

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

Monday, October 23, 2023, at 10 am CT

Call Summary

Notes derived in part from Dr. Moody's slides

In attendance

Rob deKemp, PhD (Co-Chair)

Jonathan B. Moody, PhD (Co-Chair)

Nancy Obuchowski, PhD

Jennifer Renaud, MSc, BEng

RSNA Staff

Julie Lisiecki

Moderator: Dr. Moody

Discussion

- Reviewed updates to sections 3.8 - 3.13

Profile updates

- Removed image interpretation (section 3.13) – group felt there was not much to specify; for physicians to decide
- Will begin working on Appendix D, which will include recommendations for scanner models and protocols
- Claim limited to global LV flow
- In section 3.11, image analysis, will assess quality of model fit and reassess image QA based on criteria in section 3.10
 - Criteria for kinetic model “goodness-of-fit” needed
 - Qualitative visual assessment of model fit to data points
 - Image analysis software is distinctly different from reconstruction software and must provide the capability to fit a kinetic MBF model to dynamic PET data
- Dr. deKemp mentioned an upcoming multi-center trial in Canada.
 - He would like to draft a checklist to see if the sites could conform to the Profile
 - Suggested that SPECT TC^{99m} or PET Amyloid Checklists might be useful examples for distilling the specification tables point by point

Continue discussion on next call

- O¹⁵ water radiopharmaceutical recommendations needed from Dr. Harms
- Minimum requirements to meet the claim and best practices

Paper

- BC members plan to draft a paper primarily on meta-analysis of test-retest data
- Dr. Obuchowski will be asked to review statistical aspects

New / ongoing action items: (please strike if complete)

- All – consider other papers that may have supportive data
- Dr. Moody to draft publication based on Dr. Obuchowski's meta-analysis on MBF repeatability
- Dr. deKemp to craft a bias table and review the linearity plot, looking at K¹ vs. flow values
- Dr. deKemp to approach [ASNC](#) regarding future administrative support
- Dr. Moody to work on a DRO model; will look at QIBA work with DCE-MRI
- Dynamic phantom scan protocol in Section 4 Assessment Procedures to be fine-tuned by Dr. Moody

Next call: Nov. 13, 2023, at 10 am CT (2nd & 4th Mondays) | **Future calls:** 11/13, 11/20 (?), 12/11, 12/18 (?)

QIBA Process Committee Resources

- **Process Committee Leaders:** [Kevin O'Donnell, MASc](#) (Chair) | [Michael Boss, PhD](#) (Co-Chair)
- **Wiki:** [Dashboard](#) | [Profiles](#) | [QIBA Profile template](#) | [How to Write a QIBA Profile](#) | [Claim Guidance](#) | [Vetting requirements](#)
- **EndNote:** To obtain access to the RSNA EndNote citations, please email: sstanfa@rsna.org.