

QIBA CT Volumetry Biomarker Ctte (BC) Call

13 March 2017 at 11 AM CT

Call Summary

In attendance:			RSNA:
Ehsan Samei, PhD (Co-Chair)	Rudresh Jarecha, MBBS	Nicholas Petrick, PhD	Joe Koudelik
Jenifer Siegelman, MD, MPH (Co-Chair)	Yongguang Liang, PhD, DABR	Marthony Robins, PhD	Julie Lisiecki
Hubert Beaumont, PhD	James Mulshine, MD	Na Sun, PhD	
Andrew Buckler, MS	Nancy Obuchowski, PhD	Mark Supanich, PhD	
Charles Fenimore, PhD	Eric Perlman, MD	Ying Tang, PhD	
Matthew Fuld, PhD			

Review prior call summary: March 6th summary approved as submitted

Discussion included the following:

QIDW:

- DRO digital sphere data are still pending
- Dr. Petrick will follow up with Dr. Erickson to let team members know when the full dataset is available for download

Site Feasibility Test Results (Section 4.4):

- The CT 233 segmentation analysis software is still under review by AAPM; Dr. Samei expects the review to be complete in approximately 6 months, to be publicly available by the summer of 2017
- Dr. Liang indicated that he saw minor output differences between CT 223 and his software, so the release of the CT 223 software is not critical to the physicist “actor” role for Profile conformance
- Drs. Supanich, Robins, and Samei to develop some Modulation Transfer Function (MTF) and Z-axis resolution language in the Profile Checklist to aid technologists
 - The small lung nodule profile will contain additional wording for these concepts
- Dr. Fenimore is trying to acquire additional imagery to complete the process of testing the Duke CT 233 software to check for reasonable levels of agreement
 - Both NIST and Duke have been contacted

New Task Force Proposed: Texture / Morphology

- The group discussed moving forward with a new task force to address questions on texture and morphology
- Those interested are asked to email the co-chairs or RSNA Staff: jlisiecki@rsna.org
- *Discussion regarding this topic included the following:*
 - Morphometry and texture do not lend themselves to biological objectivity
 - There are questions of clinical relevance involving objective and subjective texture and questions as to how these measurements relate to outcomes
 - No objective endpoint can be determined until the group can come to consensus on how to measure lesion texture
 - Decisions regarding how to measure robustness and quantification must be established

Action items:

- Dr. Petrick to follow up with Dr. Erickson regarding QIDW LungMan DRO data upload
- Drs. Samei, Robins, and Supanich to collaborate on Z-axis resolution and Modulation Transfer Function (MTF) language for the Profile
- Dr. Fenimore to provide results of CT 233 testing on next call
- Dr. Gill to rewrite a segment of the protocol instructions; to be reviewed by Drs. Kirsch and Tang

- Additional spreadsheets for a regression module as well as for the coordinates for the RIDER tumors are being compiled by Mr. Tervé

Next Call: Monday, March 20, 2017 at 11 am CT – (Biomarker Committee)