

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

Wednesday, 24-July-2013 at 11 AM CDT (GMT-5)

Call Summary

Participants

Marko Ivancevic, PhD (Co-Chair)	Alexander Guimaraes, MD, PhD	Jihong Wang, PhD
Edward F. Jackson, PhD (Co-Chair)	Martha Heckel	Ona Wu, PhD
Gudrun Zahlmann, PhD (Co-Chair)	Thorsten Persigehl, MD	Yuxiang Zhou, PhD
Barbara Croft, PhD	David E. Purdy, PhD	
Greg O. Cron, PhD	Mark Rosen, MD, PhD	RSNA
Bradley J. Erickson, MD, PhD	Girish Srinivasan, PhD	Joe Koudelik
James R. Ewing, PhD	Ying Tang, PhD	Madeleine McCoy
Daniel Gembris, PhD		

DSC MR Imaging Data Discussion (Dr. Brad Erickson, Mayo Clinic-Rochester)

Quantitative Imaging of High Grade Gliomas

- Data discussed by Brad Erickson, MD PhD, Zach Kelm (MD PhD Student), and Panagiotis Korfiatis, PhD
 - Goal: Imaging Biomarker(s) that separate Progression vs. Pseudo-Progression
 - Compared were 3 software packages used in evaluating relative cerebral blood volume (rCBV) across identical image/pixels
 - GE Functool (Func)
 - IB Neuro (IBN)
 - Nordiclce (Nice)
 - 45 GBM cases were retrospectively assessed
 - 3 operators processed all cases with 2 packages, and 2 operators of one package that was fully automated
 - Clinically significant differences between software packages
 - Further investigations is needed based on phantom data
 - Phantom is developed to simulate 'normal' white matter and tumor regions
 - Greater differences observed between software package performance than operators
 - Leakage correction improved accuracy while noise degrades performance of SW packages
 - Next steps involve more detailed understanding of individual packages as well as linking of results to clinical outcome

NIBIB Submission and Project Update (Dr. Jackson)

- Once a decision is made by the NIBIB, the next step will be overall prioritization of all projects by the QIBA Steering Committee
- Dr. Obuchowski (Metrology Work Group) reviewed the Tech Ctte project proposals and offered some suggestions re: statistical support needs to the PIs for consideration

Next t-con: Wednesday, August 7th at 11AM (CDT)

Agenda Items:

DWI Project Update
Compliance Discussion