QIBA fMRI Biomarker Committee (BC) Call
Wednesday, July 17, 2019 at 11 AM CT
Call Summary

In attendance
Feroze Mohamed, PhD (Co-chair)  Cathy Elsinger, PhD  David Scott, PhD
Jay Pillai, MD (Co-chair)  Erin Kelly, PhD  James Voyvodic, PhD
David Soltysik, PhD (Co-chair)  Flavius Raslau, MD

RSNA staff
Joe Koudelik  Susan Stanfa

Moderator: Dr. Soltysik

Review of Previous Call Summary
• The 06.19.2019 call summary was approved as presented

New fMRI BC Members
1. David Scott, PhD is a Scientific Director at BioClinica, Inc., where he has worked for 7 years
   • Has been using neuroimaging tools for almost 20 years
   • Currently supports the design, acquisition and analysis of MRI and Molecular Imaging endpoints for Neuroscience drug discovery
   • Enables central neuroradiologic reading, as well as quantitative analysis of MRI (including fMRI) from twenty multicenter trials worldwide
   • Studies in neuroscience were conducted at Johns Hopkins and the University of Michigan employing multi-modal imaging approaches
   • Hopes to contribute his experience in standardizing imaging to fMRI BC efforts

2. Dr. Erin Kelly, PhD is a Clinical Scientist at Canon Medical Systems USA, Inc. (formerly Toshiba), where she has worked for 12 years
   • Supports various projects in clinical application (including one with fMRI using resting state and DTI), specifically looking at chronic pain and hearing loss
   • Hopes to participate in emerging clinical trials

Dr. Elsinger provided the new members with a brief overview of the QIBA fMRI BC.

Profile v1.0 (motor-mapping)
• Dr. Soltysik provided updates re: changes made by Drs. Mohamed, Elsinger and himself
• The Profile and checklist have been edited and made consistent
• Redundant items and text not relevant to Profile Claim were removed
• In “actors and activities” listed in table 1 in Section 3: Profile Activities: “Scanner Operator,” was used to include either physicist or MR technologist
• Discussion regarding the source of supporting data for the fMRI Profile v1.0 Claim
  • It was suggested that the source of data may have been combination of DeYoe’s and Voyvodic’s datasets from their projects, as well as data from Dr. Pillai’s site
  • Based on a set of 30 subject test/retest dataset, Dr. Obuchowski’s statistical method is used to calculate the true confidence intervals needed to achieve the Claim
  • It was noted that the calculations to inform Claims were done ~2 years after the original fMRI groundwork studies were completed; they may not have been redone since data were updated
  • Suggestion made to reference past fMRI kiosk posters (located on the QIBA Wiki Education page) in effort to identify data source(s)
Datasets will need to be provided on the QIDW for Profile users to access and test

Dr. Voyvodic to submit his paper for publication once the figure is completed
  - He noted that his data has already been published, but it did not reflect Dr. Obuchowski’s methodology
  - Dr. Voyvodic to forward this 2006 paper to Dr. Soltysik

Dr. Kelly offered to review the v1.0 Profile and provide feedback

Once sites implement the checklist to determine if conformance is doable (i.e., feasibility testing), then final changes will be made to the Profile

Profile v2.0 (language-mapping)
- Suggestion to focus efforts on Profile 2.0, as there is a greater public interest and need for language-mapping
- Dr. Liu volunteered as Profile editor with the promise of support and guidance from the BC
  - Editor’s responsibilities include keeping track of section updates
  - Dr. Mohamed sent Dr. Liu the latest Profile document, and he reported that Dr. Liu’s work on Profile 2.0 is underway

- Dr. Mohamed to circulate papers (including Guissani (2010), Benjamin (2017) and Black (2017)) summarized by Dr. Soltysik in his PowerPoint slides
- Next call to focus on Profile v2.0, with Dr. Liu providing a progress update

Next call: QIBA fMRI Biomarker Cmte call – Wednesday, August 7, 2019 at 11am CT - 1st & 3rd weeks of each month

RSNA Staff attempt to identify and capture all committee members participating on WebEx calls. However, if multiple callers join simultaneously or call in without logging on to the WebEx, identification is not possible. Call participants are welcome to contact RSNA staff at QIBA@RSNA.org if their attendance is not reflected on the call summaries.