

MEETING OF THE  
ADVISORY COMMITTEE ON THE MEDICAL USES OF ISOTOPES

April 7, 2025

**MEETING SUMMARY**

**PURPOSE**

To discuss issues related to the implementation of the medical regulations in Title 10 of the *Code of Federal Regulations* (10 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 NRC 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 and handouts from the ACMUI meeting can be found on the NRC's ACMUI Meetings webpage, located at: <https://www.nrc.gov/reading-rm/doc-collections/acmui/meetings/>. The meeting attendees are listed in Enclosure 1.

**RECOMMENDATIONS AND ACTIONS**

The following provides a summary of the discussions that took place on the topics on the ACMUI meeting agenda (Enclosure 2).

The ACMUI endorsed the following subcommittee report. This report and its recommendations can be viewed, in their entirety, on the NRC's ACMUI Subcommittee Reports webpage, located at the following link: <https://www.nrc.gov/reading-rm/doc-collections/acmui/reports/index.html>.

The ACMUI unanimously endorsed the report from the Yttrium-90 (Y-90) Microsphere Gastrointestinal (GI) Deposition Medical Events, as presented.

The ACMUI unanimously endorsed the report from the Subcommittee on Training and Experience Requirements for All Modalities on Emerging Medical Technologies, as presented.

The ACMUI unanimously endorsed the report from the Subcommittee on Generic Process Checklist, as amended, with changes presented in the meeting.

The following actions resulted from discussion that took place during the meeting.

The ACMUI agreed that the current structure of reporting to the Office of Nuclear Material Safety and Safeguards continues to function effectively, and the meeting frequency is well-suited for the workload of the Committee.

Dr. Jadvar formed a subcommittee on Giving Advice on ADVANCE Act of July 2024 Mission Statement. The subcommittee's membership includes Harvey Wolkov as chair, Michael Folkert, Megan Shober, Hossein Jadvar, and Josh Mailman.

Dr. Jadvar formed a subcommittee ACMUI Generic Reporting Process. The subcommittee's membership includes Megan Shober as chair, Harvey Wolkov, Josh Mailman, Richard Green, and Zoubir Ouhib .

Dr. Jadvar formed a subcommittee on Potential AI Deep Learning Applications for NRC Medical Enterprise. The subcommittee's membership includes Andrew Einstein as chair, Hossein Jadvar, Michael Folkert, Joanna Fair, and Josh Mailman.

The ACMUI tentatively scheduled the fall 2024 meeting for October 27 - 28, 2025.

Enclosures:

1. Meeting Attendees
2. Meeting Agenda

## **MEETING ATTENDEES**

**April 8, 2024**

### **ADVISORY COMMITTEE ON THE MEDICAL USES OF ISOTOPES**

Hossein Jadvar, MD, PhD	Chair
Richard Green	Vice Chair
Richard Harvey, DrPh	Member
Melissa Martin	Member
Rebecca Allen	Member
Zoubir Ouhib	Member
Megan Shober	Member
Harvey B. Wolkov, MD	Member
Andrew Einstein, MD	Member
Michael R. Folkert, MD, PhD	Member
Joanna R. Fair, MD, PhD	Member
John F. Angle, MD	Consultant to the Committee

### **NRC STAFF**

Tammy Bloomer	Director, Division of Materials Safety, Security, State, and Tribal Programs (MSST)
Dafna Silberfeld	Deputy Director, Division of Materials Safety, Security, State, and Tribal Programs (MSST)
Christian Einberg	Chief, Medical Safety and Events Assessment Branch (MSEB) and Designated Federal Officer
Ally Marra	NMSS/MSST/MSEB
Daniel Dimarco	NMSS/MSST/MSEB
Vincent Holahan	NMSS/MSST
Daniel Shaw	NMSS/MSST/MSEB
Sarah Spence	NMSS/MSST/MSEB
Katherine Tapp	NMSS/MSST/MSEB
Andy Miller	NMSS/MSST/MSEB

