Food and Drug Administration
Center for Drug Evaluation and Research
Final Summary Minutes of the Pediatric Oncology Subcommittee of the Oncologic Drugs Advisory Committee Meeting
May 22, 2024

Location: All meeting participants were heard, viewed, captioned, and recorded for this advisory committee meeting via an online teleconferencing and/or video conferencing platform.

Topic: Amendments made by section 504 of the 2017 FDA Reauthorization Act to section 505B of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 355c) required, for original applications submitted on or after August 18, 2020, pediatric investigations of certain targeted cancer drugs with new active ingredients, based on molecular mechanism of action rather than clinical indication. The Subcommittee discussed perspectives relating to implementation of this legislation and its impact on pediatric cancer drug development to date.

These summary minutes for the May 22, 2024 meeting of the Pediatric Oncology Subcommittee of the Oncologic Drugs Advisory Committee of the Food and Drug Administration were approved on ___7/1/2024____.

I certify that I attended the May 22, 2024 meeting of the Pediatric Oncology Subcommittee of the Oncologic Drugs Advisory Committee (pedsODAC) of the Food and Drug Administration and that these minutes accurately reflect what transpired.

/s/	**/s/**
Jessica Seo, PharmD, MPH	Alberto S. Pappo, MD
Acting Designated Federal Officer, pedsODAC	Chairperson, pedsODAC

Final Summary Minutes of the Pediatric Oncology Subcommittee of the Oncologic Drugs Advisory Committee Meeting
May 22, 2024

The Pediatric Oncology Subcommittee of the Oncologic Drugs Advisory Committee (pedsODAC) of the Food and Drug Administration, Center for Drug Evaluation and Research, met on May 22, 2024. The meeting presentations were heard, viewed, captioned, and recorded through an online videoconferencing platform. Prior to the meeting, the members and temporary voting members were provided the briefing materials from the FDA. The meeting was called to order by Alberto S. Pappo, MD (pedsODAC Chairperson). The conflict of interest statement was read into the record by Jessica Seo, PharmD, MPH (Acting Designated Federal Officer). There were approximately 250 people online. There were no Open Public Hearing (OPH) speaker presentations.

A verbatim transcript will be available, in most instances, at approximately ten to twelve weeks following the meeting date.

Agenda:

Amendments made by section 504 of the 2017 FDA Reauthorization Act to section 505B of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 355c) required, for original applications submitted on or after August 18, 2020, pediatric investigations of certain targeted cancer drugs with new active ingredients, based on molecular mechanism of action rather than clinical indication. The Subcommittee discussed perspectives relating to implementation of this legislation and its impact on pediatric cancer drug development to date.

Attendance:

Oncologic Drugs Advisory Committee Members Present (Voting): Alberto S. Pappo, MD (*pedsODAC Chairperson*)

Oncologic Drugs Advisory Committee Members Not Present (Voting):
Ranjana H. Advani, MD; Toni K. Choueiri, MD; Mark R. Conaway, PhD; William J. Gradishar, MD; Pamela L. Kunz, MD; Christopher H. Lieu, MD; Ravi A. Madan, MD (*ODAC Chairperson)*; David E. Mitchell (*Consumer Representative)*; Jorge J. Nieva, MD; Ashley Rosko, MD; Daniel Spratt, MD; Neil Vasan, MD, PhD

Industry Representative to the Committee (Non-Voting): Tara L. Frenkl, MD, MPH (*Industry Representative*)

Temporary Members (Voting): Ami V. Desai, MD, MSCE; Lia Gore, MD; Richard Gorlick MD; Theodore W. Laetsch, MD; Donna Ludwinski, BSChE (*Patient Representative*); Rajen Mody, MD, MS; Donald (Will) Parsons, MD, PhD; Elizabeth A. Raetz, MD; Nita Seibel, MD; Nirali N. Shah, MD, MHSc; Malcolm A. Smith, MD, PhD; Yoram Unguru, MD, MS, MA, HEC-C

FDA Participants (Non-Voting): Richard Pazdur, MD**;** Martha Donoghue, MD; Nicole Drezner, MD; Marjilla Seddiq, MD; Ramjay Vatsan, PhD

Acting Designated Federal Officer (Non-Voting): Jessica Seo, PharmD, MPH

Open Public Hearing Speakers Present: None

The agenda was as follows:

Call to Order	**Alberto S. Pappo, MD** Chairperson, pedsODAC
Introduction of Subcommittee and Conflict of Interest Statement	**Jessica Seo, PharmD, MPH** Acting Designated Federal Officer, pedsODAC
Introductory Remarks	**Nicole Drezner, MD** Deputy Director Division of Oncology 2 (DO2) Office of Oncologic Diseases (OOD) Office of New Drugs (OND), CDER, FDA
FDA PRESENTATIONS	
FDA Reauthorization Act (FDARA) Amendments to the Pediatric Research Equity Act: FDA Perspectives and Updates on Implementation	**Marjilla Seddiq, MD** Medical Officer DO2, OOD, OND, CDER, FDA **Ramjay Vatsan, PhD** Associate Director for Policy Office of Gene Therapy (OGT) Office of Therapeutic Products (OTP) Center for Biologics Evaluation and Research (CBER) FDA
GUEST SPEAKER PRESENTATIONS	
European Perspective on Complementary US and EU Regulations in Support of Global Development	**Dominik Karres, MD** Senior Scientific Officer Paediatric Medicines Office Scientific Evidence Generation Department Human Medicines Division European Medicines Agency (EMA) **Maria Sheean, PhD** Scientific Officer Paediatric Medicines Office Scientific Evidence Generation Department Human Medicines Division, EMA

