QIBA CT Volumetry Biomarker Ctte (BC) Call

29 January 2018 at 11 AM CT Call Summary

In attendance:			RSNA:
Gregory Goldmacher, MD, PhD, MBA (Co-Chair)	Ritu Gill, MD, MPH	Michael O'Connor, PhD	Joe Koudelik
Jenifer Siegelman, MD, MPH (Co-Chair)	Lubomir Hadjiiski, PhD	Kevin O'Donnell, MASc	Julie Lisiecki
Rick Avila, MS	Philipp Hoelzer, PhD	Nicholas Petrick, PhD	
Hubert Beaumont, PhD	Yongguang Liang, PhD	Marthony Robins, PhD	
Andrew Buckler, MS	James Mulshine, MD	Ying Tang, PhD	
Heang-Ping Chan, PhD	Nancy Obuchowski, PhD	Pierre Tervé, MS	
Marios Gavrielides, PhD			

Moderator: Dr. Goldmacher

Vol CT Advanced Disease Profile Technical Confirmation Feedback Efforts:

- All <u>Profile feedback</u> can be found on the CT Volumetry BC page of the QIBA wiki
- Dr. Goldmacher and Mr. Buckler reviewed outstanding to-do items outlined by Mr. O'Donnell
- Dr. McNitt-Gray evaluated the lesions in the test set against the profile criteria and 11 of the 31 cases failed
 - o Possible reason:
 - Lesions were not conformant with the Profile, i.e. lesions segmented were not correctly selected;
 identification of correct lesions is critical for anyone evaluating the test set
 - Follow-up actions:
 - Revise the spreadsheets and test procedure (Mr. O'Donnell).
 - Recalculate table values for pass/fail rationale in section (2 or 4) (Drs. Obuchowski and Petrick)
- Discussion regarding dropping the Field-of-View (FOV) requirement:
 - From previous committee discussion, it was decided that the FOV requirement is necessary for Volumetry measurements
 - o Recommended procedure was to stay consistent between scans
 - Requirement to be added to the radiologist QA step
- Dr. Petrick to upload a new DRO for the simple tumor volume computation check (Assessment Procedure 4.3) and
 provide the updated "how to find it" text for the profile so that Dr. Robins could test it and see if the location and
 computation worked properly
 - o The DRO has been developed
 - Dr. Petrick to send the DRO to the QIDW and send Mr. O'Donnell the text for the Profile
- Dr. Petrick reported that there was a slight problem with the LungMan FDA phantom data: segmentation slices are missing from the dataset
 - o Not all of the data is from one phantom
 - o Dr. Petrick will update the description of the data to be used for linearity measurements (section 4.5, line 934)
 - A follow-up discussion will be needed before making the updates
- Mr. Tervé has been working with Dr. Obuchowski to clean up the spreadsheet for Assessment (section 4.5)
 - o Mr. Tervé will add confidence intervals and then verify calculations with Dr. Obuchowski
- The Assessment 4.4 spreadsheet needs extraneous case rows deleted, if all are in agreement
- Once the two spreadsheets have been updated, they will be added to the download bundle on the QIDW
 - o Mr. O'Donnell will update the spreadsheet
 - o Dr. Petrick will update the QIDW with the results
 - Goal would be a single "truth file" dataset that is usable on multiple platforms

Next Call: February 12th at 11 am CT