

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

Friday, April 14, 2023; 11 AM CT

## Call Summary

### In attendance

Mike Averkiou, PhD (Co-Chair)

Richard G. Barr, MD, PhD (Co-Chair)

Todd Erpelding, PhD (Co-Chair)

Paul Carson, PhD

Christian Greis, PhD

Connor Krolak (PhD candidate)

Zaiyang Long, PhD

Nancy Obuchowski, PhD

Nicolas Rognin, MSc, PhD

Heng Zhao, MS, PhD

Stephanie Wilson, MD

### RSNA

Julie Lisiecki

**Moderator:** Dr. Averkiou

### Discussion topics

- Review and approval of call summary from March 10, 2023
- [Profile template](#) group editing

### Profile

- Discussion centered around QA and assessment procedures
- Barriers to doing QA testing discussed
- Need to provide guidance without being too restrictive
- Image uniformity / quality check recommended for probes
- Drs. Long and Carson to provide guidance text re: section 3.1 (Scanner and Reconstruction Software Checklist)
- Need to distinguish difference between customers and manufacturers
- Consider differences between Section 5 (periodic QA) and Section 4 (assessment)
  - Is the assessment procedure working properly?
  - Use phantom and bubble studies
  - Reference QC documents
  - Obtain ranges for bolus in a phantom for manufacturer validation
- Concerns expressed whether manufacturers or sites will actually follow or use Profiles
  - Need to focus on realistic use
- Wear and tear on machines, transducers, software, etc. will impact variability
- Suggestion to do a feasibility test to see if different vendors can obtain the same numbers using phantom data
  - Every system has different amplitude units
  - Some companies share time intensity curves but not all
  - Consider giving companies a performance range to meet
- Recommendation to review the QIBA Process Committee [vetting requirements](#) prior to drafting the Checklist

### For next call:

- Recommendations for assessment procedures, phantom time-intensity curves, and software analysis
- Plan to review BC members contributions re: parameter requirements and discuss the repeatability claim

### Action items (some ongoing) – please strike any that are complete

- **Dr. Averkiou** to update the Profile draft and send to BC members for review and edits prior to the next call; those with expertise in specific areas asked to provide feedback where possible
- **Connor** to lead the effort in coordinating updates for the Profile section on physician / sonographer actor requirements table and create subcategories for image analysis
- Suggestions for additional schematics may be sent to Connor Krolak: [krolakc@uw.edu](mailto:krolakc@uw.edu)

**Next scheduled call(s)** will be as follows at 11 am CT, unless otherwise noted: 5/12, 6/9

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Participants are welcome to contact RSNA staff at [qiba@rsna.org](mailto:qiba@rsna.org) if their attendance is not reflected on meeting summaries.

**Helpful Resources (QIBA wiki):**

- [Profiles](#) | [QIBA Profile template](#) | [How to Write a QIBA Profile](#) | [Claim Guidance](#) | [US Shear Wave Speed Profile](#) | [Profile stages](#) | [vetting requirements](#)
- A [streamlined Profile for the QIBA CT Volumetry BC](#) is available on the wiki as an example with checklists
- The new [streamlined blank template](#) is available on the wiki; it is in a Microsoft OneDrive document

**QIBA Process Committee:** [Kevin O'Donnell, MAsc](#) (Chair) | [Michael Boss, PhD](#) (Chair)

CEUS sign up form for Profile writing: <https://forms.gle/fHXUFkaHaGG2yEhP9>