

QIBA CT Volumetry Biomarker Ctte (BC) Call

16 January 2017 at 11 AM CT

Draft Call Summary

In attendance:			RSNA:
Jenifer Siegelman MD, MPH (Co-Chair)	Ritu Gill, MD, MPH	Na Sun, PhD	Joe Koudelik
Hubert Beaumont, PhD	James Mulshine, MD	Ying Tang, PhD	Julie Lisiecki
Andrew Buckler, MS	Kevin O'Donnell, MASc	Pierre Tervé, MS	
Heang-Ping Chan, PhD	Marthony Robins, PhD	Luduan Zhang, PhD	
Matthew Fuld, PhD			

Profile Checklist Review – Items Discussed for Image Analysis (Mr. O'Donnell)

- Will image headers be scrubbed by PACS?
 - Physicist at Duke to investigate
 - Mr. O'Donnell to inquire with a GE contact regarding missing scanner spec table
 - Will assume that a PACS actor does not need to be added until confirmed
- Review of scanner specs
 - May want to include part of the original document within the checklist or a means to quickly reference section 4.2 for the requirements
- Performance of image analysis tools
 - Techs should use the same tools for initial and follow up image segmentations and analysis
 - In some cases, anatomy-specific scanner preferences may be recommended for use in follow-up
 - The tool presents study pairs and the user either segments a given tumor in both studies or the baseline segmentation is presented and the user must find the matching tumor and segment it
 - Tools are indicated in the radiologist report
- A recommendation was made to add a conformance log for each site to submit detailed conformance notes
 - A DRO DICOM object Excel spreadsheet is being considered for ease of data bundling on the QIDW
- Mr. Buckler to provide a QIBA 3A spreadsheet and online calculator details similar to the one used for the small lung nodule Profile
 - Dr. Obuchowski to be contacted for additional suggestions
 - Mr. Tervé volunteered to work on the spreadsheet, which will be included with the RIDER CT data download package
 - Coordinates for the RIDER tumors are in a .csv file corresponding to section 4.4 of the Profile
 - The small and large subgroups for the tumors need to be categorized to match the "Requirements" page
- Another spreadsheet is under consideration for a regression module
 - Mr. Tervé to review with Mr. Buckler and Dr. Petrick
 - Mr. Buckler to reach out to informatics tool developers to inform them of the group's plans
 - Discussion may be needed if there is concern that the FDA may not accept the confidence interval
- An analysis tool is under consideration that would make available the 95% confidence interval for tumor volume change based on the equation to the operator
 - FDA will need to determine whether or not this is admissible
 - This is an important component of the Profile –
 - Mr. O'Donnell to update details for further discussion on the next call
 - Mr. O'Donnell to contact Toshiba and Vital reps to determine whether or not confidence interval outputs are generated by their analysis tools
 - Follow-up with QIBA statisticians may be needed
 - Discussion to continue on next call regarding whether confidence intervals are absolutely needed, and if so, when?

Action items:

- Feasibility testing participants will report back to the group with their progress on the 1/23 WebEx call
- A dataset from Dr. Petrick for the Lungman phantom data is still needed for the QIDW
- Drs. Robins and Samei are working on making a BETA version of the MTF software available for analysis
- Dr. Liang to send DICOM images to Dr. Robins in the meantime for assistance with the analysis
- Drs. Mulshine and Armato to complete testing at Rush
- Drs. Liang and Zhao to complete testing at Columbia
- Dr. Fenimore also volunteered to do the feasibility test
- Dr. Liapi volunteered to participate in the feasibility testing as well

Next Call: Monday, January 23, 2017 at 11 am CT