QIBA Ultrasound Shear Wave Speed (SWS) Biomarker Committee & US Coordinating Committee
Friday, May 1, 2015; 11 AM CT
Call Summary

In attendance

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tr>
<td>Timothy J. Hall, PhD (Co-Chair)</td>
<td>Manish Dhyani, MD</td>
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<tr>
<td>Paul Carson, PhD</td>
<td>Gilles Guenette, RDMS, RDCS, RVT</td>
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<td>Jun Chen, PhD</td>
<td>Christopher Hazard, PhD</td>
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<td>Shigao Chen, PhD</td>
<td>Ted Lynch, PhD</td>
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<td>Wui K. Chong, MD</td>
<td>Mike MacDonald, PhD</td>
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<td>David Cosgrove, MD</td>
<td>Wayne Monsky, MD</td>
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<td>Mark Palmeri, MD, PhD</td>
<td>Marijane Trew, BSc</td>
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<td>Theresa Tuthill, PhD</td>
<td>Matthew Urban, PhD</td>
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<td>Keith Wear, PhD</td>
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RSNA

Julie Lisiecki

Moderator: Dr. Hall

Review of April 10th US SWS BC call notes
- Approved as written

Round-4 Clinical Study Update (Sources of Measurement Variability in SWS)
- The IRB is approved and in place, and physicians have been contacted to begin recruitment
- Target recruitment is 20 patients
- An IRB amendment is being filed to include all patients who have had a biopsy; this will not impede project progress

Round-4 Industry Digital Phantom Update
- LS-Dyna and Abacus algorithms are being studied, using cross validation and comparisons of reconstructed group velocities that were tested on 48 different configurations outlying for elastic studies
- A comparison between different systems and boundary conditions showed no significant sources of variance
- A proposed project for Round-5 will build upon the digital phantoms and explore digital effects, demonstrating the robustness of the various software products
- Manufacturers are actively involved, and two new groups have joined the effort: Zonare and Samsung
- Other manufacturing partners include: FibroScan, GE, Philips, Siemens, SSI, and Toshiba
- Anonymization of system comparisons recommended for publication consideration
- Digital phantom data will be posted on the RSNA Quantitative Imaging Data Warehouse (QIDW): [http://www.rsna.org/qidw/](http://www.rsna.org/qidw/)
- Open access specific configuration files and code have been posted to GitHub:
- Dr. Shigao Chen proposed a project update for the next System Dependencies/ Phantom Task Force call, on May 22nd

New Project Proposals
- Dr. Monsky is interested in working on a US Contrast / Perfusion Phantom, if Contrast is accepted as a new biomarker

Profile
- Dr. Garra has drafted the first US SWS Biomarker Profile, with assistance from Drs. Samir and Dhyani.

Action items:
- Dr. Carson requested that project proposals for Round-5 be distributed to the Biomarker Committee for review and comment, prior to the QIBA Steering Committee Meeting on May 5th
- Additional projects may be suggested after discussions occur regarding the new proposed biomarkers:
  - Contrast Enhanced Ultrasound (CEUS)
  - Volume Blood Flow
  - Sub-harmonic-aided pressure estimation (SHAPE)
Ultrasound SWS Calls (Fridays, 11 am CT):

May
- May 8: No call (Day after QIBA Annual Meeting)
- May 15: No call
- May 22: System Dependencies/ Phantom Task Force (Dr. Palmeri)
- May 29: Clinical Applications Task Force (Dr. Samir)

June (proposed)
- June 5: No call
- June 12: US SWS Biomarker Ctte (Mr. Milkowski, if available)
- June 19: System Dependencies/ Phantom Task Force (Dr. Wear, if available)
- June 26: Clinical Applications Task Force (Dr. Samir, if available)