

**Food and Drug Administration
Center for Drug Evaluation and Research**

**Summary Minutes of the Meeting of the Advisory Committee for Pharmaceutical
Science and Clinical Pharmacology
July 23, 2008**

Topics: The committee did the following: (1) received and discussed presentations from the Office of Generic Drugs (OGD) on the bioequivalence methods for locally acting drugs that treat gastrointestinal (GI) conditions, (2) received and discussed presentations from OGD on the use of inhaled corticosteroid dose-response as a means to establish bioequivalence of inhalation drug products, and (3) received and discussed presentations from OPS on the drug classification of orally disintegrating tablets (ODT) as a separate dosage form, and the need for subsequent guidance on expectations and recommendations that would be required for applications proposing the dosage form.

These summary minutes for the July 23, 2008 meeting of the Advisory Committee for Pharmaceutical Science and Clinical Pharmacology were approved on August 6, 2008.

I certify that I attended the July 23, 2008 meeting of the Advisory Committee for Pharmaceutical Science and Clinical Pharmacology meeting and that these minutes accurately reflect what transpired.

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Diem-Kieu H. Ngo, Pharm.D., BCPS
(Acting Designated Federal Official)

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Kenneth R. Morris, Ph.D.
(Chair)

**Summary Minutes of the Meeting of the Advisory Committee for Pharmaceutical Science
and Clinical Pharmacology
July 23, 2008**

The following is the final report of the meeting of the Advisory Committee for Pharmaceutical Science and Clinical Pharmacology held on July 23, 2008. A verbatim transcript will be available in approximately six weeks, sent to the Division and posted on the FDA website at <http://www.fda.gov/ohrms/dockets/ac/cder08.html#PharmScience>

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

The Advisory Committee for Pharmaceutical Science and Clinical Pharmacology of the Food and Drug Administration, Center for Drug Evaluation and Research met on July 23, 2008 at the Food and Drug Administration, Center for Drug Evaluation and Research Advisory Committee Conference Room, Rm. 1066, 5630 Fishers Lane, Rockville, MD. Prior to the meeting, the members and the invited consultants were provided the background materials from the FDA. The meeting was called to order by Kenneth R. Morris, Ph.D. (Chair); the conflict of interest statement was read into the record by Diem-Kieu H. Ngo, Pharm.D., BCPS (Designated Federal Official). There were approximately 175 people in attendance for Topic #1 (bioequivalence methods for locally acting drugs that treat gastrointestinal (GI) conditions) and 135 people in attendance for Topic #2 (drug classification of orally disintegrating tablets) and Topic #3 (use of inhaled corticosteroid dose-response as a means to establish bioequivalence of inhalation drug products). There were four Open Public Hearing (OPH) speakers.

Issue: On July 23, 2008, the committee did the following: (1) received and discussed presentations from the Office of Generic Drugs (OGD) on the bioequivalence methods for locally acting drugs that treat gastrointestinal (GI) conditions, (2) received and discussed presentations from OGD on the use of inhaled corticosteroid dose-response as a means to establish bioequivalence of inhalation drug products, and (3) received and discussed presentations from OPS on the drug classification of orally disintegrating tablets (ODT) as a separate dosage form, and the need for subsequent guidance on expectations and recommendations that would be required for applications proposing the dosage form.

Attendance:

Advisory Committee for Pharmaceutical Science and Clinical Pharmacology members present (voting): Kenneth R. Morris, Ph.D. (Chair); Jessie L-S. Au, Pharm.D., Ph.D.; Merrill Gozner (Consumer Representative); Marilyn E. Morris, Ph.D.; Anne S. Robinson, Ph.D.; Elizabeth M. Topp, Ph.D.; Carol A Gloff, Ph.D. (participated in Topic #1 and #2 only; recused for Topic #3)

Advisory Committee for Pharmaceutical Science and Clinical Pharmacology members absent (voting): John F. Carpenter, Ph.D.

Temporary Voting Members:

Jerry M. Collins, Ph.D.; Arthur H. Kibbe, Ph.D.; Melvin V. Koch, Ph.D.; Marvin C. Meyer, Ph.D.; Harriet B. Nembhard, Ph.D.

