

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

Monday, March 8, 2021 at 11 a.m. (CT)

### Call Summary

#### In attendance

Caroline Chung, MD (Co-Chair)

Hendrik Laue, PhD (Co-Chair)

Michael Boss, PhD

Cristina Lavini, PhD

Nancy Obuchowski, PhD

James O'Connor, MBBS, PhD

Russell Rockne, PhD

Steven Sourbron, PhD

Rianne van der Heijden, MD, PhD

Divya Yadav, MD

#### RSNA staff

Joe Koudelik

Susan Stanfa

#### Discussion of public comments on DCE-MRI Profile

- The [Public Comment Resolutions Sheet](#) was referenced to address comments in rows 16 - 21; details on resolutions reached through committee discussion and consensus are included
- DCE-MRI BC members are welcome to work on edits to the [Profile](#)
- Discussion continued from the March 8 meeting re: the choice of VIF approach in the “Spatial resolution and coverage” subsection in Section 3.6
  - If an individual VIF is used, spatial resolution should be sufficient for the lumen of the feeding vessel
  - Acquired voxels are smaller than the vessel lumen
  - Sagittal sinus to be used to correct max concentration (in brain); iliac artery to be considered: 14 mm (men) / 11 mm (women)
  - A one or two-sentence comment to be added, specifying the correct vessel for different organs; recommendations to be reviewed, then cited in the Profile
- Discussion re: whether protocols for prostate and breast need to be modified (e.g., FOV, matrix, etc.) to fit the head-sized phantom; Dr. Russek to be consulted regarding plans for new specific phantoms since the current NIST phantom is not optimal for the DCE Profile
- T2\* and signal non-linearity are not the same effect (more importantly, do not have the same solution)
  - Recommendations regarding echo time to be included
    - In/out phase to be considered
    - Publications to be searched
    - FA as high as SAR allows
    - Lower dose
    - To be determined whether to recommend population averaged VIF and include them in tables
    - The issue will be described for non-physicist Profile user
- The problem with a long Repetition Time (TR) relates more to temporal resolution and not so much T1 weighting
  - Vendor specific (option in Siemens for changing Flip Angle (FA) or TR, no such option on Philips)
- Vendors to be consulted to determine whether TR sequence (0018, 0080) works for all scanners; echo-spacing/flash sequencing may be needed on Siemens equipment
  - Dr. Chung to follow up with Siemens contact re: which DICOM tags are used for TR

**Next call:** Monday, March 22, 2021 at 11 a.m. (CT) [2<sup>nd</sup> & 4<sup>th</sup> Mondays of each month]

---

RSNA Staff attempt to identify and capture all committee members participating on WebEx calls. However, **if multiple callers join simultaneously or call in without logging on to the WebEx, identification is not possible.** Call participants are welcome to contact RSNA staff at [QIBA@RSNA.org](mailto:QIBA@RSNA.org) if their attendance is not reflected on the call summaries.