QIBA Volumetric CT Group 3A Update

Thursday, 27 February 2014 at 11:30 AM CT **Call Summary**

In attendance

Maria Athelogou, PhD (Chair) Hubert Beaumont, PhD Andrew Buckler, MS Marios Gavrielides, PhD Lubomir Hadjiiski, PhD Rudresh Jarecha, MBBS

Kjell Johnson, PhD Leon Lenchik, MD Eric Perlman, MD Adele Peskin, PhD Nicholas Petrick, PhD Gary Smith, MD Daniel Sullivan, MD Ying Tang, PhD Pierre Terve, MSc Binsheng Zhao, DSc

RSNA Joe Koudelik Julie Lisiecki

Update: Status of the Paper for the Pilot/Pivotal Challenge

- The paper based on the first challenge (pilot + pivotal) is still with NIST under review.
 - Dr. Peskin to update the group on the next call.

Update: Status of the Clinical Challenge as of 2/27/2014

- Analysis of the challenge data is on track; progress has been made with secondary and tertiary analyses.
- A preliminary report on the primary analysis is anticipated by the March 13th call.
- One group did not respond to the team's request to re-submit data due to compatibility issues resulting in limited analysis
- Dr. Kjell Johnson reviewed some preliminary statistics.
 - The summary of his findings was as follows: 0

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- Repeatability analyses within groups:
 - Statistics calculated:
 - CCC: concordance correlation coefficient
 - wSubiVar: Within subject variance
 - RC: Repeatability coefficient and 95% confidence bounds
 - wCV: within subject coefficient of variation
 - Figures:
 - Test-retest scatterplot
 - Bland Altman
- Reproducibility analyses across groups:
 - Statistics calculated:
 - · RDC: reproducibility coefficient 1
 - Figure:
 - · Box and whisker plots across algorithms

Action items:

- Dr. Athelogou will contact a MICCAI representative in order to invite her/him for a presentation about • comparison of challenge methodologies concerning the statistical evaluation of algorithm results.
- Dr. Peskin to follow up with NIST colleagues regarding Challenge #1 paper status.
- Next call: Dr. Kjell Johnson and Mr. Andrew Buckler will continue with the presentation of the statistical analysis results of the last challenge.