QIBA PET Tau Biomarker Committee (BC)

Friday, June 9, 2023, at 9 am CT Call Summary

Notes derived in part from Ms. Matthews' slides

In attendanceRSNA StaffTammie Benzinger, MD, PhD (co-chair)Rachid Fahmi, MSc, PhDBradford A. Navia, MD, PhDJoe KoudelikDawn Matthews, MS, MBA (co-chair)Clara FerreiraNancy Obuchowski, PhDJulie Lisiecki

Tobey James Betthauser, PhD, MS Norman Foster, MD Emily Olafson, PhD candidate
Santi Bullich, PhD Michael Haas, BSc Sandra Sanabria Bohorquez, PhD

Drew Campbell, PhD Adriaan Lammertsma, PhD John Seibyl, MD

Charlie Chen, PhD Antoine Leuzy, PhD Joanna (Jo) Shuping, BS
Patricia E. Cole, PhD, MD Richard Margolin, MD Dean F. Wong MD, PhD

Discussion topics

- Progress and status update on literature search by specific tracers
- Cross-sectional and longitudinal claim discussion
- In-person ad hoc QIBA BC meeting opportunities

Updates - Tracer literature leads

APN-1607	B. Navia/D. Campbell working to share unpublished metrics
AV-1451/Tauvid	L. laccarino and C. Ferreira are completing
GTP-1	S. Sanabria uploaded papers; 1 test-rest paper. Spreadsheet is being completed.
MK-6240	A. Leuzy completing, coordinating with T. Betthauser
PI-2620	spreadsheet and papers to N. Obuchowski; S. Bullich supporting as needed with data
RO-948	D. Wong and postdocs provided papers (uploaded to Dropbox) drafted summaries; A. Leuzy
	working with them to populate spreadsheet

• Tracers are being sorted into four categories (acquisition, test-retest, measurement, off-target binding)

Cross-sectional claim discussion

- Once all of the data have been collected from literature review, Dr. Obuchowski will review and provide guidance regarding claims
- QIBA claims are similarly structured to FDA claims and focus on technical performance only
- Within-subject coefficient of variation (wCV) will help to provide the basis for the technical claim
- Precision and bias estimates are needed to formulate Cross-sectional claims, based on phantom studies to assess ground truth
- Test/retest cutoffs are made where there is 'real change' within Longitudinal claims
- For every claim, there is a set of contextual caveats with variables that cannot be determined
- All claims are reliant on the wCV, which is why the literature search is so important
- Cross-sectional assessment is important for clinical patient evaluation, and is used for clinical trials
- Examples of cross-sectional claims, can be found in the <u>SPECT Ioflupane</u> and <u>Ultrasound Shear Wave Speed</u> (SWS) Profiles
- Claim: specified the quantitation performance (e.g., measurement confidence, detectable change)
- **Checklist**: specifies the conditions (e.g., equipment, calibration, patient management, process) to achieve the claim performance

Profile Promotion / Social Media

- Once a Profile is published, it is helpful to publish an article in a peer-reviewed journal to spread the word that the Profile is available for use
- Dr. Zahlmann worked with the FDG-PET/CT Profile BC to utilize the Checklist in a Profile conformance pilot

- The initial pilot with EARL had 50+ participants and demonstrated whether sites would be willing to or could implement the Checklist
 - The Checklist can be described as the necessary ingredients to meet a technical claim
- Ms. Ferreira suggested targeted social media posts to help promote the Profile
- Specific hashtags are recommended to gain followers on Twitter, e.g., tagging an author in a specific journal article

Next Steps

- Complete literature review and work toward wCV details and claim formulation
- Identify longitudinal use cases
- Begin laying the groundwork to write a paper on the Profile once it is complete
- Consider LinkedIn and Twitter posts to promote the Profile

References shared

QIBA PET Amyloid Profile	QIBA FDG-PET/CT Profile	
QIBA SPECT Ioflupane Profile, v2 (example of cross-sectional claim)		
QIBA US SWS Profile (example of cross-sectional claim)		
QIBA LinkedIn page	QIBA Twitter page	
QIBA Videos		

Social media posts are typically made by RSNA staff. We welcome QIBA-related content and interaction with posts. Thank you.

QIBA In person meeting opportunities -

The Co-chairs would like to arrange *informal* QIBA ad hoc meetings at these conferences. Please respond with your availability to aid with planning: https://forms.gle/ndSh6yK6gvD5M47S9

- Society of Nuclear Medicine and Molecular Imaging (SNMMI): McCormick Place, Chicago, June 27, 2023
 - O QIBA-SNMMI session is from 8-9:15 am CT, South Building: Room S405AB, 4th floor.
- Alzheimer's Association International Annual Conference (AAIC): Amsterdam, July 16 20, 2023

Prior and ongoing action items in process:

- Link to task force sign-up sheet (3 Task Forces form #2)
- Task force calls will be scheduled independently by task force champions/leaders, who will have the responsibility of reporting back to the BC; Co-Chairs will follow up with Focus Area volunteers for next steps

Next Call: Friday, August 11th at 9 am CT {whole group}

There will be no July 14th call due to BC members traveling to the AAIC meeting in Amsterdam.

Parties interested in joining the QIBA LinkedIn page for QIBA updates should visit: https://www.linkedin.com/company/rsna-qiba