

## QIBA Lung Density Biomarker Committee (BC) Call

October 23, 2019 at 2 PM (CT)

### Call Summary

#### In attendance

Sean Fain, PhD (Co-Chair)

Charles Hatt, PhD (Co-Chair)

David Lynch, MD (Co-Chair)

Heather Chen-Mayer, PhD

Raul San José Estepar, PhD

Stephen Humphries, PhD

Philip F. Judy, PhD

Miranda Kirby, PhD

Amin Motahari, PhD

Nancy Obuchowski, PhD

Kevin O'Donnell, MASC

#### RSNA

Joe Koudelik

Julie Lisiecki

**Moderator:** Dr. Fain

#### QIBA CT Lung Density Poster for RSNA 2019:

- Addition of an image or graphic was suggested
- A comparison of normal and severe emphysema, and possibly a related histogram was suggested
- Dr. Motahari suggested addition of a graphic to demonstrate change, such as density, mass, or a histogram
  - He will draft one for the poster
- Another suggestion included Perc15, where the vertical bar has shifted ideally above the Profile's noise level with the 95% confidence interval, showing some progression for the claim
- Some different slices showing emphysema progression were another possibility
- Any additional content should be sent to Dr. Jarecha ([Rudresh.Jarecha@parexel.com](mailto:Rudresh.Jarecha@parexel.com))
- The PowerPoint print-ready deadline is **November 8<sup>th</sup>**

#### Profile Public Comment Review:

- The Profile's 60-day Public Comment period ended on Wednesday, October 16, 2019
- Comments were received from individual reviewers and AAPM
- The co-chairs plan to assign follow-up to the comments to BC members based on their expertise
  - Reviewers will be assigned tasks using the comment resolution spreadsheet under the "owner" column
- Mr. O'Donnell shared the CT Volumetry Profile checklist as an example and explained how it was trimmed down based on responses received during feasibility testing at 3 sites
- Work on a checklist will continue in parallel with public comment resolution
  - Examples of Profiles with checklists include the CT Volumetry Advanced Disease Profile and the DWI-MRI Profile (both on the [QIBA wiki](#))

#### Specific comments discussed:

- AAPM commented on the possible challenges with implementing the protocol
  - Mr. O'Donnell suggested that a response to AAPM could be that once feasibility testing is completed, a more succinct protocol could be provided
  - He also suggested asking for volunteer sites from AAPM membership for feasibility testing
- In addition, adding a disclaimer such as "the Profile focuses on achieving certain performance marks, not setting the standard of clinical care" could be helpful
- It was also suggested that the existing claims could be divided into 3 parts:
  1. One claim could focus on use of Perc 15 **with** volume adjustment
  2. One claim could focus on use of Perc 15 **without** volume adjustment
  3. One claim could address the relative area of the lung (RA) as related to specific attenuation values less than -950 Hounsfield Units (HU)
- Removal of the "change log" was suggested; this was deemed inappropriate for the Profile
- Removal of the "closed issues" was considered, if truly closed; however, it was decided that this could remain as a historical reference, but that any duplicate comments should be removed

### **COPDGene Meeting, Boston (Nov. 14-15, 2019):**

- If possible, a face-to-face meeting for those attending will be arranged at the COPDGene Fall 2019 Investigators Meeting
  - Dr. Fain hopes to discuss future possibilities for the study of airways and additional future directions for the QIBA Lung Density BC
  - These discussions will continue at the breakout session after the QIBA Working Meeting at RSNA 2019 to outline a path forward for the BC
- Dr. Hatt intends to try to connect with Dr. Jean-Paul Charbonnier to invite him to discuss Protease Inhibitor 10 (Pi10) with the BC
  - Dr. Charbonnier is working with the Diagnostic Image Analysis Group within the department of radiology at the Radboud University Medical Center (the Netherlands)

### **Action items (some from previous call):**

1. BC members may be assigned follow up items (based on expertise) to resolve public comment questions and report back to the BC on the next call
2. Dr. Hatt to invite an expert in airway analysis (Dr. Jean Paul Charbonnier) to outline Pi10 at the next meeting
3. Make progress on reaching out to sites to obtain a repeatability dataset for CAC and lung density in LCS data. Not certain who the best contact would be. (Dr. Hatt to ask Ella.)
4. Finalize poster with graphics **by November 4<sup>th</sup>** and send to Dr. Jarecha ([Rudresh.Jarecha@parexel.com](mailto:Rudresh.Jarecha@parexel.com)) (Drs. Hatt and Motahari)
5. Reach out to leaders of the American Lung Association study (that is in planning) regarding a possible qualification for the Profile (Dr. Lynch)

### **Next meetings:**

#### WebEx:

- Wednesday, November 13, 2019 at 2 pm CT – QIBA Q4 CT Coordinating Committee (*for those on the CT CC*)
  - **BC Co-Chairs:** If you have not already done so, please indicate your availability to moderate/provide updates on this call by visiting: <https://tinyurl.com/QIBA-CC-Calls>.
  - [Dashboard](#)
- Wednesday, November 20, 2019 at 2 pm CT (BC WebEx)
- Wednesday, December 18, 2019 at 2 pm CT (BC WebEx)

#### f2f:

- Thursday and Friday, November 14-15, 2019 – f2f, COPDGene Meeting in Boston
- Wednesday, December 4, 2019 (QIBA Working Meeting at RSNA 2019)

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### **RSNA 2019 Reminders:**

- Please [RSVP for the Dec. 4 QIBA Working Meeting](#) during the 2019 RSNA Annual Meeting
- Please [sign up for the RSNA 2019 MTE Sessions](#) at the QIBA Kiosk:
  - Type in your name next to the presentation time slot that works for you (we encourage that each 30-minute time slot is filled by at least one committee member)
  - Simply close out of the document (there is no save button and changes will automatically save)

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