

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

Friday, November 9, 2018; 11 AM CT

Call Summary

In attendance

Mike Averkiou, PhD (Co-Chair)

Todd Erpelding, PhD, MSE (Co-Chair)

Paul Carson, PhD

Ged Harrison

Hui Jiang, PhD

Ravi Managuli, PhD

Nancy Obuchowski, PhD

Shigeto Ono

Lihong Pan, PhD

Thierry Rognard

Theresa Tuthill, PhD

RSNA

Joe Koudelik

Julie Lisiecki

Moderator: Dr. Averkiou

RSNA 2018 Poster Reviewed:

- Dr. Averkiou encouraged BC members to sign up for the [Meet-the-Expert](#) poster sessions
- Content updates to the RSNA 2018 poster included:
 - Background information regarding standardization and a reduction in variance between systems
 - A more detailed schematic of the phantom set-up including:
 - Flow phantom
 - Agent handling
 - TIC curves (similar to TIC curves for liver scans)
 - Liver scans with injected microbubbles

Talking Points for the RSNA / QIBA f2f Meeting:

- Clarify that the CEUS Profile focus is on the coefficient of variability associated with intra-scanner, not inter-scanner, test-retest results
 - The test is not a systems test; it is meant to be a standardization test to provide reproducible results
 - No decision has been made regarding an acquisition protocol, though any insights obtained will be added
- Emphasize how to get the same information from every system and extract the same parameters
- Discuss the current status of the CEUS investigations particularly with regard to amplitude corrections
 - Summarize amplitude variability with a given system
 - If possible, have a BC member phone Dr. Averkiou on their cell phone so that he can listen in

Next steps:

- More systems testing to address the amplitude and standardization issues
- Analyze data and determine from where the variability is coming
- The investigative focus will need to turn from phantom to clinical work as progress is made
- Results will be used to draft an acquisition protocol, which will be added to the Profile and published
- Details for the acquisition protocol will include:
 - Pump settings
 - Liquid concentration levels
 - Detailed instructions and measurements to replicate the phantom experiment
- Dr. Erpelding requested that Dr. Averkiou share current protocol details with BC members who would like to try the phantom experiment
 - It was noted that phantom scanning typically takes an estimated 2-4 weeks per site
- Dr. Pan had a question regarding standardization of the linear curve, which may require additional discussion

QIBA Working Meeting and Meet-the-Experts Sessions at RSNA 2018

- All are encouraged to RSVP for the [QIBA Working Meeting](#) on Wednesday, November 28th
- All are invited to volunteer for [Meet-the-Expert](#) session times

WebEx Calls: **Dec 7:** US Coordinating Committee

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 QIBA@RSNA.org if their attendance is not reflected on the call summaries.