

## QIBA Quantitative DCE Committee

October 28, 2009

11 AM CDT

### Call Summary

#### In attendance

Gudrun Zahlmann, PhD (Co-chair)  
Michael H. Buonocore, MD, PhD (Co-chair)  
Sandeep N. Gupta, PhD (Co-chair)  
Andrew Buckler, MS  
Sarah Englander  
Marco Evenchevic  
Alexander Guimaraes, MD, PhD  
Edward Jackson, PhD  
Gregory Karczmar, PhD

David Purdy, PhD  
Mark Rosen, MD, PhD  
Annette Schmid, PhD  
Daniel Sullivan, MD

#### RSNA

Fiona Miller  
Susan Anderson, MLS  
Joe Koudelik

#### U Chicago Update (Dr Karczmar)

- EuroSpin being scanned for comparison
- QIBA phantom to be reshipped to UC from MDACC for another comparison
- Excitation pulse sequence at UC to be modified to obtain better T1s; this research/service mode is acceptable only in efforts to isolate current system/phantom issues
- Need to maintain available/general sequences (not research mode) wherever possible to keep protocol generic and easily used by most acquisition sites
- Higher tip angles may also be assessed
- DCE-MRI protocol may be modified based on current site finding (data analysis)

#### U Penn Update (Dr Rosen)

- Complete Siemens dataset re-sent to Dr Ashton (VirtualScopics) for analysis; Dr Ashton to begin analysis
- All data and transfer appears normal as long as FTP site functions
- Dr Jackson to follow-up with Dr Ashton concerning Siemens data analysis
- Dr Jackson to combine Siemens data to the cross-comparison spreadsheet once analysis rec'd from VirtualScopics

#### RSNA 2009 QIBA Poster Update

- **Poster #1 QIBA Phantom Study (Dr Jackson)**
  - MDACC and UC have results to supply for poster
  - Need explanation and rescanning to determine UC analysis differences
  - U Penn data may be available
  - Poster to report mechanism only, phantom development, development of protocol, study itself, analysis and conclusions (with results, if available)
  - DCE-MRI Committee should not claim an answer ; should simply show what studies where/are being done to obtain the answers
  - Data averages discussed
  - Varying averages seen among results (MDACC and UC)
  - Group averaging needs to be described in the posters
    - e.g. pixel-to-pixel, averages-to-averages, etc
- **Poster #2 Simulation Data (Dr Gupta)**
  - Poster material is 80% complete
  - Drs Gupta and Barboriak to continue discussions
  - Dr Gupta to circulate material for group feedback

## **RSNA 2009 activities**

- QIBA Quantitative Committee Meet-the-Experts (MTE) lunchtime sessions to be scheduled
  - 12:15 – 12:45 pm and 12:45 – 1:15 pm time slots from Sunday, Nov 30 through Thursday, Dec 3, 2009
  - Sign-up MTE schedule to be circulated for volunteers; two sessions per day preferred
  - Dr Karczmar volunteered for one half-hour session (tbd)
- QI IB Informational Meeting, Nov 30, 3-4:30pm (Lakeside E352)
- QIBA Working Meeting, Dec 2, 2-4:30pm (Lakeside E270)
  - Need plans for breakout session
  - NIBIB contract funding status hopefully to be known by RSNA 2009

## **Roadmap and Profiling discussion for QIBA/ACRIN collaboration**

- Profile discussion needed; groups ready to start
- Phantom work is specific, not designed to translate readily into the clinic
- Evolving technologies will make process more clinical and quantifiable in the future
- ACRIN interested in working with QIBA
- Scaling back on clinical studies may be necessary
- Decision how to structure future DCE-MRI results presentation needed
- Imaging vendors must appreciate the efforts and the broad scope of stakeholder involvement
- Need near-term timelines and requirements vendors can take to management
- Study data needed to develop a guidance document for use outside the small sphere of research users to a broader audience
- The Profile will help structure this guidance
- Waiting on MRI technical data (assessment) to help guide/structure the Profile groundwork
- More work may be required before MR Committee is ready for clinical Profile
- Reproducibility study suggested as potential first step
- Multiple groups may work in parallel

## **ACRIN and VirtualScopics**

- Resources and leverage differences exist
- ACRIN has experienced numerous academic-related site challenges; knows the academic side of research projects
- DCE-MRI spotlighted in clinical trials needed to engage vendors

## **Next Steps**

- Dr Jackson to update the DCE-MRI study protocol and send to Co-chairs for feedback and Wiki posting
- RSNA staff to send out MTE sign-up sheet for informal schedule development
- Next group call to be scheduled for Nov 11 at 11 am CST