

**MINUTES OF THE PEDIATRIC ADVISORY COMMITTEE**

The public meeting was convened 8:00 a.m. to 4:25 p.m. on September 14, 2016

<p><b><u>Members Present (Voting)</u></b>                  Mary Cataletto, MD                  Avital Cnaan, PhD                  Melody Cunningham, MD                  Robert Dracker, MD, MHA, MBA, CPI                  Peter Havens, MD, MS                  Sarah Hoehn, MD, MBe                  Mark Hudak, MD (<i>Chair</i>)                  Bridgette Jones, MD                  Christy Turer, MD, MHS                  Kelly Wade, MD, PhD, MSCE                  Michael G. White, MD, PhD (presiding Chair for Sustiva)</p>	<p><b><u>Temporary Voting Members (Voting Consultants)</u></b>                  Premchand Anne, MD, MPH                  Jeffrey Campbell, MD, MS                  Gwentyth Fischer, MD                  Marc Moon, MD                  Wael Sayej, MD                  Tor Shwayder, MD                  Kenneth E. Towbin, MD                  (by phone for the Sustiva review only)</p>
<p><b><u>Non-Voting Members</u></b>                  Bridgette Jones, MD</p>	<p><b><u>Designated Federal Official (DFO)</u></b>                  Marieann Brill, MBA, RAC, MT (ASCP)</p>

**U.S. Food and Drug Administration (FDA) Participants**

<p><b>Office of Pediatric Therapeutics</b>                  Robert “Skip” Nelson, MD, PhD                  Judith Cope, MD, MPH                  LCDR Kenneth Quinto, MD, MPH</p> <p><b>CDER DPMH</b>                  John Alexander, MD, MPH                  Miriam Dinatale, DO                  Ethan Hausman, MD                  Mona Khurana, MD                  LCDR Erica Radden, MD                  Amy Taylor, MD, MHA                  Carolyn Yancey, MD</p> <p><b>CDER OSE:</b>                  Allen Brinker, MD                  CAPT Corrinne Kulick, PharmD                  TL Travis Ready, PharmD                  Paula Gish, RPh                  Patty Greene, PharmD                  Lisa Harinstein, PharmD, BCPS                  LCDR Dipti Kalra, RPh                  Joann Lee, PharmD                  Robert Levin, MD                  Karen Long, PharmD</p>	<p>Kusum Mistry, PharmD                  Saharat Patanavanich, PharmD, BCACP                  Anhtu Nguyen, RPh                  Tracy Pham, PharmD                  Peter Waldron, MD                  Ron Wassel, PharmD</p> <p><b>CDER Divison</b>                  Alla Bazini, MD                  Yodit Belew, MD                  Leah Crisafi, MD                  Marjorie Dannis, MD                  Patricia Dinndorf, MD                  Norman Hershkowitz, MD, PhD                  Leonard Kapcala, MD                  Anil Rajpal, MD                  Peter Starke, MD                  Ergun Velidedeoglu, MD                  Prabha Viswanathan, MD</p>	<p><b>CBER</b>                  Bethany Baer, MD                  CAPT Craig Zinderman, MD, MPH</p> <p><b>CDRH</b>                  Vasum Peiris, MD, MPH, FAAP, FACC, FASE                  George Aggrey, MD, MPH                  Colin Anderson-Smits, MPH                  Ryan Foringer, BS                  Kellie Kelm, PhD                  Steven Kurtzman, MD                  John Laschinger, MD                  Courtney Lias, PhD                  Chin-Hsin K. (Jenny) Liu, RN, BSN, MSN                  Shirin Marfatia, PhD                  Lauren Min, MPH                  Catherine Ricketts, RN, BSN                  Priya Venkataraman-Rao, MD                  Jacqueline Wieneke, MD                  Rebecca Ward, MPH</p>
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### **Welcome and Introductory Remarks**

- Marieann Brill, Designated Federal Official, Pediatric Advisory Committee, Office of Pediatric Therapeutics, Office of Special Medical Programs, FDA
- Mark Hudak, MD, Chair of the Pediatric Advisory

### **Presentation: Risk-based Assessment Review Procedure - LCDR Kenneth Quinto, MD, MPH**

This presentation provided a brief review of the FDA risk-based assessment of the pediatric post-marketing safety and utilization reviews. It also provided an overview on how the general public can access the web-posted reviews and submit comments to the docket.

