QIBA Ultrasound Shear Wave Speed (SWS)

Clinical Applications and Biological Targets Subcommittee Call

Friday, 26 September 2014; 11 AM CT Call Summary

In attendance			RSNA
	Jun Chen, PhD	Yasuo Miyajima, MS	Joe Koudelik
Anthony Samir, MD, MPH (Co-Chair)	Manish Dhyani, MD	Miwa Naito, PhD	Julie Lisiecki
David Cosgrove, MD (Co-Chair)			
S. Kaisar Alam, PhD	Brian Garra, MD	Nancy Obuchowski, PhD	
Michael André, PhD	Timothy J. Hall, PhD	Nicolas Rognin, MSc, PhD	
Richard Barr, MD, PhD	Christopher Hazard, PhD	Michael Wang, PhD, MASc	

Mike MacDonald, PhD

Moderator: Anthony Samir, MD, MPH

Discussion points:

Paul Carson, PhD

- Dr. Samir's study, "A Pilot Study of the Effect of Steatosis and Inflammation on Shear Wave Speed for the Estimation of Liver Fibrosis Stage in Patients with Diffuse Liver Disease," now has 250 subjects to date.
 - A no-cost extension has been approved to complete the pathology reads for additional subjects.

Phantom Study, Revisit of Phase I Data:

- Dr. Barr will follow up with Drs. Zheng and Hall re: using datasets from the Phase I phantom study to review statistical change
- Dr. Jun Chen expressed an interest in additional calibration measurements for Phase I phantoms and will contact Dr. Hall.

Data Analysis Requirements

- Version 2 of the draft UPICT protocol for clinical use was distributed to manufacturer contacts requesting feedback on accurate cut-offs for best practice; comments are welcome: Dhyani.Manish@mgh.harvard.edu.
- Technical personnel (engineers) were asked to provide feedback regarding how systems are set up and cut-offs defined
 - More information is needed regarding resources required for a calibration standard
 - o Discussion regarding a metric for processing elasticity and phase velocity would be helpful
 - Goal to create a mechanism for vendor measurement homogenization to help drive protocol adoption and vendor/research scientist collaboration
 - Consideration must be taken to protect vendor intellectual property
 - Inter-system variability is the problem across measurements, operators, and systems
 - Dr. Hall discussed how phase velocity may play an important role in creation of a common frequency among systems in preliminary terms

QIBA Profile

- Dr. Garra is leading the Profile effort focusing on sources of variability in imaging protocols
 - Drs. Dhyani and Samir are working on how to handle large amounts of RF data

RSNA 2014 poster

- Drs. Samir and Dhyani to spearhead creation of the RSNA 2014 poster for the QIBA Ultrasound Technical Committee
- Content will include the Phase I Phantom Study and data variability
 - o Dr. Palmeri and his colleagues to help review strategy and system comparison text
 - o Dr. Barr volunteered to help Drs. Samir and Dhyani with poster content
 - o Dr. Samir to circulate a draft poster for feedback

Action items:

- Drs. Samir and Dhyani to spearhead creation of the RSNA 2014 poster for the QIBA Ultrasound Technical Committee
- Dr. Samir to follow up with Drs. Garra and Hall offline regarding RF values and sources of SWE variability
- QIDW: Thousands of images have been acquired and de-identification software is needed to automate the process

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

- October 3, 2014: Systems/ Phantom SC Dr. Wear
- 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.

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. QIBA wiki

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