin) assigned to one of two study groups. Your baby has an equal chance of being in either of the study groups.

TO EVALUATE AIM 1: YOUR BABY WILL BE ASSIGNED A TREATMENT GROUP (CPAP GROUP) OR A CONTROL GROUP (EARLY SURFACTANT GROUP):

A. Treatment Group: (CPAP Group)

These infants will be managed as follow:

Delivery Room Management

If your baby requires positive pressure during resuscitation, CPAP or ventilation with (PEEP) will be used. CPAP will be continued until admission to the Neonatal Intensive Care Unit (NICU). Intubation will be done if your baby requires it.

If your baby requires intubation for resuscitation, he/she will receive surfactant within 60 minutes of birth. The other aspects of the resuscitation will be managed according to the Neonatal Resuscitation Program (NRP) guidelines and follow current practice.

NICU Management

If your baby is in the treatment group, while in the NICU, your baby will be managed on nasal CPAP. If your baby needs intubation, specific requirements for intubation (tube insertion), extubation (tube removal) and reintubation (reinsertion of the tube) have been developed and will continue in effect for a minimum of 14 days of life.

If your baby is intubated in the first 48 hours for respiratory distress, he/she will be given a minimum of one dose of surfactant. Up to 4 doses of surfactant may be given if needed.

B. Control Group: (Early surfactant and ventilation)

If your baby is in the control group, he/she will be treated using an approach considered similar to current standards of care. It is anticipated that a majority of these infants will be intubated and receive surfactant in the delivery room.

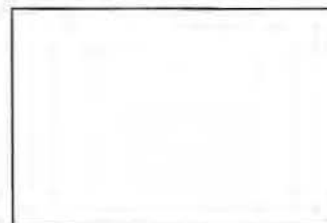
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Infants in this group will be managed as follows:

Delivery Room Management

Infants will be intubated in the delivery room and given surfactant or receive surfactant within 60 minutes of birth. The other aspects of the resuscitation will be managed according to the NRP guidelines and follow current practice for the NICU.

NICU Management

Infants will continue to receive mechanical ventilation until it is no longer needed. These requirements will continue in effect for a minimum of 14 days for all infants.

TO EVALUATE AIM 2: (LOW VERSUS HIGH SPO2 RANGE)

In addition, once your baby is in the NICU, he/she will be randomly assigned to have the high level of oxygenation (91 to 95%) or the low level of oxygenation (85 to 89%). Your baby has an equal chance of being assigned to either study group. Both groups are within the range of usual standard of care for the NICU. Your baby will remain in the group he/she is assigned to as long as he/she requires oxygen.

The study pulse oximeter (a device used to measure your baby's oxygen level) will be applied to your baby within two hours after going to the NICU. The assigned pulse oximeter will remain on your baby and will be removed once your baby has been in room air and off ventilatory support or CPAP for 72 hours. If oxygen is required later on, the same oxygen levels will be used until 36 weeks gestational age.

The assigned oximeter will be used as long as the baby is receiving ventilator support. The oximeters will alarm if they are too low (84%) or too high (96%).

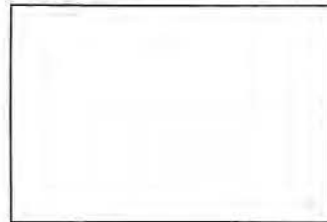
Once your baby is admitted to the NICU, he/she will receive the standard care according to the policies and procedures set by the NICU.

An ultrasound of your baby's head will be done between days 4 and 21, if one has not already been done. (All babies will be seen at about 2 years of age for developmental assessment.)

Add breathing circuit

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RISKS

The major risk of this study is that your baby may not receive surfactant as early. Early surfactant is known to reduce disease severity and the chance of death. It also reduces lung damage.

Potential risks to the use of CPAP and/or PEEP include collapsed lung, decreased heart rate, blood pressure problems, and distention of the stomach. The risks of ventilation include damage to the airways or lungs, damage from the tube moving or becoming plugged. There may also be heart rate and blood pressure problems.

Prolonged exposure to very high levels of oxygen may cause complications to your baby such as damage to the eyes which can result in blindness. Complications of too little oxygen may include problems with childhood development.

There may be risks or side effects which are unknown at this time.

Your baby's condition may not get better or may become worse while he/she is in this study.

NEW FINDINGS

You will be told about any new information that might change your decision to allow your child to be in this study.

BENEFITS

The consequences of your baby's breathing problems may be improved because of participating in this study, however, this cannot be guaranteed. It is possible that there may be no direct medical benefit to your baby for participating. The information learned in this study may benefit other babies having similar problems in the future.

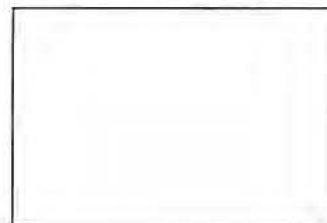
COST TO YOU

There is no cost to you for participating in this study.

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ALTERNATIVES

You have the alternative not to participate in this study and have your baby receive standard care after delivery. If you choose not to allow your baby to participate in the study, he or she will receive the standard care used at this institution. Ask the study doctor to discuss this with you.

CONFIDENTIALITY

Information from this study will be given to the sponsor. "Sponsor" includes any persons or companies which are contracted by the sponsor to have access to the research information during and after the study.

The information will also be given to the U.S. Food and Drug Administration (FDA). It may be given to governmental agencies in other countries where the study drug may be considered for approval. Medical records which identify your baby and the consent form signed by you will be looked at and/or copied for research or regulatory purposes by:

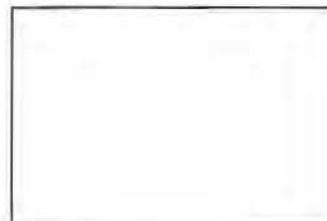
- the sponsor;
- Research Triangle Institute, an agent for the sponsor;

and may be looked at and/or copied for research or regulatory purposes by:

- the FDA;
- Department of Health and Human Services (DHHS) agencies;
- governmental agencies in other countries;
- the University of Miami; and
- the Western Institutional Review Board® (WIRB®).

Absolute confidentiality cannot be guaranteed because of the need to give information to these parties. The results of this research study may be presented at meetings or in publications. Your baby's identity will not be disclosed in those presentations.

Finally, if you should seek treatment at Jackson Health System, information from this study may be given to the treating physicians and other medical staff at Jackson Health System. In turn, the treating physicians and other medical staff at Jackson Health Systems may provide information about your baby's treatment and care to the study doctor and/or agents for the study doctor.



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COMPENSATION FOR INJURY

Your baby may be exposed to risk of injury from participation in this study. If injury occurs, treatment will in most cases be available. If you have insurance, your insurance company may or may not pay these costs. If you do not have insurance, or if your insurance company refuses to pay, you will be billed for these costs. Funds to compensate for pain, expenses, and other damages caused by injury are not routinely available.

SOURCE OF FUNDING

Funding for this research study will be provided by National Institute of Child Health and Human Development (NICHD).

VOLUNTARY PARTICIPATION/WITHDRAW

Your agreement to have your infant participate in this study is voluntary. You have the right to withdraw your consent or take your baby out of the study at any time. If you do decide to take your baby out of the study, he/she will continue to receive the same level of care that the hospital and the doctors provide. If you decide not to allow your baby to participate, or if you decide to stop participating at any time, there will be no penalty, nor loss of benefits, nor loss of medical care to which you or your baby are otherwise entitled.

The study doctor, Dr. Shahnaz Duara, or the sponsor of this study may decide to remove your baby from the study at any time without your consent if it is felt to be in the best interest of your baby.

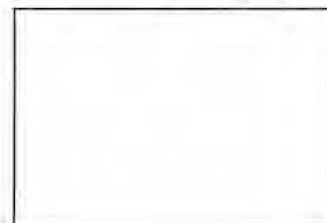
QUESTIONS

You may ask questions, and request information about this research study at any time during the study. Dr. Shahnaz Duara or her study assistants will be available to answer any questions you may have at 305-585-6408 between 8:00am to 5:00pm or the physician on call in the NICU at 305-585-5140 (24 Hours).

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If you have any questions about your rights, or the rights of your infants, as a research subject you may contact:

Western Institutional Review Board® (WIRB®)
3535 Seventh Avenue, SW
Olympia, Washington 98502
Telephone: 1-800-562-4789.

WIRB is a group of people who perform independent review of research.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

If you agree to allow your baby to participate in this study, you will receive a signed and dated copy of this consent form for your records.

CONSENT

I have read the information in this consent form (or it has been read to me). I have discussed this study and the information provided with the study doctor. All my questions about the study and my baby's participation in it have been answered. I freely consent to allow my baby to participate in this research study.

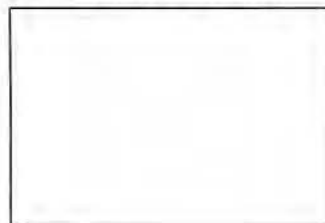
I authorize the release of my baby's medical records for research or regulatory purposes to the sponsor, Research Triangle Institute, the FDA, DHHS agencies, governmental agencies in other countries, the University of Miami, and WIRB®.

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By signing this consent form, I have not waived any of the legal rights which I or my child otherwise would have as a subject in a research study.

Printed Name of Subject

Signature of Mother

Date

Signature of Father (if available)

Date

OR

Signature of Legally Authorized Representative

Date

Authority of Subject's Legally Authorized Representative or Relationship to Subject

Signature of Witness

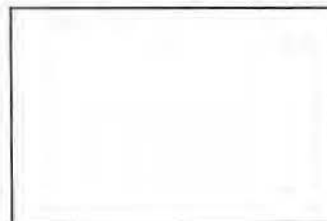
Date

Signature of Person Conducting
Informed Consent Discussion

Date

Print name

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Olympia, WA

----- Use the following only if applicable -----

If this consent form is read to the subject because the legally authorized representative is unable to read the form, an impartial witness not affiliated with the research or investigator must be present for the consent and sign the following statement:

I confirm that the information in the consent form and any other written information was accurately explained to, and apparently understood by, the subject's legally authorized representative. The subject's legally authorized representative freely consented to participate in the research study.

Signature of Impartial Witness

Date

Note: This signature block cannot be used for translations into another language. A translated consent form is necessary for enrolling subjects who do not speak English.

Study Doctor: Shahnaz Duara, M.D.
Telephone: 305-585-6408 (office)
305-585-5140 (nights and weekends)

SUBJECT IMPRINT

El Centro de Ciencias de la Salud de la Universidad de Nuevo México Consentimiento para Participar en una Investigación

La Prueba de Surfactante Presión Positiva Constante de las Vías Respiratorias y Oximetría de Pulso en Infantes que Nacen Extremadamente Bajos de Peso (Prueba con Apoyo)

Su hijo(a) esta invitada a participar en un estudio de investigación que esta siendo realizado por Kristi Watterberg, M.D., quien es la Investigadora Principal, y por sus asociados del Departamento de Pediatría. Esta investigación involucra dos preguntas básicas: ¿Cuál de los dos tratamientos del pulmón que se usaron fue mejor para los pulmones de los bebes; y ¿Cuál es el nivel apropiado de oxígeno en la sangre de los infantes prematuros? Los dos tratamientos del pulmón son “CPAP” (presión de aire positivo para ayudar a mantener los pulmones inflados) e “intubación,” el cual involucra la colocación de un tubo para respirar en la nariz del infante con una administración temprana de un medicamento llamado surfactant a través del tubo para respirar.

Desde 1970 dos maneras basicas para ayudar a bebes prematuros a respirar han sido usados en las Unidades de Cuidado Intensivo del Recien Nacido. Un metodo, llamado “intubación,” involucra el colocar un tubo para respirar en la via respiratoria y conectarlo a la máquina llamada “ventilador” la cual respira por el infante. El otro método, llamado CPAP en Inglés o “Presión Positiva Constante de las Vías Respiratorias,” involucra el colocar tubos cortos en la nariz del infante y da aire con presión el cual ayuda al infante a respirar solo. Muchos estudios se han llevado a cabo para ver como estos dos métodos pueden ser usados tan bien como sea posible. Investigaciones han demostrado, sin importar cual tratamiento se ha dado, que todos los bebes que necesitan ayuda para respirar tienen el riesgo de desarrollar una enfermedad del pulmón crónica o que pueda durar mucho tiempo llamada "Displasia Broncopulmonar," o “BPD”, (abreviación en Inglés). Desde 1990 un medicamento llamado “surfactant” ha sido disponible para ayudar a los bebes prematuros a respirar mas fácilmente, pero un tubo debe de ser colocado en la vía respiratoria para dar este medicamento.

El oxígeno es también usado cuando un bebe no es capaz de obtener suficiente oxígeno en su sangre respirando el aire del cuarto. Los doctores saben que es importante estar seguro que el bebe esta recibiendo suficiente, pero no mucho oxígeno. Una posible complicación de mucho oxígeno es una enfermedad del ojo llamada “Retinopatía del Prematuro,” que puede resultar en una visión mínima o hasta en ceguera.

Todos estos tratamientos han sido cuidadosamente estudiados y todos son usados en las Unidades de Cuidado Intensivo del Recién Nacido. Este es el primer estudio que cuidadosamente comparara el uso de todos estos métodos empezando desde los primeros momentos después del nacimiento y seguir a los bebes hasta por lo menos 18 meses después de la fecha que iban a nacer, si no hubieran sido prematuros.

En este estudio, los infantes que reciben un cuarto de parto con Presión Positiva Constante de las Vías Respiratorias y que tienen unas reglas especificas para que les sean colocado un tubo de respiración

____ Initials

Page 1 of 7

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Version: 02/23/07

APPROVED 08/05/08

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The University of New Mexico Human Research Review Committee

serán comparados con los infantes a los que se les haya colocado un tubo y dado surfactante en el cuarto de parto o muy pronto después de su nacimiento. El estudio también comparara el mantener un rango bajo (85-89%) o un alto rango (85-95%) de niveles de oxígeno en la sangre (saturación). Ambos rangos están entre el rango de saturación de oxígeno que esta siendo actualmente usado para infantes prematuros en la Unidad de Cuidado Intensivo del Recién Nacido en el Hospital de la UNM (85-95%). Una alarma sonara si la saturación de oxígeno va mas allá o por debajo del rango, como pasa con los infantes prematuros en nuestra Unidad de Cuidado Intensivo. Aunque se conoce que los rangos altos de oxígeno están asociados con mas enfermedad del ojo, el rango mas seguro de oxígeno todavía se desconoce. Esperamos saber si un rango mas bajo resulta en menos Retinopatía del Prematuro.

Se le pide que permita que su hijo(a) este en el estudio porque hay una posibilidad de que el o ella nazca de 12 a 16 semanas adelantadas (entre las 24 y 28 semanas de embarazo). Cerca de 30 bebes tomaran parte en este estudio en le Universidad de Nuevo México. 1300 bebes participaran en este estudio en los Estados Unidos. Los Institutos Nacionales de Salud están financiando este estudio.

Esta forma le explicará el estudio de investigación, y también le explicara los riesgos posibles también como los posibles beneficios hacia usted. Lo animamos a que hable con su familia y amigos antes de que decida tomar parte en este estudio de investigación. Si usted tiene alguna pregunta ahora, por favor pregúntele a uno de los investigadores del estudio.

¿Qué pasará si yo decido participar?

Si usted decide permitir que su hijo(a) este en este estudio, unos minutos antes de que su hijo(a) nazca, se le asignara al azar, como un volado, a uno de los dos tratamientos del pulmón. Los tratamientos son como sigue: 1) Presión Positiva Constante de las Vías Respiratorias en el cuarto de parto inmediatamente después del nacimiento y continuar en el cunero del cuidado intensivo, o 2) colocación de un tubo en la traque en el cuarto de parto o inmediatamente después de llegar a la unidad de cuidado intensivo, seguido por la administración del surfactante y ventilación (respiración para el bebe usando una maquina). No se sabe cual de estos tratamientos para respirar es mejor. Los infantes escogidos para el grupo de Presión Positiva Constante de las Vías Respiratorias puede, en algún momento en su cuidado, requerir un tubo para la traque y una maquina de respirar. Los doctores de su bebe tomaran la decisión si ellos piensan que es necesario para su bebe. Estudios han sugerido que los bebes que les son colocados un tubo para respirar y que se les dar un surfactante muy temprano pueden beneficiarse del surfactante (algunos estudios han demostrado que si se da el surfactante muy tempranamente resulta en menos “fuga de aire”, donde el aire se escapa de los espacios de aire de los pulmones en la área alrededor de los pulmones y menos muertes, pero otros estudios no han encontrado esta diferencia), pero ellos pueden tener un riesgo mas alto para desarrollar Displasia Broncopulmonar a consecuencia del tubo para respirar. Por otro lado, infantes que han sido tratados tempranamente con Presión Positiva Constante de las Vías Respiratorias pueden no recibir el beneficio temprano del surfactante, pero puede tener un riesgo mas bajo para desarrollar Displasia Broncopulmonar porque no se inserta un tubo para respirar.

A parte de ser asignado al azar a uno de los dos grupos descritos arriba, su bebe será asignado al azar para tener un oxímetro (una maquina que supervisa el oxígeno en la sangre) el cual lee un poco alto o uno que lea un poco bajo. Los oxímetros usados en este estudio son herramientas aprobados por el

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FDA (Administración de Drogas y Alimentos) los cuales han sido ajustados para propósitos de investigación para mostrar un valor de saturación de oxígeno el cual es un poco mas alto o un poco mas bajo que la lectura verdadera de oxígeno cuando el oxígeno esta en un rango normal (entre 85 y 95%). Fuera del rango normal, el oxímetro demuestra el nivel verdadero del oxígeno. Esto le ayudara a proteger a su bebe de los niveles de oxígeno que estén muy altos o muy bajos.

A su infante se le asignara a uno de los cuatros grupos que se muestran abajo. Ni usted ni el doctor de su bebe sabrán cual es el blanco del rango de saturación de oxígeno; sin embargo, los limites de la alarma permanecerán igual para todos los infantes prematuros en nuestra Unidad de Cuidado Intensivo de Recién Nacido. Su bebe no será expuesto a saturaciones mas bajas o mas altas que son actualmente aceptadas para todos los infantes prematuros en nuestra Unidad de Cuidado Intensivo. Las asignaciones serán hechas al azar, como echar un volado.

<p>Presión Positiva Constante de las Vías Respiratorias (CPAP) Nivel de oxígeno mas alto en la sangre</p>	<p>Presión Positiva Constante de las Vías Respiratorias (CPAP) Nivel de oxígeno mas bajo en la sangre</p>
<p>Tubo para respirar + maquina para respirar + surfactante Nivel de oxígeno mas alto en la sangre</p>	<p>Tubo para respirar + maquina para respirar + surfactante Nivel de oxígeno mas bajo en la sangre</p>

El resto del cuidado de su infante será con tratamientos estándar para bebes prematuros en la Unidad de Cuidado Intensivo del Recién Nacido del Hospital de Niños de la UNM. La información sobre ese cuidado y ciertos resultados, como ultrasonidos de cabeza y medidas de cabeza, serán colectados del expediente medico de su hijo(a). A los 6 meses y a los 12 meses le llamaremos y le haremos preguntas sobre como esta respirando su hijo (especialmente tos y jadeos), el uso de medicamentos, y visitas al doctor, a emergencias, o visitas al hospital para algún tratamiento o por problemas respiratorios. Preguntaremos también sobre el historial de la familia en cuanto a problemas respiratorios, y sobre su casa, incluyendo cosas que pueden incrementar el riesgo de que su hijo(a) tenga problemas respiratorios. Tomará como 15 minutos para contestar las preguntas. Los niños registrados en este estudio necesitarán ir a la Clínica Especial del Bebe (Special Baby Clinic) para su evaluación de crecimiento, problemas de respiración, desarrollo y habilidades de coordinación de movimiento de los 18-22 meses de edad.

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¿Cuánto tiempo estará mi hijo(a) en este estudio?

Las guías del estudio para los tratamientos de pulmones de infantes en ambos grupos serán supervisados por dos semanas. Su hijo estará en un estudio de oxímetro hasta cerca de cuatro semanas antes de la estimada fecha de nacimiento original. En ese momento, el oxímetro será cambiado al estándar por el resto de su estadía en el hospital. Para poder evaluar los efectos a la larga de los tratamientos en este estudio, se colectará información sobre la salud general de su bebé, y cualquier hospitalización durante los primeros dos años de vida. Si usted está de acuerdo a participar en este estudio, usted da consentimiento para que otros sitios médicos y proveedores den los expedientes médicos sobre el cuidado médico a la doctora Kristi Watterberg y a sus asociados. El seguimiento a los 18-22 meses es esencial para este estudio. Familias que participan en este proyecto están de acuerdo en permanecer en contacto con los investigadores y de regresar a la Clínica Especial del Bebé del Hospital de Niños de la UNM con su hijo(a) cuando el o ella tenga 18 meses de edad.

¿Cuáles son los riesgos o efectos secundarios de estar en este estudio?

La participación en este estudio puede involucrar algunos riesgos o molestias. Algunos riesgos desconocidos pueden ser aprendidos durante este estudio. Todos estos tratamientos están actualmente aceptados clínicamente, pero no han sido comparados entre ellos mismos de esta manera, así que esta no somos capaces de predecir a cual grupo le puede ir mejor. Uno o ambos tratamientos se usan normalmente en la clínica para todos los bebés que son así de prematuros en el Hospital de UNM. Si se le asigna a su bebé al grupo de bebés a los cuales se le colocan un tubo para respirar y se les da surfactante muy tempranamente, el o ella se puede beneficiar del surfactante, pero puede tener un riesgo más alto para desarrollar Displasia Broncopulmonar por el tubo para respirar. Si a su bebé se le asigna al grupo de CPAP, el o ella puede no recibir el beneficio temprano del surfactante, pero puede tener un riesgo más bajo para desarrollar Displasia Broncopulmonar porque no se le inserta un tubo para respirar. Ambos grupos de bebés recibirán presión positiva a sus traqueas. Esta es una práctica clínica usual para casi todos los bebés que son así de prematuros (cerca del 90% en el hospital de la UNM). La máscara de CPAP puede causar un ritmo cardíaco bajo. Si esto pasa, se le removerá la máscara y se le colocará de nuevo. El CPAP puede causar que se colecte aire en el estómago, así que un tubo pequeño se coloca de la boca al estómago. Todos los bebés son supervisados sobre estos problemas.

Para este estudio, no habrá cambio en el rango de saturación de oxígeno del que se usa actualmente en el NICU del Hospital de la UNM. En este estudio, nosotros estamos tratando de ser más específicos sobre el rango que actualmente estamos usando. El rango específico e ideal de oxígeno para reducir la enfermedad de ojo es desconocida. Esperamos que este estudio ayude a determinar si un rango más bajo o más alto de oxígeno que se usa actualmente para todos los bebés admitidos al NICU del hospital de la UNM. El otro riesgo de este estudio es el riesgo de la confidencialidad. Cada esfuerzo será hecho para mantener la confidencialidad de los expedientes médicos de su hijo.

¿Cuáles son los beneficios de estar en este estudio?

Su hijo puede o no puede beneficiarse participando en este estudio. El conocimiento que se aprenda de este estudio puede ayudarnos a tratar a los bebés en un futuro.

¿Qué otras opciones tengo si no quiero participar en este estudio?

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La alternativa es no dejar participar a su hijo en este estudio. Usted no debería sentirse obligado a estar de acuerdo a participar. Sus preguntas deben de ser respondidas claramente y satisfactoriamente. Si usted opta por no permitir que su hijo participe, el o ella recibirá el cuidado estándar para infantes prematuros como sea necesario. Esto puede incluir oxígeno y ayudar para respirar que es similar a los tratamientos en este estudio.

¿Cómo será mantenida mi información en una manera confidencial?

Tomaremos las medidas para proteger su privacidad y la seguridad de toda su información personal, pero no podemos garantizar confidencialidad de todos los datos del estudio.

La información contenida en los registros del estudio es usada por el personal del estudio y, en algunos casos será compartida con el patrocinador del estudio. A los representantes de los Institutos Nacionales de Salud (patrocinador del estudio), a la Administración de Drogas y Alimentos y / u otras entidades regulatorias, y al Comité de Revisión de Investigación Humana del Centro de Ciencias de la Salud de la Universidad de Nuevo México que supervisa la investigación de sujetos humanos les será permitido el acceso a sus expedientes. También, su participación en este estudio y la información en sus expedientes de estudio pueden ser divulgadas como lo requiere ley. Sin embargo, su nombre no será utilizado en reportes publicados sobre el estudio.

¿Cuáles son los costos de tomar parte en este estudio?

No hay costos involucrados cuando se toma parte en este estudio. Usted o su compañía de seguros serán responsables por los costos incurridos en el cuidado de su hijo porque ese cuidado no será diferente del cuidado que se da usualmente por el personal de enfermería. Los Institutos Nacionales de Salud y el Instituto Nacional de la Salud del Niño y Desarrollo Humano están dando ayuda financiera y / o materiales para este estudio.

¿Que pasará si me lesiono o me enfermo porque tome parte en este estudio?

El Centro de Ciencias de la Salud de la Universidad de Nuevo México (UNMHSC, siglas en ingles) no se compromete a dar cuidado medico gratuito o dinero por lesiones a participantes en este estudio. Si su hijo se lesiona o se enferma como resultado de este estudio, el UNMHSC le dará tratamiento de emergencia al costo usual. Es importante que usted le diga al doctor del estudio inmediatamente si su hijo se ha lesionado o si se enferma por tomar parte en este estudio. Si usted tiene alguna pregunta sobre estos temas, o cree que lo han tratado sin cuidado en el estudio, por favor contacte al Comité de Investigación de Investigación Humana del Centro de Salud de la Universidad de Nuevo México, Albuquerque, Nuevo México 87131, (505) 272-1129 para mas información.

¿Se me pagará por tomar parte en este estudio?

No se darán pagos por participar en este proyecto.

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¿Cómo sabré si ustedes aprenden algo nuevo que puede hacerme cambiar de parecer sobre el participar?

Usted será informada de cualquier descubrimiento significativo que se nos sea disponible durante el curso del estudio, como cambios en los riesgos o beneficios que resulten de la participación en la investigación o alternativas nuevas a participar que puedan hacerle cambiar de parecer sobre su participación.

¿Puedo dejar el estudio una vez que empiece?

Su participación en este estudio es estrictamente voluntaria. Usted tiene el derecho de no participar o de retirar su participación en cualquier momento en este estudio sin perjuicio alguno para su cuidado futuro de salud o servicios a los cuales usted tiene derecho.

A la discreción del proveedor clínico, los bebés pueden ser sacados del estudio debido a una circunstancia inesperada. Ejemplos de razones para sacar a un participante del estudio incluyen: el investigador decide que la continuación en la participación podría ser dañina para su hijo o que el estudio se cancele.

¿A quién puedo llamar para hacer preguntas o para alguna queja sobre este estudio?

Si usted tiene alguna pregunta, preocupación o queja en cualquier momento sobre el estudio de investigación, la doctora Watterberg, o a sus asociados les agradecerá responderle al teléfono 272-0180, de lunes a viernes de las 8:00 AM – 5:00 PM. Si usted quiere hablar con alguien que no sea parte del equipo de investigación, usted puede llamar al UNMHSC HRRC al (505) 272-1129.

¿A quién puedo llamar para preguntar sobre mis derechos como sujeto de investigación?

Si usted tiene preguntas sobre sus derechos como sujeto de investigación, usted puede llamar al UNMHSC HRRC al (505) 272-1129. El HRRC es un grupo de gente de la UNM y de la comunidad que da supervisión de seguridad y problemas éticos relacionados con sujetos humanos en investigación. Para más información, usted puede tener acceso a la página de Internet del HRRCC al <http://hsc.unm.edu/som/research/hrrc/>.

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Consentimiento

Usted esta tomando la decisión de dejar que su hijo participe en este estudio. Su firma abajo indica que usted leyó la información que se le dio (o se le leyó a usted la información). Si usted firma la forma de consentimiento, usted no esta renunciando a los derechos legales de su hijo como sujeto de investigación

He tenido la oportunidad de hacer preguntas y todas las preguntas han sido contestadas satisfactoriamente. Si firmo esta forma, yo estoy de acuerdo en dejar que mi hijo participe en este estudio. Una copia de esta forma de consentimiento le será dada a usted.

Nombre del Padre, Madre o Guardián Legal

_____/_____
Firma del Guardián Legal Fecha

Yo he explicado la investigación al sujeto o a su representante legal, y he contestado todas sus preguntas. Yo creo que el / ella entiende la información descrita en esta forma de consentimiento y consiente participar voluntariamente.

Nombre del Investigador / Miembro del Equipo de Investigación (escriba a mano ó a máquina)

(Firma del Investigador / Miembro del Equipo de Investigación) Fecha

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The University of New Mexico Health Sciences Center Consent to Participate in Research

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

Your child is invited to participate in a research study being done by Kristi Watterberg, M.D., who is the Principal Investigator, and her associates, from the Department of Pediatrics. This research is looking at two basic questions: which of two lung treatments used with premature babies is better for the baby's lungs; and what is the appropriate level of oxygen in the blood in premature infants. The two lung treatments are "CPAP" (positive air pressure to help keep the lungs inflated) and "intubation," which involves placement of a breathing tube in the infant's airway with early administration of a medication called surfactant through this breathing tube.

Since 1970 two basic ways to help premature babies breathe have been used in Newborn Intensive Care Units. One method, called "intubation," involves placement of a breathing tube in the infant's airway and attaching it to a machine called a "ventilator" which breathes for the infant. The other method, called "CPAP" or "Continuous Positive Airway Pressure," involves placement of short tubes in the infant's nose and providing air pressure which helps the infant breathe on his/her own. Many studies have been done to see how to make these two methods work as well as possible. Research has shown, regardless of which treatment is used, that all babies who need help with breathing are at risk of developing a type of chronic, or long lasting, lung disease called "Bronchopulmonary Dysplasia," or "BPD" for short. Since 1990 a medication, called "surfactant" has been available to help premature babies breathe easier, but a tube must be placed in the airway to give this medicine.

Oxygen is also used whenever a baby is not able to get enough oxygen into his/her blood by breathing room air. Doctors know that it is important to be sure a baby is getting enough, but not too much oxygen. One possible complication of too much oxygen is an eye disease called "Retinopathy of Prematurity," or "ROP," that may result in poor vision or even blindness.

All of these treatments have been carefully studied and all are used in Newborn ICUs. This is the first study to carefully compare the use of all of these methods starting from the first moments after birth and following the babies until at least 18 months after they would have been born, if they had not been premature.

In this study, infants who receive delivery room CPAP and who have specific guidelines for having a breathing tube placed will be compared to infants who have a breathing tube placed and surfactant given in the delivery room or very soon after birth. The study will also compare keeping a lower range (85-89%) or a higher range (91-95%) of oxygen levels in the blood (saturation). Both of these ranges are within the oxygen saturation range that is currently used for premature infants in the NICU at UNM Hospital (85 – 95%). An alarm will sound if the oxygen saturation goes above or below that range, the same as for other premature infants in our NICU. While it is known that higher oxygen

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ranges are associated with more eye disease, the safest oxygen range is still unknown. We hope to find out if a lower range results in less ROP (Retinopathy of Prematurity).

You are being asked to allow your child to be in the study because there is a possibility that (s)he will be born 12-16 weeks early (at 24 to 28 weeks of pregnancy). About 30 babies will take part in this study at the University of New Mexico. 1300 babies will participate in this study across the United States. The National Institutes of Health is funding this study.

This form will explain the research study, and will also explain the possible risks as well as the possible benefits to you. We encourage you to talk with your family and friends before you decide to take part in this research study. If you have any questions right now, please ask one of the study investigators.

What will happen if I decide to participate?

If you decide to allow your child to be in this study, a few minutes before your child is born, (s)he will be randomly assigned, like the flip of a coin, to one of two lung treatments. The treatments are as follows: 1) CPAP in the delivery room immediately after birth and continuing in the intensive care nursery (NICU), or 2) placement of a tube in the windpipe in the delivery room or right after arrival in the NICU, followed by surfactant administration and ventilation (breathing for the baby using a machine). It is not known which of these breathing treatments is better. Infants randomized to the CPAP group may, at some point in their care, require a windpipe tube and a breathing machine. Your baby's doctors will make that decision if they think it is necessary for your baby. Studies have suggested that babies who have a breathing tube placed and surfactant given very early may benefit from the surfactant (Some studies have shown that very early surfactant results in less "air leak", where air escapes from the air spaces of the lungs into the area around the lungs, and less death, but other studies have not found this difference), but they may have a higher risk for developing BPD because of the breathing tube. On the other hand, infants treated with early CPAP may not receive the early benefit of surfactant, but may have a lower risk for developing BPD because no breathing tube is inserted.

In addition to being randomly assigned to one of the two groups described above, your baby will be randomly assigned to having an oximeter (a machine that monitors oxygen in the blood) which reads slightly high or one that reads slightly low. The oximeters used in this study are FDA approved devices which have been adjusted for research purposes to show an oxygen saturation value which is either a little higher or a little lower than the true oxygen reading when the oxygen is in the normal range (between 85 and 95%). Outside the normal range, the oximeter shows the true oxygen level. This will help to protect your baby from oxygen levels that are too high or too low.

Your infant will be assigned to one of the four groups shown below. Neither you nor your baby's doctors will know which oxygen saturation range is being targeted; however, the alarm limits will remain the same as for all premature infants in our NICU. Your baby will not be exposed to lower or higher oxygen saturations than are currently accepted for all premature infants in our NICU. The assignments will be made randomly, like the flip of a coin.

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<p>CPAP</p> <p>Higher oxygen level in the blood</p>	<p>CPAP</p> <p>Lower oxygen level in the blood</p>
<p>Breathing tube + breathing machine + surfactant</p> <p>Higher oxygen level in the blood</p>	<p>Breathing tube + breathing machine + surfactant</p> <p>Lower oxygen level in the blood</p>

All the rest of your infant’s care will be the standard treatments for premature babies in the UNM Children’s Hospital NICU. Information about that care and certain results, such as head ultrasounds and growth measurements, will be collected from your child’s medical record. At 6 months and at 12 months we will call you and ask you questions about your child’s breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask questions about family history of breathing problems, and questions about your home, including things that may increase your child’s risk of breathing problems. It will take about 15 minutes to answer these questions. The children enrolled in this study will need to come to Special Baby Clinic for their 18-22 month old assessments of growth, breathing problems, development, and coordinated movement skills.

How long will my child be in this study?

Study guidelines for lung treatments of infants in both groups will be followed for two weeks. Your child will be on a study oximeter until about four weeks before the original “due date”. At that time, the oximeter will be changed to a standard one for the remainder of his/her hospital stay. The early part of the project will last until the end of your child’s hospital stay. In order to evaluate the long term effects of the treatments in this study, information will be collected about your baby’s general health, and any hospitalizations during the first two years of life. By agreeing to participate in this study, you give consent for the release of medical records from other medical facilities and providers of medical care to Dr. Kristi Watterberg and her associates. Follow up at 18-22 months is essential for this study. Families who participate in this project are agreeing to remain in contact with the investigators and to return to the UNM Children’s Hospital’s Special Baby Clinic with their child when (s)he is 18 months of age.

What are the risks or side effects of being in this study?

Participation in this study may involve some added risks or discomforts. Some unknown risks may be learned during this study. All of these treatments are currently clinically accepted, but haven’t been

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compared with each other in this manner, so we are not able to predict which group may do better. One or both of these two treatments is the usual clinical practice for all babies who are this premature at UNMH. If your baby is assigned to the group of babies who have a breathing tube placed and surfactant given very early, he/she may benefit from the surfactant, but may have a higher risk for developing BPD because of the breathing tube. If your baby is assigned to the CPAP group, he/she may not receive the early benefit of surfactant, but may have a lower risk for developing BPD because no breathing tube is inserted. The CPAP mask can cause a low heart rate. If this happens, the mask is removed and repositioned. CPAP can cause air to collect in the stomach, so a small tube is placed from the mouth into the stomach. All babies are monitored for these problems.

