QIBA CT Volumetry Technical Committee Update Call

4 November 2013 at 11 AM CT (GMT-6) Call Summary

In attendance:

Samuel G. Armato III, PhD (Co-Chair)

Gregory V. Goldmacher, MD, PhD (Co-Chair)

Lawrence Schwartz, MD (Co-Chair)

James Mulshine, MD

Julie Lisiecki

Hubert Beaumont, PhD Kevin O'Donnell, MASc Andrew Buckler, MS Eric Perlman, MD Heang-Ping Chan, PhD Nicholas Petrick, PhD Charles Fenimore, PhD Daniel Sullivan, MD Paul Garrett, MD Ying Tang, PhD

General Discussion

Update on Poster for RSNA 2013

A poster for the group has been submitted to RSNA for the annual meeting

Group members are encouraged to respond to the Doodle poll for the QIBA Poster "Meet-the-Expert" sessions at RSNA 2013: http://www.doodle.com/yei9m74crbvq7tub

This is an excellent opportunity to network with colleagues and engage meeting attendees

QIBA projects update

Two projects that are in the planning phases are:

- o Test/ re-test reproducibility of CT Volumetry in liver lesions in an animal model (Dr. Pablo Ros and colleagues)
 - An animal model of liver metastases will be used in this project to characterize the test / re-test variability in a manner similar to the 1B study previously done with lung lesion data.
 - More detail is needed regarding budget and timelines
- Phantoms for CT Volumetry of hepatic and nodal metastasis (Drs. Yankelevitz, Schwartz, Zhao, and Mr. Avila)
 - The purpose of this project will be to determine desired phantom characteristics, including cost, scanning protocols, mathematical modeling, etc.
 - Two phantoms will be used:
 - 1. A true anthropomorphic phantom
 - 2. A gel-based assay (to demonstrate greater variations in density)

Profile compliance discussion

The group discussed the compliance section re: primary purpose and needed material/ details Goal to incorporate tenets from the Metrology working groups

Topics under consideration:

- Statistical variation and rigor
- o Nature of who the 'actors' are and how they determine compliance
- o Performance details/ specifications for hardware/software
- Use of checklists to evaluate compliance
- Question as to whether radiologists' performance or precision is being measured
 - Consideration of a Quantitative Imaging Course requirement, proficiency certification with specific software tools to demonstrate compliance
- Harmony/ uniformity among QIBA modality groups producing Profiles
- Consideration of a standardized procedure across modalities to establish compliance

Action items:

Mr. Buckler to review CT Volumetry roster, provided by RSNA staff, to determine which subject-matter-experts must be invited to the next call for continuing discussion of checklist criteria, particularly with regard to image acquisition devices and reconstruction software

RSNA staff to send additional reminders to invite selected SMEs

Next QIBA CT-VOL Tech Ctte call: Monday, November 18, 2013 at 11 am CT.

RSNA 2013 Annual Meeting - QIBA Technical Committees Working Meeting:

Wednesday, December 4th | 2:30pm – 5:00pm | Chicago, McCormick Place | Room: **N136** Please let us know whether you plan to attend by responding to the following poll: http://www.doodle.com/fwf76ceggb78r75b.

We appreciate your continued support and look forward to your participation - Thank You!

QIBA Poster Meet-the-Expert (MTE) Sessions at RSNA 2013

Location: McCormick Place, Chicago - Lakeside Learning Center (Hall D)

Please provide your availability to participate in the QIBA Poster Meet-the-Expert (MTE) sessions.

This is a chance to interact with meeting attendees to discuss current subcommittee projects.

Sessions are 30 minutes over the noon-time hour, Sunday through Thursday.

The Tech Ctte posters will be located at the QIBA Kiosk, which is within the Lakeside Learning Center (Hall D).

Doodle Poll URL: CT Volumetry Technical Committee: http://www.doodle.com/yei9m74crbvq7tub
