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

Monday, May 10, 2021 at 9 am CT Call Summary

In attendance RSNA Staff

Robert deKemp, PhD (Co-Chair) Marcelo di Carli, MD (Co-Chair) Jonathan B. Moody, PhD (Co-Chair) P. David Mozley, MD Nancy Obuchowski, PhD Julie Lisiecki

Moderator: Dr. deKemp

## **Discussion**

- BC members discussed preparing study level test-retest data for metanalysis
- Subject level estimates at rest and stress have been included from all studies
- There are up to 16 entries with reserve data available and a few studies with repeated analysis
- The raw data will be included
- Dr. Moody mentioned two studies had regional data where a non-standard method was used
  - These studies will be excluded as there is large variability between test-retest scans, and the stress wCV was 22%
- Most variability in regional data comes from different timepoints, erring on the side of positive bias
  - No same-day regional observations were available
- Dr. Obuchowski recommended keeping everything that might be useful, as well as providing a rationale for why any data should be excluded
  - o Data in question can then be excluded to see how results are affected
  - O The data have been updated in Dropbox
  - o Dr. Moody to email the latest spreadsheet to Dr. Obuchowski
    - Dr. Obuchowski would like to know how the rest and stress data are being distinguished
- Dr. Moody to determine the 3 5 most important factors in the day-to-day vs. same-day data and adjust for the most important factors
- Dr. Obuchowski to conduct two analyses for subject level data (day-to-day and same day) and will add a predictor in the model
  - A difference is only expected between day-to-day and same day data
- Dr. Mozley suggested that systems variance should be assessed for the following:
  - No obvious disease
  - No obvious drug
  - o Difference between rest and stress
- The two measurands, flow-reserve and stress, are the most clinically relevant
  - o If results from the two are very different, separate models can be created
- Based on the discussion, the team feels more confident about drafting claims once a good estimate of wCV values is available
- Dr. Obuchowski suggested testing a few more items prior to finalizing the wCV to determine if the wCV and standard deviation are constant

Action item: Dr. Moody to provide Dr. Obuchowski with the updated Excel file of subject level data

Next Call: May 24, 2021 at 9 am CT (2<sup>nd</sup> and 4<sup>th</sup> Mondays) at 9 am CT

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Parties interested in joining the QIBA LinkedIn page for QIBA updates should visit: <a href="https://www.linkedin.com/company/rsna-qiba">https://www.linkedin.com/company/rsna-qiba</a>

## **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
- QIBA Process Committee Leaders: Kevin O'Donnell, MASc (Chair) | Michael Boss, PhD (Co-Chair)
- Wiki Resources: <u>Dashboard</u> | <u>Profiles</u> | <u>QIBA Profile template</u> | <u>How to Write a QIBA Profile</u> | <u>Claim Guidance</u>
- 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: <a href="mailto:sstanfa@rsna.org">sstanfa@rsna.org</a>.