

## QIBA fMRI Reproducibility Work Group Update

Tuesday, January 10, 2012 at 2 PM CST

Call Summary

### In attendance

James Voyvodic, PhD (Chair)

Paul Carson, PhD

Barbara Croft, MD

Ted DeYoe, PhD

Feroze Mohamed, PhD

Laura Rigolo, MS

Domenico Zaca, PhD

### RSNA

Julie Lisiecki

### Scheduling

- New call schedule did not accommodate all group members; Dr Voyvodic to determine whether schedule to be changed once more

### Discussion – Reproducibility and Claims Revisions

- Discussion of motor mapping and how to get good language results
- Results need to be more general overall
  - Thresholding remains a problem
  - Group mission is to demonstrate that fMRI can be used as a biomarker
- It is not difficult to show that motor mapping is consistent and reproducible
  - Do not want to point out the “obvious” with claims
  - Claims need to be more specific, more quantitative, more focused on results
  - Reproducibility cannot be a claim

### Example discussed:

- Decision of where the boundary is located for eloquent cortex within a certain distance of the region in question
  - Claim suggests that this is quantitative; however, this particular evaluation is NOT quantitative – it is subjective
  - Measurement determined by the physicist / neuro-radiologist and adjusted for clinical relevance until it “looks right”
- Claim should be:
  - *fMRI is capable of revealing eloquent cortex within a margin of a certain measurement.*
    - (to focus on its use as a biomarker)
  - There is a qualification process that must occur to get this measurement correct
  - Consideration regarding how to include the issue of specificity
  - Proposed addressing these issues in Profile as “guidelines” for language-mapping and decision-making
  - Associate each issue with data that will demonstrate what happens if you do not follow the recommended guidelines
  - Push final decision making into the clinical segment
  - What should be done must be based on evidence

### Next Steps

- Dr. Voyvodic to consider alternate meeting times for fMRI Reproducibility

### Next Calls

- QIBA fMRI Technical Committee, *Wednesday, January 18, 2012 at 11 am CST*
- QIBA fMRI Reproducibility Working Group, *Tuesday, January 24, 2012 at 2 pm CST (may change)*