QIBA Dynamic Contrast-Enhanced (DCE) MRI Biomarker Committee (BC) Meeting

Monday, March 27, 2023, at 11 a.m. (CT)

Meeting Summary

In attendance			RSNA staff
Hendrik Laue, PhD (Co-chair)	Caroline Chung, MD	Nancy Obuchowski, PhD	Susan Stanfa
James O'Connor, MD, PhD (Co-chair)	Cristina Lavini, PhD	Mark Shiroishi, MD	
Nima Ameli, MD	Sina Nazemi, MD	Rianne van der Heijden, MD, PhD	

Topics Discussed:

- Remaining issues in the profile resolution sheet with reference to the current DCE-MRI Profile
- Profile comments related to Sections 2.1: Clinical Context, 3.6: Protocol and Reconstruction Design, 3.10: Image Data Reconstruction, 3.11: Image QA, 3.13: Image Analysis, 4.2 Assessment Procedure: Image Analysis Software

Action Items:

- 3.11.1: Figure 2 Dr. Shiroishi to search for severe motion artifact cases to provide examples relevant to the anatomic profiles, outlined in this document
 - o Mr. McCullum will check with his colleague, Dr. Joshua Yung
- Discussion on section 4.2, comment on <u>row 106</u> regarding DROs noise level not matching text
 - The QIDW offers a variety of DCE DROs, but none of them match the description (lowest sigma in the Tofts_v12 set is 2)
 - \circ $\;$ Suggestion to clearly mark the dataset in QIDW to be used
 - o Staff to investigate issue with changes made in QIDW; Profiles are referencing datasets that have been moved
 - Accessibility to DROs needed for software validation process is crucial for Profile users
 - Solution may be to provide a more general description on where to find the data, instead of linking to it
- Comment on <u>row 107</u>: regarding DRO 1000 ms not suitable for prostate
 - \circ $\;$ Related T1 paper from Andrey et al. to be referenced
- Row 115: publications regarding combined perfusion and registration method to be referenced
- Dr. Laue to look into speed of bolus injection and whether to start DCE MR acquisition after the injection starts

Next Steps:

• <u>DCE-MRI Profile v2.0</u> to be completed, followed by BC review, and vote-to-publish the Profile as Stage 2: Consensus followed by an MR CC vote

Next meeting: Monday, April 10, 2023, at 11 a.m. (CT) [2nd & 4th Mondays of each month]

Participants are welcome to contact RSNA staff at QIBA@RSNA.org if their attendance is not reflected in meeting summaries.