For this study, there will be no change in the oxygen saturation range from the one that is currently used in the NICU at UNMH. In this study we are trying to further narrow the range that we are currently using. The specific and ideal oxygen range to reduce eye disease is unknown. We hope that this study will help to determine if a lower or higher oxygen range may be better. The higher and lower ranges that are used in this study are both in the oxygen range that is currently used for all babies admitted to the UNM NICU. The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

What are the benefits to being in this study?

Your child may or may not benefit from participating in this study. The knowledge learned from this study may help us treat babies in the future.

What other choices do I have if I do not want to be in this study?

The alternative to having your child participate in this project is not to participate. You should not feel obligated to agree to participate. Your questions should be answered clearly and to your satisfaction. If you choose not to have your child participate he/she will receive the standard care for premature infants as needed. This may include oxygen and help to breathe that is similar to the treatments in this study.

How will my information be kept confidential?

We will take measures to protect your privacy and the security of all your personal information, but we cannot guarantee confidentiality of all study data.

Information contained in your study records is used by study staff and, in some cases it will be shared with the sponsor of the study. The University of New Mexico Health Sciences Center Human Research Review Committee (HRRC) that oversees human subject research, the National Institutes of Health which sponsors this study, and the Food and Drug Administration and/or other regulatory entities will be permitted to access your records. There may be times when we are required by law to share your information. However, your name will not be used in any published reports about this study. A copy of this consent form will be kept in your medical record.

What are the costs of taking part in this study?

There are no costs involved in taking part in this study. You or your insurance company will be responsible for the costs incurred in your child's care because that care will not be different from what

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is usually provided by the nursery staff. The National Institutes of Health and National Institute of Child Health and Human Development are providing financial support and/or materials for this study.

What will happen if I am injured or become sick because I took part in this study?

No commitment is made by the University of New Mexico Health Sciences Center (UNMHSC) to provide free medical care or money for injuries to participants in this study. If your child is injured or becomes sick as a result of this study, UNMHSC will provide him or her with emergency treatment, at your cost. It is important for you to tell your study doctor immediately if your child has been injured or becomes sick because of taking part in this study. If you have any questions about these issues, or believe that you have been treated carelessly in the study, please contact the Human Research Review Committee (HRRC) at the University of New Mexico Health Sciences Center, Albuquerque, New Mexico 87131, (505) 272-1129 for more information.

Will I be paid for taking part in this study?

No payment will be provided for this project.

How will I know if you learn something new that may change my mind about participating?

You will be informed of any significant new findings that become available during the course of the study, such as changes in the risks or benefits resulting from participating in the research or new alternatives to participation that might change your mind about participating.

Can I stop being in the study once I begin?

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study without affecting your future health care or other services to which you are entitled.

At the discretion of the clinical provider, babies may be taken out of this study due to unanticipated circumstances. Examples of reasons for taking a participant out of the study include: the investigator deciding that continued participation could be harmful to your child or the study being canceled

Who can I call with questions or complaints about this study?

If you have any questions, concerns or complaints at any time about the research study, Kristi Watterberg, M.D., or her associates will be glad to answer them at (505) 272-0180 on Monday through Friday between 9 am and 5 pm. If you would like to speak with someone other than the research team, you may call the UNMHSC HRRC at (505) 272-1129.

Who can I call with questions about my rights as a research subject?

If you have questions regarding your rights as a research subject, you may call the UNMHSC HRRC at (505) 272-1129. The HRRC is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving human subjects. For more information, you may also access the HRRC website at <http://hsc.unm.edu/som/research/hrrc/>.

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.
Consent You are making a decision whether to have your child participate in this study. Your signature below indicates that you read the information provided (or the information was read to you). By signing this consent form, you are not waiving any of your child's legal rights as a research subject.

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this consent form, I agree to participate or let my child participate in this study. A copy of this consent form will be provided to you.

Name of Parent/Child's Legal Guardian

Signature of Parent/Child's Legal Guardian

Date

I have explained the research to the subject and his/ her parent/legal representative, and answered all of his/ her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

Name of Investigator/
Research Team Member

Signature of Investigator/
Research Team Member

Date

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The University of New Mexico Human Research Review Committee

The University of New Mexico Health Sciences Center Consent to Participate in Research

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

Your child is invited to participate in a research study being done by Kristi Watterberg, M.D., who is the Principal Investigator, and her associates, from the Department of Pediatrics. This research is looking at two basic questions: which of two lung treatments used with premature babies is better for the baby's lungs; and what is the appropriate level of oxygen in the blood in premature infants. The two lung treatments are "CPAP" (positive air pressure to help keep the lungs inflated) and "intubation," which involves placement of a breathing tube in the infant's airway with early administration of a medication called surfactant through this breathing tube.

Since 1970 two basic ways to help premature babies breathe have been used in Newborn Intensive Care Units. One method, called "intubation," involves placement of a breathing tube in the infant's airway and attaching it to a machine called a "ventilator" which breathes for the infant. The other method, called "CPAP" or "Continuous Positive Airway Pressure," involves placement of short tubes in the infant's nose and providing air pressure which helps the infant breathe on his/her own. Many studies have been done to see how to make these two methods work as well as possible. Research has shown, regardless of which treatment is used, that all babies who need help with breathing are at risk of developing a type of chronic, or long lasting, lung disease called "Bronchopulmonary Dysplasia," or "BPD" for short. Since 1990 a medication, called "surfactant" has been available to help premature babies breathe easier, but a tube must be placed in the airway to give this medicine.

Oxygen is also used whenever a baby is not able to get enough oxygen into his/her blood by breathing room air. Doctors know that it is important to be sure a baby is getting enough, but not too much oxygen. One possible complication of too much oxygen is an eye disease called "Retinopathy of Prematurity," or "ROP," that may result in poor vision or even blindness.

All of these treatments have been carefully studied and all are used in Newborn ICUs. This is the first study to carefully compare the use of all of these methods starting from the first moments after birth and following the babies until at least 18 months after they would have been born, if they had not been premature.

In this study, infants who receive delivery room CPAP and who have specific guidelines for having a breathing tube placed will be compared to infants who have a breathing tube placed and surfactant given in the delivery room or very soon after birth. The study will also compare keeping a lower range (85-89%) or a higher range (91-95%) of oxygen levels in the blood (saturation). Both of these ranges are within the oxygen saturation range that is currently used for premature infants in the NICU at UNM Hospital (85 – 95%). An alarm will sound if the oxygen saturation goes above or below that range, the same as for other premature infants in our NICU. While it is known that higher oxygen

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ranges are associated with more eye disease, the safest oxygen range is still unknown. We hope to find out if a lower range results in less ROP (Retinopathy of Prematurity).

You are being asked to allow your child to be in the study because there is a possibility that (s)he will be born 12-16 weeks early (at 24 to 28 weeks of pregnancy). About 30 babies will take part in this study at the University of New Mexico. 1300 babies will participate in this study across the United States. The National Institutes of Health is funding this study.

This form will explain the research study, and will also explain the possible risks as well as the possible benefits to you. We encourage you to talk with your family and friends before you decide to take part in this research study. If you have any questions right now, please ask one of the study investigators.

What will happen if I decide to participate?

If you decide to allow your child to be in this study, a few minutes before your child is born, (s)he will be randomly assigned, like the flip of a coin, to one of two lung treatments. The treatments are as follows: 1) CPAP in the delivery room immediately after birth and continuing in the intensive care nursery (NICU), or 2) placement of a tube in the windpipe in the delivery room or right after arrival in the NICU, followed by surfactant administration and ventilation (breathing for the baby using a machine). It is not known which of these breathing treatments is better. Infants randomized to the CPAP group may, at some point in their care, require a windpipe tube and a breathing machine. Your baby's doctors will make that decision if they think it is necessary for your baby. Studies have suggested that babies who have a breathing tube placed and surfactant given very early may benefit from the surfactant (Some studies have shown that very early surfactant results in less "air leak", where air escapes from the air spaces of the lungs into the area around the lungs, and less death, but other studies have not found this difference), but they may have a higher risk for developing BPD because of the breathing tube. On the other hand, infants treated with early CPAP may not receive the early benefit of surfactant, but may have a lower risk for developing BPD because no breathing tube is inserted.

In addition to being randomly assigned to one of the two groups described above, your baby will be randomly assigned to having an oximeter (a machine that monitors oxygen in the blood) which reads slightly high or one that reads slightly low. The oximeters used in this study are FDA approved devices which have been adjusted for research purposes to show an oxygen saturation value which is either a little higher or a little lower than the true oxygen reading when the oxygen is in the normal range (between 85 and 95%). Outside the normal range, the oximeter shows the true oxygen level. This will help to protect your baby from oxygen levels that are too high or too low.

Your infant will be assigned to one of the four groups shown below. Neither you nor your baby's doctors will know which oxygen saturation range is being targeted; however, the alarm limits will remain the same as for all premature infants in our NICU. Your baby will not be exposed to lower or higher oxygen saturations than are currently accepted for all premature infants in our NICU. The assignments will be made randomly, like the flip of a coin.

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<p>CPAP</p> <p>Higher oxygen level in the blood</p>	<p>CPAP</p> <p>Lower oxygen level in the blood</p>
<p>Breathing tube + breathing machine + surfactant</p> <p>Higher oxygen level in the blood</p>	<p>Breathing tube + breathing machine + surfactant</p> <p>Lower oxygen level in the blood</p>

All the rest of your infant’s care will be the standard treatments for premature babies in the UNM Children’s Hospital NICU. Information about that care and certain results, such as head ultrasounds and growth measurements, will be collected from your child’s medical record. At 6 months and at 12 months we will call you and ask you questions about your child’s breathing (especially wheezing and coughing), medication use, and visits to a Doctor, Emergency Room, or Hospital visits for treatment of breathing problems. We will also ask questions about family history of breathing problems, and questions about your home, including things that may increase your child’s risk of breathing problems. It will take about 15 minutes to answer these questions. The children enrolled in this study will need to come to Special Baby Clinic for their 18-22 month old assessments of growth, breathing problems, development, and coordinated movement skills.

How long will my child be in this study?

Study guidelines for lung treatments of infants in both groups will be followed for two weeks. Your child will be on a study oximeter until about four weeks before the original “due date”. At that time, the oximeter will be changed to a standard one for the remainder of his/her hospital stay. The early part of the project will last until the end of your child’s hospital stay. In order to evaluate the long term effects of the treatments in this study, information will be collected about your baby’s general health, and any hospitalizations during the first two years of life. By agreeing to participate in this study, you give consent for the release of medical records from other medical facilities and providers of medical care to Dr. Kristi Watterberg and her associates. Follow up at 18-22 months is essential for this study. Families who participate in this project are agreeing to remain in contact with the investigators and to return to the UNM Children’s Hospital’s Special Baby Clinic with their child when (s)he is 18 months of age.

What are the risks or side effects of being in this study?

Participation in this study may involve some added risks or discomforts. Some unknown risks may be learned during this study. All of these treatments are currently clinically accepted, but haven’t been

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compared with each other in this manner, so we are not able to predict which group may do better. One or both of these two treatments is the usual clinical practice for all babies who are this premature at UNMH. If your baby is assigned to the group of babies who have a breathing tube placed and surfactant given very early, he/she may benefit from the surfactant, but may have a higher risk for developing BPD because of the breathing tube. If your baby is assigned to the CPAP group, he/she may not receive the early benefit of surfactant, but may have a lower risk for developing BPD because no breathing tube is inserted. The CPAP mask can cause a low heart rate. If this happens, the mask is removed and repositioned. CPAP can cause air to collect in the stomach, so a small tube is placed from the mouth into the stomach. All babies are monitored for these problems.

For this study, there will be no change in the oxygen saturation range from the one that is currently used in the NICU at UNMH. In this study we are trying to further narrow the range that we are currently using. The specific and ideal oxygen range to reduce eye disease is unknown. We hope that this study will help to determine if a lower or higher oxygen range may be better. The higher and lower ranges that are used in this study are both in the oxygen range that is currently used for all babies admitted to the UNM NICU. The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

What are the benefits to being in this study?

Your child may or may not benefit from participating in this study. The knowledge learned from this study may help us treat babies in the future.

What other choices do I have if I do not want to be in this study?

The alternative to having your child participate in this project is not to participate. You should not feel obligated to agree to participate. Your questions should be answered clearly and to your satisfaction. If you choose not to have your child participate he/she will receive the standard care for premature infants as needed. This may include oxygen and help to breathe that is similar to the treatments in this study.

How will my information be kept confidential?

We will take measures to protect your privacy and the security of all your personal information, but we cannot guarantee confidentiality of all study data.

Information contained in your study records is used by study staff and, in some cases it will be shared with the sponsor of the study. The University of New Mexico Health Sciences Center Human Research Review Committee (HRRC) that oversees human subject research, the National Institutes of Health which sponsors this study, and the Food and Drug Administration and/or other regulatory entities will be permitted to access your records. There may be times when we are required by law to share your information. However, your name will not be used in any published reports about this study. A copy of this consent form will be kept in your medical record.

What are the costs of taking part in this study?

There are no costs involved in taking part in this study. You or your insurance company will be responsible for the costs incurred in your child's care because that care will not be different from what

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is usually provided by the nursery staff. The National Institutes of Health and National Institute of Child Health and Human Development are providing financial support and/or materials for this study.

What will happen if I am injured or become sick because I took part in this study?

No commitment is made by the University of New Mexico Health Sciences Center (UNMHSC) to provide free medical care or money for injuries to participants in this study. If your child is injured or becomes sick as a result of this study, UNMHSC will provide him or her with emergency treatment, at your cost. It is important for you to tell your study doctor immediately if your child has been injured or becomes sick because of taking part in this study. If you have any questions about these issues, or believe that you have been treated carelessly in the study, please contact the Human Research Review Committee (HRRC) at the University of New Mexico Health Sciences Center, Albuquerque, New Mexico 87131, (505) 272-1129 for more information.

Will I be paid for taking part in this study?

No payment will be provided for this project.

How will I know if you learn something new that may change my mind about participating?

You will be informed of any significant new findings that become available during the course of the study, such as changes in the risks or benefits resulting from participating in the research or new alternatives to participation that might change your mind about participating.

Can I stop being in the study once I begin?

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study without affecting your future health care or other services to which you are entitled.

At the discretion of the clinical provider, babies may be taken out of this study due to unanticipated circumstances. Examples of reasons for taking a participant out of the study include: the investigator deciding that continued participation could be harmful to your child or the study being canceled

Who can I call with questions or complaints about this study?

If you have any questions, concerns or complaints at any time about the research study, Kristi Watterberg, M.D., or her associates will be glad to answer them at (505) 272-0180 on Monday through Friday between 9 am and 5 pm. If you would like to speak with someone other than the research team, you may call the UNMHSC HRRC at (505) 272-1129.

Who can I call with questions about my rights as a research subject?

If you have questions regarding your rights as a research subject, you may call the UNMHSC HRRC at (505) 272-1129. The HRRC is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving human subjects. For more information, you may also access the HRRC website at <http://hsc.unm.edu/som/research/hrrc/>.

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.
Consent You are making a decision whether to have your child participate in this study. Your signature below indicates that you read the information provided (or the information was read to you). By signing this consent form, you are not waiving any of your child's legal rights as a research subject.

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this consent form, I agree to participate or let my child participate in this study. A copy of this consent form will be provided to you.

Name of Parent/Child's Legal Guardian

Signature of Parent/Child's Legal Guardian

Date

I have explained the research to the subject and his/ her parent/legal representative, and answered all of his/ her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

Name of Investigator/
Research Team Member

Signature of Investigator/
Research Team Member

Date

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The University of New Mexico Human Research Review Committee

**The University of New Mexico Health Sciences Center
Consent to Participate in Research**

Extended Follow-up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort

Purpose and General Information

You are being asked to participate in a research study that is being done by Dr. Kristi Watterberg, who is the Principal Investigator, and her associates, from the Department of Pediatrics. Your child is invited to participate in a follow-up visit between six years, four months and seven years, two months of age (school age) for children who were enrolled in the SUPPORT Neuroimaging study. As you may recall, that study did a brain MRI at the time of your child's near-term brain ultrasound that was done for routine preemie care. The purpose was to compare the findings of early and near-term ultrasounds and near-term MRI to determine if one way of imaging gives more useful information than the other. Your child was selected as a potential school age follow-up participant because he/she was enrolled in the brain imaging part of the SUPPORT study. The purpose of this phase of the study is to examine participants at school age and determine whether near-term MRI is better than ultrasound in predicting physical and developmental outcome. Approximately four children and their parents will take part in this study at the University of New Mexico. Nationwide, about 500 children and their parents are expected to participate. The National Institutes of Health (NIH) are funding this study.

This form will explain the study to you, including the possible risks as well as the possible benefits of participating. This is so you can make an informed choice about whether or not to participate, and allow your child to participate in this study. Please read this Consent Form carefully. Ask the investigators or study staff to explain any words or information that you do not clearly understand.

What will happen if my child and I participate?

If you agree to be in this study, you will be asked to read and sign this Consent Form. After you sign the Consent Form, the following things will happen:

- His/her medical history will be reviewed, including details of the most recent vision and hearing tests.
- He/she will be weighed, measured and have a blood pressure check.
- A detailed neurological examination will be done to look at muscle strength, coordination and ability to walk.
- Additional testing will look at hand and eye coordination and balance (Movement ABC).
- A test of number skills and word identification called the Woodcock Johnson will be conducted.
- A test of problem solving with words, blocks and pictures called the Wechsler Intelligence Scale for Children of will be done.
- A test evaluating visual problem solving skills and ability to pay attention called the Neurological/Psychological test (NEPSY) will be carried out.

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- If your child cannot be evaluated by the last two tests, you will be asked to answer questions about the daily living activities of your child in the areas of self-care, mobility, communication, and understanding.
- In addition, you will be asked to complete questionnaires about your household and your child's overall health, education, and activities away from school.

During the clinic visit, the interviews for you as a parent will take about 1½-2 hours and the time to evaluate your child will take about 3½ hours, including breaks. The interviews with you will be at the same time your child is being tested so the whole visit will last about 3½ hours.

What are the possible risks or discomforts of being in this study?

The only known risks to participating in the medical/neurological and developmental testing of this study are the risks of inconvenience, stress or emotional distress. Some unknown risks may be learned during the study. Every effort will be made to protect the information you give us. However, there is a small risk of loss of confidentiality.

How will my information be kept confidential?

Your name and other identifying information will be maintained in locked files, available only to authorized members of the research team, for the duration of the study. For any information entered into a computer, the only identifier will be a unique study identification (ID) number. Any personal identifying information and any record linking that information to study ID numbers will be destroyed when the study is completed. Information resulting from this study will be used for research purposes and may be published; however, you will not be identified by name in any publications.

Information from your participation in this study may be reviewed by the NIH, federal and state regulatory agencies, and by the UNM Human Research Review Committee (HRRC) which provides regulatory and ethical oversight of human research.

What are the benefits to being in this study?

There may or may not be direct benefit to you from being in this study. However, your participation may help find out which type of brain imaging (ultrasound or MRI) of babies who were born very early better predicts outcome at school age. The study will also check to see if there is a difference in outcome at school age between the breathing management and oxygen groups in the original SUPPORT project. The possible benefits to your child for taking part in this study are detection and treatment of any developmental problems as well as referral to agencies or pediatric clinics for his/her continued medical care.

What other choices do I have if I don't participate?

Taking part in this study is voluntary so you can choose not to participate.

Will I be paid for taking part in this study?

You and your child will not be paid to participate in this research study. You will receive a standard amount of money to help cover your travel and meal expenses. That amount will be based on the distance you had to travel. UNM uses government guidelines to determine how much money is provided for travel. These guidelines change every year, but are usually about 50 cents for each mile traveled and \$10-15 for a meal. There is no cost to you for participating in this study or for any of the special tests. These testing costs are covered by the NIH.

Can I stop being in the study once I begin?

Yes. You can withdraw from this study at any time without prejudice to your child or effect on your child's medical care. The investigators have the right to end your participation in this study if they determine that you no longer qualify to take part, if you do not follow study procedures, or if it is in your best interest or the study's best interest to stop your participation. The Sponsor may stop the study at any time.

Authorization for Use and Disclosure of Your Protected Health Information (HIPAA)

As part of this study, we will be collecting health information about you and sharing it with others. This information is "protected" because it is identifiable or "linked" to you.

Protected Health Information (PHI)

By signing this Consent Document, you are allowing the investigators and other authorized personnel to use your protected health information for the purposes of this study. This information may include: results of physical exams and medical history, including details of the most recent vision and hearing tests.

In addition to researchers and staff at UNMHSC and other groups listed in this form, there is a chance that your health information may be shared (re-disclosed) outside of the research study and no longer be protected by federal privacy laws. Examples of this include disclosures for law enforcement, judicial proceeding, health oversight activities and public health measures.

Right to Withdraw Your Authorization

Your authorization for the use and disclosure of your health information for this study shall not expire unless you cancel this authorization. Your health information will be used or disclosed as long as it is needed for this study. However, you may withdraw your authorization at any time provided you notify the UNM investigators in writing. To do this, please send a HIPAA Research Withdrawal Form or letter notifying them of your withdrawal to: Dr. Kristi Watterberg, MSC 5540, 1 University of New Mexico, Albuquerque New Mexico 87131

Please be aware that the research team will not be required to destroy or retrieve any of your health information that has already been used or shared before your withdrawal is received.

Refusal to Sign

If you choose not to sign this consent form and authorization for the use of your PHI, you will not be allowed to take part in the research study.

What if I have questions or complaints about this study?

If you have any questions, concerns or complaints at any time about the research study, Kristi Watterberg MD, or her associates will be glad to answer them at (505) 272-3967 on Monday through Friday between 9 am and 5 pm. If you would like to speak with someone other than the research team, you may call the Human Research Review Committee (HRRC) at (505) 272-1129. The HRRC is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving human subjects.

What are my rights as a research subject?

If you have questions regarding your rights as a research subject, you may call the HRRC at (505) 272-1129 or visit the HRRC website at <http://hsc.unm.edu/som/research/hrrc/>.

Consent and Authorization

You are making a decision whether to participate (and to have your child participate) in this study. Your signature below indicates that you read the information provided (or the information was read to you). By signing this Consent Form, you are not waiving any of your legal rights as a research subject.

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this Consent Form, I agree to participate in this study and give permission for my health information to be used or disclosed as described in this Consent Form. A copy of this Consent Form will be provided to me.

Name of Adult Participant (print)

_____/_____
Signature of Adult Participant Date

I have explained the research to the subject and answered all of his/her questions. I believe that he/she understands the information in this consent form and freely consents to participate.

Name of Research Team Member

_____/_____
Signature of Research Team Member/Date

Child Assent (ages 7-11)

You are being asked to join a study to see how children who were born early do on tests of thinking and moving. The tests will take about 3½ hours, including breaks. We would like you to ask any questions and talk with your parents about this before you decide whether or not to be in this study. We will also ask your parents if they want you to be in this study.

You do not have to be in this study. If you do decide to be in the study, you can change your mind at any time. The doctors and nurses won't care if you change your mind or if you don't want to join this study. Signing this form means you have decided to join this study.

Name of Child Subject

_____/_____
Signature of Child Subject/Date

Name of Parent/Child's Legal Guardian

_____/_____
Signature of Parent/Legal Guardian/Date



Permission Form

Study Title: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants.

Principal Investigator: Nirupama Laroia, MD

Introduction

This permission form describes a research study and what you may expect if you decide to have your child participate. You are encouraged to read this form carefully and to ask the person who presents it any further questions you may have before making your decision whether or not to have your child participate.

Your child is being asked to participate in this study because your child will likely be born at 24 weeks to 27 weeks and 6 days gestational age (time from your last menstrual period) and your child may have breathing problems due to premature birth.

This form describes the known possible risks and benefits and describes what other choices for care or services are available to your child if you do not wish to have your child be in the study. You are completely free to choose whether or not to have your child participate.

Background

Many premature babies have difficulty expanding their lungs at birth and establishing breathing. The usual treatment is to give them oxygen and inflate their lungs with a ventilation bag. If breathing is not effective, then a small tube is passed into the windpipe to assist the baby's breathing using a ventilator (breathing machine or respirator). This is effective and is used for the majority of very premature babies who need assistance with their breathing. However, use of a breathing tube and mechanical ventilation can result in problems (complications) to the baby.

There is new evidence that even very premature babies might be helped to breathe on their own, without the need for a ventilator, if the lungs are gently and continuously inflated beginning soon after birth. This technique is called Nasal Continuous Positive Airway Pressure or Nasal CPAP; it means that oxygen is provided at constant pressure to the airway through a tube in the nostrils. Nasal CPAP is a treatment that is regularly used in neonatal intensive care to assist the breathing of babies with minor respiratory difficulties. It is most commonly used to help babies after they have been weaned from (taken off) the ventilator. Nasal CPAP is not usually used to help babies breathe immediately following birth, but it is used in a few hospitals. Available information suggests that this method may be successful in helping some infants born very prematurely.

There is currently no solid information that enables us to decide which of these techniques is best for assisting a baby's initial breathing.

In addition, premature babies sometimes develop an eye disease known as Retinopathy of Prematurity (ROP) which can result in loss of vision or even blindness. The level of oxygen in the baby's blood may have an effect on whether the baby develops ROP. All babies that are born prematurely have the amount of oxygen in their blood monitored almost continuously for several weeks using a pulse oximeter. The pulse oximeter measures the amount of oxygen by shining a light through the hand or foot. The light sensor is attached with tape like a bandage. The levels of oxygen in the blood usually range from 85% to 95%. We do not know, however, if it is better to keep the baby's oxygen level in the lower range (85% - 89%) or the higher range (91% - 95%) and what effect this may have on developing ROP or long term development.

Purpose of the Study

The purpose of this research study is to find out whether starting nasal CPAP (providing oxygen through a nasal tube) at birth is better, just the same as, or worse than using a ventilator and breathing tube for babies born very prematurely. The study will also compare low range (85%-89%) oxygen saturation levels with high range (91% - 95%) levels to determine if a lower oxygen saturation range results in decreased eye disease (ROP), and is safe.

Duration of Participation

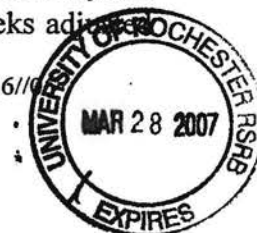
Study participation will begin as soon as the infant is born. The baby will remain in the study for the duration of hospitalization. Your baby will be followed after discharge through telephone interviews with you when your baby is six and twelve months of age, and either by telephone or in person when your baby returns for a follow-up study visit at 18-22 months after the date your baby would have been born if full term.

Description of Study Procedures

If you agree to have your baby participate in this study, your baby will be randomly assigned (like flipping a coin) prior to delivery to receive, either:

(1) Continuous positive airway pressure (CPAP) in the delivery room immediately after birth and continuing in the NICU or (2) Assisted ventilation using a tube in the windpipe (endotracheal tube) followed by surfactant administration. Surfactant is a liquid that helps babies with immature lungs breath easier by helping to keep their lungs from collapsing. Surfactant may also be given to infants in the first group if they show they need it in the NICU.

In addition to being randomly assigned to one of these two groups, your baby will also be randomly assigned to 1 of 2 levels of blood oxygen. This will be done using special oximeters (oxygen monitors). Within the range of oxygen that we normally keep babies in (85 to 95%), your baby will either be in the high end of normal or the low end of normal. The nurse taking care of your baby or his/her physician will not know to which blood oxygen group your baby has been assigned. Your child will remain on this device until he/she reaches 36 weeks adjusted gestational age.



age (e.g., 24 weeks gestation plus 12 weeks of age = 36 weeks adjusted age).

Your baby will receive all standard care provided to any baby in the Neonatal Intensive Care Unit. No additional tests or procedures will be done on your baby just for this study. We will collect medical information regarding your baby's time in the hospital from your baby's medical chart. This will include laboratory values, any additional treatments that your baby receives and his or her progress over time.

We will continue to stay in touch with you and your infant by telephone every six months over the next 18 – 22 months. At these times, we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to the Doctor, Emergency Room or Hospital for treatment of breathing problems. We will also ask you several questions about your family and yourself. The telephone calls should take about 15 minutes of your time, less if your baby has had no breathing problems.

We will schedule the telephone calls at a time that is convenient for you. The telephone calls will occur when your infant is 6, 12, and 18 months after his/her expected delivery at full term delivery date.

The results of your baby's questionnaire will be combined with other infants from around the country. However, your baby's name will not be used.

We will ask you to bring your baby in for a clinic visit at 18 to 22 months. At the follow-up visit your baby will receive testing of his or her muscles, nerves and mental and motor skills. This clinic visit will take approximately 2-4 hours.

Optional part of the Study

Standard of care in our NICU includes doing head ultrasounds at 1 – 14 days of age, at approximately 6 weeks of age, and at other times as deemed necessary for your baby's care. If you agree, we would perform an additional test, a magnetic resonance imaging study (MRI) when your infant is at 35 – 42 weeks PMA, with a corresponding head ultrasound if one has not been done as standard of care. The MRI is a more advanced scan and can detect subtle differences in the brain that may not be seen on the head ultrasound. Your baby may or may not require light sedation while the MRI is being done.

Number of Subjects

Approximately 1300 babies will be enrolled in this study at 16 different centers across the country. Of those, approximately 50 will be enrolled at Golisano Children's Hospital at Strong.

Risks of participation

The procedures that are being used are standard (routine) treatments used in neonatal intensive care. Special attention will be given to prevent any damage to the mucosa (soft tissue) of the



nostrils (if your baby receives a tube in the nostril) and/or the windpipe (if your baby receives a tube in the windpipe). Premature babies receiving either CPAP or assisted ventilation are at risk for lung problems, including leakage of air outside the lungs and prolonged need for oxygen. It is not clear that one treatment has a lower risk of this than another. Early use of surfactant (like in the babies who will get assisted ventilation) protects premature babies from severe lung disease and death. Continuous use of CPAP also improves these same outcomes. It is not clear that one treatment has a lower risk of this than another. To the best of our understanding, there will be no more risks for the baby in this study than are possible for any ill premature baby needing intensive care.

The MRI does not use x-rays. If your baby needs to have sedation for the study, the risks include sleepiness, slow breathing, or cessation of breathing. The incidence of these complications is low and your infant will be carefully monitored.

It is possible that the procedures that your baby receives will be less effective or have more risks or complications of prematurity than the other treatment but this will not be known until the end of the study. The incidence of these complications will be carefully measured in this study. We will take every precaution to minimize potential complications.

Benefits of Participation

Your baby may or may not benefit from participation in this study.

New Study Findings

You will be informed of any new findings, which may affect your decision to continue your baby's participation in this research study. If you would like to know about the results of the research, please let Dr. Nirupama Laroia know; so that results can be provided on request at the completion of the study.

Alternatives

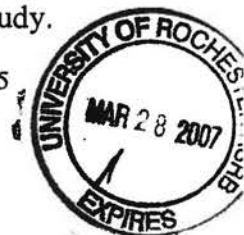
You may choose not to permit your child to participate in this study. If you choose not to enter your baby in this study, your baby will receive standard care. In that case, your baby's doctor will decide whether to administer nasal CPAP, oxygen or ventilation to your baby, and standard blood oxygen levels will be used.

Costs

You or your insurance company will be responsible for the cost of standard medical care that your baby receives. There will be no additional costs as a result of your baby's participation in this study. The follow up evaluation is provided at no cost and you and your child's physician will receive a full report.

Circumstances for Dismissal from the Study

You will be dismissed from the study if the study sponsor decides to stop or cancel the study.



Sponsor Support

The University of Rochester is receiving payment from the National Institute of Child Health and Human Development, a division of the National Institutes of Health, for conducting this research study.

Compensation for Injury

The University of Rochester will provide medical care for any emergency medical problem that your child may experience as a direct result from your child's participation in this research. You will not have to pay for this emergency care, but the university may seek reimbursement for this care from your health insurance carrier. Decisions regarding care and compensation for any research related injury will be made on a case-by-case basis.

Confidentiality of Records and HIPAA Authorization

While we will make every effort to keep information we learn about your baby private, this cannot be guaranteed. Other people may need to see the information. While they normally protect the privacy of the information, they may not be required to do so by law. Results of the research may be presented at meetings or in publications, but your baby's name will not be used.

The federal Health Insurance Portability and Accountability Act (HIPAA) requires us to get your permission to use health information about your baby that we either create or use as part of the research. This permission is called an Authorization. We will use your child's research record, related information from your child's medical records, results of laboratory and other diagnostic tests obtained during his/her initial hospitalization, as well as information obtained during the 18-24 month follow up visit.

We will use your child's health information to conduct the study, to monitor your child's health status and to determine outcomes related to the use of this therapy for treating respiratory disease. Health information is used to report results of research to sponsors and federal regulators. It may be audited to make sure we are following regulations, policies and study plans. If you have never received a copy of the Strong Health HIPAA Notice, please ask the investigator for one.

To meet regulations or for reasons related to this research, the study investigator may share a copy of this consent form and records that identify your baby with the following people: The Department of Health and Human Services, the University of Rochester, the National Institutes of Child Health and Human Development (NICHD) and organizations (like the Research Triangle Institute) used by the NICHD to manage studies.

If you decide to have your child take part, your Authorization for this study will not expire unless you cancel (revoke) it. You can always cancel this Authorization by writing to the study investigator. If you cancel your Authorization, your child will be removed from the study. However, standard medical care and any other benefits to which you are otherwise entitled will not be affected. Canceling your Authorization only affects uses and sharing of information after the study investigator gets your written request. Information gathered before then may need to



be used and given to others. For example, information gathered during your child's initial hospitalization may need to be sent to the NICHD Neonatal Research Network and to the Research Triangle Institute.

As stated in the section on Voluntary Participation below, you can also refuse to sign this permission/Authorization and not have your baby be part of the study. You can also tell us you want to withdraw your baby from the study at any time without canceling the Authorization. By signing this permission form, you give us permission to use and/or share your baby's health information.

Contact Persons

For more information concerning this research or if you believe that your child has suffered a research-related injury, please contact: Nirupama Laroia, MD (principal investigator) at (585) 275-2972.

If you have any questions about your rights as a research subject, you may contact the Human Subjects Protection Specialist at the University of Rochester Research Subjects Review Board, Box 315, 601 Elmwood Avenue, Rochester, NY 14642-8315, Telephone: (585) 276-0005; for long-distance, you may call toll-free, (877) 449-4441.

Voluntary Participation

Taking part in this study is voluntary. You are free not to participate or to withdraw at any time, for whatever reason. If you do decide to withdraw, we will keep confidential the information we have collected. If you choose not to have your child participate or you wish to withdraw your baby from the study, your baby will not risk loss of present or future care your baby would otherwise expect to receive.

Optional MRI

- I agree to have the MRI performed on my child.
- I do not agree to have the MRI performed on my child.



Signatures/Dates

I have read (or have had read to me) the contents of this permission form and have been encouraged to ask questions. I have received answers to my questions. I give permission for my child to participate in this study. I will receive a signed copy of this form for my records and future reference.

Study Subject (Print)

Parent/Guardian Signature

Print Name

Date

Person Obtaining Consent

I have read this form to the parent/guardian of this subject and/or the parent/guardian of this subject has read this form. An explanation of the research was given and questions from the subject's family were solicited and answered to their satisfaction. In my judgment, the parent/guardian has demonstrated comprehension of the information. I will provide the parent/guardian with signed copy of this consent form.

Signature, person conducting
Informed Consent

Print Name

Date



Stanford University HIPAA Authorization Form
Cooperative Multicenter Network of Neonatal Intensive Care Units:
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**Authorization To Use Your Child's Health Information
For Research Purposes**

Because information about your child and his/her health is personal and private, it generally cannot be used in this research study without your written authorization. If you sign this form, it will provide that authorization. The form is intended to inform you about how your child's health information will be used or disclosed in the study. Your child's information will only be used in accordance with this authorization form and the informed consent form and as required or allowed by law. Please read it carefully before signing it.

