

QIBA Volumetric CT Tech Committee General Business Update

Monday, June 6, 2011 at 11 am CDT

Call Summary

In attendance

P. David Mozley, MD (Co-chair)
Maria Athelougou, PhD
Hubert Beaumont, PhD
Kavita Garg, MD
Paul Garrett, MD
Philip Judy, PhD
Michael McNitt-Gray, PhD
James Mulshine, MD
Kevin O'Donnell
Nicholas Petrick, PhD

Anthony Reeves, PhD
Michael Silver, PhD
Neil Steinmetz, MD, JD
Daniel Sullivan, MD
Ying Tang, PhD
David Vining, MD

RSNA

Joe Koudelik

General Discussion Items (Dr Mozley)

- Overview of the latest advanced disease Profile *v-CT: Change Measurements in the Volumes of Solid Tumors V2.0* (“QIBA Profile” text to be included within all Profile documents)
 - Profile audience: Device manufacturers, software and algorithm developers, clinical trialist, etc
 - Protocol audience: Clinical trialists and implementers
- Derivative protocol to be pushed into approval as well
- References/appendices support work but could be tightened
- Profile is “information rich” with tables, but does not utilize the “bulls-eye” performance specifications
- Executive summary progresses through Claims in a chronological order based on actors and actions needed to produce measurements of change in tumor volume with specified precision
- Aspirational vs Data Supported Claims
 - Group consensus was that Claims need to be grounded by supportive data to have real utility to users; caution not to “over-speak” Claims and provide misguidance
 - “Consensus” Claims may be better a description with a focus on best-practices
- Profile to be reviewed by Tech Ctte and forwarded to the Modality Ctte within two weeks
- QIBA Tech vs Modality Ctte Structure
 - Tech Cttes open to all interested
 - Modality Cttes comprised of regular call participants from both the VolCT and COPD groups based on a minimum attendance criteria
 - Tech Ctte approves documents, make recommendations and forwards to the Modality Ctte for review; Modality Ctte schedules a call to review and once content agreed upon, sends out for public comment phase
- Tech Ctte feedback concerning Profile content is critical since member names are listed within acknowledgment section
- Claim language reviewed; literature review does support the 30% value
- 95-percent confidence around the coefficient of variation remains a complicated issue
- Radiation exposure discussed; may be outside current Profile scope
 - Reduction of dose vs reduction of image quality discussed (i.e., noise level)
 - Minimum image quality level may translate to a minimum dose; details not clear

- Dose needs to be addressed in CT protocols; this may be added later even if no consensus is reached
- Some questions may remain when Profile goes to Public Comment phase; this is an iterative process
- Process for Profile public approval posted to the QIBA WIKI for reference at: http://qibawiki.rsna.org/index.php?title=Review_Process

Next Steps

- Changes/feedback to Profile to be sent to Dr Mozley and Mr Buckler directly as soon as reasonably possible
- RSNA staff to distribute derivative protocol to the Tech Ctte for feedback
- Dr Mozley to follow-up with experts-in-the-field (e.g., Drs Raunig, Zhao, etc) concerning the 95-percent confidence around the coefficient of variation
- Dr Petrick to provide written feedback/ wording for the 95-percent confidence detail
- Dr McNitt-Gray to expand text in section 13.1 (acquisition parameters)
- Next call scheduled for Monday, June 13th, 2011 at 11 am CDT