

QIBA CT Volumetry Technical Committee Update Call

15 July 2013 at 11 AM CDT (GMT-5)

Call Summary

In attendance:

Samuel G. Armato III, PhD (Co-Chair)

Gregory V. Goldmacher, MD, PhD (Co-Chair)

Lawrence Schwartz, MD (Co-Chair)

Hubert Beaumont, PhD

Andrew Buckler, MS

Barbara Croft, PhD

Charles Fenimore, PhD

Michael McNitt-Gray, PhD

James Mulshine, MD

Kevin O'Donnell, MASc

Guillaume Orioux, MSc

Nicholas Petrick, PhD

Daniel C. Sullivan, MD

Ying Tang, PhD

Pierre Terve, MS

RSNA:

Fiona Miller

Joe Koudelik

Madeleine McCoy

General Discussion

QIBA Projects for Next Round of Potential Funding:

- **Project 1:** Variability of CT volumetry in phantoms of hepatic and lymphatic metastases
 - Dr. Petrick reported that NIST colleagues might collaborate on this project, but would be unable to lead.
 - Dr. Petrick to contact Mr. Avila to discuss phantom specifications and cost.
- **Project 2:** A coffee-break study of liver lesions
 - Costs of animal study being explored.
 - Application/translation of results from animal model to humans was discussed.
 - Working with existing animal- model studies, specifically liver metastases, would be optimal.
 - Dr. McNitt-Gray to inquire with contacts at the UCLA animal lab.
 - A t-con between Drs. Sullivan, Schwartz and McNitt-Gray to be scheduled.
- **Project 3:** A comparative algorithm challenge using real patient data
- **Project 4:** Establishing the added value of pocket phantoms
 - Mr. Buckler to reach out to Mr. Rick Avila with Kitware and Dr. Zachary Levine of NIST to discuss the value of pocket phantoms and to clearly devise a hypothesis. Dr. Fenimore to be included.
- **Project 5:** Correlation of volume changes with survival data in the lung
 - The next step is to speak with statisticians to better define a plan to accomplish these tasks.
 - T-cons with Drs. Sullivan, Obuchowski and Gatsonis are being established.
 - Project would help address questions posed by the FDA.

QIBA Lung Nodule Assessment in CT Screening WG Update

- Working toward an effective Profile and claims that limit image acquisition parameters, resulting in a standardized CT volumetry procedure for lung screening.
- Goal is to have a solid Profile by September.

Next Steps:

- Dr. McNitt-Gray to report findings regarding UCLA animal lab details.
- T-Con between Drs. Sullivan, Schwartz and McNitt-Gray to discuss animal models.
- Mr. Buckler to coordinate discussion with Mr. Avila, Drs. Levine and Fenimore.
- Dr. Petrick to identify any tentative FDA simple nodule phantom projects and related costs.
- Dr. Sullivan to speak with Drs. Obuchowski and Gatsonis regarding the role of statisticians in Project 5.
- **Next QIBA CT-VOL Tech Ctte t-con, Monday, July 29, 2013 at 11am (CDT).**