

QIBA Perfusion, Diffusion and Flow – MRI Biomarker Committee (BC) Update Call

Wednesday, September 2 at 11 AM (CT)

Call Summary

Participants

Michael Boss, PhD (Co-Chair)

James Ewing, PhD

Nancy Obuchowski, PhD

RSNA

Joe Koudelik

John Kirsch (Co-Chair)

Daniel Gembris, PhD

David Purdy, PhD

Susan Weinmann

Mark Rosen, MD, PhD (Co-Chair)

Edward Jackson, PhD

Suraj Serai, PhD

Daniel Barboriak, MD

Daniel Krainak, PhD

Daniel Sullivan, MD

Joseph Borrello

Chen Lin, PhD

Ying Tang, PhD

Mark Brown, PhD

Hendrik Laue, PhD

Ona Wu, PhD

Thomas Chenevert, PhD

Elizabeth Mirowski, PhD

Junqian (Gordon) Xu, PhD

Amita Dave, PhD

Krishna Nayak, PhD

Yuxiang Zhou, PhD

Bradley Erickson, MD, PhD

Moderators: Dr. Boss

Discussion of the RSNA Annual Meeting QIBA PDF-MRI Poster

- Each BC is permitted one poster
- Content for the 2015 poster
 - Dr. Rosen displayed last year's PDF-MRI poster and the group discussed possible updates
 - The audience for this poster is both QIBA members and those new to QIBA, so the approach should be more educational/ informational and less in-depth science
 - Ideas included:
 - Remove last year's "Profiles & Writing Groups" section in order to showcase PDF-MRI TFs, which are open to new members
 - Devote space to each TF, including an update on their activities
 - Include citation for NIBIB funding of PDF-MRI projects
 - Make poster more visual/graphic and less text-based
 - The poster needs to be submitted to RSNA Staff by October 28 in order to have it sent to print
 - Dr. Rosen will oversee the creation process of the new poster
- The possibility of a cross-modality poster focusing on DROs was discussed
- There will also be signage dedicated to general QIBA information that will contain the full, current QIBA organizational chart

Round 4 Updates and Summaries

- Dr. Barboriak provided an update on his project: "Digital Reference Object for DCE-MRI Analysis Software Verification 2"
 - Deliverables of this project included:
 - Intensive in-house evaluations of DCE-MRI software packages
 - Development of verification protocols and integration into profiling and compliance activities
 - Extension of simulations to generate more realistic synthetic dynamic datasets by generating DRO datasets using the following:
 - Images simulating B1 variations from -20 to +20
 - Signal intensity variation due to receiver coil heterogeneity
 - Additionally, Dr. Obuchowski has completed a comparison of aggregated and disaggregated approaches to software evaluation

- Dr. Jackson provided an update on his project: “RSNA DCE-MRI Phantom Automated Analysis Software Package Development:”
 - While the existing software package provided raw data, it did not provide analysis of those data
 - Phantom integrated data analysis package in the Matlab environment for Windows, Mac, and Linux workstations was developed
 - Deidentified DCE-MRI phantom sample data from GE, Philips, and Siemens scanners, and associated analysis reports, will be uploaded to the QIDW this week
 - Executable versions of the package for common operating systems are ready for use

- Both round 4 projects will be completed on schedule

Next PDF-MRI Biomarker Committee Call: September 16 at 11 AM CT [Dr. Kirsch to moderate]