

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

Monday, December 18, 2023, at 10 am CT

Call Summary

In attendance

Rob deKemp, PhD (Co-Chair)

Jonathan B. Moody, PhD (Co-Chair)

Ian S. Armstrong, MPhys, MSc, PhD

Charles Hayden, BS, MSEE

RSNA Staff

Julie Lisiecki

Nancy Obuchowski, PhD

John O. Prior, MD, PhD

Jennifer Renaud, MSc, BEng

Moderator: Dr. Moody

Profile updates

- Reference to be made to prompt rate threshold in the table specific to acquisition devices
- Some edits may be needed re: the torso phantom
- Device is considered an actor though it requires a physicist or technologist to adjust dose
- Goal is to identify and keep only what is truly necessary
 - Considering changing some requirements to recommendations, as well as eliminating or consolidating some requirements to streamline the Profile

Those items that are considered 'shoulds' can likely be eliminated as the main focus is on technical performance

- Need to consider real vs. statistical changes
- The first draft of the Profile is nearly ready and preparation for public comment will begin in the new year
- BC members will need to supply a list of targeted SMEs for comprehensive feedback
- Dr. Moody to accept agreed upon tracked changes
- BC leaders to approach Dr. Lance Gould for assistance with public comment
- Dr. deKemp emailed Dr. Boss re: the template for asking for societal administrative support but has not heard back; Dr. deKemp to draft something on his own to contact [ASNC](#)
- Profiles at Stage 2 (Consensus) can be submitted for QUIC endorsement after December following the [process posted on the QIBA Wiki](#)

Next steps

- Drs. Moody and deKemp to try to schedule a call with their colleague at ASNC re: administrative support
- Dr. Moody to work on conformance (Section 5)
 - Will review FDG-PET/CT slides from their conformance pilot to better understand concept
 - Checklist will be broken down by actor
 - Consensus needed to decide what is absolutely required to meet the claim(s)
- Dr. deKemp is considering inquiring about a trial for test-retest repeatability to test the MBF Profile
- Make certain rationale is covered for all three tracers: rubidium (^{82}RB), ^{13}N ammonia, and ^{15}O -water
- Dr. Moody to incorporate model-specific recommendations for image acquisition and reconstruction to Appendix D
- Clarify motion correction in Table 3.8.2
- Ms. Renaud to work on the rubidium assessment procedure and edit the phantom protocol
- Dr. Moody to work on the checklist

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

Ongoing action items: (please strike if complete)

- Proposed inclusion of summary table of known standards values for reference to save time for users
- **All** – consider other papers that may have supportive data
- **Dr. deKemp** to draft a checklist for multi-center trial in Canada to see if sites can conform to the Profile
- **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 K^1 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
-

Resources

- Wiki: [Dashboard](#) | [Profiles](#) | [QIBA Profile template](#) | [How to Write a QIBA Profile](#) | [Claim Guidance](#)
[Vetting requirements](#)