

QIBA PET-Amyloid Biomarker Committee (BC) Call

Friday, March 13, 2020 at 9 AM CT

Call Summary

In attendance:

Dawn Matthews, MS (Co-chair)

Anne Smith, PhD (Co-chair)

Tammie Benzinger, MD, PhD

Paul Kinahan, PhD

Adriaan Lammertsma, PhD

Nancy Obuchowski, PhD

RSNA

Joe Koudelik

Julie Lisiecki

Moderator: Dr. Smith

Status of PET-Amyloid Profile Feasibility Questionnaire and Profile

- Minor DRO issues regarding nonrealistic Cerebrospinal Fluid (CSF) values have been resolved
 - a new value set has been generated with 6 levels and 5 realizations
 - new set not yet available for download, however
- The next step is testing with amyloid processing software
 - Siemens MI (Dr. Smith) and ADMdx (Ms. Matthews) will test on their respective SW platforms
- Testing on different platforms remains uncertain; the BC will need to determine how to test the DRO to define common fields, e.g., SUVr, ratios, etc. in order to develop a template for reportable values
 - As regions are defined differently, it may not be possible to generate the same values
 - Use of centiloid maps may be helpful, as they are pre-defined for qualifying manufacturer platforms
- It will also be necessary to review the Profile guidelines to see if there are thresholds for acceptability
 - Dr. Kinahan to send his procedural notes for comparison
 - The SA process using the DRO needs to specify who performs the conformance (1) analysis and the (2) qualification, e.g., site, vendor, etc.
- Some software can be tailored, and some can be used as-is
 - Dr. Smith will check on these parameters with Dr. Fahmi
- Once most of these questions are answered, the BC will have a better idea of how the DRO test might be used for self-attestation and the conformance procedure can be finalized
- Technical confirmation has been narrowed down to a smaller number of questions that need to be addressed
- The questionnaire has been adapted from the FDG-PET Profile
 - Once finalized, it will be used to develop a self-attestation template
- The feasibility questionnaire has been divided by actor for ease of response
 - Dr. Sunderland has agreed to get the feasibility questionnaire answered at U-Iowa
 - Ms. Matthews is working on a Google or SurveyMonkey based format for ease of responding on smart phones
 - Dr. Wahl had also previously offered to assist with the feasibility questionnaire
 - Dr. Lammertsma recommended getting in touch with Dr. Boellaard in the Netherlands, as he is the European champion for PET standardization

Considerations for Technical Confirmation

- Getting the Profile to [Stage 3: Technically Confirmed](#) is the current goal
- More details regarding advancing through Profile stages can be found on the QIBA wiki here:
 - <http://qibawiki.rsna.org/index.php/Process>
 - http://qibawiki.rsna.org/index.php/Technical_Confirmation_Process#Planning
- Once completed, the PET-Amyloid Profile to be promoted as a finished product

Next Steps

- Dr. Smith to run the DRO with Dr. Fahmi to obtain additional feedback
- Dr. Kinahan to send needed changes for the Profile Appendix DRO Section
- Ms. Matthews to get in touch with Drs. Minoshima and Wahl regarding site testing
 - Actor-specific checklists to be distributed to participating sites
 - Ms. Matthews may also contact Drs. Sunderland and Subramaniam

QIBA Nuclear Medicine Schedule:

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|--------------|--------------------------------------|
| 03/27 | NM Leadership @ 9 am CT |
| 04/10 | PET Amyloid BC @ 9 am CT |
| 04/14 | SPECT TC ^{99m} BC @ 2 pm CT |
| 04/17 | FDG-PET BC @ 11 am CT |
| 04/24 | NM Leadership @ 9 am CT – TBD |