

QIBA COPD/Asthma Technical Committee

December 14, 2011 at 2 PM CST

Call Summary

In attendance

Philip F. Judy, PhD (Co-chair)

John D. Newell, Jr. (Co-chair)

Paul L. Carson, PhD

Harvey Coxson, PhD

Barbara Croft, MD

Bernice Hoppel, PhD

Dan Sullivan, MD

RSNA

Julie Lisiecki

Dr. Newell Reviewed Breakout Session Notes from RSNA 2011:

- Group discussed metrics and specific numbers for threshold: -856 vs. -850 being considered
 - Dr. Judy would like numbers to be more general and include background on how they were established
 - Dr. Coxson commented that maybe these numbers are not important – rather consider the ultimate end goal
- Suggestion of a Second Technical Profile: Goal of this Profile would be to use physical materials to map out values on well-calibrated state-of-the-art CT scanners from the 4 major CT manufacturers (GE, Philips, Siemens, and Toshiba).
- Will increase standard deviations over time by working with data and continue to update numbers for greater accuracy
 - Dr. Coxson commented that values tested for scanner calibration using physical materials are not the strongest for representing pathologic/ biologic values and wants more emphasis on biologic effects
 - Also suggested a clarification/ definition of terms, (glossary), particularly terms that should be used universally
 - i.e., LAA vs. threshold index /percentile
 - “low emphysema volume” might be a better term
 - important to be and remain consistent
 - Would like to include a glossary or emphysema index with the COPDGene Profile
 - The group needs to be just as rigorous with analysis software as with machinery when considering standards

Phantom Round Robin:

- Dr. Judy is shipping the COPDGene Phantom to Dr. Fain on 12/15 for return on 1/9
 - Dr. Fain will test a variety of the ring configurations and provide numbers for GE scanners
 - After significant data is obtained, numbers will be updated to provide a range using the spiromics protocol across scanners
 - Will specify claim in a more precise/ accurate way
 - Dr. Hoppel also expressed an interest in working with a phantom and possibly purchasing one
 - Dr. Judy will follow up and provide Mr. Levy’s contact information

Next one-day Quantitative CT Imaging of the Lung meeting, March 2012

- Dr. Judy received about a dozen abstracts to review for the meeting and is pleased that there is interest.
- Drs. Judy and Newell are both working to get more vendor representatives involved on calls or at face-to-face meetings

Available Software for Airways Discussed:

- No public domain software yet available for morphological airways measurements
- Dr. Judy is trying a public domain software called *Airway Infector*; however, it does not have all of the functions for analysis
 - Dr. Judy to follow up with Susan Wood at VIDA Diagnostics re: measurement software availability for airways

Next Steps:

- Dr. Newell will invite his contacts from Siemens to the Quantitative CT Imaging of the Lung Mtg at STR.
- Dr. Hoppel agreed to contact GE personnel and invite them to the Quantitative CT Imaging of the Lung Mtg at STR.
- Dr. Newell will revise the Profile based on the conversations and suggestions from today’s call
- Dr. Judy to follow up with Susan Wood at VIDA Diagnostics re: measurement software availability for airways

Next calls:

- Next COPD/Asthma LDCRS WG update call: **Wednesday, December 21, 2011 at 2 PM CST**
- Next COPD/Asthma TC update call: **Wednesday, January 4, 2012 at 2 PM CST**