QIBA Quantitative CT Committee
Monday, February 1, 2010
11 AM CST

Call Summary

In attendance

Andrew Buckler, MS (co-chair)
Lawrence Schwartz, MD (co-chair)
Rahul Bhotika, PhD
Charles Fenimore, PhD
John Fraunberger
David Gustafson, PhD
Philip F. Judy, PhD
Grace Kim, PhD
John Lu, PhD
Michael McNitt-Gray, PhD

James Mulshine, MD
Michael O'Neal, MD
Nicholas Petrick, PhD
Yuanxin Rong, MD, MPH

RSNA
Fiona Miller
Susan Anderson, MLS
Joe Koudelik

General
- Dr Petrick will submit data to AVT; expects initial analysis at minimum

Group 1A Data Analysis
- Drs Kim and Lu have completed preliminary data analysis and will begin writing project summary
- Eventually need to construct summary conclusions as data analysis continues with data interpretation and logical implications
- Dr Lu presented numerical data; also has graphical representation
- Data segmented by nodule shape; 2 scans; 2 densities; 2 slice thicknesses; semi-automated RECIST measurements made
- Differences in readers seen; three of six readers had experience with OncoCare volumetric tool
- Wide variability (inter- and intra-reader variation) seen in thick and thin slice reading; relative bias increases between thick and thin slices
- Segmentation datasets to be examined for possible explanation as to reader error
- Thin slice is within target threshold (15% error); thick slice is beyond threshold even in this limited condition
- Error measures based on RECIST need to be compared to actual volumes
- Some tasks were more idealized than in clinical practice
- Reader 'consensus mean' defined as average of mean from each reader
- Orientation is important consideration re: density calculation
- Consider abstract submission for meetings and for publication
  - AAPM (July meeting in Philadelphia) has abstract submission deadline of March 3

Next Steps
- Dr Petrick will submit data to AVT
- RSNA staff will distribute Drs Lu and Kim data prior to next call
- Drs Lu and Kim to continue presentation of data
- Continue discussion on draft FDA Briefing Document