

QIBA FDG-PET Biomarker Committee (BC) Call

06 September 2019 at 9 AM CT

Call Summary

In attendance:

John Sunderland, PhD (Co-Chair)
Alexander Guimaraes, MD, PhD
Howard Higley, PhD

Nancy Obuchowski, PhD
Eric Perlman, MD
Anne Smith, PhD

Mitsuaki Tatsumi, MD
Richard Wahl, MD
Jeffrey Yap, PhD

RSNA

Julie Lisiecki

Moderator: Dr. Sunderland

Radiology Manuscript update:

- At the QIBA Annual Meeting in June, it was decided that publishing study results obtained by using the QIBA FDG-PET Profile would promote both QIBA and the Profile leading to increased citations and use by the medical community
- The updated manuscript was re-submitted to *Radiology* on 8/21 and is now being considered as a new submission to possibly be included with a Special Report Issue
- An alternate plan for publication is in place should *Radiology* not accept the manuscript for publication

Global QIBA Conformance Efforts:

- Ad hoc SIG calls are focusing on transforming mature Profile checklists into site conformance processes
 - Methods of conformance include self-attestation vs. full verification and an in-between option
- For a full verification model, QIBA volunteers would figure prominently as subject-matter-experts for verifying conformance, and building a large-scale sustainable model may be challenging
- Defining the paradigm is the challenge – QIBA needs to decide whether clinical trials are the focus or a more global view of clinical practice which also encompasses clinical trials
 - For broader adoption of QIBA Profiles and methods, some effort is needed to distill the checklist language into a 6 to 7-page clinical trial manual for acquisition sites; this 3rd document would require periodic updates
- The goal is to make QIBA conformance part of routine practice, expanding beyond the research setting

QIBA NM Modality Poster for RSNA 2019:

- The focus of the posters this year has been changed in hopes of appealing to the broader radiological community and demonstrating how QIBA and QI are valuable, and can enhance clinical practice and clinical trials
- Each modality will have one poster, which will be a combined effort across BCs
- The posters should be visually appealing, with more images and less text
- The focus should be on marketing QIBA and QI, including topics such as:
 - The need for QI in AI
 - Data Science
 - Clinical Trials (Pharma)
 - Standardization (equipment vendors)
 - Algorithm development (software vendors)
 - Highlight specific use cases (both clinical and research)
 - Could also highlight disease focused areas and treatment guidance
- Emphasis should be on the impact of QI and showcasing the work of QIBA
- Dr. Sunderland is working on a template, and plans to send his draft to the PET Amyloid BC prior to their call

- Elements that may be included are the *Journal of Clinical Oncology* (JCO) article suggested by Dr. Wahl
 - This article discussed how a 40% decrease in SUV lean with two drugs was a predictor of complete response by pathology
 - The study used the UPICT protocol and the QIBA FDG-PET/CT Profile, which would be a good marketing piece
- Additional studies that use Quantitative PET which show tabulated outcomes or efficacy of new drugs are welcome, though these may be difficult to find
- Metabolic tumor studies that show compelling predictive data may also be useful
- Focusing on workstation vendors, Pharma, and acquisition device vendors would engage more stakeholders beyond clinicians
 - Pharma may be engaged by the Amyloid section, due to their work with PET tracers
 - Highlighting the work of these vendors and demonstrating how they are QIBA conformant or working toward conformance may also be beneficial
 - For example, Siemens includes QIBA checklist requirements for all new release testing
 - The requirements are written in a very industry-friendly format and have proven helpful
 - Dr. Sunderland to solicit input from Dr. Wollenweber (GE) and a representative from Philips

United Healthcare Imaging (UHI) (China):

- Dr. Wahl mentioned that UHI is a new vendor out of China that is gaining market share in the US with Volumetric PET and PET-MRI equipment
- They are not presently involved in QIBA and Dr. Wahl suggested that the BC leaders invite them to join
- Due to time differences, it may be difficult for them to join calls; however, additional vendor input may be helpful, as QIBA methods do encourage sharing of vendor protocols in Profile appendices without revealing any proprietary methods
- Dr. Sunderland will try to initiate contact and will send UHI the FDG-PET scanner checklist to invite them to see if they are conformant

Test-Retest Study Update:

- Drs. Sullivan and Wahl met with an immunotherapy imaging group regarding a proposed FDG-PET trial
- Very early discussions indicate hope that the FNIH may agree to fund a test-retest study
- Dr. Sullivan has agreed to communicate any substantive updates
- Dr. Higley mentioned that the trial would be based on a checkpoint inhibitor design

Nuclear Medicine Schedule: *The next scheduled QIBA calls will be as follows at 9 am CT unless otherwise noted:*

9/10	SPECT TC ^{99m} BC @ 2 pm CT	10/04	FDG-PET BC
9/13	PET Amyloid BC	10/08	SPECT TC ^{99m} BC @ 2 pm CT
9/18	NM Poster Dev Call @ 10 am CT	10/11	PET Amyloid BC
9/27	NM Leadership – TBD	10/25	NM Leadership – TBD
11/08	Print-ready copy deadline for QIBA CC posters		
11/15	NM Q4 Coordinating Committee		

RSNA Staff attempt to identify and capture all committee members participating on WebEx calls. However, if multiple callers join simultaneously or call in without logging on to the WebEx, identification is not possible. Call participants are welcome to contact RSNA staff at QIBA@RSNA.org if their attendance is not reflected on the call summaries.