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

Tuesday, March 28, 2023, at 1 pm (CT) Meeting Summary

Participants

Michael Boss, PhD (Co-chair) Dariya Malyarenko, PhD (Co-chair) Daniel Margolis, MD (Co-chair) Trevor Andrews, PhD Amita Shukla Dave, PhD Nandita deSouza, MD Lucas McCullum, MS Brigid McDonald, PhD Savannah Partridge, PhD Sus Lisa Wilmes, PhD Jessica M. Winfield, PhD

RSNA Susan Stanfa

Topics:

- White paper
- Addition of Head & Neck cross-sectional Claim to Profile
- H&N ADC repeatability groundwork project update

Next Steps / Action Items:

White Paper

• To be reformatted into a short Google doc with supplementary materials located at the end, for BC member feedback

Literature Search for White Paper / Next Iteration of the Profile

- Three categories of papers were identified through a MSKCC literature search
 - \circ (1) Not test-retest studies, but related to interobserver reproducibility
 - References will be used in the white paper and possibly in the next iteration of the Profile
 - o (2) True test-retest studies with few (~10) subjects
 - Suggestion to combine the head and neck studies to develop additional Profile Claim
 - (3) Test-retest repeatability studies on healthy volunteers on large ROIs, e.g., prostate
- Dr. Obuchowski to be consulted :
 - Incorporating papers relevant to prostate into a metanalysis and assisting with the development of a cross-sectional Claim
 - o Including confidence intervals for repeatability coefficients

H&N ADC repeatability groundwork project update

- Recruitment has proceeded more slowly than expected, with almost 200 patients screened, and only 6 completing the MR scans
- Subjects withdrew for various reasons, including schedule conflicts with the 2-week scan-rescan window
- Dr. Guzmán to continue the study due to independent funding following the end of the RSNA R&E grant

Next Steps:

- Drs. Boss, Dave, Malyarenko, Margolis, Obuchowski, and Partridge to meet offline to divide the list of articles for review based on disease sites
- Work on white paper will be done offline, with updates provided during upcoming monthly DWI BC meetings
- Dr. Boss to schedule each vendor for a 15-20-minute presentation on AI algorithms for image quality improvement during April, May, and June DWI meetings

Next DWI-MR BC Meeting: Tuesday, April 25, 2023, at 1 p.m. (CT)

Participants are welcome to contact RSNA staff at <u>giba@rsna.org</u> if their attendance is not reflected in meeting summaries.