

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

Monday, November 14, 2022, at 11 a.m. (CT)

## Draft Meeting Summary

### In attendance

Hendrik Laue, PhD (Co-chair)

James O'Connor, MD, PhD (Co-chair)

Michael Boss, PhD

Wolter de Graaf, PhD

Cristina Lavini, PhD

Sina Nazemi, MD

Nancy Obuchowski, PhD

### RSNA staff

Susan Stanfa

### Topics Discussed:

- Public comment resolutions
- Profile updates
  - Sections discussed included 3.6: Protocol and Reconstruction Design, 4.2 Assessment Procedures: Image Analysis Software, and Open Issues log

### Next Steps / Action Items:

- Discussion of issue related to GBM and Ktrans in the Claim
  - The DCE-MRI Profile Claims are based on the presence or absence of a change, and linearity needs to be determined
  - As a result of the small sample size (11 human subjects) upon which the Claim is based, there will be wide confidence intervals
  - A method for determining whether the coefficient of variation or repeatability coefficient will change with different magnitudes of Ktrans needs to be determined
  - Due to lack of supporting literature and variation in standards among different countries, it was decided not to decrease the gadolinium dose in the Profile, as had been discussed
- Discussion concerning guidance on delineating ROIs for DCE-MRI and dealing with patient movement
  - Dynamic series data to be used to delineate the ROI if other data are not usable
  - The main concern is regarding whether there is a material difference in the technical performance of the QIB based on the ROI delineation and the reproducibility / repeatability of that metric
    - The goal is consistent delineation for a given subject
  - Specification tables should be as concise as possible, with supporting details located in the discussion or appendices
  - SOP for a study to be defined in advance

### Future Tasks:

- Plan to advance Profile v 2.0 to Consensus Stage
  - Finish the [DCE-MRI BC Profile v2.0](#)
  - Internal BC review of Profile draft
  - 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)

**Next meeting:** Monday, December 12, 2022, at 11 a.m. (CT) [2<sup>nd</sup> & 4<sup>th</sup> Mondays of each month]

**Zoom meeting link:** <https://rsna-org.zoom.us/j/86058676145?pwd=TjYySW8vb0hhUXE4TEZHVkJFSOHN5QT09>

Meeting ID: 860 5867 6145

Passcode: DCE