MEETING OF THE ADVISORY COMMITTEE ON THE MEDICAL USES OF ISOTOPES

September 20-21, 2012

MEETING SUMMARY

PURPOSE

To discuss current rulemaking activities and other issues related to the implementation of the medical regulations in Title 10, Code of Federal Regulations (CFR), Part 35, "Medical Use of Byproduct Material."

OUTCOME

The Advisory Committee on the Medical Uses of Isotopes (ACMUI) made recommendations, and the U.S. Nuclear Regulatory Commission (NRC) staff gained a better understanding of the views and opinions of the ACMUI, as well as other stakeholders' views and opinions. The staff will consider these views in its continuing effort to make 10 CFR Part 35 more useful, practical, and not overly burdensome on licensees, while maintaining public health and safety.

Full transcripts of the ACMUI meeting can be found on NRC's public website: http://www.nrc.gov/reading-rm/doc-collections/acmui/tr/

Handouts from the ACMUI meeting can be found on NRC's public website: http://www.nrc.gov/reading-rm/doc-collections/acmui/meeting-slides/

ATTENDEES

ACMUI

Darice G. Bailey
Member
Milton S. Guiberteau, M.D.
Susan M. Langhorst, Ph.D.
Leon S. Malmud, M.D.
Steve R. Mattmuller
Christopher J. Palestro, M.D.
John H. Suh, M.D.
Member
Member
Member

Bruce R. Thomadsen Ph.D. Vice Chairman

William A. Van Decker, M.D. Member Laura Weil Member James S. Welsh, M.D. Member Pat Zanzonico, Ph.D Member

NRC

Brian McDermott Director, Division of Materials Safety and State

Agreements

Pamela Henderson Deputy Director, Division of Materials Safety and State

Agreements

Christian Einberg Chief, Radioactive Materials Safety Branch

Michael Fuller Alternate Designated Federal Officer and Medical Radiation

Safety Team Leader

Ashley Cockerham Alternate Designated Federal Officer and ACMUI Coordinator

Sophie Holiday Alternate ACMUI Coordinator

Susan Abrahams NRC staff, Office of Nuclear Security and Incident Response

Bernice Ammon NRC staff, Office of the General Counsel

Neelam Bhalla NRC staff, Rulemaking Branch B

Susan Chidakel NRC staff, Office of the General Counsel Sean Croston NRC staff, Office of the General Counsel

Jackie Cook NRC staff, Region IV

Donald Cool, Ph.D. NRC staff, Division of Intergovernmental Liaison and

Rulemaking

Said Daibes, Ph.D. NRC staff, Radioactive Materials Safety Branch

Sara Forster NRC staff, Region III

Sandra Gabriel, Ph.D.

NRC staff, Radioactive Materials Safety Branch
NRC staff, Office of the General Counsel

Latischa Hanson NRC staff, Region IV

Patricia Hirsch NRC staff, Office of the General Counsel

Vincent Holahan NRC staff, Division of Materials Safety and State Agreements

Anthony Huffert NRC staff, Office of Nuclear Regulatory Research

Andrea Kock NRC staff, Office of the Commission, Commissioner William

Ostendorff

Angela McIntosh NRC staff, Radioactive Materials Safety Branch

Robert Norman NRC staff, Office of Nuclear Security and Incident Response

Andrew Pessin NRC staff, Office of the General Counsel

Josephine Piccone, Ph.D. NRC staff, Director, Division of Intergovernmental Liaison and

Rulemaking

Tamara Powell NRC staff, Intergovernmental Liaison Branch

Lizette Roldan NRC staff, Region IV

Mohammad Saba NRC staff, Office of Nuclear Regulatory Research

Jeremy Suttenberg

John Szabo

NRC staff, Office of the General Counsel

NRC staff, Office of the General Counsel

NRC staff, Office of the General Counsel

NRC staff, Radioactive Materials Safety Branch

NRC staff, Radioactive Materials Safety Branch

MEMBERS OF THE PUBLIC

Scott Bertetti - Bayer Jeffrey Bova – Bayer

Uwe Budde - Bayer Robert Dansereau – NY State Dept of Health William Davidson – University of Pennsylvania

Dr. Lothar Everz - Bayer

Lynne Fairobent – Am. Assoc. of Physicists in

Medicine

Maria Favorito - Cohn & Wolfe

Maria Garrigan - Bayer Juergen Gay - Bayer

Dr. Joseph Germino - Bayer

Robert Gorsuch – Johns Hopkins University Kelli Hayashi – Johns Hopkins University

