

**QIBA Ultrasound Shear Wave Speed (SWS) Combined Call:
System Dependencies and Phantom-System Measurement Testing Subcommittees**

Friday, October 3, 2014; 11 AM CT

Notes provided by Dr. Wear

In attendance

Keith Wear, PhD (Co-Chair)
S. Kaisar Alam, PhD
Jun Chen, PhD
Shigao Chen, PhD
David Cosgrove, MD
Timothy J. Hall, PhD

Ted Lynch, PhD
Mike MacDonald, PhD
Andy Milkowski, MS
Yasuo Miyajima, MS
Kathy Nightingale, PhD

Nicolas Rognin, MSc, PhD
Daniel Sullivan, MD
Matthew Urban, PhD
Michael Wang, PhD, MASc
Hua Xie, PhD

RSNA

Joe Koudelik
Julie Lisiecki

Moderator: Keith Wear, PhD

1. Review and approval of minutes of previous meeting.
2. Discussion of Phase II phantom conditions when received at Philips, Briarcliff Manor, New York. The phantoms were labelled A1, B3, and C1. A picture of phantom C1 taken by Ned Rouze at Duke U. prior to shipping to Philips indicated a bubble. However, phantom C1 had much bigger bubbles when received at Philips. These bubbles may have been caused by air shipping. Phantom A1 was fine. Phantom B3 had a small bubble. Hua Xie kept the phantoms for about 2 weeks. Over this time, bubbles got smaller, especially for Phantom C1. The bubble for B3 was not noticeable after 2 weeks. These bubbles are not big enough to create a measurement issue. Phantoms were shipped from Philips, New York to Philips, Bothell via FedEx ground shipping. Ted Lynch observed that air bubbles must have been introduced during the pouring process. Bubbles may either move or get resorbed. Therefore, **investigators need to observe phantoms carefully for bubbles so they can be avoided**. Adding saline for coupling medium could affect bubbles by gravity. **It was suggested that phantoms be imaged to look for bubbles in the interior**. Both Ted Lynch and Hua Xia imaged the phantoms and did not see inhomogeneities on B-mode.
3. Update on Phase II phantom Air Bubble issue. The problem is related to air getting trapped in the gel while pouring. Ted Lynch made a slight adjustment to the formulation that made the gel easier to pour without trapping air, and have sent samples to Duke for testing.
4. It was suggested that we proceed with the current set of phantoms. In addition, CIRS will produce a second set of phantoms for a follow-up round-robin inter-laboratory comparison. **It was decided that ground shipping is preferable to air shipping to minimize risk of damage**. Duke U. has a second set of phantoms from CIRS. Duke will measure the second set of phantoms and then mail them to Philips in New York for measurement. Then Philips will send them to the next lab, etc., thus creating a second complete set of measurements.
5. **Participants were encouraged to take pictures of phantoms when received in order to document condition of phantoms.**
6. Vijay Shamdasani (Philips) was not available on the teleconference to confirm condition of phantoms or report whether he had measured them or not.
7. Andy Milkowski at Siemens said he would follow up with Vijay Shamdasani at Philips to ascertain the state of phantoms and phantom measurements.
8. Yasuo Miyajima cautioned participants to be very careful when positioning the transducer. Measurements in imaging mode can be difficult.
9. **Phase II Measurement Schedule**
 - a) Duke X
 - b) Philips (Bothell)
 - c) Siemens
 - d) Toshiba
 - e) UCSD
 - f) Mayo Clinic
 - g) University of Wisconsin
 - h) Southwoods Imaging Center
 - i) Massachusetts General Hospital
 - j) FDA/VA
 - k) Duke

Next QIBA Ultrasound SWS Call Dates – Fridays at 11 am CT:

- October 10, 2014: Technical Committee – *Dr. Hall*
- *October 17, 2014: Systems/ Phantom SC – Dr. Wear (TBD - if another call is needed)*
- October 24, 2014: Clinical SC – *Dr. Samir*
- **October 31, 2014: No call -- Deadline for RSNA 2014 poster print-ready file to be sent to RSNA**

Conferences for Ultrasound on QIBA Wiki have been updated (as known) for 2014 – 2015. Updates welcome.

QIBA Technical Committees - Working Meeting at RSNA 2014

- Wednesday, December 3rd | 2:30pm – 5:00pm | Chicago, McCormick Place | Room: **E262**
- Please let us know whether you plan to attend by responding to the following poll:
<http://doodle.com/mk7qecxint6vbwf5>.

QIBA Poster Meet-the-Expert (MTE) Sessions at RSNA 2014

- **Location:** McCormick Place, Chicago - Learning Center (**Hall D**) – QIBA Kiosk
- Please provide your availability to volunteer for the QIBA Poster Meet-the-Expert (MTE) sessions.
- **Doodle Poll URL:** Ultrasound SWS Technical Committee: <http://doodle.com/uph4zgvfbsi4ynd7>