QIBA COPD/Asthma Technical Committee

October 10, 2012 at 2 PM CT Call Summary

In attendance

Philip F. Judy , PhD (Chair)

Paul Carson, PhD

Bernice Hoppel, PhD

Mark Schiebler, MD

Julie Lisiecki

Harvey Coxson, PhD

Zachary Levine, PhD

Barbara Croft, MD

David Lynch, MB

Daniel C. Sullivan, MD

Sean Fain, PhD

1. Report on International COPD Genetics Consortium, Sept 27-28, 2012, Amsterdam Update

- Status of various cohorts and the nature of multi-institutional trials were highlights of the meeting
 - o These included: ECLIPSE, Spiromics, COPDGene, KOLD, MESA, etc.
- Observations from the meeting:
 - Many investigators still feel that CT number of air outside the subject has utility as reference for scanner correction
 - Collaboration with radiation therapy was suggested
 - Need to know repeatability and reproducibility of FEVI
 - o Dr. Judy requested reproducibility data of conference participants
 - o Dr. Judy plans to pursue study of BMI in patients because investigators attending the ICGC2 underestimate its impact on bias of density measurements

2. Status of 2013 CBQC Biomarkers Workshop – Scheduled for Feb 5 - 6, 2013

- The CBQC is going ahead with their planned CT biomarker qualification workshop in Bethesda, MD.
- Drs. Judy and Lynch followed up with Mr. John Walsh and Dr. Stephen Rennard regarding the CBQC Workshop for February 2013, and to date, the only contact with QIBA has been with Dr. Judy; no contact with Dr. Sullivan
- Dr. Judy plans to suggest COPD TC members as potential speakers to the organizers.

3. Committee poster at RSNA 2012

- Dr. Judy will act as content editor, will develop and print the final poster, and bring it to the meeting in Chicago.
- Poster focus will primarily be phantoms and airway measurement.

4. QIBA participation in 2013 International Workshop for Pulmonary Functional Imaging

- Dr. Schiebler (University of Wisconsin-Madison) has offered QIBA a half day session at this workshop
- Drs. Judy and Lynch to finalize the QIBA program and submit a proposal with agenda to RSNA
- Dr. Judy would like to have speakers identified before the proposal is submitted

5. Emphysema Profile considerations

- What metric should be used as the "emphysema severity metric" is of particular interest.
- Feedback on PERC 15 welcomed.
- Particular concern about radiation and CT dose in the evaluation of emphysema.
- More discussion of CT imaging techniques any ways to reduce dose are needed, as well as review/evaluation of current studies
 - o Iterative reconstructions are changing how Hounsfield Units are generated in these images.
 - o Dr. Levine is currently working on a protocol for iterative reconstructions.
- Goal to move CT forward as a valid biomarker if there is an endpoint in the data
 - o This may be possible if it can be shown that a reduction of dose will still yield good quantitative scans.

Next Steps

- Discuss more details or updates, if any, for the Consortium Meeting (CBQC)
- Dr. Fain to provide information to Dr. Judy for the poster in the next three weeks
- Seek alternate sources of funding for RFP for computer program to analyze COPDGene Phantom images

- Plan a comparison of airway-size image analysis algorithms
- Return to Profile writing
 - o Discuss Profile claims and next steps Add calibration procedure

Next call: QIBA COPD/Asthma Update Call, Wednesday, October 24, 2012, 2 pm CT