

QIBA FDG-PET Biomarker Committee (BC) Call

01 February 2019 at 9 AM CT

Call Summary

In attendance:

Rathan Subramaniam, MD, PhD, MPH (Co-Chair)
Howard Higley, PhD
Nancy Obuchowski, PhD
Amy Perkins, PhD

Eric Perlman, MD
Fabien Ricard, MD, MS
Kelley Ryan, MHS
Anne Smith, PhD

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

RSNA

Joe Koudelik
Julie Lisiecki

Moderator: Dr. Subramaniam

Radiology Manuscript Update

- Dr. Subramaniam to follow up with Dr. Kinahan offline for an update

Follow up with ACR Foundation (Dr. Subramaniam)

- There was a call with the ACR Foundation recently to discuss the test-retest grant application
- Due to leadership changes, the committee which appropriates funding has not met since June 2018
- There is no timeline for the next meeting, which means that funding decisions are on hold
- Drs. Sunderland, Guimaraes, and Perlman will look into alternate options such as in-kind donations to support needed groundwork projects
 - Mr. Tervé and Dr. Boyko have also expressed interest
 - RSNA Staff to follow up with Drs. Guimaraes and Sunderland to build a doodle poll

Estimation of what remaining groundwork is needed

- BC members to consider if there are knowledge gaps requiring groundwork projects if QIN or NIBIB funding were to become available
- Some suggested topics for groundwork studies included the following:
 - What minimum dose counts are acceptable to produce images without sacrificing performance?
 - How much noise is acceptable? Is a region in a normal liver sufficient for noise measurements?
 - Addressing lean body mass in greater detail
 - Determining whether current SUV measurements are sufficiently robust and whether SUV is being used
 - More data showing that SUV and SUV-change would be valuable
 - Working toward a PET/MR Profile by adapting the current FDG-PET/CT Profile
 - It is unclear, but there are PET/MRI people who are interested; they just need to be more formally engaged
 - Looking at reduction and infiltration numbers in relation to the quality of the injection
 - Reviewing noise measurements from a medical physicist's perspective
- For any groundwork project, a "champion" would be needed
- The proposed clinical trial is the highest priority in efforts to progress to Profile Stage 4: Claim Confirmed

From the last call in November –

Clinical Trial Task Forces

- Volunteer effort will be needed to organize a trial; BC members are asked to volunteer for one of the following 3 groups by responding to RSNA Staff: jlisiecki@rsna.org:
 1. **Trial Logistics Group** (led by Dr. Perlman)
 2. **QIBA Conformance Group** (led by Dr. Sunderland)
 3. **Data Definition Final Design Group** (led by Dr. Subramaniam)
- It is imperative that progress be made on the protocol definitions and trials design
- Dr. Perlman mentioned that BC members need to discuss ways to engage others who are needed to create the necessary infrastructure
 - Institutions are needed to share data from patients, and volunteers will be needed to do the readings
 - A platform is needed for volunteer readers to access/read and store analysis results, and a web-based one would be ideal
 - In-kind donations from different organizations would be most appreciated
 - Potential targets must be identified as well as image management, e.g. *AG Mednet, Triad?*
 - Data storage needs to be considered; it needs to be determined if the QIDW is a possibility
 - Image display stations must also be selected, such as *MIM, Hermes, or TeraRecon*
 - It was noted that Dr. Knopp recently finished working with Imaging Core Lab to collect data for an NIH study, and the data for 171 patients will be available at TCIA for additional analysis
 - It might be worthwhile to ask TCIA if they might be willing to collaborate

Action Items:

- All are asked to volunteer for Clinical Trial Task Forces by contacting RSNA Staff: jlisiecki@rsna.org
- The next call will focus on how to encourage Profile and Checklist use at clinical institutions
- Finalize a detailed trial design with a checklist for conformance
- Develop case report forms ([RedCap](#)) and reader manual

Nuclear Medicine Schedule:

2/8/2019	PET Amyloid BC
2/12/2019	SPECT BC: TC ^{99m} @ 2pm CT
2/15/2019	I-123 BC – TBD by co-chairs
2/22/2019	Hold for NM Coordinating Committee
3/1/2019	FDG-PET BC
3/8/2019	PET Amyloid BC
3/12/2019	SPECT BC: TC ^{99m} @ 2pm CT
3/15/2019	I-123 BC - TBD by co-chairs
3/22/2019	NM Leadership - TBD

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.