What is the purpose of this research study and how will my child's health information be utilized in the study?

The study is designed to find out more about the best way to help the breathing of babies who are born very early and to learn the appropriate levels of oxygen in their blood. Your child's health information will be used to compare the characteristics, such as birth weight, of the children in the four study groups, compare the amount of breathing help they need, oxygen levels, results of eye exams, and need for oxygen when they are close to their due dates. This information will be sent to the study data center and the sponsor (National Institutes of Health). The information will have your child's study number on it, not his/her name. The results of the study will be published in a scientific or medical journal but the identities of children who were in the study will not be disclosed.

Do I have to sign this authorization form?

You do not have to sign this authorization form. But if you do not, your child will not be able to participate in this research study. Signing the form is not a condition for receiving any medical care outside the study.

If I sign, can I revoke it or withdraw my child from the research later?



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If you decide to allow your child to participate, you are free to withdraw your authorization regarding the use and disclosure of your child's health information (and to discontinue any other participation in the study) at any time. After any revocation, your child's health information will no longer be used or disclosed in the study, except to the extent that the law allows us to continue using your information (e.g., necessary to maintain integrity of research). If you wish to revoke your authorization for the research use or disclosure of your child's health information in this study, you must write to: Dr David K Stevenson or Dr Krisa Van Meurs, Division of Neonatology, 750 Welch Road, Palo Alto, CA 94304.

What Personal Information Will Be Used or Disclosed?

Your child's health information related to this study, may be used or disclosed in connection with this research study, including, but not limited to, perinatal and birth records, physical examinations, laboratory records, respiratory records, nursing records, vital signs, x-rays, ultrasounds, MRIs, medication records, psychometric parameters, visual function and acuity, and auditory function may be used or disclosed in connection with this research study.

Who May Use or Disclose the Information?

The following parties are authorized to use and/or disclose your child's health information in connection with this research study:

- The Protocol Director, David Stevenson, MD
- The Assistant Protocol Director, Krisa Van Meurs, MD
- The Stanford University Administrative Panel on Human Subjects in Medical Research and any other unit of Stanford University as necessary
- The research coordinator, nurses, research assistants and data clerk

Who May Receive / Use the Information?

The parties listed in the preceding paragraph may disclose your child's health information to the following persons and organizations for their use in connection with this research study:

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- The Office for Human Research Protections in the U.S. Department of Health and Human Services
- The National Institutes of Health
- Research Triangle Institute (data management center)
- Collaborators at other institutions

Your child's information may be redisclosed by the recipients described above, if they are not required by law to protect the privacy of the information.

When will my authorization expire?

Your authorization for the use and/or disclosure of your child's health information will continue until December 31, 2100.

Will access to my child's medical record be limited during the study?

To maintain the integrity of this research study, you may not have access to any health information developed as part of this study until it is completed. At that point, you would have access to such health information if it was used to make medical or billing decision about your child (e.g., if included in your official medical record).

Signature of Legally Authorized Representative

Date

Description of Representative's Authority to Act for Subject

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IRB Approval Date: 12/17/08

IRB Expiration Date: 12/16/09

Is your child participating in any other research studies? _____ yes _____ no

Informed Consent

Your child is invited to participate in a research study to find out more about treatment with CPAP (positive air pressure to help keep the lungs inflated) and learn the appropriate levels of oxygen in the blood in premature infants. You are being asked to allow your child to be in the study because there is a possibility that (s)he will be born 12-16 weeks early (at 24 to 28 weeks of pregnancy).

The study, funded by the National Institutes of Health, is being conducted at Stanford and other medical centers across the country. The study will compare two ways of assisting premature infants to breathe. Infants who receive delivery room CPAP and who have specific guidelines for having a breathing tube placed will be compared to infants who have a breathing tube placed and surfactant (a liquid which helps babies with immature lungs breath easier by helping keep their lungs from collapsing) given in the delivery room. The study will also compare management of infants in lower range (85-89%) and higher range (91-95%) oxygen levels (saturation). We hope to determine if a lower range results in decreased ROP (Retinopathy of Prematurity, an eye disease that may result in impairment of vision or even blindness, which may be caused by excessive levels of oxygen.) Nationwide, a total of 1300 patients are expected to enroll in this study over about two years. We expect about 60 of those infants will be from Stanford. Children who are enrolled in the study will be involved for about two years.

If you decide to allow your child to be in this study, a few minutes before your child is born, (s)he will be randomly assigned, like the flip of a coin, to one of two lung treatment strategies. The treatments are as follows: 1) CPAP in the delivery room immediately after birth and continuing in the intensive care nursery (NICU), or 2) placement of a tube in the windpipe in the delivery room followed by surfactant administration and ventilation (breathing for the baby using a machine). Infants randomized to the CPAP group may, at some point in their care, require a windpipe tube and a breathing machine. If the attending physician deems this necessary, participation in the study will not affect this decision. Study guidelines for lung treatments of infants in both groups will be followed for two weeks.

In addition to being randomly assigned to one of the two groups described above, your baby will be randomly assigned to having an oximeter (blood oxygen monitor) which reads slightly high or one that reads slightly low. The oximeters used in this study are FDA approved devices which have been modified for research purposes. This modification makes the monitors show a oxygen

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saturation value which is either a little higher or a little lower than the true oxygen reading when values are in the normal range (between 85 and 95%). Outside those ranges, the oximeter works the same as a standard oximeter. This will allow us to keep the saturations at the high and low ends of the normal range and still protect the study infants from undesirable oxygen levels. The doctors and nurses taking care of your infant will not know if (s)he is in the high or low saturation group. This is to help assure that all patients are cared for in the same way. Your child will be on a study oximeter until about four weeks before the original “due date”. At that time, the oximeter will be changed to a standard one for the remainder of his/her hospital stay.

Your infant will be assigned to one of the four groups shown below. Neither you or the doctors taking care of your infant will be able to choose which group your infant is assigned to. The assignments will be made randomly, like the flip of a coin.

CPAP Higher oxygen saturation	CPAP Lower oxygen saturation
Breathing tube + breathing machine Higher oxygen saturation	Breathing tube + breathing machine Lower oxygen saturation

Part of your child’s regular care during the first few weeks after birth will include one or more head ultrasounds and, within about four weeks of your child’s planned due-date, an MRI of the brain. The ultrasounds and MRI studies create pictures (images) of the brain which are used to look for brain injury. Children who participate in this study will have an ultrasound at the time the MRI is done so the doctors conducting the project can compare the findings and determine if one way of imaging gives more useful information than the other.

Other aspects of your infant’s care will be the standard treatments for premature babies in the Stanford NICU. All children who participate in the project will return to the Development and

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Behavior Unit at regular intervals during the first two years as part of their routine care. When the children enrolled in this study return for their 18-22 month old assessments of growth, development, and coordinated movement skills, the study will collect that outcome information.

Additional Breathing Follow-Up

Many children who were born prematurely and needed help to breathe continue to have breathing problems such as wheezing and coughing in the first two years of life. The study would like to stay in touch with you by telephone beginning when your baby goes home and continuing every six months over the next 18-22 months, a total of four times. At these times, the caller will ask questions about your child's breathing, medication use, and visits to a doctor, emergency room, or hospital for treatment of breathing problems. The caller will also ask several questions about you and your family. Each call should take about 15 minutes of your time, less if your baby has had no breathing problems. The results from your baby's questionnaires will be combined with other babies from around the country. However, your baby's name will not be used.

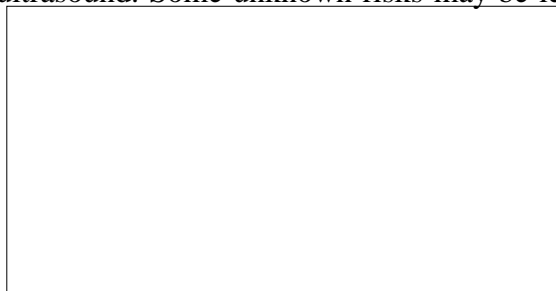
If you decide you would like to participate in the telephone questionnaires, we will ask for your telephone contact information around the time that your baby is getting ready to go home. Your name and contact information will be given to the study calling center, based at the University of Rochester in Rochester, NY. Although they will have your name, the information you give them will be identified by your baby's study number, not your or your baby's name. Additionally, the study calling center will not disclose your name or contact information to any other person or entity.

Please indicate your decision below:

_____ Yes, I agree to participate in the telephone questionnaires

_____ No, I do not want to participate in the telephone questionnaires

Participation in this study may involve some added risks or discomforts. Because all of the treatments proposed in this study are within standard of care, there is no predictable increase in risk for your baby. There is no known risk or discomfort associated with the extra head ultrasound. Some unknown risks may be learned during the study. You will be told of any new



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information that is learned which may affect your child's condition or influence your willingness to have him/her continue participation in this study. The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

There may be benefits to your child directly, including a possible decrease in chronic lung disease (need for extra oxygen near discharge) and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because we do not know in advance the actual strategies chosen for your child, or which of the treatment strategies is the most effective, it is also possible that your baby will receive no direct benefit. The knowledge learned from this study may help us treat babies in the future. However, each of the 4 possible combinations of treatments is considered by some NICUs to represent their desired approach.

WE CANNOT AND DO NOT GUARANTEE OR PROMISE THAT YOUR CHILD WILL RECEIVE ANY BENEFIT FROM THIS STUDY.

The alternative to having your child participate in this project is not to participate. You should not feel obligated to agree to participate. Your questions should be answered clearly and to your satisfaction. If you choose not to have your child participate, he/she will receive the standard care for premature infants including oxygen, and help to breathe as needed.

Any data that may be published in scientific journals or presented at scientific or medical meetings will not reveal the identity of your child. Patient information may be provided to Federal and regulatory agencies as required. The Food and Drug Administration, for example, may inspect research records and learn your identity if this study falls within its jurisdiction.

Your child's participation in this study is entirely voluntary.

Your decision whether or not to allow your child to participate will not prejudice your child or his/her medical care. If you wish to allow your child to participate in this study, you must sign this consent form and the authorization form. If you decide to let your child participate, you are free to withdraw your consent, including your authorization regarding the use and disclosure of your child's health information, and to discontinue participation at any time without prejudice to your child or effect on your child's medical care. If you decide to terminate your child's participation in this study, you should notify Dr Van Meurs or Dr Stevenson at (650) 723 5711.

The early part of the project will last until the end of your child's hospital stay. In order to successfully evaluate the approaches to lung treatment and oxygen used in this study, Dr. Van Meurs and her associates will want to collect information about your baby's general health, and any hospitalizations during the first two years of life. By agreeing to participate in this study, you

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give consent for the release of medical records from other medical facilities and providers of medical care to Dr. Krisa Van Meurs and her associates. Follow up at 18-22 months is essential for this study. Families who participate in this project are agreeing to remain in contact with the investigators and to return to the Mary L. Johnson Development and Behavior Unit at Packard Children's Hospital with their child when (s)he is 18 months of age.

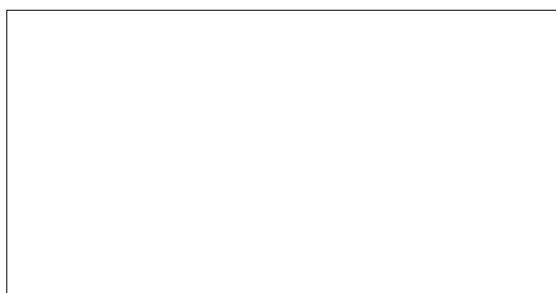
While participating in this study, your child should not take part in any other research project without approval from all of the investigators. This is to protect your child from possible injury arising from such things as extra blood drawing, extra x-rays, interaction of research drugs, or similar hazards.

You and your child will not be paid to participate in this research study. You or your insurance company will be responsible for the costs incurred in your child's care because that care will not be different from what is usually provided by the nursery staff. The study will pay for the extra ultrasound obtained around the due-date. The National Institutes of Health and National Institute of Child Health and Human Development are providing financial support and/or materials for this study.

At the discretion of the protocol director subjects may be taken out of this study due to unanticipated circumstances. Examples of reasons for taking a participant out of the study include: *failure to follow the instructions of the Protocol Director and study staff, the investigator deciding that continued participation could be harmful to your child, the study being canceled, some other administrative reason.

If you have any questions, concerns or complaints about this research study, its procedures, risks and benefits, or alternative courses of treatment, you should ask the protocol director, Dr Van Meurs at 650 723 5711. You should also contact her at any time if you feel your child has been hurt by being a part of this study. If you cannot reach the protocol director, please page the research team at 415 607 4326.

If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your child's rights as a participant, please contact the Stanford Institutional Review Board (IRB) to speak to someone independent of the research team at 650 723 5244 or toll free at 1 866 680 2906. You can also write to the Stanford IRB, Stanford University, Stanford, CA 94305-5401.



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All forms of medical diagnosis and treatment, whether routine or experimental, involve some risk of injury. In spite of all precautions, your child might develop medical complications from participating in this study. If such complications arise, the protocol director will assist you in obtaining appropriate medical treatment. In the event that your child has an injury or illness that is directly caused by participation in this study, reimbursement for all related costs of care first will be sought from your insurer, managed care plan, or other benefits program. You will be responsible for any associated co-payments or deductibles as required by your insurance. If costs of care related to such an injury are not covered by your insurer, managed care plan or other benefits program, you may be responsible for these costs. If you are unable to pay for such costs, the protocol director will assist you in applying for supplemental benefits and explain how to apply for patient financial assistance from the hospital. Additionally, Stanford is not responsible for research and medical care by other institutions or personnel participating in this study. You do not waive any liability rights for personal injury by signing this form.

As a research participant your child has the following rights. These rights include but are not limited to the participant's right to:

- be informed of the nature and purpose of the experiment;
- be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized;
- be given a description of any attendant discomforts and risks reasonably to be expected;
- be given an explanation of any benefits to the subject reasonably to be expected, if applicable;
- be given a disclosure of any appropriate alternatives, drugs, or devices that might be advantageous to the subject, their relative risks and benefits;
- be informed of the avenues of medical treatment, if any, available to the subject after the experiment if complications should arise;
- be given an opportunity to ask any questions concerning the experiment or the procedures involved;
- be instructed that consent to participate in the medical experiment may be withdrawn at any time and the subject may discontinue participation without prejudice;
- be given a copy of the signed and dated consent form, and be given the opportunity to decide to consent or not to consent to a medical experiment without the intervention of any element of force, fraud, deceit, coercion or undue influence on the subject's decision.



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YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PERSON OBTAINING CONSENT, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, AND THAT A COPY OF THIS FORM HAS BEEN GIVEN TO YOU.

Signature of Parent

Date

Authority to act for participant

(If available) Signature of Other Parent

Date

Authority to act for participant

The IRB determined that the permission of one parent is sufficient for research to be conducted under 45 CFR 46.404, in accordance with 45 CFR 46.408(b).

Person Obtaining Consent

I attest that the requirements for informed consent for the medical research project described in this form have been satisfied-that the participant has been provided with the Experimental Subject's Bill of Rights, if appropriate, that I have discussed the research project with the participant and explained to him or her in nontechnical terms all of the information contained in this informed consent form, including any risks and adverse reactions that may reasonably be expected to occur. I further certify that I encouraged the participant to ask questions and that all questions asked were answered.

Signature of Person Obtaining Consent

Date

Participant ID



STUDY

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

**Extended Follow-up at School Age for the SUPPORT Neuroimaging and
Neurodevelopmental Outcomes (NEURO) Cohort**

Director: Krisa Van Meurs, M.D.

IRB meeting date: 10/25/11

**Authorization To Use Your Child's Health Information
For Research Purposes**

Because information about your child and his/her health is personal and private, it generally cannot be used in this research study without your written authorization. If you sign this form, it will provide that authorization. The form is intended to inform you about how your child's health information will be used or disclosed in the study. Your child's information will only be used in accordance with this authorization form and the informed consent form and as required or allowed by law. Please read it carefully before signing it.

What is the purpose of this research study and how will my child's health information be utilized in the study?

The study is designed to compare the brain imaging (ultrasound and MRI) of babies who were born very early to see if the ways of imaging give information that better predicts outcome at school age. The study will also check to see if there is a difference in outcome at school age between the breathing management and oxygen groups in the original SUPPORT project.

Do I have to sign this authorization form?

You do not have to sign this authorization form. But if you do not, your child will not be able to participate in this research study. Signing the form is not a condition for receiving any medical care outside the study.

If I sign, can I revoke it or withdraw my child from the research later?

If you decide to allow your child to participate, you are free to withdraw your authorization regarding the use and disclosure of your child's health information (and to discontinue any other participation in the study) at any time. After any revocation, your child's health information will no longer be used or disclosed in the study, except to the extent that the law allows us to continue using your child's



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

**Extended Follow-up at School Age for the SUPPORT Neuroimaging and
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Director: Krisa Van Meurs, M.D.

IRB meeting date: 10/25/11

information (e.g., necessary to maintain integrity of research). If you wish to revoke your authorization for the research use or disclosure of your child's health information in this study, you must write to: Dr Krisa Van Meurs, Division of Neonatology, 750 Welch Road, Palo Alto, CA 94304.

What Personal Information Will Be Used or Disclosed?

Your child's health information related to this study, may be used or disclosed in connection with this research study, including, but not limited to, physical examinations, hospitalizations, clinic visits, surgeries, pathology reports, ultrasounds, MRIs, medication records, psychometric parameters, vision, and hearing may be used or disclosed in connection with this research study.

Who May Use or Disclose the Information?

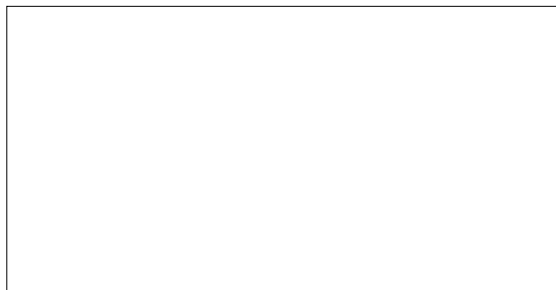
The following parties are authorized to use and/or disclose your child's health information in connection with this research study:

- The Protocol Director, Krisa Van Meurs, MD
- The Assistant Protocol Director, Susan R Hintz, MD
- The Stanford University Administrative Panel on Human Subjects in Medical Research and any other unit of Stanford University as necessary
- The research coordinator and other members of the research team

Who May Receive / Use the Information?

The parties listed in the preceding paragraph may disclose your child's health information to the following persons and organizations for their use in connection with this research study:

- The Office for Human Research Protections in the U.S. Department of Health and Human Services
- The National Institutes of Health
- Research Triangle Institute (data management center)
- Collaborators at other institutions



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Your child's information may be redisclosed by the recipients described above, if they are not required by law to protect the privacy of the information.

When will my authorization expire?

Your authorization for the use and/or disclosure of your child's health information will continue until December 31, 2100.

Will access to my child's medical record be limited during the study?

To maintain the integrity of this research study, you may not have access to any health information developed as part of this study until it is completed. At that point, you would have access to such health information if it was used to make medical or billing decision about your child (e.g., if included in your child's official medical record).

Signature of Legally Authorized Representative

Date

Description of Representative's Authority to Act for Subject

Participant ID

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STUDY

Stanford University Research Consent Form
Cooperative Multicenter Network of Neonatal Intensive Care Units:
The Surfactant Positive Airway Pressure and Pulse Oximetry Trial
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Director: Krisa Van Meurs, M.D.

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Is your child participating in any other research studies? _____ yes _____ no

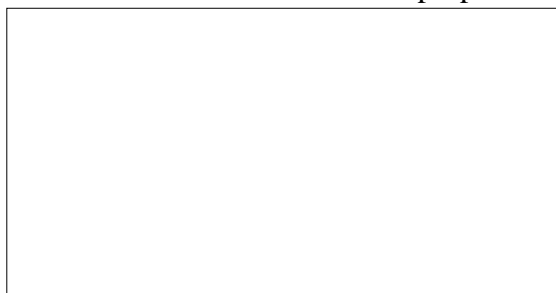
Informed Consent

Your child is invited to participate in a research study to find out more about treatment with CPAP (positive air pressure to help keep the lungs inflated) and learn the appropriate levels of oxygen in the blood in premature infants. You are being asked to allow your child to be in the study because there is a possibility that (s)he will be born 12-16 weeks early (at 24 to 28 weeks of pregnancy).

The study, funded by the National Institutes of Health, is being conducted at Stanford and other medical centers across the country. The study will compare two ways of assisting premature infants to breathe. Infants who receive delivery room CPAP and who have specific guidelines for having a breathing tube placed will be compared to infants who have a breathing tube placed and surfactant (a liquid which helps babies with immature lungs breath easier by helping keep their lungs from collapsing) given in the delivery room. The study will also compare management of infants in lower range (85-89%) and higher range (91-95%) oxygen levels (saturation). We hope to determine if a lower range results in decreased ROP (Retinopathy of Prematurity, an eye disease that may result in impairment of vision or even blindness, which may be caused by excessive levels of oxygen.) Nationwide, a total of 1300 patients are expected to enroll in this study over about two years. We expect about 60 of those infants will be from Stanford. Children who are enrolled in the study will be involved for about two years.

If you decide to allow your child to be in this study, a few minutes before your child is born, (s)he will be randomly assigned, like the flip of a coin, to one of two lung treatment strategies. The treatments are as follows: 1) CPAP in the delivery room immediately after birth and continuing in the intensive care nursery (NICU), or 2) placement of a tube in the windpipe in the delivery room followed by surfactant administration and ventilation (breathing for the baby using a machine). Infants randomized to the CPAP group may, at some point in their care, require a windpipe tube and a breathing machine. If the attending physician deems this necessary, participation in the study will not affect this decision. Study guidelines for lung treatments of infants in both groups will be followed for two weeks.

In addition to being randomly assigned to one of the two groups described above, your baby will be randomly assigned to having an oximeter (blood oxygen monitor) which reads slightly high or one that reads slightly low. The oximeters used in this study are FDA approved devices which have been modified for research purposes. This modification makes the monitors show a oxygen



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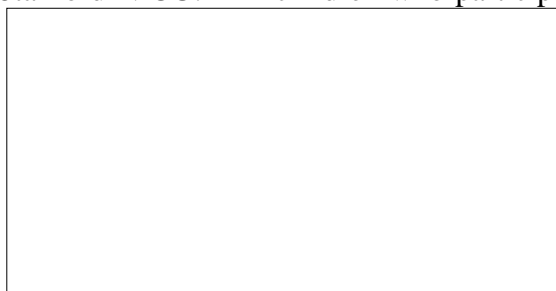
saturation value which is either a little higher or a little lower than the true oxygen reading when values are in the normal range (between 85 and 95%). Outside those ranges, the oximeter works the same as a standard oximeter. This will allow us to keep the saturations at the high and low ends of the normal range and still protect the study infants from undesirable oxygen levels. The doctors and nurses taking care of your infant will not know if (s)he is in the high or low saturation group. This is to help assure that all patients are cared for in the same way. Your child will be on a study oximeter until about four weeks before the original “due date”. At that time, the oximeter will be changed to a standard one for the remainder of his/her hospital stay.

Your infant will be assigned to one of the four groups shown below. Neither you or the doctors taking care of your infant will be able to choose which group your infant is assigned to. The assignments will be made randomly, like the flip of a coin.

CPAP Higher oxygen saturation	CPAP Lower oxygen saturation
Breathing tube + breathing machine Higher oxygen saturation	Breathing tube + breathing machine Lower oxygen saturation

Part of your child’s regular care during the first few weeks after birth will include one or more head ultrasounds and, within about four weeks of your child’s planned due-date, an MRI of the brain. The ultrasounds and MRI studies create pictures (images) of the brain which are used to look for brain injury. Children who participate in this study will have an ultrasound at the time the MRI is done so the doctors conducting the project can compare the findings and determine if one way of imaging gives more useful information than the other.

Other aspects of your infant’s care will be the standard treatments for premature babies in the Stanford NICU. All children who participate in the project will return to the Development and



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Behavior Unit at regular intervals during the first two years as part of their routine care. When the children enrolled in this study return for their 18-22 month old assessments of growth, development, and coordinated movement skills, the study will collect that outcome information.

Additional Breathing Follow-Up

Many children who were born prematurely and needed help to breathe continue to have breathing problems such as wheezing and coughing in the first two years of life. The study would like to stay in touch with you by telephone beginning when your baby goes home and continuing every six months over the next 18-22 months, a total of four times. At these times, the caller will ask questions about your child's breathing, medication use, and visits to a doctor, emergency room, or hospital for treatment of breathing problems. The caller will also ask several questions about you and your family. Each call should take about 15 minutes of your time, less if your baby has had no breathing problems. The results from your baby's questionnaires will be combined with other babies from around the country. However, your baby's name will not be used.

If you decide you would like to participate in the telephone questionnaires, we will ask for your telephone contact information around the time that your baby is getting ready to go home. Your name and contact information will be given to the study calling center, based at the University of Rochester in Rochester, NY. Although they will have your name, the information you give them will be identified by your baby's study number, not your or your baby's name. Additionally, the study calling center will not disclose your name or contact information to any other person or entity.

Please indicate your decision below:

_____ Yes, I agree to participate in the telephone questionnaires

_____ No, I do not want to participate in the telephone questionnaires

Participation in this study may involve some added risks or discomforts. Because all of the treatments proposed in this study are within standard of care, there is no predictable increase in risk for your baby. There is no known risk or discomfort associated with the extra head ultrasound. Some unknown risks may be learned during the study. You will be told of any new

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information that is learned which may affect your child's condition or influence your willingness to have him/her continue participation in this study. The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential.

There may be benefits to your child directly, including a possible decrease in chronic lung disease (need for extra oxygen near discharge) and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because we do not know in advance the actual strategies chosen for your child, or which of the treatment strategies is the most effective, it is also possible that your baby will receive no direct benefit. The knowledge learned from this study may help us treat babies in the future. However, each of the 4 possible combinations of treatments is considered by some NICUs to represent their desired approach.

WE CANNOT AND DO NOT GUARANTEE OR PROMISE THAT YOUR CHILD WILL RECEIVE ANY BENEFIT FROM THIS STUDY.

The alternative to having your child participate in this project is not to participate. You should not feel obligated to agree to participate. Your questions should be answered clearly and to your satisfaction. If you choose not to have your child participate, he/she will receive the standard care for premature infants including oxygen, and help to breathe as needed.

Any data that may be published in scientific journals or presented at scientific or medical meetings will not reveal the identity of your child. Patient information may be provided to Federal and regulatory agencies as required. The Food and Drug Administration, for example, may inspect research records and learn your identity if this study falls within its jurisdiction.

Your child's participation in this study is entirely voluntary.

Your decision whether or not to allow your child to participate will not prejudice your child or his/her medical care. If you wish to allow your child to participate in this study, you must sign this consent form and the authorization form. If you decide to let your child participate, you are free to withdraw your consent, including your authorization regarding the use and disclosure of your child's health information, and to discontinue participation at any time without prejudice to your child or effect on your child's medical care. If you decide to terminate your child's participation in this study, you should notify Dr Van Meurs or Dr Stevenson at (650) 723 5711.

The early part of the project will last until the end of your child's hospital stay. In order to successfully evaluate the approaches to lung treatment and oxygen used in this study, Dr. Van Meurs and her associates will want to collect information about your baby's general health, and any hospitalizations during the first two years of life. By agreeing to participate in this study, you

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give consent for the release of medical records from other medical facilities and providers of medical care to Dr. Krisa Van Meurs and her associates. Follow up at 18-22 months is essential for this study. Families who participate in this project are agreeing to remain in contact with the investigators and to return to the Mary L. Johnson Development and Behavior Unit at Packard Children's Hospital with their child when (s)he is 18 months of age.

While participating in this study, your child should not take part in any other research project without approval from all of the investigators. This is to protect your child from possible injury arising from such things as extra blood drawing, extra x-rays, interaction of research drugs, or similar hazards.

You and your child will not be paid to participate in this research study. You or your insurance company will be responsible for the costs incurred in your child's care because that care will not be different from what is usually provided by the nursery staff. The study will pay for the extra ultrasound obtained around the due-date. The National Institutes of Health and National Institute of Child Health and Human Development are providing financial support and/or materials for this study.

At the discretion of the protocol director subjects may be taken out of this study due to unanticipated circumstances. Examples of reasons for taking a participant out of the study include: *failure to follow the instructions of the Protocol Director and study staff, the investigator deciding that continued participation could be harmful to your child, the study being canceled, some other administrative reason.

If you have any questions, concerns or complaints about this research study, its procedures, risks and benefits, or alternative courses of treatment, you should ask the protocol director, Dr Van Meurs at 650 723 5711. You should also contact her at any time if you feel your child has been hurt by being a part of this study. If you cannot reach the protocol director, please page the research team at 415 607 4326.

If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your child's rights as a participant, please contact the Stanford Institutional Review Board (IRB) to speak to someone independent of the research team at 650 723 5244 or toll free at 1 866 680 2906. You can also write to the Stanford IRB, Stanford University, Stanford, CA 94305-5401.



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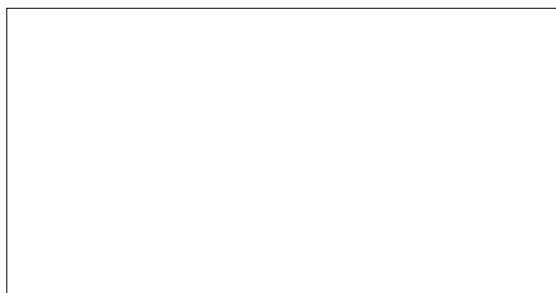
IRB Approval Date: 12/17/08

IRB Expiration Date: 12/16/09

All forms of medical diagnosis and treatment, whether routine or experimental, involve some risk of injury. In spite of all precautions, your child might develop medical complications from participating in this study. If such complications arise, the protocol director will assist you in obtaining appropriate medical treatment. In the event that your child has an injury or illness that is directly caused by participation in this study, reimbursement for all related costs of care first will be sought from your insurer, managed care plan, or other benefits program. You will be responsible for any associated co-payments or deductibles as required by your insurance. If costs of care related to such an injury are not covered by your insurer, managed care plan or other benefits program, you may be responsible for these costs. If you are unable to pay for such costs, the protocol director will assist you in applying for supplemental benefits and explain how to apply for patient financial assistance from the hospital. Additionally, Stanford is not responsible for research and medical care by other institutions or personnel participating in this study. You do not waive any liability rights for personal injury by signing this form.

As a research participant your child has the following rights. These rights include but are not limited to the participant's right to:

- be informed of the nature and purpose of the experiment;
- be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized;
- be given a description of any attendant discomforts and risks reasonably to be expected;
- be given an explanation of any benefits to the subject reasonably to be expected, if applicable;
- be given a disclosure of any appropriate alternatives, drugs, or devices that might be advantageous to the subject, their relative risks and benefits;
- be informed of the avenues of medical treatment, if any, available to the subject after the experiment if complications should arise;
- be given an opportunity to ask any questions concerning the experiment or the procedures involved;
- be instructed that consent to participate in the medical experiment may be withdrawn at any time and the subject may discontinue participation without prejudice;
- be given a copy of the signed and dated consent form, and be given the opportunity to decide to consent or not to consent to a medical experiment without the intervention of any element of force, fraud, deceit, coercion or undue influence on the subject's decision.



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The Surfactant Positive Airway Pressure and Pulse Oximetry Trial
in Extremely Low Birth Weight Infants (SUPPORT)
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IRB Approval Date: 12/17/08

IRB Expiration Date: 12/16/09

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PERSON OBTAINING CONSENT, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, AND THAT A COPY OF THIS FORM HAS BEEN GIVEN TO YOU.

Signature of Parent

Date

Authority to act for participant

(If available) Signature of Other Parent

Date

Authority to act for participant

The IRB determined that the permission of one parent is sufficient for research to be conducted under 45 CFR 46.404, in accordance with 45 CFR 46.408(b).

Person Obtaining Consent

I attest that the requirements for informed consent for the medical research project described in this form have been satisfied-that the participant has been provided with the Experimental Subject's Bill of Rights, if appropriate, that I have discussed the research project with the participant and explained to him or her in nontechnical terms all of the information contained in this informed consent form, including any risks and adverse reactions that may reasonably be expected to occur. I further certify that I encouraged the participant to ask questions and that all questions asked were answered.

Signature of Person Obtaining Consent

Date

Participant ID



STUDY

STANFORD UNIVERSITY Research Consent Form

Approval Date: October 25, 2012
Expiration Date: October 25, 2013

Protocol Director: Krisa P. Van Meurs, MD

Protocol Title: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT)

Extended Follow-up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort

Is your child participating in any other research studies? _____ yes _____ no

Your child is invited to participate in a follow-up visit between six years, four months and seven years, two months of age (school age) for children who were enrolled in the SUPPORT Neuroimaging study. As you may recall, that study did an extra brain ultrasound at the time that your child’s near-term brain MRI was done for routine premie care. The purpose was to compare the findings of early and near-term ultrasounds and near-term MRI to determine if one way of imaging gives more useful information than the other. Your child was selected as a potential school age follow-up participant because he/she was enrolled in the brain imaging part of the SUPPORT study. The purpose of this phase of the study is to examine participants at school age and determine whether near-term MRI is better than ultrasound in predicting physical and developmental outcome.

SUPPORT school age follow-up, funded by the National Institutes of Health, is being conducted at Stanford and 14 other medical centers across the country. Nationwide, about 500 children and their parents are expected to participate. Forty six children are eligible to participate at Stanford. It is anticipated that five years will be required to complete the project.

Your child’s participation in this follow up study is entirely voluntary. If your child takes part in the study, his/her medical history will be reviewed, including details of the most recent vision and hearing tests; he/she will be weighed, measured and have a blood pressure check; a detailed neurological examination will be done to look at muscle strength, coordination, balance, ability to walk, and so forth; a test of number skills and word identification called the Woodcock Johnson will be conducted; a test of problem solving with words, blocks and pictures called the Wechsler Intelligence Scale for Children of will be done; a test evaluating visual problem solving skills and ability to pay attention called the Neurological/Psychological test will be carried out; and, if your child cannot be evaluated by the last two tests, you will be asked to answer questions about the daily living activities of your child in the areas of self-care, mobility, communication, and understanding. In addition, you will be asked to complete questionnaires about your household and your child’s overall health, education, and activities away from school. During the clinic visit, the interviews for you as a parent will take about 1½-2 hours and the time to evaluate your child will take about 3½ hours, including breaks. The interviews with you will be at the same time your child is being tested so the whole visit will last about 3½ hours.

There are no known risks to participating in the medical/neurological and developmental testing of this study. Some unknown risks may be learned during the study. You will be told of any important new information that is learned during the course of this research study that might affect your child’s condition or your willingness to continue your child’s participation in this study.

Participant ID



STANFORD UNIVERSITY Research Consent Form

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Protocol Director: Krisa P. Van Meurs, MD

Protocol Title: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT)

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The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child’s medical record confidential.

The possible benefits to your child for taking part in this study are detection and treatment of any developmental problems as well as referral to agencies or pediatric clinics for his/her continued medical care.

WE CANNOT AND DO NOT GUARANTEE OR PROMISE THAT YOUR CHILD WILL RECEIVE ANY BENEFITS FROM THIS STUDY.

The alternative to having your child participate in this project is not to participate. You should not feel obligated to agree to allow your child to participate. Your questions should be answered clearly and to your satisfaction. Information about this study is available on a public registry website, <http://clinicaltrials.gov/> identifier NCT00233324, and on the Stanford University website, <http://med.stanford.edu/clinicaltrials/>.

Your decision whether or not to allow your child to participate will not prejudice your child or your child’s medical care. If you decide to allow your child to participate, you are free to withdraw your consent, and to discontinue participation at any time without prejudice to your child or effect on your child’s medical care. If you decide to terminate your child’s participation in this study, you should notify Dr Van Meurs at 650 723 5711.

While participating in this study, your child should not take part in any other research project without approval from all of the investigators.

