QIBA PET Amyloid Biomarker Committee

11 December 2015 at 9 AM CT

In attendance: **Participants: RSNA** Ronald Boellaard, PhD Joe Koudelik **Co-chairs:** Alan Maurer, MD Satoshi Minoshima, MD, PhD Orest Boyko, MD, PhD Nancy Obuchowski, PhD Julie Lisiecki Eric Perlman, MD John Hoffman, MD Annette Schmid, PhD Anne Smith, PhD Edward Jackson, PhD Rathan Subramaniam, MD, PhD, MPH Paul Kinahan, PhD, FIEEE Daniel Sullivan, MD Gregory Klein, PhD Jean-Luc Vanderheyden, PhD Brian Zimmerman, PhD Adriaan Lammertsma, PhD

Prior Meeting Review

- Minutes from 13Nov2015 teleconference approved without modification
- Draft minutes from RSNA QIBA Amyloid PET working group session provided & reviewed

Dawn Matthews, MS, MBA

Literature Review

- Dr. Subramaniam gave an overview of his literature review of radiotracers
- Some unanswered questions remain regarding F¹⁸ amyloid tracers, including:
 - Can/should we separate the 18-F from the 11-C PiB data? -> Dr. Subramaniam's group will do the analysis and present
 - o Can/should we have separate claims for normals, MCI and AD subjects?
 - If not, do we group them all together or just report for normals?
 - o Can we learn anything re repeatability from more recent clinical trials that used 18-F PET amyloid tracers?
 - Need to weigh "the best we can currently do" with "variance is too high to be of use" when we write the claim

Profile Updates

- The Profile Comment Review document highlights issues in need of resolution. All BC members are encouraged to review the document (in totality or directed to their area of expertise) and to complete the new Profile Comment Review Template with their comments. Regarding the current Review spreadsheet,
 - o Comments are color-coded:
 - yellow = open (revisions have been made, still in need of group approval)
 - green = open (revisions need to be discussed with the group)
 - Additional review of these comments is planned for the call on January 15th at 9 am CT
- Ms. Matthews and Drs. Subramaniam and Lammertsma volunteered to work on Section 4.4: ROI definition.
 - o This section was pulled from the FDG-PET Profile and needs to be re-written specific to Amyloid analysis
- Directive for inter-time point tracer uptake time allowance is current gap in scientific literature
 - o Dr. Boellaard will consider project/review of data to address this issue
- Once the internal Profile draft review is completed, it will be distributed for public comment.
 - o RSNA staff will collate a preliminary list of Public Reviewers.
 - Members are requested to provide additional names of either individuals and/or societies/organizations to whom the Profile can be distributed for the Public review.

Upcoming NM Call Schedule / Topics

- Drs. Kinahan and Sunderland to further explain the DRO and amyloid physical phantom respectively, and how these may be used in conjunction with the Profile to measure "conformance"
- Logistics for Profile feasibility testing and a review process need to be discussed

• Consider joint meeting with interested MR QIBA members to understand use of MR volumetry in AD.

Upcoming QIBA Nuclear Medicine BC Calls (Fridays, 9 am CT):

Jan 8: FDG-PET BCJan 15: PET-Amyloid BC

Jan 22: SPECT BC

• Jan 29: TBD - Nuclear Medicine Combined BCs

SPECT Task Forces: (Tuesdays at 2 pm CT) – pending availability of co-chairs

Dec 29: No call (RSNA Winter Break)

• Jan 5: Image Acquisition and Image Processing for DaTscan – Dr. Dewaraja

• Jan 12: Quantitative and Image Analysis – Drs. Miyaoka and Seibyl

• Jan 19: Phantoms/ DRO Group – Drs. Dickson and Zimmerman

• Jan 26: Clinical / Literature Review – *Dr. Seibyl*