

QIBA CT Volumetry Technical Committee Update Call

30 July 2012 at 11 AM CDT (GMT-5)

Call Summary

In attendance:

P. David Mozley, MD (Co-Chair)	Kavita Garg, MD	Daniel C. Sullivan, MD
James Conklin, MS, MD (Co-chair)	Gregory V. Goldmacher, MD, PhD	Ying Tang, PhD
Hubert Beaumont, PhD	Hyun Grace Kim, PhD	David J. Vining, MD
Andrew Buckler, MS	James Mulshine, MD	Binsheng Zhao, DSc
David A. Clunie, MBBS	Kevin O'Donnell, MASc	Luduan Zhang, PhD
Barbara Croft, MD	Nicholas Petrick, PhD	
Alden Dima, MS	Guarav Sawhney	RSNA:
Heidrun Endt	Neil Steinmetz, MD, JD	Joe Koudelik
Charles Fenimore, PhD		Madeleine McCoy

NIBIB funded project updates—the following projects are all projected to meet the 9/30/2012 deadline

- University of Colorado-Dr. Garg
 - Goal of project is to characterize inter- and intra-readers variability within part-solid pulmonary nodules
 - Four readers performed 2 reads each under identical conditions, 3 weeks apart
 - High-level statistical analysis completed by Dr. Kim
 - Dr. Scherzinger has volunteered to be the primary manuscript writer
 - Project is progressing on time and will deliver a (final) technical report by the 9/30/2012 deadline with a manuscript to follow
 - RSNA Staff to work with Dr. Garg to set up a follow-up t-con with the CO Group; open invite to be sent to the entire CT Volumetry Tech Ctte membership for valuable comment/feedback
- Columbia University-Dr. Zhao
 - Specific Aim 1: To explore variability in measuring total tumor volume (uni and bi as well) and their changes
 - Specific Aim 2: To correlate response assessed by the three techniques (uni, bi and vol) with patient survival using both RECIST and the variability-based cut-off values
 - All measurements are done for both aims; working on statistical analysis for Aim 2
 - RSNA Staff to work with Dr. Zhao to set up an update t-con; open invite to be sent to the entire CT Vol Tech Ctte membership for valuable comments/feedback, i.e., perspectives from oncologists needed
- UCLA-Dr. Kim (Multiple concurrent projects discussed)
 - Cross-scanner comparison (aka, the “Fenimore 1C Project”) has completed data analysis which were forwarded to Dr Fenimore for review
 - Publication/abstract accepted for the RSNA 2012 Annual Meeting
 - Assessing measurement variability of lung lesions in patient datasets (aka, the “McNitt-Gray 1B Project”)
 - 1B data analysis has been completed
 - Assessing measurement variability of lung lesions in patient datasets under clinical workflow conditions (aka, “Project 1B extension”)
 - Locked sequential paradigm used for side-by-side reads (mark-ups)
 - 3A Challenge Pivotal Study—Assessing analysis algorithm performance by comparing to ground truth data
 - Analysis of 3A Pivotal data in progress
 - Draft report will be complete within the next few days
 - The final 3A Challenge report will encompass both Pilot and Pivotal study results
- CoreLab Partners-Dr. Clunie
 - Round-1 project reads for the inter-scanner/inter-clinic comparison of CT phantom nodule sizing has been completed
 - Round-2 “Project 1B Extension” reads beginning
 - Lesions have been selected and the randomization scheme has been developed
 - Read data will be forwarded to Dr. Kim for analysis by the end of August 2012
 - Drs. Kim and McNitt-Gray to collaborate on data analysis, with a deadline of two weeks after hand-off from CoreLab Partners; delivery of final technical report expected by Sept 30, 2012

- Dr. Mulshine requested participation of the NIBIB funded project leaders in the newly-formed Early Stage Lung Cancer (Small Nodule) Profile Writing Group which is planned to meet over the next six weeks
 - Initial Profile draft expected by September 30, 2012
 - Need distillation of all CT TC groundwork projects into the current Advanced Disease and upcoming
- Caution not to allow new goals to distract from the TC's capacity to deliver on current projects; parallel efforts deemed acceptable as long as they don't dilute existing initiatives

Next steps

- CO Group to reconvene for discussions on delivering an end-product; this call will be open to the entire CT Vol TC
- Dr. Zhao to coordinate a time within two weeks to meet to discuss the final steps of the project; this call will be open to the entire CT Vol TC
- RSNA Staff to distribute the NIBIB Spreadsheet (Sources of Variation, Version 5), and the Process Map
- RSNA Staff to contact Dr. Samei for the NIBIB Funded Project Update for the next CT Vol t-con
- Mr. Buckler suggested a Systems Engineering Analysis for the Tech Ctte as a future agenda topic
- Next CT Vol t-con is scheduled for Monday, August 13th at 11 AM (CT)
 - Agenda Items to include:
 - CT Vol Tech Ctte Action Items (Updated since the May 2012 QIBA Annual Meeting)
 - Dr. Samei NIBIB Funded Project Update
 - Mr. O'Donnell to discuss final text changes for the Advanced Disease Profile