

QIBA Lung Density Biomarker Committee (BC)

Wednesday, February 24, 2021, 2 PM CT

Call Summary

In attendance

Charles Hatt, PhD (Co-Chair)	Bernice Hoppel, PhD	John D. Newell, Jr., MD
Miranda Kirby, PhD (Co-Chair)	Stephen Humphries, PhD	Nancy Obuchowski, PhD
Ehsan Abadi, PhD	Philip F. Judy, PhD	Sam Peterson, MS
Rick Avila, MS	Annelise Malkus, PhD	Juan Carlos Ramirez-Giraldo, PhD
Raul San Jose Estépar, PhD	Joseph G. Mammarrappallil, MD, PhD	Gonzalo Vegas-Sanchez-Ferrero, PhD, MSc
Sean B. Fain, PhD	Hatem Mehrez, PhD	

RSNA

Joe Koudelik
Julie Lisiecki

Moderator: Dr. Hatt

QIBA Campaign 2021

- Mr. Avila, the QIBA Sustainability Implementation Committee (QSIC) representative for CT, joined the call to ask the BC to consider how they might move their Lung Density Profile from the Consensus Stage (Stage 2) to Technically Confirmed (Stage 3)
- QIBA Profile Stages:** http://qibawiki.rsna.org/index.php/QIBA_Profile_Stages
- Mr. Avila asked that at least three sites be identified to test the Profile using the checklist in a feasibility test, and to provide feedback to the BC using an electronic format that would capture their responses, e.g., [SurveyMonkey](#)
- If all three sites are able to successfully execute the Profile, the Profile would advance to Technically Confirmed, making it more readily usable in clinical care or clinical trial use
- It was agreed that research technologists should be targeted, as their feedback would be particularly useful
- Dr. Humphries volunteered to add the checklist to his group's phantom scanning efforts with the COPDGene study, and asked for a brief description with instructions, which Dr. Fain offered to format
- With twenty COPDGene study sites, three or more sites were expected to participate with feasibility testing
- Dr. Hatt suggested that open-source software and phantoms would be helpful but would require additional work

Task Forces for Gas-trapping/Parametric-Response Mapping (PRM) and Airway Measurements

- Dr. Hatt announced that Task Forces will meet independently and will report progress to the Lung Density BC, monthly
- Dr. Hatt assigned volunteers to groups as outlined in the table below
- He asked that if anyone has a strong preference for one group over the other to let him know: charleshatt@imbio.com
- Dr. Hatt to email individual task force members to determine suitable meeting times
- A [formal new biomarker proposal](#) will be needed for submission to the CT Coordinating Committee, to address five areas: *Transformational, Translational, Feasible, Practical, and Collaborative* (and later reviewed by the QIBA Steering Committee)
- More information can be found on the QIBA wiki: http://qibawiki.rsna.org/index.php/Selection_Process

Gas-trapping / PRM	Airway Analysis
Ehsan Abadi, PhD	Samuel Ash, MD, MPH
Sean Fain, PhD	Raul San Jose Estepar, PhD
Chuck Hatt, PhD	Philip F. Judy, PhD
Joe Mammarrappallil MD, PhD	Miranda Kirby, PhD
Lars Nordenmark, PhD	John D. Newell Jr., MD
Yoshiharu Ohno, MD, PhD	Nancy Obuchowski, PhD
Gonzalo Vegas-Sanchez-Ferrero, PhD, MSc	Samuel Peterson, MS
	Claudio Silva, MD, MSc

- For detailed descriptions of biomarkers, please see [notes](#) posted to the [Lung Density BC QIBA wiki page](#)

Action items:

- Dr. Hatt to follow up via email to determine when task force groups will meet
- Dr. Fain to send Checklist to co-chairs and Dr. Humphries for review/feedback
- Continue discussion of multi-parametric Profile suggestions on next call

Next meetings: 3/24, 4/28, 5/26