

QIBA CT Angiography Biomarker Committee (BC) Call

19 November 2018 at 11 AM CT

Call Summary

On Call

Andrew Buckler, MS (Co-Chair)
J. Kevin DeMarco, MD
Svetlana Egorova, MD, PhD
Maros Ferencik, MD, PhD

Alexander Guimaraes, MD, PhD
Márton Kolossváry, PhD
Kevin O'Donnell, MASC
Taylor Richards, PhD

RSNA Staff

Joe Koudelik
Julie Lisiecki

Profile Sections Discussed:

- Mr. Buckler has updated the Profile with input from clinicians regarding the following sections:
 - Section 3.1 – subject handling (including specifications for contrast, breath holding, etc.)
 - Section 3.2 – image data acquisition
 - The updated Profile is posted to the [QIBA wiki](#) for review
- Dr. Richards is working on the integrated plan for the set of theoretically investigated parameters
 - Drs. Richards, Kolossváry, and Egorova volunteered to validate the simulation model for proposed image acquisition parameters on their respective scanners so that it may be used as means to optimize the requirements tables
 - Mr. Buckler commended this cross-institutional effort and encouraged them to invite additional volunteers as engagement of scanner manufacturers is critical for the effort
 - Any images obtained from this testing may be used for future conformance testing and software validation
- This testing will bridge the gap between acquisition and analysis, as outlined in the Profile

Claims:

- The group needs to determine what will be claimed for a given measurand and how to describe bias
- For the individual requirements tables in Profile section 3, scanner (hardware) specs are separated from the image analysis (software) specs; these will later be incorporated together in the Claims (Profile section 2)
- Dr. Richards will provide a strawman specification table for the scanner study, with input from Dr. Kolossváry
- Mr. Buckler provided performance metrics to guide sample sizing from actual test results on at least one software application (used across multiple scanners)
- The team is working on a specification table to aid with developing the claims

Action items:

- All are asked to contact the co-chairs to ensure inclusion of desired parameters:
andrew.buckler@elucidbio.com; lucasabamd@gmail.com; schoepf@musc.edu
- Drs. Richards, Hoelzer, Kolossváry, and Obuchowski to correspond offline regarding experiment designs
- Proposed parameters will be reviewed in greater detail on the next call, along with conversions for the validation plan

Next call: Monday, December 17th at 11 am CT

QIBA Wiki CT Angiography BC page: http://qibawiki.rsna.org/index.php/CT_Angiography_Biomarker_Ctte

RSNA 2018: All are encouraged to RSVP for the [QIBA Working Meeting](#) on Wednesday, November 28th and to volunteer for [Meet-the-Expert](#) session times