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

Friday, July 27, 2018; 11 AM CT Call Summary

In attendance RSNA

Brian Garra, MD (Co-Chair) Todd Erpelding, PhD Anthony Samir, MD, MPH Joe Koudelik Tim Hall, PhD (Co-Chair) Kathy Nightingale, PhD Leah Schafer, MD Julie Lisiecki S. Kaisar Alam, PhD Nancy Obuchowski, PhD Theresa Tuthill, PhD Paul Carson, PhD Keith Wear, PhD Arinc Ozturk, MD Jun Chen, PhD Mark Palmeri, MD, PhD Jim Zagzebski, PhD

Moderator: Dr. Garra

Yuling Chen, PhD

Approval of 04.06.2018 call summary

The summary was approved as written

Manuscript update (Dr. Palmeri):

- Dr. Palmeri has completed a comprehensive paper for possible submission to Radiology
 - The paper summarizes conclusions from the ultrasound shear wave speed (US SWS) phantom phase I &
 II experiments, which informs the Profile regarding acoustic attenuation in the liver
- This paper should be of great interest to those in the ultrasound community as it addresses systems variation
- The author list has more than 20 names demonstrating that this paper is the result of a large multi-institutional, multi-vendor consensus effort
 - o Dr. Palmeri to write a cover letter upon submission addressing the extensive author list
- It was suggested that the long list of authors could be added to an appendix; however, Dr. Palmeri wants to ensure that all volunteers are recognized for their efforts
- It was decided that the paper should be submitted unchanged for editor feedback
- So that it can be referenced in the SWS Profile, Dr. Palmeri is hopeful that an e-published version will be available months ahead of the print copy if accepted
 - o An assigned doi would also be helpful to allow for ease of citation
- Many experts within the ultrasound community participated in this study, so it may be difficult to get impartial expert reviewers in the field (i.e. during the public comment phase)
 - O Suggested reviewer names can be sent to Dr. Palmeri: mark.palmeri@duke.edu
- Dr. Samir proposed that the SWS BC co-chairs should speak with Dr. Jackson about suggesting a special edition of *Radiology* solely on quantitative imaging (QIBA-centric), and specifically, highlighting RSNA/NIBIB/QIBA-funded research
- Dr. Hall had a preliminary conversation with Dr. Bluemke, *Radiology* Editor, who is aware the manuscript will be longer than usual and will not follow the *Radiology* format guidelines

Profile update:

- Mr. O'Donnell made substantial edits to the Profile
- Mr. O'Donnell also made edits to the statistical analysis section; Dr. Garra to share these with Dr. Obuchowski
- Concern raised that the Profile is taking too long to reach the intended audience and that it could be beneficial if released
- It was suggested that the current Profile version be sent out for public comment asap
- Mr. O'Donnell's comments would be considered along with other feedback received during public comment
- The Profile is a "living" document; format/template changes are expected but should not impede progress
- Comments are welcome to Drs. Garra and Hall: <u>Brian.Garra@fda.hhs.gov</u>; <u>bgarra@gmail.com</u>; <u>tjhall@wisc.edu</u>

Profile Approval Process Next Steps:

- See voting and balloting process links http://qibawiki.rsna.org/index.php/Process
- Voting to release the Profile for public comment will be done electronically

Round-6 NIBIB Project Updates:

MGH (Dr. Samir):

- Siemens, Toshiba, GE, and Fibroscan scanners were used on 30 patients
- It is important to ensure that the machines have current software
- There is no progress yet on the study publication

VA (Dr. Garra):

- The VA has processed some data, though data is difficult to obtain due to the inability to contact potential patients directly leading to a slow accrual process
- More than one site is needed
- The data may be asymmetric in quantity
- VA data to be combined with MGH data soon

Clinical Confirmation Study Planning (Dr. Garra):

- Proposals that may be considered include those that are NIH-funded and multi-center trials
- No ability to compare cross-vendor data due to dominance of Fibroscan platforms at all imaging sites
- A direct comparison between Fibroscan and MRE suggested for obese subjects
- · There are also no algorithms available for extrapolating data in Hertz measurements
- A material model must be supported with data which must also include a basic science component
- It is wise to be planning in advance due to delays that can occur with application procedures

Next QIBA WebEx calls are as follows:

Aug 10: CEUS BC

Aug 17: SWS BC (if needed)

Sept 07: SWS BC
 Sept 14: CEUS BC

Sept 21: US Coordinating Committee