At the discretion of the protocol director, subjects may be withdrawn from the study without their consent. Examples of reasons for taking a participant out of the study include: the study being canceled, some other administrative reason, or unanticipated circumstances.

Any data that may be published in scientific journals or presented at scientific or medical meetings will not reveal the identity of your child. Patient information may be provided to Federal and other regulatory agencies as required. The Food and Drug Administration (FDA), for example, may inspect research records and learn your child’s identity if this study falls within its jurisdiction.

You and your child will not be paid to participate in this research study. There is no cost to you for participating in this study. The National Institutes of Health (NIH) are providing financial support and/or materials for this study.

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Extended Follow-up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort

All forms of medical diagnosis and treatment – whether routine or experimental – involve some risk of injury. In spite of all precautions, your child might develop medical complications from participating in this study. If such complications arise, the Protocol Director and the research study staff will assist you in obtaining appropriate medical treatment. In the event that your child has an injury or illness that is directly caused by participation in this study, reimbursement for all related costs of care first will be sought from your insurer, managed care plan, or other benefits program. **You will be responsible for any associated co-payments or deductibles as required by your insurance.**

If costs of care related to such an injury are not covered by your insurer, managed care plan or other benefits program, you may be responsible for these costs. If you are unable to pay for such costs, the Protocol Director will assist you in applying for supplemental benefits and explain how to apply for patient financial assistance from the hospital.

You do not waive any liability rights for personal injury by signing this form.

If you have any questions, concerns or complaints about this research study, its procedures, risks and benefits, or alternative courses of treatment, you should ask the protocol director, Dr Van Meurs at 650 723 5711. You should also contact her at any time if you feel your child has been hurt by being a part of this study. If you cannot reach the protocol director, please call the NICU attending physician at 650 497 8800.

If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your child’s rights as a participant, please contact the Stanford Institutional Review Board (IRB) to speak to someone independent of the research team at 650 723 5244 or toll free at 1 866 680 2906. You can also write to the Stanford IRB, Stanford University, MC 5579, Palo Alto, CA 94304.

As a research participant your child has the following rights. These rights include but are not limited to the participant's right to:

- be informed of the nature and purpose of the experiment;
- be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized;
- be given a description of any attendant discomforts and risks reasonably to be expected;
- be given an explanation of any benefits to the subject reasonably to be expected, if
- applicable;

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- be given a disclosure of any appropriate alternatives, drugs, or devices that might be advantageous to the subject, their relative risks and benefits;
- be informed of the avenues of medical treatment, if any, available to the subject after the experiment if complications should arise;
- be given an opportunity to ask any questions concerning the experiment or the procedures involved;
- be instructed that consent to participate in the medical experiment may be withdrawn at any time and the subject may discontinue participation without prejudice;
- be given a copy of the signed and dated consent form, and be given the opportunity to decide to consent or not to consent to a medical experiment without the intervention of any element of force, fraud, deceit, duress, coercion or undue influence on the subject's decision.

Researchers working on the project hope that it will be possible to follow the children who participated in the SUPPORT project for longer than seven years. If funding for additional follow-up can be obtained, may we contact you about future studies that may be of interest to you? YES NO (please circle one)

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PERSON OBTAINING CONSENT, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, AND THAT A COPY OF THIS FORM HAS BEEN GIVEN TO YOU.

Signature of Parent

Date

Authority to act for participant

Signature of Other Parent

Date

Authority to act for participant

Participant ID



STANFORD UNIVERSITY Research Consent Form

Protocol Director: Krisa P. Van Meurs, MD

Approval Date: October 25, 2012
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Protocol Title: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (SUPPORT)

Extended Follow-up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort

Person Obtaining Consent

I attest that the requirements for informed consent for the medical research project described in this form have been satisfied-that the participant has been provided with the Experimental Subject's Bill of Rights, if appropriate, that I have discussed the research project with the participant and explained to him or her in non-technical terms all of the information contained in this informed consent form, including any risks and adverse reactions that may reasonably be expected to occur. I further certify that I encouraged the participant to ask questions and that all questions asked were answered.

Signature of Person Obtaining Consent

Date

The following witness line is to be signed only if the consent is provided as a summary form and accompanied by a short form foreign language consent.

Signature of Witness

Date

Participant ID



The Surfactant Positive Airway Pressure and Pulse Oximetry Trial

Informed Consent Form to Participate in Research

Principal Investigator: Ivan D. Frantz III, MD

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**TUFTS MEDICAL CENTER
DEPARTMENT OF PEDIATRICS, DIVISION OF NEWBORN MEDICINE**

INFORMED CONSENT FORM TO PARTICIPATE IN RESEARCH

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

Principal Investigator: Ivan D. Frantz III, MD

Co-investigator: John M. Fiascone, MD

INTRODUCTION

Your baby is invited to participate in a research study to compare two ways to assist premature babies to breathe and to compare two ranges of blood oxygen saturation levels by which premature babies are managed. You are being asked to allow your child to be in the study because (s)he might be born 12-16 weeks early (at 24 to 28 weeks of pregnancy). If your baby is born at or after 28 weeks of pregnancy, (s)he will not be enrolled in this study.

The study is being conducted by the National Institutes of Child Health and Human Development Neonatal Research Network, of which Tufts Medical Center is a member. Nationwide, a total of 1300 patients are expected to enroll in this study and we expect that about 30 of those infants will be from Tufts Medical Center. Children enrolled in the study will be involved for two years.

BACKGROUND

Babies born prematurely are at risk for breathing problems. A baby's lungs are made up of tiny air sacs. Each one is supposed to open and close as the baby breathes in and out. This works well in full term babies and adults; however, in premature babies the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder to breathe.

Almost all babies born between 24-28 weeks of pregnancy require some treatment to help them breath. Doctors use one of two different treatment approaches. One approach is to give the baby a medication called surfactant shortly after delivery to try and keep the lung sacs expanded. Surfactant is given directly into the lungs via a breathing tube that is inserted into the airway (referred to as intubation). The baby is then maintained on a ventilator (breathing machine) until the baby may tolerate removal of the ventilator. A second treatment approach is to keep the lungs slightly inflated (or open) between breaths. This may be done by placing small tubes in the

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baby's nostrils to provide a small amount of continuous air pressure (CPAP) in the lungs to make it easier for the baby to take a breath. It is at present not clear if one of these approaches is better than the other.

Babies may also develop longer-term problems. The need for oxygen extending to four weeks prior to the baby's normal due date at full-term means your baby has a disease called Bronchopulmonary dysplasia (BPD), which is characterized by abnormal lung development. Premature babies are also at risk for an eye disease called Retinopathy of Prematurity (ROP). This problem affects the blood vessel growth in their eyes and may result in vision problems or even blindness. The amount of oxygen that a baby receives (oxygen saturation) may be a risk factor for ROP. The oxygen saturation is routinely monitored with a pulse oximeter. This oximeter uses a tiny probe, which is much like a band-aid applied to the foot or hand. There has not been consensus across the country about what is the best oxygen saturation range in which to keep premature babies, however the normal range of saturation is generally considered to fall between 85-95%.

Either treatment (CPAP or use of breathing tube, surfactant and breathing machine) is acceptable medical practice, with some hospitals favoring one or the other. One treatment has not been proven to be better than the other. Based on our interpretation of the medical literature, the standard medical treatment at Tufts Medical Center for babies born at less than 27 weeks gestational age is use of a breathing tube, breathing machine and administration of surfactant in the delivery room. Babies born 27-28 weeks gestational age receive surfactant if they are intubated for any reason in the delivery room. At Tufts Medical Center oxygen saturation is kept between 88-94%.

PURPOSE OF STUDY

The primary purpose of this study is to evaluate the effect of two respiratory treatments and two ranges of blood oxygen saturation levels on the incidence and/or severity of BPD and ROP. We hope to determine if providing CPAP instead of ventilator support may reduce the incidence and/or severity of BPD and if a lower oxygen saturation range results in decreased ROP. Additionally, we will study two methods to detect brain injury and will follow your baby's growth and development. Specifically, this study will:

1. Compare two ways of assisting premature infants to breathe. Infants who receive CPAP in the delivery room with specific guidelines for further breathing support will be compared to infants who have a breathing tube placed, surfactant given in the delivery room, followed by breathing support.
2. Find out the oxygen level that should be used to help prevent some of the eye injury that may occur in premature babies. Specifically, infants in lower range (85-89%) and higher range (91-95%) oxygen levels (saturation) will be compared.

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3. Compare brain imaging by ultrasound or magnetic resonance imaging (MRI), done around the time when a baby would normally be born, to determine if one method gives more useful information about brain injury than the other.
4. Determine any effect of the study treatments on premature babies' growth and respiratory, neurological and developmental health during the first 18-22 months after his/her expected delivery at full term.

STUDY PROCEDURES

If you decide to allow your child to be in this study, a few minutes before your child is born, (s)he will be randomly assigned, like the flip of a coin, to one of two lung treatment strategies and one of two oxygen treatment levels. Your infant will be assigned to one of the four groups shown below. Each of the 4 possible combinations of treatments is considered by some hospitals to represent their desired standard approach. No one approach is known to be better than the others.

CPAP Higher oxygen saturation	CPAP Lower oxygen saturation
Surfactant + breathing machine Higher oxygen saturation	Surfactant + breathing machine Lower oxygen saturation

The treatments are as follows: 1) CPAP in the delivery room immediately after birth and continuing in the intensive care nursery (NICU), or 2) placement of a breathing tube in the windpipe in the delivery room followed by surfactant administration and ventilation (breathing for the baby using a machine). Infants randomized to the CPAP group may, at some point in their care, require a breathing tube and a breathing machine. If the attending physician deems this necessary, participation in the study will not affect this decision. If intubation occurs within the first 48 hours of birth, the baby will receive surfactant. Study guidelines for lung treatments of infants in both groups will be followed for two weeks.

In addition to being randomly assigned to one of the two groups described above, your baby will be randomly assigned to having an oximeter (blood oxygen monitor) which reads slightly high or one that reads slightly low. The oximeters used in this study are devices approved by the U.S. Government's Food and Drug Administration which have been modified for research purposes. This modification makes the monitors show an oxygen saturation value that is either a little higher or a little lower than the true oxygen reading when values are in the normal range

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(between 85 and 95%). Outside those ranges, the oximeter works the same as a standard oximeter. This will allow us to keep the saturations at the high or low end of the normal range and still protect the study infants from undesirable oxygen levels. The doctors and nurses taking care of your infant will not know if (s)he is in the high or low saturation group. This is to help assure that all patients are cared for in the same way. Your child will be on a study oximeter until about four weeks before the original "due date" or until transfer to a hospital not participating in this study. At that time, the oximeter will be changed to a standard one for the remainder of his/her hospital stay.

Other aspects of your infant's care will be the standard treatments for premature babies in the Tufts Medical Center NICU. Information from your baby's medical record about medical care your baby received and results of tests and data that pertain to your baby will be documented in your baby's research study records. This information will include respiratory support; feeding and weekly growth measurements of body weight, length, and head circumference; and results of eye exams.

Your baby will have routine ultrasounds of his/her head during his/her stay in the NICU. A copy of the head ultrasounds conducted between 4-14 days of life and at the time of the original expected due date will be collected for this study. If your baby's head ultrasound at the time of the expected due date occurs before 35 weeks post-menstrual age, your baby will receive another head ultrasound for the purpose of this study between 35-42 weeks post-menstrual age. In addition, your baby will have a MRI (Magnetic Resonance Imaging) for the purpose of this research study between 35-42 weeks post-menstrual age. Neither the head ultrasound nor the MRI is experimental and both are currently used on infants at Tufts Medical Center. The ultrasound shows the structure of your baby's brain by bouncing sound waves off of it. You may have seen an ultrasound of your baby during your pregnancy. The MRI is a specialized brain scan that takes detailed pictures of the brain structure and can detect normal and abnormal brain tissue. If conducted for the purpose of this study, the head ultrasound and/or MRI will be paid for by The National Institutes of Child Health and Human Development at no cost to you. If your baby is still in the NICU, your baby will need to be transported to the MRI suite in order to have the procedure. Only those patients considered stable for transport will undergo an MRI. If your baby is discharged home prior to 35-42 weeks PMA, you will be asked to return to Tufts Medical Center for the head ultrasound and MRI procedures. If your baby is transferred to another hospital participating in this study, the head ultrasound and/or MRI may take place at that hospital. The MRI will be conducted after your baby is swaddled while sleeping following a feeding and with the use of a jacket-like device that allows the baby to lie still without using sedation. A physician at the hospital in which you receive the head ultrasound and MRI will provide you with an interpretation of the results of the tests. Neither the ultrasound nor the MRI involves exposure to radiation.

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At the time your baby is discharged from the NICU, you will be asked questions about your socioeconomic status such as how much money your family earns, the level of education you have completed, and information about your household. You will also be asked questions about any family history of breathing problems or respiratory illness.

All children in the Tufts Medical Center NICU return to the NICU Follow-up Clinic at regular intervals during the first two years as part of their routine medical care. We will continue to stay in touch with you by telephone or in person at these visits over the next 18-23 months. At these times, we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a doctor, emergency room, or hospital for treatment of breathing problems. We will also ask you several questions about your family and yourself. Each interview should take 15 minutes or less of your time. When your baby returns to the NICU follow-up clinic for his/her 18-month-old assessment of growth, development, and coordinated movement skills, the study will collect that outcome information. In order to successfully evaluate the approaches to lung treatment and oxygen used in this study, follow up at 18-22 months is essential for this study. Families who participate in this project are agreeing to remain in contact with the investigators and to return to the NICU Follow-up clinic with their child when (s)he is 18 months of age.

Research procedures for this study occur while your baby is in the hospital and if discharged home prior to 35 weeks post-menstrual age, when your baby returns to the hospital for a head ultrasound and/or MRI. Data will be collected for this study at the 18-month follow-up visit that your child attends as part of standard medical care. Subjects in this study must participate in all aspects of the study including the MRI and head ultrasounds and 18-month follow-up visit.

Doctors working on the SUPPORT study hope that it will be possible to follow the children who participated in SUPPORT for more than 18-22 months. If money for longer follow-up is obtained, we would like to follow your child for up to 6-7 years. If money for longer follow up is obtained we ask your permission for the study doctor and/or his designee to contact you about possible additional years of follow-up. Your child could only participate in SUPPORT follow-up beyond 18-22 months with your written consent, but you would not be under any obligation to continue.

RISKS AND DISCOMFORTS

This study does not pose significant risks beyond those inherent in a sick premature baby. For example, premature infants with respiratory distress syndrome are at increased risk of pneumothorax (collapse of lung) however there is no evidence supporting a difference in this risk between the respiratory treatments being studied (breathing tube and breathing machine v. CPAP

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in the delivery room). It is not known if the known reduction of death and disease severity as a result of surfactant in the delivery room and the reduction of BPD in babies that receive surfactant will be less than, offset, or increased by the early use of CPAP. Infants treated with CPAP often swallow air and have a tube placed into the stomach to remove it. None of the aspects of the study are believed to be uncomfortable beyond the discomfort associated with routine medical care. All treatments are standard of care at some NICUs across the country.

There are no known effects from exposure to magnetic fields (MRI). Temporary minor skin irritation from tape used to apply MRI-compatible monitoring electrodes may occur, but this risk is unlikely.

Some unknown risks may be learned during the study. You will be told of any new information that is learned which may affect your child's condition or influence your willingness to have him/her continue participation in this study.

Another risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential. There will be no name or other patient identification in any study report that may be published after the study is completed. Measures taken to protect you and your baby's identity are described in the confidentiality section of this document.

BENEFITS

There may be benefits to your child directly, including a decrease in chronic lung disease and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because we do not know in advance the actual strategies chosen for your child, or which of study groups is the most effective, it is also possible that your baby will not receive these possible benefits. However, all babies in the study may benefit from the MRI that is conducted for purposes of this research. Babies may benefit from this procedures if they identify brain injury, which may allow for earlier treatment than would normally occur. If the doctor sees anything on the MRI that would help treat your infant, s/he will use that information.

ALTERNATIVES TO PARTICIPATION

The alternative to having your child participate in this project is not to participate. If you choose not to have your child participate, he/she will receive the standard care for premature infants.

CONTACT INFORMATION

If you have any questions about the study or concerns during the study, you may contact the investigator (Dr. Frantz) or his designees via the Tufts Medical Center Paging Operator: (617)

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636-5114 or Tufts Medical Center (617) 636-5008. If you have question about your rights as a research study subject, call the Tufts Medical Center Institutional Review Board (IRB) at (617) 636-7512. The Institutional Review Board is a group of doctors, nurses, and non-medical people who review human research studies for safety and protection of people who take part in the studies. Federal law requires the Institutional Review Board to review and approve any research study involving humans. This must be done before the study can begin. The study is also reviewed on a regular basis while it is in progress. This research study has been reviewed and approved by the IRB of Tufts Medical Center.

RESEARCH RELATED INJURY

All forms of medical diagnosis and treatment, whether routine or experimental, involve some risk of injury. In spite of all precautions, your child might develop medical complications from participating in this study. If such complications arise, immediate necessary medical care is available at Tufts Medical Center. Either you or your health insurance will be responsible for the costs of medical care that is medically necessary or indicated for your infant.

COSTS

There is no extra cost to participate in this study beyond the costs of medical care that is medically necessary or indicated for your infant's care and which is the responsibility of you or your health insurance. The head ultrasound and MRI conducted for the sole purpose of research is paid for by the National Institutes of Child Health and Human Development, which is the sponsor of this study.

PAYMENT

If your baby is discharged home prior to the MRI and head ultrasound procedures at 35-42 weeks post-menstrual age, you will be reimbursed reasonable travel expenses to get to these appointments. A gift certificate to a local department store for \$20.00 will be provided per child at the 18-month follow-up visit as an appreciation payment for your child's participation.

VOLUNTARY PARTICIPATION/WITHDRAWAL

Taking part in this research study is completely your choice and you are free to change your mind. You can decide to stop taking part in this study at any time for any reason and your child will receive standard medical care. If you want to stop participation in this study, we ask that you contact Dr. Ivan D. Frantz III by writing, telephone or in person and let him know that you are withdrawing your child from the study. Dr. Frantz can be reached via telephone through the Tufts Medical Center Paging Operator: (617) 636-5114 or Tufts Medical Center NICU (617)

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636-5008. His mailing address is 800 Washington Street, Tufts Medical Center #44, Boston, MA 02111. At that time we will ask your permission to continue using data that has already been collected as part of the study prior to your withdrawal. At the discretion of the Principal Investigator, subjects may be taken out of this study due to unanticipated circumstances. Examples of reasons for taking a participant out of the study include: the investigator deciding that continued participation could be harmful to your child, the study being canceled, or some other administrative reason.

CONFIDENTIALITY

Extensive efforts are made to protect all research subjects from the use of information that will adversely affect them. Specifically, access to information about you and your child is restricted to the Tufts Medical Center Division of Newborn Medicine clinical research staff that is involved in this study. Clinical and research information with respect to this study is maintained in a research file separate from hospital medical records and will not be placed in the official Tufts Medical Center medical record by research staff. Clinical information collected from your baby's chart for this study will be labeled with a coded study ID number. Coded information will be sent to the NICHD Neonatal Research Network's Data Coordinating Center at Research Triangle Institute (RTI) in Research Triangle Park, North Carolina. The key linking the code number with your baby's identity will be kept secure at the Tufts Medical Center Division of Newborn Medicine clinical research office. Your baby's head ultrasound and MRI images may be identified with a header listing you baby's name, hospital number and birth date since it is not always possible to remove your baby's identification from these scans. These scans will be sent to RTI so that study radiologists may read the image and ensure consistent interpretation across all of the babies around the country that are participating in this study. The study radiologists will not have any other information about your child. In no other instance, will information directly identifying your baby, such as name or medical record number, to study data collected leave Tufts Medical Center. Research data from which your child may be identified will not be disclosed to third parties except with your written permission or as required by law. If research results from this study are reported in a professional setting, such as in a medical journal or at a scientific meeting, the identity of research subjects taking part in the study is withheld.

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PARTICIPANT'S STATEMENT

I have read this consent form and have discussed with Dr. Frantz or his/her representative the procedures described above. I have been given the opportunity to ask questions, which have been answered to my satisfaction. I understand that any questions that I might have will be answered verbally or, if I prefer, with a written statement.

I understand that I will be informed of any new findings developed during the course of this research study that may affect my willingness to stay in this research study.

I understand that my participation is voluntary. I understand that I may refuse to participate in this study. I also understand that if, for any reason, I wish to discontinue participation in this study at any time, I will be free to do so, and this will have no effect on my future care or treatment by my physicians or this hospital.

I understand that in the event I become ill or am injured as a result of participating in this research study, medical care will be provided to me. However, such medical care will not be provided free of charge, even if the injury or illness is a direct result of this research study. I understand that no funds to provide financial compensation for research-related injury or illness are available.

If I have any questions concerning my rights as a research subject in this study, I may contact the Institutional Review Board at (617) 636-7512.

I have been fully informed of the above-described study with its risks and benefits, and I hereby consent to the procedures set forth above.

I understand that as a participant in this study my identity and my medical records and data relating to this research study will be kept confidential, except as required by law, and except for inspections by the U.S. Food and Drug Administration which regulates investigational drug studies, and the study sponsor.

Date

One Parent/Legal Authorized Representative Signature

I have fully explained to _____ the nature and purpose of the above-described study and the risks that are involved in its performance. I have answered all questions to the best of my ability.

Date

Principal Investigator or Representative's Signature

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Extremely Low Birth Weight Infants**

**Principal Investigator: Ivan D. Frantz III, MD
Co-investigator: John M. Fiascone, MD**

INTRODUCTION

Your baby is invited to participate in a research study to compare two ways to assist premature babies to breathe and to compare two ranges of blood oxygen saturation levels by which premature babies are managed. You are being asked to allow your child to be in the study because (s)he might be born 12-16 weeks early (at 24 to 28 weeks of pregnancy). If your baby is born at or after 28 weeks of pregnancy, (s)he will not be enrolled in this study.

The study is being conducted by the National Institutes of Child Health and Human Development Neonatal Research Network, of which Tufts Medical Center is a member. Nationwide, a total of 1300 patients are expected to enroll in this study and we expect that about 30 of those infants will be from Tufts Medical Center. Children enrolled in the study will be involved for two years.

BACKGROUND

Babies born prematurely are at risk for breathing problems. A baby's lungs are made up of tiny air sacs. Each one is supposed to open and close as the baby breathes in and out. This works well in full term babies and adults; however, in premature babies the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder to breathe.

Almost all babies born between 24-28 weeks of pregnancy require some treatment to help them breath. Doctors use one of two different treatment approaches. One approach is to give the baby a medication called surfactant shortly after delivery to try and keep the lung sacs expanded. Surfactant is given directly into the lungs via a breathing tube that is inserted into the airway (referred to as intubation). The baby is then maintained on a ventilator (breathing machine) until the baby may tolerate removal of the ventilator. A second treatment approach is to keep the lungs slightly inflated (or open) between breaths. This may be done by placing small tubes in the

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Either treatment (CPAP or use of breathing tube, surfactant and breathing machine) is acceptable medical practice, with some hospitals favoring one or the other. One treatment has not been proven to be better than the other. Based on our interpretation of the medical literature, the standard medical treatment at Tufts Medical Center for babies born at less than 27 weeks gestational age is use of a breathing tube, breathing machine and administration of surfactant in the delivery room. Babies born 27-28 weeks gestational age receive surfactant if they are intubated for any reason in the delivery room. At Tufts Medical Center oxygen saturation is kept between 88-94%.

PURPOSE OF STUDY

The primary purpose of this study is to evaluate the effect of two respiratory treatments and two ranges of blood oxygen saturation levels on the incidence and/or severity of BPD and ROP. We hope to determine if providing CPAP instead of ventilator support may reduce the incidence and/or severity of BPD and if a lower oxygen saturation range results in decreased ROP. Additionally, we will study two methods to detect brain injury and will follow your baby's growth and development. Specifically, this study will:

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Surfactant + breathing machine Higher oxygen saturation	Surfactant + breathing machine Lower oxygen saturation

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In addition to being randomly assigned to one of the two groups described above, your baby will be randomly assigned to having an oximeter (blood oxygen monitor) which reads slightly high or one that reads slightly low. The oximeters used in this study are devices approved by the U.S. Government's Food and Drug Administration which have been modified for research purposes. This modification makes the monitors show an oxygen saturation value that is either a little higher or a little lower than the true oxygen reading when values are in the normal range

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At the time your baby is discharged from the NICU, you will be asked questions about your socioeconomic status such as how much money your family earns, the level of education you have completed, and information about your household. You will also be asked questions about any family history of breathing problems or respiratory illness.

All children in the Tufts Medical Center NICU return to the NICU Follow-up Clinic at regular intervals during the first two years as part of their routine medical care. We will continue to stay in touch with you by telephone or in person at these visits over the next 18-23 months. At these times, we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a doctor, emergency room, or hospital for treatment of breathing problems. We will also ask you several questions about your family and yourself. Each interview should take 15 minutes or less of your time. When your baby returns to the NICU follow-up clinic for his/her 18-month-old assessment of growth, development, and coordinated movement skills, the study will collect that outcome information. In order to successfully evaluate the approaches to lung treatment and oxygen used in this study, follow up at 18-22 months is essential for this study. Families who participate in this project are agreeing to remain in contact with the investigators and to return to the NICU Follow-up clinic with their child when (s)he is 18 months of age.

Research procedures for this study occur while your baby is in the hospital and if discharged home prior to 35 weeks post-menstrual age, when your baby returns to the hospital for a head ultrasound and/or MRI. Data will be collected for this study at the 18-month follow-up visit that your child attends as part of standard medical care. Subjects in this study must participate in all aspects of the study including the MRI and head ultrasounds and 18-month follow-up visit.

Doctors working on the SUPPORT study hope that it will be possible to follow the children who participated in SUPPORT for more than 18-22 months. If money for longer follow-up is obtained, we would like to follow your child for up to 6-7 years. If money for longer follow up is obtained we ask your permission for the study doctor and/or his designee to contact you about possible additional years of follow-up. Your child could only participate in SUPPORT follow-up beyond 18-22 months with your written consent, but you would not be under any obligation to continue.

RISKS AND DISCOMFORTS

This study does not pose significant risks beyond those inherent in a sick premature baby. For example, premature infants with respiratory distress syndrome are at increased risk of pneumothorax (collapse of lung) however there is no evidence supporting a difference in this risk between the respiratory treatments being studied (breathing tube and breathing machine v. CPAP

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in the delivery room). It is not known if the known reduction of death and disease severity as a result of surfactant in the delivery room and the reduction of BPD in babies that receive surfactant will be less than, offset, or increased by the early use of CPAP. Infants treated with CPAP often swallow air and have a tube placed into the stomach to remove it. None of the aspects of the study are believed to be uncomfortable beyond the discomfort associated with routine medical care. All treatments are standard of care at some NICUs across the country.

There are no known effects from exposure to magnetic fields (MRI). Temporary minor skin irritation from tape used to apply MRI-compatible monitoring electrodes may occur, but this risk is unlikely.

Some unknown risks may be learned during the study. You will be told of any new information that is learned which may affect your child's condition or influence your willingness to have him/her continue participation in this study.

Another risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential. There will be no name or other patient identification in any study report that may be published after the study is completed. Measures taken to protect you and your baby's identity are described in the confidentiality section of this document.

BENEFITS

There may be benefits to your child directly, including a decrease in chronic lung disease and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because we do not know in advance the actual strategies chosen for your child, or which of study groups is the most effective, it is also possible that your baby will not receive these possible benefits. However, all babies in the study may benefit from the MRI that is conducted for purposes of this research. Babies may benefit from this procedures if they identify brain injury, which may allow for earlier treatment than would normally occur. If the doctor sees anything on the MRI that would help treat your infant, s/he will use that information.

ALTERNATIVES TO PARTICIPATION

The alternative to having your child participate in this project is not to participate. If you choose not to have your child participate, he/she will receive the standard care for premature infants.

CONTACT INFORMATION

If you have any questions about the study or concerns during the study, you may contact the investigator (Dr. Frantz) or his designees via the Tufts Medical Center Paging Operator: (617)

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636-5114 or Tufts Medical Center (617) 636-5008. If you have question about your rights as a research study subject, call the Tufts Medical Center Institutional Review Board (IRB) at (617) 636-7512. The Institutional Review Board is a group of doctors, nurses, and non-medical people who review human research studies for safety and protection of people who take part in the studies. Federal law requires the Institutional Review Board to review and approve any research study involving humans. This must be done before the study can begin. The study is also reviewed on a regular basis while it is in progress. This research study has been reviewed and approved by the IRB of Tufts Medical Center.

RESEARCH RELATED INJURY

All forms of medical diagnosis and treatment, whether routine or experimental, involve some risk of injury. In spite of all precautions, your child might develop medical complications from participating in this study. If such complications arise, immediate necessary medical care is available at Tufts Medical Center. Either you or your health insurance will be responsible for the costs of medical care that is medically necessary or indicated for your infant.

COSTS

There is no extra cost to participate in this study beyond the costs of medical care that is medically necessary or indicated for your infant's care and which is the responsibility of you or your health insurance. The head ultrasound and MRI conducted for the sole purpose of research is paid for by the National Institutes of Child Health and Human Development, which is the sponsor of this study.

PAYMENT

If your baby is discharged home prior to the MRI and head ultrasound procedures at 35-42 weeks post-menstrual age, you will be reimbursed reasonable travel expenses to get to these appointments. A gift certificate to a local department store for \$20.00 will be provided per child at the 18-month follow-up visit as an appreciation payment for your child's participation.

VOLUNTARY PARTICIPATION/WITHDRAWAL

Taking part in this research study is completely your choice and you are free to change your mind. You can decide to stop taking part in this study at any time for any reason and your child will receive standard medical care. If you want to stop participation in this study, we ask that you contact Dr. Ivan D. Frantz III by writing, telephone or in person and let him know that you are withdrawing your child from the study. Dr. Frantz can be reached via telephone through the Tufts Medical Center Paging Operator: (617) 636-5114 or Tufts Medical Center NICU (617)

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636-5008. His mailing address is 800 Washington Street, Tufts Medical Center #44, Boston, MA 02111. At that time we will ask your permission to continue using data that has already been collected as part of the study prior to your withdrawal. At the discretion of the Principal Investigator, subjects may be taken out of this study due to unanticipated circumstances. Examples of reasons for taking a participant out of the study include: the investigator deciding that continued participation could be harmful to your child, the study being canceled, or some other administrative reason.

CONFIDENTIALITY

Extensive efforts are made to protect all research subjects from the use of information that will adversely affect them. Specifically, access to information about you and your child is restricted to the Tufts Medical Center Division of Newborn Medicine clinical research staff that is involved in this study. Clinical and research information with respect to this study is maintained in a research file separate from hospital medical records and will not be placed in the official Tufts Medical Center medical record by research staff. Clinical information collected from your baby's chart for this study will be labeled with a coded study ID number. Coded information will be sent to the NICHD Neonatal Research Network's Data Coordinating Center at Research Triangle Institute (RTI) in Research Triangle Park, North Carolina. The key linking the code number with your baby's identity will be kept secure at the Tufts Medical Center Division of Newborn Medicine clinical research office. Your baby's head ultrasound and MRI images may be identified with a header listing you baby's name, hospital number and birth date since it is not always possible to remove your baby's identification from these scans. These scans will be sent to RTI so that study radiologists may read the image and ensure consistent interpretation across all of the babies around the country that are participating in this study. The study radiologists will not have any other information about your child. In no other instance, will information directly identifying your baby, such as name or medical record number, to study data collected leave Tufts Medical Center. Research data from which your child may be identified will not be disclosed to third parties except with your written permission or as required by law. If research results from this study are reported in a professional setting, such as in a medical journal or at a scientific meeting, the identity of research subjects taking part in the study is withheld.

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PARTICIPANT'S STATEMENT

I have read this consent form and have discussed with Dr. Frantz or his/her representative the procedures described above. I have been given the opportunity to ask questions, which have been answered to my satisfaction. I understand that any questions that I might have will be answered verbally or, if I prefer, with a written statement.

I understand that I will be informed of any new findings developed during the course of this research study that may affect my willingness to stay in this research study.

I understand that my participation is voluntary. I understand that I may refuse to participate in this study. I also understand that if, for any reason, I wish to discontinue participation in this study at any time, I will be free to do so, and this will have no effect on my future care or treatment by my physicians or this hospital.

I understand that in the event I become ill or am injured as a result of participating in this research study, medical care will be provided to me. However, such medical care will not be provided free of charge, even if the injury or illness is a direct result of this research study. I understand that no funds to provide financial compensation for research-related injury or illness are available.

If I have any questions concerning my rights as a research subject in this study, I may contact the Institutional Review Board at (617) 636-7512.

I have been fully informed of the above-described study with its risks and benefits, and I hereby consent to the procedures set forth above.

I understand that as a participant in this study my identity and my medical records and data relating to this research study will be kept confidential, except as required by law, and except for inspections by the U.S. Food and Drug Administration which regulates investigational drug studies, and the study sponsor.

Date

One Parent/Legal Authorized Representative Signature

I have fully explained to _____ the nature and purpose of the above-described study and the risks that are involved in its performance. I have answered all questions to the best of my ability.

Date

Principal Investigator or Representative's Signature



INFORMED CONSENT

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

The SUPPORT Trial of the NICHD Neonatal Research Network

IRB # 041093

Revised August 1, 2008

PRINCIPAL INVESTIGATOR:

Maynard Rasmussen, MD

APPROVED

SEP 19 2008

**Institutional Review Board
Member**

SPONSOR:

National Institute of Child Health and Human Development (NICHD)
Neonatal Research Network

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Sharp Healthcare

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The Support Trial of the NICHD

Participation in a Research Study

The Neonatologists at Sharp Mary Birch Hospital for Women (SMBHW) and the National Institute of Child Health and Human Development (NICHD) Neonatal Research Network are conducting a research study in extremely premature infants to find out more about:

- 1) Treatment with Continuous Positive Airway Pressure (CPAP) - pressure applied with a face mask or nasal prongs to help babies breathe easier and keep their lungs from collapsing
- 2) The ideal range of Oxygen Saturation - the amount of oxygen in the blood

You are being asked to allow your baby to be in this study because there is a possibility he/she will be born 12 to 16 weeks early (24-28 weeks gestation). We need to tell you about the study so you can decide if you want your baby to participate. You need to know why we are doing the study, if there might be any risks for your baby, and what we will expect from you and your baby.

Why is this Study Being Done?

- 1) To compare the treatment of extremely premature infants in the delivery room who receive CPAP with infants who are treated with a breathing tube in the windpipe (trachea) and surfactant (a medication which keeps the lungs from collapsing) to see if either treatment results in healthier lungs.
- 2) To compare treatment with lower oxygen saturation range (85-89%) with higher range (91-95%) to determine if either range results in healthier eyes.

Both of these approaches may be beneficial. This study will help determine which of these treatments work the best and are the safest for premature infants.

A number of studies have suggested that the early use of CPAP and the avoidance of mechanical ventilation (assisting the baby's breathing with a breathing machine) are associated with:

- 1) A decreased need for treatment with surfactant (a natural substance extremely premature infants lack and which helps keep the lungs from collapsing)
- 2) A decreased risk of death or need for oxygen at 36 weeks post-conceptual age (for a baby born at 24 weeks gestation and who is 12 weeks old, his/her post-conceptual age is 36 weeks)

Currently the most extremely premature infants are treated with mechanical ventilation and surfactant. Many studies have shown that surfactant therapy is associated with:

- 1) A decreased risk of the lungs collapsing
- 2) A decreased risk of developing leaks in the lungs
- 3) A decreased risk of death or needing oxygen at 36 weeks post-conceptual age

Retinopathy of Prematurity (ROP) is a common eye problem in extremely premature infants, because the blood vessels that nourish their eyes have not fully developed. ROP may result in

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impairment of vision or even blindness, which may be caused by excessive levels of oxygen. Blood oxygen saturation levels in premature infants are commonly maintained between 80-95%. The ideal oxygen saturation in these extremely low birth weight infants (ELBW) is unknown. This study will compare the outcomes of infants whose oxygen saturation target is 85-89% vs. those whose target is 91-95% to see if either target decreases the risk of ROP.

