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

Friday, January 13, 2023; 11 AM CT Call Summary

RSNA In attendance Christian Greis, PhD

Mike Averkiou, PhD (Co-Chair) Richard G. Barr, MD, PhD (Co-Chair) Paul Carson, PhD J. Brian Fowlkes, PhD

Connor Krolak Stefanie Y. Lee, MD, FRCPC Zaiyang Long, PhD

Michelle Robbin, MD Nicolas Rognin, MSc, PhD Stephanie Wilson, MD Heng Zhao, MS, PhD

Julie Lisiecki

Moderator: Dr. Averkiou

Paul Freiburger, PhD

Discussion topics

- Review and approval of call summary from December 9, 2022
- CEUS protocol technical note update
- Profile template

Updates

- The technical note submitted to Radiology was rejected
- Resubmission to other journals discussed in the following order
 - Investigative Radiology
 - Journal of Ultrasound in Medicine (JUM)
 - Academic Journal of Roentgenology (AJM)
 - European journals
- Dr. Barr to contact Dr. Val Murray Runge, editor-in-chief of Investigative Radiology to ask if the journal might be interested in the technical note, and if so, to provide format suggestions
- Submitting the paper to JUM as an invited paper would be an alternative approach

Profile

- Dr. Averkiou has begun working with the streamlined Profile template and praised its many user-friendly features
- Scanner parameter requirements were discussed
- Dr. Averkiou plans to create an updated list of quantitative software products available for group reference and to aid with determining which vendors may require follow up
- Vendors need to be reminded about the importance of quantifying perfusion
- Dr. Wilson emphasized that clinicians need to continue requesting standardized performance from the vendors and that this should be emphasized in the Profile, as it is needed in the clinical setting
- QIBA Process Committee vetting requirements recommended for review when drafting the Checklist

Next meeting

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 table within the Profile template and send to BC members for review and contribution regarding actors and parameters prior to the next call
- Dr. Averkiou to create an updated list of quantitative software products for group reference
- 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(s) will be as follows at 11 am CT, unless otherwise noted: 2/10; 3/10

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> |
 <u>Profile stages</u> | <u>vetting requirements</u>
- 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): 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