QIBA Lung Density Biomarker Committee (BC)

Wednesday, December 16, 2020, 2 PM CT

Call Summary

In attendance Charles Hatt, PhD (Co-Chair) Miranda Kirby, PhD (Chair) Bernice Hoppel, PhD	Joseph G. Mammarappallil, MD, PhD Hatem Mehrez, PhD Amin Motahari, PhD	Sam Peterson Joshua Schirm, BSE Gonzalo Vegas-Sanchez-Ferrero, PhD, MSc	RSNA Joe Koudelik Julie Lisiecki
Annelise Malkus, PhD	Nancy Obuchowski, PhD		

Moderator: Dr. Hatt

Next QIBA Profile: Proposal Ideas Under Consideration (Drs. Kirby and Hatt)

- Dr. Kirby reviewed the results of the survey for new future quantitative Profile biomarker proposals for COPD
- 31 responses were received between November 6th December 16th
- Task forces will be created to allow teams to pursue multiple Profiles in parallel; biomarkers under consideration focus on the following:
 - 1) Gas-trapping/Parametric response mapping (PRM) and
 - 2) Airway Dimension Measurements
 - It may be necessary to conduct a second survey to further narrow down interest, as vascular volume and lung texture were also popular responses
- The BC is also considering including Interstitial Lung Disease (ILD) in addition to COPD
- The emphysema Profile will be used as a template
- Dr. Vegas-Sanchez-Ferrero thinks that two biomarkers are more than sufficient, as a dilution of effort would not produce the best results
- Dr. Motahari mentioned that further discussion is needed regarding 950 HU for vendor implications
 - This will be added to the next agenda
- Availability of clinical evidence and potential claims are important considerations, as well as studies on reproducibility and repeatability, which focus on the specifics of quantification for the biomarker
- The BC intends to start with new biomarker proposals in Q1-Q2 of 2021
- As there are several areas of interest, task forces may be formed to move forward more efficiently and in parallel
- For more detailed description of the previously discussed biomarkers, please see <u>recent notes</u> posted to the <u>Lung</u> <u>Density BC QIBA wiki page</u>

Action items:

• Continue discussion of multi-parametric Profile suggestions on next call

Next meeting: 1/27/2021