QIBA Quantitative DCE Committee
Wednesday, November 11, 2009
11 AM CDT

Call Summary

In attendance
Sandeep N. Gupta, PhD (Co-chair)
Edward Jackson, PhD (Co-chair)
Edward Ashton, PhD
Andrew Buckler, MS
Michael H. Buonocore, MD, PhD
Geoffrey D. Clarke, PhD
Sarah Englander
Jeffrey L. Evelhoch, PhD
Igor Grachev, MD, PhD
Marko Ivancevic

Gregory Karczmar, PhD
Janie Petti, RT
David Purdy, PhD
Mark Rosen, MD, PhD
Katherine Scott, PhD
Daniel Sullivan, MD

RSNA
Fiona Miller
Susan Anderson, MLS
Joe Koudelik

UPenn data update (Dr Ashton and Jackson)
- T1 values for variable flip angle data remain issues
- Software cannot read current flip angle data; cannot extract this data
- Limited support to pursue de-bugging software issues
- Corrected and uncorrected signal intensity data based on body coil plotted shown a 0.78 – 0.90 correlation
- Signal intensity of data look good regardless of rotation once correction done
- Raw signal intensity v. IR measurements correlations have proven helpful
- Siemens scanner shows no slope issues; consistent finding with corrected UPenn data show slopes nearly overlapping

UChicago data update (Drs Jackson and Karczmar)
- Slope offsets with UChicago data main issue
- Scaling factors corrected for, but may be changing and causing issues
- EuroSpin phantom shown tight T1 slope plots
- Philips system check proposed to rule out a possible detectable service fault
- UChicago to re-run QIBA phantom again to compare data
- Dr Karczmar to send EuroSpin compartments to Dr Jackson for comparison scans

Analysis (Dr Rosen)
- All UPenn Siemens data zipped and sent to Dr Ashton (VirtualScopics)
- Dr Rosen and Sarah Englander (Rosen Lab) to burn all UPenn Siemens data to DVD and send to Dr Ashton for analysis; based on VA 30 datasets; VB 15 being acquired now
- Dr Ashton to complete analysis
- Dr Jackson to incorporate UPenn data within comparison spreadsheet

Poster 1 Overview (Dr Jackson)
- Concept draft of poster 1 created, including group goals, approach, acquisition protocol, phantom selection process, multi-vendor multi-time point vision, preliminary results and future directions including thoughts concerning current QIBA phantom use
- Still need to clarify means and coefficients in tables
- Ratio method shows promise for correcting for RF inhomogeneity
- Dr Ashton to draft and send a paragraph concerning analysis methodology to Dr Jackson for the poster

- Additional acquisition sites waiting to scan to be mentioned on the poster; QIBA phantom flow diagram to be incorporated
- Decision made to anonymize scanner systems and sites (A=GE, B=Philips, C=Siemens) and acknowledge all acquisition site data to show extent of sources of variability

Poster 2 Overview (Dr Gupta)
- Dr Gupta to forward synthetic data poster to MRI ctte for feedback
- Dr Gupta offered assistance with the phantom poster
- Dr Gupta generously offered to print both MRI committee posters at GE

Next Steps:
- Dr Karczmar to send EuroSpin compartments to Dr Jackson for comparison scans
- Dr Rosen and Sarah Englander (Rosen Lab) to burn all UPenn Siemens data to DVD and send to Dr Ashton for analysis; based on VA 30 datasets; VB 15 being acquired now
- Dr Ashton to complete analysis
- Dr Ashton to draft and send a paragraph concerning analysis methodology to Dr Jackson for the poster
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