QIBA COPD/Asthma Lung Density Reference & Consistency Standards Working Group

November 9, 2011 at 2 PM CST Draft Call Summary

In attendance

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

Paul L. Carson, PhD

Zachary Levine, PhD

David Lynch, MB

Joe Koudelik

Frank Ranallo, PhD

Julie Lisiecki

Sean Fain, PhD

Volunteers are needed for Meet-the-Expert sessions at RSNA 2011:

Please respond to the following poll to indicate availability: http://www.doodle.com/cwkdggpr2nd24fm3

Phantom Manuscript (Dr. Lynch)

COPDGene Phantom Manuscript Draft, version 10142011, has not yet been distributed; Dr. Lynch shared latest version.

Quantitative CT Imaging of the Lung Meeting at STR, March 10, 2012 (Dr. Lynch)

- Feedback solicited regarding publicizing the workshop and the December 7th deadline for abstracts.
- RSNA staff to distribute a call for abstracts, etc., with invitation from Dr. Lynch to the QIBA Vol CT and COPD/Asthma Technical Committees (complete)
- Documents have also been posted to the QIBA WIKI: http://qibawiki.rsna.org/index.php?title=COPD-Asthma tech ctte
- Dr. Lynch inquired about using the RSNA membership list, pending approval; the request has been forwarded
- Other suggestions: Severe Asthma Research Program (SARP), COPDGene investigators, The COPD Foundation, Phantom Labs
- Suggested Future Rotations of the Quantitative CT Imaging of the Lung Meeting be held in conjunction with other large meetings that have a COPD/CT community; possibly at the end of July or early August
- Suggestions for possible partnerships:
 - o AAPM (The American Association of Physicists in Medicine) -deemed the most likely partner with related goals
 - RSNA (Radiological Society of North America)
 - WMIC (World Molecular Imaging Congress) hosted by the World Molecular Imaging Society ATS (American Thoracic Society)
 - o SPIE (international society for optics and photonics)

Poster:

Dr. Newell asked that any suggestions or additions be sent to Dr. Judy directly: <u>pjudy@partners.org</u>.

Profile Efforts:

- Dr. Fain suggested using a "snapshot" of what the field is using now to move the Profile forward: Best Practices
 - Focus more on the specific goals for the Profile.
- Dr. Newell suggested inviting the major CT vendors to TC meeting at RSNA 2011 to set the goal of them all committing
 to achieve cross-manufacturer repeatability of CT numbers derived from the NIST foams, possibly including a single
 cross-vendor reconstruction process.
- Dr. Carson suggested that working groups could be established to advance the effort.
 - o To confirm that clinical care would be improved by having better than the ±10 HU S.D
 - Use algorithms and protocols for consistent lung density measurements in the range of 500 to -1000 HU.
 - Establish a working group on consistent lung density measurements with strong participation and co-leadership, by industry and physicists.
 - Participant roles and project time scales to be discussed at RSNA.

Next Steps:

- Dr. Lynch will approach the COPDGene investigators at their upcoming meeting
- Dr. Lynch: verbiage on the value of Quantitative CT as well as a draft claim; summary of clinical utility of air morphology
- Drs. Fain and Ranallo to provide airway Claim information from the COPD Profile
- Dr. Judy to update and produce poster for RSNA 2011

Next calls:

- Next COPD/Asthma TC update call: Wednesday, November 16, 2011 at 2 PM CST
- Next COPD/Asthma LDCRS WG update call: Wednesday, November 23, 2011 at 2 PM CST