

## QIBA Lung Density Biomarker Committee

February 25, 2015 at 2 PM CT

Call Summary

### In attendance

*Philip F. Judy, PhD (Chair)*

Heather Chen-Mayer, PhD

Harvey Coxson, PhD

Sean Fain, PhD

Matthew Fuld, PhD

Bernice Hoppel, PhD

Nancy Obuchowski, PhD

Karen Procknow, RT (R)

Daniel Sullivan, MD

### RSNA

Joe Koudelik

### General Discussion

#### Vendor COPDGene Phantom 2 Scanning

- Status - Phantom scanned by the second vendor system; 3<sup>rd</sup> scheduled for the week of March 2<sup>nd</sup>
- Siemens' legal has approved the use of the U Iowa phantom analysis software; Dr. Fuld to complete phantom analysis in two weeks
- Specification and Performance Assessment of spatial resolution needed for the Profile

#### Connect Claim in Profile with Claim Appendix

- Dr. Chen-Mayer to connect with the meta-analysis appendix
- Using the CT Volumetry Profile as a reference was suggested

#### Profile Makeup

- Use of the the CT Volumetry Profile as a reference was suggested
- Analysis Issues – Open Questions
  - Scanner Variation
  - Volume Correction – Will require volume correction for serial measurement but will not specify method
  - Dose Correction or Specify Noise – Use of pixel noise in COPDGene Phantom was suggested
- Goal is to have a draft Profile ready for the May QIBA Annual Meeting

#### Consider Groundwork Project: Develop and evaluate procedures to make the lower lung density measurements equivalent to a previous higher measurement

- Benchmarking cross-platform performance values to obtain the same output metrics (consistency) deemed more suitable than advocating for lower CT doses
- Higher-dose protocols show lower/smaller source errors, i.e., minimizing confounding factors, but evidence minimal due to limited supporting datasets

**Next call:** Wednesday, Mar 11, 2015 at 2 pm CT