Dr. Deepika Jalota - Bayer

Karen Langley – Univeristy of Utah

Ralph Lieto – Trinity Health
Dr. Peter Luehrs – Bayer
Angel McCullough – Johns Hopkins University
Andrew McKinley – Am. Soc. of Nuc. Card.
Janette Merrill – Society of Nuclear Medicine
and Molecular Imaging
Michael Noska – U.S. Food and Drug Admin.
Jatinder Palia – Veterans Health Administration
Michael Peters – Am. College of Radiology
Dr. Dennis Phillips – U.S. Dept. of Energy

Joe Rodgers – Theragenics
Gloria Romanelli – Am. College of Radiology
Ruth Schukman-Dakotas – Univ. of Kansas
Hospital
Michael Sheetz – University of Pittsburgh
Dr. Jeffry Siegel – Nuclear Physics Enterprises
Cindy Tomlinson – Am. Soc. for Rad. Onc.
Dr. Mona Wahba - Bayer
Gary Williams – Veterans Health Administration
Nancy Young – Xcenda

AGENDA TOPICS

CLOSED SESSION

- 1. Ethics Training
- 2. eTravel Training
- 3. Time Training
- 4. Allegations Training
- 5. Information Security Training

OPEN SESSION

- 6. Opening Statements
- 7. Old Business
- 8. ACMUI Group Photo
- 9. Use of Dose Calibrators in Medicine
- 10. Licensing of Radium-223 Dichloride/Radium-223 Dichloride Subcommittee Report
- 11. Status of Data Collection on Patient Release
- 12. 10 CFR Part 35 Rulemaking Update
- 13. Update on Proposed Regulatory Changes for Permanent Implant Brachytherapy Programs
- 14. ACMUI Reporting Structure
- 15. Abnormal Occurrence Criteria
- 16. Reducing Occupational Dose Limits
- 17. Update on Domestic Production of Molybdenum-99
- 18. Administrative Closing

RECOMMENDATIONS AND ACTIONS

For agenda topic 9, Use of Dose Calibrators in Medicine, Dr. Leon Malmud asked NRC staff to find data on events in which the radiopharmacy has dispensed the incorrect amount of a radiopharmaceutical or the incorrect radiopharmaceutical.

For agenda topic 10, Licensing of Radium-223 Dichloride/Radium-223 Dichloride Subcommittee Report, the ACMUI recommended that Ra-223 dichloride be licensed under 10 CFR 35.300 and recommended (but not recommend requiring) direct measurement of activity before/after administration. The recommendation passed unanimously with twelve favorable votes.

Also for agenda topic 10, Licensing of Radium-223 Dichloride/Radium-223 Dichloride Subcommittee Report, the ACMUI endorsed the subcommittee report submitted on July 16, 2012 with the following changes: 1) recommend licensing of Ra-223 dichloride under 10 CFR 35.300 and recommend (but not require) direct measurement of activity before/after administration; 2) remove statement regarding applicability of report for all future alpha-emitting particles; and 3) remove statement regarding Ra-223 dichloride significantly prolonging survival. The ACMUI will submit a report to NRC staff with the aforementioned changes. The recommendation passed unanimously with 12 favorable votes.

For agenda topic 14, ACMUI Reporting Structure, the ACMUI requested that the reporting structure reviews remain on an annual basis.

For agenda topic 15, Abnormal Occurrence Criteria, Dr. Leon Malmud created a subcommittee to review the refined Abnormal Occurrence criteria and to provide recommendations to NRC staff. Subcommittee members include: Dr. Susan Langhorst (chair), Ms. Darice Bailey, Mr. Steve Mattmuller, Dr. Christopher Palestro, Dr. Bruce Thomadsen, Ms. Laura Weil, and Dr. James Welsh. The NRC staff resource person will be Ms. Angela McIntosh.

Also for agenda topic 15, Abnormal Occurrence Criteria, Dr. Susan Langhorst asked NRC staff to provide direction as to whether or not the trigger criteria needs to be a part of the Abnormal Occurrence criteria or if the trigger criteria could be used separately.

For agenda topic 18, Administrative Closing, the ACMUI planned the spring 2013 ACMUI Meeting on April 15-16, 2013, at NRC Headquarter. The back-up date is April 29-30, 2013. The ACMUI will meet separately with the Commission, if requested.