

QIBA fMRI Biomarker Committee Call Summary
Wednesday, September 7, 2016 at 11 AM CDT
Call Summary

In attendance

Ted DeYoe, PhD (Co-Chair)
Thomas Chenevert, PhD
Cathy Elsinger, PhD
Andrew Kalnin, MD

Feroze Mohamed, PhD
Nancy Obuchowski, PhD
Jay Pillai, MD
Uma Ranjan, MSc, PhD

Walter Schneider, PhD
David Soltysik, PhD
James Voyvodic, PhD
Yuxiang Zhou, PhD, DABR

RSNA

Fiona Miller
Julie Lisiecki
Susan Weinmann

Review of Previous Call Summary

- The 08.24.2016 call summary was approved as presented

Profile 1.0 draft – continued review (Dr. Mohamed et al.)

- Profile v1.0 to focus on motor cortex and incorporate Dr. Voyvodic's DRO data and paradigms
- DRO results demonstrating a quantitative index process to detect activation to be incorporated
- The purpose of using a DRO is to determine what values to recommend in the Profile
- Table 3.8.2 Specification
 - Added table and crucial data
 - Image data processing, including image correction is addressed
 - BOLD Map Thresholding: if manual setting is being used, a peak threshold value in the vicinity of the motor cortex to be found (vicinity of the posterior frontal lobe and anterior parietal lobe), and 50% of this peak to be computed to determine the threshold
 - Agreement to use 50%, which is based upon literature findings
 - Contains detail on neurovascular uncoupling (NVU) and how it is assessed
 - Motor cortex to be used as a model system to understand NVU in context of motor system in which symmetry is a useful tool
 - NVU as a data qualifier: if there is no detectable signal, Claims will be irrelevant
 - The context of the Profile is pre-surgical mapping, without concern for other applications at this time
 - Dr. Pillai to draft content and submit to Dr. Mohamed
 - Clustering Identification or Region of Interest:
 - Single largest cluster in the vicinity of the posterior frontal lobe and anterior parietal lobe
 - The Claims in this Profile do not support a situation in which multiple clusters appear in that region of the cortex
 - Dr. Voyvodic to add cluster definition criteria for motor cortex data

Development of an fMRI poster for the RSNA 2016 Annual Meeting

- Last year's poster to be used as a template
- Poster due to RSNA staff by October 31 for printing

Next calls:

- QIBA fMRI Bias TF call - Tuesday, September 13 at 11am CDT
- QIBA fMRI Biomarker Committee call - TBD