

QIBA Volumetric CT Group 3A Update

Thursday, March 8, 2012; 11 AM CST

Call Summary

In attendance

Maria Athelougou, PhD (Chair)

Hubert Beaumont, PhD

Andrew J. Buckler, MS

Dirk Colditz, PhD

Alden Dima, MS

Hyun Grace Kim, PhD

John Lu, PhD

Ninad Mantri, MS

Ying Tang, PhD

Luduan Zhang, PhD

RSNA

Joe Koudelik

1. Update on the QIBA Group 3A Challenge

- No new participants or data received; all participants issued id's have submitted data
 - Data submission deadline - Wednesday, February 29, 2012
 - "soft" deadline – data will be accepted even if participants go past 2/29
 - Analysis/ results deadline extended to **Wednesday, March 28, 2012**

2. Discussion of QIBA 3A Challenge Pilot Data Analysis

- Convergence of statistical methodologies discussed
- Single- vs. multiple- analysis plots discussed; caution not to over- or under- pool data so as not to lose the elegance of visual communication (ie, best use of the Radar Plot)
- Radar Plot spokes to represent bias, variability, repeatability, cross-x and cross-y reproducibility
- Peer review still needed to address:
 - Number of plot spokes and what each is to represent
 - Equation of the R-script
 - Number of Radar Plots and definition of one vs. multiple plots
- Need algorithm description and category reported for all submitted datasets for stat analysis
 - RSNA staff to forward to Mr Buckler and Dr Kim
- Study design to provide analysis based on multiple uses
 - Individual algorithm analysis
 - Comparison to the other algorithms
 - Comparison to a Gold Standard

3. PIVOTAL study rollout

- Dr. Saiprasad has prepared 408 lesions in a pivotal set – additional cases are available if needed
- Pivotal study documents (package) revised by Mr Dima
 - Guidance language to be incorporated based on technical questions reviewed from pilot study–updates will be handled by Mr Dima and Mr Buckler

4. MICCAI update

- Workshop schedule released; no topics deemed suitable for the 3A Challenge Pilot results
- Consider submitting publication for MICCAI 2013 and focus on presenting at RSNA 2012 instead
 - Pilot results and nature of study to be focus of abstract
 - Mr Buckler to draft initial 250- word abstract with input from Dr Kim and Mr Dima
 - RSNA abstract submission deadline: **March 31, 2012 (12 NOON Central Time)**
 - <http://abstract.rsna.org>

Next steps:

- RSNA staff to provide Challenge status update on next call
- RSNA staff to forward algorithm description and category for all submitted datasets to Mr Buckler and Dr Kim
- 3A Challenge organizers to continue work on curation of the pivotal data for next phase
- Mr Dima and Mr Buckler to work on pivotal study documents
- Drs Kim, Lu and Saiprasad to prepare statistical design (power study) documents based on guidance from Dr Athelougou by the end of March
- Alternating calls to focus on the Pilot data analysis and designing the Pivotal Study
- Extra dedicated t-con in one week to focus on the Pilot study

Next calls: **Thursday, March 15, 2012 at 11 AM Central (Daylight) Time** (focus on the **Pilot** Study)

Thursday, March 22, 2012 at 11 AM Central (Daylight) Time (focus on the **Pivotal** Study)