

QIBA DCE-MRI Technical Committee Update
Wednesday, June 10, 2009
11:00 am CDT

Call Summary

In attendance:

Gudrun Zahlmann, PhD (Co-Chair)
Michael H. Buonocore, MD, PhD (Co-Chair)
Edward Ashton, PhD
Andrew Buckler, MS
Geoffrey D. Clarke, PhD
John Freymann
Alexander Guimaraes, MD, PhD
Sandeep N. Gupta, PhD
Edward F. Jackson, PhD
Janie Petti, RT

David E. Purdy, PhD
Mark Rosen, MD, PhD
Katherine Scott, PhD
Daniel C. Sullivan, MD
John Waterton, PhD

RSNA
Fiona Miller
Susan Anderson
Joe Koudelik

Discussion Topics:

- NIBIB contract project outline: status and next steps
- Financial overview test-retest study
- Status of phantom study (including image transfer test MDACC-NCIA)

General Discussion – NIBIB Contract Proposal

- Dr Zahlmann thanked all contributors, namely Drs Ashton, Jackson, Karczmar, and Rosen
- Dr Jackson to finalize edits; Drs Zahlmann and Karczmar review
- Dr Sullivan provided overview of the proposal
 - Proposal will contain 20 pages of background motivation
 - Structure and support staff requirements
 - Approaches to evaluating new imaging biomarkers
 - Specific aims of each Technical Committee
 - DCE-MRI project specifics will be included in the appendices
 - Budget details will be aggregated on a separate spreadsheet
 - Budget issues to be discussed next week
 - Dr Zahlmann would like to specify statistical power required for phantom study, i.e.
 - Number of subjects and level of analytical power required
 - Power stat analysis details not required for this proposal
 - DCR-MRI can extrapolate statistical analysis from the VolCT projects
 - Dr Grace Kim (working with the VolCT subgroups) may offer assistance
 - Metrics needed for meaningful assessment of project

Proposed Next Project: Liver Metastases and Imaging Techniques (Test – Retest Study)

- Rough estimate of 42 people at 6 sites
- Is \$400,000 over 2 years adequate or realistic for scope of proposed study?
 - Additional funding sources such as the Biomarkers Consortium may be required; group will continue to discuss scope of project
- Dr Rosen to provide project budget input for test-retest study (rough budgeting models to use as guidelines)
 - Cost per site based on 6 sites, 7 patients per site
 - Radiologist salary, statistical analysis, etc
- Drs Jackson and Karczmar to describe clinical implementation challenges
- Drs Guimaraes, Schmid and Scott to provide clinical trial details
- Integration of data/information may increase cost of study substantially

- Suggestion to modify first proposed claim; aiming for a data collection project, rather than a than data collection and data integration project

Phantom Project Update

- Phantom 1 ready for shipping to U Chicago (Philips scanner)
 - Dr Karczmar also has access to a GE scanner
- Phantom 2 ready for shipping to U Penn (Siemens scanner)
- Drs Jackson and Purdy to discuss matching/comparing GE and Siemens scanner parameters and scheduling ESPRIT time off-line
- Dr Jackson sent second image data set to NCIA
- NCIA to make data accessible (shared) by next week
- Dr Ashton to test image data set download to VirtualScopics
 - Dr Ashton to discuss transfer details to Mr Freymann by mid-week
 - Mr Freymann to follow-up with Drs Jackson and Ashton with any details/questions

Next Steps:

- Phantom:
 - Siemens protocol needed; Drs Jackson and Purdy to meet at MD Anderson
 - Dr Jackson to send GE 14-15X (system) scanner download to Dr Karczmar
 - Phantom shipments proceeding
 - Dr Ashton to discuss transfer details with Mr Freymann
- NIBIB proposal:
 - Dr Rosen to provide budget input with direct and indirect costs for test-retest study (rough budgeting models to be use as guidelines)
 - Cost per site based on 6 sites, 7 patients per site
 - Radiologist salary, statistical analysis, etc
 - High-level paragraph on statistician needs
 - Dr Ashton to provide Dr Zahlmann with rough post-acquisition/data analysis budget
 - Drs Jackson and Karczmar to describe clinical implementation challenges
 - Dr Jackson to draft high-level intro piece describing the activity
 - Drs Guimaraes, Schmid and Scott to provide clinical trial details
 - Dr Jackson to review proposal after contributors add new section material and finalize edits
 - Drs Zahlmann and Karczmar to review