QIBA DCE-MRI Technical Committee October Update October 23, 2008 10AM CDT Call Summary

In attendance:

Gudrun Zahlmann, PhD Jeffrey Evelhoch, PhD Daniel Barboriak, MD David A. Clunie, MBBS Edward Jackson, PhD Gregory Karczmar, PhD David Purdy, PhD Katherine Scott, PhD Fiona Miller (RSNA) Joe Koudelik (RSNA)

General Discussion

- Dr Evelhoch provided an overview of Phantom Protocol
 - o General protocol is done
 - o All agreed that image analysis, followed by data analysis was needed next
- Phantom Delivery Status
 - o Two phantoms ordered from Phantom Labs
 - o Dr Jackson to contact Josh for delivery schedule
- Scanning Site Requirements
 - o Old/New 1.5T scanner versions from GE, Philips, Siemens
 - o Definition of "old" was not completely determined
- Image Analysis (Central/Core Site)
 - o Who will do control image analysis on data from six scanners?
 - What will the associated cost be?
 - Who has time and resources to perform this analysis?
 - o A core set of analysis is needed at one site.
- Data Analysis Discussed
 - Detailed definition of project needed
 - Need potential site contacts to inform the group as to their site resources
- Data Storage
 - Using the RIDER infrastructure was proposed
 - o Dr David Purdy to contact Dr Carl Jaffe (NCI) to inquire as to archiving future data
- Phantom Handling Procedures
 - o Image analysis protocol development
 - o Data analysis protocol development
 - o Rule to make data analysis (ie, minimum site requirements)
 - o Quality assurance measurements for both phantoms in need to be place
 - o Data acquisition time-frame needed
- Financial support for the sites willing to perform phantom scanning

- Shipping of phantoms between sites will require funding
- o RSNA needs to budget for central image analysis process
 - Software development/extensions
 - FNIH may be alternate source of funding through the Mitch Schnall prostate study (ie, combining studies)
- Keep Dr Gary Kelloff informed of group activities
 - o Dr Evelhoch to follow-up with Dr Kelloff
 - o What would be a reasonable time-frame for funding to come through from FNIH
- Time-frame
 - o Prep work of analysis studies November 2008
 - o Image results from first study available early 2009
 - o Test and re-test study data soon after
- Software development
- Funding needed for software development
- Software package verification needed so that software could collect results from multiple workstations
- Framework needed to test against well-defined test data to assess analysis packages
- RadPharm and caBIG doing Ground Truth projects now to produce such a framework
- XIP framework needs to be understood better contains many components that QIBA project needs
- Development of analysis package in ABT proposed
 - o Dr David Clunie to provide additional ABT details
- Committee proposed for Test/Re-test studies
 - o Protocol Committee
 - o Image Analysis Committee
 - Who to manage these studies? Designated person needed to organize
 - o Dr Evelhoch to contact Mark Rosen (colleague of Dr Mitch Schnall) for possible project involvement

Next steps:

- Summary of phantom study to be drafted (Drs Zahlmann, Evelhoch and Buonocore)
- Follow-up with how much and where funding is to come from
- Dr Evelhoch to provide background on the NCI prostate trials

Action Items:

- Dr Evelhoch to contact Mark Rosen for interest with overseeing the project
- Dr Evelhoch to follow-up with Dr Kelloff
- Dr David Clunie to provide additional ABT details