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 Persiehl, 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)
    - NordicIce (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