

QIBA fMRI Reproducibility Work Group Update

Tuesday, March 6, 2012 at 11 AM CT

Call Summary

In attendance

James Voyvodic, PhD (Chair)

Paul Carson, PhD

Barbara Croft, MD

Ted DeYoe, PhD

Jeffrey Petrella, MD

David Soltysik, PhD

Domenico Zaca, PhD

RSNA

Julie Lisiecki

Discussion

- Discussion regarding different ways of quantifying the overlap of border measurements to correlate with the actual region of function for the neurosurgeon
- Goal is to figure out *what* is reproducible and to what degree
 - It is not possible to know if a result is 'good' simply because it is reproducible
 - Images need to be both quantitative and reliable in order to be useful
- Three main topics were discussed:
 1. The relevance between the reproducible segmented brain activation maps and the underlying biomarker as related to clinical performance
 2. The underlying biophysiology (focus of Claim)
 - Quantitative imaging must be correlated with the biomarker
 - Readout may be considered the biomarker
 - The relationship between the image and the function correspond to definition of the biomarker
 3. More discussion needed to identify the methodology in support of the Claim language
 - For example – Relationship between BOLD intensity, biophysiology and neurosurgery

Next Steps

- More work needed to determine Claim language

Next Calls

- QIBA fMRI Technical Committee, **Wednesday, March 14, 2012 at 11 am CT**
- QIBA fMRI Reproducibility Working Group, **Tuesday, March 20, 2012 at 11 am CT**