

## QIBA fMRI Biomarker Committee (BC) Meeting

Wednesday, January 18, 2023, at 11 a.m. (CT)

### Meeting Summary

#### In attendance

Feroze Mohamed, PhD (Co-chair)

Jay Pillai, MD (Co-chair)

David Soltysik, PhD (Co-chair)

Shruti Agarwal, PhD

Andrew Kalnin, MD

Anthony Liu, PhD

James Voyvodic, PhD

Yuxiang Zhou, PhD, DABR

#### RSNA staff

Susan Stanfa

#### Review of Previous Meeting Summary:

- The 01.04.2023 meeting summary was approved as presented

#### Topics Discussed:

- Remaining open Profile issues
- Edits to Appendix B: Biomarker Usage
- Process of selecting clusters for comparison

#### Next Steps / Action Items:

- Text related to the initial fMRI Profile on sensorimotor mapping cortical mapping with BOLD fMRI that represented a more rudimentary clinical application from the standpoint of presurgical mapping will remain
- Section 4: Assessment Procedures deemed relevant only to large scale clinical trials to prove that they are conforming to the Profile by demonstrating successful performance of assessment procedures
- Dr. Voyvodic recently recalculated peak and center of mass of clusters plots, and found that there was better agreement with centers of mass than peaks
  - The Claims for peaks will not be quite as rigorous as the Claims for center of mass of clusters
  - The Profile will give users confidence that the location of clusters is accurate
  - The Profile addresses how reproducible the location of a cluster is; how the location of it is measured in practice may not matter
  - The Profile needs to show how the center of mass is calculated
    - The difference between center of mass reproducibility and peak location reproducibility needs to be discussed
  - The following items will be added: (1) Figure showing how clusters are calculated, (2) Examples of two maps showing the pairing of clusters and the differences between them, and (3) Description of algorithm to be added
  - The point of the Profile is to explain how to perform the scan and quality control, and to distinguish maps that meet the Profile's pre-criteria (peak of t value of 8) from the ones that do not
  - Dr. Voyvodic to present more details on his algorithm and how it relates to the Claim during the Feb. 1 meeting
  - fMRI members were asked to review the Profile and send questions and comments to Dr. Soltysik, focusing on items that need to be completed prior to public comment
- Next steps following completion of the Profile:
  - Circulation for full BC review and a vote-to-release for Stage 1: Public Comment
  - MR CC vote-to-release will follow

**Next meeting:** Wednesday, February 1, 2023, at 11 a.m. CT (1<sup>st</sup> & 3<sup>rd</sup> weeks of each month)

**Join Zoom Meeting:** <https://rsna-org.zoom.us/j/87552084926?pwd=eU9MWGV6a3JWRHlkZ0wzdEZsK3JoQT09>

Meeting ID: 875 5208 4926 | Passcode: fMRI