

## QIBA CT Volumetry Biomarker Ctte (BC) Call

24 October 2019 at 11:00 AM CT, Thursday

### Call Summary

#### In attendance

Rudresh Jarecha, MBBS, DMRE, DNB (Co-Chair)	Yongguang Liang, PhD, DABR	Kevin O'Donnell, MASc	RSNA Joe Koudelik
Ehsan Samei, PhD (Co-Chair)	James Mulshine, MD	Nicholas Petrick, PhD	Julie Lisiecki
Maria Athelougou, PhD	Nancy Obuchowski, PhD	Ying Tang, PhD	

**Moderator:** Dr. Jarecha

#### Recent Updates

- Mr. O'Donnell presented two change proposals related to testing that was completed by Canon physicists.
- The CPs follow DICOM/IHE formats with **added** and **removed** text shown.
- The first proposal requires assessment of more protocols (e.g. chest and abdomen) to claim conformance
- The second proposal expands/shifts the in-plane resolution ( $F^{50}$ ) requirements
  - The trend in CT is toward higher resolution which should help accurate quantification
  - Dr. Samei offered to investigate what  $f50$  values would be supportable.
  - A proposal to also allow higher noise was withdrawn based on evidence from Dr. Samei supporting the existing 60HU threshold, and the fact that other parameters can typically be adjusted to meet the existing threshold (although possibly with a slight increase in dose)
- The first proposal was approved to go to an e-ballot vote via a motion on the call
- The second proposal will be reviewed again when Dr. Samei's data is available

#### QIBA CT Posters for RSNA 2019

- Portions of the poster have been provided by the CT Angiography, CT Lung Density and CT SLN BCs
  - A few minor changes are anticipated for Lung Density
  - CT CC leaders to review the SLN content and follow up with Dr. Gierada if any revision is needed
- Content has not yet been provided for CT Volumetry
  - Dr. Samei will work with Drs. Siegelman and Jarecha to provide content / language for the CT Volumetry section
  - Dr. Jarecha requested content by October 30<sup>th</sup> ([Rudresh.Jarecha@parexel.com](mailto:Rudresh.Jarecha@parexel.com)) so that he can streamline the message on both of the CT posters
  - Final posters are due to RSNA by November 8<sup>th</sup> in PowerPoint print-ready format
- Dr. Obuchowski discussed her paper, "Statistical Considerations for Planning Clinical Trials with Quantitative Imaging Biomarkers," published in the *Journal of International Cancer Institute (JNCI)* doi: 10.1093/jnci/djy194
  - She suggested that a table in the paper might be helpful content for the CT Volumetry section of the poster as it demonstrates how statistical power decreases when standardization and quantitation are removed
    - Dr. Mulshine noted that this "table of statistical power" based on standardization compared to RESIST provides a compelling argument for quantitation and is an excellent translation for those unfamiliar with QIBA and why QI matters
  - Dr. Obuchowski also provided some slides that could be used in the posters; Dr. Jarecha to forward these slides for discussion to Drs. Samei, Siegelman and Lynch

#### Action items:

- Determine when next call should be scheduled based on co-chair availability
- Invite Dr. Schwartz to the CT CC call or the next CT Volumetry call to discuss his study

**Next Call:** TBD

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**RSNA 2019 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)
  - Simply close out of the document (there is no save button and changes will automatically save)

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The next **CT Coordinating Committee Call** is scheduled for **Wednesday, November 13<sup>th</sup>** at **2 pm CT**.

- **BC Co-Chairs:** If you have not already done so, please indicate your availability to moderate/provide updates on this call by visiting: <https://tinyurl.com/QIBA-CC-Calls>.
- [Dashboard](#)