### **Open Public Hearing**

An opening statement was read by the Marieann Brill, DFO.

Craig Butler, the National Executive Director of the Cooley's Anemia Foundation read a statement.

### **Presentations**

#### **Center for Biologics Evaluation and Research (CBER): Abbreviated Review of Adverse Event Presentations**

**MENVEO (Meningococcal [Groups A, C, Y, and W-135] Oligosaccharide Diphtheria CRM197 Conjugate Vaccine)** Abbreviated Presentation: Judith Cope MD, MPH

- The Committee concurred (Yes - 15; No - 0) with the FDA proposal to continue post-marketing safety surveillance.

#### **IXIARO (Japanese Encephalitis Vaccine, Inactivated, Adsorbed)**

Abbreviated Presentation: Judith Cope MD, MPH

- The Committee concurred (Yes - 15; No - 0) with the FDA proposal to continue post-marketing safety surveillance.

#### **Center for Drug Evaluation and Research (CDER): Standard Review of Adverse Event Presentations**

**Sustiva (efavirenz)** – Carolyn Yancey, MD

The Safety Review concluded that FDA is considering adding the term catatonia to labeling, and recommends continued post-marketing safety surveillance.

- The Committee concurred (Yes - 14; No - 0; Recused - 1) with the FDA proposal to considering adding the term catatonia to labeling.
- The Committee voted against (Yes - 5; No - 9; Abstain - 1; Recused - 1) the FDA to return with drug levels and genetic variations in the labeling.
- The Committee (Yes - 14; No - 0; Recused - 1) with the FDA proposal to continue post-marketing safety surveillance.

The Committee discussed the role of therapeutic drug levels, the risks to rapid metabolizers, how genomic testing would be useful, and the importance of adding this information to the label. The Committee welcomed a future discussion and review of these general issues.

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### **Topamax (topiramate) - Mona Khurana, MD**

The Safety Review concluded that no new pediatric safety signals were identified. FDA plans to monitor for anorexia nervosa, bulimia nervosa, and acute hepatic failure in all patient populations. FDA will review the PREA PMR once it is submitted and recommends continued post-marketing safety surveillance.

- The Committee concurred (Yes - 15; No - 0) with the FDA proposal to continue post-marketing safety surveillance.

### **Asacol/Asacol HD and Delzicol (mesalamine) - LCDR Erica Radden, MD**

The safety review identified benign intracranial hypertension as a safety signal, but imaging was insufficient to distinguish the events from cerebral venous thrombosis. The PAC disagreed. The safety review identified nephrogenic diabetes insipidus as a drug related safety signal. FDA recommends (1) no change to product labeling for any mesalamine product regarding benign intracranial hypertension; (2) adding nephrogenic diabetes insipidus to the list of adverse reactions that have been reported in the post-marketing section of product labeling for mesalamine products; and (3) continued post-marketing safety surveillance.

- The Committee voted against (Yes - 0; No - 15) the FDA recommendation to not change the label regarding benign intracranial hypertension. They requested that FDA further review this possible association.
- The committee concurred (Yes - 15; No - 0) with the FDA recommendation to add nephrogenic diabetes insipidus to the list of adverse reactions that have been reported in the post-marketing section of product labeling for mesalamine products.

### **Kepivance (palifermin) - LCDR Erica Radden, MD**

The safety review concluded that the cases were related to patient's underlying medical conditions, confounded by concomitant medications, or had limited information to assess causality. No new safety signals were identified, however, the review highlights the risks of Kepivance off-label use for pulmonary indications and such practice is discouraged unless further study shows a positive risk benefit profile. The FDA recommends continued post-marketing safety surveillance.

- The Committee concurred (Yes - 15; No - 0) with the FDA proposal to continue post-marketing safety surveillance.

### **Presentation: Update on Exjade (deferasirox) - Peter Waldron, MD**

Exjade was presented to the PAC in September 2015 and the PAC requested that FDA review any data regarding safety of continued medication with Exjade (deferasirox) to children who have fever and report back to the PAC. This presentation provided updated information on FDA's ongoing evaluation of acute illness events and adverse effects of kidney and liver injury. A final report is expected in March 2017 which will include a discussion of possible label changes.

