



## AIUM/QIBA Ultrasound Volume Blood Flow Biomarker

### Summary 02-May-2022

Attendees: Attendees: Brian Fowlkes, Kourosh Kalayeh, Cristel Baiu, Jim Zagzebski, Jing Gao, Jonathan Rubin, Megan Russ, Michelle Robbin, Nicole Lafata, Paul Carson, Rimon Tadross, Stephen Pinter, Todd Erpelding  
Aium Staff: Haylea Weiss

1. Review of Previous Call Summary – 04-April-2022
2. Discussion Topics
  - 2.1. Abstracts for Groundwork Studies. Future plans for direct comparison between 3D volume flow and 2D volume flow in the contexts of the AVF for dialysis access. Potential for phantom studies comparing 2D and 3D directly. Megan R. is interested in contributing to groundwork studies but mentioned not having any 3D transducers. This will be a potential limitation for site participation. There is a potential of doing some Round Robin measurements at professional meetings, i.e. RSNA and AIUM. Would need to examine the logistics, recognizing that systems may not be using released software. Brian mentioned building an app in MATLAB and hopes to have that up and running in the near future.
  - 2.2. Brian new analysis of the results from the Zonnebeld et al. reference. These results are now incorporated into the Profile text. We will need to determine if there is any additional information (appendix) that would need to be provide related to this analysis. Consider whether there might be interest by the authors in an additional related publication.
3. Update on Phantom Modeling
  - 3.1. Kourosh K. presented an update on the phantom modeling with the latest configuration from Cristel B. Several suggestions were made with regard to simulations to run. Also we will need to know at what depths the flow profile will parabolic to within X%. Decided to simulate first the maximum volumetric flow in the phantom to determine the least ranges of depth that are parabolic.
4. Update on VBF Profile Discussions
  - 4.1. Review of current draft and updates from Profile Task Group
    - 4.1.1. Profile (Review of Section 4)

- 4.1.1.1. Covered several outstanding issues raised by Jim J. and Nicole L.
  - 4.1.1.1.1. Discussed the possible need to pulsatile flow specifications.
  - 4.1.1.1.2. Discussed the objective of section 4 vs. section 3
  - 4.1.1.1.3. Concerns about overlap with section 3.
- 4.1.2. Checklist

## 5. Action Items

- 5.1. Check to see who may be able to lead May 11 call.
- 5.2. Brian to set up groups to divide tasks.

Next full BC meeting is Monday June 6, 2022 at 12:30 pm ET.

Next Profile meeting is Wednesday May 11, 2022 at 10:00 am ET.