QIBA PET Tau Biomarker Committee (BC)

Friday, August 11, 2023, at 9 am CT Call Summary

Notes derived in part from Ms. Matthews' slides

In attendance **RSNA Staff** Tammie Benzinger, MD, PhD (co-chair) Michael Haas, BSc Nancy Obuchowski, PhD Julie Lisiecki

Dawn Matthews, MS, MBA (co-chair)

Rachid Fahmi, MSc, PhD

Norman Foster, MD

Clara Ferreira

Leonardo Iaccarino, PhD Emily Olafson, PhD candidate

Adriaan Lammertsma, PhD Jean-Luc Vanderheyden, PhD Dean F. Wong MD, PhD Antoine Leuzy, PhD

Richard Margolin, MD

Charlie Chen, PhD Gregory Klein, PhD John Seibyl, MD

Discussion topics

- QIBA Transition
- Options for moving forward
- Timeline
- Next steps

QIBA Transition

- New RSNA committee, the Quantitative Imaging Committee (QUIC) will assume oversight of RSNA's quantitative imaging initiatives
- In-process work to be completed by December 22nd
- In-process Profiles to be advanced to nearest stage and/or summary or white paper of the Profile to be published
- The QUIC will review future Profiles for inclusion in the QIBA Profile library, (processes TBD)
- QUIC may initially focus on 1-3 QIBs
- Feasible BC deliverables need to be determined for 4-month window
- QIBA Wiki will continue to be accessible post-transition
- BC members are welcome to submit comments or questions to the Future Direction of QIBA Activities Form

Options for moving forward

- 1. Focus only on producing a literature review paper or
- 2. Produce a PET Tau Profile within the known timeframe of resource availability by December 22nd
- BC members unanimously agreed to pursue option 2 and draft a Profile by December
- Scope of the Profile will be constrained to reasonable expectations
 - Checklist will be similar to the one for PET Amyloid, since scanner methodologies will not change
 - o Difference will be in analysis and population selection
 - Need to decide what claim(s) to pursue
 - Task Forces will be developed to review tracers and regions of interest
 - Agreed to avoid pooled tracer analysis due to limited timeframe
 - Will need to consider clinical variability and disease progression
 - Will not be able to address centaur regions due to lack of published data on this topic
- RSNA staff to aid with creation of a Google form to assist BC member input regarding Profile topics and claims
 - A free form entry to be included for additional thoughts
- Examples of cross-sectional claims: SPECT Ioflupane and Ultrasound Shear Wave Speed (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

- The timeline for Profile completion will be aggressive (below)
- Public Comment must provide enough time for comment, but short enough to complete necessary steps (this is typically 30 days)
- BC considering ways to reach Stage 2 (Consensus) in parallel

	August	September	October	November	December
Decide on plan A (lit review, opt-in) or plan B (tau profile based on amyloid profile)	11-Aug				
Agree on timeline and steps for profile:	11-Aug				
Technical confirmation (in parallel or not changing bc covered by amyloid profile?)		10-Sep			
Plan B1: Longitudinal claim: test-retest literature, Nancy wCV					
Plan B2: Cross sectional claim: ADNI data, Nancy wCV					
Writing: adapting amyloid profile to tau profile			15-Oct		
Writing: Nancy wsCV			15-Oct		
Internal review			31-Oct		
Public comment, consensus stage, comments incorporated				15-Nov	
Final posting and manuscript submission					15-Dec

Proposed revisions to timeline:

Toposed revisions to difference.					
Action items		Sept	Oct	Nov	Dec
Decide on plan A (lit review, opt-in) or plan B (Tau Profile based on Amyloid Profile)	ofile based on Amyloid Profile) 11-Aug				
Agree on timeline and steps for the Profile:					
Consensus in parallel (?) Not sure what this line item meansStage 2 is near last step (below)BC can address feedback as it's received this will speed up the entire process		10 Sept			
Plan B1: Longitudinal claim: test-retest literature, Nancy wCV					
Plan B2: Cross sectional claim: ADNI data, Nancy wCV					
Writing: adapting amyloid Profile to Tau Profile		15-Sept			
Writing: Nancy wCV		15-Sept			
Internal review (BC and CC voting, 14 days typically for each; we can do 7 days for each)		30-Sept			
Public comment (30 days needed), comments incorporated as they are received			31-Oct	30-Nov	
Incorporate comments and provide <u>Comment Resolution Spreadsheet</u> to staff					6-Dec
BC and CC voting to advance to Stage 2 (Consensus) (~7 days each)					20-Dec
Final posting and manuscript submission					22-Dec

Next Steps

- Complete literature review and work toward wCV details and claim formulation
- Identify longitudinal use cases

References

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				
Consensus (Stage 2): Comment Resolution Spreadsheet				
Clinically Feasible (Stage 3): Feedback Resolution Spreadsheet				
http://tinyurl.com/QIBA-Public-Comment-Form				

Next Call: Friday, September 8th at 9 am CT {whole group}

08/17	NM Coordinating Ctte – 1 pm CT
09/08	PET Tau BC
10/13	PET Tau BC
11/10	PET Tau BC
12/08	PET Tau BC
12/	Q4 NM Coordinating Ctte - TBD