



**PULSE-ECHO QUANTITATIVE ULTRASOUND  
BIOMARKER COMMITTEE**  
*Agenda for July 10, 2020 – 11am EST*

Attendees: Ivan Rosado-Mendez, Anthony Samir, Michael Wang, Aiguo Han, Amy Lex, Anil Chauhan, Brian Fowlkes, Cristel Baiu, Gary Ng, Glen McLaughlin, Guy Cloutier, Jeff Bamber, Jing Gao, Kibo Nam, Marie Muller, Michelle Robbin, Andy Milkowski, Arinc Ozturk, Paul Sidhu, Ravi Managuli, Jonathan Rubin, Stephen McAleavey, Stephen Rosenzweig, Tian Liu, Tim Hall, Timothy Stiles, Todd Erpelding, Viksit Kumar, Xiaohong Wang, Jim Zagzebski, Giovanna Ferraioli, Raul Esquivel. Keith Wear, David Fetzer, Juvenal Ormachea, Shigeto Ono, Theresa Tuthill, Kai Thomenius

AIUM Staff: Kelly Phillips, Therese Cooper

AS: Anthony Samir  
IRM: Ivan Rosado-Mendez  
MW: Michael Wang

TOPIC	COMMENTS	ACTION ITEMS
Introduction	Welcome (IRM)	Ivan discussed goals of the call (below)
BC Communication	Frequency of teleconferences - (IRM) First Friday of each month (if possible)	<ul style="list-style-type: none"> <li>-Plan is to host one monthly BC call on the first Friday of each month. (next is Aug 7)</li> <li>-to discuss progress of each work group – each will have about 10 min to present their progress of the last month</li> <li>-suggest each WG have monthly meetings in between the monthly meeting of the BC</li> </ul>

Work group assignments	Review assignments of work groups – (MW)	<p>-Confirmed all received survey/email and know their assigned work group; explained how they were chosen</p> <p>-IRM went over group members – no comments made</p>
Work group guidelines	<p>Presentation: Levels of QIB validation – (AS)</p> <p>Biomarker Work Group guidelines – (IRM)</p> <p>Phantom Work Group guidelines – (MW)</p>	
Open discussion		<p>AS: Success – closer on methodology to make these measurements, have a standardized way of making measurements; set of claims driving clinical practice and research forward and enables drug development</p>
Summary	<p>Summary of discussed points and review of proposed actions (IRM)</p> <p>Next meeting (IRM)  Date: August 7, 2020  Time: 11:00 am, EST</p>	<p>Each work group should meet and take initial steps</p>

## PHANTOM WORKGROUP

Cristel	Baiu	Industry expert
Ted	Lynch	Industry expert
Andy	Milkowski	Industry expert
Tim	Stiles	Basic ultrasound scientist
Yassin	Labyed	Basic ultrasound scientist
Stephen	McAleavey	Basic ultrasound scientist
Jim	Zagzebski	Basic ultrasound scientist
Michelle	Robbin	Physician
David	Fetzer	Physician

## ATTENUATION WORKGROUP

Gary	Ng	Industry expert
Amy	Lex	Industry expert
Ravi	Managuli	Industry expert
Theresa	Tuthill	Industry expert (2nd assignment)
Todd	Erpelding	Industry expert (2nd assignment)
Marie	Muller	Basic ultrasound scientist
Kibo	Nam	Basic ultrasound scientist
Viksit	Kumar	Basic ultrasound scientist
Chris	de Korte	Basic ultrasound scientist
Juvenal	Ormachea	Basic ultrasound scientist (2nd assignment)
Kevin	Parker	Basic ultrasound scientist
Arnic	Ozturk	Physician
Giovanna	Ferraioli	Physician
Richard	Barr	Physician
Mark	Lockhart	Physician
Jing	Gao	Physician (2nd assignment)

## BACKSCATTER WORKGROUP

Aiguo	Han	Basic ultrasound scientist
Guy	Cloutier	Basic ultrasound scientist
Kai	Thomenius	Basic ultrasound scientist (2nd assignment)
Keith	Wear	Basic ultrasound scientist
Roberto	Lavarello	Basic ultrasound scientist
Tian	Liu	Basic ultrasound scientist
Jonathan	Rubin	Physician
Anil	Chauhan	Physician
Jing	Gao	Physician (1st assignment)
Theresa	Tuthill	Industry expert (1st assignment)
Todd	Erpelding	Industry expert (1st assignment)

## SOUND SPEED WORKGROUP

Glen	McLaughlin	Industry expert
Stephen	Rosenzweig	Industry expert
Theodore	Pierce	Physician
Paul	Sidhu	Physician
Xiaohong	Wang	Physician
Jeff	Bamber	Basic ultrasound scientist
Kai	Thomenius	Basic ultrasound scientist (1st assignment)
Juvenal	Ormachea	Basic ultrasound scientist (1st assignment)
Raúl	Esquivel	Basic ultrasound scientist

IRM - Goals – to present the conceptual framework that will guide the initial activities of this BM committee

- Discuss work group assignments

AS providing clarification on QIBA activities

-level 1,2,3 Hepatic Steatosis (level 3)

- focused on level 1 at this stage (measurements)

-Guy Cloutier asked about adding AI to level 3.....AS – goal of PEQUS activities is to generate a set of methods to provide high quality biomarker data; construction of statistical framework is not necessarily a QIBA activity

-Tim Hall added that there is a metrology working group within QIBA that is addressing the statistics of outcomes. AI is one of four classes of statistics that is being considered.

-Role of phantom group: To produce a credible phantom or set of phantoms that represents the range and physicommechanical conditions and which measurements would be obtained for fatty liver disease

MW - went over phantom WG guidelines document

- Will need input from the other 3 BM WG
- Suggest a review of QIBA literature
- Suggest using a Doodle to figure out timing for a meeting 2 weeks following the BC Meeting
- Jim Z asked about basecamp and wiki regarding where documents are placed
  - o Brian F explained how/where documents are placed –
    - Wiki for final document/work product for QIBA leadership to review
    - Basecamp for works in progress etc (facilitated by AIUM staff)
  - o Tim Hall confirmed and QIBA can help with guidelines etc as needed
    - Wiki needs – minutes from BC meeting, however minutes/notes from WG meetings do not need to be here
    - Liason for MR proton density fat fraction BM committee: IT IS IMPORTANT TO KNOW HOW MRPDFF IS BEING REPORTED.

IRM – went over BM work group guidelines documents (attenuation, Sound Speed, backscatter)

- Suggest a review of QIBA literature
- Guidelines are not rules
- No questions or comments made by members
  - o AS: let members know to reach out to the chairs if there are questions or need for clarification

Open Discussion:

Guy Cloutier – What is the vision of QIBA community in regards to open access versus proprietary software to be tested? Are you expecting ultrasound sharing software?

- AS: Large variety of methodologies/technologies across instruments and software
- Role of QIBA to assist developers to bring the output of BM closer together
  - o Provide the framework to bring ideas forward in order to assist in creating software

David Fetzer –How do we see collaboration moving forward between this committee and AIUM Liver Fat Quantification TF?

- IRM: We should engage in more active communication with AIUM TF....work of PEQUS will compliment work of AIUM liver fat TF (level 1 work)
- Brian F: Clinical application will strongly involve the AIUM Liver Fat TF (later stage)
- David F: AIUM committee focused on producing guidance and documents as far as clinical needs