

QIBA Quantitative PET SUV Subcommittee

November 5, 2009

2:00 PM CST

Call Summary

In attendance

Paul Kinahan, PhD (Co-chair)
David Clunie, MBBS (Co-chair)
Michael Casey, PhD
Steve Kohlmyer
Dennis Nelson, PhD
Eric Perlman, MD

Ling Shao, PhD
John Wolodzko, PhD
Jeffrey Yap, PhD

RSNA

Susan Anderson, MLS
Joe Koudelik

Material for RSNA 2009 poster

- Dr Kinahan to create one poster for the Quantitative PET Committee
- Each subcommittee assigned 1/5 of poster
- “Big Picture” statement drafted at QIBA 2009 f2f to be incorporated
 - RSNA staff to forward this document to Dr Kinahan
- Dr Kinahan to have poster draft ready in 1-2 days, will circulate for subcommittee feedback
- Dr Kinahan to print at University of Washington and send to RSNA by Nov 18

Current status of SUV calculation project

- Dr Clunie has drafted a pseudocode for vendors which covers most bases of SUV calculations
- True net injection activity being documented now, but there is a difference between vendor systems
- Injected dose activity is simplistic in contrast to total dose
- Scanners vary on what can be stored (e.g. Siemens systems have no space to enter this data) and in data interpretation as well
- Refinement of scanner “private DICOM tags” may be required using similar methodology between scanners; editing of DICOM tags required on some systems

DRO

- DRO subcommittee has created a DICOM stack object based on the NEMA phantom
- 3rd version will be run against the Clunie DICOM validator process
- Needs to be as generic as possible and readable by different display stations
- Requested that Dr Nelson look over DRO and provide feedback to Dr Kinahan
- SNM scanner data available; current DRO numbers could be checked against this dataset
- Need to update DRO to Clunie specification
- Various images from scanners and display stations to be sent to Dr Nelson for additional analysis; SNM to be consulted on release of data

Next Steps:

- RSNA staff to send Quantitative CT Profile to Dr Kinahan as reference
- RSNA staff to circulate the 2008 QIBA PET poster material used at the QIBA Kiosk
- RSNA staff to send Dr Kinahan materials from QIBA May f2f for reference with poster
- Dr Kinahan to create poster at University of Washington
- Dr Kinahan to send Dr Clunie images from DRO for text of pseudocode
- Dr Kinahan will contact SNM about use of images
- Dr Clunie to update DRO
- Schedule next Quantitative PET SUV Subcommittee call for January 14, 2010