QIBA fMRI Biomarker Committee (BC) Call
Wednesday, May 3, 2017 at 11 AM CT
Call Summary

In attendance
Ted DeYoe, PhD (Co-Chair)  Nancy Obuchowski, PhD  James Voyvodic, PhD  RSNA
James Reuss, PhD (Co-Chair)  Jay J. Pillai, MD  Zhiyue Jerry Wang, PhD  Joe Koudelik
Ping Hou, PhD  David Soltysik, PhD  Francisco Zamorano, PhD  Susan Weinmann
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/1M8XywKVYSL9_SXfmbkPzVdnunVTXHwc3CdnqFRxw/edit?usp=sharing
• Discussion continued on Section 4: Assessment Procedures
  o Parameters for 30 pairs (test/retest simulation) of DROs where each pair is one ‘pseudo-subject’ to be specified
  o Pairs should be within Profile performance limits to permit assessment of post-processing workflow reproducibility
  o 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
  o 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)

  o 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

  o 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

  o The formula for calculating bias & precision can be found in the Appendix of the Profile
  o Assessment of bias to be indicated as open issue on Profile 1.0
  o Dr. Reuss to integrate Dr. Soltysik’s comments
  o 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)