

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

Friday, December 9, 2022; 11 AM CT

Call Summary

In attendance

Mike Averkiou, PhD (Co-Chair)

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

Todd Erpelding, PhD (Co-Chair)

Mark T. Burgess, PhD

Paul Carson, PhD

Sherwin S. Chan, MD, PhD

J. Brian Fowlkes, PhD

Paul Freiburger, PhD

Christian Greis, PhD

Connor Krolak

Zaiyang Long, PhD

Nancy Obuchowski, PhD

John S. Pellerito, MD, FACR, FAIUM, FSRU

Marissa Rae Shumaker

Stephanie Wilson, MD

James Wiskin, PhD

Heng Zhao, MS, PhD

RSNA

Julie Lisiecki

Moderator: Dr. Averkiou

Discussion topics

- Review and approval of call summary from September 9, 2022
- CEUS protocol technical note update
- [Profile template](#)

Updates

- The technical note has been submitted to *Radiology*; no feedback received yet
- Dr. Fowlkes gave an update on QIBA presentations at RSNA 2022, including the QI for AI initiative
 - There may be opportunities for automation with the use of AI, though the feedback loop will be important for measurements

Profile

- Writing to begin in earnest in the new year; section content task force sign-ups to be reviewed
- [Profile stages](#) are available for reference on the wiki
- Dr. Fowlkes mentioned that manufacturer standards and updates need to be included
- Clinical / medical physicist QC / QA should also be included
- QIBA Process Committee [vetting requirements](#) recommended for review when drafting the Checklist
- Dr. Obuchowski provided guidance regarding the within-subject coefficient of variation and claims
- With regard to change detection claims, it is important to make sure there is a real change and not just measurement variability
 - Dr. Fowlkes suggested that a 25% change in rise time would be needed to demonstrate real change

Next meeting

- The next meeting will be scheduled for January 13th and the BC will resume work on the Profile
- 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

Action items (ongoing)

- New QIBA Profile Template to be used: focus on Checklist, streamlined introduction, and executive summary
- Suggestions for additional schematics may be sent to Connor Krolak: krolakc@uw.edu
- **Endnote:** For reference details in Endnote and Excel formats, please email Connor Krolak at: krolakc@uw.edu
- Drs. Barr and Wilson to draft a press release to advocate for the use of US contrast in light of CT contrast shortages and emphasize that CEUS can be used effectively for many of the same applications
- Dr. Fowlkes to work on an announcement advocating for CEUS via AIUM channels
- RSNA staff to link to / share these press releases once available via QIBA LinkedIn and the wiki

Next scheduled call will be as follows at 11 am CT, unless otherwise noted: [1/13](#), [2/10](#)

Helpful Resources (QIBA wiki):

- [Profiles](#) | [QIBA Profile template](#) | [How to Write a QIBA Profile](#) | [Claim Guidance](#) | [US Shear Wave Speed Profile](#)

QIBA Process Committee:

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

Task Forces for Technical Note Review

Table 1, contrast agents	Imaging settings (Industry experts)	Perfusion Quantification software
Christian Greis, PhD	Todd Erpelding, PhD	Paul Carson, PhD
Connor Krolak	Ged Harrison, BS	Todd Erpelding, PhD
Zaiyang Long, PhD	Nasr Makni, PhD	Nasr Makni, PhD
	Heng Zhao, MS, PhD	Bino Varghese, PhD
		Stephanie Wilson, MD

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