How Many Infants will be Enrolled?

We plan to enroll approximately 1300 babies at NICHD Neonatal Research Network hospitals over a two-year period. Approximately 50 infants will be enrolled here at SMBHW.

What Does Participation in This Study Involve?

If you agree for your baby to be in this study, the following will happen to him/her: Prior to delivery, your baby will be randomly assigned (chosen by chance like a flip of a coin) to one of two treatment strategies. The treatments are as follows:

- 1) CPAP in the delivery room immediately after birth and continuing in the NICU
- Or
- 2) Placement of a breathing tube in his/her trachea (windpipe) in the delivery room followed by surfactant administration and mechanical ventilation (breathing for the baby using a machine).

Your baby will also be randomly assigned to a study oximeter (an oxygen saturation monitor that displays how much oxygen is in the blood). These oximeters will assist us in maintaining your baby's oxygen saturation target. It will also record your baby's oxygen saturations until he/she reaches 36 weeks post-conceptual age or no longer needs extra oxygen.

Routine neonatal intensive care will be provided during your baby's participation in the study. Your baby will be followed in our Infant Follow-up clinic at 6 and 12 months as standard of care for small babies. At 18-22 months corrected age your baby will receive a complete exam of his/her muscles, nerves, and mental and coordinated movement skills.

How Long Will Your Baby be in the Study?

Your baby will be in the study until 18-22 months post-conceptual age.

What are the Risks of the Study?

Each of the study treatments is already being used by many doctors across the country, there is no predictable increase in risk for your baby. Infants randomized to the CPAP group may, at some point in their care, require intubation and assisted ventilation (methods to help them breathe). If the attending physician deems this necessary, participation in the study will not affect this decision.

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SHARP HEALTHCARE

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Some unknown risks may be learned during the study. If these occur, study personnel will inform you.

The only other risk of the study is confidentiality. Every effort will be made to keep your baby's medical record information confidential. Your baby will not be identified in any report or publication about this study. Measures taken to protect you and your baby's identity are described in the confidentiality section of this document.

Are There Benefits to Taking Part in the Study?

Your baby may or may not receive any direct benefit from taking part in this study. However, your participation in this study may help us learn about better ways to treat babies requiring assistance with breathing.

What about Confidentiality?

Study personnel at SMBHW will collect clinical information from your baby's chart. Information will be labeled with a code number. Coded information will be sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute at Research Triangle Park, North Carolina. The study log linking the code number information with your baby's identity will be kept under lock and key at SMBHW. Research records will be kept confidential to the extent provided by law.

Organizations that may inspect and/or copy your baby's research records for quality assurance and data analysis include the following groups: the United States Food and Drug Administration (FDA), the Sharp HealthCare Institutional Review Board (IRB), the study sponsor NICHD Neonatal Research Network, and the Office for Human Research Protections (OHRP).

Protected Health Information (PHI)

As a part of this research study you will be asked to sign a separate document giving your permission to use and disclose your baby's medical records. This document will tell you who will view your baby's records, how they will be used and how long they will be needed. It will also tell you what you can do if you no longer agree to have your baby's medical records used. Your signature will give us permission to use your baby's records. You will receive a copy of the signed document.

What are the Costs?

It is anticipated that taking part in this study will not lead to added costs to you and your insurance company. The costs of diagnostic tests and the treatment of your baby will be your responsibility and/or that of your insurance carrier. Sharp HealthCare and the investigators will be partially reimbursed by the sponsor for time, effort and oversight by the professional staff to perform procedures, tasks, and accurately collect and submit data.

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Research Related Injury?

In the case of injury or illness resulting from this study, emergency medical treatment is available but will be provided at the usual charge. No funds are available to compensate you in the event of injury. Sharp HealthCare will not provide any compensation to you in the event your baby sustains a research related injury while participating in this study.

What are My Rights as a Participant?

Taking part in this study is voluntary. You may choose for your baby not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you or your baby are entitled. A Data Safety and Monitoring Board, an independent group of experts, will be reviewing the data from this research throughout the study. We will tell you about the new information from this or other studies that may affect your baby's health, welfare, or your willingness to keep your baby in this study.

What Alternatives to the Study do I Have?

As an alternative to participation in this study you may have the baby's doctor decide which treatment your baby will receive. If you decide not to include your baby in this study, none of his/her medical information will be included in the study. Participation in research is entirely voluntary. You may refuse for your baby to participate or withdraw at any time without jeopardy to the medical care your baby will receive at Sharp Mary Birch Hospital for Women or loss of benefits to which your baby is entitled. If you withdraw your baby from the study, the attending physician will decide whether to maintain the current treatment or to change it, based on your baby's needs at the time of the decision. Data collection for research purposes will stop at that time.

Your baby's participation in this study may be stopped if the doctor feels that it is in your baby's best interest medically, or if the FDA or the IRB stops the study.

Who do I Call If I Have Questions or Problems?

For questions about the study or a research related injury, contact the principal investigator, Maynard Rasmussen, MD, at (858) 939-4176.

For questions about your rights as a research participant or to address complaints about the research, contact David J. Bodkin, M.D., Chair of the Sharp HealthCare Institutional Review Board (a group of people who review the research to protect your rights) via the:

Sharp's Office for the Protection of Research Participants (IRB)
8695 Spectrum Center Boulevard
San Diego, California 92123
Phone: (858) 499-4836

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Signature

Your signature below indicates that you have read the above about the SUPPORT Trial and have had a chance to ask questions to help you understand what your baby's participation will involve. You agree for your baby to participate in the study until you decide otherwise. You are not waiving your legal rights by signing this consent form.

Signature of Parent (or Legally Authorized Representative)	Printed Name	Date
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Signature of Witness	Printed Name	Date
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I _____ attest that the requirements for informed consent for the medical research project described in this form have been satisfied – that the participant's parent has been provided with a copy of the California Experimental Subject's Bill of Rights, that I have discussed the research project with the participant's parent and explained to him or her in non-technical terms all of the information contained in this informed consent form, including any risks and adverse reactions that may reasonably be expected to occur. I further certify that I encouraged the participant's parent to ask questions and that all questions asked were answered.

Signature of Investigator	Printed Name	Date
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CALIFORNIA EXPERIMENTAL SUBJECT'S BILL OF RIGHTS

You have been asked for your infant to participate as a subject in an experimental procedure. Before you decide whether you want to participate in the experimental procedure, you have a right to:

1. Be informed of the nature and purpose of the experiment;
2. Be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized;
3. Be given a description of any discomforts and risks reasonably to be expected from your participation in the experiment;
4. Be given an explanation of any benefits reasonably to be expected from your participation in the experiment;
5. Be given a disclosure of any appropriate alternative procedures, drugs or devices that might be advantageous to you, and their relative risks and benefits;
6. Be informed of the avenues of medical treatment, if any, available to you after the experimental procedure if complications arise;
7. Be given an opportunity to ask any questions concerning the medical experiment or the procedures involved;
8. Be instructed that consent to participate in the experimental procedure may be withdrawn at any time and that you may discontinue participation in the medical experiment without prejudice;
9. Be given a copy of this form and the signed and dated written consent form; and
10. Be given the opportunity to decide to consent or not to consent to the medical experiment without the intervention of any element of force, fraud, deceit, duress, coercion or undue influence on your decision.

I have carefully read the information contained above and I understand fully my rights as a potential subject in a medical experiment involving people as subjects.

Signature of Parent or Legal Guardian

Signature of Witness

Date

Date

Authorization to Use your Protected Health Information (PHI)

Protected Health Information: PHI is any personal health information through which your baby can be identified. We are asking for your permission to use your baby's PHI in this research study. If you do not sign this form, your baby cannot participate in the study. Your baby's protected health information may include information about blood samples, physical examinations, medical history, diagnostic test such as x-rays, head ultrasound, eye examinations and other data collected or reviewed during the course of the study or prior to the study, as described in the consent form up to 18-22 months post-conceptual age.

Who will disclose your PHI?

- Maynard Rasmussen, MD, Sharp Mary Birch Hospital for Women, and Sharp HealthCare

Who will see your PHI?

- The sponsor of the research study *National Institute of Child Health and Human Development (NICHD) Neonatal Research Network*
- Government agency, *National Institute of Health*, or the Food and Drug Administration (FDA)
- Sharp HealthCare committees that review research to help protect people who join research studies.

How long will Sharp HealthCare use and share my baby's information, and what will it be used for?

- What information will be used? Study records including information about what occurred during delivery, procedures, tests, treatment that your baby had done before or during his/her hospital stay, and other medical information about your baby's participation in this study.
- How long will your baby's information be used and shared? This authorization will expire in 20 years. However, you have the right to cancel this authorization at any time. Once your baby's PHI is disclosed to the groups listed above, it will no longer be protected by federal privacy laws and may be redisclosed..

If you decide not to share your information anymore:

- You must write to the study doctor and tell him that you no longer want to share your information. Write to the study doctor at: Maynard Rasmussen, MD, Sharp Mary Birch Hospital for Women, Neonatology Department, 3003 Health Center Dr., San Diego, CA 92123.

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- Your baby will no longer be a part of the research study.
- Your baby will still get the same medical care that you have always had at Sharp HealthCare.
- **The research team can continue to use and disclose any of the protected information that they already have.**

Do you have the right to see and copy your baby's research information?

- You can only see your baby's research information if it is also being used in your baby's medical records, or at the end of the study.
- If you agree to share your baby's information you must sign this form below. You will be given a copy of this form.

Print your baby's name

Date

Signature of Parent or Legal Guardian

Research Representative

Consentimiento Informado

Estudio de Presión Positiva con Surfactant a las Vías Respiratorias y Oximetría de Pulso en Infantes Extremadamente Bajos de Peso al Nacer

Prueba de RESPALDO para la Neonatal Research Network (Red de Investigación Neonatal) del NICHD

IRB # 041093

Revisado el 1 de Agosto del 2008

Investigador Principal:

Dr. Maynard Rasmussen

APPROVED

SEP 1 2008

Institution Review Board

Patrocinado por:

Red de Investigación Neonatal del Instituto Nacional de Salud Infantil y Desarrollo Humano (NICHD por sus siglas en inglés)



Prueba de Respaldo del NICHD

Participación en un Estudio de Investigación

Los Neonatólogos del hospital Sharp Mary Birch Hospital for Women (SMBHW) y la Neonatal Research Network (Red de Investigación Neonatal) del National Institute of Child Health and Human Development (Instituto Nacional de Salud Infantil y Desarrollo Humano - NICHD por sus siglas en inglés) están conduciendo un estudio de investigación en infantes extremadamente prematuros para conocer más acerca de:

- 1) El tratamiento con Presión Positiva Continua a las Vías Respiratorias (CPAP por sus siglas en inglés) – presión aplicada con mascarilla o cánulas en la nariz para ayudar al bebé a respirar más fácilmente y evitar que sus pulmones se colapsen.
- 2) El nivel ideal de Saturación de Oxígeno – la cantidad de oxígeno en la sangre.

Se le está solicitando a usted que permita a su bebé participar en este estudio porque existe la posibilidad de que él o ella nazcan de 12 a 16 semanas antes de término (con 24 a 28 semanas de gestación). Necesitamos informarle acerca del estudio para que usted pueda decidir si desea que su bebé participe. Necesita saber la razón por la cual estamos llevando a cabo el estudio, si pudiera haber riesgos para su bebé, y lo que esperamos de usted y de su bebé.

¿Por qué se está Llevando a Cabo este Estudio?

- 1) Para comparar el tratamiento de infantes extremadamente prematuros que reciben CPAP en la sala de parto con infantes a quienes se les aplica un tubo respiratorio en la tráquea y surfactant (un medicamento que evita que los pulmones se colapsen), y ver si uno de los dos tratamientos obtiene mejores resultados para la salud de los pulmones.
- 2) Para comparar el tratamiento con nivel bajo de saturación de oxígeno (85-89%) con un nivel más alto (91-95%), y así determinar si uno de éstos da como resultado mejor salud de los ojos.

Ambas maneras de tratarlo podrían ser de beneficio, pero hasta ahora no ha habido un estudio que compare el uso de CPAP con entubación y tratamiento con surfactant, empezando inmediatamente al nacer y continuando en la unidad de cuidados intensivos neonatales (NICU).

Varios estudios han sugerido que el uso temprano de CPAP, evitando el uso de ventilación mecánica (ayuda al bebé a respirar con una máquina respiradora), está relacionado con:

- 1) La reducción de la necesidad de tratamiento con surfactant (sustancia natural que les falta a los bebés extremadamente prematuros y que les ayuda a que no se colapsen sus pulmones).
- 2) La reducción del riesgo de muerte o de necesitar oxígeno a la edad de 36 semanas post conceptuales (para un bebé que nace a las 24 semanas de gestación y que tiene 12 semanas de nacido, su edad post conceptual es de 36 semanas).

Actualmente los infantes extremadamente prematuros son tratados con ventilación mecánica y surfactant. Varios estudios han demostrado que la terapia con surfactant está relacionada con:

- 1) Menor riesgo de que los pulmones se colapsen
- 2) Menor riesgo de desarrollar fugas en los pulmones
- 3) Menor riesgo de morir o de necesitar oxígeno a la edad post conceptual de 36 semanas.

La Retinopatía de Premadurez (ROP por sus siglas en inglés) es un problema de los ojos común en infantes extremadamente prematuros, porque los vasos sanguíneos que nutren a los ojos no están completamente desarrollados. La ROP puede resultar en deterioro de la vista o hasta ceguera, la cual puede ser causada por niveles excesivos de oxígeno. Los niveles de saturación de oxígeno en la sangre de infantes prematuros se mantienen generalmente entre 80-95%. La saturación ideal de oxígeno en estos bebés extremadamente bajos de peso al nacer (ELBW por sus siglas en inglés) se desconoce.

¿Cuántos Infantes Participarán en este Estudio?

Esperamos inscribir a aproximadamente 1300 bebés en hospitales de la Red de Investigación Neonatal de NICHD durante un período de dos años. Aproximadamente 50 infantes serán inscritos aquí en SMBHW.

¿Qué es lo que Involucra la Participación en este Estudio?

Si usted acepta que su bebé entre en este estudio, le pasará lo siguiente. Antes del parto, y después de obtener su permiso, se asignará a su bebé al azar (como si se lanzara una moneda al aire) a una de las dos estrategias de tratamiento. Los tratamientos son los siguientes:

- 1) El CPAP en la sala de parto, inmediatamente después de nacer, y continuando en la unidad de cuidados intensivos (NICU).
- O
- 2) La colocación de un tubo respiratorio en la tráquea del bebé en la sala de parto, seguido por administración de surfactant y ventilación mecánica (bebé respira con uso de máquina).

Además de ser asignado a uno de los dos grupos descritos arriba, su bebé también será asignado al azar a uno de dos tipos de oxímetros (monitores de saturación de oxígeno que muestran cuanto oxígeno hay en la sangre). Los oxímetros (monitores de oxígeno) utilizados en esta prueba son dispositivos aprobados por la FDA. Para este estudio, los oxímetros fueron modificados para mostrar un valor que es ligeramente más alto o ligeramente más bajo que el nivel real de oxígeno cuando los valores están entre 85 y 95%. Fuera de estos niveles, el oxímetro trabaja igual que un dispositivo no modificado.

La saturación de oxígeno en su bebé será mantenida ya sea en el nivel alto (91-95%) o en el nivel bajo (85-89%). El tipo de oxímetro ("Lectura Alta" o "Lectura Baja") al cual su bebé será asignado no lo conocerán las enfermeras o los doctores que atienden a su bebé. Esta información solo la conocerá NICHD, pero se le dará al doctor de su bebé si se necesita. Su bebé permanecerá con ese tipo de oxímetro mientras esté bajo terapia de oxígeno, hasta que él o ella alcance la edad de 36 semanas de edad post concepcional.

Se le proporcionará cuidado intensivo neonatal de rutina a su bebé durante su participación en el estudio. Seguirá bajo observación médica en nuestra clínica de Seguimiento Médico para Infantes a los 6 y 12 meses de edad, recibiendo el estándar de atención para bebés pequeños. A los 18-22 meses de edad corregida, su bebé recibirá sin costo alguno para usted, un examen completo de sus músculos, sus nervios y su habilidad mental y coordinación de movimientos.

¿Por Cuanto Tiempo Van a Estudiar a su Bebé?

Su bebé estará en el estudio hasta los 18-22 meses de edad post concepcional.

¿Existen Riesgos Asociados con este Estudio?

Todos los tratamientos que se proponen en este estudio son los mismos que se están usando actualmente en nuestra NICU, no se espera ningún riesgo mayor para su bebé. Los infantes que les toque estar en el grupo CPAP podrían, en algún momento, requerir entubación y ventilación asistida (métodos que les ayudan a respirar). Si el doctor que atiende a su bebé lo considera necesario, el hecho de que participa en el estudio no afectará esta decisión. Podría ser que se descubrieran riesgos durante el estudio que aún no se conocen. Si estos ocurrieran, el personal investigador le informará a usted.

El único otro riesgo del estudio es la confidencialidad. Se hará todo esfuerzo por mantener confidencial la información del expediente médico de su bebé. No se identificará a su bebé en ningún reporte o publicación acerca de este estudio. Las medidas que se tomarán para proteger la identidad de usted y de su bebé se describen en la sección sobre confidencialidad de este documento.

¿Existen Beneficios Asociados a la Participación en este Estudio?

Su bebé podría o no recibir beneficio directo por participar en ese estudio. Sin embargo, la participación de su bebé nos ayudará a encontrar mejores maneras de tratar a bebés que requieren ayuda para poder respirar.

¿Qué sucede con la Confidencialidad?

El personal encargado del estudio en SMBHW recopilará la información clínica del expediente de su bebé, a la cual se le pondrá una etiqueta con un número codificado. La información codificada se enviará al Centro de Colección de Datos de la Red Neonatal del NICHD al Research Triangle Institute en Research Triangle Park, North Carolina. La bitácora del estudio que enlaza la información codificada con la identidad de su bebé se mantendrá bajo llave en SMBHW. Los archivos de la investigación se mantendrán en forma confidencial hasta donde permite la ley.

Las organizaciones que pueden examinar o copiar los datos de investigación de su bebé para asegurar la calidad del estudio, así como para analizar datos, incluyen los siguientes grupos: la United States Food and Drug Administration (FDA), Sharp HealthCare Institutional Review Board (IRB), el patrocinador del estudio, NICHD Neonatal Research Network, y la Oficina de Protección de la Investigación Humana (Office for Human Research Protection - OHRP).

Información de Salud Protegida (PHI por sus siglas en inglés)

Como parte de este estudio de investigación, se le pedirá que firme un documento por separado en el cual usted otorga su autorización para que se tenga acceso a la información médica de su bebé. Este documento le indicará quien tendrá acceso a dicha información, por cuanto tiempo y como será usada la misma. De igual forma, le dirá lo que usted puede hacer en caso de que ya no

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deseara que se siga usando la información médica de su bebé. Su firma nos dará autorización para usar la información médica de su bebé. Usted recibirá una copia firmada de dicho documento.

¿Cuáles son los Costos?

Estamos anticipando que el participar en este estudio no representará ningún costo adicional para usted, ni para su compañía de seguro médico. Los costos de pruebas de diagnóstico y tratamiento de su bebé serán responsabilidad de usted y(o) de su compañía de seguro médico. Sharp HealthCare y los investigadores serán reembolsados parcialmente por el patrocinador, por su tiempo, esfuerzo y supervisión del equipo profesional para llevar a cabo los procedimientos, tareas, y coleccionar y presentar correctamente los datos obtenidos.

¿Qué Sucede en Caso de Lesiones Durante el Estudio?

En el caso de presentarse alguna lesión o enfermedad como resultado de dicho estudio, se dispone de tratamiento médico de emergencia pero se le proporcionará al precio acostumbrado. No existen fondos de compensación para usted en caso de lesiones. Sharp HealthCare no le proporcionará ninguna compensación a usted en el caso de que su bebé sufra algún daño relacionado con la investigación mientras esté participando en este estudio.

¿Cuáles son mis Derechos como Participante?

El tomar parte en este estudio es voluntario. Usted puede elegir que su bebé no participe o puede retirarlo del estudio en cualquier momento. El dejar el estudio no resultará en ninguna multa o pérdida de beneficios para los cuales usted o su bebé tienen derecho. Un grupo independiente de expertos, el Data Safety and Monitoring Board (Consejo de Seguridad y Monitoreo de Datos), estará revisando los datos de esta investigación a lo largo del estudio. Le diremos si alguna nueva información con respecto a este u otros estudios pudiera afectar la salud o el bienestar de su bebé, o su disponibilidad de permanecer en el estudio.

¿Qué Otras Alternativas Tengo Además de este Estudio?

Como alternativa a la participación en este estudio, usted puede pedirle al doctor de su bebé que decida cual tratamiento es el indicado para su bebé. Si usted decide no incluir a su bebé en este estudio, nada de su información médica será incluida en el mismo. La participación en esta investigación es enteramente voluntaria. Usted puede rehusarse a que su bebé participe en este estudio o retirarlo de su participación en cualquier momento, sin que esto afecte el cuidado médico que su bebé reciba en Sharp Mary Birch Hospital for Women, o que pierda su bebé los beneficios a que tenga derecho. Si usted retira a su bebé de dicho estudio, el doctor que lo está atendiendo decidirá si mantenerlo bajo el tratamiento que estaba recibiendo o si cambiarlo, basándose en las necesidades de su bebé en el momento en que se tome esa decisión. La colección de datos para fines del estudio de investigación se suspenderá en ese momento. La participación de su bebé en este estudio puede ser suspendida si su doctor siente que esto sería en beneficio médico de la salud de su bebé, o si la FDA o el IRB suspenden el estudio.



¿A Quién debo Llamar si Tengo Dudas o Problemas?

Para cualquier pregunta acerca del estudio o con respecto a alguna lesión relacionada con la investigación, comuníquese con el investigador principal, Dr. Maynard Rasmussen, al teléfono: (858)939-4176.

Para cualquier pregunta acerca de sus derechos como participante en el estudio, o para presentar una queja acerca de la investigación, comuníquese con el Dr. David J. Bodkin, Presidente del Sharp HealthCare Institutional Review Board (un grupo de personas que revisan la investigación para proteger los derechos de usted) por la siguiente vía:

Sharp's Office for the Protection of Research Participants (IRB)
8695 Spectrum Court
San Diego, California 92123
Teléfono: (858) 499-4836

Firma

Su firma al calce indica que usted ha leído lo anterior acerca de la Prueba de Respaldo y ha tenido oportunidad de hacer preguntas que le ayuden a entender lo que involucra la participación de su bebé. Usted está de acuerdo en que su bebé participe en el estudio hasta que decida lo contrario. Usted no está renunciando a los derechos legales de su bebé al firmar este consentimiento.

Firma del Padre/Madre
(o su representante legal
autorizado)

Nombre en Letra de Molde

Fecha

Firma del Testigo

Nombre en Letra de Molde

Fecha

Yo _____ certifico que los requisitos para firmar el consentimiento informado del proyecto de investigación médica descrito en este documento han sido cumplidos, que se le ha proporcionado al padre y(o) a la madre del participante una copia de los "Derechos de los Sujetos que Participan en Experimentos en California," que he platicado del proyecto de investigación con el padre y(o) la madre del participante y les he explicado, en términos que entienden, toda la información contenida en este consentimiento informado, así como los riesgos y las reacciones adversas que se podría esperar razonablemente que ocurrieran. Además certifico que aconsejé al padre y(o) a la madre del participante que hicieran preguntas, y que todas sus preguntas fueron aclaradas.

Firma del Investigador

En Letra de Molde

Fecha

DERECHOS DE LOS SUJETOS QUE PARTICIPAN EN EXPERIMENTOS EN CALIFORNIA

Se le ha solicitado que permita a su bebé participar como sujeto de un procedimiento experimental. Antes de que decida si va a participar en el procedimiento experimental, usted tiene derecho a:

1. Estar informado de la naturaleza y propósito del experimento.
2. Recibir una explicación sobre los procedimientos que se van a seguir en el experimento médico y de cualquier fármaco o dispositivo que se vaya a utilizar.
3. Recibir una descripción de cualquier incomodidad o riesgo que se pueda esperar razonablemente por participar en el experimento.
4. Recibir una explicación de cualquier beneficio que usted pueda esperar razonablemente por participar en el experimento.
5. Recibir información de cualquier procedimiento, droga o dispositivo alternativo apropiado, que pudiera ser provechoso para usted, y sus riesgos y beneficios correspondientes.
6. Estar informado de las vías de tratamiento médico, si las hubiera, que usted tiene a su disposición después del procedimiento experimental, en caso de que surgieran complicaciones.
7. Tener la oportunidad de hacer cualquier pregunta relacionada con el experimento médico o los procedimientos involucrados.
8. Recibir información de que puede retirar en cualquier momento su consentimiento para participar en el procedimiento experimental, y de que puede abandonar la participación en el experimento sin perjuicio alguno.
9. Recibir una copia de este formulario y el formulario de consentimiento firmado y fechado, y
10. Recibir la oportunidad de decidir si consiente o no consiente al experimento médico sin que intervenga ningún elemento de fuerza, fraude, dolo, coacción, coerción o una influencia indebida sobre su decisión.

He leído la información anterior con mucho cuidado y entiendo totalmente mis derechos como sujeto potencial de un experimento médico que involucra a personas como sujetos.

Firma del Padre/Madre o Tutor Legal

Firma del testigo

Fecha

Fecha

Autorización para Usar su Información de Salud Protegida (PHI por sus siglas inglés)

Información de Salud Protegida: PHI es toda la información personal de salud mediante la cual se le puede identificar a su bebé. Estamos solicitando su permiso para usar el PHI de su bebé en este estudio de investigación. Si usted no firma esta forma, su bebé no podrá participar en este estudio. La información protegida de salud de su bebé puede incluir información acerca de muestras de sangre, exámenes físicos, historia médica, diagnósticos de rayos X, ultrasonidos de la cabeza, exámenes de ojos y otros datos recopilados o revisados durante el curso de este estudio o antes de este estudio, como se indica en la forma de consentimiento, hasta 18 a 22 meses de edad post concepcional.

¿Quién podrá disponer de su PHI?

- El Dr. Maynard Rasmussen, el hospital Sharp Mary Birch Hospital for Women, y Sharp HealthCare.

¿Quién va a ver su PHI?

- El patrocinador de dicho estudio *National Institute of Child Health and Human Development (NICHD) Neonatal Research Network* (Red de Investigación Neonatal del Instituto Nacional de la Salud Infantil y Desarrollo Humano)
- Las agencias gubernamentales *National Institute of Health* (Instituto Nacional de Salud) o la *Food and Drug Administration (FDA)* (Administración de Alimentos y Fármacos)
- Los comités de Sharp HealthCare que revisan la investigación para proteger a las personas que participan en estudios de investigación.

¿Cuánto tiempo usará y distribuirá Sharp HealthCare la información de su bebé y para qué será utilizada?

- ¿Qué información será usada? Datos médicos incluyendo información acerca de lo que ocurrió durante el parto, procedimientos, pruebas, tratamientos que su bebé haya tenido antes o durante su estancia en el hospital, y otra información médica acerca de la participación de su bebé en este estudio.
- ¿Por cuánto tiempo se usará y se compartirá la información de su bebé? Esta autorización expirará en 20 años. Sin embargo, usted tiene el derecho de cancelar esta autorización en cualquier momento. Una vez que la información protegida de salud de su bebé sea compartida con los grupos arriba mencionados, ya no estará protegida por las leyes federales de confidencialidad y podrá ser divulgada.

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Si decide que ya no quiere compartir su información:

- Usted tiene que escribir al doctor que conduce el estudio y decirle que ya no desea compartir la información de su bebé. Escriba a:

Maynard Rasmussen, MD
Sharp Mary Birch Hospital for Women
3003 Health Center Drive
San Diego, California 92123

- Su bebé ya no participará en el estudio de investigación.
- Su bebé continuará recibiendo la misma atención médica que siempre se le ha brindado en Sharp HealthCare.
- **El equipo de investigación podrá continuar usando y divulgando la información protegida que ya hayan obtenido.**

¿Tiene usted derecho a ver y recibir una copia de la información de su bebé obtenida por la investigación?

- Usted podrá ver la información de la investigación concerniente a su bebé únicamente si está siendo usada en su historial médico, o al final del estudio.
- Si usted está de acuerdo en compartir la información de su bebé, usted debe firmar a continuación. Se le dará una copia de este documento.

Nombre del bebé en letra de molde

Fecha

Firma del Padre/Madre o Tutor Legal

Representante de la Investigación

DTF1200



PATIENT INFORMATION

University of California, San Diego

Parent Informed Consent

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

The SUPPORT Trial of the NICHD Neonatal Research Network

This is a research study. Research studies include only subjects who choose to take part. You are being asked to allow your child to be in the study because there is a possibility he/she will be born between 16 and 12 weeks early (24-28 weeks gestational age). Please take your time to make your decision. Discuss it with your family. Be sure to ask any questions that you may have.

STUDY INVESTIGATOR AND SPONSOR

Investigator(s): Neil Finer, MD
Sponsor: Eunice Shriver National Institute of Child Health and Human Development

WHY IS THIS STUDY BEING DONE?

This reasons this study is being done are:

- 1) To compare infants who receive delivery room CPAP (Continuous Positive Airway Pressure – a **commonly used method of keeping babies lungs expanded with increased airway pressure**) and who have strict guidelines for having a breathing tube placed with infants who have the tube placed and surfactant (a liquid which helps babies with immature lungs breath easier by helping keep their lungs from collapsing) given in the delivery room.
- 2) To compare low range (85-89%) oxygen saturation levels with high range (91-95%) levels to determine if a lower range results in decreased ROP (Retinopathy of Prematurity, an eye disease that may result in impairment of vision or even blindness, which may be

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Version DATE March 26, 2007

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caused by excessive levels of oxygen.)

WHAT MAKES THIS DIFFERENT FROM THE USUAL TREATMENT?

The use of CPAP and Intubation/Surfactant are both treatments currently used in the delivery room at UCSD. The decision as to which to use is currently made by the physician attending the delivery.

The oxygen level currently used in the NICU at UCSD is between 85% and 95%. Both treatment groups (85-89% and 91-95%) fall within that range. The study will attempt to keep babies in one of these two smaller ranges.

HOW MANY PEOPLE WILL TAKE PART IN THE STUDY?

50 subjects will be in this study at UCSD, and a total of 1310 nationwide at 16 other academic medical centers.

HOW LONG WILL YOUR CHILD BE IN THE STUDY?

Your child will be in the study for 18-22 months. The part of the study which uses either CPAP or Intubation and Surfactant lasts for 14 days. The part which keeps your baby in one of two levels of oxygen continues until your baby no longer need oxygen, or reach 36 weeks adjusted age. (A baby who was born at 24 weeks gestation will reach 36 weeks adjusted age 12 weeks after birth.) The follow-up part of the study that will see how your baby is doing developmentally will take place at 18-22 months. The NICHHD is currently considering following infants in the SUPPORT trial until school age (6-7 years). This consent will include your permission to contact you at that time to re-evaluate you child's development. Because this will occur for some children after 7 years of age, we would also ask your child for their assent at that time.

You can stop your child's participating at any time. However, if you decide to stop your child from participating in the study, we encourage you to talk to the research doctor.

WHAT IS INVOLVED IN THE STUDY?

This is what will happen if your child participates in this study:

Prior to delivery, and after your permission, your baby will be randomized (chosen by chance like the flip of a coin) to one of two lung treatment strategies. The treatments are as follows:

- 1) CPAP in the delivery room immediately after birth and continuing in the NICU, or
- 2) The placement of a tube in his/her trachea (windpipe) in the delivery room followed by

surfactant administration and ventilation (breathing for the baby using a machine)

And,

In addition to being randomly assigned to one of the two groups described above, your baby will be randomized to a High reading or Low reading oximeter [a monitor that displays how much oxygen is in the blood.] The oximeters (oxygen monitors) used in this trial are FDA approved oximeters which have been modified for research purposes. This modification makes the monitors show a value which is either slightly higher or slightly lower than the true oxygen level when values are between 85 and 95%. Outside those ranges, the oximeter works the same as the standard of care device.

Which group your baby is randomized to will not be known to the nurse taking care of your baby, or his/her physician. Only the study coordinator will know which group your baby is in. Within the range of oxygen which we normally keep babies in, your baby will either be on the high end of normal or the low end of normal. He/she will remain on this device until he/she reaches 36 weeks adjusted age. (e.g. 24 wks gestation plus 12 weeks of age = 36 weeks adjusted age.) Other care will be conducted as normal during his/her participation in the study.

Your baby will be followed in our Infant Follow-up clinic at 6 and 12 months as standard of care for small babies. At 18-22 months corrected age your baby will receive, at no charge to you, a complete exam of their muscles, nerves, and mental and coordinated movement skills.

We will continue to stay in touch with you and your infant by telephone or in person at one of your visits every 6 months over the next 18-22 months, a total of three times.

WHAT ARE THE RISKS OF THE STUDY?

Participation in this study may involve some added risks or discomforts. Because all of the treatments proposed in this study are standard of care, there is no predictable increase in risk for your baby. Infants randomized to the CPAP group may, at some point in their care, require intubation and assisted ventilation (methods to help them breathe). If the attending physician thinks this is necessary, participation in the study will not affect this decision. Some unknown risks may be learned during the study. If these occur, you will be informed by the study personnel. The only other risk of this study is the risk to confidentiality. Every effort will be made to keep your child's medical record confidential. There will be no name or other patient identification in any study report that may be published after the study is completed. Measures taken to protect you and your baby's identity are described in the confidentiality section of this document.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?

There may be benefits to your child directly, including a possible decrease in chronic lung disease (need for extra oxygen near discharge) and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because we do not know in advance the actual

strategies chosen for your child, or which of the treatment strategies is the most effective, it is also possible that your baby will receive no direct benefit. The knowledge learned from this study may help us treat babies in the future. However, as noted above, each of the 4 possible combinations of treatments is considered by some units to represent their desired approach.

WHAT OTHER OPTIONS ARE THERE?

As an alternative to participation in this study you may decide to have your baby's doctor decide which treatment your baby will receive. If you decide not to include your child in this study, none of his/her medical information will be included in the study data. Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without jeopardy to the medical care your child will receive at this institution or other loss of benefits to which your child is entitled. If you withdraw your child from the study, the attending physician will decide whether to maintain current treatment or change it, based on your child's needs at the time of the decision. Data collection for research purposes will stop at that time.

CAN YOUR CHILD BE REMOVED FROM THE STUDY WITHOUT YOUR CONSENT?

Your child's participation in this study may be ended without your consent by the investigator or your baby's doctor if it is in your child's best medical interest, there is a lack of effect, or for other reasons. If your newborn leaves the study early, he/she will continue with whichever treatment the doctor feels is best.

WHAT ABOUT CONFIDENTIALITY?

Every reasonable effort will be made to keep your child's records confidential. Clinical information will be collected from your baby's chart by study personnel at UCSD. Information will be labeled with a code number. Coded information will be sent to the NICHD Neonatal Network's Data Collection Center at Research Triangle Institute (RTI) in Research Triangle Park, North Carolina. The study log linking the code number with your baby's identity will be kept under lock and key at UCSD. Information directly identifying your baby will not leave UCSD. Research records will be kept confidential to the extent provided by law. Your child's records and information will not be released without your consent to the extent the law allows. If the study results are published or presented, your child will not be identified.

WHAT ARE THE COSTS?

There are no costs to participate in this trial.

WHAT IF YOUR CHILD IS INJURED IN THE STUDY?

