

QIBA COPD/Asthma Subcommittee Update
November 17, 2010 at 2 PM CST

Draft Call Summary

In Attendance	Jered Sieren
David Lynch, MB (Co-chair)	Berend Stoel, PhD
Andrew Buckler, MS	Juerg Tschirren, PhD
Heather Chen-Mayer, PhD	
James Crapo, MD	
Sean Fain, PhD	RSNA
Zachary Levine, PhD	Joe Koudelik
John Newell, Jr, MD	Julie Lisiecki

Poster Overview

- Sections of the poster are to cover different topics
- CT attenuation, correlation with physiology, sources of variation, COPD Gene phantom design and imaging protocol, automated phantom analysis software, quantitative CT for asthma assessment, airway modeling and trapping, etc
- Trying to standardize CT dose across vendor systems and limiting scan time to only lungs will be two most important items to demo on the COPD poster
- Minimizing radiation dose without compromising image quality is key
- Meet-the-Expert (MTE) poster sessions for Sunday through Thursday available to anyone attending RSNA in Chicago

Standardizing the CT Protocol

- Profile to be structured around the UPICT protocol template
- Mr. Sieren provided an overview of the SPIROMICS imaging protocol (a great resource)
 - Input parameters, rotation speed, detector alignment, pitch, kVp, dose modulation and reconstruction algorithms all discussed
 - Last page of protocol very useful in helping users help themselves
 - Patient study protocol current version now; a phantom version protocol is next project
 - Mr Sieren to forward SPIROMICS protocol to the group members for reference
- Extraction of detail needed from the basic imaging process; vendors to fill-out detail tables to help fix problems without hindering innovation
- Possibility of publishing article in *Radiology* discussed; topic would be the development of a standardized CT protocol; additional team discussion needed
- Expiratory protocol discussed; used for air trapping primarily
 - Dose kept constant between inspiration/expiration
 - Modulation caused shift in density; possible issue with attenuation analysis
- Step-by-step instruction forms for each scanner platform needed
 - e.g. Patient positioning, scan coverage, CT parameters, breathing instructions, etc

Meet-the-Experts (MTE) Poster Sessions

- Everyone attending the RSNA 2010 Annual Meeting in Chicago welcome to help promote the COPD/Asthma project efforts by participating in the MTE sessions Sunday through Thursday in the QIBA poster area (Lakeside Learning Center, Hall E)

Next Steps:

- Mr Sieren to forward SPIROMICS protocol to the group members for reference
- Next call scheduled for after the RSNA Annual Meeting; Dec 15th at 2 pm CST