

Joint Public Meeting on Equivalence of Levothyroxine Sodium Products
Co-sponsored with the FDA by the American Thyroid Association, The Endocrine Society and
the American Association of Clinical Endocrinologists

Monday, May 23, 2005

National Transportation Safety Board
490 L'Enfant Plaza, SW
Washington, DC 20594

AGENDA AND SCHEDULE

8:30 – 8:45 am Welcoming Remarks - Steve Galson, M.D. and Society Representatives

Session I: Background: Clinical Issues and New Drug Applications for Levothyroxine

8:45 – 9:15 am Levothyroxine Sodium: A Widely Employed Narrow Therapeutic Range
Drug
Paul W. Ladenson, MD

9:15 – 9:30 am Overview of FDA General Regulatory Requirements and Methods for
Demonstration of Therapeutic Equivalence
Dale P. Conner, Pharm.D.

9:30 – 9:45 am Manufacturing Standards
Eric P. Duffy, PhD

9:45 – 10:00 am Bioavailability/Bioequivalence Studies in Evaluation of New
Levothyroxine Products
Henry J. Malinowski, PhD

10:00 – 10:15 am Report of Recently Approved Products' Performance in Bioequivalence
Testing
Barbara Davit, PharmD

10:15 – 10:35 am Limitations of Current Bioequivalence Standards
James Hennessey, M.D.

10:35 – 10:50 am **BREAK**

10:50 – 11:20 am Questions and Panel Discussion

11:20 – 11:50 am Public Comment Period

11:50 am-12:50 pm **LUNCH**

Session II: Approach to Comparing Levothyroxine Products: Serum Thyrotropin (TSH) Concentration as a Pharmacodynamic Measure of Thyroxine Bioequivalence and Study Design Considerations

- 12:50 – 1:10 pm Rationale for TSH as a Marker of Thyroid Hormone Tissue Effects
E. Chester Ridgway, M.D.
- 1:10 – 1:25 pm Levothyroxine or TSH for Determination of Bioequivalence: Study
Design Considerations (including study populations and controls,
crossover vs. parallel group, sample size, etc.)
Steven I. Sherman, M.D.
- 1:25 – 1:45 pm FDA Perspective on Pharmacodynamic Bioequivalence Measures,
Methodological and Regulatory Considerations and Study Design Issues
in TSH-based BE Studies
Robert Lionberger, PhD
- 1:45 – 2:15 pm Questions and Panel Discussion
- 2:15 – 2:45 pm Public Comment Period

Session III: Summary of Issues/Next Steps

- 2:45 – 3:05 pm Society concerns regarding current U.S. Prescribing and Dispensing
Practices
Leonard Wartofsky, MD
- 3:05 - 3:20 pm FDA Summary
David G. Orloff, M.D.
- 3:20 – 3:35 pm **BREAK**
- 3:35 – 4:05 pm Questions and Panel discussion
- 4:05 - 4:35 pm Public Comment
- 4:35 – 5:00 pm Closing Remarks - David Orloff, M.D. and Society Representatives