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

RSNA

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:

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