QIBA Perfusion, Diffusion and Flow – MRI Technical Committee Update Call
Wednesday, 13-June-2012 at 11 AM CDT (GMT-5)

Call Summary

Participants

Edward F. Jackson, PhD (Co-chair)
Marko Ivancevic, PhD (Co-chair)
Daniel P. Barboriak, MD
Michael Boss, PhD
Martin Buechert, PhD
Thomas L. Chenevert, PhD
Daniel Gembris, PhD
Sandeep N. Gupta, PhD
Jiachao Liang, PhD

David E. Purdy, PhD
Rohit Sood, MD, PhD
Daniel C. Sullivan, MD
Ying Tang, PhD
Bachir Taouli, MD
Ona Wu, PhD

RSNA
Joe Koudelik
Madeleine McCoy

DCE-MRI Digital Reference Object (DRO) Progress Update:
- Dr. Barboriak shared a slide presentation discussing the following:
    - Summary of Deliverables 1
    - Summary of Deliverables 2
    - R1 mapping evaluation for variable S_0 and noise levels
    - Tofts mapping results for variable K^{trans} and v_e (and S_0) for multiple software packages
    - Future Directions:
        - Finish QIBA v8 Tofts modeling (with variable time intervals and jitter)
        - Release QIBA v9 Tofts DRO (with variable noise)
        - Evaluation of analysis software comparison; additional volunteers still welcome
        - Work is ongoing with QIBA Metrology Group (Xiaofeng Wang, PhD) to develop reasonable single figure-of-merit for performance
        - Open data archive being developed by RSNA utilizing MIDAS software (Kitware)
        - Licensing issues expected to be of minimal concern regarding this synthetic data
    - A version of presented project slides will be posted on the QIBA WIKI for reference
    - Dr. Barboriak's site: https://dblab.duhs.duke.edu/

DWI Profile Update
- Dr. Boss welcomed Drs. Bachir Taouli and Ona Wu on the t-con as participants in the DWI Profile development
- Dr. Guimaraes will report on his literature search for DWI brain imaging during the June 27th t-con
- Discussion of literature review assignments for the organ-specific content: brain, liver, breast, prostate, head & neck, bowel disease
- Existing published test/retest data expected to be difficult to come by for several of the organ systems listed above
- It was proposed to draft the Profile to provide educational content that may fall outside of the specific claim. Specifics of test/retest expectations in these "educational content areas" can be addressed in a subsequent revision/extension of the Profile

Next steps:
- RSNA Staff to post a version of the Dr. Barboriak's slides to the QIBA WIKI
- Dr. Boss to work with RSNA Staff to circulate assignments for the organ-specific content
- Dr. Rosen to give an update on ACRIN/RSNA t-con protocol modification to include test/retest on the next t-con
- Next call scheduled for Wednesday, June 27th, 2012 at 11 AM CDT