

## QIBA CT Volumetry Biomarker Ctte (BC) Call

12 December 2016 at 11 AM CT

### Call Summary

| In attendance:                              |                       |                       | RSNA:          |
|---------------------------------------------|-----------------------|-----------------------|----------------|
| Gregory Goldmacher, MD, PhD, MBA (Co-Chair) | Rudresh Jarecha, MBBS | Kevin O'Donnell, MASc | Joe Koudelik   |
| Hubert Beaumont, PhD                        | Lu Jiang, PhD         | Nicholas Petrick, PhD | Julie Lisiecki |
| Andrew Buckler, MS                          | Claudia Kirsch, MD    | Marthony Robins, PhD  |                |
| Heang-Ping Chan, PhD                        | Eleni Liapi, MD, ScM  | Na Sun, PhD           |                |
| Andrea Ferrero, PhD                         | James Mulshine, MD    | Ying Tang, PhD        |                |
| Matthew Fuld, PhD                           | Nancy Obuchowski, PhD | Luduan Zhang, PhD     |                |
| Lubomir Hadjiiski, PhD                      |                       |                       |                |

### Profile Update

- The Profile is in the consensus stage presently
- Initial feasibility testing will include the following components:
  - A phantom scan
  - A patient scan
  - Basic lesion measurements on patient scans needed
    - Access to prior scans and image sets would also be very helpful
- A few BC team members are working on the feasibility testing:
  - Columbia University: Drs. Schwartz and Zhao
  - Duke University: Drs. Samei and Robins (phantom scanning has been completed)
  - University of Chicago and Rush University Medical Center: Drs. Armato and Mulshine
- Updates from feasibility testing sites are anticipated by the end of this week; a more substantial update should be available by the Monday, December 19<sup>th</sup> call
- A future goal is to integrate the Profile into a clinical trial

### Profile Publication Possibilities

- In order to get more visibility for the Profile, a publication is being planned
- The article would be 1 – 2 pages in length, with an explanation of the Profile's purpose, outline, and basics for conformance, etc.
- Suggestions included:
  - A letter to the editor of appropriate journals, such as *Radiology*, *JCO*, or *Clinical Cancer Research*
  - Writing two publications in parallel – in a series of related articles –
    - one for an imaging-based publication and
    - one for a clinical-based publication

### Next Steps for the Profile

- The Profile is on its way to technical confirmation; the next step would be claim confirmation
- There is no procedure in place yet for this next step
- Dr. Obuchowski's statistical guidance will be required
- A task force to address the overall approach for claim confirmation will be formed and is comprised of the following members:
  - Mr. Buckler
  - Dr. Goldmacher
  - Dr. Jarecha

- Dr. Obuchowski
- Mr. O'Donnell
- Dr. Petrick
- Dr. Samei
- This group will outline a plan and topics to be addressed by additional small focused teams working on manageable sections

### **Morphology and Texture Task Forces under Consideration for CT CC**

- Drs. Ferrero, Hadjiiski, and Jarecha expressed interest in pursuing these topics as possible future biomarkers under the QIBA CT umbrella
- A time will need to be scheduled for this task force to report findings to the QIBA CT Coordinating Committee
- Lung Density BC members may be interested in joining this effort
- Dr. Hadjiiski to connect with QIN leadership regarding interest
- Output from this task force will be assessed by the CT CC; once mature, a SC request will be made to promote to BC status
- Mr. O'Donnell will share information with MITA
- Suggestions are welcome for any other professional societies or communities that are researching these topics
- A broader base of support related to the [Moonshot Initiative](#) is also recommended
- Other possible contacts to increase community endorsement included:
  - ACR
  - Joint Commission
  - PINTAD
  - Quality-of-imaging groups in general
  - AAPM
  - SNMMI
  - FDA
  - fNIH

### **Biomarker Qualification Update**

- Additional clinical evidence for the Profile is needed for the ongoing biomarker qualification effort
- Dr. Tang volunteered to provide a brief overview presentation on the fNIH biomarker qualification efforts in January

**Next Call:** Monday, December 19, 2016 at 11 am CT

\*There will be no BC calls on Monday, December 26<sup>th</sup> or Monday, January 2<sup>nd</sup>