

QIBA FDG-PET/CT Tech Cttee Update Call

14 June 2013 at 9 AM CT (GMT-5)

Call Summary

In attendance:

Paul E. Kinahan, PhD (co-chair)

Ling X. Shao, PhD (co-chair)

Richard L. Wahl, MD (co-chair)

Ronald Boellaard, PhD

Andrew Buckler, MS

Janice Campbell, PhD

Barbara Croft, PhD

Robert Doot, PhD

Howard Higley, PhD

Gregory Klein, PhD

Martin Lodge, PhD

Lawrence MacDonald, PhD

Eric S. Perlman, MD

Anne M. Smith, PhD

Daniel Sullivan, MD

John Sunderland, PhD

Timothy Turkington, PhD

Wolfgang Weber, MD

John Wolodzko, PhD

Brian Zimmerman, PhD

RSNA

Joe Koudelik

Julie Lisiecki

Agenda

- Address assigned public comment resolution for physics topics – *Dr. Perlman*

Public Comment resolution for assigned physics topics

- Extended discussion regarding scanner calibration and assuring accuracy, on a quantitative basis
 - Frequency of scanner calibration and need for a NIST-traceable phantom was discussed
 - Pros and cons for daily, weekly, monthly, quarterly testing reviewed for PET constancy check
 - Cons included: radiation dose to the technologist and financial cost to site
 - Pros included: additional consistency and comparability; improved patient care, and improved quantitative measurement
 - Considerations for conducting constancy checks include:
 - Variability in the positioning/ placement of the phantom
 - Cost-of-use
 - Difficulty with logistics
- Daily/ weekly QC drift check of NIST- traceable germanium phantom or equivalent was proposed
- Test would be costly but would help to determine reproducibility and exchange rates of SUV between sites with a goal of quantitative accuracy

Action items (QIBA FDG_PET Profile Triage):

- Dr. Kinahan will follow up with inviting DICOM Working Group 3 participants
- Dr. Perlman (ericperlman@gmail.com) welcomes feedback for review on Monday's Triage of Public Comments call
- UPICT FDG-PET Protocol requires editor to help address future comments

Next calls:

- **Monday, June 17th** – (9 am CT) - QIBA FDG_PET Triage of Public Comments call
- **Friday, June 21st** – (9 am CT) – Regular Meeting of the FDG_PET Technical Committee – continued PHYSICS topics