Magdalena Gryglak	NMSS/MSST/MSEB
Logan Allen	NMSS/MSST/MSEB
Maryann Ayoadé	NMSS/MSST/MSEB
Jennifer Fisher	NMSS/MSST/MSEB
Lillian Armstead	OCIO/SDOD/EAPSB
Celimar Valentin-Rodriguez	COMM/OCMAC
Hector Rodriguez	COMM/OCMJM
Christopher Rapson	R-I/DRSS/MLAB
Netra Patel	R-I/DRSS/MLAB
Jan Nguyen	R-I/DRSS/MLAB

### **PUBLIC PARTICIPANTS**

Doug Burrichter  
Carlie Jenney  
Kendall Berry  
Jonathan Otten  
James Cordes  
Mary Ann Spiker  
Michelle Delgado  
Sean Chapel  
Ralph Lieto  
Daniel Doenges  
Michael Welling  
Joshua Westmoreland  
Joseph Oberender  
Brandi Woods  
Tara Medich  
William Hinchcliffe

Mike Drelich  
Jeffrey Mason  
Jeff Dovyak  
Ariel Doucet  
Boris Tsenov  
Edward Case  
Joseph Beckman  
Cami Still  
Riad Salem  
Sophia Brodish  
Carol Wen  
Jennifer House  
Deborah Barrickman  
Phillip Peterson  
Brian Kelley  
Aaron Bartoo  
David Crowley  
Keith Brown  
James Blacker  
Scott Fuller  
Amy Biggs  
Kimberly Butler  
Olwen Burton  
Sandra Ramirez  
Kevin Kunder  
Mary Richardson  
Leona Choi  
Peter DiMarco

David Bierman

Caitlin Root

Rebecca Hunt

Kevin Tello

Taylor Brown

Ashley Gray

Olusegun Akano Larinde

Mike Stephens

Matthew Williamson

Brad Kelly

Emily Rostel

Tianliang Gu

Jason Hout

Georgia Lawrence

Erin Niven

Lina Planutyte

Joyce Petersen

Adam Ekstedt

Emma Anderson

Nicholas Borges

Diana Thompson

Heather Merchantz

Rebecca Grabarkewitz

Brent Colby

Christopher Pagan

Zerak Sarki

Nick Dorrell

Evan Boote

Neil Worlikar

Eugenio Silvestrini Hernandez

Daniel Lapkoff

Jenna Engelking

Hanna Heibel

William White

Pat Zanzonico

Christopher Helstern

Emily Chou

Jennifer Gersman

Julia Bellinger

Assen Kirov

Daniel Miodownik

Toby Irving

Alyssa Sullivan

Billie Harvey

Laurenti Ngutter

Sally Pasell

Matthew Hall

Robert Golduber

Thomas Cornwell

Ashley Cockerham

Andrew Polemi

Cheri Douglas

Tracy Jue

Jam Mailman

Ann Marie Derby

Vivek Dharne

Rachel Nichols  
Candi McDowell  
Louie Cueva  
Steven O'Brien  
Jose Macatangay  
Doug Burrichter  
Hillary Haskins  
David Adams  
Mike Melton  
Ching Mei Feng  
Laurence Donahue  
Justin Brown  
Ulysses Rodriguez  
David Bushnell  
Ian Irvin  
Sandy Gabriel  
Matt Hough  
Michael Martin  
Lisa Egle  
Barbara Hamrick  
Samantha Tobin  
Michael Stanfield  
Mike Welling  
Cindy Tomlinson  
Michael Peters  
Abbey Van Haren  
Catherine Hess

**MEETING AGENDA**  
**ADVISORY COMMITTEE ON THE MEDICAL USES OF ISOTOPES**  
**April 7 – 8 2025**

**One White Flint North Building, 11555 Rockville Pike, Commissioner's Hearing Room**  
**North Bethesda, Maryland 20852**

NOTE: Sessions of the meeting may be closed pursuant to 5 U.S.C. 552(b) to discuss organizational and personnel matters that relate solely to internal personnel rules and practices of the ACMUI; information the release of which would constitute a clearly unwarranted invasion of personal privacy; information the premature disclosure of which would be likely to significantly frustrate implementation of a proposed agency action; and disclosure of information which would risk circumvention of an agency regulation or statute.

