QIBA COPD/Asthma LDRCS WG
February 29, 2012 at 2 PM CST
Call Summary

Agenda

1. Updates:
   a. NIST Reference Material
   b. UW Dose Reduction

2. Year 3 possible NIBIB Projects - Gaps/Opportunities
   a. COPDGene Phantom Image QA Software

3. Round Robin Scans of COPDGene Phantom with NIST Foams
   a. Next up: NIST

4. COPDGene Phantom results from Aquilion One at the Clinical Research Imaging Centre in Edinburgh

Discussion Summary

NIST Reference Material:
• COPDGene with NIST foams will be scanned
  o Dr. Judy working in parallel with Dr. Chen-Mayer on coordinating this project and the scanning protocol

Gantt Chart Review of Projects for NIBIB Update:
• University of Wisconsin Project on Dose Reduction on schedule for July 2012 completion
  o Dr. Fain is working on analysis and measurements to reconstruct raw datasets on “human data”
  o Phantom scanning is complete

Profile
• Suggested focus of Profile on a biomarker/ single quantity within the biomarker
  o Lung density or airway size measurements
• Need to look at literature for both short- and long- term repeatability of the metrics
  o Density metrics are the most mature
  o COPDGene is recording lung density
  o Dr. Newell suggested “mean lung density” as a more reliable measurement for reference
• Another issue is uncertainty regarding how to launch a field test in a different domain than oncology.
  o Group has decided to emphasize NIST foams instead of human trials
• Another project idea under consideration is modification of “Airway Inspector” software
  o Dr. Fain has expressed interest in this idea and in project collaboration
  o Dr. Judy will send the COPDGene phantom to NIST for development of studies using NIST foams

Other topics
• Dr. Martin Connell, with the Clinical Research Imaging Centre in Edinburgh, joined the group and discussed his work with the COPDGene phantom on Aquilion One using new software available only in Europe
• Dr. Judy distributed a PowerPoint presentation summarizing Dr. Connell’s work

Next Steps:
• More discussion is needed regarding potential Year- 3 NIBIB Projects; to continue on next call, March 7th

Next calls:
• Next COPD/Asthma Technical Committee update call: Wednesday, March 7, 2012 at 2 PM CST
• Next COPD/Asthma LDRCS WG update call: TBD