

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

Wednesday, 27-June-2012 at 11 AM CDT (GMT-5)

Call Summary

Participants

Gudrun Zahlmann, PhD (Co-chair)
Edward F. Jackson, PhD (Co-chair)
Marko Ivancevic, PhD (Co-chair)
Michael Boss, PhD
Andrew J. Buckler, MS
Patricia E. Cole, PhD, MD
Daniel Gembris, PhD
Alexander Guimaraes, MD, PhD
Donna Hartfeil, BSN
Jiachao Liang, PhD

Estanislao Oubel, PhD
David E. Purdy, PhD
Mark Rosen, MD, PhD
Rohit Sood, MD, PhD
Brandon Whitcher, PhD
Ona Wu, PhD
Xiangzhi Zhou, PhD

ACRIN Participants

Glenna Gabrielli
Gwen (CoreLabs)
Sarah (Penn/ACRIN)
Maria Oh (ACRIN)
Dena Flamini

RSNA

Joe Koudelik
Madeleine McCoy

Combined QIBA ACRIN T-Con Re ACRIN 6701 Test-Retest Trial (Dr. Rosen)-Agenda

- Current status of protocol: Rosen/Hartfeil
- Site update Penn:
 - Protocol Activation: Rosen
 - DWI phantom : Chenevert
 - DCE-MRI phantom: Rosen/Jackson
- Possible protocol amendment, coffee break DWI test: Rosen/Chenevert
- Form Update: Rosen/Gabrielli
- Imaging Manual Update: Rosen/Flamini
- Other Site Recruitment

General Discussion

- IBR approval received and budgetary issues are being handled by Ms. Donna Hartfeil of ACRIN
- The next step is to determine what to do with the phantom image analysis
- Dr. Jackson will follow-up with the GE 3T and 1.5T platforms. Dr. Rosen to forward the first set of Siemens raw image data to Dr. Jackson for cross-vendor comparisons.
- Discussions of the distortion correction filter being removed from the acquisition protocol language.
- Dr. Rosen to address:
 - Application of the analysis for the ACRIN study
 - Recommendations for the community
 - Expected outcomes
- The “complete package” consisting of the DCE-MRI phantom (v2), image-acquisition protocol, acquired DCE-MRI Phantom (v2) image data and the data analysis tools are nearly complete for full testing; pending a software update
- Scanner sequence cards may need to be revised-but will not be included in the imaging manual
- Potential buy-in/excitement still needed to recruit additional imaging sites for the ACRIN test-retest study
- An amendment to the protocol proposed to include a DWI “coffee break” test procedure to compare short-interval test-retest image acquisitions; Dr. Rosen to incorporate this minor procedural change into the protocol

- Site participation forms will need to be revised taking into account the coffee-break modification so that recruitment may proceed June through September of 2012
- 6-8 months expected for all sites to complete data acquisition
- Standards for site qualification discussed
 - Machine stability compliance issues need to be addressed; metrics to be identified
 - DCE-MRI Phantom (v2) to be used for initial imaging site qualification and subsequent QC
 - QC to be performed at yearly intervals, or after major scanner software upgrades

Next steps:

- RSNA Staff to post the latest version of the Profile and the Imaging Manuals to the QIBA WIKI
- DWI change metrics needed for the DWI Profile; Drs. Rosen and Chenevert to follow-up off-line
- Next call scheduled for Wednesday, July 11th, 2012 at 11 AM CDT