

QIBA Volumetric CT Group 3A Update

Thursday, August 11, 2011; 11 AM CDT

Call Summary

In attendance

Maria Athellogou, PhD (Chair)

Hubert Beaumont, PhD

Andrew Buckler, MS

Dirk Colditz, PhD

Alden A. Dima, MS

Grace Kim, PhD

Nicholas Petrick, PhD

Daniel C. Sullivan, MD

Ying Tang, PhD

Bingsheng Zhao, DSc

RSNA

Joe Koudelik

Julie Lisiecki

I. Discussion of possibilities for study design

- Study design has been edited via a joint effort to select the appropriate standard terminology; input welcome
- Needed to sort through various terms and determine which are the most suitable
 - Examples: *pilot vs. pivotal, train vs. test, optimized vs. pure, investigation vs. endpoint, bias, variance, etc.*
 - Want to use standard terminology to integrate well with future QIBA projects
- Data includes 40 cases from Group 1A; 408 images; all lesions have seed points provided
 - Pilot phase = full test run, not published
 - Pivotal phase = results published

II. TEST data

- Test data to include 10 cases, all lesions per case
- Study design will aim for a “pure” test – no use of optimized data
- Participants will be asked to sign a pledge, using the honor system, that they will not use optimized data
- Policy: data will be available for any use to participants
 - participants may use all of the 16 pilot cases for algorithm optimization if they wish

III. TRAINING data

- Wording changed to better reflect what readers would expect
- Training data to include 5 cases, all lesions per case

IV. Possibility of a power study discussed

- Power study proposed for more weight if needed later in reporting phase
- Necessary data is available; pilot to be used for practice; pivotal study to be used for power study
- Confidence interval test proposed
- May consider an error propagation model if it will not deter from the deadlines needed to complete the project
 - “All data associated with the challenge shall comply with the QIBA profile” – disclaimer included

Next steps:

- Deadlines to be finalized with registrar/ small core group on August 18th call
- Group to start thinking about a small blurb to be incorporated within the QIBA Vol CT poster for RSNA 2011

Next regularly scheduled call: **Thursday, September 8, 2011 at 11 am CDT. {No calls on August 25th or Sept 1st.}**

Note: All documents are posted to the QIBA wiki at: <http://qibawiki.rsna.org>.