

QIBA COPD/Asthma Technical Committee

March 12, 2014 at 2 PM CT

Call Summary

In attendance

Philip F. Judy, PhD (Chair)

Andrew Buckler, MS

Heather Chen-Mayer, PhD

Sean Fain, PhD

Matthew Fuld, PhD

Bernice Hoppel, PhD

Daniel Sullivan, MD

RSNA

Joe Koudelik

Julie Lisiecki

Agenda 3/12/2014:

1. Review Summary of 2/26/2014 Conference Call
2. Lung density profile claims – Report on conference call.
3. Plan to finalize acquisition and reconstruction of Profile specifications
 - a. Comments on Matthew Fuld observations
4. Review of QIBA Lung QCT presentation at STR

Next call: Wednesday, March 26, 2014 at 2 pm CT

Discussion topics included:

- Dr. Judy reminded the group that concepts for proposed Year-4 NIBIB projects are due **April 7th**
- Dr. Fain summarized a recent offline call held to best define bias and precision with respect to parenchymal density on CT for emphysema with Mr. Buckler and Drs. Chen-Mayer and Judy
- Key discussion points:
 - It is difficult to formulate a bias claim and connect histology measures of emphysema
 - The group plans to evaluate bias past the -960 HU threshold, including -950 and -910, quantitatively evaluating how they differ.
 - Perc15 and other measures that are considered more stable for longitudinal studies will also be reviewed.
 - Dr. Chen-Mayer is focusing on precision issues, using simple model corrections
 - Dr. Judy plans to follow up with Drs. Chen-Mayer and Fain regarding histogram adjustments
- Drs. Hoppel and Fuld are finalizing acquisition and reconstruction Profile specifications
 - Plan to address all things that will affect individual patient measurements, e.g., noise, AEC measurements, etc.
 - Goal of Profile is to define criteria for users to meet compliance without prescribing how; must enable flexibility among vendor systems to allow for innovation
 - Mr. Buckler proposed that Dr. Fuld consider taking on the role of Profile Editor.
 - RSNA staff to provide a list of QIBA manufacturer and informatics participants for CT Volumetry/ COPD/Asthma
- Drs. Fain and Fuld to discuss possible project collaboration on AEC and IR measurements.
- Dr. Judy previewed his presentation for the QCT seminar and requested group feedback
- Sunday breakfast meeting at STR planned to discuss QIBA COPD/Asthma projects

Action items:

- Dr. Judy welcomes feedback from group members regarding Profiles, etc.: philipfjudy@philipfjudy.com.
- RSNA staff to provide a list of QIBA manufacturer and informatics participants for CT Volumetry/ COPD/Asthma to Drs. Hoppel and Fuld

QIBA COPD/Asthma upcoming calls:

- 3/26/2014 and 4/09/2014