

QIBA Lung Density Biomarker Committee (BC)

Wednesday, April 27, 2022, 2 PM CT

Call Summary

In attendance

Charles Hatt, PhD (Co-Chair)

Miranda Kirby, PhD (Co-Chair)

Gonzalo Vegas-Sánchez-Ferrero, PhD, MSc (Co-Chair)

Sean B. Fain, PhD

Stephen Humphries, PhD

Philip F. Judy, PhD

Amin Motahari, PhD

John D. Newell, Jr., MD

Nancy Obuchowski, PhD

Sam Peterson, MS

Chuan Zhou, PhD

RSNA

Julie Lisiecki

Moderator: Dr. Hatt

The following topics were discussed:

- Future presentation on [3-D printed lungs](#)
- Progress re: the [Air-trapping Profile](#)
- New software comparison study
- Harmonization groundwork study for software comparison and image analysis

Action items:

- Dr. Hatt has invited [Dr. Peter Noël](#) to discuss [3-D printed lungs](#) on the May 25th call; all are asked to attend, as this promises to be an interesting presentation
- Dr. Kirby is using the Lung Density Profile as a template for the air-trapping Profile
- New software comparison study
 - Ancillary study may include COPDGene subjects ~50 and will invite vendors and academics to analyze images for gas-trapping
 - Volume adjustment to be considered
- [RSNA Staff](#) to invite Dr. Peter Noël to May 25th BC call to give a presentation on 3D-printed lungs and to help encourage attendance for this presentation
- [Dr. Kirby](#) to share her air-trapping draft with the BC
- [Dr. Fain](#) to follow up with a colleague, Alejandro C., regarding COPDGene papers, including FRC, Phase II, etc.

Previous action items (please strike if complete):

- [Dr. Hatt](#) to add some notes about the 3/23 discussion to the gas-trapping Google Profile document
- [Dr. Hatt](#) to ask Dr. Newell re: spiromics data ancillary studies once paper has been published
- [Dr. Hatt](#) to connect with Dr. Abadi re: virtual imaging
- Volunteers may be needed to assist Dr. Vegas-Sánchez-Ferrero with segmentation work
- [RSNA staff](#) suggest contacting [Dr. Hoppel](#) re: the multi-site Lung Density “road trip” experiment data
- Standardized naming of actors across QIBA Profiles (medical physicist or image analysis core, TBD)
- Exploration of cross-sectional claim instead of longitudinal for gas-trapping Profile

Next meetings: 5/25, 6/22, 7/27

References: [Profile Stages page](#) | [Technical Confirmation Process](#) | streamlined Profile [conformance checklist](#)

- [Notes](#) posted to the [Lung Density BC QIBA wiki page](#) can be referenced for detailed descriptions of biomarkers