

QIBA Ultrasound Shear Wave Speed (SWS) Biomarker Committee (BC) Call

Friday, August 4, 2017; 11 AM CT

Call Summary

In attendance

Tim Hall, PhD (Co-Chair)

Andy Milkowski, MS (Co-Chair)

S. Kaisar Alam, PhD

Michael André, PhD

Paul Carson, PhD

Anil Chauhan, MD

Manish Dhyani, MD

Todd Erpelding, PhD, MSE

Steven Fick, PhD

Alan Gee

Ken Linkhart

Mike MacDonald, PhD

Stephen McAleavey, PhD

Arinc Ozturk, MD

Nicolas Rognin, PhD

Yao-Sheng Tang, PhD

Matthew Urban, PhD

Keith Wear, PhD

Hua Xie, PhD

RSNA

Joe Koudelik

Julie Lisiecki

Moderator: Dr. Hall

Review prior call summary: July 7th summary approved as submitted

Discussion included:

- Proposal to calibrate US SWS phantoms utilizing the Verasonics platform (as an open, readily available system) using the open-source implementation code created by Dr. Palmeri and Dr. Urban
- Transducer/probe differences are a concern
 - While some variability is expected, the larger concern is the shape of the acoustic field produced
 - Significant differences in the acoustic field created by vastly different transducer designs (target applications) will likely significantly affect shear wave experiments
 - There is no absolute liver stiffness standard to test against
 - A common software package for calibrating US systems is desired
- How to compensate for probe differences and system variations must be taken into consideration
 - Differences from one probe to the next of the same design from the same manufacturer will likely lead to minimal differences in shear wave experiments
 - Differences from one system to the next from the same manufacturer with the same hardware configuration are likely to be minimal
- One site may be designated as a “calibration site”
 - At least three sites with identical configurations that can cross-validate calibrations is desired.
- Verasonics is interested in collaborating, pending confirmation that no software agreements are violated
 - US SWS leadership to follow up with Verasonics business leadership regarding a software agreement
 - The Duke University software is already posted on GitHub, and the Verasonics leadership is aware of that

Next QIBA WebEx calls are as follows:

- **Sept 01:** SWS BC
- **Sept 08:** CEUS BC
- **Sept 29:** US Coordinating Cttee

SAVE-THE-DATE:



QIBA Biomarker Committee Working Meeting at RSNA 2017 | Wednesday, November 29, 2:30-5 pm – Lakeside Center