

## QIBA Lung Density Biomarker Committee (BC) Call

August 30, 2017 at 2 PM CT

### Call Summary

#### In attendance

Sean Fain, PhD (Co-Chair)

David Lynch, MD (Co-Chair)

Philipp Hoelzer, PhD

Stephen Humphries, PhD

Miranda Kirby, PhD

Nancy Obuchowski, PhD

Gonzalo Vegas Sanchez-Ferrero, PhD, MSc

#### RSNA

Joe Koudelik

Julie Lisiecki

#### Discussion included:

**RSNA 2017 Poster:** The group confirmed that it will produce a poster.

#### Welcome new BC member:

- Dr. Philipp Hoelzer with Siemens introduced himself to the group. He will be replacing Dr. Fuld on CT Volumetry WebEx calls and also intends to work with the Lung Density BC.

#### Profile:

- The first draft of the Profile is complete and has been distributed to the BC for internal review
- Possibility of a conformance standard or document provided by each vendor instead of specific protocols
- Development of a more condensed profile conformance document

#### Comparative Algorithm Study update:

- There are now 12 participants signed up for the comparative study: 7 academic and 5 commercial
- Instructions are needed to participate
- The team is waiting for completion of the COPDGene CT data curation
  - There was some corruption in the downloadable file, and a few patient scans need to be re-uploaded
- Dr. Hatt will conduct a beta test of the downloads, then draft a results form and study instructions

#### Harmonization field testing (Dr. Humphries):

- Waiting for scan returns from a few more COPDGene scan sites
- An interim descriptive analysis is on hold due to new NIST responsibilities for Dr. Chen-Mayer
  - Any volunteers to aid with the harmonization model would be much appreciated
  - Goal is to present an interim analysis by RSNA 2017
- Examining past-linear mixed models, histogram shift approaches, and harmonization of emphysema measures

#### Supplemental funding:

- BC leadership has approached COPDGene for supplemental funding to complete the Phase II protocol
  - Potential to request supplemental funding associated with Dr. Crapo's awarded grant
  - Dr. Lynch is following up with Drs. Crapo and Silverman to clarify what additional funding may be needed

#### Additional topics for exploration:

- Post-linear mixed models
- Profile protocols and preliminary results
- Automated Exposure Control (AEC) measures
- De-noising techniques

**Next call:** Updates on the proposed comparative study will be discussed, Profile comments, and poster assignments  
[Wednesday, September 13, 2017 at 2 pm CT](#)

**SAVE-THE-DATE:** QIBA Working Meeting at RSNA 2017 | Wednesday, November 29, 2:30-6 pm – Lakeside Center

