

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

Friday, November 13, 2020; 11 AM CT

Call Summary

In attendance

Mike Averkiou, PhD (Co-Chair)

Christian Greis, PhD

Nancy Obuchowski, PhD

RSNA

Joe Koudelik

Todd Erpelding, PhD (Co-Chair)

George Kapodistrias, PhD

Douglas Stone, PhD

Julie Lisiecki

Dave Duncan, PhD, MSE

Zaiyang Long, PhD

Moderator: Dr. Averkiou

Approval of 10.09.2020 call summary

- The last call summary was approved as presented.

QIBA Profile – In progress

- The first version of the Profile will be built on phantom data to standardize a protocol using the bolus technique
- The manuscript presented a quantification protocol for the bolus technique, and reported on test retest variability on multiple trials, days, machines, and software.
- Another option discussed was to postpone the Profile and continue with more phantom activities
 - Typically, 10 - 15 BC members are actually active on calls, while others are less connected
 - Via email, Dr. Sherwin Chan indicated that designing good clinical studies will be important
- Questions that remain include:
 - Who is our audience and how will they use the Profile?
 - Are clinicians the main audience?
 - How will they feel about a Profile based solely on phantom data and not clinical trials?
 - We could make clear that this Profile is version 1 (phantom) and that in the future, clinical data will be incorporated for subsequent versions
 - The US SWS Profile was noted as a successful non-clinical (phantom based) effort
 - Dr. Erpelding suggested that Dr. Wilson might have more data re: a second bolus injection or other scenario
- Data need to be published via the peer-review process and other vehicles to promote future Profile use
- Future versions of the Profile, v 2.0, etc., will be built upon the additional phantom data once available
- Dr. Averkiou would like to organize task forces to work toward Profile writing and clinical validation
- All on the call voted in favor of working on the Profile as the next step forward vs. focusing on additional phantom studies
- The next step will be to create small task forces to address specific Profile sections

Task Forces:

- These task forces may be revised or expanded based on the Google spreadsheet data where volunteers signed up for specific sections of the Profile writing; however, as discussed on the call, here are the current assignments:

| Executive Summary: | Clinical Context: | Claims: | Literature Review: |
|-------------------------------------------|---------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------|
| Dr. Averkiou Dr. Carson Dr. Fowlkes | Dr. Barr Dr. Sherwin Chan Dr. Greis Dr. Wilson | Dr. Averkiou Dr. Erpelding Dr. Obuchowski | Dr. Duncan Dr. Erpelding Dr. Greis Dr. Kapodistrias Dr. Long |

- Clinical interpretation will be important, though it is a moot point presently, as the focus will be a standardized protocol based on phantom data
- Claims may be made based on phantom groundwork done or on literature review related to the clinical problem
 - Literature review must inform the Profile claim; the process may need to be broken down into subgroups
 - Much of the work of the Literature Review Task Force can be done via email exchanges
- Dr. Erpelding shared how the Volume Blood Flow (VBF) BC has three working groups with a combined approach using volunteering and survey
- Dr. Erpelding to follow up with Dr. Averkiou regarding the structure and plan for these groups

- Dr. Averkiou to draft a message to other BC members to solicit more diverse expertise on the next call

Next Steps:

- Discussion on the next call will include the Executive Summary, the Claims, and the Clinical Context
- Dr. Averkiou to draft a few sentences to other BC members in order to get more diverse expertise on the next call
- Determining how to formulate the claim(s) and how to address phantom test-retest variability and deviation from consensus, with possible future correlation with flow in phantoms
- Help is needed with clarifying the claims, as well as clinical context in particular; clinician input is vital

Action items:

- Dr. Erpelding to send details re: Volume Blood Flow BC’s organizational plan to Dr. Averkiou
- Dr. Averkiou to assign additional BC members to Profile writing task forces per preferences from the [Google form](#)
- All to consider the claims and to forward suggestions to the co-chairs: Drs. [Averkiou](#), [Barr](#), and [Erpelding](#)
- CEUS BC SMEs are asked to attend more calls to provide their diverse expertise
- Participation from BC members with experience with the QIBA Profile-writing process is also crucial

The next scheduled QIBA ultrasound calls will be as follows at 11 am CT, unless otherwise noted:

| | |
|--------------|--------------|
| 11/20 | SWS BC |
| 12/11 | CEUS BC |
| 12/18 | SWS BC - TBD |

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.

Helpful Resources (QIBA wiki):

- [Profiles](#) | [QIBA Profile template](#) | [How to Write a QIBA Profile](#) | [Claim Guidance](#) | [US Shear Wave Speed Profile](#)
- All Profile Editors are encouraged to join the QIBA Process Committee to learn about QIBA writing tips and processes and network with other Profile Editors to exchange best practices

QIBA Process Committee: Kevin O’Donnell, MAsc (Chair): Kodonnell@MRU.MEDICAL.CANON