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

Friday, August 12, 2022; 11 AM CT *Call Summary*

In attendance

Mike Averkiou, PhD (Co-Chair) Richard Barr, MD, PhD (Co-Chair) Todd Erpelding, PhD (Co-Chair) Paul Carson, PhD J. Brian Fowlkes, PhD Connor Krolak Nancy Obuchowski, PhD Michelle Robbin, MD Nicolas Rognin, MSc, PhD Judy H. Squires, MD

Bino Varghese, PhD Stephanie Wilson, MD James A. Zagzebski, PhD Heng Zhao, MS, PhD **RSNA** Julie Lisiecki

Moderator: Dr. Averkiou

Discussion topics

- Review and approval of call summary from July 15, 2022
- CEUS protocol technical note updates

Action items

Technical note publication

- "Recommendations for the Parameters and Imaging Settings for Contrast Enhanced Ultrasound (CEUS) Time-Intensity Analysis: A QIBA Technical Manuscript" is being formatted as a special report / letter to the editor and will be submitted to Radiology
 - o Radiology special reports allow up to 30 authors to be listed (10-12 actual contributors estimated)
- CEUS BC members provided comments:
 - No references may be included in the abstract
 - Suggested wording for "2D/contrast gain"
 - Focus could be made clearer
 - o Dr. Wilson to provide IBD references
 - o No setting changes are allowed
 - o Recommendation to eliminate sequential use and use a 2-minute acquisition time
 - Propose style of articulated arm to use
 - o More research is needed re: the 0.9 value, which has been relaxed to 0.85
 - Change five-minute clip to 2 minutes
 - Dr. Obuchowski recommended telling the audience what other researchers have done but not offering a formal recommendation due to the lack of data
 - Dr. Barr suggested wording along the lines of "the higher the R² curve value, the better the fit."
 - Dr. Averkiou will circulate the technical note to co-authors once more for feedback and to collect author details prior to submission

Action items (ongoing)

- Dr. Averkiou to request ORCID ID numbers and exact names from potential authors
- 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 calls will be as follows at 11 am CT, unless otherwise noted: 9/9; 10/14

Helpful Resources (QIBA wiki):

• <u>Profiles</u> | <u>QIBA Profile template</u> | <u>How to Write a QIBA Profile</u> | <u>Claim Guidance</u> | <u>US Shear Wave Speed Profile</u>

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