Industry Representatives present (non-voting):

Richard J. Stec, Jr., Ph.D; Patricia C. Tway, Ph.D.

Industry Representatives absent (non-voting): Mukul A. Agrawal, Ph.D.; Philip R. Mayer, Ph.D.

FDA Participants (non-voting):

Helen Winkle; Keith Webber, Ph.D.; Gary Buehler, R.Ph.; Frank Holcombe, Jr., Ph.D. (Topic #2 only); Lawrence Yu (Topic #1 and #3 only).

Open Public Hearing Speakers:

Abu Alam, Ph.D.; Guy Rousseau, Ph.D.; Dale Gerding, M.D.; Paul Dorinsky, M.D.

The agenda was as follows:

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| 8:30 a.m. | Call to Order | Ken R. Morris, Ph.D.
Chair, ACPS-CP |
| | Conflict of Interest Statement | Diem-Kieu H. Ngo, Pharm.D., BCPS
Acting Designated Federal Official |
| 8:45 a.m. | <i>Topic 1: Bioequivalence Methods for Locally Acting Drugs that Treat Gastrointestinal (GI) Conditions</i> | |
| | Bioequivalence of Locally Acting GI Drugs: An Overview | Lawrence Yu, Ph.D.
Director for Science, Office of Generic Drugs (OGD), OPS, CDER, FDA |
| | Bioequivalence of Locally Acting GI Drug: Scientific Considerations | James Polli, Ph.D.
University of Maryland School of Pharmacy
Department of Pharmaceutical Sciences |
| 10:00 a.m. | Open Public Hearing | |
| 10:30 a.m. | BREAK | |
| 10:45 a.m. | Bioequivalence of Poorly Soluble Locally Acting GI Drugs | Robert Lionberger, Ph.D.
Chemical Engineer
OGD, OPS, CDER, FDA |
| | <i>Committee discussions and recommendations</i> | |
| 12:30 p.m. | LUNCH | |
| 1:30 p.m. | Open Public Hearing | |
| 2:00 p.m. | <i>Topic 2: Drug Classification of Orally Disintegrating Tablets (ODT)</i> | |
| | Topic Introduction | Frank Holcombe, Ph.D.
Associate Director for Chemistry
OGD, OPS, CDER, FDA |
| | <i>Committee discussions and recommendations</i> | |
| 3:00 p.m. | BREAK | |

Committee Discussion:

The committee considered the following properties to be critical: disintegration time (how quickly the tablet disintegrates); size (particularly, the volume of the dosage form should not be too excessive); and the tablet's ability to disintegrate to small particles that are suitable for swallowing. (See Transcript for Complete Discussion)

2. Should physical and/or functional properties (e.g., size, formulation, and disintegration times) be a primary factor in determining conformance to this dosage form? (Yes/No/Abstain)

Committee Discussion:

(See Transcript for Complete Discussion)

Yes: 12 No: 0 Abstain: 0

- a. If so, how specific or restrictive should the criteria be?

Committee Discussion:

The committee came to the consensus that the agency should standardize the disintegration test methodology in order to determine the criteria (for instance, the screen size will determine the particle size in which the tablet disintegrates to). The committee also felt that the criteria should be less restrictive so that consumers may have more options in terms of ODT products. (See Transcript for Complete Discussion)

3. Can labeling (i.e., instructions for use) be considered sufficient to define the dosage form? (Yes/No/Abstain)
 - a. If so, should labeling describe/include differences between/among NDA and ANDA products?

The committee and OPS agreed to skip question #3 and #3a since the discussion of question #2 lead to the answers for these questions.

4. What, if any, special issues should be considered (e.g., patient compliance, target populations/conditions)?

Committee Discussion:

One committee member felt that palatability should be considered while others felt that the agency's regulatory role should be focused on safety & efficacy and not on palatability. The committee came to the consensus that patient compliance should be considered. (See Transcript for Complete Discussion)

Topic 3: Use of Inhaled Corticosteroid Dose Response as a Means to Establish Bioequivalence of Inhalation Drug Products – There were no *Questions to the Committee* for this topic.

The meeting was adjourned at approximately 4:45 p.m.