QIBA DCE-MRI Technical Committee Update Call
28 March 2012 at 1 PM CDT (GMT-8)
Call Summary

In attendance

Gudrun Zahlmann, PhD (Co-chair)
Michael Boss, PhD
Martin Buechert, PhD
Patricia E. Cole, PhD, MD
Barbara Croft, MD
Daniel Gembris, PhD

Marko Ivancevic, PhD
Hendrik Laue, PhD
Jiachao Liang, PhD
Thorsten Persigehl, MD
David E. Purdy, PhD
Ying Tang, PhD
Brandon Whitcher, PhD

Ona Wu, PhD
Xiangzhi Zhou, PhD

RSNA

Madeleine McCoy

Project proposals for a potential phase 3 NIBIB funding were presented by Drs. Laue, Persigehl, Boss and Whitcher.

Tool to Evaluate Software Using Artificial DCE-MRI Data and Statistical Analysis Overview (Dr. Laue)
- Review of the tool to evaluate and compare software on the reproducibility of DCE-MRI, native T1and DWI parameters from various software packages.
- It might also provide decision support for FDA qualification process
- The wording in the document will be revised to reflect that the data was supplied by Dr. Barboriak.

DCE-MRI Phantom Study to Evaluate the Impact of Parallel Imaging and B1 Inhomogenetics at Different MR Field Strengths of 1.0Y, 1.5T, and 3.0T Overview (Dr. Persigehl)
- The project plan is to acquire T1 maps with various flip angle technique by using the QIBA DCE-MRI phantom using Philips and Siemens scanners.
- The group discussed that a GE platform should also be used; strongly endorsed by Dr. Zahlmann.
- Dr. Persigehl will work with Dr. Wu to get the study into MGH which has the GE scanners. Dr. Jackson will be contacted for further support of this effort.

DWI Groundwork Proposal Overview (Dr. Boss)
- The phantom materials and temperature control was discussed.
- Discussion of possibility of Phantom Labs constructing a phantom in less than 6 months.
- The next step would be to decide which sites to send the phantom to.
- The goal is to have an ADC simple phantom which would be common to all platforms
    - completion of the entire project projected for 12 months after receipt of initial funds.

Software Development for Analysis of QIBA DW-MRI Phantom Data (Dr. Whitcher)
- The software will require minimal interaction from the user and operates with the following inputs/outputs:
    - *Input*
        - DW-MRI data in DICOM format using two or more *b*-value acquisitions.
    - *Output*
        - ADC estimates for each ROI.
        - Optimal *b*-value selection.
        - Summary statistics for all parameters of interest.
- Software development would begin with award of funding with an alpha version produced in approximately 12 weeks.

The DCE MR committee approved the project proposals as being presented to QIBA steering committee for further decision making.

New Technical Committee names for consideration will be discussed on the next t-con.

Next Steps
- RSNA Staff to follow-up with the proposal authors with submission instructions.
- Dr. Wu and Dr. Persigehl to discuss the GE Platform for the proposal.
- Next t-con will include a discussion of Dr. Rosen's Notes of QIBA ACRIN 6701 protocol
- Next call scheduled for Wednesday, April 18, 2012 at 11am (CT)