If your child is injured as a direct result of participation in this research, the University of California will provide any medical care your child needs to treat those injuries. The University will not provide any other form of compensation to you if your child is injured. You may call the UCSD Human Research Protections Program office at (858) 455-5050 for more information about this, or to inquire about your rights as a research subject, or to report research-related problems.

_____ has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach Wade Rich, the Study Coordinator, or Renee Bridge, the Research Nurse, at 619-543-3759. You may contact the principal investigator Dr. Neil Finer at 619-543-3794

WILL YOU OR YOUR CHILD BE COMPENSATED?

Neither you nor your child will receive compensation for participation in this trial.

WHO DO YOU CALL IF YOU OR YOUR CHILD HAVE QUESTIONS OR PROBLEMS?

For questions about the study or a research-related injury, contact the researcher:

**Neil Finer, MD
619-543-3794**

WHAT ARE YOUR CHILD'S RIGHTS AS A RESEARCH SUBJECT?

Taking part in this study is voluntary. You may choose not to let your child take part or you or your child may choose to leave the study at any time. Your decision will not result in any penalty or loss of benefits to which your child is entitled. If you have questions about your child's rights you may call:

**University of California, San Diego
Human Research Protections Program
(858) 455-5050**

You will be told about any new information that may affect your child's health, welfare, or willingness to stay in this study.

SIGNATURE AND CONSENT TO BE IN THE STUDY:

Your signature below means that you have read the above information about the _____ study and have had a chance to ask questions to help you understand

what your child will do in this study and how your child's information will be used.

You or your child can change your minds later if you want to. You will be given a copy of this consent form and a copy of the Subject's Bill of Rights. By signing this consent form you are not giving up any of your or your child's legal rights.

NAME OF PARTICIPANT

AGE

SIGNATURE OF PARENT OR GUARDIAN

DATE

SIGNATURE OF 2nd PARENT OR GUARDIAN

DATE

SIGNATURE OF WITNESS (person explaining this form)

DATE

SUBJECT'S BILL OF RIGHTS

It is important that the purpose and procedures of the research study are fully understood and that consent is offered willingly. A subject in a research study or someone, who is asked to give consent on behalf of another person for such participation, has the right to:

1. Be informed of the nature and purpose of the research.
2. Be given an explanation of all procedures to be followed and of any drug or device to be used.
3. Be given a description of any risks or discomforts, which can be reasonably expected to result from this research study.
4. Be given an explanation of any benefits, which can be reasonably expected to the subject as a result of this research study.
5. Be informed of any appropriate alternative procedures, drugs, or devices that may be advantageous and of their relative risks and discomforts.
6. Be informed of any medical treatment, which will be made available to the subject if complications should arise from this research.
7. Be given an opportunity and encouraged to ask any questions concerning the study or the procedures involved in this research.
8. Be made aware that consent to participate in the research may be withdrawn and that participation may be discontinued at any time without affecting continuity or quality of medical care.
9. Be given a copy of the signed and dated written consent form if requested.
10. Not be subjected to any element of force, fraud, deceit, duress, coercion, or any influence in reaching the decision to consent or to not consent to participate in the research.

If you have any further questions or concerns about your child's rights as a research subject, please contact your research doctor, the Children's Hospital Office for Human Subjects Protection at (858) 966-4008 or the UCSD Human Research Protections Program.



PATIENT INFORMATION

**Rady Children's Hospital – San Diego
and University of California, San Diego**

CHILD ASSENT FORM
(ages 7-12)

School Age Follow up of children who were in the SUPPORT MRI study

Dr. Garey is doing a research study to find out what happens to children who were born very early (premature) and who had special pictures taken of their brain when they were tiny babies. You are being asked if you want to be in this research study because you were born very early and you were a part of a special research project looking at different kinds of pictures of the brain in premature babies.

If you decide that you want to be in this research study, this is what will happen to you:

1. You will come to an office and play school games with a child psychologist. A Child psychologist is someone who knows about how children learn. You will use pencils and paper and answer questions and look at pictures and words.
2. Your parents will meet with a Doctor or Nurse Practitioner (N.P.) and answer questions about how you are doing in school, what medicines you take, who lives in your house, and how you behave.
3. The Doctor or Nurse Practitioner will play games with you to see how you can walk and run and balance and throw bean bags. They will see how strong you are. They will give you a check-up and measure you. They will measure how thick your skin is using a metal tool. They will take your blood pressure.

Sometimes kids get tired when they are doing the school games. If you get tired you may take a break or have a snack. You may tell your parents or the psychologist or the doctor or nurse if you are tired or if you don't want to do the games.

The check-up may tickle.
You may not like the feeling of measuring your skin or checking your blood pressure because the tools we use can get tight on your arms and skin.
There are not any things that will hurt.

If you feel any of these things, or other things, be sure to tell your mom or dad.

You don't have to be in this research study if you don't want to. Nobody will be mad at you if you say no. Even if you say yes now and change your mind after you start doing this study, you can stop and no one will be mad.

Be sure to ask Dr. Garey or N.P.Fuller to tell you more about anything that you don't understand.

R R R R R R R R R R

Yes, you will be in this research study. No, you don't want to do this.

Write your name on this line

Date





INFORMACIÓN DEL PACIENTE

**Rady Children's Hospital – San Diego
y University of California, San Diego**

**FORMULARIO DE ASENTIMIENTO DEL NIÑO
(Edades de 7 a 12 años)**

Seguimiento en edad escolar de niños que estuvieron en el estudio SUPPORT MRI

La Dra. Garey está haciendo un estudio de investigación para saber qué sucede a los niños que nacieron antes de tiempo (prematuros) y a quienes se les tomó unas fotos especiales de su cerebro cuando eran bebés muy pequeños. Se te está preguntando si quieres estar en este estudio de investigación porque tú naciste antes de tiempo y fuiste parte de un proyecto de investigación especial que examinó diferentes tipos de fotos del cerebro en bebés prematuros.

Si decides que quieres estar en este estudio de investigación, sucederá lo siguiente:

1. Vendrás a un consultorio y jugarás unos juegos escolares con un psicólogo infantil. Un psicólogo infantil es una persona que sabe acerca de cómo aprenden los niños. Usarás lápices y papel y contestarás unas preguntas y verás unas imágenes y palabras.
2. Tus padres se reunirán con un médico o enfermera practicante (N.P.) para contestar preguntas sobre cómo te va en la escuela, qué medicamentos tomas, quién vive en tu casa, y cómo te comportas.
3. El médico o la enfermera practicante jugarán contigo para ver cómo puedes caminar y correr y equilibrarte y aventar asientos puf rellenos de bolitas. Ellos verán qué tan fuerte eres. Te harán un chequeo y te tomarán medidas. Medirán qué tan gruesa es tu piel usando una herramienta de metal. También tomarán tu presión arterial.

A veces los niños se cansan cuando están haciendo los juegos escolares. Si te cansas puedes hacer un descanso o tomar un refrigerio. Puedes decirles a tus padres o al psicólogo o al médico o la enfermera si estás cansado o si no quieres hacer los juegos.

El chequeo puede hacerte sentir cosquillas. Es posible que no te guste lo que sientas cuando te midan tu piel o tu presión arterial porque los objetos que usamos pueden oprimir tus brazos y piel, pero no son cosas que te vayan a doler.

Si sientes cualquiera de estas cosas, u otras cosas, díselo a tu mama o papá.

No tienes que estar en este estudio de investigación si no quieres hacerlo. Nadie se va a enfadar contigo si dices que no. Aun cuando ahora digas que sí y luego cambies de opinión después de que comiences este estudio, puedes dejar de hacerlo y nadie se enfadará.

No olvides preguntar a la Dra. Garey o a la enfermera practicante Fuller que te expliquen más sobre cualquier cosa que no entiendas.

R R R R R R R R R R

Sí; estarás en este estudio de investigación. No; no deseas hacer esto.

Escribe tu nombre en esta línea

Fecha

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Fecha del formulario 07/03





**Rady Children's Hospital – San Diego
and University of California, San Diego**

Parent Informed Consent

Study Title

Extended Follow-up at School Age for the SUPPORT Neuroimaging and Neurodevelopmental Outcomes (NEURO) Cohort

This is a research study. Research studies include only subjects who choose to take part. You are being asked to let your child take part in this study because your child was enrolled in the "SUPPORT Neuroimaging" study during their care in the neonatal intensive care unit. As you may recall, that study evaluated different ways to support of breathing and oxygen for premature babies and did an extra brain ultrasound at the time your baby received their brain MRI close to the time of their due date. Your child was evaluated when they were between 18 and 22 months adjusted age. Please take your time to make your decision. Discuss it with your child and family. Be sure to ask any questions that you may have.

STUDY INVESTIGATOR AND SPONSOR

Investigator(s): Dr. Donna Garey

Sponsor: Neonatal Research Network of the Eunice Kennedy Shriver National Institute of Child Health and Human Development.

WHY IS THIS STUDY BEING DONE?

This study is being done to find out if one type of brain imaging gives more useful information than the other.

We will assess your child's cognitive skills (learning), neuromotor exam (strength, movements), their function and behavior.

We will look at changes from 18- 22 months to age 6-7 years.

We will compare 6 to 7 year old outcomes based on the type of breathing and oxygen support received in the neonatal intensive care unit.

In addition to the above, we want to compare the growth (weight, height, and head size)

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looking at measurements from 18-22 months compared with measurements obtained at 6-7 years.

We will check the children's blood pressure to find out if children who were premature have different rates of high blood pressure than children who were born full term.

WHAT MAKES THIS DIFFERENT FROM THE USUAL TREATMENT?

The experimental part of this study is collecting data by examining your child's learning, behavior, movements, neuromotor exam and function. All tests used are used on children of this age and are not experimental.

HOW MANY PEOPLE WILL TAKE PART IN THE STUDY?

Approximately 530 children will be in this study nationwide at 15 medical centers, with 20 in this study from the San Diego area all cared for in the neonatal intensive care unit at UCSD.

HOW LONG WILL YOUR CHILD BE IN THE STUDY?

Your child will be in the study until all assessments have been completed. This should be one study visit.

You can stop your child's participating at any time. However, if you decide to stop your child from participating in the study, we encourage you to talk to the research team.

WHAT IS INVOLVED IN THE STUDY?

This is what will happen if your child participates in this study:

Study Visit 1: We plan to complete all assessments at one visit. This visit will last approximately 4 hours. We will allow breaks and snacks as needed.

Child Assessments:

Tests of your child's learning and problem solving will be administered by a child psychologist. The tests include:

- 1) The Wechsler Intelligence scale for Children: a test of problem solving with words, blocks, and pictures.
- 2) The Woodcock Johnson: a test of number skills and word identification
- 3) The "NEPSY" a neuropsychological test of visual problem solving and attention

The study doctor or nurse practitioner will administer a test of your child's motor skills (ability to walk, their coordination) called the "Movement ABC". The doctor or nurse

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practitioner will also perform a neurological examination, evaluating their muscle strength, reflexes, and coordination. Your child will be weighed and their height and head size will be measured. We will measure the thickness of their skin ("skin fold measurements") on their arms, back, and abdomen. We will check their blood pressure.

Parent Questionnaires:

While your child is being tested by the child psychologist, the study doctor or nurse practitioner will ask you questions about your child's health and medical history, your living situation, and your child's activities. You will be asked questionnaires about your child's behavior, their strengths and weaknesses, their activity levels, and their abilities to communicate. It may take up to 2 hours to ask these questions.

If we are unable to complete all assessments in one visit, we will schedule a second visit to complete the assessments. Duration of the second visit will be dependent upon how many assessments remain to be performed.

WHAT ARE THE RISKS OF THE STUDY?

There is a risk of loss of confidentiality. We will keep all records confidential in a locked office and all data is collected on forms using a study number.

There is a risk that you or your child may become tired because the testing and questions will take several hours. We will allow breaks and time for snacks.

Some children may not like the feeling of the blood pressure measurement (because it gets tight on their arms) or the skin fold measurements (taken with metal instruments called "calipers").Neither of these will cause pain.

There is a risk that you may discover that your child has a problem that you did not know about. With your signed permission, we will provide a brief summary of this visit to your child's primary care provider.

Since this is an investigational study there may be some unknown risks that are currently unforeseeable.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?

There may or may not be any direct benefit to you or your child by participation in this study. You may learn information about your child that may be helpful to you.

Information gained from this study may help doctors understand if one type of brain imaging done on premature infants provides more helpful information than another type. They may learn if one type of oxygen/breathing support given in the NICU has an effect on how children perform when they are school aged. Researchers will learn more about what happens to premature children when they are school age.

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WHAT OTHER OPTIONS ARE THERE?

Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without penalty or loss of benefits to which you are entitled. If you decide that you no longer wish to continue in this study, you will be required to notify the study personnel

WHAT ARE THE ALTERNATIVES TO PARTICIPATING IN THE STUDY?

The alternative to participating in the study is not to participate.

CAN YOUR CHILD BE REMOVED FROM THE STUDY WITHOUT YOUR CONSENT?

Your child may be withdrawn from the study if Dr. Garey believes it is in your child's best interest. You may also be withdrawn from the study if you do not follow the instructions given you by the study personnel.

WHAT ABOUT CONFIDENTIALITY?

Every reasonable effort will be made to keep your child's records confidential. Data will be maintained in a locked office accessible only to the study team and a password protected data base accessible only to the study team. However, while your child is in this study all related records may be made available to:

- The UCSD Institutional Review Board (for the protection of human subjects in research)
- Other regulatory agencies responsible for overseeing research, such as the federal Office for Human Research Protections
- The Eunice Kennedy Shriver National Institutes for Child Health and Human Development.

Your child's records and information will not be released without your consent to the extent the law allows. If the study results are published or presented, your child will not be identified.

WHAT ARE THE COSTS?

There are no costs for participation in this study.

WHAT IF YOUR CHILD IS INJURED IN THE STUDY?

If your child is injured as a direct result of participation in this research, Rady Children's Hospital – San Diego or the University of California will provide any medical care needed to treat those injuries. Neither Rady Children's Hospital – San Diego nor the University will provide any other form of compensation to you if your child is injured. You may call the Human Research Protections Program Office at (858) 657-5100 for more information

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about this, to inquire about your child's rights as a research subject or to report research-related problems.

WILL YOU OR YOUR CHILD BE COMPENSATED?

You will be compensated 55.5 cents/mile for travel from your home to and from the study visit.

At the completion of the study assessments, you will receive \$100 in compensation for your time.

WHO DO YOU CALL IF YOU OR YOUR CHILD HAVE QUESTIONS OR PROBLEMS?

For questions about the study or a research-related injury, contact the researcher:

Dr. Donna Garey:
UCSD Division of Neonatology 619-543-3759

WHAT ARE YOUR CHILD'S RIGHTS AS A RESEARCH SUBJECT?

Taking part in this study is voluntary. You may choose not to let your child take part or you or your child may choose to leave the study at any time. Your decision will not result in any penalty or loss of benefits to which your child is entitled. If you have questions about your child's rights you may call:

University of California, San Diego
Human Research Protections Program
(858) 657-5100

You will be told about any new information that may affect your child's health, welfare, or willingness to stay in this study.

A description of this clinical trial will be available on <http://www.ClinicalTrials.gov>. as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

SIGNATURE AND CONSENT TO BE IN THE STUDY:

Researchers working on the project hope that it will be possible to follow the children who participated in the SUPPORT project for longer than seven years. If funding for additional follow-up can be obtained, may we contact you about future studies that may be of

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interest to you?

YES NO (please circle one)

Your signature below means that you have read the above information about the extended follow up of SUPPORT neuroimaging study and have had a chance to ask questions to help you understand what your child will do in this study and how your child's information will be used.

You or your child can change your minds later if you want to. You will be given a copy of this consent form and a copy of the Subject's Bill of Rights. By signing this consent form you are not giving up any of your or your child's legal rights.

You agree to allow your child to participate in this research study.

NAME OF PARTICIPANT

AGE

SIGNATURE OF PARENT OR GUARDIAN

DATE

SIGNATURE OF 2nd PARENT OR GUARDIAN
(If required by IRB)

DATE

SIGNATURE OF WITNESS (person explaining this form)

DATE

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SUBJECT'S BILL OF RIGHTS

It is important that the purpose and procedures of the research study are fully understood and that consent is offered willingly. A subject in a research study or someone, who is asked to give consent on behalf of another person for such participation, has the right to the following:

1. Be informed of the nature and purpose of the research.
2. Be given an explanation of all procedures to be followed and of any drug or device to be used.
3. Be given a description of any risks or discomforts, which can be reasonably expected to result from this research study.
4. Be given an explanation of any benefits, which can be reasonably expected to the subject as a result of this research study.
5. Be informed of any appropriate alternative procedures, drugs, or devices that may be advantageous and of their relative risks and discomforts.
6. Be informed of any medical treatment, which will be made available to the subject if complications should arise from this research.
7. Be given an opportunity and encouraged to ask any questions concerning the study or the procedures involved in this research.
8. Be made aware that consent to participate in the research may be withdrawn and that participation may be discontinued at any time without affecting continuity or quality of medical care.
9. Be given a copy of the signed and dated written consent form.
10. Not be subjected to any element of force, fraud, deceit, duress, coercion, or any influence in reaching the decision to consent or to not consent to participate in the research.

If you have any further questions or concerns about your child's rights as a research subject, please contact your research doctor or the UCSD Human Research Protections Program at (858) 657-5100.

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**Rady Children's Hospital – San Diego
y University of California, San Diego**

Consentimiento informado de los padres

Título del estudio

Seguimiento prolongado en edad escolar de la cohorte de SUPPORT de los resultados de pruebas de neuroimágenes y neurodesarrollo (NEURO)

Este es un estudio de investigación. Los estudios de investigación incluyen solo a sujetos que deciden participar. Se le está pidiendo que permita que su hijo participe en este estudio porque él estuvo inscrito en el estudio de neuroimágenes llamado "SUPPORT Neuroimaging" durante su atención en la unidad de cuidados intensivos neonatales. Como puede recordar, en ese estudio se evaluaron diferentes formas de apoyar la respiración y el suministro de oxígeno de los recién nacidos prematuros y se realizó una ecografía adicional del cerebro en el momento en que a su bebé se le realizó un estudio por imágenes de resonancia magnética (MRI) cerca del tiempo de la fecha prevista para su nacimiento. Su hijo fue evaluado cuando tenía entre 18 y 22 meses de edad ajustada. Le rogamos que se tome su tiempo para tomar su decisión. Platíquelo con su hijo y su familia. Asegúrese de hacer cualquier pregunta que pueda tener.

INVESTIGADOR Y PATROCINADOR DEL ESTUDIO

Investigadora: Dra. Donna Garey

Patrocinador: Neonatal Research Network of the Eunice Kennedy Shriver National Institute of Child Health and Human Development (Red de Investigación Neonatal del Instituto Nacional de Salud Infantil y Desarrollo Humano Eunice Kennedy Shriver).

¿POR QUÉ SE REALIZA ESTE ESTUDIO?

Este estudio se lleva a cabo para averiguar si un tipo de estudio por imágenes del cerebro proporciona más información útil que el otro.

Evaluaremos las habilidades cognitivas (de aprendizaje) de su hijo, los resultados de un examen neuromotor (fuerza, movimientos), su funcionamiento y comportamiento.

Examinaremos los cambios desde los 18 a 22 meses, hasta los 6 a 7 años de edad.

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Compararemos los resultados de los 6 a 7 años de edad con base en el tipo de apoyo respiratorio y de oxígeno que haya recibido en la unidad de cuidados intensivos neonatales.

Además de lo anterior, queremos comparar el crecimiento (peso, estatura, y tamaño de la cabeza), examinando las mediciones de los 18 a 22 meses, en comparación con las mediciones que se obtengan a los 6 a 7 años de edad.

Revisaremos la presión arterial de los niños para saber si los niños que fueron prematuros tienen diferentes índices de presión arterial que los niños que nacieron a término.

¿QUÉ HACE A ESTO DIFERENTE DEL TRATAMIENTO HABITUAL?

La parte experimental de este estudio es la recopilación de datos, examinando el aprendizaje, comportamiento, los movimientos, resultados del examen neuromotor y funcionamiento de su hijo. Todas las pruebas se emplean en niños de esta edad y no son experimentales.

¿CUÁNTAS PERSONAS PARTICIPARÁN EN EL ESTUDIO?

Aproximadamente 530 niños participarán en este estudio en todo el país en 15 centros médicos, y habrá 20 en este estudio procedentes del área de San Diego, habiendo sido atendidos todos en la unidad de cuidados intensivos neonatales en UCSD.

¿CUÁNTO TIEMPO ESTARÁ SU HIJO EN EL ESTUDIO?

Su hijo estará en el estudio hasta que se hayan llevado a cabo todas las evaluaciones. Esto deberá hacerse en una consulta del estudio.

Usted puede interrumpir la participación de su hijo en cualquier momento. Sin embargo, si decide hacerlo, le recomendamos que lo platique con el equipo de la investigación.

¿QUÉ PROCEDIMIENTOS IMPLICA EL ESTUDIO?

Esto es lo que sucederá si su hijo participa en este estudio:

Consulta del estudio 1: Tenemos pensado llevar a cabo todas las evaluaciones en una consulta. Esta consulta durará alrededor de 4 horas. Permitiremos descansos y daremos tiempo para tomar refrigerios conforme sea necesario.

Evaluaciones del niño:

Un psicólogo infantil aplicará a su hijo las pruebas de aprendizaje y de resolución de problemas. Las pruebas comprenden:

- 1) La escala de inteligencia Wechsler para niños: Una prueba de resolución de

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- problemas con palabras, bloques, e imágenes.
- 2) La prueba Woodcock Johnson: Una prueba de habilidades con números e identificación de palabras.
 - 3) La prueba "NEPSY": Una prueba neuropsicológica de resolución de problemas visuales y de atención.

El médico o enfermera practicante del estudio aplicará a su hijo una prueba de habilidades motoras (capacidad para caminar, su coordinación) llamada el "Movimiento ABC". El médico o la enfermera practicante también llevarán a cabo un examen neurológico, una evaluación de su fuerza muscular, sus reflejos, y coordinación. Se pesará a su hijo y se medirá su estatura y el tamaño de la cabeza. Mediremos el grosor de su piel ("mediciones de pliegues cutáneos") en sus brazos, espalda, y abdomen. Verificaremos su presión arterial.

Questionarios para los padres:

Mientras el psicólogo realice las pruebas a su hijo, el médico o enfermera practicante del estudio le hará preguntas a usted sobre la salud y antecedentes médicos de su hijo, su situación de convivencia, y las actividades de su hijo. Le preguntarán sobre el comportamiento de su hijo, sus cualidades o puntos fuertes y debilidades, sus niveles de actividad, y sus habilidades para comunicarse. Puede tomar hasta 2 horas hacer estas preguntas.

Si no podemos terminar todas las evaluaciones en una consulta, programaremos una segunda consulta para concluir las evaluaciones. La duración de la segunda consulta dependerá de cuántas evaluaciones queden por realizar.

¿CUÁLES SON LOS RIESGOS DEL ESTUDIO?

Existe el riesgo de pérdida de la confidencialidad. Guardaremos todos los registros confidenciales en una oficina bajo llave y toda la información que se recabe en formularios se hará usando un número del estudio.

Existe el riesgo de que usted o su hijo puedan llegar a sentirse cansados debido a que las pruebas y preguntas tomarán varias horas. Permitiremos que haya descansos y daremos tiempo para tomar refrigerios.

Es posible que a algunos niños no les guste la sensación de la medición de la presión arterial (ya que sienten una opresión en sus brazos) o las mediciones de los pliegues cutáneos (que se toman con instrumentos de metal llamados "calibradores"). Nada de lo anterior provocará dolor.

Existe el riesgo de que usted pueda darse cuenta de que su hijo tiene un problema que usted desconocía. Con su autorización firmada, proporcionaremos un breve resumen de esta consulta al médico de atención primaria de su hijo.

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Puesto que este es un estudio de investigación, puede haber algunos riesgos desconocidos que actualmente son imprevisibles.

¿HAY BENEFICIOS POR PARTICIPAR EN EL ESTUDIO?

Puede haber o no algún beneficio directo para usted o su hijo por la participación en este estudio. Usted pudiera enterarse de información sobre su hijo que posiblemente le sea útil.

La información que se obtenga a partir de este estudio podrá ayudar a los médicos a entender si un tipo de estudio por imágenes del cerebro que se realiza a los bebés prematuros proporciona más información útil que otro tipo de técnica. Ellos podrán saber si un tipo de apoyo respiratorio y de oxígeno que se dé en la NICU tiene un efecto en la manera en que los niños se desempeñan cuando están en la edad escolar. Los investigadores aprenderán más sobre lo que sucede a los niños que fueron prematuros, cuando estén en la edad escolar.

¿QUÉ OTRAS OPCIONES EXISTEN?

La participación en la investigación es completamente voluntaria. Usted puede negarse a participar o retirarse en cualquier momento, sin sufrir ninguna sanción ni pérdida de los beneficios a los que tiene derecho. Si decide que ya no desea continuar en este estudio, será necesario que lo notifique al personal del estudio.

¿CUÁLES SON LAS ALTERNATIVAS EN VEZ DE PARTICIPAR EN EL ESTUDIO?

La alternativa a la participación en el estudio es no participar.

¿SE PUEDE RETIRAR A SU HIJO DEL ESTUDIO SIN SU CONSENTIMIENTO?

Su hijo podrá ser retirado del estudio si la Dra. Garey considera que es lo más conveniente para su hijo. También a usted se le podrá retirar del estudio si no sigue las instrucciones que le dé el personal del estudio.

¿QUE HAY SOBRE LA CONFIDENCIALIDAD?

Se hará todo esfuerzo razonable por mantener los registros de su hijo confidenciales. La información se guardará en una oficina bajo llave, accesible exclusivamente para el equipo del estudio. Sin embargo, mientras su hijo esté en este estudio, todos los registros relacionados con él estarán disponibles para:

- La Junta de Revisión institucional de UCSD ([UCSD Institutional Review Board] para la protección de los sujetos humanos en investigaciones).
- Otros organismos reguladores responsables de la supervisión de la investigación, como la oficina federal de Protección para la Investigación en Seres Humanos

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(Office for Human Research Protections).

- Los Institutos Nacionales de Salud Infantil y Desarrollo Humano Eunice Kennedy Shriver (The Eunice Kennedy Shriver National Institutes for Child Health and Human Development).

Los registros e información de su hijo no se divulgarán sin su consentimiento en la medida que la ley lo permita. Si los resultados del estudio se usan en publicaciones o presentaciones, su hijo no será identificado en ellas.

¿CUÁLES SON LOS COSTOS?

No hay costos por participar en este estudio.

¿QUÉ PASA SI SU HIJO RESULTA LESIONADO EN EL ESTUDIO?

Si su hijo resulta lesionado como consecuencia directa de la participación en esta investigación, Rady Children's Hospital – San Diego o University of California proporcionarán cualquier atención médica necesaria para tratar esas lesiones. Ni Rady Children's Hospital – San Diego ni la Universidad le proporcionarán ninguna otra forma de compensación si su hijo resulta lesionado. Para mayor información sobre este punto, preguntar sobre los derechos de su hijo como sujeto de investigación o para informar de problemas relacionados con la investigación, puede llamar a la oficina del Programa de Protección para la Investigación en Seres Humanos (Human Research Protections Program Office), al (858) 657-5100.

¿SE LE COMPENSARÁ A USTED O A SU HIJO?

Usted recibirá una compensación de 55.5 centavos/milla por los gastos de traslado de su casa hacia y desde la consulta del estudio.

Al concluir las evaluaciones del estudio, recibirá la cantidad de \$100 dólares como compensación por su tiempo.

¿A QUIÉN PUEDE LLAMAR SI USTED O SU HIJO TIENEN PREGUNTAS O PROBLEMAS?

Para preguntas sobre el estudio o sobre alguna lesión relacionada con el estudio, comuníquese con la investigadora:

Dra. Donna Garey:
División de Neonatología de UCSD 619-543-3759

¿CUÁLES SON LOS DERECHOS DE SU HIJO COMO SUJETO DE INVESTIGACIÓN?

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Formar parte de este estudio es voluntario. Usted puede optar por no permitir que su hijo participe o su hijo puede decidir dejar el estudio en cualquier momento. Su decisión no tendrá como resultado ninguna sanción ni pérdida de los beneficios a los que su hijo tiene derecho. Si tiene preguntas sobre los derechos de su hijo, puede llamar a:

University of California, San Diego
Human Research Protections Program
(858) 657-5100

Se le avisará sobre cualquier información nueva que pudiera afectar la salud, el bienestar o la buena voluntad de su hijo de permanecer en este estudio.

En <http://www.ClinicalTrials.gov>, estará disponible una descripción de este ensayo clínico, conforme lo exige la ley de los EE.UU. Este sitio web no incluirá información que pueda identificarle. Cuando mucho, el sitio web contendrá un resumen de los resultados. Usted puede realizar una búsqueda en este sitio web en cualquier momento.

FIRMA Y CONSENTIMIENTO PARA PARTICIPAR EN EL ESTUDIO:

Los investigadores que trabajan en el proyecto esperan que sea posible hacer un seguimiento durante más de siete años de los niños que participaron en el proyecto SUPPORT. En caso de que se pueda obtener financiamiento para el seguimiento adicional, ¿podemos comunicarnos con usted acerca de estudios futuros que pudieran interesarle?

SÍ NO (favor de encerrar en un círculo su respuesta)

Su firma al calce significa que usted leyó la información anterior sobre el seguimiento prolongado del estudio de neuroimágenes SUPPORT y que tuvo oportunidad de hacer preguntas para ayudarle a comprender lo que su hijo hará en este estudio y cómo se usará la información de su hijo.

Usted o su hijo pueden cambiar de opinión más adelante, si así lo desean. Se le entregará una copia de este formulario de consentimiento y una copia de la Declaración de los derechos del sujeto experimental (Subject's Bill of Rights). Al firmar este formulario de consentimiento usted no renuncia a ninguno de sus derechos legales ni de los de su hijo.

Usted está de acuerdo en permitir que su hijo participe en este estudio de investigación.

NOMBRE DEL PARTICIPANTE

EDAD

Número de estudio 120224 6 de 7
FECHA de la versión 16 de mayo de 2012



FIRMA DEL PADRE, MADRE O TUTOR

FECHA

FIRMA DEL 2º PADRE O TUTOR
(Si lo requiere la IRB)

FECHA

FIRMA DEL TESTIGO (persona que explica este formulario)

FECHA

Número de estudio
FECHA de la versión

120224
16 de mayo de 2012

7 de 7

Versión de formulario 05/04



DECLARACIÓN DE LOS DERECHOS DEL SUJETO EXPERIMENTAL

Es importante que el propósito y los procedimientos del estudio de investigación se entiendan completamente y que el consentimiento se dé en forma voluntaria. Un sujeto en un estudio de investigación, o alguien a quien se le pida su consentimiento en nombre de otra persona para tal participación, tiene derecho a lo siguiente:

1. Ser informado de la naturaleza y el propósito de la investigación.
2. Recibir una explicación de todos los procedimientos que se realizarán y de cualquier medicamento o dispositivo que se vaya a usar.
3. Recibir una descripción de todos los riesgos o molestias que se puedan esperar razonablemente como resultado de este estudio de investigación.
4. Recibir una explicación sobre los beneficios que el sujeto puede esperar razonablemente como resultado de este estudio de investigación.
5. Recibir información sobre cualquier procedimiento, medicamento o dispositivo alternativo, adecuado que pudiera ser ventajoso, así como también de los riesgos y molestias correspondientes.
6. Recibir información sobre cualquier tratamiento que el sujeto pueda tener a su disposición si llegaran a surgir complicaciones como consecuencia de esta investigación.
7. Que se le dé oportunidad y se le anime a formular preguntas relacionadas con el estudio o con los procedimientos involucrados en esta investigación.
8. Que se le haga saber que puede retirar este consentimiento para participar en la investigación y que también puede interrumpir su participación en cualquier momento, sin afectar la continuidad ni la calidad de la atención médica que reciba.
9. Recibir una copia del formulario de consentimiento impreso, firmado y fechado.
10. No estar sujeto a ningún elemento de presión, fraude, engaño, coacción, coerción, ni a ninguna influencia para llegar a la decisión de dar o no dar el consentimiento para su participación en la investigación.

Si tiene otras preguntas o inquietudes sobre los derechos de su hijo como sujeto de investigación, comuníquese con su médico de la investigación o al UCSD Human Research Protections Program (Programa de Protecciones para la Investigación en Seres Humanos de UCSD), al (858) 657-5100.

Número de estudio 120224
FECHA de la versión 16 de mayo de 2012

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Versión de formulario 05/04





**PARENTAL PERMISSION and
AUTHORIZATION DOCUMENT
IHC INSITUTIONAL REVIEW BOARD**

INTERMOUNTAIN HEALTH CARE
URBAN CENTRAL REGION
IRB

TITLE: The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weigh Infants (SUPPORT Trial)

FEB 3 2009	DEC 11 2009
APPROVED	EXPIRATION DATE

PRINCIPAL INVESTIGATOR: Bradley A. Yoder, MD (801) 581-7052

CO-INVESTIGATOR(S): Roger Faix, MD (801) 581-7052
Susan Wiedmeier, MD (801) 408-3435

LOCATION: Intermountain Medical Center and Primary Children's Medical Center

BACKGROUND:

You are being asked to allow your baby to be in this research study because there is a possibility he/she will be born between 24 and 27 weeks gestation. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with friends, and relatives if you wish. Ask us if there is anything that is not clear or if you would like more information. Please take time to decide whether or not you volunteer your baby to take part in this research study.

Our hospital is conducting this study in cooperation with the National Institutes for Child Health and Human Development (NICHD) Neonatal Research Network to try to determine the best way to manage early breathing support in the extremely premature infant and to determine the most appropriate level of oxygen in the blood of extremely premature babies.

STUDY PROCEDURES:

Prior to delivery, and after your permission, your baby will be randomized (chosen by chance, like a flip of a coin) to one of four treatment strategies as shown below. There are two breathing support strategies: 1) early CPAP (giving pressurized gas by small plastic tubes in the nose) and 2) Intubation/Surfactant (placing a breathing tube and giving a medicine through the tube to try to help the lungs work better). Both treatments are currently used immediately after delivery at this hospital. The decision as which to use is currently made by the physician attending the delivery. There are also two oxygen support strategies: 1) a low normal range (85-89%) and 2) a high normal range (91-95%). The box on the following page indicates the four possible treatment combinations your infant can be randomized to. There is an equal chance (1 in 4) for randomization to each treatment group.

<p>CPAP and Higher oxygen saturation</p>	<p>CPAP and Lower oxygen saturation</p>
<p>Breathing tube + Surfactant and Higher oxygen saturation</p>	<p>Breathing tube + Surfactant and Lower oxygen saturation</p>

Your baby will remain on a specially modified oxygen saturation monitor (measures oxygen levels in the blood through the skin without needle sticks) until he/she reaches 36 weeks corrected age (example: 24 weeks gestation plus 12 weeks of age = 36 weeks corrected age) or until the monitor is no longer needed because your baby is in room air. Because of the design of these monitors none of the nurses, doctors, or study personnel taking care of your baby will know if he/she is in the lower or higher oxygen saturation group.

Other care will continue as normal during his/her participation in the study.

A secondary purpose to this study is to determine the longer term effect of different approaches to breathing and oxygen support in the very premature baby. In that regard, this study includes three planned follow-up evaluations of all study baby's during the first two years of life including:

- a. follow-up for subsequent lung problems
- b. follow-up of neurodevelopmental function (a complete exam of their muscles, nerves, mental and coordinated movement skills) at 18-22 months age
- c. a comparison of currently applied radiology studies (MRI and Ultrasound) obtained at 36-42 weeks corrected gestation for predicting later neurodevelopmental function

Some of these follow-ups may be by phone and some may be in our special follow-up clinic for very premature infants routinely provided at 6, 12 and 18-22 months age.

