

## QIBA CT Angiography Biomarker Committee (BC) Call

13 August 2018 at 11 AM CT

### Call Summary

#### On Call

Andrew Buckler, MS (Co-Chair)

Uwe Joseph Schoepf, MD (Co-Chair)

James Kevin DeMarco, MD

Damini Dey, PhD

Alexander Guimaraes, MD, PhD

Edward Jackson, PhD

Rudresh Jarecha, MBBS, DMRE, DNB

Laura Jimenez-Juan, MD

Márton Kolossváry, PhD

Qin Li, PhD

Pál Maurovich-Horvat MD, PhD, MPH

Nancy Obuchowski, PhD

Kevin O'Donnell, MASc

Narinder Paul, MD

Toby Richards, MD

Marly van Assen, MSc

Akos Varga-Szemes, MD, PhD

Renu Vermani, MD

#### RSNA Staff

Joseph Koudelik

Julie Lisiecki

#### Announcements

- New Co-Chairs were re-introduced:
  - Luca Saba, MD (University of Cagliari, Italy)
  - Uwe Joseph Schoepf, MD (Medical University of South Carolina)

#### Overview of QIBA and Profile Requirements

- Mr. Buckler provided a brief overview of QIBA and the Profile development stages
- Image acquisition protocols will differ between the chest and the neck
  - We will work the content in the Monday calls, but as necessary it is possible to break out into smaller groups to do offline work for more specific issues
- Although the claims are not yet being discussed, they will be important guiding elements for the Profile
- Mr. Buckler recommended addressing issues that are more familiar to the group before crafting the Profile performance Claims
- Items that will need to be addressed within statistics will include:
  - Bias, inter- and intra- reader variability
- Standardization of measurement for air and soft tissue edges is needed and is a motivating factor
- Determining the proper measurands will aid in determining critical parameters
- Mr. Buckler has created a basic Profile framework based on the QIBA CT Volumetry Profile
  - Existing text has been “greyed-out” but remains in order to help guide the group, as some text may be similar and can be changed to black if agreed
  - Mr. O'Donnell recommended that Profile authors also look at the official [QIBA Profile Template](#) on the [QIBA wiki](#) as there are helpful instructions in the margins for Profile development

#### Image Acquisition (Chest)

- There are different types of plaque burdens which will include quantitative assessments to consider including:
  - Vessel structure (lumen and wall areas, from which various other measures are derived)
  - Tissue characteristics (i.e., Lipid-rich necrotic core and calcified areas)
- It was suggested that focus be placed on the specification tables that bear the actual requirements within the Profile rather than the discussion text as it is more helpful to focus on actual requirements
- The specification table is critical to providing guidance needed by Profile users
- A decision was taken to use “imaging physician” instead of “radiologist”
- While “actor” may not be a common term in some protocols, Mr. Buckler explained its use (and the related term “activity”) to maintain standardization for QIBA Profiles across QIBA modalities
- Scanner protocol and output reproducibility is an important area of Profile focus

#### Homework

- For the next call, the participants on this call will be asked to comment on a specification table to be distributed to the group
- Mr. Buckler will compile comments and discussion will begin with those comments on the next call
- In the course of the work we will finalize the measurands and imaging responsibilities, e.g. technologist, radiologist, etc.

**Next Steps**

- Drs. Saba and Schoepf to provide their research interests and perspectives as they pertain to QIBA on the next committee call
- Suggestion to create section writing assignments for Subject Matter Experts (SMEs)
- Future calls will be used for Profile work, rather than high-level discussion

**Next call:** Monday, August 27<sup>th</sup> at 11 am CT