

QIBA Volumetric CT Group 3A Update
Thursday, 27 March 2014 at 11:30 AM CT
Call Summary

In attendance

Maria Athellogou, PhD (Chair)
Hubert Beaumont, PhD
Andrew Buckler, MS
Heang-Ping Chan, PhD

Marios Gavrielides, PhD
Lubomir Hadjiiski, PhD
Leon Lenchik, MD
Kevin O'Donnell, MASc

Adele Peskin, PhD
Nicholas Petrick, PhD
Ying Tang, PhD
Pierre Tervé, MS

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 with the NIST Division Chief under review.
 - Dr. Peskin to update the group on the next call.

Update: Paper for the Clinical Challenge

- Dr. Athellogou has proposed the following assignments for efficient completion and publication of the new study paper:
 - Mr. Buckler to serve as Manager/ Editor of the document
 - Drs. Gavrielides and Petrick to serve as Co-Managers/ Editors of the document for FDA approval
 - Dr. Peskin to serve as a Manager/ Editor of the document for NIST approval

Proposal Discussed by Mr. O'Donnell

- A review of the work being done by CT Volumetry sub-writing groups for the Profile was discussed
- Groups are working through patient prep, image acquisition guidelines, and image analysis guidelines
- While reviewing text, some questions were raised regarding image resolution and voxel noise
 - The groups would like feedback on noise, dose, image quality, standard deviation, etc. from QIBA 3A Challenge participants, i.e., algorithm / tool developers
 - Mr. O'Donnell proposed a brief survey be sent to the QIBA 3A Challenge participants in order to get this valuable feedback regarding Profile parameters
 - Writing group members do not seek to change the Profile dramatically but need some input on limits

Update: Status of the Clinical Challenge as of 3/27/2014

- Mr. Buckler reiterated that exploration of the variability of differing algorithms continue with the analysis; plan is to build on prior results of QIBA study 1B and to explore repeatability and reproducibility
- May reassess results based on lesion stratification after the analysis is complete
- Completion of analysis is anticipated for the next call, April 10th.

Action items:

- Mr. O'Donnell to draft a survey for QIBA 3A Challenge participants regarding parameters for approval of Dr. Athellogou/ dissemination to the group
- Dr. Athellogou to invite a MICCAI representative to discuss challenge methodologies concerning the statistical evaluation of algorithm results.
- Dr. Peskin to follow up with NIST colleagues regarding paper status.

Next call: Thursday, **April 10, 2014** at 11:30 AM CT.