Clarifying Questions	
GUEST SPEAKER PRESENTATIONS (cont.)	
Impact of RACE Act: COG Perspective	**Brenda J. Weigel, MSc, MD** Professor and Division Director Pediatric Hematology/Oncology University of Minnesota Chair, Developmental Therapeutics COG
Research to Accelerate Cures and Equity (RACE) for Children ACT - Implementation and Impact Industry Perspective	**Ruchi Gupta, MS** Program Director, Regulatory Affairs Genentech, Inc.
European academic perspectives on international trial collaboration in paediatric oncology	**Pamela Kearns, MBChB, BSc (Hons), PhD, FRCPCH** Chair of Clinical Paediatric Oncology Director, Institute of Cancer and Genomic Sciences University of Birmingham President of ITCC
Clarifying questions	
LUNCH	
OPEN PUBLIC HEARING	
Questions to the Subcommittee and Subcommittee Discussion	
Closing Remarks	**Martha Donoghue, MD** Associate Director for Pediatric Oncology and Rare Cancers Oncology Center of Excellence (OCE) Office of the Commissioner (OC) Associate Director, Pediatric Oncology (Acting) OOD, OND, CDER, FDA
ADJOURNMENT	

Questions to the Committee:

1. **DISCUSSION:** Please discuss your perspectives on how the 2017 FDA Reauthorization Act (FDARA) is impacting pediatric oncology and development of new molecularly targeted therapies for pediatric patients with cancer.

Describe positive effects or challenges associated with the legislation, and thoughts regarding how to improve its implementation.

***Committee Discussion**: In discussing the impact of FDARA on pediatric oncology and development of new molecularly targeted therapies for pediatric patients with cancer, Subcommittee members expressed agreement that this legislation has had positive effects, including raised awareness and increased attention to the development of new treatments for pediatric cancers. One Subcommittee member noted a perceived increase in the number of clinical trials available for pediatric patients. Members also opined that the legislation is encouraging increased collaboration among stakeholders (academia, industry, and regulators) and supported tracking of the progress of initial pediatric study plans (iPSPs).*

Members of the Subcommittee also noted challenges and recommended improvements to FDARA implementation. Some comments include the following:

- *earlier collaboration between stakeholders before iPSPs are finalized is needed to effectively prioritize which new targeted products should be investigated in pediatric patients with cancer*
- *the term "molecularly targeted therapies" can be confusing and may need clearer definitions to align with current practices and emerging therapies*
- *assessing the full impact of the legislation may require more time due to the lengthy process of starting and running clinical trials, and establishing metrics to measure the success of FDARA may be helpful*
- *there is a need for greater transparency in the development and progress of pediatric cancer trials, suggesting public access to the content of iPSPs could benefit the research community and improve coordination by preventing duplication of efforts and ensuring efficient use of resources, which is critical given the small patient populations in pediatric oncology*

Please see the transcript for details of the Subcommittee's discussion

2. **DISCUSSION:** Please discuss factors that should be considered when determining whether nonclinical proof-of-concept studies should be conducted prior to initiating a molecularly targeted pediatric cancer investigation in pediatric patients with cancer.

   Also discuss the degree of preclinical antitumor activity that would be considered sufficient to warrant clinical development.

   ***Committee Discussion**: The Subcommittee members discussed various factors that should be considered when determining whether nonclinical proof-of-concept studies should be conducted. It was suggested that similarity of the disease and proposed mechanism of action in both adult and pediatric populations should be considered, and that a molecularly targeted therapy that has shown success in adults with the same cancer type may not need additional non-clinical studies for pediatric development. Subcommittee members generally agreed that preclinical models can help predict clinical success and provide useful*

information about potential efficacy and toxicity. Several members also agreed that when information from pre-clinical proof-of concept studies are considered necessary to support pediatric development, demonstration of tumor regression in appropriate pediatric models would generally be needed to justify clinical development in pediatric patients. Please see the transcript for details of the Subcommittee's discussion

3. **DISCUSSION:** Please discuss the role of pediatric clinical trial networks and international collaboration in efficient development of new medical products for pediatric patients with cancer including identification of relevant molecular targets, specific efforts that have been most valuable, and ideas for improved collaboration.

   Additionally, please discuss barriers to the conduct of international trials in pediatric oncology and potential ways to address these barriers.

   Committee Discussion: *The Subcommittee members agreed that pediatric clinical trial networks and international collaboration are crucial for the efficient development of new medical products for pediatric patients with cancer, especially given the molecularly defined subgroups that result in extremely small populations of patients available to enroll in clinical trials. Barriers discussed included differences between countries on rules governing data sharing and patient privacy that complicate the conduct of international trials, insufficient resources to support timely international academic research efforts, and variability in intrinsic and extrinsic patient factors across countries that can potentially affect trial outcomes and interpretation of data. Suggested ways to address these barriers included continued and earlier harmonization between regulatory agencies (e.g., FDA and European Medicines Agency) and building the necessary infrastructure within organizations such as the Innovative Therapies for Children with Cancer (ITCC) consortium and Children's Oncology Group (COG). Members also suggested that not all trials need to be international and recommended focusing international efforts on subtypes of pediatric cancers associated with poor outcomes or that have rare genomic profiles in an effort to optimize patient accrual in limited patient populations. Please see the transcript for details of the Subcommittee's discussion.*

The meeting was adjourned at approximately 3:31pm ET.