

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

Monday, March 8, 2021 at 9 am CT

Call Summary

In attendance

Robert deKemp, PhD (Co-Chair)

Marcelo Di Carli, MD (Co-Chair)

Jonathan B. Moody, PhD (Co-Chair)

Michael Boss, PhD

Nancy Obuchowski, PhD

Anne M. Smith, PhD

Gudrun Zahlmann, PhD

RSNA Staff

Joe Koudelik

Julie Lisiecki

Moderator: *Dr. deKemp*

Discussion

- Dr. deKemp provided an overview of the test-retest literature search which he saved to the Dropbox folder in an Excel document
- Dr. Obuchowski discussed the test-retest data and claim development and noted that not much data are available and Within Subject Coefficient of Variation (WCV) metrics are needed; conducting a metanalysis would be helpful
- Some articles with reproducibility coefficients (RPC) were highlighted
- Most of the studies do not show significant bias between test and retest
- The WCV changes over time – Dr. Obuchowski to further review the papers to check for a common metric (same value)
- Dr. Di Carli recently shared RAMPART data with Dr. deKemp and Moody (approximately 500 records), though only 300 of these were randomized, and 100 were part of a placebo arm, which included one scan at baseline and a scan at one year
 - The placebo arm with 100 patients is the largest test-retest dataset where a core lab measured flows, within the context of a clinical trial
 - Siemens scanners were used, but they were not PET/CT and provided 2D data, not 3D
- Dr. Moody is following up on data use agreements between Brigham and Women's and Invia
 - More data are needed with more contemporary scanners, though Dr. Di Carli noted that flow numbers would be the same, regardless of scanner vintage; he suggested focusing on the ammonia data
 - Tracer delivery has also changed as it was not originally designed for newer 3D scanners

Other comments

- Dr. Boss reminded the group that QIBA wants widespread adoption of Profiles based on what is commonly found in the field and recommended use of data to inform the claims in order to field-test the Profile in the future
- Goal is to raise the performance bar without creating user pushback, i.e., need to avoid creating an overly stringent Profile
- Dr. Obuchowski reminded the group to test assumptions underlying the claim using feasibility testing and the Within Subject Coefficient of Variation (WCV) and bias data, focusing primarily on a longitudinal claim, as bias is currently unknown

Action item:

- **Dr. Moody** to check on data sharing agreement between INVIA and Brigham and Women's Hospital

Next Call: **March 22, 2021 at 9 am CT** (2nd and 4th Mondays) at 9 am CT

Parties interested in joining the [QIBA LinkedIn](https://www.linkedin.com/company/rsna-qiba) page for QIBA updates should visit: <https://www.linkedin.com/company/rsna-qiba>

Process Committee

- All Profile Editors are encouraged to join the QIBA Process Committee to learn about QIBA writing tips and processes and network with other Profile Editors to exchange best practices

Contact information for QIBA Process Committee Leaders:

- [Kevin O'Donnell, MAsc](#) (Chair) | [Michael Boss, PhD](#) (Co-Chair)

QIBA Wiki Resources:

- [Dashboard updates](#) | [Profiles](#) | [QIBA Profile template](#) | [How to Write a QIBA Profile](#) | [Claim Guidance](#)

Inventory of QIBA tools:

- [QIBA LinkedIn page](#) (please join / follow) | [QIBA News](#) | [QIBA Community](#) (discussion board)

Other: [QIBA Webpage](#) | [QIBA Wiki](#) | [QIBA Biomarker Committees](#) | [QIBA Organization Chart](#) | [Dropbox](#)

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