

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

Wednesday, January 4, 2017 at 11:00 AM (CT)

Call Summary

Participants

<i>Michael Boss, PhD (Co-Chair)</i>	Daniel Gembris, PhD	Elizabeth Mirowski, PhD	RSNA Joe Koudelik
<i>Mark Rosen, MD, PhD (Co-Chair)</i>	Jim Gimpel, RT (R)(MR)	Nancy Obuchowski, PhD	Susan Weinmann
Mariam Aboian, MD, PhD	Alexander Guimaraes, MD	Samir Sharma, PhD	
Dafna Ben Bashat, PhD	Ping Hou, PhD	Mark Shiroishi, MD	
David Bennett, PhD	Claudia Kirsch, PhD	Jason Stafford, PhD	
Orest Boyko, MD	Daniel Krainak, PhD	Ying Tang, PhD	
Thomas Chenevert, PhD	Hendrik Laue, PhD	Brian Taylor, PhD	
Caroline Chung, MD	Eleni Liapi, MD, ScM	Elisabeth Wilde, PhD	
Amita Dave, PhD	Mikko Määta, PhD	Qing Yuan, PhD	
Timothy Dondlinger	Dariya Malyarenko, PhD	Yuxiang Zhou, PhD	

Moderator: Dr. Boss

Proposed White Paper on Reproducibility Study Needs

- Discussed during the Nov 30 F2F meeting during the 2016 RSNA Annual Meeting in Chicago
- Effort is motivated by the dearth of papers that are able to support DWI claim statements
- There is paucity in published test-retest data and inconsistency in how the data are collected and presented, especially in some submodalities like DCE
- The white paper is to communicate the need for more published test-retest data, especially patient data, with a proper statistical approach to address the literature gaps across organs and submodalities
- The goal is to standardize how the data are collected, analyzed and reported to be most useful for Claim development across various QIBA Profiles
- With BC consensus, Drs. Obuchowski, Chung, Laue, Wilde, Boyko and Aboian have volunteered either to draft sections or to proofread
- Enough similarity exists across modalities regarding data reporting to make this is useful for developing Profile Claims
- Dr. Guimaraes to present a synopsis of this paper on Cross-modality CC Leadership call on January 19
- Suggestion to submit for publication in *Radiology* classified as a “special report,” (as previously done by the Metrology Working Group) as opposed to submitting it as a “cold” manuscript

DWI Profile Update (Drs. Boss & Chenevert)

- Important changes have been made to the DWI Profile:
 - A third Claim and third organ (prostate) was added
 - Those with expertise in prostate MR provided valuable input
 - Dr. Dave added technical specifications for pulse sequence
- RSNA staff provided an author list of PDF-MRI BC members for Appendix B
- Outstanding references to be added
- Link to literature review database to be added
- Internal review by PDF-MRI BC to begin in two weeks, with all feedback due by Jan 31

- Review process described on the QIBA Wiki at: http://qibawiki.rsna.org/index.php/Review_Process
 - Subject Matter Experts (SMEs) to focus on specific sections
 - Others to review overall document
 - Drs. Rosen, Kirsch, Obuchowski, Shiroishi and Taylor to assist
 - Mr. O'Donnell to be invited to provide feedback and process/format insight
- Document to be transferred to Google doc to allow for efficient review process
 - Anyone with link may view and comment
 - Editing to be restricted to Dr. Boss
- Next steps after internal review by PDF-BC:
 - PDF-MRI SMEs conduct review; to be completed by February 1
 - PDF-BC members vote by e-ballot to approve release for public comment after review period of 2 – 4 weeks
 - MR Coordinating Committee voting members to complete a ballot to approve the Profile for public comment
 - Details on the voting process can be found on the QIBA wiki at: http://qibawiki.rsna.org/index.php/Voting_Process

Upcoming PDF Task Force Updates:

- January 18 – DSC Task Force
- February 1 – DCE Task Force
- February 15 – DTI Task Force
- March 1 – DWI Task Force

Next PDF-MRI Biomarker Committee Call: January 18, 2017 at 11 AM CT