

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

Monday, February 27, 2023, at 9 am CT

Call Summary

### In attendance

Robert deKemp, PhD (co-chair)  
Jonathan B. Moody, PhD (Co-Chair)  
Ian S. Armstrong, MPhys, MSc, PhD  
Caroline Chung, MD, MSc, FRCPC, CIP

Charles Hayden, BS, MSEE  
Martin Lodge, PhD  
Nancy Obuchowski, PhD  
John O. Prior, MD, PhD

### RSNA Staff

Julie Lisiecki

**Moderator:** Dr. Moody

### The following topics were discussed:

- Overview of Profile draft

### Overview

- Main clinical impact data is related to risk assessment
- MBF could help diagnose coronary artery disease and stenosis, though main goal remains risk assessment
- Will need to include details on blood-flow bias; need to find an index that relates to blood flow bias
- Claim may address absolute values for blood flow and reserve
- Focus has been on test - retest repeatability for a longitudinal claim
- Dead-time correction can lead to both over- and under- correction
- Shape of the phantom, and scanner and software versions matter; 20 cm phantom suggested because it is more widely available
- Aim with the Profile is not to be overly prescriptive with claims but to explain what needs to be done
- No comprehensive documentation of every possible combination but rather a recipe to meet the recommended bias and precision
- Want to get Profile to Consensus

### New action items:

- [Mr. Hayden](#) to provide some comments in a marked up version to Drs. Moody and deKemp
- [All](#) – Continue to review Profile draft and Checklist examples from other Profiles
- [All](#) – Choose sections based on your expertise to make comments and edits
- Expertise is needed in determining all of the measurement requirements; input needed from MBF device developers and users (Profile Section 3: Activities and Actors)

### Ongoing action items: (please strike if complete)

- [Dr. Moody](#) to draft publication based on Dr. Obuchowski's meta-analysis on MBF repeatability
- [Dr. Moody](#) to start drafting the Radiologist (Actor) checklist per the [streamlined Profile template](#)
- [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  $K^1$  vs. flow values
- [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:** [March 13, 2023](#), at 9 am CT (2<sup>nd</sup> and 4<sup>th</sup> Mondays) at 9 am CT

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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:** [Dashboard](#) | [Profiles](#) | [QIBA Profile template](#) | [How to Write a QIBA Profile](#) | [Claim Guidance](#) | [Vetting requirements](#)
- **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](mailto:sstanfa@rsna.org).