QIBA SPECT Biomarker Committee (BC) Friday, February 16, 2018, 9 AM (CT)

Call Summary

In attendance: RSNA

Yuni Dewaraja, PhD (Co-Chair)Rachid Fahmi, PhDKevin O'Donnell, MAScJoe KoudelikP. David Mozley, MD (Co-Chair)Paul Kinahan, PhDEric Perlman, MDJulie Lisiecki

Denis Bergeron, PhD Robert Miyaoka, PhD Andrew Prideaux, PhD

John Dickson, PhD Nancy Obuchowski, PhD

Moderators: Drs. Mozley and Miyaoka

Discussion:

- The TC-99m oncology Profile TF is aiming to have a first draft ready for the f2f QIBA Annual Meeting in May at RSNA HQ
- The I-123 Profile TF intends to meet only as needed; planning for feasibility testing is being done offline by Drs.
 Dickson and Seibyl
- Three sites have volunteered for I-123 conformance testing to-date:
 - o Weill Cornell (Dr. Mozley)
 - o NHS UK (Dr. Dickson)
 - Yale / Institute for Neurodegenerative Disorders (Dr. Seibyl)
- Dr. Kinahan described the FDG-PET checklist that Dr. Turkington had used for site feasibility testing
- He explained that while it may be possible for a site to implement recommendations from the Profiles, not all sites will conform to all of the steps prescribed in the Profile
 - o Providing 3 multiple choice selections on a checklist, as follows, could be helpful:
 - Yes, we can meet these criteria (i.e. routinely do already)
 - No, these criteria cannot be met
 - Yes, we can meet these criteria but choose not to perform these steps as part of our protocol
- In addition, the FDG-PET team performed two rounds of feasibility testing, to facilitate improvements based on input from the testers
 - Round 1: Testing done by long-standing BC member sites with solid understanding of the Profile
 - Round 2: Testing done outside of QIBA with new sites, not familiar with the Profile (new perspectives)
 - Additional testers, particularly manufacturers, were invited for the second round of testing
 - Requesting testing at 2-3 sites in Japan suggested, but reserved for Round-2 (when most of the rough edges have been identified/addressed from Round-1)

Additional Groundwork Reviewed:

- Dr. Dewaraja is doing some additional ground work for TC^{99m} to better quantify liver and lung tumors, in order to plan for a "whole-body" Profile
- Dr. Miyaoka reviewed progress made on new groundwork for I-123, which was included on the RSNA 2017 poster
 - He presented results for specific binding rations (SBR) for the digital reference object (DRO), detailing comparisons amongst various software analysis packages
 - o Each of the packages returned fairly different values, and the team needs to consider how these values may impact the Profile
 - o Dr. Prideaux volunteered to provide additional DRO analysis data from Hermes

Claims:

- Currently, the TC^{99m} Profile contains a longitudinal claim (based on use of the same analysis software package); this claim may be expanded to allow for different analysis software at two time points if bias was considered
- If the team wanted to add a cross-sectional claim, it would need to factor in how much bias to expect
- In addition, linearity would need to be shown for a claim that demonstrates the amount of change between two time points

Action items:

- Drs. Dickson and Seibyl to work on conformance plan for Ioflupane Profile
- Dr. Dickson to follow up with RSNA Staff regarding whether or not an I-123 TF call is needed

Call Scheduling:

- An I-123 Profile Task Force (TF) call will be scheduled for the first Tuesday of the month, if needed
- A TC-99m/ oncology TF call will be scheduled for the second Tuesday of the month
- A sign-up sheet is available for the Technetium TF: https://goo.gl/forms/XUjy203aiWvNJCFI1
 - o Technical scribes are needed; if interested, please respond to Dr. Mozley: mozley@gmail.com

New members

- All are encouraged to recruit new members regularly; new names can be sent to qiba@rsna.org
- Previous meeting agendas, Profile versions, and work products are available in the group's Dropbox folder

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. QIBA wiki

Nuclear Medicine WebEx Schedule:

03/02 FDG-PET BC03/09 PET Amyloid BC03/16 SPECT BC

03/23 NM Coordinating Ctte CC *(new date)*

SPECT TF call: 03/13 TC 99m Profile Development