

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

Monday, June 12, 2023, at 9 am CT

Call Summary

Notes derived in part from Dr. Moody's slides

In attendance

Jonathan B. Moody, PhD (Co-Chair)

Rob deKemp, PhD (co-chair)

Ian S. Armstrong, MPhys, MSc, PhD

Charles Hayden, BS, MSEE

Martin Lodge, PhD

Nancy Obuchowski, PhD

John O. Prior, MD, PhD

Jennifer Renaud, MSc, BEng

RSNA Staff

Julie Lisiecki

Moderator: Dr. Moody

The following topics were discussed:

- Review of changes to sections 3.4 - 3.7
- Phantom scan limitations

Discussion

- Reviewed updates to sections 3.4, 3.5, 3.6, and 3.7
- Retrospective check of patient scan used to determine and adjust dose
- Suggested reviewing Charles Watson papers from early 2000s
- Two areas under consideration:
 - Things that can be improved, e.g., dosing and accuracy
 - What has been done previously
- Daily QC with dynamic scan (centered on phantom scan)
- Preventive maintenance would not be a daily procedure
- Limitations of count rate with the phantom
- Explore comparable thresholds for different scanners
- Subject handling (3.6) and Radiopharm administration (3.7) introduced

Continue discussion on next call

- Radiopharm administration requirements (3.7)

Ongoing action items: (please strike if complete)

- **Dr. Moody** to try to find a technologist willing to join the call to discuss certain requirements, e.g., patient motion, etc.
- **Dr Armstrong** – Review QA requirements before next call and work on section 3.4.2 (table specifications)
 - Consider adding another row for general PET scanner QA
- **All** – consider other papers that may have supportive data
- **Dr. deKemp** to provide names and email addresses of new members to be added
- **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: July 10, 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:** [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.