

**QIBA Volumetric CT Group 1C Update WebEx
Cross-Platform / Inter-Clinical Study
Sept 2, 2009, 2:00 PM CDT**

Call Summary

In attendance:

Charles Fenimore, PhD (Chair, Moderator)
Andrew Buckler, MS
David Clunie, MBBS
David Gustafson, PhD
John Fraunberger, MD
John Lu, PhD
Mahadevappa Mahash, MS, PhD

Michael McNitt-Gray, PhD
Nicholas Petrick, PhD
Ehsan Samei, PhD

RSNA Staff

Susan Anderson, MLS
Joe Koudelik

General Discussion

Representatives from potential collection sites will be invited to participate on Group calls

Group 1C Overview

- Group 1C planning a two-branch structure:
 - 1st branch: using standard protocol, similar to ACRIN 6678
 - 2nd branch: using performance metrics specifications, e.g. resolution, noise level
- Study will use two phantoms: FDA phantom and NIST pocket phantom with mixture of sphere/lesion sizes and densities
- Group 1C will be progressive, based on Group 1A's previous work
- Additional CROs may be used to read cases; Perceptive already contacted by Dr Fenimore
- CRO choice of analysis tools sets will introduce another variable; each CRO will use their own methodologies
- All attempts to be made to keep 1C protocol independent of analysis tools sets
 - RadPharm to supply segmentation roster from output of tools sets used
- QIBA concerns:
 - Produce threshold minimums – judgment whether algorithms are good enough
 - Provide Profile details – how people are to use the tools
 - Allow and encourage differentiated offerings
 - Key is not to constrain vendor solutions
- Imaging sites being established
 - Minimal control needed over scanning sites to help maintain room for diversity
 - Profile must be mindful of sites with limited means (resources, eqpt, etc)
- Overview of experiment – the size of a full factorial design is problematic.
 - 4 sites, 2 Profile branches, 8 nodules, 3 measurements (RECIST, WHO, volume) = 192 nodule sizings per reader.
 - Other factors: 3-5 acquisitions (1-2 read), 2 repeat reads ~ 576 nodule sizings per reader.

Next Steps

- Continue discussion on sizing of study
- Dr Fenimore to forward Protocol slides to RSNA staff for Wiki posting
- Next call to be scheduled for 1 week (Sept 9th) at 2 PM CDT