

QIBA COPD/Asthma Technical Committee

September 19, 2012 at 2 PM CT

Call Summary

In attendance

Philip F. Judy, PhD (Chair)

Paul Carson, PhD

Heather Chen-Mayer, PhD

David Lynch, MB

Daniel C. Sullivan, MD

RSNA

Joe Koudelik

Julie Lisiecki

Collaborative Publication Update

- COPDGene Reference Test Object paper has been published. It was distributed to the group. Sieren JP, Newell JD, Judy PF, Lynch DA, Chan KS, Guo J, Hoffman EA., *Reference standard and statistical model for inter-site and temporal comparisons of CT attenuation in a multicenter quantitative lung study*. Med Phys. 2012 Sep; 39(9):5757-67.
- **Purpose:** The purpose of this study was to detect and analyze anomalies between multiple CT scanners, tracked over time, utilized to collect human pulmonary CT data for a national multicenter study: chronic obstructive pulmonary disease genetic epidemiology study (COPDGene).

International COPD Genetics Consortium, Sept 27-28, 2012, Amsterdam

- Drs. Judy and Lynch are planning to meet to discuss next steps in a Profile for Emphysema
- Goal to bring COPD CT imaging and genetics cohort data together
- Dr. Judy to present: How to correct for inconsistencies on scanners using the COPDGene Phantom
- Dr. Lynch to present: Discussion of How to Implement CT Collaborations Across Cohorts
 - will also incorporate the QIBA COPD/Asthma Profile work
 - will invite interested attendees to discuss Profile efforts and quantitative CT
- Dr. Stoehl will be at the conference presenting on volume corrections
 - Dr. Judy plans to invite him to contribute a panel on volume corrections to the Poster for **RSNA 2012**
- Drs. Judy and Lynch will follow up with the COPD Foundation key contacts regarding the CBQC Workshop for January 2013.

Profile Editors Needed

- A Profile Editor is needed to further develop template for the Emphysema Profile
- Dr. Fain is working on the Airways Profile
- Dr. Judy suggested pursuing two Profiles, since COPD and Asthma are too complex to address in a single Profile

Committee poster at **RSNA 2012 (hard copy to RSNA by Nov 1st)**

- Topics to include the following with a panel devoted to each:
 1. Scanner correction
 2. Volume correction (Dr. Stoel)
 3. Airway dimension accuracy (Dr. Fain)
 4. Q/A reference standards
- Dr. Judy will act as content editor and will develop the final poster

QIBA participation in 2013 International Workshop for Pulmonary Functional Imaging

- Dr. Lynch to follow up with Dr. Schiebler (*University of Wisconsin-Madison*) next week to finalize QIBA program

Next Steps

- Dr. Judy to send latest versions of the Profile to Dr. Lynch – prior to the COPD Genetics Conference
- Seek alternate sources of funding for RFP for computer program to analyze COPDGene Phantom images
- Plan a comparison of airway-size image analysis algorithms
- Discuss Profile claims and next steps – Add calibration procedure

Next call: QIBA COPD/Asthma Update Call, **Wednesday, October 10, 2012, 2 pm CT**