QIBA Lung Density Biomarker Committee (BC)
June 3, 2015 at 2 PM CT
Call Summary

In attendance
Philip F. Judy, PhD (Chair)
Heather Chen-Mayer, PhD
Dominic Crotty, PhD

RSNA
Bernice Hoppel, PhD
Joe Koudelik
Daniel Sullivan, MD
Julie Lisiecki

Discussion topics:
1. Review of QIBA Annual Meeting Breakout Sessions Notes provided by Drs. Chen-Mayer and Fain

2. Proposed Round-5 project - Volume corrections
   • Consideration to build a compressible lung phantom based on the Stoel model, to be used as a standard for benchmarking results
   • Dr. Lynch has also requested investigator help to work with COPDGene data:
     o to examine low dose scans using iterative reconstruction (IR) and automatic exposure control (AEC)
     o to review longitudinal data for testing volume correction
     o to consider how metrics are biased by the noise

3. Vendor COPDGene Phantom 2 Scanning
   • CT number calibrations – Second round robin includes NIST lung density reference object
   • Dr. Hoppel to follow up with Dr. Crotty regarding phantom delivery
   • Vendors hope to have results to share on the 6/17 call

4. Tasks for Profile Markup
   • Analysis Issues – Open Questions
   • Correction for scanner model variation – Vendor study results
   • Edge response function matching
   • Volume Correction - list possible methods
   • Specification noise – constrained by resolution
   • Conformance, formerly known as compliance
   • Long term precision of phantom CT numbers
   • Citations

Action items:
• Dr. Hoppel to follow up offline with Mr. Sieren and Dr. Guo regarding U-Iowa software questions
• Dr. Hoppel to follow up with Dr. Crotty regarding phantom delivery
• Dr. Fain to present updates on his research at the 6/17 vendor and BC calls
• Dr. Chen-Mayer to follow up with Dr. Lynch regarding COPDGene novel data sets

Other:
• Dr. Chen-Mayer’s AAPM Presentation
  o TU-G-204-8 (Tuesday, July 14, 2015), 4:30 – 6 PM Room: 204

Next call: Wednesday, June 17, 2015 at 2 pm CT - Topics: Calibration and Update on Round-1 Vendor Scans