

QIBA Volumetric CT Group 1C Update
Thursday, December 15, 2011; 3:00 PM CST
Draft Call Summary

In attendance

Charles Fenimore, PhD, (Chair)	Barbara Croft, MD	Hyun Grace Kim, PhD	RSNA
Andrew Buckler, MS	Marios Gavrielides, PhD	John Lu, PhD	Julie Lisiecki
Baiyu Chen, PhD	Howard Higley, PhD	Nicholas Petrick, PhD	
David A. Clunie, MBBS			

Agenda: *Analysis of reader data for QIBA vCT 1C.*

Statistical Data Analysis (relative bias): Dr. Kim

- Dr. Kim reviewed the results of the data analysis of phantom nodules
 - Testing the measure of bias in the interval between +/- 15 (global) – across all scanners
 - Some interesting observations were:
 - There is a scanner effect; however, it is not really meaningful across the two arms of the study
 - “Within a scanner, a threshold of 15% relative bias is being met”
 - This may not be clinically significant if – a comparison of 2 scanners shows that they are only at 3% within the range of the 15% bias
 - Group needs to look at the raw uncertainty and difference between scanners

Questions from today’s discussion

- The group will look at questions raised by the analysis of relative bias
- Analysis of both **relative bias**, (Dr. Kim) and **variation**, (Dr. Lu), will be incorporated and addressed in a scientific paper
- Differences between and unique attributes of scanners may also need to be considered
 - For example, sizing vs. change analysis
 - One scanner may handle “sizing” better than another
- Results of this study will need to be put into a more accessible context for those who are unfamiliar with the details of the study

For further analysis/discussion:

- How to conduct a statistical analysis on the uncertainty

Next steps:

- Update to be distributed only to those on today’s call (core group) by Dr. Kim; additional comments may be added after the group has an opportunity to review

Next call: *TBD in 2012*