

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

Friday, July 29, 2016; 11 AM CT

Call Summary

In attendance

Michalakis (Mike) A. Averkiou, PhD (Co-Chair)

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

Thierry Bettinger, PhD

Paul Carson, PhD

David Cosgrove, MD

Christian Greis, PhD

Timothy J. Hall, PhD

Christine Kalli, MSc

Kirstin Laconte

Mary (Beth) McCarville

Andy Milkowski, MS

Nancy Obuchowski, PhD

Vladimir Reiser, PhD

Maria Luigia Storto, MD

Theresa Tuthill, PhD

Stephanie Wilson, MD

RSNA

Fiona Miller

Susan Weinmann

Moderator: Dr. Barr

CEUS Task Forces (Dr. Barr)

- Discussion on proposed task forces and their functions
 - Data-gathering TFs (proposed by Dr. Barr):
 1. Literature Review
 - Use Mendeley to facilitate collaboration and gather articles
 - Crucial for identifying knowledge gaps and establishing next steps for phantom study
 2. Contrast Agent (gather and maintain information on agents)
 3. Contrast Specific Software (detail all available software)
 4. Acquisition Parameters (define acquisition parameters and suggested settings)
 5. Quantification (describe and list methods of quantification with advantages and disadvantages)
 6. Signal Output (list what is the output signal from various vendors)
 - TFs will be charged with identifying what's available, the current status, and gaps
 - Vendor participation will be especially critical for TF 2, 3 and 6.
 - Experimental TFs (proposed by Dr. Averkiou):
 1. Clinical focus team (clinical requirements of measurements)
 2. Imaging systems requirements (which systems, what software release, parameters, etc.)
 3. Data management (format, sharing, archiving, etc.)
 4. Quantification analysis software (Vuebox, QLAB, QStation, etc.)
 5. Ultrasound physics (attenuation, shadowing, beamforming, nonlinear propagation artifact)
 6. Bolus kinetics physics (indicator dilution, models, parameters, curve fitting, arterial input function, correlation with clinical parameters)

Phantom Project Update (Dr. Averkiou)

- Dr. Averkiou to begin to look at data in September
- Phantom design may be modified as more information is gathered through a literature review

Action items

- Drs. Barr, Averkiou and Hoyt to provide a comprehensive list of CEUS TFs
- RSNA staff to create Doodle poll with final list of task forces for enlistment of volunteers
- Dr. Barr to reach out to vendors and pharmaceutical companies to identify contacts at each organization from whom crucial information can be obtained for Profile purposes

- Dr. Barr to post vendor information on Ultrasound CEUS BC QIBA wiki page at: http://qibawiki.rsna.org/index.php/Ultrasound_CEUS_BC
- RSNA Staff to suggest available time slots for set rotation once the list of task forces is finalized

AUGUST US WebEx / Conference Schedule

WebEx:

- **August 05:** US Coordinating Cmte
- **August 12:** Clinical Task Force
- **August 19:** US SWS BC
- **August 26:** CEUS BC

Conferences/ Meetings:

July 31 – Aug 4: American Association of Physicists in Medicine (AAPM), (Washington, DC)

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.