Summary Minutes of the
Pediatric Oncology Subcommittee of the
Oncologic Drugs Advisory Committee
June 27, 2007
Location: Center for Drug Evaluation and Research Advisory Committee
5630 Fishers Lane, Rockville Md. Rm: 1066

All external requests for the meeting transcripts should be submitted to the CDER, Freedom of Information office.

These summary minutes for the June 27, 2007 of the Pediatric Oncology Subcommittee of the Oncologic Drugs Advisory Committee of the Food and Drug Administration were approved on July 10, 2007

I certify that I attended the June 27, 2007, the Pediatric Oncology Subcommittee of the Oncologic Drugs Advisory Committee of the Food and Drug Administration meeting and that these minutes accurately reflect what transpired.

Mimi T. Phan, Pharm.D., R.Ph.
Acting Designated Federal Officer

Michael P. Link, M.D.
Acting Chair

Meeting of the Pediatric Oncology Subcommittee of the Oncologic Drugs Advisory Committee
June 27, 2007

Prior to the meeting, the members and the invited consultants had been provided the background material from the FDA. The meeting was called to order by Michael P. Link, M.D (Acting Committee Chair); the conflict of interest statement was read into the record by Mimi T. Phan, Pharm.D., R.Ph. (Acting Designated Federal Official). There were approximately sixty (60) persons in attendance. There were two (2) speakers for the Open Public Hearing session.

Issue: The subcommittee (1) discussed review of oncology products granted pediatric exclusivity under the Best Pharmaceuticals for Children Act (BPCA); and (2) discussed 13-cis retinoic acid: summary of clinical experience, including access through iPledge, and additional clinical studies for the treatment of patients with neuroblastoma to be conducted under the BPCA.

Attendance:

Oncologic Drugs Advisory Committee Members Present (Voting):
Pamela Haylock, M.A., R.N.; Michael Link, M.D. (Acting Chair); Joanne Mortimer, M.D., F.A.C.P., Ronald Richardson, M.D.

Special Government Employee Consultants (Voting):
Peter Adamson, M.D. (AM session), Susan Blaney, M.D. (AM session), Jerry Finkelstein, M.D., Neil Hutchison, M.B.A, C. Patrick Reynolds, M.D., Ph.D., Cindy Schwartz, M.D., Malcolm Smith, M.D., Ph.D., Loice Swisher, M.D., Naomi Winick, M.D.

Industry Representative Members Present (Non-Voting):
Samuel Maldonado, M.D.

Guest Speaker (Non-Voting):
Katherine K. Matthay, M.D.

FDA Participants (Non-Voting):
Ramzi Dagher, M.D, Lisa L. Mathis, M.D. (AM session), Richard Pazdur, M.D. (PM session), Victor Santana, M.D., Karen Weiss, M.D., Anne Zajicek, M.D., Pharm.D. (PM session)

Acting Designated Federal Official:
Mimi T. Phan, Pharm.D., R.Ph.

Open Public Hearing Speakers:
Susan Weiner, M.D.
Children's Cause for Cancer Advocacy, Brooklyn, NY.

Mark Del Monte, J.D.
American Academy of Pediatrics, Washington, DC.

The agenda was as follows:

Call to Order and Introductions	**Michael Link, M.D.** (Acting) Committee Chair
Conflict of Interest Statement	**LCDR Mimi T. Phan, Pharm.D., R.Ph.** Acting Designated Federal Official Oncologic Drugs Advisory Committee

Opening Remarks	**Karen Weiss, M.D.** Deputy Director, Office of Oncology Drug Products (OODP), Office of New Drug (OND), CDER, FDA
Pediatric Oncology and the Best Pharmaceuticals for Children Act	**Lisa Mathis, M.D.** Associate Director, Pediatric and Maternal Health Staff, OND, CDER, FDA
BPCA Experience with Oncology Drugs	**Victor Santana, M.D.** FDA/CDER/OODP Guest Worker from St. Jude Children's Research Hospital

Questions to the Presenters

Break

Open Public Hearing

Questions to the Pediatric Oncology Subcommittee and Discussion

Lunch

Call to Order Introduction of Committee	**Michael Link, M.D.** Acting Chair, Pediatric Oncology Subcommittee
Conflict of Interest Statement	**Mimi Phan, Pharm.D., R.Ph.** Acting Designated Federal Official, Pediatric Oncology Subcommittee
The Best Pharmaceuticals for Children Act	**Anne Zajicek, M.D., Pharm.D.** Pediatric Medical Officer, National Institute of Child Health & Human Development, NIH
Isotretinoin Phase 1 PK/Phase 3 data	**C. Patrick Reynolds, M.D., Ph.D.** Director, Developmental Therapeutics Program, USC-CHLA Institute for Pediatric Clinical Research, Children's Hospital Los Angeles; Professor of Pediatrics, Keck School of Medicine, The University of Southern California
Cooperative Clinical Trials with 13-cis-Retinoic Acid in Neuroblastoma	**Katherine Matthay, M.D.** University of California, San Francisco Children's Oncology Group

1:15 p.m. *Questions to the Presenters*

1:45 p.m. Break

2:00 p.m. Open Public Hearing

2:30 p.m. *Questions to the Pediatric Oncology Subcommittee and Discussion*

4:00 p.m. Adjourn

Questions to the Subcommittee Session I: BPCA & Oncology Experience

1. Over the past 10 years, when exclusivity incentives have been available for development of pediatric therapeutics, there has been a number of oncology products studied. This has generated useful and important information for pediatric oncology patients. However, much work remains to be done.

    - Please discuss the limitations, strengths, and weaknesses of the approaches and efforts thus far.

    - Please discuss ways in which FDA can improve the process. In your response, please consider issues such as the timing of pediatric studies, types of studies to ask for in the WR, how best to incorporate pre-clinical data.

The subcommittee recognized that there is a willingness in the community to assist FDA in identifying some of the information that need to be include in the written request (WR) and has suggested the following: identify the study designs; consider international studies to access a larger number of patients in a shorter time-frame; identify pathways of interest; encourage pediatric formulation studies; extend the timeline beyond 90 days, and update the label as new information is available. **(Please see the transcript for detailed discussion)**

Questions to the Subcommittee Session II: 13-cis-Retinoic Acid Clinical Experience

1. Given the results of the Phase 3 RCT in high risk neuroblastoma patients who received intensive chemotherapy, radiotherapy, autologous stem cell transplant and 13-*cis*-retinoic acid, should the FDA ask [in a WR] for submission of these data to FDA as a sNDA [i.e., to potentially support a new indication]?

The subcommittee indicated the importance of additional reviews internally before re-addressing this question. **(Please see the transcript for detailed discussions)**

2. Please discuss other types of studies/data that should be part of a WR to further inform the safety, dosing, and efficacy of 13-*cis*-retinoic acid in pediatric patients with high risk neuroblastoma.

The subcommittee suggested the following types of studies/data: pharmacokinetics (correlations of levels with outcomes); different formulations and their utility in comparison with standard formulations (for compliances to achieve target levels); pharmacogenomics and toxicity profiles **(Please see the transcript for detailed discussion).**