QIBA CT Volumetry Technical Committee Update Call 02 April 2012 at 11 AM CDT (GMT-6)

Call Summary

In attendance:

P. David Mozley, MD (Co-chair) Maria Athelogou, PhD Hubert Beaumont, PhD Andrew Buckler, MS Paul L. Carson, PhD David A. Clunie, MBBS Barbara Croft, MD Steven Federici, BS, RT Charles Fenimore, PhD Paul R. Garrett, MD Gregory Goldmacher, MD, PhD David Gustafson, PhD Philip F. Judy, PhD Hyun Grace Kim, PhD Michael McNitt-Gray, PhD James Mulshine, MD Kevin O'Donnell, MASc Neil Steinmetz, MD, JD Ying Tang, PhD Binsheng Zhao, DSc

RSNA:

Madeleine McCoy

NIBIB Contract Proposals for CT Volumetry (Mr. Buckler)

- The Long-Term Objectives were discussed and the claim was revised
- Mr. Buckler to submit the updated version to Dr. Sullivan
- The document will be circulated to the Technical Committee for feedback
- Dr. Mozley reminded the group that this is a technical report, not a grant application
- The first 15 minutes of the next t-con will be devoted for continued discussion

QIBA Vol-CT AdvDisease v2 Public Comment Profile Feedback

- The next 2 dedicated working sessions have been scheduled:
 - Thursday, April 12th at 11am 1pm (CT)
 - Monday, April 23rd at 12pm 2pm (CT)

QIBA Volumetric Study 3A Update (Mr. Buckler, Dr. Athelogou, Mr. Dima and Dr. Kim)

- Reader study to characterize uncertainty in volume and other reader-based sizing of nodules in CT imagery collected on scanners from four vendors
- The multi-scanner imaging protocol has 2 arms:
 - o "standard arm" based on ACRIN 6678
 - o image quality-based, device-independent arm
- Project will analyze uncertainty and bias of sizing measures for covariates
- Dr. Mozley discussed the 2 criteria to what constitutes a compliant nodule. The focus was on nodule size and geometric complexity
- Issues of nodule attachment were explicitly excluded
- Dr. Kim discussed the acquired data from 6 lesion types, 6 scanner types and the volumes derived from segmentation
- Whether the next progress report to the government should be more expansive (i.e., include graphs) was to be discussed with Dr. Sullivan
- Next steps:
 - Writing an abstract for RSNA
 - o Replicate Dr. Zhao's analysis at additional institutions
 - Finalize this document and submit for publication

Schedule Updates:

- April 9th: open with 10 minutes of discussion about the NIBIB contract. Then Dr Zhao will present an update on behalf of the 3B team
- April 16th: spend the whole meeting on organizing for new NIBIB application

Next Steps:

- To maintain current momentum, the group decided to continue hosting weekly calls until all project updates are completed (~April 16), then revert to a bi-weekly call schedule moving forward
- Dr. Zhao to draft a QIBA Project 3B update for group distribution by Thursday, April 5th
- Reminder that these project updates are to focus on a business plan, or the "business of science" perspective, not intended as a pure scientific/technical update

- Technical Committee members are encouraged to submit suggestions to Mr. Buckler regarding the NIBIB contract proposals for CT Volumetry in preparation for further discussions
 Next call scheduled for Monday, April 9th at 11 am CT