QIBA fMRI Biomarker Committee Call Summary  
Wednesday, April 22, 2015 at 11 AM CT  

Call Summary

In attendance  
Jeffrey Petrella, MD (Co-Chair)  
James Reuss, PhD (Co-Chair)  
Andrew J. Kalnin, MD  
Feroze Mohamed, PhD  
Nancy Obuchowski, PhD  
Jay J. Pillai, MD  
David Soltysik, PhD  
James Voyvodic, PhD  
Zhiyue Jerry Wang, PhD  
Daniel Sullivan, MD  
Gudrun Zahlmann, PhD  
Yuxiang Zhou, PhD  
RSNA  
Joe Koudelik  
Susan Weinmann

General Announcements:

1. Review of previous call summary – approved as submitted

Old Business:

1. Review proposals for NIBIB RFR – 1st drafts due 4/27!
   - This discussion took up most of the hour-long call
   - Dr. Mohamed discussed this project
     - Two paradigms = language and lateralization
     - In year five, this group proposes to address language mapping issues in order to add two important quantitative claims to the version 1.1 fMRI Profile
     - Will test following hypotheses:
       - The spatial distribution of activations within homologous ROIs will be highly variable between subjects
       - The relative amplitudes of activations between frontal and temporal areas will be highly variable between subjects but less variable within subjects
       - The relative amplitude of activations between homologous ROIs in different hemispheres in the same subject will be similar between scans (laterality)
       - The upper half of the AMPLE spatial activation profile for homologous ROIs in the same subject will be similar between scans (spatial extent)
       - Inter-scan repeatability within subject will be greatest for scans that meet the quantitative data quality constraints (SNR, motion, performance, NV) identified in year four study
     - In testing the above hypotheses, the group will also consider alternative analysis and normalization strategies to see if they yield improved repeatability than the AMPLE approach
   - Deliverables
     - Quantitative spatial extent and laterality claims for fMRI language Profile 1.1
     - Quantitative data quality constraints to qualify fMRI Profile 1.1
     - Sample language repeatability scans will be uploaded to the QIDW to support findings
   - Detailed budget information is not expected at this stage; and estimate is sufficient

2. DRO Project update (Dr. DeYoe, Dr. Voyvodic)
   - Dr. Voyvodic will make revisions to the proposal based upon feedback from the group – will send to r. Pillai first
   - Repeat different tasks in same subject
   - Same tasks in different subjects
   - HIPAA issues

3. QIBA Annual Meeting, May 6th-7th – profile working session planning
   - Focus of the breakout sessions will be continued Profile development
• fMRI Profile ver 1.0 to be ready for Public Comment by October 2015

4. Profile Development (Feroze Mohamed) – continuing work

Next calls:

• QIBA fMRI Bias TF call (to focus on round 5 projects) - Tuesday, May 12th, at 10am CT
• QIBA fMRI Biomarker Committee call - Wednesday, May 20th, at 11am CT