

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

Tuesday, December 19, 2023, at 1 pm (CT)

Meeting Summary

Participants

Michael Boss, PhD (Co-chair)

Dariya Malyarenko, PhD (Co-chair)

Daniel Margolis, MD (Co-chair)

Thomas Chenevert, PhD

Amita Shukla Dave, PhD

Nandita deSouza, MD

Kevin Miller, MS

Nancy Obuchowski, PhD

Michael Ohliger, MD, PhD

Savannah Partridge, PhD

Callie Weiant, JD

Lisa Wilmes, PhD

Jessica M. Winfield, PhD

RSNA

Susan Stanfa

Discussion Topics

- Future of the DWI group
- “The QIBA Profile for MR Diffusion-Weighted Imaging of the Apparent Diffusion Coefficient (ADC) as a Quantitative Imaging Biomarker” Special Report was resubmitted to *Radiology* and is under review
- 2023 QI Symposium: Sponsored by QIBA: Quantitative Imaging in the Era of Artificial Intelligence: Opportunities and Needs presentations included:
 - Background on QIBA formation and review of its accomplishments, impact of QIBA efforts since its 2007 inception, and BC efforts
 - The future of quantitative imaging with RSNA
 - Drs. Benzinger and Kinahan appointments as QUIC Co-chairs were announced

Action Items:

- QUIC timeline to include RSNA-approved appointments and planning during the first half of 2024, with Profile Authoring Group decisions probably occurring after Q2 2024
- The DWI group will transition from RSNA admin support to continuing efforts independently after Dec 22
- The original DWI BC goal upon its formation, was ADC recognition as an FDA-qualified biomarker
- Short term priorities following Dec. 22 include (1) adoption of the streamlined Profile template, (2) updates to current Claims, (3) optimizing QA procedures with respect to operating temperature, and (4) clinical application of ADC
- Considerations for the next 18-24 months include closely coordinating with PIRADS 3 for QI and biparametric MRI, which will be important and far-reaching in terms of clinical ADC use
- Other long-term goals include a close review of head and neck literature and expansion into more advanced applications of diffusion, e.g., kurtosis and multicompartamental models, e.g., VERDICT or RSI
- CaliberMRI requested feedback on the value of QIBA conformance certification they have been providing
 - To support broader Profile adoption and implementation, free RSNA/QIBA conformance certification will be offered to DWI BC member sites through December 2023
 - Access to phantoms is available to all DWI BC members and a comparison of the scans could be done
 - Interested sites should contact kmiller@qmri.com and/or cweiant@qmri.com

Next Steps:

- Reach out to VERDICT contact for update on trial and reach out to PIRADS contact
- New Profile authoring group name to be confirmed
- Staff will send the DWI BC email list to leaders, indicating those who have been active within the past year
- Monthly meetings to continue with CaliberMRI staff hosting Zoom calls/details
- Access to the Google Drive that Dr. Boss set up for collaboration and tracking goals and objectives will be provided to all