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

Tuesday, August 29, 2023, at 1 pm (CT)

Meeting Summary

Participants RSNA

Michael Boss, PhD (Co-chair)
Dariya Malyarenko, PhD (Co-chair)
Daniel Margolis, MD (Co-chair)
Trevor Andrews, PhD
Thomas Chenevert, PhD

Amita Shukla Dave, PhD Moti Freiman, PhD Kevin Miller, MS Nancy Obuchowski, PhD Rebecca Rakow-Penner, MD, PhD Dafna Sourani-Link, PhD Callie Weiant, JD Lisa Wilmes, PhD Susan Stanfa

Discussion Topics

Letter to RSNA Quantitative Imaging Committee (QUIC)

Action Items:

- ADC to be advocated for as one of the 1 − 3 QIBs on which QUIC could focus
- DWI BC accomplishments to be highlighted
 - Several funded groundwork projects with notable output and adoption by the community, including digital reference object, analysis software, physical phantoms, Profiles
 - Profile engagement with groups outside of QIBA, e.g., VERDICT, among others that have led to publications
 - o Commercial activity, e.g., CaliberMRI
 - Pathways to clinical impact and necessary resources to be defined
 - Mirror message in <u>Delivering a Quantitative Imaging Agenda</u>
 - o Future plans to advance quantitative imaging in the clinic
 - Commitment to speak at upcoming conferences to continue to emphasize the importance of quantitative imaging, especially with more AI approaches being utilized for imaging acquisition and processing
 - ADC is the start of quantitative diffusion, not the end, e.g., restricted diffusion models, advanced diffusion models
 - Scope of quantitative diffusion is constantly expanding or being refined
 - Interest in adding head and neck Claim to current stage 3 Profile
 - Evidence of stronger repeatability in the prostate that would significantly reduce the reproducibility coefficient in half to 21%

Next Steps:

- Drs. Margolis and deSouza to write and circulate an outline or draft of a 2 3-page letter to QUIC by Sept. 10
 - Meeting to be scheduled for ~9/17 to discuss draft
 - Letter to be finalized by September 30
- Meeting with Dr. Malyarenko, Obuchowski, Partridge, et al., to be scheduled to review prostate literature and confirm whether there are sufficient data to support Profile Claim adjustment
 - o Dr. Malyarenko to locate references and re-send to Dr. Obuchowski
- Scientific report text to be circulated by September 30
- Next DWI-MR BC Meeting: One-time schedule adjustment to Wed., September 27, 2023, at 1 pm CT