

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

Wednesday, April 14, 2021 at 11 a.m. (CT)

## Call Summary

### Participants

Bradley Erickson, MD, PhD (Co-chair)

Ona Wu, PhD (Co-Chair)

Kiran Dhakal, PhD

Zhaoyang Fan, PhD

Nancy Obuchowski, PhD

Mark Shiroishi, MD

Yuxiang Zhou, PhD, DABR

### RSNA

Susan Stanfa

### Introduction of New DSC-MRI BC Member

- Kiran Dhakal, PhD, is a research fellow at Harvard Medical School and Athinoula A. Martinos Center for Biomedical Imaging (Massachusetts General Hospital)

### Possible Implementation of the DSC-MRI Profile in the GABLE Study

- Dr. Shiroishi will act as a liaison between the DSC-MRI BC and the GABLE study; regular updates to be provided
- The use of a binarized outcome measure is still planned for the GABLE study
- The exact threshold is still to be determined; anything above 1.75 is considered to be progressive tumor
- There is not yet a public website or publication for the GABLE study that can be referenced in the DSC-MRI white paper
- The study is still in the discussion phase and is not yet registered at clinicaltrials.gov
- Dr. Shiroishi to contact GABLE study PIs and CC Drs. Erickson and Wu

### QIBA Recommendations: Towards dynamic susceptibility contrast MRI-based quantitative imaging biomarkers for multi-center neuro-oncology trials White Paper

- The [DSC-MRI BC Google Drive](#) contains the Stage 2 Profile and materials related to the [White Paper effort](#); access can be requested from Dr. Erickson
- Writing assignments are documented in the [outline](#) Google Doc and were reviewed
- Work on the [DSC White Paper draft document](#) is underway
- Dr. Erickson made corrections and Dr. Shiroishi added content; there are still many sections to be developed
- Discussion re: choice of publication; the target audience may inform some aspects of writing this paper
  - Standardization may be more appealing to neurologists and neurooncologists than to radiologists
  - It was noted that RSNA has a vested interest in promoting QIBA activities in *Radiology* and the DSC paper may have a good chance of being accepted
  - *JMRI*, *Journal of NeuroOncology* and *Journal of Clinical Oncology* were suggested
- The differences between editing mode and suggesting mode in Google Docs were explained
  - Direct changes are made to the document in editing mode; this method would be appropriate for writing new content in assigned sections
  - Suggesting mode is optimal for commenting or proposing changes to existing text
- Dr. Erickson to start working on introduction
- Sources of Variability section to be refined
- Dr. Wu to consult with Dr. Obuchowski on text related to refining repeatability/reproducibility
- Discussion re: how routinely DSC is used in clinical work on brain tumor patients
- The DSC-MRI will reconvene on May 12 to address comments made in suggesting mode since the April 14 meeting

**Next DSC-MRI BC Call:** Wednesday, May 12, 2021 at 11 a.m. CT