QIBA Volumetric CT Group 3A Update

Thursday, 21 February 2013 at 11:30 AM CT (GMT-6) Call Summary

Additional Notes provided by Mr. Buckler

RSNA In attendance Maria Athelogou, PhD (Chair) Jovanna Danagoulian, PhD Guillaume Orieux, MSc Joe Koudelik Hubert Beaumont, PhD Julie Lisiecki Alden Dima, MS Nicholas Petrick, PhD Andrew Buckler, MS Marios Gavrielides, PhD Ying Tang, PhD Barbara Croft, PhD Friedrich Knollmann, MD, PhD David J. Vining, MD

Agenda

Preparation for the second 3A Challenge kickoff meeting on February 25, 2013 at NIST

Notes

- Final details of slide preparation, etc. were reviewed.
- Dr. Danagoulian demonstrated continued progress on the analysis methods, using 1B data by way of example:
 - The primary analysis has been performed on log-scaled data and the draft report updated.
 - The secondary analysis has been further developed to comprise the following steps:
 - Registration of participant image segmentations to resolve scaling or position differences.
 - Execution of a complete implementation of STAPLE (based directly on Warfield's code, obtained through correspondence) to produce reference segmentations represented as probability maps, and individual participant sensitivity, specificity, intersection, and union results.
 - Binarization of the output probability map to form a reference for purposes of computing pixel-wise indices.
 - Visualization of each stage is possible, specifically, maps showing 2 (and more) objects to show true positive, false positives, true negative, and false negatives are possible.
 - Data reporting options were discussed.

Next Steps:

- Mr. Dima to provide international teleconference details to: Dr. Beaumont and Mr. Orieux
- Study advisors for the pilot and pivotal studies to respond to RSNA staff with:
 - 1. FDA co-sponsorship agreement statement (will also satisfy NIST requirements)
 - 2. Author coordinates
 - (*Email, physical mailing address, phone, credentials*), if not yet complete.

Next call: Thursday, March 14, 2013 at 11:30 AM CT.