

QIBA Volumetric CT Group 3A Update

Thursday, March 17, 2011; 11 AM CDT

Call Summary

In attendance

Maria Athelougou, PhD (Chair) Charles Fenimore, PhD
Rick Avila, MS David Gustafson, PhD
Hubert Beaumont Nicholas Petrick, PhD
Dirk Colditz, PhD Ying Tang, PhD

RSNA

Joe Koudelik
Julie Lisiecki

I. Study Design discussed

- Focus more on how this study will inform the QIBA Profile

- Dr. Fenimore mentioned that 1C data may not be available for 2-3 months
 - Currently in curation and reader study mode
 - Will share 1C data for 3A study as soon as it is available
 - 1A data is available upon request from Dr. Petrick

- Clinical vs. phantom data
 - Potential for bias exists
 - Training sets
 - Determined that using training sets is not really necessary; may add bias
 - Concern regarding classifying / grouping the nodules in a clinical setting

- Algorithm classification needed for study – according to volcano study
 - Automatic vs. semi-automatic
 - Questions to ask:
 - Are these fully automatic?
 - If not, how many were there with parameter adjustments?
 - If images were edited, on what fraction?
 - Modified vs. Fixed algorithms
 - Research vs. Commercial algorithms

Next steps:

- Group to look at 3A study design and send suggestions to Dr. Athelougou: MAthelougou@DEFiNiENS.com.
- Dr. Athelougou to consult Dr. Reeves regarding some of the algorithm classification questions.
- Dr. Athelougou to incorporate group ideas and post updated draft study design on the WIKI
- Dr. Athelougou to follow up with Dr. Fenimore re: NIST availability
- Dr. Athelougou to procure currently available data
- On next call, discuss study design
- Projected completion date for the 3A study is August 2011

Next call: TBD. When determined, a save-the-date notice will be sent to the group.

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