

## QIBA CT Volumetry Biomarker Ctte (BC) Call

29 August 2016 at 11 AM CT

Draft Call Summary

In attendance:			RSNA:
Gregory Goldmacher, MD, PhD, MBA (Co-Chair)	Charles Fenimore, PhD	Eric Perlman, MD	Joe Koudelik
Ehsan Samei, PhD (Co-Chair)	Matthew Fuld, PhD	Aria Pezeshk, PhD	Julie Lisiecki
Jenifer Siegelman, MD, MPH (Co-Chair)	Lubomir Hadjiiski, PhD	Ying Tang, PhD	
Rick Avila, MS	Edward Jackson, PhD	Pierre Tervé, MS	
Hubert Beaumont, PhD	Claudia Kirsch, MD	Luduan Zhang, PhD	
Andrew Buckler, MS	Nancy Obuchowski, PhD	Binsheng Zhao, DSc	
Vadivel Devaraju, PhD	Kevin O'Donnell, MASc	Na Sun, PhD	

### Location of test-retest dataset: QIDW vs TCIA

- For improved work flow when implementing Profile conformance testing, it was proposed that QIBA host all conformance data in a central location, on the *Quantitative Imaging Data Warehouse* ([QIDW](#))
  - The goal will be for each QIBA Profile to have its own conformance data community
  - It is also hoped that data will be accessible across communities to avoid duplication on the QIDW
- To gain permission for hosting existing data on the QIDW, CT Volumetry leadership has drafted a letter that will be sent to *the QIDW Oversight Committee*, requesting permission to host this duplicate [RIDER Lung CT dataset](#), with detailed reasons explaining why this would be advantageous for QIBA and the quantitative imaging community at large
- This proposal will be discussed on the RSNA QIDW Oversight Committee WebEx call, scheduled for Tuesday, August 30<sup>th</sup>

### Additional dataset

- Dr. Petrick's "lungman" phantom data is also available for upload to the QIDW; however, the data must be reviewed to make certain that it is Profile-compliant
- Original test-retest data used a sharp kernel, and other tests that were run used the standard kernel

### Profile Checklist

- Mr. Tervé shared his proposed feasibility assessment checklist, an Excel document with individual sheets for each 'actor' within the Profile
  - This may be the precursor to a Profile field test checklist
  - Feedback from feasibility assessment participants will be used to refine the document
  - Manufacturer feedback is needed
  - This tool will prove very useful for field testing at various sites
- Dr. Perlman offered to share the approach taken by the QIBA FDG-PET BC and suggested categories based on the **National Biomarker Development Alliance (NBDA)** model which has 4 main categories: *people, process, platforms, phantoms*
- A separate checklist for manufacturers would also be ideal, particularly with regard to site qualification parameters
  - While content can be organized in a variety of ways, e.g., chronologically, by group, etc., it would be ideal to have a *standardized* checklist template that could be adopted across all QIBA modalities

### Additional Issues

- Mr. Avila suggested an ad hoc call to discuss reconstruction kernels and Hounsfield Unit density changes, deep within objects, as related to the conformance procedures
- Dr. Samei to follow up with Mr. Avila
- RSNA Staff to follow up with a Doodle poll to organize an engineering / physics call

### RSNA 2016

- It was decided that the BC would produce a poster for the QIBA Kiosk
  - Division of labor TBD
  - Overall theme and design will be similar to last year, and space will be allocated for various SME updates

- A [QIBA Special Interest Session \(SIS\)](#) at RSNA 2016: *Translating Quantitative Imaging from Academia to the Practice of Precision Medicine* (SPSI24), will be held on Monday, November 28<sup>th</sup> from 4:30 – 6 pm; Room TBD

**Action items (CT Tumor Volume Change for Advanced Disease (CTV-AD) Profile):**

*\*as provided by Dr. Goldmacher*

- Dr. Petrick – location of the FDA Lungman N1 data needed
- Noise/res information (Dr. Petrick / Dr. Fuld / Dr. Siegelman)
  - Siemens – Dr. Petrick to send Dr. Samei model and protocol information
  - Philips
- .CSV file similar with the coordinates of the 7 lesions to measure
  - Dr. Samei to send Dr. Petrick CSV file
  - Dr. Petrick to compose equivalent

**Next Call:** Monday, **September 12<sup>th</sup>** at 11 am CT | Profile review | Next steps