QIBA fMRI Biomarker Committee (BC) Call

Wednesday, May 3, 2017 at 11 AM CT

Call Summary

In attendance			**RSNA**
Ted DeYoe, PhD (Co-Chair)	Nancy Obuchowski, PhD	James Voyvodic, PhD	Joe Koudelik
James Reuss, PhD (Co-Chair)	Jay J. Pillai, MD	Zhiyue Jerry Wang, PhD	Susan Weinmann
Ping Hou, PhD	David Soltysik, PhD	Francisco Zamorano, PhD	
Andrew Kalnin, MD			

Review of Previous Call Summary

- The 4.19.2017 call summary was approved as presented

fMRI Profile v1.0 draft (All)

- To support concurrent access and editing, the fMRI Profile v1.0 is on Google docs at: https://docs.google.com/document/d/1M8XywlKVYSl9_SXfmvkPzVdnunVTXHwc3CdnqFTrsCw/edit?usp=sharing
- Discussion continued on Section 4: Assessment Procedures
    - Parameters for 30 pairs (test/retest simulation) of DROs where each pair is one 'pseudo-subject' to be specified
    - Pairs should be within Profile performance limits to permit assessment of post-processing workflow reproducibility
    - An assumption is that DRO pairs have the same performance and motion parameters, but may have different randomly generated motion patterns, e.g. acceptable and unacceptable
    - Discussion on whether claim conformance can be achieved in the presence of noise
        - The amount of noise that would disqualify datasets needs to be determined
        - Motion may vary from zero to 3x the 'acceptable limit' (3 mm measured over entire volume)
    - Discussion on NVU
        - Since NVU is not a threshold-controlled parameter in the Profile, it is not within the scope of DROs
        - Suggestion to include dataset that shows a clear case of NVU
        - Too difficult to identify an accurate definition of NVU
    - Discussion on DROs to be generated and how to use them to test conformance
        - Performance specifications in Profile to be resolved to help determine what kind of DROs are needed
        - Those who plan to create DROs can share work and tools
    - The formula for calculating bias & precision can be found in the Appendix of the Profile
    - Assessment of bias to be indicated as open issue on Profile 1.0
    - Dr. Reuss to integrate Dr. Soltysik's comments
    - Next step is the MR CC e-ballot vote-to-release process

QIBA Annual Meeting

- No fMRI BC call on May 17 due to the QIBA Annual Meeting
- MR dashboard and report slide updates to be completed –Drs. Pillai & Voyvodic to include status of groundwork projects
- Dr. Reuss to call in remotely during fMRI Breakout Session, as he is unable to attend f2f

Next calls:

- QIBA fMRI Bias TF call - Tuesday, May 9 at 1pm CT (one-time start time change)
- QIBA fMRI Biomarker Committee call – Wednesday, May 31 at 11am CT (QIBA Annual Meeting on May 17-no call)