

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

01 February 2018 at 1 PM CT

Call Summary

In attendance:			RSNA:
<i>Samuel G. Armato, III, PhD (Co-Chair)</i>	Charles Fenimore, PhD	Kevin O'Donnell, MASc	Joe Koudelik
<i>David S. Gierada, MD (Co-Chair)</i>	Edward Jackson, PhD	Anthony Reeves, PhD	Julie Lisiecki
<i>James L. Mulshine, MD (Co-Chair)</i>	Artit Jirapatnakul, PhD	Mario Silva, MD	
Rick Avila, MS	Steve Metz, PhD		

Moderator: Dr. Mulshine

Phantom Updates:

- There are 38 phantoms distributed around the world:
 - 16 sent within the U.S.
 - 22 sent internationally
 - Includes 2 to Italy sent to Dr. Mario Silva
- Each site that receives a phantom will be working to achieve the image quality requirements of the Profile
- Each site to use the phantom for scanning at least once per quarter for one year
- Additional lung cancer screening sites that may be interested in the group's efforts are always welcome
- In particular, it would be desirable to have additional representation from the following geographical areas:
 - Europe (e.g. Germany, Spain, The Netherlands, etc.)
 - South Korea
 - South America

[QIBA Newsletter:](#)

- Mr. Avila encouraged all interested parties to read his 1/31 article published in the *QIBA Newsletter*
 - Methods used to develop the phantoms are discussed in greater detail in the article, "[QIBA Profile Conformance Process and Pilot Project](#)"

Addressing Profile Comments (Mr. Avila):

- The references that needed to be changed for standardization of the lesion measurement from <12mm to <10mm have been updated
- Requirements for section 3.7.2 have been updated
- Dr. Gierada is working on updating the references
- Mr. O'Donnell to send assessment procedure details from sections 4.4 and 4.5
- Mr. Tervé has the most recent copy of the conformance checklist/spreadsheet
- A conformance process for software is in development
 - Some updates are needed
 - Mr. Avila is working with the QIBA CT Advanced Disease Profile editors
 - Different datasets will be needed: a focused call on this topic may be requested in the near future
- Mr. O'Donnell added columns for site feasibility feedback to the conformance checklist/spreadsheet, as inspired by QIBA's nuclear medicine teams
- There are concerns that some sites may drop out of the current pilot study, due to difficulty adhering to the high technical performance and terminology associated with the SLN Profile, i.e. may prove too difficult, even with an abbreviated checklist
 - It was suggested that Profile navigational assistance might be helpful

- Suggestions included:
 - a Comment Board that would be monitored by leadership
 - a reference Webinar that would walk participants through the process of testing the Profile
 - Choosing a clear direction for the community to use when scanning
 - Using numbers from the groundwork studies to help select appropriate parameters
 - Mr. Avila to follow up with Drs. Petrick and Gavrielides regarding their data from the Kyoto LungMan phantom
 - Creation of a team of testers suggested to assess scanner variability for small/medium/large patients
- Desired outcomes:
 - Cross-vendor scanning on any platform
 - Low dose
 - Addressing variables with iterative reconstruction

- A Profile feedback resolution spreadsheet will be posted to the QIBA Wiki for reference when updated
- Suggestions for refinements and improvements are always welcome
- The Profile is expected to be updated soon, and will allow the BC members to plan for the next phase of conformance testing, aka “field testing”

Volunteers needed:

- Volunteers are needed for a scanner vendor / site testing which will include DOE scanning and the analysis process
- Volunteers are asked to please contact Mr. [Avila](#) or any of the co-chairs: Drs. [Armato](#), [Gierada](#) and [Mulshine](#)

Next call: TBD by doodle poll

Calls will be scheduled bimonthly in the near future and will eventually be scheduled monthly