Our study coordinator will keep track of how your baby is doing up to 40 weeks gestational age (the babies original due date) or until discharge. Once your baby reaches 36 weeks gestational age we will record if he/she is still being treated with oxygen and/or a ventilator. If your baby is still on nasal cannula oxygen we will try to wean him/her off the oxygen using a standard protocol. If he/she successfully weans off oxygen, your baby's medical team may decide to take him/her completely off oxygen.

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DEC 11 2009

RISKS:

Because all treatments proposed in this study are currently accepted standard of care, there is no predictable increase in risk to your baby. Infants randomized to the CPAP group may, at some point in their care, require intubation and assisted breathing. This will be determined by your baby's attending physician and participating in this study will not effect this decision.



BENEFITS:

We cannot promise any direct benefits to your baby from being in this study. However, possible benefits to your child may include decrease in chronic lung disease (need for extra oxygen at discharge) and decrease in the need for eye surgery as a result of exposure to oxygen. The information we learn from this study may help us treat premature babies in the future.

ALTERNATIVE PROCEDURES:

As an alternative to participation in this study you may decide to have your baby's doctor decide which treatment your baby will receive. If you decide not to include your baby in this study, none of his/her medical information will be included in the study data. Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without jeopardy to the medical care your baby will receive at this institution. Data collection for this study will stop at that time.

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FEB 3 2009 DEC 11 2009
APPROVED EXPIRATION DATE

PERSON TO CONTACT:

If you have concerns or questions about this research or any related matter, you can contact the primary investigator, Dr. Bradley Yoder @ 801-581-7052 (pager 801-339-0092) or co-investigator, Dr. Roger Faix@ 801-587-7500 (pager 338-2228), in the Department of Pediatrics/Neonatology, University of Utah School of Medicine.

INSTITUTIONAL REVIEW BOARD:

If you have questions regarding your child's rights as a research subject, or if problems arise which you do not feel you can discuss with the Investigator, please contact the Institutional Review Board Office at the LDS Hospital @ 801-408-6781.

INJURY NON-COMPENSATION STATEMENT:

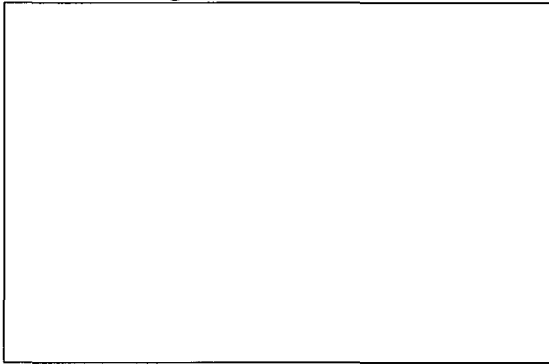
In the event your child sustains an injury resulting from your participation in the research project, Intermountain Medical Center can provide to him/her, emergency and temporary medical treatment and will bill your insurance company. Since this is a research study, payment for any injury resulting from participation in this research study may not be covered by some health insurance plans. If you believe that your child sustained an injury as a result of your participation in this research program, please contact the Institutional Review Board Office at the LDS Hospital @ 801-408-6781.

VOLUNTARY PARTICIPATION:

It is up to you to decide whether or not your baby will take part in this study. If you do decide to have him/her take part you will be asked to sign this consent form. You are free at any time to withdraw from this study without giving a reason. Whether your baby joins this study or not, your baby will receive the same medical and nursing care as needed and it will not affect your relationship with the investigator or other medical staff.

UNFORESEEABLE RISKS:

A particular treatment may involve risks to the baby that are currently unforeseeable. However, because all of the treatments proposed in this study are currently accepted as standard of care, there is no unpredictable increase expected. Unknown risks may be learned during the study, and is so you will be informed by the study personnel. The only other risk of this study is a risk to confidentiality. Every effort will be made to keep your baby's medical information confidential.



RIGHT OF INVESTIGATOR TO WITHDRAW:

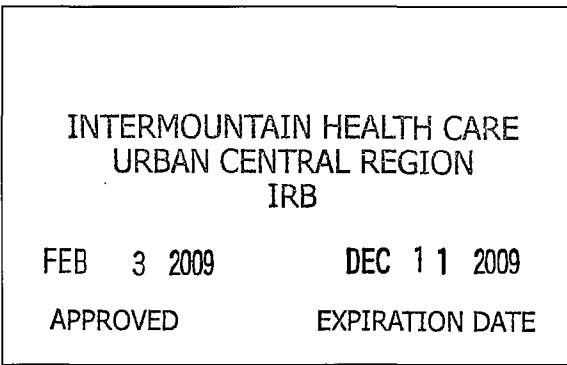
You may withdraw your baby from this study at any time without penalty. Dr. Bradley Yoder or his associate investigators can withdraw your baby without your approval. Possible reasons for withdrawal include a need to transfer care to a different hospital not involved in this study or early termination of this study for safety considerations.

COSTS TO SUBJECTS AND COMPENSATION:

There is no cost to parents nor is there any compensation for participating in this study.

NEW INFORMATION:

Sometimes during the course of a research project, new information becomes available about the treatment that is being studied. If this happens, your research doctor will tell you about it and discuss with you whether you want your baby to continue in the study. If you decide to continue your baby in the study, you will be asked to sign an updated permission form. Also, on receiving new information your research doctor might consider it to be in the best interest of your baby to withdraw him/her from the study. They will explain the reasons and arrange your baby's care to continue.



NUMBER OF SUBJECTS:

We expect to include about 1300 babies in the study from the sixteen NICHD Neonatal Research Network hospitals over a two-year period. Intermountain Medical Center, Primary Children's Medical Center, and the University of Utah Hospital will enroll around 80 babies over the two year period.

CONFIDENTIALITY/ APPROVAL TO USE YOUR CHILD'S PROTECTED HEALTH INFORMATION

IHC has a commitment to protect your child's confidentiality. Federal regulations require that you understand how your child's protected health information (PHI) is used for this study.

Signing this document means you allow us, the researchers in this study, and others working with us to use information about your baby's health for this research study. You can choose whether or not to participate in this research study. However, in order to participate you have to sign this consent and authorization form.

This is the information we will use:

Name

Address

Telephone number

Current and past medications or therapies

Information from a physical examination, such as blood pressure, heart rate, breathing rate, and temperature

Information related to the use of any device for support of lung function such as ventilator pressures, oxygen concentration and blood oxygen levels; any pertinent x-ray studies including head ultrasounds and MRI's; and information related to other neonatal diagnoses.

In records and information disclosed outside of IHC to the NICHD Neonatal Network Data Collection center at Research Triangle Park, North Carolina, your child's information will be assigned a unique code number. We will keep the key to the code in a secure file maintained in the Division of Neonatology, University of Utah School of Medicine.

Others who will have access to your child's protected health information for this research project include IHC's Institutional Review Board (the committee that oversees research studying people) and authorized members of the IHC's workforce who need the information to perform their duties (for example: provide treatment, to ensure integrity of the research, and for accounting or billing matters), the Food and Drug Administration, and others as required by law.

You may revoke this authorization at any time. **This must be done in writing.** You must either give your revocation in person to the Principal Investigator or the Principal Investigator's staff, or mail it to Dr. Bradley A. Yoder, Department of Pediatrics/Neonatology, University of Utah School of Medicine, and PO Box 581289, Salt lake City, UT 84158-1289. If you revoke this authorization, we will not be able to collect new information about your baby, and will be withdrawn from the research study. However, we can continue to use information we have already started to use in our research, as needed to maintain the integrity of the research.

You have a right to information used to make decisions about your baby's health care. However, your baby's information from this study will not be available during the study; it will be available after the study is finished. This authorization lasts until this study is finished.

For more information about rights to your child's protected health information, how to revoke this authorization, and how IHC uses your child's health information, you may ask to see or obtain a copy of the IHC Notice of Privacy Practices.

I hereby acknowledge that I have received or been offered a copy of IHC's Notice of Privacy Practices.

INTERMOUNTAIN HEALTH CARE
URBAN CENTRAL REGION
IRB

FEB 3 2009

DEC 11 2009

APPROVED

EXPIRATION DATE

CONSENT:

I confirm that I have read and understand this consent and authorization document and have had the opportunity to ask questions. I understand that my child's participation is voluntary and that I am free to withdraw my child at any time, without giving any reason, without his/her medical care or legal rights being affected. I will be given a signed copy of the consent and authorization form to keep.

INTERMOUNTAIN HEALTH CARE URBAN CENTRAL REGION IRB			
FEB 3 2009		DEC 11 2009	
APPROVED		EXPIRATION DATE	

I agree to allow my child to participate in this research study and permit you to use and disclose health information about my child for this study, as you have explained in this document.

Child's Name

(Please Note: Both parents must give their permission unless one parent is deceased, unknown, incompetent, not reasonably available, or when only one parent has legal responsibility for the care and custody of the child. If both parents are not able to sign, please list the name of the parent and the reason why they are not able to sign in the signature line.

Parent/ Guardian Name	Parent/ Guardian Signature	Title	Date

Name of Person Obtaining Authorization and Consent

Signature of Person Obtaining Authorization and Consent

Date

Name of Witness

Signature of Witness

Date

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants

Background

You are being asked to allow your baby to be in the study because there is a possibility he/she will be born between 24 and 27 weeks gestation. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with friends, and relatives if you wish. Ask us if there is anything that is not clear or if you would like more information. Please take time to decide whether or not you volunteer your baby to take part in this research study.

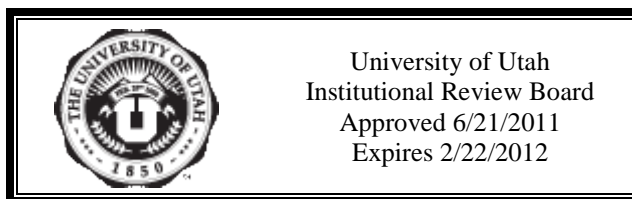
Our hospital is conducting this study in cooperation with the National Institutes for Child Health and Human Development (NICHD) Neonatal Research Network to try to determine the optimal means for managing early breathing support in the extremely premature infant (CPAP or a breathing tube) and to determine the appropriate level of oxygen saturation (oxygen levels in the blood) in extremely premature babies. CPAP stands for Continuous Positive Airway Pressure. The pressure is provided by the flow of oxygen and air through prongs or a tube in the nose, and the purpose of the pressure is help keep the lungs inflated making it easier for the baby to breathe and to get adequate oxygen into the blood.

Study Procedures

Prior to delivery, and after your permission, your baby will be randomized (chosen by chance, like a flip of a coin) to one of two lung treatment strategies. The use of early CPAP and Intubation/Surfactant are both treatments currently used immediately after delivery at this hospital. The decision as which to use is currently made by the physician attending the delivery. The randomized treatments are as follows:

- 1) CPAP immediately after delivery continuing in the neonatal intensive care unit (NICU), or
 - 2) The placement of a breathing tube (ETT) in the airway immediately after delivery followed by surfactant administration and assisted ventilation (breathing for the baby using a machine)
- And,
- 3) Oxygen saturation levels (O₂-SAT's) maintained between 85-89% (low range), or
 - 4) Oxygen saturation levels (O₂-SAT's) maintained between 91-95% (high range)
- The box below indicates the 4 possible treatment combinations your infant can be randomized to.

CPAP and Higher range oxygen saturation	CPAP and Lower range oxygen saturation
Breathing tube + Surfactant and Higher range oxygen saturation	Breathing tube + Surfactant and Lower range oxygen saturation



The physician or nurse caring for your baby will not know which oxygen saturation group the baby is randomized to.

Your baby will remain on the specially modified O2-SAT monitor until he/she reaches 36 weeks corrected age (example: 24 weeks gestation plus 12 weeks of age = 36 weeks adjusted age) or until the monitor is no longer needed because your baby is in room air.

Other care will continue as normal during his/her participation in the study.

A secondary purpose to this study is to determine the longer term effect of different approaches to breathing and oxygen support in the very premature baby. In that regard, this study includes several other planned follow-up evaluations of all study baby's during the first two years of life including:

- a. follow up at 6 and 12 months in our high-risk infant follow-up clinic
- b. follow-up for subsequent lung problems
- c. follow-up at 18-22 months of age for neurodevelopmental function (a complete exam of their muscles, nerves, mental and coordinated movement skills)
- d. a comparison of currently applied radiology studies (MRI and Ultrasound) obtained at 36-42 weeks corrected gestation for predicting later neurodevelopmental function

Some of these follow-ups may be by phone and some may be in our special follow-up clinic for very premature infants. The costs of all follow-up evaluations and the MRI examination are covered by the NIH Neonatal Research Network.

Our study coordinator will keep track of how your baby is doing up to 40 weeks gestational age (the babies original due date) or until discharge. Once your baby reaches 36 weeks gestational age we will record if he/she is still being treated with oxygen and/or a ventilator. If your baby is still on nasal cannula oxygen we will try to wean him/her off the oxygen using a standard protocol. If he/she successfully weans off oxygen, your baby's medical team may decide to take him/her completely off oxygen. All information will have a code number and, after discharge, this information will be sent to the NICHD Neonatal Network's Data Collection center at Research Triangle Park, North Carolina.

A further planned follow-up will occur when your baby is about 6 – 7 years old. This will involve neurological, developmental and intelligence testing at a Follow-Up clinic appointment. With your permission we will maintain contact with you in order for your baby to attend the Follow Up appointment when he/she is in grade school.

Risks

All treatments proposed in this study are currently accepted standard of care. All of these treatment options may have risks but there is no known predictable increase in risk to your baby from any one approach. We don't know which approach to treatment is better or safer – that is why we are doing this study. Infants randomized to the CPAP group may, at some point in their care, require intubation and assisted ventilation. If the attending physician deems necessary, participating in this study will not effect this decision. Some unknown risks may be learned during the study. If this occurs, you will be informed by the study personnel. The only other risk in this study is the risk to confidentiality. Every effort will be made to keep your child's medical



record confidential. There will be no names or other patient identification in any study report that may be published after the study is complete. Measures taken to protect you and your baby's identity are described in the confidentiality.

Benefits

There may be benefits to your child directly, including a possible decrease in chronic lung disease (need for extra oxygen at discharge) and decrease in the need for eye surgery as a result of exposure to oxygen. However, we cannot promise any benefits to your baby from being in this study. The knowledge learned from this study may help us treat babies in the future.

Confidentiality

As an alternative to participation in this study you may decide to have your baby's doctor decide which treatment your baby will receive. If you decide not to include your baby in this study, none of his/her medical information will be included in the study data. Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without jeopardy to the medical care your baby will receive at this institution. Data collection for this study will stop at that time.

Person to Contact

If you have concerns or questions about this research or any related matter, you can contact the primary investigator, Dr. Bradley Yoder @ 801-581-7052 or co-investigator, Dr. Roger Faix @ 801-587-7500, in the Department of Pediatrics/Neonatology, University of Utah School of Medicine. After hours, please call the NICU directly (University Hospital: 801-581-2775; or Primary Children's Medical Center: 801-588-3800) and ask for the doctor on call. They will be able to answer your questions or contact the above investigators. If you believe your child has been harmed as a result of participation, or if you have any complaints or concerns, please contact the study team.

Institutional Review Board

Contact the Institutional Review Board (IRB) if you have questions regarding your child's rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

Research-Related Injury

If your infant is injured from being in this study, medical care is available at either the University of Utah Hospital or Primary Children's Medical Center, as it is to all sick or injured people. The University of Utah Hospital and Primary Children's Medical Center do not have a program to pay you if your infant is hurt or has other bad results from being in the study. The costs for any treatment or hospital care would be charged to you or your insurance company (if you have insurance), to the study sponsor or other third party (if applicable), to the extent those parties are responsible for paying for medical care you receive. Since this is a research study, some health insurance plans may not pay for the costs.



The University of Utah is a part of the government. If your child is injured in this study, and you want to sue the University or the doctors, nurses, students, or other people who work for the University, special laws may apply. The Utah Governmental Immunity Act is a law that controls when a person needs to bring a claim against the government, and limits the amount of money a person may recover. See [Section 63G-7-101 to -904 of the Utah Code](#).

Voluntary Participation

It is up to you to decide whether or not your baby will take part in this study. If you do decide to have him/her take part you will be asked to sign this consent form. You are free at any time to withdraw from this study without giving a reason. Whether your baby joins this study or not, your baby will receive the same medical and nursing care as needed and it will not affect the relationship you have with the investigator or other medical staff.

Unforeseeable Risks

The particular treatment or procedure may involve risks to the baby that are currently unforeseeable but because all of the treatments proposed in this study are standard of care, there is no unpredictable increase. If unknown risks are learned during the study, you will be informed by the study personnel. The only other risk of this study is a risk to confidentiality. Every effort will be made to keep your baby's medical record confidential.

Right of Investigator to Withdraw

Your baby may withdraw from the study at any time without penalty. Dr. Bradley Yoder or his associate investigators can withdraw your baby without your approval. Possible reasons for withdrawal include a need to transfer care to a different hospital not involved in this study or early termination of this study for safety considerations.

Costs to Subjects and Compensation

There is no cost to parents nor is there any compensation for participating in this study. Standard costs for care will be billed to you and your insurance company in the usual manner. The exception to this is that the cost of the MRI scan to be obtained at 36 weeks corrected age will be covered by study funds obtained from the NIH Neonatal Research Network and will not be billed to you.

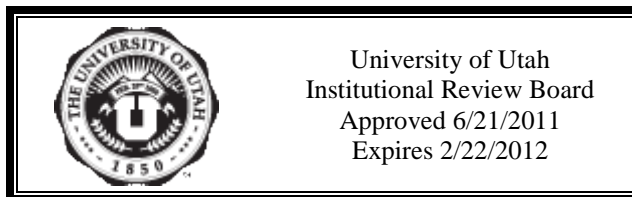
New Information

Sometimes during the course of a research project, new information becomes available about the treatment that is being studied. If this happens, your research doctor will tell you about it and discuss with you whether you want to continue in the study. If you decide to continue your baby in the study, you will be asked to sign an updated permission form. Also, on receiving new information your research doctor might consider it to be in your baby's best interest to withdraw him/her from the study. They will explain the reasons and arrange your baby's care to continue.

Number of Subjects

We expect to include about 1310 babies in the study from the fifteen NICHD Neonatal Research Network hospitals over a two- year period. The University of Utah and LDS Hospital will enroll around 60 babies over the two year period.

Approval to Use Your Child's Protected Health Information



Signing this document means you allow us, the researchers in this study, and others working with us to use information about your baby's health for this research study. You can choose whether or not to will participate in this research study. However, in order to participate you have to sign this consent and authorization form.

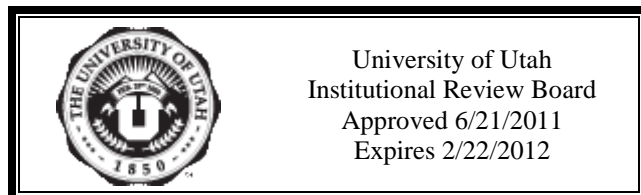
This is the information we will use:

- Name
- Address
- Telephone number
- Current and past medications or therapies
- Information from a physical examination, such as blood pressure reading, heart rate, breathing rate, and temperature
- Information related to the use of any device for support of lung function such as ventilator pressures, oxygen concentration and blood oxygen levels; any pertinent x-ray studies including head ultrasounds; information related to other neonatal diagnoses.

Others who will have access to your child's information for this research project are the University's Institutional Review Board (the committee that oversees research studying people) and authorized members of the University's and/or Primary Children's Medical Center workforce who need the information to perform their duties (for example: to provide treatment, to ensure integrity of the research, and for accounting or billing matters). The sponsor of the study does not have the right to inspect patient records.

If we share your child's information with anyone outside the University of Utah Health Sciences Center and/or Primary Children's Medical Center, your child will not be identified by name, social security number, address, telephone number, or any other information that would directly identify him/her, unless required by law. In records and information disclosed outside of the University of Utah Health Sciences Center and/or Primary Children's Medical Center, your child's information will be assigned a unique code number. We will keep the key to the code in a password protected computer. We will destroy the key to the code at the end of the research study.

You may revoke this authorization at any time. **This must be done in writing.** You must either give your revocation in person to the Principal Investigator or the Principal Investigator's staff, or mail it to Dr. Bradley A. Yoder, Department of Pediatrics/Neonatology, University of Utah School of Medicine, and PO Box 581289, Salt lake City, UT 84158-1289. If you revoke this authorization, we will not be able to collect new information about your child and they will be withdrawn from the research study. However, we can continue to use information we have already started to use in our research, as needed to maintain the integrity of the research. You have a right to information used to make decisions about your baby's health care. However, your baby's information from this study will not be available during the study; it will be available after the study is finished. This authorization lasts until this study is finished.



Consent

I confirm that I have read and understand this consent and authorization document and have had the opportunity to ask questions. I understand that my child's participation is voluntary and that I am free to withdraw my child at any time, without giving any reason, without my medical care or legal rights being affected. I will be given a signed copy of the consent and authorization form to keep.

I agree to allow my child to participate in this research study and permit you to use and disclose health information about my child for this study, as you have explained in this document.

Child's Name

1st Parent/Guardian's Name

1st Parent/Guardian's Signature

Date

Relationship to Child for 1st Parent/Guardian

2nd Parent/Guardian's Name

2nd Parent/Guardian's Signature

Date

Relationship to Child for 2nd Parent/Guardian

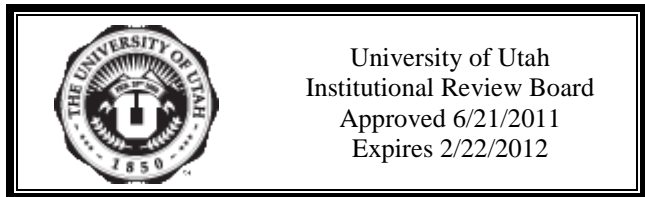
Permission cannot be obtained from 2nd parent/guardian because *(please check which one applies to the situation. 45 CFR 46.408)*:

- The parent/guardian is deceased.
- The parent/guardian is unknown.
- The parent/guardian is incompetent.
- The parent/guardian is not reasonably available.
- Only one parent/guardian has legal responsibility for the care and custody of the child.

Name of Person Obtaining Authorization and Consent

Name of Person Obtaining Authorization and Consent

Date



WAKE FOREST UNIVERSITY SCHOOL OF MEDICINE AND FORSYTH MEDICAL CENTER

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

Michael O'Shea, MD, MPH, Principal Investigator

Introduction

You, as a parent or legal guardian of _____, are invited to enter your child in a research study conducted at Forsyth Medical Center and Wake Forest University Baptist Medical Center and sponsored by the National Institutes of Child Health and Human Development (NICHD) Neonatal Research Network. You are being asked to allow your child to be in the study because there is a possibility he/she will be born between 24 and 28 weeks of gestation. Babies born this early frequently develop chronic lung disease (prolonged difficulty with breathing) and retinopathy of prematurity (a condition in which there is overgrowth of the blood vessels in the back of the eye). This study is being carried out to test the benefit of two treatments which may decrease the risk of developing chronic lung disease and retinopathy of prematurity. Approximately 1310 infants, cared for at one of sixteen medical centers in the United States will participate in this study, and about 74 of these babies will be born at Forsyth Medical Center.

Research studies are designed to gain scientific knowledge that may help other babies in the future. Your child may or may not receive any benefit from being part of this study. Participation is voluntary. Please take your time to make your decision, and ask your doctor or the study staff to explain any words or information that you do not understand.

Why Is This Study Being Done?

One of the primary purposes of this study is to find out if the risk of chronic lung disease can be reduced by treatment with continuous positive airway pressure (CPAP) applied immediately after birth while the baby is in the delivery room and continued in the neonatal intensive care unit (NICU). Also, strict guidelines will be used for having a breathing tube placed and mechanical ventilation started. There is no standard way to use CPAP for resuscitation in the delivery room for premature infants. This pressure is given using a mask placed on the baby's face. The pressure may also be given using prongs placed in the infant's nostrils. The pressure is produced using current breathing machines (ventilators). There are also special devices that are designed to deliver such pressures. At the current time very few infants who are born at Forsyth Medical Center and 24 to 27 completed weeks gestation are resuscitated using only CPAP, but this approach has been used for hundreds of babies in other hospitals.

The other purpose of this study is to find out if the risk of retinopathy of prematurity can be reduced by using a lower range for oxygen saturation levels (85-89%) instead of a higher range

(91-95%). Retinopathy of prematurity (ROP) is a common eye problem in tiny premature infants. Blood vessels that nourish the preterm infant's eyes are not fully developed. Small vessels in the retina (part of the eye) may have periods of increased or rapid growth. Over time ROP can get better or get worse. Usually ROP will heal without any problems. If the ROP is worse than usual, there is a chance that the blood vessels will grow out of control. If this happens, surgery may be needed to prevent scars inside the eye. These scars can cause severe vision loss. The oxygen saturation level currently used in the neonatal intensive care units at Forsyth Medical Center and Brenner Children's Hospital is between 85% and 94%, so both treatment groups (the group for whom the target for oxygen saturation levels will be 85-89% and the group for whom the target for oxygen saturation levels will be 91-95%) will be treated with oxygen in a manner that is very similar to that currently used at both hospitals.

What Is Involved in the Study?

If you give permission for your child to be in this research study, the following will happen:

1) Prior to delivery your baby will be assigned to one of two treatments for babies with respiratory distress. Assignment will be random, like the flipping of a coin. In the first treatment group, your baby will be placed on CPAP in the delivery room immediately after birth and CPAP will continue after transfer of your baby to the NICU. If your baby is in the second treatment group, a tube will be placed in his/her trachea (windpipe) and your baby will be receive help with his/her breathing with a ventilator (a breathing machine). After the tube is placed, a dose of surfactant will be given in the tube. Surfactant is produced by the normal full-term baby lung. It is lacking in very preterm baby lungs and its use has been connected with a decrease in respiratory problems and death.

Both of these treatment groups are current standards of care for preterm babies in the delivery room. The other aspects of the resuscitation will be managed according to the Neonatal Resuscitation Program (NRP) guidelines and follow current hospital practice. Infants randomized to the CPAP group may, at some point in their care, require intubation, assisted ventilation (methods to help them breathe), and surfactant. If the attending physician deems this necessary, participation in the study will not affect this decision. After your infant is admitted to the NICU the study guidelines for intubation, extubation and re-intubation will be in effect for the first 14 days of your baby's life. After 14 days, the ventilation care will be the same as the standard practices in your baby's nursery.

2) Your baby will also be randomized to a high reading or low reading pulse oximeter (a monitor that displays how much oxygen is in the blood). We will start this monitoring of oxygen saturation by 2 hours of age. These oximeters have been modified for use in our research study so that they show a value that is either slightly higher or slightly lower than the true oxygen level when the values are between 85 and 95%. The ranges used in this study are in common use in NICU's across the country. When the true oxygen level is outside those ranges, the actual number will be displayed. This type of oximeter will be used the entire time your baby is on oxygen while he/she is in the NICU until he/she reaches 36 weeks corrected age (age adjusted for prematurity). None of the professionals caring for your baby will know which type of pulse oximeter (high or low reading) your baby is using. This information will be known only by the research coordinator.

The oximeter group your baby is randomized to will not be known to the nurse, respiratory therapist or physician/s taking care of your baby. Only the study coordinator will know which group your baby is in.

3) If your baby is still receiving oxygen therapy at around 36 weeks corrected age and qualifies for testing, he/she will have an Oxygen Reduction Test. Your baby will stay in his/her bed and a neonatal research nurse will always be present at the bedside. The level of oxygen in the blood will be measured using a standard pulse oximeter. The test will begin with a measurement of the pulse oximeter value at the amount of oxygen your child is receiving. The oxygen level will be lowered in small steps. If the oxygen saturation (or level of oxygen in the blood) remains high, your baby will be placed in room air and monitored for 30 minutes. If your baby's oxygen level goes below the acceptable level (less than 90% for five minutes or 80% or less for 15 seconds), the test will be ended. At the end of the test, your baby will be returned to the oxygen level that he or she was in before the test.

4) As part of the study we will collect information about eye exams. If your baby is transferred to another hospital before discharge home, or requires follow-up eye examinations after discharge we will request a copy of your child's exam.

5) Prior to the time when your infant is discharged from neonatal intensive care, we will contact you to ask about your family, yourself, and your home. We will contact you three more times, either at the time of a visit to our outpatient clinic or by telephone, every 6 months over the next 18-22 months. At these times, we will ask questions about your child's breathing (especially wheezing and coughing), medication use, and visits to a doctor, emergency room, or hospital visits for treatment of breathing problems. We will also ask you several questions about your family and yourself. We expect that answering these questions will take no more than 15 minutes at each contact.

How Long Will My Baby Be in the Study?

The study begins with your agreement to allow your baby to participate in this study. During the initial hospitalization there is no time commitment required from the parent/legal guardian. The treatments that are being tested in this research study will end when your child is discharged. The collection of data will end when your child comes for his/her 18-22 months corrected age visit at the Infant Follow-Up Program at Amos Cottage in Winston-Salem for an evaluation of motor skills, mental development, health and physical growth. These assessments are a part of routine follow-up care for infants born very prematurely. That visit takes approximately 2-3 hours.

In the future we may wish our study participants to return for additional follow-up assessments. Your signature on the line below indicates that you give permission for us to contact you about any further opportunities for follow-up evaluations, after the 18-22 months of age visit.

Signature of parent or legal guardian

Date of signature

Version: 12/13/2005

Initials _____

What Are the Risks of the Study?

Participation in this study may involve some added risks or discomforts. Because all of the treatments proposed in this study are standard of care, there is no predictable increase in risk for your baby. Some unknown risks may be learned during the study. If these occur, you will be informed by the study personnel.

Are There Benefits to Taking Part in the Study?

There may be benefits to your child directly, including a possible decrease in chronic lung disease and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because we do not know in advance the actual strategies chosen for your child, or which of the treatment strategies is the most effective, it is also possible that your baby will receive no direct benefit. The knowledge learned from this study may help us treat babies in the future.

What Other Choices Are There?

Your decision to permit your child to participate in this study is voluntary. Your alternative is to not participate in this study.

What about the Use, Disclosure and Confidentiality of Health Information?

Taking part in this research study will involve collecting health information that you consider confidential or private and that directly identifies your baby. Information that identifies your baby includes, but is not limited to, such things as name, address, telephone number, and date of birth. Personal health information includes all information about your baby which is collected or created during the study for research purposes. It also includes your baby's health information that is related to this study and that is maintained in medical records at Forsyth Medical Center, Brenner Children's Hospital and at other such places as additional hospitals or clinics where your baby may have received medical care. Examples of personal health information include health history, the family health history, how your baby responds to study procedures, laboratory and test results, and medical images and information from study-related visits, interactions, and questionnaires. The information gathered from this study will be kept strictly confidential but will be submitted to the National Institute of Child Health and Human Development (NICHD) Neonatal Research Network **without any identification of you or your baby.**

Personal health information and information that identifies you and your baby ("your health information") may occasionally be given to others during and after the study. This is only for reasons such as to carry out the study, to make sure the study is being done correctly, to and to provide required reports.

The health information of your baby **without any identification of you or your baby** may be used by the research team, other researchers and their staff involved with this study or by data management centers; the sponsor of this study, the NICHD, the Federal Office of Human Research Protection, the Food and Drug Administration (FDA), the Wake Forest University School of Medicine Institutional Review Board, The Forsyth Medical Center Institutional Board, or the Office of Clinical Trials, Novant Health Triad Region. The health information of your baby may be disclosed if required by state or federal laws. The results of this study may be published in medical journals, presented at medical meetings, or exchanged between medical investigators; **however your name or your child's name will not be used.** If you have never received a copy of the Wake Forest University Baptist Medical Center Health Insurance Portability and Accountability Act (HIPAA) notice, please ask for one.

When you sign this consent and authorization you give permission for the use of the health information of your baby as described in this consent form. This authorization does not have an expiration date. You may decide to withdraw your consent at any time by providing written notification of your decision to Dr. Michael O'Shea at the following address: *Department of Pediatrics, Wake Forest University School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157.* If you withdraw your authorization your baby will not be able to be in this study. If you withdraw your authorization, no new health information will be gathered after that date, however the information already collected will continue to be used to the extent that it has already been relied on for the study, as necessary to maintain the integrity of the research study or as required by law. Refusal to participate in this study or withdrawal at a later date will not affect the care given to your child by your physician or any other health professionals. This study has been approved by the Wake Forest University Baptist Medical Center Institutional Review Board and Forsyth Medical Center Institutional Review Board, which are committees to help assure that research studies are safe and properly performed.

Although every effort will be made to keep your baby's research-related information private, absolute confidentiality and protection of the information cannot be guaranteed. If information is disclosed to a person or entity that is not covered by the federal privacy regulations it may be re-disclosed. Your baby's research-related information **without any identification of you or your baby** may be used or disclosed until the end of the research study. If the information is included in a research database there is no scheduled date at which it will be destroyed or no longer used. This is because research information continues to be analyzed for many years and it is not possible to determine when this will be complete.

What Are the Costs?

There are no costs to you for taking part in this study. All of the costs related directly to the study, will be paid for by the study. Costs for your regular medical care, which are not related to this study, will be your own responsibility.

Will You Be Paid for Participating?

You will receive no payment or other compensation for taking part in this study. However, you will receive \$100 after completion of the follow-up visit at 18-22 months corrected age to compensate you for time and expenses related to that visit. If your child's birth weight is between 401 (about 14 ounces) and 1000 grams (about two pounds and 3 ounces), this money will be paid as a part of the Follow Up Study. If your child's birth weight is less than 401 grams or more than 1000 grams, this money will be paid as a part of the SUPPORT Trial. In addition, we will assist with travel expenses. To receive payment, you must provide your social security number, name, and address, so that we can comply with Internal Revenue Service (IRS) reporting requirements. When payments are reported to the IRS we do not let them know what the payment is for, only that you have been paid. If you do not wish to provide this information, you can still take part in the study but you will not be paid.

What Happens If My Child Experiences an Injury or Illness As a Result of Participating in This Study?

Should your child experience a physical injury or illness as a direct result of his or her participation in this study, Wake Forest University School of Medicine maintains limited research insurance coverage for the usual and customary medical fees for reasonable and necessary treatment of such injuries or illnesses. To the extent research insurance coverage is available under this policy the reasonable costs of these necessary medical services will be paid, up to a maximum of \$25,000. Wake Forest University Baptist Medical Center holds the insurance policy for this coverage. It provides a maximum of \$25,000 coverage for each claim, and is limited to a total of \$250,000 for all claims in any one year. The Wake Forest University School of Medicine, and The North Carolina Baptist Hospitals, Incorporated do not assume responsibility to pay for these medical services or to provide any other compensation for such injury or illness. Additional information may be obtained from the Medical Center's Director of Risk Management, at (336) 716-3467.

You do not give up any legal rights as a research participant by signing this consent form. For more information on medical treatment for research related injuries or to report a study related illness, adverse event, or injury you should call Dr. Michael O'Shea at (336) 716-2529. After hours you may call (336) 716-7654 or 1-800-277-7654 and ask for Dr. O'Shea to be paged.

What Are My Child's Rights as a Research Study Participant?

Taking part in this study is voluntary. If you choose not to have your baby participate in this study, he/she will receive routine care. You may choose not to take part or you may leave the study at any time. The investigators also have the right to stop participation in the study at any time. You will be given any new information we become aware of that would affect your willingness to continue to have your baby participate in the study.

Whom Do I Call if I Have Questions or Problems?

Questions about your baby's participation in this research study can be directed to Dr. Michael O'Shea at (336) 716-2529) during business hours and (336) 716-7654 or 1-800 277-7654 before or after business hours. The Institutional Review Board (IRB) is a group of people who review the research to protect your rights. If you have a question about your rights as a research participant, you may contact the Chairman of the Wake Forest University Health Sciences IRB at (336) 716-4542 and/or the Chairman of the Forsyth Medical Center IRB at (336) 718-5960.

