## QIBA Diffusion-Weighted Imaging (DWI) MR Biomarker Committee (BC) Meeting

Tuesday, May 30, 2023, at 1 pm (CT)

Draft Meeting Summary

Participants RSNA

Michael Boss, PhD (Co-chair)
Dariya Malyarenko, PhD (Co-chair)
Daniel Margolis, MD (Co-chair)
Rajpaul Attariwala, MD, PhD
Suchandrima Banerjee, PhD
Thomas Chenevert, PhD

Amita Shukla Dave, PhD Nandita deSouza, MD Brigid McDonald, PhD Kevin Miller, MS Peter Ngum, MSc Nancy Obuchowski, PhD Savannah Partridge, PhD Rebecca Rakow-Penner, MD, PhD Jaemin Shin, PhD Lisa Wilmes, PhD Jessica M. Winfield, PhD Susan Stanfa

## **Discussion Topics**

- CaliberMRI conformance testing supplement
- Scientific report (formerly referred to as white paper)
- May 10 QIBA Annual Meeting
- Presentation series: Al algorithms for image quality improvement

## **Action Items:**

- Conformance testing supplement was updated to include procedures for using the CaliberMRI qCal software
  - o Procedures are based on the ice water, rather than room temperature phantom
- Scientific report: results of the literature review have been summarized and are being assessed
- Presentations can be access from the May 10 QIBA Annual Meeting website
- Application of deep learning (DL) reconstruction to diffusion weighted MRI (Dr. Suchandrima Banerjee GE Healthcare)
  - Comparison of conventional MR image reconstruction vs. AIR<sup>™</sup> Recon DL
  - DL reconstruction shows noticeably lower dispersion (uncertainty), indicating effective noise and artifacts reduction with DL

## **Next Steps:**

- Conformance testing supplement to be forwarded to Dr. Partridge for review; final version to be sent to RSNA staff for QIBA Wiki positing
- Dr. Obuchowski to review prostate literature and determine the necessary adjustment to the Profile Claim
- Dr. Partridge to review breast and brain new lesion literature and determine whether they are consistent with Claims; she will also review interobserver studies for the discussion section
- Next DWI-MR BC Meeting: June 27, 2023, at 1 p.m. CT [4<sup>th</sup> Tuesday of each month)
  - Canon Medical to be invited to present

Participants are welcome to contact RSNA staff at <a href="mailto:qiba@rsna.org">qiba@rsna.org</a> if their attendance is not reflected in meeting summaries.