QIBA PET Myocardial Blood Flow (MBF) Biomarker Committee (BC)

Monday, December 12, 2022, at 9 am CT *Call Summary*

In attendance

RSNA Staff Julie Lisiecki

Rob deKemp, PhD (Co-Chair)
Jonathan B. Moody, PhD (Co-Chair)
Caroline Chung, MD, MSc, FRCPC, CIP
Nancy Obuchowski, PhD

Moderator: Dr. Moody

The following topics were discussed:

- Overview of RSNA 2022
- Profile claims based on tracers
- Potential new participants

Updates

- Dr. Moody gave an overview of the RSNA 2022 meeting, and the QIBA Symposium
 - Special note was made of the FDG-PET Profile conformance discussions regarding the EARL and RadSite pilots

Profile

- Each tracer has its own characteristic bias
 - o A sub-claim may be needed for each tracer, e.g., compartmental vs. net retention bias
 - Different compartmental models exist for ammonia and rubidium, and it would be helpful to cover the best practices for their respective commercial packages
- Plan to compare Dr. Lodge's cylinder phantom with cardiac insert and perform an analysis
- Would like to compare PET Amyloid and SPECT Technetium checklists, as well as FDG-PET/CT once new version is available
- Next steps will be to work on Checklists organized by actor per the streamlined Profile template

New BC participants

- Dr. Moody thinks it is time to start adding some BC participants to get additional expertise and input
- Some suggested colleagues were:
 - o lan Armstrong
 - Hans Harms
 - o John Prior
 - Sergey Nesterov
 - Jonathan Votaw
 - Jonathon Nye
 - Mark Hyun, an experienced technologist
- Drs. deKemp and Moody to contact potential participants and let Julie know if/when to add them to the call invitation

New action items:

- Dr. Moody to confirm which new participants to invite to the 1/23 call and provide any new emails
- Dr. Moody to start drafting the Radiologist checklist
- Julie to inquire if the presentations from the 2022 QIBA Symposium presentations at RSNA 2022 can be shared with the PET MBF BC team
- Julie to provide Word versions of the PET Amyloid and SPECT Technetium Profiles and Checklists; to check with Ms. Matthews and Dr. Miyaoka for latest versions

Ongoing action items: (please strike if complete)

- Dr. Moody to work on protocol design tables and share papers to shared drive
- Dr. deKemp to craft a bias table and review the linearity plot, looking at K¹ vs. flow values
- Dr. Moody to distribute Gould article and share RFIT manual
- Dr. deKemp and Dr. Lodge to review materials provided by Dr. Moody regarding GitHub and Manubot
- Dr. Moody to work on a DRO model; will look at QIBA work with DCE-MRI
- Review needed for 3.3 Product Validation, 3.4 Periodic QA, and 3.7 Pharmaceutical Administration
- Dynamic phantom scan protocol in Section 4 Assessment Procedures to be fine-tuned by Dr. Moody

Next Call: January 23, 2023, at 9 am CT (2nd and 4th Mondays) at 9 am CT

Parties interested in joining the QIBA LinkedIn page for QIBA updates should visit: https://www.linkedin.com/company/rsna-qiba

QIBA Process Committee Resources

- Process Committee Leaders: Kevin O'Donnell, MASc (Chair) | Michael Boss, PhD (Co-Chair)
- Wiki Resources: <u>Dashboard</u> | <u>Profiles</u> | <u>QIBA Profile template</u> | <u>How to Write a QIBA Profile</u> | <u>Claim Guidance</u> <u>Vetting requirements</u>
- Inventory of QIBA tools: QIBA LinkedIn page (please join / follow) | QIBA News | QIBA Community
- Other: QIBA Webpage | QIBA Wiki | QIBA Biomarker Committees | QIBA Organization Chart | Dropbox
- EndNote: To obtain access to the RSNA EndNote citations, please email: sstanfa@rsna.org.