QIBA FDG-PET Biomarker Committee (BC) Call

07 July 2017 at 9 AM CT Call Summary

In attendance: RSNA

Rathan Subramaniam, MD, PhD, MPH (Co-Chair) Scott Wollenweber, PhD (Co-Chair) Edward Jackson, PhD Adriaan Lammertsma, PhD Nancy Obuchowski, PhD Amy Perkins, PhD Eric Perlman, MD Mitsuaki Tatsumi, MD Pierre Tervé, MS Jeffrey Yap, PhD Joe Koudelik Susan Weinmann

Moderator: Dr. Wollenweber

Jeff Kolthammer, PhD

Highlights from the Society of Nuclear Medicine and Molecular Imaging Annual Meeting (June 10-14, 2017)

- Dr. Turkington gave a presentation on preliminary results for reproducibility using simple phantoms to reveal variability
 - o These results may be used to determine QIBA performance criteria
- Dr. Lodge discussed phantom advanced reconstruction techniques and their impact on quantitative measurements
- SUV^{peak} to further be included in Claim Confirmed Profile analysis

Moving the FDG-PET/CT Profile to Claim Confirmed

- Funding being investigated based on simultaneous completion of Stage 4: Claim-Confirmed & Stage 5: Clinically-Confirmed
- FDG-PET BC decision on whether to combine Stages 4 & 5 will inform other logistics
- It is acceptable to combine stages 4 & 5 as long as all requirements are met for Stage 5; BC consensus needed
- Requirements for stages 4 & 5 regarding number/type of sites, patient sample size, etc. to be defined with Dr.
 Obuchowski's assistance; the FDG-PET BC encouraged to continue progress on writing protocol in the meantime
- Funding and operational support to be determined

FDG-PET Checklist

- The BC hopes to partner with ECOG-ACRIN in order to test performance of the claim with functional validation
- At present, no decision has been made; agreements with ECOG-ACRIN would need to be reviewed and confirmed
- A draft proposal will be prepared for discussion
- Confirmation from Radiology editor, Dr. Kressel that manuscript will be considered for publication in Radiology
 - Manuscript to be submitted to Radiology before August. 1; if submitted after this date, confirmation would need to be obtained from new editor, Dr. Bluemke
- Dr. Obuchowski has calculated site/patient numbers for small 4-site study (e.g. stage 4); details for a larger, more generalized study (e.g. Stage 5) to be calculated for comparison
- Subramaniam to write introduction and rationale while other issues regarding protocol are under discussion

- Suggestion to leverage relationships with more imaging iCROs
 - NBDA opportunity to be leveraged to get more iCRO involvement; comparing the current FDG-PET protocols used by both suggested to identify performance gaps
 - NBDA efforts incorporated both quantitative & qualitative FDG-PET, as qualitative aspect was required with lymphoma as topic
 - o QIBA FDG-PET checklist focused mainly on quantitative, as it concerns solid tumors
 - o Proposal to obtain feedback from imaging iCROs on QIBA's quantitative work, as there is an interest in determining the differences between the two checklists in regard to technical requirements

Action items (ongoing)

- Dr. Kinahan to follow up with potential authors regarding authorship for the proposed Radiology article
- Dr. Wollenweber to follow up with Dr. Kinahan re: status of manuscript
- Dr. Subramaniam to enquire with the AJR editor re: a possible back-up or parallel manuscript publication

Nuclear Medicine WebEx Schedule:

7/14	PET Amyloid BC	7/28	NM Leadership (TBD)
7/18	SPECT TF (TBD)	8/1	SPECT TF (TBD)
7/21	SPECT BC	8/4	FDG-PET BC
7/25	SPECT TF (TBD)	8/8	SPECT TF (TBD)