QIBA FDG-PET Biomarker Committee (BC) Call
05 May 2017 at 9 AM CT
Call Summary

In attendance:

Rathan Subramaniam, MD, PhD, MPH (co-chair)
Scott Wollenweber, PhD (co-chair)
Terry Brown
Howard Higley, PhD
John Hoffman, MD
Martin Lodge, PhD
Nancy Obuchowski, PhD
Amy Perkins, PhD
Eric Perlman, MD
Na Sun, PhD
Timothy Turkington, PhD
Jeffrey Yap, PhD

RSNA
Joe Koudelik
Julie Lisiecki

Moderator: Dr. Wollenweber

Moving the FDG-PET/CT Profile to Claim Confirmed

- The BC hopes that it can piggyback onto an existing clinical trial in order to test performance of the claim with functional validation
  - The Profile is in Stage 3; the Technically Confirmed stage
  - The goal is to move closer to Stage 4; Claim Confirmed
  - Main focus of the breakout sessions during the QIBA Annual Meeting will address these next steps

Round-6 Project Update (Dr. Lodge)

- Dr. Lodge discussed reconstruction of PET images with/out Point Spread Function (PSF)
- Initial work has involved the use of 5 NEMA, low-noise phantoms, investigating multiple variables
- Preliminary results suggest SUV^{peak} may be preferable to SUV^{max}
- SUV^{peak} improves the quantitative characteristics of PSF images

Round-5 Project Update (Dr. Subramaniam)

- Dr. Subramaniam is writing a paper based on this inter-reader study; analysis and repeatability results are being summarized now

Topics prioritized for discussion at the QIBA Annual Meeting

- The impact of Dr. Lodge's project on moving the FDG-PET Profile to the claim confirmed stage
- An update on Dr. Kinahan's manuscript draft for *Radiology*
- The process for producing more realistic, i.e. complex test objects, such as phantoms and DROs
- System performance and image accuracy issues
- SUV: looking at feature size may play a different role
  - Metabolic volume may not be the same as structural value
  - Metabolic volume is very significant and more complex
- Review of Dr. Turkington's project and ways for those implementing the Profile to use simple phantoms to reveal variability

Action items (ongoing)

- Dr. Obuchowski to follow up with Dr. Sunderland regarding citations for the clinical trial study
- Dr. Kinahan to follow up with potential authors regarding authorship for the proposed *Radiology* article
- Drs. Sunderland, Subramaniam, and Wollenweber to draft a poll for scanner manufacturers to determine reconstruction capabilities and other pending questions

Nuclear Medicine WebEx Schedule:

5/12	Amyloid BC
5/19	SPECT BC
5/26	NM Leadership (TBD)
6/2	FDG-PET BC
6/9	NM Coordinating Ctte
6/16	SPECT BC
6/23	NM Leadership (TBD)