QIBA PET Amyloid Biomarker Committee (BC) Call
14 July 2017 at 9:00 AM CT
Call Summary

In attendance:			RSNA
Anne Smith, PhD (Co-Chair)	William (Bill) Bridge	Eric Perlman, MD	Joe Koudelik
Satoshi Minoshima, MD, PhD (Co-Chair)	Anurag Gupta, PhD	Rathan Subramaniam, MD, PhD, MPH	Julie Lisiecki
Ronald Boellaard, PhD	Edward Jackson, PhD	John Sunderland, PhD	
	Nancy Obuchowski, PhD	Richard Wahl, MD, FACR	

Moderator: Dr. Smith

Profile Public Comment Update:
- The Profile was released on June 1st for public comment; four comments have been received to-date
- Committee members intend to follow up personally with colleagues in order to solicit targeted feedback
- Volunteer contacts for sister organizations are as follows:
    o Alzheimer's Association (Dr. Minoshima)
    o ADNI (Dr. Minoshima)
    o GAAIN (Dr. Minoshima)
    o FNIH (Dr. Wahl)
    o NIA (Drs. Wahl and Minoshima to contact Peter H. and others)
    o AFAR (Dr. Vanderheyden)
    o European and Japanese Initiatives (Dr. Boellaard)
    o Human Amyloid Imaging Group (Dr. Subramaniam)
    o SNMMI Brain Council (TBD)
    o Keith Johnson (to be contacted by Dr. Gupta, with some text provided by Dr. Smith)
- A strategy to triage and address comments is under development; co-chairs will review comment resolution spreadsheets from FDG-PET, SPECT, and MR Profiles
- Dr. Jackson to forward the CT Volumetry template to Dr. Smith for reference
- Google docs were also mentioned as a tool useful for reviewing comments by 2-3 core team members

Next Steps for the Current Profile:
- Finish the DRO, which is important to move the Profile forward
    o Volunteers needed to drive this effort and perform the feasibility test

- **Reference region / segmentation project**:
    o Once the DRO is stable, the group must determine what is needed for imaging analysis work station conformance
    o Image analysis vendors to be involved including the following known vendors and others, TBD:
        ▪ GE
        ▪ Hermes
        ▪ MIMNeuro
        ▪ Mirada
        ▪ Philips
        ▪ PMOD
        ▪ Siemens
    o A standard set of patient data will be used to test the variability of different analysis packages
    o Reports will be generated on the variability of region statistics and SUVRs
    o Data are needed from 3 different PET amyloid tracers
    o Assistance will be requested from: Drs. Obuchowski and Koeppe and Ms. Matthews
    o The following labs will be asked to help with standard datasets and advise on the project protocol:

- Bill Jagust at UC Berkeley
- Cliff Jack at Mayo Clinic
- Reesa Sperling at Brigham and Women's

- QIDW and its role in Profile development and conformance assessment will be considered, including:
  - Specific improvements that would increase its impact for BC efforts
  - Storing the DRO for Image Analysis Workstation (IAW) image analysis performance assessment

- Dr. Wahl also mentioned that the multi-reader study was just published in the *Journal of Nuclear Medicine* with Dr. Joon Hyun O as the lead author
  - The goal of this study was to understand the variability of software analysis packages

Groundwork Projects:

Funded
- Ms. Matthews has a project on the effect of reconstruction on SUVRs
  - A poster will be produced for IEEE MIC 2017
- Dr. Kinahan has a DRO project
- Dr. Lodge is working on the effects of Point Spread Function (PSF) in conjunction with the FDG-PET BC

Unfunded
- Dr. Boellaard is exploring the effect of uptake time on different tracers (looking for funding mechanisms)
- Dr. Lammertsma is exploring the coffee break protocol with 2 amyloid agents; work to be done this summer

Future biomarker ideas:
- Tau agents were suggested as a future addition to the Profile
  - However, tau study is a very fluid field and not mature enough yet for a full Profile
  - Test-retest studies would be needed
  - It was suggested to wait until it is clear that there are agents that will be approved

Next Profile Version for PET Brain:
- Update PET Amyloid Profile to include PET / MR
- FDG: Make it more specific and useful for dementia imaging

Action items:
- Dr. Jackson to forward a template to Dr. Smith
- Dr. Gupta to reach out to Dr. Sperling and Dr. Johnson

NM WebEx Schedule:

7/21	SPECT BC
7/28	NM Leadership (TBD)
8/4	FDG-PET BC
8/11	Amyloid BC
8/18	SPECT BC
8/25	NM Leadership (TBD)