Best Pharmaceuticals for Children Act (BPCA)
Gastroenterology Disease Therapeutics Working Group Conference Call and Webcast
June 18, 2010
2:00 p.m.–2:30 p.m. ET

Participants

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Purpose

The purpose of this conference call and webcast was to review the May 7 conference call/webcast, provide updates on activities since that call, and determine next steps.

Presentation

Dr. Taylor-Zapata briefly discussed the following:

- Information about BPCA activities, the therapeutics and therapeutic needs prioritization process, the three 2010 working groups, and the BPCA annual scientific meeting. The working groups’ recommendations will be presented at the annual meeting on November 9 and 10, 2010, in Rockville, MD.
- The recommendations made by the working group during its May conference call.
- Follow-up activities conducted since the May call, including a database search.

Review of the May Conference Call

The working group identified the following therapeutic areas and drugs requiring further study:

<table>
<thead>
<tr>
<th>Therapeutic Areas</th>
<th>Drugs</th>
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<tbody>
<tr>
<td>Nutrition-induced liver disease and/or short-gut syndrome</td>
<td>Omegaven</td>
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<td>Gastroesophageal reflux (GERD)</td>
<td>Promotility drugs</td>
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<td>Chronic constipation</td>
<td>– Cisapride, erythromycin, baclofen</td>
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<td>Inflammatory bowel disease</td>
<td>Acid-suppressing agents</td>
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<td>Irritable bowel disease</td>
<td>Miralax</td>
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<td>Cyclic vomiting</td>
<td>Immunomodulators and biologics (infliximab, methotrexate, tacrolimus, azathioprine, coumarin, chloride channel-blocking agents)</td>
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<td>Cholestatic liver disease</td>
<td>Cyproheptadine</td>
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<tr>
<td>Other (chronic conditions)</td>
<td>Ursodeoxycholic acid</td>
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<td></td>
<td>Megestrol</td>
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</tbody>
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Updates

Discussion with the Neonatal Research Network (NRN). As a follow-up to the May conference call, Dr. Taylor-Zapata, conferred with the NRN (NICHD) about research with Omegaven and GERD:

- Omegaven: The network is considering a study with this drug.
- GERD: The network agrees that there needs to be more research on this area, but the issue is that making an “accurate” diagnosis is problematic.

Current Omegaven Studies. A search of ClinicalTrials.gov revealed the following current studies of Omegaven:

- NCT00969332—Phase 1, safety and efficacy, 15 patients, University of California–Los Angeles
- NCT00816348—Phase 2, compassionate use, 5 patients, North Shore Long Island Jewish
- *NCT01089426—Open-label, safety and efficacy, 40 patients, Children Hospital of Los Angeles
- NCT00862446—Phase 4, open-label, 20 patients, Vanderbilt University
- *NCT00919104—Phase 2–3, efficacy, 200 patients, Children Hospital of Boston
  – NCT00512629
- *NCT00738101—compassionate use, 15 patients, Baylor College of Medicine.

*These trials have included extensive literature reviews in the postings on ClinicalTrials.gov.

Top Gastrointestinal (GI) Drugs Used in Children. Based on a previous request for more information on the top GI drugs used in children, an NICHD contractor (The Lewin Group) searched the Ingenix United Health Group Analytics pharmacy claims database of about 20 million people, 4 million of which are children, throughout the United States. The top drug classes (based on National Drug Code classification) included:

- Histamine H2 antagonists
- Proton pump inhibitors
- Bowel evacuants
- Belladonna alkaloids for GI spasm
- GI antispasmodics
- GI absorbents
- Agents for inflammatory bowel disease
- Antidiarrheal agents
- GI anticholinergic antispasmodic combinations.

Top 20 Drugs. The top 20 drugs identified in the Ingenix database search were as follows:

- Nine were GERD-related (proton pump inhibitors and H2 antagonists)—ranitidine, lansoprazole, omeprazole, nizatidine, pantoprazole, cimetidine, esomeprazole, rabeprazole, famotidine
- One for constipation—polyethylene glycol-electrolyte solution
- Four antispasmodics—hyoscyamine sulfate, dicyclomine, belladonna extract/phenobarbital, glycopyrrolate
- GI absorbents, antidiarrheal, and other—sucralfate, diphenoxylate/atropine, 5-aminosalicylic acid/phenobarbital
- One miscellaneous—ursodiol
- Two digestive enzymes—pancreatin, pancrelipase.

**Open Forum**

As the working group moves forward, contractors can be asked to conduct reviews of specific medications and conduct literature reviews of topics of interest. The working group can make suggestions on study designs and formulations research.

Dr. Berquist noted that Omegaven has an investigational new drug number in an intestinal transplant center. The use of Omegaven has had an impact on intestinal failure cholestasis. One aspect in a literature search is identifying study designs. The information could be compiled in a spreadsheet.

**Next Steps:**

- Contractors will conduct reviews of specific medications and conduct literature reviews of topics of interest.
- Contractors will conduct reviews to match drugs and indications.
- Dr. Taylor-Zapata will circulate the results of the literature reviews to the working group and ask for feedback in order to develop a final list.