QIBA COPD/Asthma Committee

Tuesday, February 2, 2010 11 AM CST

Call Summary

In attendance

Philip Judy, PhD (Co-chair) Andrew Buckler, MS Zachary Levine, PhD Michael McNitt-Gray, PhD RSNA

Fiona Miller Susan Anderson, MLS Joe Koudelik

Status of COPDGene CT Number Accuracy Conference

- Dr Crapo has postponed planning for large mtg with vendors; instead will convene smaller group meeting of COPDGene investigators, ctte members and others to move towards consensus before involving vendors
- The COPD Profile can help focus activities and frame 'wish list' of vendors in a positive manner

Ancillary Study design for committee (Dr Judy and Mr Buckler)

- The ancillary study plan is part optimization, part characterization
- Outlines activities which include:
 - Background data: snapshot of where we are with literature search and other components
 - Acquire or develop phantom:
 - Intermediate goal: modifying COPDGene phantom to mimic air trachea
 - Characterize variability as Q-CT Dr Fenimore and Group 1C is doing
- "Challenge problem" is defined as making improvements; proprietary platform-dependent solutions guided/standardized by platform-independent solutions
 - The supposition is that engineering or software changes are necessary to achieve desired performance
 - Manufacturers appear willing to cooperate with scanning and setting within current design but concern about their interest in moving from current design to new design to meet external 'challenges'
 - Benefit to vendors who meet compliance certification is improved product which meets demand Profile-compliant product
- Workplan will demonstrate convincingly to vendors that pulmonologists and radiologists' suggestions are do-able
- Vendor product lines to be 'Profile compliant', where 'compliance' is a product feature leading to increased product utilization (based on features)
- Positive feedback on better definition of HU; Dr Levine to pursue
- Discussion of streaking on high-contrast features; another iteration of phantom with patterns of high-contrast objects may be helpful to mimic noise and shift HU values
- Discussion of funding or pursuing workplan with volunteers

Phantom modification

 Want to avoid work or modifications which have been addressed with ACR phantom; need to determine if the ACR phantom mimics the air trachea issues Dr McNitt-Gray discussed loan of ACR phantom, which has air circle in relatively solid disk, to Dr Judy; Dr Judy has experience with linearity phantom from Kyoto company which has similar features

FDA Guidance for Industry - Chronic Obstructive Pulmonary Disease: Developing Drugs for Treatment (Draft Nov 2007)

- Group will consider whether Nov 07 draft and any updates have recommended/approved primary and secondary endpoints
- Dr McNitt-Gray will share document with colleagues for comment
- Are select CT measurements approved as primary or secondary endpoints? Do sponsors want this?

Next Steps:

- Dr McNitt-Gray to distribute Draft FDA Guidance for Industry Chronic Obstructive Pulmonary Disease: Developing Drugs for Treatment to colleagues for comment
- Dr Judy welcomes guideline feedback
- Next call scheduled for Feb 16, 2010 at 11 AM CST