

QIBA Nuclear Medicine Update Call
FDG-PET/CT & Amyloid BCs combined w/ SPECT representatives

10 April 2015 at 9 AM CT

DRAFT Call Summary

In attendance:

Rathan Subramaniam, MD, PhD (Co-chair, FDG-PET BC)

John Sunderland, PhD (Co-chair, FDG-PET BC)

Scott Wollenweber, PhD (Co-chair, FDG-PET BC)

Satoshi Minoshima, MD, PhD (Co-chair, Amyloid BC)

Eric Perlman, MD (Co-chair, Amyloid BC)

Anne Smith, PhD (Co-chair, Amyloid BC)

Ronald Boellaard, PhD

Ming-Kai Chen, MD, PhD

Susan De Santi, PhD

Constantine Gatsonis, PhD

John Hoffman, MD

Paul Kinahan, PhD, FIEEE

Gregory Klein, PhD

Adriaan Lammertsma, PhD

Martin Lodge, PhD

Lawrence (Larry) MacDonald, PhD

P. David Mozley, MD

Nancy Obuchowski, PhD

Amy Perkins, PhD

John Seibyl, PhD

Daniel Sullivan, MD

Jean-Luc Vanderheyden, PhD

Richard Wahl, MD

RSNA

Joe Koudelik

Julie Lisiecki

QIBA Project Proposals for 2015-2016

- Ideas for possible funded project proposals are due **to RSNA staff by April 27th: qiba@rsna.org**
- Dr. Subramaniam proposed a new biomarker Profile for FDG Volumetric markers
 - This would go beyond SUVmax and involve the study of metabolic tumor volume
 - DRO testing and the test-retest group, along with ACRIN 6678, would figure prominently
 - Permission was received last year to contact Merck for datasets supporting this effort
 - Dr. Subramaniam plans to follow up with Dr. Wolfgang Weber and Dr. Barry Siegel for ACRIN 6678 data
- ACRIN imposes stringent requirements for working with their data
 - Travel to ACR HQ to complete the analysis on site, along with costs associated with bringing additional readers to Philadelphia must be considered
 - To control budget, the possibility of allowing readers to access data remotely is being considered
 - ACR clearance would be needed
 - Using automated reader algorithms, instead of using human readers, was also suggested as a test
 - ACR has a MIMVISTA reader package; it is uncertain whether or not this package is automatic
 - Dr. Subramaniam to follow up with ACR re: level of automation
 - A test of the software may be possible, using either a physical phantom or DRO to test volume and FDG
 - Dr. Kinahan to follow up with Dr. Pierce regarding possibility of modifying the DRO
 - Dr. Perlman suggested that a “challenge” similar to the QIBA 3A challenge for CT Volumetry testing different algorithms in an anonymized fashion might be another project idea
- Dr. Lodge suggested a project to evaluate PET image reconstruction parameters
 - Currently, a wide range of parameters exist, making selection more difficult with a wide range of scanners
 - Some guidance on measuring spatial resolution in a systematic and meaningful way may be helpful
- A software trial with PIP data was also suggested
 - Dr. Perlman to inquire whether or not Piramal may be willing to share data.
- Another suggested project was “Diagnostic Inter-Rater Variability” with a receiver or rater role for QIBA
 - As there are discrepancies between visual and quantitative analysis, the FDA is interested in projects that may provide a better understanding of quantitative measurement

Action items:

- BC co-chairs need slides from Task Force Leaders – for presentations at the QIBA Annual Meeting
- Proposal champions are needed for project proposals; reminder to plan for indirect costs

Proposed Nuclear Medicine Calls (Fridays, 9 am CT):

- **April 17:** (proposed) SPECT Biomarker Ctte
- **April 24:** PET Amyloid Biomarker Ctte
- **May 1:** FDG-PET Biomarker Ctte {Planning for the QIBA Annual Meeting for those representatives who will be attending.}
- **May 8:** No call (day after the QIBA Annual Meeting)
- **May 15:** Combined Nuclear Medicine Call Update (*FDG-PET, Amyloid, SPECT (?)*)
- **May 22:** Amyloid Biomarker Ctte
- **May 29:** (proposed) SPECT Biomarker Ctte