

QIBA Lung Density Biomarker Committee (BC)

April 22, 2015 at 2 PM CT

Call Summary

In attendance

Sean Fain, PhD (Moderator)

Andrew Buckler, MS

Heather Chen-Mayer, PhD

Dominic Crotty, PhD

Junfeng Guo, PhD

Bernice Hoppel, PhD

David Lynch, MB

John D. Newell, Jr. MD

Nancy Obuchowski, PhD

Mark Schiebler, MD

Jered Sieren, BSRT (R) MR CT

Daniel Sullivan, MD

RSNA

Joe Koudelik

Julie Lisiecki

Discussion topics:

1. Volume adjustment proposal for next QIBA funding cycle.
 - a. COPD Gene data request and approval
 - i. Consider dose levels and impact on histogram and density measures
 - b. Volume-histogram modeling
 - i. Dependence of histogram on lung inflation
 - c. Phantom?
 - i. Stoel phantom sponge-piston
 1. Shaker et al and deviations from sponge model
 - ii. Anthropomorphic phantom
 1. 3D printing?
 2. Piston
2. Profile status update.
 - a. Software for automatic analysis of the phantom
 - b. T-con at QIBA meeting in Bethesda
3. AEC project updates
 - a. Phantom scans and working with vendors
 - b. Development of AEC dose or noise ceiling to match protocols across GE and Siemens

Action items:

- Dr. Hoppel to follow up offline with Mr. Sieren and Dr. Guo regarding U-Iowa software questions
- Dr. Fain to present updates on his research at the next vendor and BC calls
- Dr. Fain to follow up with Dr. Judy regarding a possible vendor T-con option at the in-person breakout meeting at the QIBA Annual Meeting
- Dr. Chen-Mayer to follow up with Dr. Lynch regarding COPD Gene novel data sets for both testing of volume adjustment and dose dependence of histogram measures (high and low dose scans acquired).
- Proposal approved by subcommittee. Submit proposal for volume adjustment to QIBA by April 27. Draft budget needs to include costs of travel to work with Dr. Stoel.

Next call: Wednesday, May 20, 2015 at 2 pm CT