

QIBA Perfusion, Diffusion and Flow – MRI Technical Committee Update Call

Wednesday, 10-July-2013 at 11 AM CDT (GMT-5)

Call Summary

Participants

Edward F. Jackson, PhD (Co-Chair)
Gudrun Zahlmann, PhD (Co-Chair)
Daniel P. Barboriak, MD
Marcelino Bernardo, PhD
Orest B. Boyko, MD
Martin Buechert, PhD
Thomas L. Chenevert, PhD
Barbara Croft, PhD
James R. Ewing, PhD

Daniel Gembris, PhD
Jayashree Kalpathy-Cramer, PhD
Hendrik Laue, PhD
Chen Lin, PhD
Thorsten Persigehl, MD
Katherine Scott, PhD
Girish Srinivasan, PhD
Daniel C. Sullivan, MD
Ying Tang, PhD
Jihong Wang, PhD

Zhiyue Jerry Wang, PhD
Ona Wu, PhD
Yong Zhou, PhD

RSNA

Fiona Miller
Joe Koudelik
Madeleine McCoy

NIBIB Submission Update (Dr. Zahlmann)

Finalization of the Phase-3 Project Proposals

- Project 1: DCE MRI for 3T and compliance for analysis software packages
- Project 1 Subprojects:
 - DCE phantom-based assessment of parallel imaging and B1 inhomogeneities: Drs. Persigehl and Laue
 - Compliance tool for DCE analysis packages based on DRO data: Dr. Laue
- Project 2: DW-MRI ADC Phantom + analysis software
- Project 2 Subprojects:
 - DW-MRI ADC Phantom: Dr. Boss
 - DW-MRI ADC Phantom analysis software: Dr. Chenevert
- All projects can be done in parallel or series, if necessary. However, for Project 2, in particular, there is advantage to parallel development given the ongoing (and proposed) collaborations with IMI.
- Dr. Zahlmann to send the overview and proposals to RSNA Staff and Dr. Sullivan.

DRO T₁ Mapping Software Evaluation Update (Dr. Barboriak)

- Dr. Barboriak is evaluating the feedback received re: the areas of software parameter space in hopes of determining consensus.
- Drs. Barboriak and Jackson to discuss accessing the existing DCE phantom data.
 - RSNA Staff will add Dr. Barboriak to Dr. Jackson's Community on the Quantitative Imaging Data Warehouse so existing data can be accessed.
- Dr. Barboriak gave an overview of the data explaining the need for establishing the performance criteria as a function of S_0/σ . Dr. Jackson suggested that the parameter space might be remapped to image SNR as opposed to S_0/σ and will investigate this option.
- Additional contributions regarding recommended performance criteria for both patient data analysis and QC/qualification purposes to be sent to Dr. Barboriak.

Compliance Discussion-topics for next t-con (Dr. Zahlmann)

- Current imaging procedures data to be reviewed, including T₁ and ACRIN 6701 Clinical contributions as well as manufacturer's input to be addressed.
- Input and guidance for Compliance Section of the DWI Profile to include site qualification beyond phantom imaging requirements.

Next t-con: Wednesday, July 24th at 11AM (CDT)