QIBA fMRI Biomarker Committee (BC) Meeting

Wednesday, May 3, 2023, at 11 a.m. (CT)

Meeting Summary

In attendance RSNA staff

Feroze Mohamed, PhD (Co-chair)
David Soltysik, PhD (Co-chair)
Shruti Agarwal, PhD

Cathy Elsinger, PhD Anthony Liu, PhD Nancy Obuchowski, PhD Judd Storrs, PhD James Voyvodic, PhD Francisco Zamorano, PhD Susan Stanfa

Review of Previous Meeting Summary:

The 04.19.2023 meeting summary was approved as presented

Topics Discussed:

- ROI Identification Section in Appendix A9
- Profile progress remaining issues
- Profile Claims

Next Steps / Action Items:

- Review of text for the ROI Identification section in the Appendix drafted by Dr. Storrs, as well as discussion on the procedure for registering the atlas brain to a subject's brain
- "Computing" removed from the preceding "Weighted laterality index" in the section title
 - o Dr. Agarwal to provide reference to support the statement that "calculation of language left/right laterality metrics is very sensitive to BOLD activation thresholding"
 - Dr. Liu provided via chat: Ruff M, et al. <u>Assessment of the language laterality index in patients with</u>
 <u>brain tumor using functional MR imaging: effects of thresholding, task selection, and prior surgery</u>
- Claim 2 on Weighted Laterality Index to remain in the Profile
- Suggestion to add 3rd Claim on the spatial extent of location of activations
- Discussion on how to update Figure 1 in Section 1.1: Clinical Context re: ROIs
 - Dr. Agarwal provided a paragraph from her paper citing various regions involved in expressive and receptive language area

Next Steps

- Dr. Storrs to update ROI Identification section text in the Appendix re: registration process
- Discussion on whether to add a 3rd Claim to be continued
- Next steps following completion of the Profile:
 - o Circulation for full BC internal review followed by a vote-to-release for Stage 1: Public Comment
 - o MR CC vote-to-release will follow
- White paper to be drafted once the Profile is completed and Dr. Voyvodic's reproducibility study data has been published

Next meeting: Wednesday, May 17, 2023, at 11 a.m. CT (1st & 3rd weeks of each month)