Summary Minutes of the
Pharmaceutical Science Advisory Committee
October 5-6, 2006
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 October 5-6, 2006 of the Advisory Committee for Pharmaceutical Science of the Food and Drug Administration were approved on 10/24/06

I certify that I attended the October 5-6, 2006, meeting of the Advisory Committee for Pharmaceutical Science of the Food and Drug Administration meeting and that these minutes accurately reflect what transpired.

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

Carol Gloff, Ph.D.
Acting Chair (October 5, 2006)

Charles Cooney, Ph.D.
Chair (October 6, 2006)

Meeting of the Advisory Committee for Pharmaceutical Science
October 5, 2006

Prior to the meeting, the members and the invited consultants were provided the background materials from the FDA and any written statements submitted by the public. The meeting was called to order by Carol Gloff, Ph.D. (Committee Acting Chair); the conflict of interest statement was read into the record by Mimi T. Phan, Pharm.D., R.Ph. (Designated Federal Officer). There were approximately 120 individuals in attendance.

On October 5, 2006, the committee will: 1) receive an update on the International Conference on Harmonisation (ICH) Quality Topics (Q8, Q9, Q10, Q4B, QOS) and discuss the impact on current regulatory direction, and 2)receive and discuss a series of presentations from the different offices within the Office of Pharmaceutical Science (OPS) on progress being made on quality-by-design (QBD) initiatives, followed by presentations from the pharmaceutical industry trade associations (The Generic Pharmaceutical Association [GPhA] and The Pharmaceutical Research and Manufacturers of America [PhRMA]) on their QBD perspectives and issues.

Attendance:

Advisory Committee for Pharmaceutical Science Members Present (voting):
Carol Gloff, Ph.D. (Acting Chair); Meryl Karol, Ph.D.; Melvin Koch, Ph.D.; Ken Morris, Ph.D. (Recused from discussions and voting for all topics on October 5, 2006); Cynthia Selassie, Ph.D.; Marc Swadener, Ed.D.; Jürgen Venitz, M.D., Ph.D.

Advisory Committee for Pharmaceutical Science Members (Industry Representatives- non-voting):
Paul H. Fackler, Ph.D.; Gerald Migliaccio

Advisory Committee for Pharmaceutical Science Consultants (voting):
Arthur H. Kibbe, Ph.D.; Marvin C. Meyer, Ph.D.

Guest Speakers (non-voting):
Robert G. Baum, Ph.D.; John C. Berridge, Ph.D.; Gordon Johnston, R.Ph., M.S.

FDA Participants at the Table:
Gary Buehler, R.Ph.; Steven Kozlowski, M.D.; Moheb Nasr, Ph.D.; Keith Webber, Ph.D.; Helen Winkle; Lawrence Yu, Ph.D.

FDA & Guest Speakers Presentations:

Introduction to Meeting and Office of Science (OPS) Update Helen Winkle
Director, OPS, CDER, FDA

International Conference Harmonisation (ICH) Quality Topics Update

(1) Topic Introduction	Moheb Nasr, Ph.D. Director, Office of New Drug Quality Assessment (ONDQA), OPS, CDER, FDA
(2) Q8 – Pharmaceutical Development	John Berridge, Ph.D. Rapporteur, ICH Q8 and consultant to Pfizer Ltd. (Representing Pharmaceutical Research & Manufacturers of America/The European Federation of Pharmaceutical Industries Associations/Japan Pharmaceutical Manufacturers Association)
(3) Q9 – Quality Risk Management	H. Gregg Claycamp, Ph.D. Director, Scientific Support Staff, Office of New Animal Drug Evaluation (ONADE), Center for Veterinary Medicine (CVM), FDA
(4) Q10 – Pharmaceutical Quality Systems	Joseph Famulare

	Acting Deputy Director, Office of Compliance (OC), CDER, FDA
(5) Q4B – Regulatory Acceptance of Analytical Procedures and/or Acceptance Criteria	Robert H. King, Sr. Special Assistant for Science, OPS, CDER, FDA (Rapporteur, ICH Q4B)

Committee Discussion and Recommendations

Implementing Quality-by-Design: Status, Challenges, and Next Steps

(1) Topic Introduction and an FDA Perspective	Moheb Nasr, Ph.D.
(2) ONDQA Initiatives	Chi-Wan Chen, Ph.D. Deputy Director, ONDQA, OPS, CDER, FDA
(3) Office of Generic Drugs Initiatives (OGD)	Lawrence Yu, Ph.D. Director for Science, OGD, OPS, CDER, FDA
(4) Office of Biotechnology Products (OBP) Initiatives	Steven Kozlowski, M.D. Director, OBP, OPS, CDER, FDA
(5) Generic Pharmaceutical Association (GPhA) Perspectives	Gordon Johnston, R.Ph., M.S. Vice President, Regulatory Affairs, GPhA
(6) PhRMA Perspectives	Robert G. Baum, Ph.D. Executive Director, Global Regulatory Chemistry, Manufacturing & Controls Policy, Pfizer Global Research & Development (Representing PhRMA)
(7) Summary of Current Plan Status -- Challenges and Next Steps	Helen Winkle

Committee Discussion and Recommendations

Open Public Hearing Speakers (October 5, 2006):

Charles P. Hoiberg, Ph.D. (Pfizer Inc.)
Neil Lewis, Ph.D. (Analytical Imaging Systems Malvern Instruments)
Fred Razzaghi (Consumer HealthCare Products Association)

Questions to the Committee on Topic 1: International Conference Harmonisation (ICH) Quality Topic Update:

1) Do you agree with FDA implementation strategy of the new ICH quality vision?