Monday, April 7, 2025 OPEN SESSION		
9:00 – 9:10	<b>1. Opening Remarks</b> Mr. Einberg will formally open the meeting, and Ms. Silberfeld will provide opening remarks.	<b>C. Einberg, NRC</b> <b>D. Silberfeld, NRC</b>
9:10 – 9:20	<b>2. Old Business</b> Dr. Tapp will review past ACMUI recommendations and provide NRC responses.	<b>K. Tapp, NRC</b>
9:20 – 9:40	<b>3. Open Forum</b> The ACMUI will identify medical topics of interest for further discussion.	<b>ACMUI</b>
9:30 – 10:15	<b>4. Medical Related Events</b> Mr. Dimarco will provide an update on recent medical events.	<b>D. Dimarco, NRC</b>
10:15 – 10:30	<b>BREAK</b>	
10:30 – 11:00	<b>5. Yttrium-90 (Y-90) Microsphere Gastrointestinal (GI) Deposition Medical Events Subcommittee Report</b> Dr. Harvey will discuss the subcommittee's evaluation of recent Y-90 microsphere medical events to identify potential cause of sudden increase in reported events involving unexpected GI deposition.	<b>R. Harvey, ACMUI</b>
11:00 – 11:45	<b>6. Training and Experience Requirements for All Modalities Subcommittee Report on Emerging Medical Technologies</b> Dr. Folkert will discuss the subcommittee's recommendations to the NRC on knowledge topics encompassing the safety related characteristics of emerging medical technologies.	<b>M. Folkert, ACMUI</b>
11:45 – 1:00	<b>LUNCH</b>	
1:00 – 1:30	<b>7. Generic Process Checklist Subcommittee Report</b> Mr. Green will discuss the subcommittee's recommendations regarding development of process checklists to minimize medical events.	<b>R. Green, ACMUI</b>
1:30 – 2:15	<b>8. NRC Medical Radiation Safety Team Updates</b> Dr. Tapp will provide an update on the Medical Radiation Safety Team's activities, including efforts to increase efficiency in licensing and oversight in response to the Advanced Act.	<b>K. Tapp, NRC</b>

2:15 – 2:30	<b>9. Special Recognition for Ms. Allen</b> Ms. Bloomer will make a special presentation to Ms. Allen	<b>T. Bloomer, NRC</b>
2:30 – 2:45	<b>10. Thoughts on Leaving the ACMUI</b> Ms. Allen will share her thoughts on leaving the ACMUI.	<b>R. Allen, ACMUI</b>
2:45 – 3:00	<b>BREAK</b>	
3:00 – 3:15	<b>11. ACMUI Reporting Structure</b> Ms. Marra will provide an overview of the current reporting structure. Members will discuss the reporting structure of the Committee and provide feedback to the NRC.	<b>A. Marra, NRC</b>
3:15 – 3:30	<b>12. Open Forum</b> The ACMUI will discuss medical topics of interest previously identified.	<b>ACMUI</b>
3:30– 3:45	<b>13. Administrative Closing</b> Ms. Marra will provide a meeting summary and propose dates for the fall 2025 meeting.	<b>A. Marra, NRC</b>
3:45 – 4:00	<b>BREAK</b>	
<b>Closed Session</b>		
4:00 – 4:30	<b>14. ACMUI Working Session: Biennial Evaluations</b>	<b>ACMUI</b>

<b>Tuesday, April 8, 2025</b>		
<b>Open Session</b>		
10:00 – 12:00	<b>15. Commission Meeting with the ACMUI</b> The ACMUI will brief the Commission on various topics in a public meeting.	<b>ACMUI</b>
	<b>16. Group Photo</b> The ACMUI will take a group photo with and without the Commission.	<b>ACMUI</b>
12:00	<b>ADJOURN</b>	