

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

Monday, July 10, 2023, at 9 am CT

Call Summary

*Notes derived in part from Dr. Moody's slides*

### In attendance

Jonathan B. Moody, PhD (Co-Chair)

Charles Hayden, BS, MSEE

Nancy Obuchowski, PhD

Jennifer Renaud, MSc, BEng

Gudrun Zahlmann, PhD

### RSNA Staff

Julie Lisecki

**Moderator:** Dr. Moody

### The following topics were discussed:

- Review of changes to sections 3.4 - 3.7
- Phantom scan limitations
- Scanner analysis
- RSNA Board Directive regarding QIBA

### 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
- For section 3.4:
  - How comparable is the prompt rate threshold for saturation
    - RB-82 vs. F-18 vs. N-13 ammonia
    - NEMA line source phantom vs. Renaud torso phantom
  - Weight dependence of prompt rate threshold
- Limitations of count rate with the phantom
- Explore comparable thresholds for different scanners

### Continue discussion on next call

- Radiopharm administration requirements (3.7)
- O<sup>15</sup> water radiopharmaceutical recommendations needed from Dr. Harms
- Dr. Prior's recommendations needed for patient handling (3.6)
- Minimum requirements to meet the claim and best practices

### RSNA Board Directive regarding dissolution of QIBA / restructuring of quantitative imaging initiatives

- Dr. Zahlmann mentioned the RSNA Board Directive to discontinue administrative support of QIBA at the end of the year, although there will be a pathway for endorsement of Profiles by the new Quantitative Imaging Committee (QUIC)
- Dr. Moody will share the letter he received with other BC members.
- Biomarker Committees should discuss meaningful endpoints for the 5-month window
- A [QIBA Google form](#) regarding transition plans has been set up to collect questions from members
- Dr. Moody is resolute in his wish to continue working on the Profile and would like to get to Public Comment (Stage 1)

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

- **Dr. Moody** to provide a Profile draft prior to the next call (7/24) for group discussion
- **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 24, 2023, at 9 am CT (2<sup>nd</sup> and 4<sup>th</sup> 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](mailto:sstanfa@rsna.org).