

QIBA Lung Density Technical Committee

October 8, 2014 at 2 PM CT

Call Summary

In attendance

Philip F. Judy, PhD (Chair)

Andrew Buckler, MS

Heather Chen-Mayer, PhD

Ekta (Shah) Dharaiya, MS

Matthew Fuld, PhD

Bernice Hoppel, PhD

Lars Nordenmark, PhD

Karen Procknow, RT (R)

Jered Sieren

Daniel Sullivan, MD

RSNA

Julie Lisiecki

Madeleine McCoy

Agenda 10/8/2014: Lung Density Technical Committee

1. RSNA Meeting Poster
2. Finalize Precision Claim for Perc15 and Volume Correction
 - a. Incorporate into draft profile
3. Status of AEC and IR Project
4. Acquisition and reconstruction specifications
 - a. CT Number bias requirement given claims
5. Plan to analysis sections of Profile
6. Propose review of Profile on Oct 22 call

Next call: Wednesday, October 22, 2014 at 2 pm CT

Discussion:

- The vendors working group reported that they need measurements for *bias* and *precision* based on phantom studies, with a stricter focus on the accuracy requirement and controlled outcomes, rather than specified parameters
- Consistent numbers for section 3 of the Profile are needed to demonstrate functionality
- Topics reviewed by Dr. Judy:
 - Test object segmentation using cylindrical tubes in the COPDGene phantom
 - Inside Air COPDGene Phantom
 - Recommended correction for GE 16 slice scanners
 - CT number of air outside COPDGene Phantom 16 slice GE scanners
- Goal to develop methods for obtaining consistent measurements on CT scanners
- Observations:
 - Intra-model variations are small relative to inter-model variations
 - Need computer to segment regions of interest
 - Control location of phantom and FOV
 - For most CT models used in COPDGene, the number for air outside the subjects and phantom is unlikely to be useful as a correction for intra-model variations
 - GE Lightspeed 16 has been excluded because of a large shift in the COPDGene phantom material CT number caused by recalibration of scanners.

Action item: Dr. Fain to head up the poster effort for the technical committee; print-ready PPT draft due to RSNA by **October 31st**

Next call: 10/22/2014 at 2:00 PM (CT)

QIBA Technical Committees - Working Meeting at RSNA 2014

- Wednesday, December 3rd | 2:30pm – 5:00pm | Chicago, McCormick Place | Plenary Session Room: **E253AB**, Breakout: **E272B**
- Please let us know whether you plan to attend by responding to the following poll: <http://doodle.com/mk7qecxint6vbwf5>.

QIBA Poster Meet-the-Expert (MTE) Sessions at RSNA 2014

- **Location:** McCormick Place, Chicago - Learning Center (**Hall D**) – QIBA Kiosk
- Please provide your availability to volunteer for the QIBA Poster Meet-the-Expert (MTE) sessions.

Doodle Poll URL: Lung Density Technical Committee: <http://doodle.com/ay5aqkemq2f8wkt8>