   Yes= 7(seven) *No= 0(zero)* *Abstain= 1(one)*

2) Should FDA implement additional QRM activities, given resource constraints?
   The Committee believed that it is a management decision that needs to be determined internally. It is not the Committee's to look at the resources and prioritize them. (Please see the transcript for more detailed information)

3) Should FDA continue to develop additional implementation guidances or rely only on ICH guidelines?
   With the Committee consensus, this is not a voting question.

   The Committee felt that the ICH guidance is adequate in providing appropriate level of details for both experience and inexperience companies for most topics. However in some instances that is not the

case. In addition, the Committee felt that FDA should seek for advice from Industry and observe the submissions to the FDA to further determine where additional guidance would be needed. Lastly, the Committee encouraged the FDA to continue to develop additional implementation guidances when appropriate. (Please see the transcript for detailed discussion)

4) Is it necessary to gain experience through implementation of the new concepts prior to development of additional guidelines?

The Committee had asked the FDA to clarify the question as below:
Since FDA is implementing Design Space (one of the new concepts), should the FDA uses examples of ICH guidelines or develop other guidelines to provide more explanation of what Designing Space is at this time or should it wait until FDA understands how this could be used in development, submissions and review before revisiting or reviewing existing guidances?

The Committee felt that the more specific these ICH guidance become, the more difficult for everyone to function. When an agency indicates a specific expectation, it limits companies when making their submissions. The freedom to move within the principles of ICH is ideal. In addition, it is premature to issue guidances to design something that only exist a short period of time and in a small number of incidences. (Please see the transcription for detailed discussion)

Questions to the Committee on Topic 2: Implementing Quality by Design (QbD):

1) Do you agree that application of QbD principles should result in (1 or a) a higher level of assurance in product quality, (2 or b) more flexibility for the applicant to make continuous improvement; and (3 or c) less need for FDA regulatory oversight on post-approval changes?

The Committee asked the FDA to rephrase part 3 of the question as followed: If one applies the principles of QbD, can FDA eliminate some post-approval changes?

a) YES= 8 (eight)	*NO=0 (zero)*	*Abstain= 0 (zero)*
b) YES= 8 (eight)	*NO=0 (zero)*	*Abstain= 0 (zero)*
c) YES= 8 (eight)	*NO=0 (zero)*	*Abstain= 0 (zero)*

(Please see the transcript for detailed discussion)

2) Should FDA develop a new guidance on QbD to facilitate its implementation or rely only on ICH guidelines?

The Committee suggested that it was premature for the Committee to make recommendation for a written, supportive guidance. The Committee felt that this question should be defer until FDA has further experience with the implementation of QbD. (Please see the transcript for detailed discussion)

3) What are the relevant scientific areas of disagreement among the stakeholders that the FDA should seek to establish consensus through additional efforts?

The Committee understood that the disagreement was on the implementation, not on what should be accomplished. The Committee encouraged FDA to continue its leadership in driving concepts such as post-approval changes. (Please see the transcript for detailed discussion)

4) Are there additional mechanisms for educating reviewers and industry on changes being made?

The Committee suggested training or education information disseminated to both reviewer and industry representatives at the same time. (Please see the transcript for detailed discussion)

5) Are the ONDQA plans and efforts adequate to implement QbD?
The Committee felt that it was a good plan; however, it was too early in the process to determine at this time whether it was adequate or not. The Committee suggested keeping thorough and detailed records of the implemented programs before, during and after process.

6) OGD Question-based Review initiative is currently limited to generic drug product. Should it be expanded to include drug substance?
The Committee felt that drug substance should be included, however it was not being discussed in the meeting, and there was no Q8 guidance yet. The Committee thought it was premature to apply the question-based review initiative drug substance, but some kind of initiative to assist the drug substance manufacturer improve the information.

7) Should FDA develop a pilot program to explore specific QbD issues that are important for biotechnology products?

The concept is an appropriate concept; however, the Committee did not have adequate information to give feedback.
The Committee had asked the FDA to rephrase the question as followed:
Should the FDA explore development a pilot program for specific QbD supporting biotechnology?
The consensus from the Committee was for the Agency to consider it. (please see the transcript for detailed discussion)

The Meeting adjourned for the day at approximately 17:50 p.m. and reconvened on October 6, 2006 at 8:30 a.m.