

## QIBA CT Volumetry Biomarker Ctte (BC) Call

5 October 2015 at 11 AM CT

### Call Summary

#### In attendance:

Samuel G. Armato, III, PhD (Co-Chair)

Gregory Goldmacher, MD, PhD, MBA (Co-Chair)

Jenifer Siegelman, MD, MPH (Co-Chair)

Maria Athellogou, PhD

Rick Avila, MS

Andrew Buckler, MS

Charles Fenimore, PhD

Marios Gavrielides, PhD

Lubomir Hadjiyski, PhD

Rudresh Jarecha, MBBS, DNB, DMRE

Grace Kim, PhD

Michael O'Connor, PhD

Kevin O'Donnell, MASc

Adele Peskin, PhD

Nicholas Petrick, PhD

Marthony Robins, PhD

Ehsan Samei, PhD

Ying Tang, PhD

#### RSNA:

Joe Koudelik

Julie Lisiecki

#### RSNA 2015 QIBA CT Volumetry BC Poster Updates:

- Section authors who provided content for *RSNA 2014* are being asked to review their contributions and email updated content to Dr. Goldmacher *by Friday, October 16<sup>th</sup>*
- *Authors for 2015:*
  - Gregory Goldmacher, MD, PhD, MBA; Samuel Armato III, PhD; Maria Athellogou, PhD; Nicholas Petrick, PhD; Berkman Sahiner, PhD; Ehsan Samei, PhD; Binsheng Zhao, DSc; Kevin O'Donnell, MASc; Jenifer Siegelman, MD, MPH
  - cc: Andrew Buckler, MS; James Mulshine, MD; Lawrence Schwartz, MD; Rudresh Jarecha, PhD; Grace Kim, PhD
- Completed print-ready PowerPoint documents are due to RSNA Staff *by October 30<sup>th</sup>*
- RSNA Staff to distribute the PowerPoint document to those working on the poster updates

#### Dr. Samei Overview Presentation: "Lesion Modeling Tools for CT Image Quality Assessment"

##### Topics Discussed included:

- Lesion modeling framework
- Lesion addition software tool (demonstration)
- Validation of tool for lung nodule volumetry: phantom study
- Image examples
- Lesion morphology: Regional Hausdorff Distance
- A Demonstration of Synthetic Lesion Insertion Methods
  - Projection space
  - Image space
  - FDA Blending

##### Future Goals:

- Establishment of statistical exchangeability of hybrid and real datasets
- Creation of static reference clinical datasets: 100 normal images inserted with 100+ lung lesions
- Delivery of a software tool for lesion addition and database creation upon demand

#### Action items:

- Group members / authors to update sections of the QIBA CT Volumetry poster for *RSNA 2015*
- RSNA Staff to follow up with Drs. Samei, Sahiner, Athellogou, Petrick, and Zhao regarding scheduling for Round-4 project presentations to the Biomarker Committee
- Dr Samei asked to present his CT lesion simulation results on an upcoming 3A call

#### Next Call:

- Monday, October 19<sup>th</sup> at 11 am CT (No call on October 12 due to the Columbus Day Holiday - US)

#### Call planning:

- |             |                                        |
|-------------|----------------------------------------|
| 1. Oct 19 – | 6. Nov 23: <i>Pre-Thanksgiving (?)</i> |
| 2. Oct 26 – | 7. <b>Nov 30: RSNA 2015 - no call</b>  |
| 3. Nov 2 –  | 8. Dec 07: <i>post-RSNA 2015 (?)</i>   |
| 4. Nov 9 –  | 9. Dec 14 -                            |
| 5. Nov 16 – |                                        |