QIBA Dynamic Susceptibility Contrast (DSC-MRI) Biomarker Committee (BC) Call

Wednesday, September 8, 2021, at 11 a.m. (CT)

Call Summary

Participants			RSNA
Ona Wu, PhD (Co-Chair)	Leland Hu, MD	Kathleen Schmainda, PhD	Joe Koudelik
Rafat Damseh, PhD	Nancy Obuchowski, PhD	Mark Shiroishi, MD	Susan Stanfa
Zhaoyang Fan, PhD	Chad Quarles, PhD		

RSNA Staff attempt to capture all committee members participating on Zoom calls. However, **if attendees join only by phone, or do not use a recognizable name, identification is not possible.** Participants are welcome to contact RSNA staff at <u>QIBA@RSNA.org</u> if their attendance is not reflected on the call summaries.

Progress Update on the DSC-MRI White Paper and Remaining Tasks

- The DSC-MRI BC white paper draft can be found in the group's Google Drive; assignments were reviewed
- Dr. Wu had developed a combined 1.5T and 3T checklist for potential use in the GABLE study and also made it more user-friendly for all sites to implement during Technical Confirmation (stage 3)
 - Echo time (te) specification on 1.5T GE scanner was updated to align with standardized brain tumor imaging protocol (BTIP) recommendations
 - During their most recent meeting, the GABLE Study group discussed types of analysis to use in alignment with <u>Consensus recommendations for a dynamic susceptibility contrast MRI protocol for use in high-grade</u> <u>gliomas</u> acquisition methods
 - o Dr. Schmainda to touch base with Dr. Barboriak who has been working with various committees for final imaging protocol approval; updates re: post-processing needed
- Dr. Wu to edit phantom section and add Claims
- Drs. Boxerman and Erickson to explain 3T focus over 1.5T
- Explanatory text to be added to introduction re: how and why QIBA DSC-MRI Profile recommendations differ from recommendations in other consensus papers, e.g., BTIP/ASFNR and how they are complementary (Drs. Boxerman and Fan)
 - o Comparison table to illustrate differences to be developed and uploaded onto the DSC-MRI BC Google Drive
- Drs. Erickson and Quarles to revise DRO section
 - o DRO simulations show that variability expected as a function of flip angle is minimal; Dr. Quarles to add the simulation data to the white paper
 - o Table for 90 FA vs. 30 FA simulations to be revised
 - Paragraph re: why new paper on simulations needed in case white paper submitted is submitted prior to Bell/Quarles paper
- Dr. Schmainda to expand discussion on flip angle (FA) choice and dosage regimen
- DSC-MRI BC members were asked to work on assignments for review during the next meeting on Oct. 13; they
 were instructed to make edits via suggestions
- Drs. Wu and Zhou will accept/reject DSC-MRI BC member suggestions and update the white paper accordingly
- Having a draft ready for submission to Radiology by the end of December 2021 is the goal
- Drs. Erickson and Wu plan to meet with other DSC-MRI BC members at the Dec. 1 QIBA Working Meeting during the RSNA Annual Meeting to finalize white paper edits

ASFNR Meeting: September 19-21, 2021

• Dr. Wu to present on DCE-MRI quantitation (reproducibility and repeatability) during the perfusion imaging session on September 20, representing the QIBA DSC-MRI BC; other speakers will represent the QIBA DSC-MRI and ASL BCs