# QIBA CT Small Lung Nodule (SLN) Biomarker Ctte (BC) Call

26 September 2019 at 1 PM CT Call Summary

In attendance RSNA

Samuel Armato, III, PhD (Co-Chair) Rick Avila, MS Mario Silva, MD Joe Koudelik
David Gierada, MD (Co-chair) Artit Jirapatnakul, PhD Daniel Sullivan, MD Julie Lisiecki

James Mulshine, MD (Co-Chair) Nancy Obuchowski, PhD

Moderator: Dr. Mulshine

### Approval of 08.15.2019 call summary

The summary was approved as written

#### Discussion

- Dr. Silva cannot log in to the Accumetra site because the "state" field is preventing international users from accessing the site
- Mr. Avila noted that this would be fixed quickly
- · Also, it would be helpful to list scanners that are already certified based on brand and model on the site
- Mr. Avila plans to draft some instructions for future participating VA sites (Phoenix and Philadelphia) that will
  be completing the feasibility testing, moving closer to the technically confirmed phase for the Profile

## CTLX2 (water jacket) phantom update

- The CTLX2 phantom received development funding support from the Prevent Cancer Foundation
- This second generation phantom includes water jackets to simulate realistic body mass
- The challenge in creating this phantom has been to keep costs low for production and shipping but to have a phantom that produces quality results
- Team members at Mt. Sinai have been testing the water phantom and new software is being developed to analyze acquired data
- Questions remain regarding the difference between Modulation Transfer Function (MTF) and 3-D Point Spread Function (PSF)
  - Mr. Avila has additional analyses to complete on the MTF data
  - How to handle MTF/3-D PSF equivalence needs to be outlined within the Profile

### **QIBA Posters for RSNA 2019**

- Dr. Gierada put together a few slides that can be used in the overall CT modality poster(s) for the QIBA kiosk
- These are less text heavy and low on technical complexity to appeal to the broader audience at the meeting; and are to include practical clinical applications
- Some of the details focus on the extent that the team has minimized noise and bias to demonstrate the ultimate benefits of adherence to the Profile
  - Much of the data was acquired on Siemens software and the NELSON study
  - o The Siemens software may date back to 2005
  - o From the NELSON study to the present day, there may be an approximate 12% difference in numbers
  - o If the older numbers are used, this may increase a false-positive result by 80%
- Dr. Gierada hopes that these real-world examples will be helpful
- Suggestion to include a visualization of image quality was mentioned

#### **MITA**

- Medical Imaging and Technology Alliance (MITA) submitted a letter to Dr. Jackson inquiring about metrics used in the SLN Profile
- Dr. Sullivan stressed the importance of peer-reviewed publications in demonstrating the acceptance of the SLN Profile and conformance process by the scientific community
  - o He suggested compiling a list of publications to target for future articles
- AAPM and ACR both leverage the help of small businesses to perform accreditation work; so, their concerns regarding the use of a small business for-profit company are unclear
  - o The Small Lung Nodule BC modeled their business model after the UL model
  - The Profile has been developed and informed by ongoing discussion and feedback within the QIBA
     Small Lung Nodule BC
  - Does the concept of QIBA Conformance overseen by a for-profit, 3<sup>rd</sup> party (i.e., Accumetra) cause push-back from industry?
    - Dr. Sullivan to follow up with QIBA leadership regarding possible vendor concern

# QIBA CT Small Lung Nodule Schedule:

- 10/24/2019 CT Small Lung Nodule BC call, 1 pm CT TBD
- 11/14/2019 CT Small Lung Nodule BC call, 1 pm CT TBD
- 11/13/2019 CT Coordinating Committee, Quarter 4 call, 2 pm CT

Deadline for poster print copy will be November 8th

## **Reminders:**

- Please RSVP for the Dec. 4 QIBA Working Meeting during the 2019 RSNA Annual Meeting
- Please sign up for the RSNA 2019 MTE Sessions at the QIBA Kiosk:
  - Type in your name next to the presentation time slot that works for you (we encourage that each 30-minute time slot is filled by at least one committee member)

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