

**Best Pharmaceuticals for Children Act (BPCA)  
Gastroenterology Disease Therapeutics Working Group Conference Call  
and Webcast**

**May 7, 2010**

**2:00 p.m.–2:45 p.m. ET**

**Participants**

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Yeruk Mulugeta, Pharm.D.  
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Robert H. Squires, Jr., M.D.  
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Perdita Taylor-Zapata, M.D.

**Purpose**

The purpose of this conference call and webcast was to:

- Give an introduction to BPCA
- Review the role of therapeutic area working groups
- Identify questions for experts in this area
- Provide an open forum for discussion.

**Presentation**

Dr. Taylor-Zapata reviewed the background of BPCA legislation and the work being carried out in the BPCA program. The *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) is the lead agency responsible for establishing and conducting pediatric drug development activities, which are carried out by its Obstetric and Pediatric Pharmacology Branch. The drug development program involves a prioritization process to identify gaps in pediatric therapeutics that need further study and clinical trials of primarily off-patent drugs that have been prioritized. As of November 2009, 106 therapeutics have been discussed with experts and 76 drug–indication pairs have been identified and listed as priority. As of March 2009, 16 therapeutic categories, 35 diseases/conditions, and 48 therapeutics—drugs, biologics, or delivery systems—have been listed as priority.

Each year, the NICHD identifies three new areas for focus. For 2010, those areas are neurology, endocrinology, and gastroenterology. Therapeutic area working groups for these three areas have been formed. The groups will meet two or three times a year. Minutes of meetings will be posted on the BPCA Web site and distributed to working group members. The NIH asks the working groups for recommendations of drugs (drug classes) or other areas of research that impact

therapeutics and need further study in pediatrics. The Gastroenterology Disease Therapeutic Working Group's recommendations will be presented at the annual BPCA prioritization meeting in November 2010 and could lead to publications, workshops, or studies. Working group members will be invited to participate in the annual meeting.

To date, there have been no BPCA-related studies in gastroenterology. In 2003, metoclopramide for the treatment of gastroesophageal reflux was listed as a priority drug in need of further study because of the limited pharmacoepidemiologic research on this drug. Some data were gathered from searches of commercial and Medicaid databases to determine frequency of condition and frequency of drugs used in this condition and from ICD-9 codes. However, when the American Gastroenterologic Association Institute issued a statement (*Gastroenterology* 2008;135:1388–1391) that metoclopramide should be avoided, the drug was dropped from consideration for study. Gastroesophageal reflux disease (GERD) remains a condition that needs to be studied.

The BPCA mandate is to identify needs in pediatric therapeutics, including gastroenterology. The NICHD is fully aware that other institutes such as the National Institute for Diabetes and Digestive and Kidney Diseases have the lead and have funded studies in gastrointestinal research. The NICHD became interested in the needs in this area from the 2009 BPCA outreach process when treatment of inflammatory bowel disease and irritable bowel disease were recommended as priority areas.

The following questions were posed to the working group:

- Are there therapeutic gaps for the treatment of irritable bowel disease?
- Are there therapeutic gaps for the treatment of inflammatory bowel disease?
- Are there therapeutic gaps for the treatment of constipation in children?
- Are there other therapeutic gaps in the area of pediatric gastroenterology that group members would like to recommend for consideration under the BPCA program?

Gaps can include clinical needs (for example, lack of pediatric dosing, safety, and efficacy) and basic research needs. The working group can address any ethical and feasibility concerns before making final recommendations.

## Open Forum

Dr. Taylor-Zapata explained that studies are not limited to investigations of a single drug. For example, a study could compare two drugs. Studies can include dosing, safety, efficacy, pharmacokinetics (PK), and pharmacodynamics (PD). Although off-patent drugs are the primary focus of the BPCA program, the working group can recommend studies of both off-patent and on-patent drugs.

Dr. Taylor-Zapata noted that the NICHD is currently soliciting proposals to establish an indefinite-delivery, indefinite-quantity task order contract to support clinical activities for a new Pediatric Trials Network (PTN). The solicitation is searchable at [www.FedBizOpps.gov](http://www.FedBizOpps.gov) by solicitation number NIH-NICHD-CRMC-2010-02. The PTN will be able to conduct studies recommended from the BPCA priority list of needs in pediatric therapeutics.

Dr. Chen recommended the following drugs and indications for possible pediatric studies:

- Chronic constipation and the use of Miralax
- Omegaven and total parenteral nutrition-induced liver disease
- Promotility drugs
- GERD, particularly its pathophysiology in infants
- Inflammatory bowel disease and immunomodulators
- Safety and efficacy of azathioprine for the treatment of inflammatory bowel disease
- Irritable bowel disease.

Other recommendations included:

- Management of intestinal failure–related liver disease
- Dosing of prokinetic and acid-suppressing agents, especially in infants
- Chloride channel–blocking agents
- Tacrolimus
- Promotility agents
  - Cisapride
  - Erythromycin
- Baclofen for GERD (currently being studied in adults)
- Methotrexate and biologics (for example, infliximab and coumarin) to treat inflammatory bowel disease
- Safety and efficacy of megestrol in various chronic conditions in pediatric patients
- Cyclic vomiting syndrome and cyproheptadine, particularly PK/PD studies
- Ursodeoxycholic acid and cholestatic liver disease, particularly efficacy studies.

A call participant asked about ongoing or recently completed clinical trials of intravenous (IV) lipids to treat children with intestinal failure or short bowel syndrome to determine the gaps in clinical research. A list of these trials would be informative to the working group. Dr. Taylor-Zapata agreed to investigate current pediatric studies of IV nutrition support, the use of Omegaven, and the use of lipids for intestinal failure.

### **Next Steps:**

- Dr. Taylor-Zapata will investigate current pediatric studies of IV nutrition support, the use of Omegaven, and the use of lipids for intestinal failure.
- Dr. Taylor-Zapata will follow up with working group members by e-mail regarding key diagnoses and drugs for further study.
- A second working group call will be scheduled in about 6–8 weeks.
- Working group members will be invited to the annual priority meeting in November 2010.