### **Presentation: Pregnancy and Lactation Labeling Rule (PLLR) - Miriam Dinatale, DO**

This presentation provided an introduction, history, and overview of the PLLR which went into effect on June 30, 2015.

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### **Bloxiverz (neostigmine methylsulfate) - Amy Taylor, MD, MHS**

The review noted five reports of pulmonary edema after administration of neostigmine. All cases could be considered confounded by potential airway management difficulties that can occur in patients with advanced airway support. The FDA recommends continued post-marketing safety surveillance.

- The Committee concurred (Yes - 15; No - 0) with the FDA proposal to continue ongoing monitoring.

### **Doryx (doxycycline hyclate) – Amy Taylor, MD, MHS**

The review concluded that no new safety signals were identified. The FDA recommends continued post-marketing safety surveillance.

- The Committee concurred (Yes - 15; No - 0) with the FDA proposal to continue post-marketing safety surveillance.

### **Xolair (omalizumab) – Amy Taylor, MD, MHS**

The review concluded that no new safety signals were identified. The FDA recommends continued post-marketing safety surveillance.

- The Committee concurred (Yes - 15; No - 0) with the FDA proposal to continue post-marketing safety surveillance.

### **Karbinal ER (cabinoxamine maleate) – Ethan Hausman, MD**

The review concluded that no new safety signals were identified. The FDA recommends continued post-marketing safety surveillance.

- The Committee concurred (Yes - 15; No - 0; Recused - 1) with the FDA proposal to continue post-marketing safety surveillance.

### **Center for Devices and Radiological Health (CDRH): Annual Post-Market HDE Reviews:**

#### **Berlin Heart EXCOR® Pediatric Ventricular Assist Device (VAD) – Rebecca Ward, MPH**

The annual review of the ADN, published literature, and MDRs did not identify any new or unexpected risks for the pediatric population, and the benefit/risk profile of the Berlin Heart EXCOR® Pediatric VAD for its Indication for Use continues to support the HDE for which the exemption was granted.

- The Committee concurred (Yes - 14; No - 0; Recused - 1) with the FDA proposal to continue surveillance and report the annual distribution number, literature review, MDR review to the PAC in 2017.

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### **Contegra Pulmonary Valved Conduit - George Aggrey, MD, MPH**

The annual review of the ADN, published literature, and MDRs did not identify any new or unexpected risks for the pediatric population, and the benefit/risk profile of the Contegra Pulmonary Valved Conduit for its Indication for Use continues to support the HDE for which the exemption was granted.

- The Committee concurred (Yes - 14; No - 0; Absent - 1) with the FDA proposal to continue surveillance and report the annual distribution number, literature review, MDR review to the PAC in 2017.

### **Pleximmune - Kellie Kelm, PhD**

The annual review of the ADN, published literature, and MDRs did not identify any new or unexpected risks for the pediatric population, and the benefit/risk profile of the Pleximmune for its Indication for Use continues to support the HDE for which the exemption was granted.

- The Committee concurred (Yes - 14; No - 0; Absent - 1) with the FDA proposal to continue surveillance and report the annual distribution number, literature review, MDR review to the PAC in 2017.

### **Enterra™ Therapy System - Catherine Ricketts, RN, BSN**

The annual review of the ADN, published literature, and MDRs did not identify any new or unexpected risks for the pediatric population, and the benefit/risk profile of the Enterra™ Therapy System for its Indication for Use continues to support the HDE for which the exemption was granted.

- The Committee concurred (Yes - 13; No - 0; Recused - 1; Absent - 1) with the FDA proposal to continue surveillance and report the annual distribution number, literature review, MDR review to the PAC in 2017.

### **Elana Surgical Kit (HUD) -Colin Anderson-Smits, MPH**

The review concluded that there was no reported use, no sales, and literature review. The post approval study will continue with reported sales and use.

- The Committee concurred (Yes - 13; No - 0; Absent - 2) with the FDA proposal to continue surveillance and report the annual distribution number, literature review, MDR review to the PAC in 2017.

### **Adjournment**

Mark Hudak, MD, Chair