

## QIBA FDG-PET Biomarker Committee Call

06 January 2017 at 9 AM CT

Draft Call Summary

### In attendance:

Scott Wollenweber, PhD (co-chair)  
Orest Boyko, MD, PhD  
Janice Campbell, PhD  
Howard Higley, PhD  
Paul Kinahan, PhD

Jeff Kolthammer, PhD  
Martin Lodge, PhD  
Nancy Obuchowski, PhD  
Amy Perkins, PhD  
Uma Ranjan, MSc, PhD

Anne Smith, PhD  
Mitsuaki Tatsumi, MD  
Timothy Turkington, PhD  
Richard Wahl, MD  
Jeffrey Yap, PhD

### RSNA

Joe Koudelik  
Julie Lisiecki

**Moderator:** Dr. Wollenweber

### Discussion Topics included:

#### RSNA 2016 (QIBA Breakout Session) Discussion Overview

- Profile status and next steps beyond the Technically Confirmed phase
- Extension of the claims scope under consideration to address mixed reviews regarding asymmetrical repeatability
- Test-retest groundwork studies may be necessary to update the Profile
- Other issues discussed included
  - Point spread function
  - Lean body mass
  - Time of flight
  - Asymmetric claim structure and achieving consensus on this topic
  - Next steps to achieve Profile Clinical Confirmation via crowd-sourcing (i.e. multiple sites to submit test-retest data)
  - How the Profile will address treatment response criteria needs additional discussion

#### Profile Status

- The Profile is currently at the [Technically Confirmed](#) stage and Dr. Kinahan has posted the [most recent version of the Profile](#) (v1.13) to the QIBA wiki
- Moving to the next phase will include the use of test-retest studies and Dr. Subramaniam's guidance will be needed
- Complications that may cause skewing of the data are related to asymmetric limits and differences in the ways that test-retest studies are analyzed
- These issues will need to be resolved by the group in order to have consensus moving forward
- Feedback from test sites would be ideal; however, determining logistics may prove difficult, as a coordinating site manager will be needed to address Technologist questions while implementing the Profile
- Possibly utilizing a divide-and-conquer approach by scanner expert may be helpful; however, this remains a challenge

#### Checklist Update

- The final version of the checklist has been included as an Appendix for the Profile
- The checklist has been broken down into *two* checklists for more tailored use, posted to the QIBA wiki:
  - A [site checklist](#)
  - A [scanner-specific checklist for vendors](#)
  - Comments or edits may be sent to: [timothy.turkington@duke.edu](mailto:timothy.turkington@duke.edu) and [kinahan@uw.edu](mailto:kinahan@uw.edu)

#### Action items for next call (February 3<sup>rd</sup>):

- All are asked to review the [most recent version of the Profile](#) posted on the QIBA wiki prior to the next call
- If available, Dr. Subramaniam to provide details regarding the test-retest studies and suggestions on moving the Profile toward the Clinically Confirmed stage

---

#### Notes from RSNA QIBA FDG-PET/CT Biomarker Committee Breakout session

Date: 30 Nov 2016

Reviewed on Biomarker Committee WebEx 2017-01-06

Provided by: Paul Kinahan, PhD

Summary of topics raised in discussion:

1. We should review asymmetric claim at next BC call
  - What are implications for response criteria (i.e. PERCIST)?
2. We should review checklists on next call
  - Tim to lead
  - Should we ask technologists to review?
  - Good opportunity to refresh everyone on current Profile
3. We should synchronize profile versions
  - (not sure what this means, perhaps w.r.t. with the standard QIBA form?)
4. How do we get to clinical confirmation?
  - There was agreement this is good, but not clear if it is feasible
  - can also discuss a crowd-sourced trial for clinical confirmation
  - Leveraging iCROs and or moonshot to add re-test studies
  - see funding and/or support from ECOG-ACRIN
5. Claim should be reassessed for LBM, PSF and TOF
  - Could start with IQ phantom data from harmony project comparing w/ w/o PSF TOF
6. Other tracers: FLT and Ga68-PSMA.
7. What about PET/MR?
8. Note that Technically Confirmed Profile (version 1.13) is on Wiki site <http://qibawiki.rsna.org/index.php/Profiles>

***Nuclear Medicine WebEx Schedule:***

**Jan 13:** ad hoc Amyloid PET Physics call

**Jan 20:** Amyloid BC

**Jan 27:** NM Leadership / TBD

**Feb 03:** FDG-PET BC