

QIBA CT Volumetry Technical Committee (TC) Update Call

24 February 2014 at 11 AM CT (GMT-6)

Draft Call Summary

In attendance:

Lawrence Schwartz, MD (Co-Chair)
Hubert Beaumont, PhD
Andrew Buckler, MS
Heang-Ping Chan, PhD
Charles Fenimore, PhD
Marios Gavrielides, PhD
David Gustafson, PhD

Lubomir Hadjiiski, PhD
Rudresh Jarecha, MBBS
Philip Judy, PhD
Leon Lenchik, MD
Michael McNitt-Gray, PhD
James Mulshine, MD

Kevin O'Donnell, MASc
Eric Perlman, MD
Nicholas Petrick, PhD
Daniel Sullivan, MD
Ying Tang, PhD
Pierre Terve, MS

RSNA:

Joe Koudelik
Julie Lisiecki

Update from Patient Handling Sub Group:

- Additional details resolved for artifacts and baseline symptoms; breast shields will not be used
- Breathing instructions in the Profile were deemed sufficient

Update from Image Acquisition Sub Group:

- Dr. McNitt-Gray is running experiments to determine where the CT noise value threshold should be; 18 HU sounds reasonable for a diagnostic scan; this may be relevant to other protocols and will require additional input/ analysis for other QIBA groups
- Agreement not yet reached on iterative reconstruction details

Update from Image Analysis Sub Group:

- May change style to a more procedural vs. manuscript style
- References to data sets will be of interest to others.

Update from Lung Nodule Writing Group:

- The group is still refining the claim language, struggling with dose questions.
- Concern exists regarding addressing a recent [New York Times article](#) which suggests cancer-induced scanning
 - A version appears in print on 07/16/2013 with the headline: *Childhood CT Scans Raising Cancer Risk*.
 - Dr. Kazerooni, et al, have written an interesting paper on this topic:
 - Frank L, Christodoulou E, Kazerooni EA. **Radiation Risk of Lung Cancer Screening**. *Semin Respir Crit Care Med*. 2013 Dec; 34(6):738-747. doi: 10.1055/s-0033-1358615. Epub 2013 Nov 20. [PubMed link](#)
- Dr. McNitt-Gray to draft some clinical “dose language” for inclusion in the Profile addressing the recent focus on weighing the benefits of CT and quantitative imaging vs. the risks.
- Other resources to consider for the lung nodule response included:
 - Image Wisely/ Image Gently campaigns
 - NCRP (National Council on Radiation Protection)
 - ACR (American College of Radiology)
 - AAPM (American Association of Physicists in Medicine)
 - Other studies including some papers from Australia and England on childhood radiation exposure
 - Suggested wording:
 - “As a guiding principle, we firmly believe in the benefits of quantitative imaging, and encourage all actors to perform quantitative imaging at the lowest possible dose.”

Next calls:

- 1) Monday, March 3, 2014 at 11 am CT: [Image analysis](#) (both software and human analysts/readers)
- 2) Monday, March 10, 2014 at 11 am CT: [Image acquisition hardware and reconstruction software](#)
- 3) Monday, March 17, 2014 at 11 am CT: [Full Technical Committee](#): Final updates from sub-workgroups