QIBA Lung Density Biomarker Committee (BC) Call

January 17, 2018 at 2 PM CT Call Summary

In attendance RSNA

David Lynch, MD (Co-Chair)Philipp Hoelzer, PhDKevin O'Donnell, MAScJoe KoudelikRaul San José Estepar, PhDStephen Humphries, PhDGonzalo Vegas-Sanchez-Ferrero, PhD, MScJulie Lisiecki

Charles Hatt, PhD Philip Judy, PhD

Topics discussed included the following:

1. Harmonization field test updates, "QIBA-SRM Calibration Procedure." (Drs. Humphries)

- COPDGene subjects have been scanned
- Drs. Humphries and Chen-Mayer are testing Dr. Chen-Mayer's simplified analysis technique, which uses curves and corrects histograms based on phantom scans to demonstrate better harmonization among scanners
- This involves mapping the scale of the HU values, adjusting Perc 15 and the scale for determining the RA-950 cutoff
- They are currently in a data analysis phase

2. Comparative Study Update

- Seven participants have submitted data
- RSNA Staff to follow up with the 6 participants who have not yet responded to assess their interest in participating, and to encourage them to submit data
- RSNA Staff to provide anonymized data received to-date to Dr. Kirby for analysis
- Analysis to begin in the near future
- A report will be provided to the vendors to show their algorithm performance and how they compared to other (anonymized) participants
- IDs will be anonymized in all study reports

3. Funding next phase updates

- Dr. Lynch reviewed the wording of the aims for the COPDGene supplemental funding proposal
- He will forward edits made on the call for review to Drs. Estepar, Ferrero, Fain, and Humphries
 - Draft Aim 1: To evaluate existing harmonization approaches for evaluation of lung density measurements and validate these methods in relationship to lung function
 - o *Draft Aim 2*: To use a quantitative reference phantom to improve accuracy and precision of qCT measures of lung density

Reminders:

- Dr. Fain requested a volunteer to serve as co-editor of the Profile; if interested, please email: sfain@wisc.edu
- Mr. O'Donnell recommended that BC members begin compiling a list of experts and outside organizations that
 would be interested in reviewing the Profile once it is released for public comment: email addresses will be
 needed.

Next meeting: Wednesday, January 31, 2018 at 2 pm CT