

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

Monday, August 22, 2022, at 11 a.m. (CT)

Meeting Summary

In attendance

Hendrik Laue, PhD (Co-chair)
Laura Bell, PhD
Ararat Chakhoyan, PhD

Cristina Lavini, PhD
Sina Nazemi, MD

Nancy Obuchowski, PhD
Mark Shiroishi, MD

RSNA staff

Susan Stanfa

Topics Discussed:

- Open Science Initiative for Perfusion Imaging (OSIPI) overview (Guest, Dr. Laura Bell)
- Other potential clinical use cases for the Profile

Next Steps:

- [General aims](#) are to develop:
 - A comprehensive inventory of complete open-source packages for perfusion imaging analysis
 - A library of open-source functions, scripts and pipelines for perfusion imaging analysis
 - An inventory of data for the evaluation of perfusion software
 - Guidelines for reporting image acquisition and analysis of perfusion imaging
- Seven manuscripts will be submitted to the ISMRM Board of Trustees following approval from the ISMRM Perfusion Study Group
- Harmonization of QIBA Profiles and OSIPI language was recommended
- Resources discussed:
 - [Rocketship](#) for bias corrections - new release scheduled for early September
 - [OSIPI Task Force 3.2: Clinical and preclinical data](#)
 - [Datasets inventory](#)
- Standardized B1 mapping and flip angle sequences available on everyday scanners and a software solution for correcting Ktrans for T1 and B1 are needed; Dr. Laue to reach out to vendors
- Dr. Laue to survey all DCE-MRI BC clinicians regarding the most clinically relevant application of DCE, e.g., glioblastoma multiforme (GBM)

Future Tasks (after Stage 2: Consensus Profile is completed):

- Finish the [DCE-MRI BC Profile v2.0](#)
 - Once the Profile is completed, internal BC review will proceed
 - Next, a BC vote-to-publish the Profile as Stage 2: Consensus will be followed by an MR CC vote
- Work toward Stage 3 – “Clinically Feasible” (formerly Technically Confirmed)
- Suggested use cases / clinical applications discussed for DCE-MRI:
 - Juvenile arthritis
 - Other inflammatory diseases
 - Other cancer types, e.g., liver cancer
 - Bone tumors
 - Multiple myeloma
 - Cardiac MRI
 - Non-oncology renal

Next meeting: Monday, September 12, 2022, at 11 a.m. (CT) [2nd & 4th Mondays of each month]

Zoom meeting link: <https://rsna-org.zoom.us/j/86058676145?pwd=TjYySW8vb0hhUXE4TEZHVkFSOHNSQT09>

Meeting ID: 860 5867 6145

Passcode: DCE