# QIBA Contrast Enhanced Ultrasound (CEUS) Biomarker Committee (BC) Call

Friday, November 12, 2021; 11 AM CT Call Summary

In attendance RSNA

Mike Averkiou, PhD (Co-Chair) Zaiyang Long, PhD Nicolas Rognin, MSc, PhD Julie Lisiecki

Paul Freiburger, PhDYing Luan, PhDGiovanni Valbusa, BSChristian Greis, PhDNancy Obuchowski, PhDStephanie Wilson, MDConnor KrolakMichelle Robbin, MDHeng Zhao, MS, PhD

Stefanie Y. Lee, MD, FRCPC

Moderator: Dr. Averkiou

### **Discussion topics**

- Three types of data:
  - o Compressed, DICOM data with values from 0-255 (not for quantification)
  - Native/linearized data values in absolute scale must be used for curve-fitting
  - Linearized data values in decibels
- How to collaborate with scanner vendors to provide image data linearization
- Advocate that all companies use log-normal distribution for curve fitting and extract at least the 4 standardized QIBA parameters (RT, MTT, AUC, PI)
- Technical note based on the committee's recommendation for CEUS quantification
- Formal recommendation from the QIBA CEUS BC for time-intensity curve (TIC) analysis needed
- Standardization of the method to un-code the raw data (e.g., including in DICOM instructions)
- Development of a QIBA share-ware program that would provide basic quantification

#### Meetings

- RSNA's 107<sup>th</sup> Scientific Assembly and Annual Meeting, Redefining Radiology, Nov. 28 to Dec. 2, 2021, in Chicago
- The Acoustical Society of America Nov. 29- Dec. 3, 2021, in Seattle
- The European Symposium on Ultrasound Contrast Imaging (Rotterdam) January 20-21, 2022

### **Action items (ongoing)**

- Dr. Averkiou to invite specific colleagues to upcoming calls based on their expertise for planned topics
- New QIBA Profile Template to be used: focus on Checklist, with streamlined introduction and executive summary
- CEUS BC SMEs are asked to get more involved with the Profile activities
- Endnote: For reference details in Endnote and Excel formats, please email Connor Krolak at: krolakc@uw.edu

The next scheduled calls will be as follows at 11 am CT, unless otherwise noted:



RSNA Staff attempt to identify and capture all committee members participating on WebEx calls. However, if multiple callers join simultaneously or call in without logging on to the WebEx, identification is not possible Call participants are welcome to contact RSNA staff at <a href="QIBA@RSNA.org">QIBA@RSNA.org</a> if their attendance is not reflected on the call summaries.

### Helpful Resources (QIBA wiki):

- Profiles | QIBA Profile template | How to Write a QIBA Profile | Claim Guidance | US Shear Wave Speed Profile
- All Profile Editors are encouraged to join the QIBA Process Committee to learn about QIBA writing tips and processes and network with other Profile Editors to exchange best practices

## **QIBA Process Committee:**

Kevin O'Donnell, MASc (Chair): KOdonnell@MRU.MEDICAL.CANON | Michael Boss, PhD (Chair): mboss@acr.org