QIBA PET-Amyloid Biomarker Committee
Friday, May 14, 2021 at 9 AM CT
Call Summary

In attendance:		**RSNA**
Dawn Matthews, MS, MBA (Co-chair)	Norman Foster, MD	Joe Koudelik
Satoshi Minoshima, MD, PhD (Co-chair)	Lindsay Quandt, MS, MBA	Julie Lisiecki
Anne Smith, PhD (Co-chair)	John Sunderland, PhD	
Tammie Benzinger, MD, PhD	Jean-Luc Vanderheyden, PhD	
Clara Ferreira		

Moderator: Dr. Smith

DRO updates

- Follow up conversation with Dr. Obuchowski will be needed regarding calculation questions
- Dr. Fahmi and a colleague at MIMVista have run the DRO analyses, with no success with the percent RC measurement
    - MIMVista used their Amyvid software which uses target avid regions and two different reference regions without the use of the MRI reference scan
- Feedback indicated that the DRO naming convention within the DICOM headers must be changed/made clearer
- A correct MRI reference for the DRO is needed
    - The BC is seeking permission from the University of Washington to use the original MRI patient scan that formed the PET-DRO
    - This T^1 image is needed for certain software packages to analyze data properly
    - An artificial MRI for image registration may need to be created (warped to the DRO) if permission cannot be granted, as this detail would be helpful for DRO users; Dr. Smith to follow up with Dr. Kinahan again
- A disclaimer is needed to clearly show that any created MRI data are <u>not</u> real to prevent any HIPAA concerns
- PET-MRI testing has been successful with extremely linear results
    - Some trouble with achieving expected percent RC
    - A user workbook was proposed to aid with selecting permutations for better results
- Ms. Matthews to follow up with Drs. Fahmi and Obuchowski offline regarding the measurement questions

Publishing the PET Amyloid Profile

- The BC is drafting a collaborative paper for peer-reviewed publication to promote QIBA and the Profile
- Details on barriers to Profile implementation are needed
- Dr. Lammertsma to add European process/regulation differences
- Dr. Foster inquired about Japanese and Korean reviewers
    - Dr. Minoshima to follow up with a colleague at J-QIBA to ask him to review
    - Dr. Sunderland has Korean contacts that he will invite
    - Dr. Benzinger also has neurologist colleagues in Korea if needed
- International reviewers are asked to note differences between their methods and the U.S. version
- Previously, it was decided that the group would target the *Alzheimer's and Dementia* journal, as it has the highest impact score and best targets their audience

Proposal for new testing method (Dr. Sunderland)

- Dr. Sunderland proposed a new method for uniform phantom testing involving a simulation, which could be a workaround for requiring the arduous and expensive Hoffman phantom
- This method would involve the use of a cylinder in place of the phantom to measure the reconstructed resolution from the center of the field of view
- Dr. Sunderland and Ms. Matthews to work offline to review the analysis previously performed on the uniform phantom

Action items (ongoing)

- Dr. Smith or Ms. Matthews to add a Profile note indicating that data are simulated to ensure that no questions are raised pertaining to HIPAA regulations
- Dr. Smith to follow-up with Dr. Kinahan re a T^1-weighted MRI for the DRO
- Dr. Vanderheyden to contact United Imaging colleagues to evaluate DRO and inquire about manuscript
- Dr. Lammertsma to add European differences and contact Australian colleagues: Christopher Rowe, MD, and Victor Villemagne, MD
- Dr. Lammertsma to contact Simon Cherry, PhD
- Dr. Minoshima to ask Japanese colleagues to read manuscript and point out any Japanese differences
- Dr. Sunderland to contact Korean colleagues to read manuscript and note and differences
- Ms. Matthews to reformat the Profile checklist from Excel to Word for ease of use
- Co-chairs to finalize feasibility questionnaire and discuss Mr. O'Donnell's suggestions

Next call – June 11th at 9 am CT