Consent

I agree to let my child take part in The SUPPORT Trial. (The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants. I authorize the use and disclosure of my child's health information as described in this consent and authorization form. I have had a chance to ask questions about being in this study and have those questions answered. By signing this consent and authorization form, I am not releasing or agreeing to release the investigator, the sponsor, the institution or its agents from liability for negligence.

(You will receive a copy of this consent form after all signatures have been obtained.)

Signature of parent or legal guardian

Date of signature

Printed name of parent or legal guardian

Signature of person administering consent

Date of signature

Printed name of person administering consent

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birthweight Infants (SUPPORT Trial)

Informed Consent

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birthweight Infants (SUPPORT Trial)

Seetha Shankaran, M.D. Principal Investigator, Wayne State University

INTRODUCTION AND PURPOSE

I am being asked to allow my baby to participate in a clinical research study. Clinical research is the study of human diseases in an attempt to improve diagnosis and treatment. In order to decide whether or not I should agree for my baby to take part in this research study, I should understand enough about its risks and benefits to make a judgment. This process is called informed consent.

This consent form gives information about the research study that will be discussed with me. Once I understand the study, I will be asked to sign this form if I wish for my child to participate. I will have a copy for my child's records.

PROCEDURE:

My baby may be born prematurely. Babies that are born this early are at a higher risk for many more problems than a baby born at full term. I understand that my baby will be at high risk for developing breathing problems requiring oxygen and additional treatment to keep the lungs inflated (open and expanded instead of collapsed).

Seetha Shankaran, MD, her associates, and the National Institutes for Child Health and Human Development (NICHD) Neonatal Research Network are conducting a research study to find out more about treatment with CPAP (positive pressure applied with a face mask to help keep the lungs inflated) and learn the appropriate levels of oxygen saturation (oxygen levels in the blood) in premature babies. Additionally, to learn more about how very premature babies grow in relationship to levels of oxygen saturation. I am being asked to allow my child to be in the study because there is a possibility he/she will be born between 16 and 12 weeks early (24-28 weeks gestational age).

The purposes of this trial are the following:

- 1) To compare infants who receive delivery room CPAP and who have strict guidelines for having a breathing tube placed (intubated) with infants who have the tube placed and surfactant (a liquid which helps babies with immature lungs breath easier by helping keep their lungs from collapsing) given in the delivery room.
- 2) To compare low range (85-89%) oxygen saturation levels with high range (91-95%) levels to determine if a lower range results in decreased ROP (Retinopathy of Prematurity), an eye disease that may result in impairment of vision or even blindness, which may be caused by excessive levels of oxygen.
- 3) To compare babies' growth in relationship to the two levels of oxygen saturation to see if a lower range level results in better growth.

Duration of the Study: To include about 1300 babies in the study from all the NICHD Neonatal Research Network hospitals over a two-three year period.

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birthweight Infants (SUPPORT Trial)

The use of CPAP and Intubation/Surfactant are both treatments currently used in the delivery room at Hutzal Women's Hospital. The decision as to which to use is currently made by the physician attending the delivery.

The oxygen level currently used in the NICU at Hutzal Women's Hospital is between 85% and 95%. Both treatment groups (85-89% and 91-95%) fall within that range. The study will attempt to keep babies in one of these two smaller ranges.

If I agree to allow my child to be in this study, I understand the following will happen to my child: Prior to delivery, and after my permission, my baby will be randomized (chosen by chance like the flip of a coin) to one of two lung treatment strategies. The treatments are as follows:

- 1) CPAP by mask in the delivery room immediately after birth and continuing in the NICU with prongs in the nose. If my child meets the guidelines for having a breathing tube placed (intubated), then surfactant will be administered at that time or
- 2) The placement of a tube in his/her trachea (windpipe) in the delivery room followed by surfactant administration and ventilation (breathing for the baby using a machine).

In addition to being randomly assigned to one of the two groups described above, my baby will be randomized to a High reading or Low reading oximeter (a monitor that displays how much oxygen is in the blood). The oximeters (oxygen monitors) used in this trial are FDA approved oximeters which have been modified for research purposes. This modification makes the monitors show a value which is either slightly higher or slightly lower than the true oxygen level when values are between 85 and 95%. Outside those ranges, the oximeter works the same as the standard of care device.

Which group my baby is randomized to will not be known to the nurse taking care of my baby, or his/her physician. Only the study coordinator will know which group my baby is in. Within the range of oxygen which the doctors normally keep babies in, my baby will either be on the high end of normal or the low end of normal. He/she will remain on this device until he/she reaches 36 weeks adjusted age. (e. g. 24 wks gestation plus 12 weeks of age = 36 weeks adjusted age) or until he/she does not need oxygen anymore. Other care will be conducted as normal during his/her participation in the study. My baby will be followed in the Infant Follow-up clinic at 6 and 12 months as standard of care for small babies. At 18-22 months corrected age my baby will receive, at no charge to me, a complete exam of their muscles, nerves, and mental and coordinated movement skills.

To monitor growth, measurements of my baby's weight will be collected from the medical record on the following dates: the day of birth, once weekly for the next four weeks, about eight weeks before the date my baby would have been born at full term, and at discharge to home. On those same dates, measurements of my baby's length using a length board and head circumference (measurement around the head) using a measuring tape will be done.

BENEFITS:

There may be benefits to my child directly, including a possible decrease in chronic lung disease (need for extra oxygen near discharge) and/or a decrease in the need for eye surgery as a result of exposure to oxygen. Because the doctors do not know in advance the actual strategies chosen for my child, or which of the treatment strategies is the most effective, it is also possible that my baby will receive no direct benefit. The knowledge learned from this study may help doctors treat babies in the future.

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birthweight Infants (SUPPORT Trial)

RISKS:

Participation in this study may involve some added risks or discomforts. Because all of the treatments proposed in this study are standard of care, there is no predictable increase in risk for my baby. Infants randomized to the CPAP group may, at some point in their care, require intubation and assisted ventilation (a breathing machine). If the attending physician deems this necessary, participation in the study will not affect this decision. There may be other risks identified during the study. If there are additional risks, I will be informed about these risks by the study personnel.

ALTERNATIVES:

If my baby does not participate in this study, my infant will receive surfactant therapy and nasal CPAP (CPAP is given by prongs placed in his/her nose) and if needed, be intubated (placed on the breathing machine) with oxygen saturation between 85-95%.

VOLUNTARY PARTICIPATION/WITHDRAWAL:

Participation is voluntary. I can also take my baby out of the study at any time. If I do take my baby out of the study, the hospital and the doctor's will continue to give my baby the best care that they can while my baby is treated in this institution.

COSTS:

There is no cost to me for participation in the study. I will receive no financial compensation for participation in this study except for reimbursement for travel costs. Costs that are part of standard of care are the responsibility of me or my insurance company. I will be provided transportation to the clinic for my follow-up visit.

COMPENSATION:

I understand that in the event of injury resulting from participation in this study, no compensation and no free medical treatment or reimbursement is offered by The Detroit Medical Center, Children's Hospital or Hutzel Women's Hospital, Wayne State University, or any other party involved in this study.

CONFIDENTIALITY:

Information about what the doctors learn from this study may be published or given to other people doing research, but neither my name nor my child's name will be used. The Food and Drug Administration (FDA) may review my child's medical record. The data collected in this study will be submitted to the National Institute of Health that is sponsoring this study. All the

The Surfactant Positive Airway Pressure and Pulse Oximetry Trial in Extremely Low Birthweight Infants (SUPPORT Trial)

information gathered on my baby as part of this study will be part of his/her medical record and will otherwise be kept confidential to the extent permitted by law.

QUESTIONS:

Any questions I have asked about this study have been answered to my satisfaction. If I have any other questions later on or if I believe my baby has suffered injury as a result of participation in this study, I may call Dr. Seetha Shankaran at 313-745-1436. If I have questions regarding my rights or my child's rights as they relate to my child's participation in this study, I may contact the Chairman of the Human Investigation Committee at 313-577-1628.

If new information develops during the course of the study that will affect my child continuing to be part of the study, the doctors will provide it to me.

By signing this paper, I am saying that I have read it, understand it, and that I agree for my baby to participate in this study.

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

Printed name of Study Subject

Date

Signature of Legally Authorized Representative

Date

Relationship to Subject

Date

Signature of Witness

Date

Signature of Investigator/Designee

Date

APPROVAL PERIOD
MAR 27 '08 MAR 30 '08
HUMAN INVESTIGATION COMMITTEE

Name:

Hospital Unit Number:

Addressograph:

**PERMISO PARA LA PARTICIPACIÓN EN UN PROYECTO DE INVESTIGACIÓN
ESCUELA DE LA UNIVERSIDAD DE YALE DE LA MEDICINA - HOSPITAL
DE YALE NEW HAVEN**

Título del Estudio: Ensayo Clínico de la Presión Positiva del Surfactante y de la Oximetría de Pulso en Neonatos con un Peso de Nacimiento Extremadamente Bajo (El ensayo SUPPORT).

Investigador Principal: Richard A. Ehrenkranz, MD

Coinvestigador: Vineet Bhandari, MD, DM

Fuente De Financiamiento: Instituto Nacional de la Salud del Niño y de la Red Neonatal Humana de Investigación del Desarrollo (NICHD)

Invitación a Participar y Descripción del Proyecto

Le invitamos a participar en un proyecto de investigación que tiene por objeto averiguar si el uso de la presión positiva continua en las vías respiratorias durante las maniobras de resucitación después del nacimiento disminuye la gravedad de las enfermedades pulmonares en los bebés prematuros. También observaremos el nivel de saturación de oxígeno que se usa actualmente para tratar a estos bebés. Le hemos pedido a su bebé y a usted que participen porque usted está embarazada de menos de 28 semanas y su bebé puede nacer prematuramente. Este estudio está avalado por el Instituto Nacional de la Salud Infantil y del Desarrollo Humano (National Institute of Child Health and Human Development) y en él participan los médicos de la Unidad Especial de Cuidados Neonatales (NBSCU) del Yale-New Haven Children's Hospital (Y-NHCH); junto con otros 15 hospitales por todo el país.

Para decidir si usted desea participar en de este estudio de investigación debe saber bastante sobre sus riesgos y ventajas para poder hacer un juicio informado. Esta forma de consentimiento le da información detallada sobre el estudio de investigación, que un miembro del equipo de investigación discutirá con usted. Esta discusión debe cubrir todos los aspectos de esta investigación: su propósito, los procedimientos que serán realizados, cualquier riesgo de los procedimientos, ventajas posibles y posibles tratamientos alternativos. Una vez que usted entienda el estudio, le preguntarán si usted desea participar; si es así le pedirán firmar esta forma de consentimiento.

Descripcion de los Procedimientos

Su bebé puede nacer prematuramente y corre el riesgo de sufrir un problema respiratorio llamado **Síndrome de Sufrimiento Respiratorio (RDS)**. Los pulmones del bebé están compuestos de diminutos sacos pulmonares, cada uno de éstos debe abrirse y cerrarse cuando el bebé inspira y expira. De manera que el oxígeno debe entrar y el dióxido de carbono salir. Esto es lo que hacen los bebés nacidos a término y los adultos. Sin embargo, en el caso de los bebés prematuros, los sacos pulmonares no siempre funcionan así. Algunos sacos pulmonares se abren y se cierran con normalidad; otros se colapsan o se quedan pegados cuando el bebé respira dificultando su respiración. Los médicos tratan este problema manteniendo los pulmones ligeramente inflados (o abiertos) entre las respiraciones. Esto se hace manteniendo un poco de presión de aire en los pulmones después de que el bebé expira (presión diastólica), facilitándole la siguiente inspiración de aire. A veces se emplea un medicamento llamado **surfactante** que ayuda a mantener los sacos pulmonares dilatados. El surfactante se administra directamente a los pulmones mediante un tubo que se inserta en las vías respiratorias (este procedimiento se denomina intubación).

Después de que nazca su hijo, si él/ella necesita ayuda para respirar, el médico o la enfermera colocarán una mascarilla para resucitación sobre la nariz y la boca del bebé y le suministrarán oxígeno con una bolsa resucitadora de acción manual. Se aprieta la bolsa para introducir aire en los pulmones del bebé. La bolsa y la mascarilla pueden usarse para proporcionar aire o presión para mantener los pulmones inflados (abiertos) entre las respiraciones. Esta presión de descanso se denomina presión positiva continua en las vías respiratorias (CPAP) o presión positiva espiratoria final (PEEP). En la actualidad, no hay recomendaciones sobre la utilización temprana de la CPAP/PEEP en la sala de partos para continuar después en la sala de neonatos prematuros. No obstante, algunos estudios apuntan que el uso temprano de la CPAP/PEEP puede estar relacionado con resultados beneficiosos tales como: el descenso del número de bebés que necesitan una máquina para poder respirar, disminución del uso de oxígeno en bebés que tienen un mes de edad, y descenso del número de casos en los que hay que administrar surfactante. Este estudio empezará en la sala de partos y continuará en la sala de cuidado de neonatos. Compararemos el uso temprano de la CPAP/PEEP con la intubación temprana, el tratamiento con surfactante y el inicio de ayuda respiratoria mecánica. El objeto de este estudio consiste en observar si alguno de estos tratamientos reduce la gravedad de, o tal vez sirva para prevenir, el desarrollo de problemas pulmonares a largo plazo en neonatos prematuros. Estos problemas respiratorios se denominan displasia bronco-pulmonar (BPD) o enfermedad pulmonar crónica (CLD).

En otro apartado de este estudio observaremos los niveles de saturación de oxígeno que se usan actualmente con neonatos prematuros. En el transcurso de una jornada rutinaria, los médicos, enfermeras y el resto del personal que cuida a su bebé usan un monitor llamado oxímetro de pulso que emplea una sonda que se coloca en la mano o en el pie para controlar de forma no invasiva el oxígeno que se le suministra al bebé para satisfacer sus necesidades. En esta parte del estudio nos gustaría determinar el nivel exacto que debería usarse para ayudar a prevenir algunos de los problemas que sufren los bebés prematuros, tales como la retinopatía de la prematuridad (ROP). Ésta procede cuando hay una proliferación anormal de los vasos sanguíneos en el ojo. Esto

causa un crecimiento de tejido cicatrizado alrededor de la retina y si éste se adhiere a la retina con suficiente firmeza, puede causar ceguera. Gracias a una serie de observaciones publicadas en 1950, se sabe que el riesgo de contraer ROP aumenta debido al uso prolongado de suplementos de oxígeno, pero desconocemos cuales son los beneficios de emplear niveles altos de oxigenación comparado a los niveles bajos en los bebés, especialmente en los prematuros. Después de examinar cómo se trataba a los bebés en el pasado, se ha sugerido que el uso de niveles bajos de saturación puede resultar en un descenso de la ROP grave.

Si su bebe ha nacido antes de la edad gestacional de 28 semanas, es posible que de forma aleatoria (como sucede al lanzar una moneda al aire) él/ella sea asignado al grupo de CPAP/PEEP Temprana o de Surfactante Temprano/ Grupo de ventilación.

Ambos procedimientos se emplean actualmente en Y-NHCH.

Si su bebé queda adscrito aleatoriamente al grupo de CPAP/PEEP Temprana, él/ella será tratado con CPAP/PEEP en la sala de partos y seguirá con este tratamiento en la sala de cuidado de neonatos. No obstante, si en cualquier momento, las dificultades respiratorias de su bebé empeoran, se le intubará y se le conectará a una maquina PARA RESPIRAR. Si esto sucede dentro de las primeras 48 horas de vida del bebé, también se le administrará surfactante.

Si su bebé queda adscrito aleatoriamente al grupo de Surfactante Temprano/ Grupo de ventilación, se le intubará y se le conectará a la máquina PARA RESPIRAR en la sala de partos y también se le administrará surfactante durante su primera hora de vida.

Durante los primeros 14 días de vida, habrá una serie de pautas que los médicos de la unidad de neonatos tendrán que seguir. Estas pautas les ayudarán a decidir cuando hay que conectar a los bebés a las máquinas para respirar y cuando hay que desconectarlos. Estas pautas también les ayudarán a decidir cuando hay que administrar o suprimir la CPAP/PEEP. Transcurridos 14 días de vida, la atención respiratoria de su bebé se manejará según la práctica estándar de la NBSCU.

Los bebés que participen en este estudio también serán asignados aleatoriamente (de nuevo, como si tirásemos una moneda al aire) a un grupo que tendrá como objetivo el alcance de niveles más bajos de saturación de oxígeno (SpO₂) o en un grupo que tendrá como objetivo el alcance de niveles más altos de saturación de oxígeno (SpO₂). Como hemos mencionado arriba, la saturación del oxígeno en el bebé se mide con un monitor llamado oxímetro de pulso. Emplea un sensor diminuto o una sonda que se coloca en la mano o en el pie del bebe para medir de forma no invasiva el nivel de saturación de oxígeno en la sangre del bebé con oxígeno. La oximetría no es dolorosa y proporciona las medidas de SpO₂ durante las 24 horas del día. Los bebés que estén en el grupo de niveles bajos tendrán como objetivo un SpO₂ del 85-89%, mientras que los bebés que se encuentre en el grupo de niveles más altos tendrán como objetivo un SpO₂ del 91-95%. Se considera que estas saturaciones están dentro de los niveles normales para neonatos prematuros. Si el SpO₂ cae por debajo del 85% o sube más del 95%, sonará la alarma del oxímetro de pulso para que los médicos y las enfermeras sepan si tienen que aumentar o disminuir el oxígeno que está recibiendo su bebé.

Por consiguiente, si su bebé participa en este estudio, le asignaremos uno de los siguientes 4 grupos:

Intervención Aleatoria	Bajo SpO2 85% a 89%	Alto SpO2 91 a 95%
Grupo de CPAP/PEEP Temprana	CPAP Temprana + Bajo SpO2	CPAP Temprana + Alto SpO2
Administración Temprana de Surfactante - Grupo con Ventilación	Surfactante + Bajo SpO2	Surfactante + AltoSpO2

Finalmente, después de haber sido dado de alta invitaremos a su bebé a que vuelva al Programa de Seguimiento de Neonatos de Yale situado en el Yale Child Study Center. Este programa tiene por objeto la realización de pruebas de desarrollo estandarizadas a todos los bebés con un peso de nacimiento inferior o igual a 1.000 (mil) gramos que han recibido tratamiento en la NBSCU. Los recién nacidos que participan en proyectos de investigación, como este, también están invitados a participar en este programa. De manera que como parte de este estudio, cuando su bebé tenga entre 18 a 22 meses de edad, se le hará un examen completo de sus músculos, nervios y de su habilidad mental y motora. Además, antes de esta visita, nuestro personal de seguimiento le hará breves entrevistas por teléfono para interesarse por la salud de su bebé.

Riesgos e Inconveniencias

Los posibles riesgos que se derivan del uso de la CPAP/PEEP incluyen la sensación de estómago lleno y la disminución temporal de la frecuencia cardiaca. Otro riesgo posible es el colapso de uno o de ambos pulmones. El uso de la CPAP/PEEP, en la proporción empleada en este estudio, no aumenta el riesgo de colapso pulmonar (neumotórax). Al igual que sucede con la CPAP/PEEP, un riesgo posible que se deriva de la intubación para iniciar la ventilación mecánica puede consistir en la disminución temporal del ritmo cardiaco o la posibilidad de colapso de uno o de los dos pulmones. Otro riesgo muy remoto es la posibilidad de pinchar las vías respiratorias al insertar el tubo para respirar. Advierta que los riesgos asociados con la intubación y la iniciación de la ventilación mecánica no aumentan al participar en este estudio.

La oximetría de pulso se usa rutinariamente en miles de neonatos prematuros en NICU's de todo el país. El control mediante los oxímetros de pulso no entraña ningún

riesgo conocido para su bebé. Hay un pequeño riesgo de rotura de la piel en el lugar donde se inserta la sonda del oxímetro de pulso, pero esto puede minimizarse si la enfermera de su hijo cambia la sonda de lugar de vez en cuando.

Beneficios

Algunas Unidades consideran que cada una de estas 4 posibles combinaciones de tratamientos representa la mejor alternativa disponible. No obstante, puede ocurrir que su bebé no se beneficie directamente al participar en esta prueba.

Si en este ensayo se identifican líneas de tratamiento que puedan disminuir el riesgo de BPD o ROP, éstas se aplicarán al manejo clínico de casos extremos de neonatos pretérmino, con la esperanza de que se reduzca la incidencia de estos problemas.

Consideraciones Económicas

Todos los tratamientos y procedimientos que se han usado como parte de este estudio, incluyendo CPAP/PEEP temprana, intubación, ventilación mecánica, terapia con surfactante, y oximetría de pulso, son los que se emplean regularmente para tratar a recién nacidos que ingresan en la NBSCU a causa de problemas respiratorios. Como en este estudio compararemos tratamientos estándar, bien usted o su compañía de seguros serán los responsables de abonar el coste de los cuidados médicos que el personal de la NBSCU dispense al pequeño.

Después de que el bebé complete su visita de seguimiento cuando tenga entre 18 y 22 meses de edad, le abonaremos una compensación de 50 (cincuenta) dólares más gastos (por ejemplo el parking o la guardería).

Tratamientos Alternativos /Alternativas

Si usted decide que su bebé no participe en este estudio, el niño recibirá ayuda para respirar mediante los tratamientos que normalmente se emplean en la NBSCU. En la actualidad la CPAP/PEEP temprana, la intubación, la ventilación mecánica, y la terapia con surfactante son prácticas habituales en la NBSCU para recién nacidos con un peso extremadamente bajo que tienen problemas respiratorios. Como hemos mencionado arriba, la participación en este estudio entraña la comparación de estrategias de tratamientos estándar.

Confidencialidad

La información clínica será recogida de la historia medica de su bebé por el personal del estudio del equipo de investigación clínico neonatal de Yale. La información será identificada con un código numérico. La información será enviada con este código al centro neonatal de recolección de datos de las redes de NICHD en el instituto del triángulo de investigación (RTI) en el Parque del Triángulo de la Investigación, en Carolina del Norte. El registro del estudio que contiene el número de código a la identidad de los bebés será guardado bajo llave en la oficina clínica neonatal de investigación de Yale. La información

que identifica directamente a su bebé quedara en Yale. Todos los datos obtenidos con el fin de este estudio serán mantenidos en un archivo protegido por un código secreto, y todos los datos incorporados en la computadora neonatal de la investigación serán accesados solamente utilizando una contraseña.

Representantes de la Comite de la Yale Investigacion Humana (el comite que revisa, aprueba y vigila estudio humano) y la Institucion Nacional de Salud (los patricinadores de este estudio) pueden revisar los documentos del estudio durante procedimientos de intervencion. Estos individuales estan obligados a mantener toda la informacion confidencial.

En caso de una lesión

Si su bebe sufre una lesión al participar en este estudio, se le proporcionara tratamiento médico. Usted o su seguro médico serán responsables por los costos de este tratamiento. No habrá remuneración financiera adicional si surge una lesión. Tampoco se le pagara por el tiempo de trabajo que haya perdido. Usted no renuncia a sus derechos legales al firmar esta hoja de consentimiento.

Participación y retiro voluntario

Sí usted elige no participar, o si usted retira su participación, no se afectara su relación con los doctores o con el Hospital de Niños de Yale-New Haven. También, según lo indicado previamente, si usted retira su participación los datos obtenidos hasta ese momento serán utilizándose. Estos se mantendrán de manera confidencial.

Preguntas

Hemos utilizado algunos términos técnicos en esta forma. Por favor siéntase libre a preguntar cualquier cosa que usted no entienda y considere esta investigación y la hoja de consentimiento cuidadosamente - antes de tomar una decisión.

Autorización

He leído (o alguien me ha leído) esta forma y he decidido participar en el proyecto descrito arriba. Sus propósitos generales, los detalles de la implicación y de peligros posibles y los inconvenientes se han explicado a mi satisfacción. Mi firma también indica que he recibido una copia de esta forma del consentimiento.

Nombre del Sujeto: _____

Firma: _____

Relación: _____

Fecha: _____

Firma del Investigador principal

Fecha

Firma de la persona que obtiene consentimiento

Fecha

Si usted tiene otras preguntas sobre este proyecto o si usted tiene un problema relacionado – a esta investigación, usted puede llamar el Investigador Principal del estudio, Richard A. Ehrenkranz en (203) 688-2320. Si usted tiene algunas preguntas referentes a los derechos de su bebe como sujeto de la investigación, usted puede llamar al Comité de Investigaciones Humanas de la Universidad de Yale al (203) 785-4688.

ESTA FORMA ES INVÁLIDA A MENOS QUE LA CAJA SIGUIENTE SE HAYA TERMINADO EN LA OFICINA DE HIC.

ESTA FORMA ES VÁLIDO SOLO HASTA: _____ PROCOLO # 27163 INICIALES: _____

NAME:

HOSPITAL UNIT NUMBER:

ADDRESSOGRAPH:

**PERMISSION FOR PARTICIPATING IN A RESEARCH PROJECT
YALE UNIVERSITY SCHOOL OF MEDICINE-YALE-NEW HAVEN HOSPITAL**

Study Title: The Surfactant Positive Pressure and Pulse Oximetry Trial in Extremely Low Birth Weight Infants (The SUPPORT Trial)

Principal Investigator: Richard A. Ehrenkranz, MD

Co-Investigator: Vineet Bhandari, MD, DM

Funding Source: The National Institute of Child Health and Human Development (NICHD) Neonatal Research Network

Invitation to Participate and Description of Project

You are invited to participate in a research study designed to determine if using continuous positive airway pressure during resuscitation after birth helps decrease the severity of lung disease in premature babies. We will also be looking at the ranges of oxygen saturation that are currently being used with these same babies. You and your baby have been asked to participate because you are less than 28 weeks pregnant and your baby may be born prematurely. The doctors at the Newborn Special Care Unit (NBSCU) at Yale-New Haven Children's Hospital (Y-NHCH); along with 15 other centers across the country, are participating in this project sponsored by the National Institute of Child Health and Human Development.

In order to decide whether or not you wish to be a part of this research study you should know enough about its risks and benefits to make an informed judgment. This consent form gives you detailed information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risks of the procedures, possible benefits and possible alternative treatments. Once you understand the study, you will be asked if you wish to participate; if so, you will be asked to sign this form.

Description of Procedures

Your baby may be born prematurely and is at risk for a breathing problem called **Respiratory Distress Syndrome (RDS)**. A baby's lungs are made up of tiny lung sacs; each one is suppose to open and close as the baby breathes in and out. Oxygen is supposed to go in and carbon dioxide is supposed to come out. This works well in full term babies and adults; however, in premature babies the lung sacs don't always work this way. Some lung sacs open and close normally; others collapse and stick together when the baby breathes out making it harder for the baby to breathe. Doctors treat this problem by keeping the lungs slightly inflated (or open) between breaths. This is done by maintaining a little air pressure in the lungs after the baby

breathes out (resting pressure), making it easier for the baby to take the next breath. Sometimes a medication called **surfactant** is given to try to help keep the lung sacs expanded. Surfactant is given directly into the lungs via a tube that is inserted into the airway (referred to as intubation).

After your baby is born, if he/she needs help breathing, the doctor or nurse will place a resuscitation mask over the baby's nose and mouth and provide oxygen and manual breaths with a resuscitation bag. The bag is squeezed to force air into the baby's lungs. The bag and mask may be used to give breaths or give just pressure to keep the lungs inflated (open) between breaths. This resting pressure is called continuous positive airway pressure (CPAP) or positive end-expiratory pressure (PEEP). At the present time, there is no recommendation regarding the early use of CPAP/PEEP in the delivery room and then continuing it in the nursery for premature infants. However, some studies have suggested that the use of early CPAP/PEEP may be associated with improved outcomes such as; fewer babies needing to be placed on a breathing machine, less oxygen use in babies at one month of age and longer, and less need for surfactant to be given. This study will begin in the delivery room and will continue into the nursery. It will compare the use of early CPAP/PEEP with early intubation, surfactant treatment, and initiation of mechanical breathing assistance. The purpose of the study is to see if one of these treatment plans reduces the severity of, and perhaps prevents, the development of long-term lung problems in premature infants. Those lung problems are referred to as bronchopulmonary dysplasia (BPD) or chronic lung disease (CLD).

Another part of the study will be looking at the ranges of oxygen saturations that are currently being used with premature infants. Doctors, nurses, and others taking care of your baby use, in routine daily care, a monitor called a **pulse oximeter** that uses a small probe placed on a hand or a foot to non-invasively monitor oxygen provided to help meet the baby's needs. In this part of the study we would like to pinpoint the exact range that should be used to help prevent some of the problems that occur with premature babies such as Retinopathy of Prematurity (ROP). This is when there is abnormal blood vessel growth in the eye. It causes scar tissue to build up around the retina and if it pulls on the retina hard enough it can cause blindness. It is known that the risk of ROP is increased by the prolonged use of supplemental oxygen from observations published in the 1950's, but the benefit of higher versus lower levels of oxygenation in infants, especially for premature infants, is not known. After reviewing how babies in the past were managed, it has been suggested that the use of lower saturation ranges may result in a lower incidence of severe ROP.

If your baby is born before a gestational age of 28 weeks, he/she will randomly (like the flip of a coin) be placed into the Early CPAP/PEEP group **or** the Early Surfactant/Ventilation group. **Both approaches are currently used at Y-NHCH.**

If your baby is randomized to the Early CPAP/PEEP group, he/she will be treated with CPAP/PEEP in the delivery room and will continue to be supported by CPAP/PEEP after admission to the nursery. However, if at any time, your baby's respiratory distress worsens, he/she will be intubated and started on a breathing machine. If this occurs within the first 48 hours of life, he/she will also be given surfactant.

If your baby is randomized to the Early Surfactant/Ventilation Group, he/she will be intubated and started on the breathing machine in the delivery room and will also be given surfactant within the first hour of birth.

For the first 14 days of life, there will be guidelines for the doctors in the nursery to follow. These guidelines help them decide when to place babies on the breathing machines and when to try and take them off the breathing machines. These guidelines also will help decide when to put them on and take them off of CPAP/PEEP. After 14 days of life, your baby’s respiratory care will be managed in accordance with standard NBSCU practice.

The babies in this study will also be placed randomly (again, like the flip of a coin) into a group in which lower oxygen saturation (SpO2) values are targeted or into a group in which higher SpO2 values are targeted. As described above, oxygen saturation is measured on a baby with a monitor called a pulse oximeter. It uses a tiny sensor or probe on the hand or foot of the baby to non-invasively measure how saturated the baby’s blood is with oxygen. Oximetry is not painful and provides SpO2 measurements 24 hours a day. The babies in the lower range group will have a target SpO2 of 85-89%, while the babies in the higher range group will have a target SpO2 of 91-95%. All of these saturations are considered within the normal range for premature infants. If the SpO2 falls below 85% or goes higher than 95% then the pulse oximeter will alarm so that the doctors and nurses know when to turn your baby’s oxygen up or down.

Therefore, if your baby participates in this study, he/she will be assigned to one of 4 groups.

Randomized Intervention	Low SpO2 85% to 89%	High SpO2 91 to 95%
Early CPAP/PEEP Group	Early CPAP + Low SpO2	Early CPAP + High SpO2
Early Surfactant - Ventilation Group	Surfactant + Low SpO2	Surfactant + High SpO2

Finally, after discharge home your baby will be invited to return to Yale’s Newborn Follow-Up Program located at the Yale Child Study Center. The purpose of this program is to perform standardized developmental testing on all infants cared for in the NBSCU with birth weights less than or equal to 1000 grams. Infants who participate in research projects, such as this one, are also invited to be evaluated in this program. Therefore, at 18-22 months corrected age, your baby will receive, as part of this study, a complete exam of his or her muscles, nerves, and mental and motor skills. In addition, before that visit, brief telephone interviews about your baby’s health will be done by our Follow-Up staff.

Risks and Inconveniences

The possible risks of using CPAP/PEEP include stomach fullness and a temporary slowing of the heart rate. Another possible risk is collapsing of one or both lungs. Use of CPAP/PEEP at the level used in this study **does not** increase the risk of a collapsed lung (pneumothorax). As with the use of CPAP/PEEP, a possible risk of being intubated for initiation of mechanical ventilation may include a temporary slowing of the heart rate or possibly the collapse of one or both lungs. Another unlikely risk is the possibility of the airway being punctured during insertion of the breathing tube. **Note** that the risks associated with intubation and initiation of mechanical ventilation **are not increased** by participation in this study.

Pulse oximeters are used routinely in thousands of premature infants in NICU's across the country. There is no known risk to your baby from monitoring with the pulse oximeters. There is a small risk of skin breakdown at the site of the pulse oximeter's probe, but that will be minimized by your baby's nurse routinely changing the probe site.

Benefits

Each of the 4 possible treatment combinations is considered to represent the best approach by some units. However, your baby may not receive any direct benefits from participating in this trial.

If this trial identifies treatment strategies that lower the risk of BPD or ROP, clinical management of extremely preterm infants will be influenced and, hopefully, lead to reductions in the incidence of those problems.

Economic Considerations

All of the therapies and procedures used as part of this study, including early CPAP/PEEP, intubation, mechanical ventilation, surfactant therapy, and pulse oximetry, are commonly used to treat infants in the NBSCU with respiratory problems. Since this study will compare standard therapies, you or your insurer will be responsible for the cost of medical care provided by the staff of the NBSCU to your infant.

A \$50.00 gift plus expenses (for example for parking or childcare) will be given to you as compensation for your time after your infant completes the Follow-Up visit at 18 to 22 months corrected age.

Treatment Alternatives/Alternatives

If you choose not to enroll your infant in this study your infant will be treated with respiratory support in accordance with treatment commonly followed in the NBSCU. Currently early CPAP/PEEP, intubation, mechanical ventilation, and surfactant therapy are common practices in the NBSCU for extremely low birth weight infants with breathing problems. As described above, participation in this study will compare standard treatment strategies.

Confidentiality

The medical information gathered from this study and your infant's medical record might be reviewed by representatives of the National Institute of Child and Human Development (NICHD), and the Yale University School of Medicine Human Investigation Committee (the committee that reviews, approves and monitors research on humans). The collection and submission of medical information from this study to the NICHD will be done with professional standards of confidentiality. The results of this study may eventually be published and information may be exchanged between medical investigators. However, your infant's name will not be used in any publication which may result from this research.

In Case of Injury

Although it is highly unlikely that your infant will be injured as a result of his/her participation in this study, treatment will be provided for an injury that is a result of this study. You or your insurance carrier will be expected to pay for the costs of this treatment. No additional financial compensation for injury is available. You do not give up any of your legal rights by signing this form.

Volunteer Participation and Withdrawal

Your infant's participation in this study is purely voluntary. You are free not to give your permission for participation, and refusal to do so will in no way affect the care your baby receives in this unit. Whether or not your infant participates, he/she will be cared for according to standards of newborn care. You are free to withdraw your infant from this study at any time and withdrawal from this study will in no way hurt your relationship with the physicians in the NBSCU or with Yale-New Haven Children's Hospital.

Questions

We have used some technical terms in this form. Please feel free to ask about anything you don't understand and to consider this research and the consent form carefully for as long as you feel is necessary before you make a decision.

Authorization

I have read (or someone has read to me) this form and have decided to participate in the project described above. Its general purposes, the particulars of involvement and possible hazards and inconveniences have been explained to my satisfaction. My signature also indicates that I have received a copy of this consent form.

Name of Subject: _____

Signature: _____

Relationship: _____

Date: _____

Signature of Principal Investigator

Date

Or

Signature of Person Obtaining Consent

Date

If you have further questions about this project or if you have a research-related problem, you may contact the Principal Investigator [Richard A. Ehrenkranz, MD at (203)-688-2320]. If you have any questions concerning your rights as a research subject, you may contact the Human Investigation Committee at (203) 785-4688.

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HAS BEEN COMPLETED IN THE HIC OFFICE**

<p>THIS FORM IS VALID ONLY UNTIL:</p> <p>_____</p> <p>HIC PROTOCOL #: 0410027163</p> <p>INITIALED:</p> <p>_____</p>
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