

QIBA Proton Density Fat Fraction Biomarker Committee (PDFF BC) Meeting

Thursday, January 26, 2023, at 9 a.m. (CT)

Meeting Summary

Participants

Scott Reeder, MD, PhD (Co-chair)

Wissam Al Ghuraibawi, PhD

Mustafa Bashir, MD

Matt Cashmore, PhD

Manuela França, MD, PhD

Matt Hall, PhD

Timothy J. Hall, PhD

Gavin Hamilton, PhD

Diego Hernando, PhD

Houchun (Harry) Hu, PhD

Nancy Obuchowski, PhD

Jonathan Riek, PhD

Gary Schooler, MD

Gudrun Zahlmann, PhD

RSNA Staff

Fiona Miller

Joe Koudelik

Susan Stanfa

ISMRM Staff

Gerardo Mopera

Topics Discussed:

- Introductions
- PDFF leadership and administrative support
- QIBA collaborations
- Profile draft

Next Steps / Action Items:

Announcements

- Drs. Reeder and Yokoo were thanked for their leadership and work
- Drs. Hernando and Hu were welcomed as the new PDFF BC Co-chairs
- ISMRM will provide admin support, coordinating, scheduling, hosting, and taking notes for all future PDFF BC meetings

Collaborative models of QIBA

- An overview of current QIBA collaboration with accreditation bodies, commercial entities, and scientific organizations was provided
- [QIBA and National Imaging Facility \(NIF\)](#) (Australia) collaboration opportunities were discussed
 - Similar visions regarding the application of QIBA Profiles into clinical use
 - Priority alignment on efficiency (e.g., scaffold, avoid duplication) and synergy opportunities (e.g., scientific, impact, cost)
 - Discussions took place in May and July 2022 about a potential liver MRI pilot based on disease importance and project team appointments have been made
 - Structure of BC support to be explored to progress a broader implementation phase of PDFF through the development of an R2* project

Review of PDFF BC work to date and next steps

- Initial work included development of the primary characteristics of the Profile through the completion of two major studies
 - Round robin with commercial phantom led by Dr. Hu to assess linearity and bias to inform [Claim values](#)
 - Metanalysis effort led by Dr. Yokoo with input from Dr. Obuchowski, et al., comparing PDFF to MR Spectroscopy to examine coefficient of repeatability and reproducibility to assess [variability](#)
- Immediate goal is to develop a draft Profile containing all complete technical specifications, but omitting conformance testing component
 - 5–6-member Profile writing task force to be formed; those interested should contact Drs. Hernando and Hu
 - Tasks will be assigned with the goal to complete writing in 6-8 weeks
 - Dr. Boss to provide guidance on Profile writing, as needed

- Drs. Reeder and Yokoo to focus on their conformance testing study to validate the PDFF Profile Claim
- ISMRM staff to develop a schedule of monthly PDFF BC meetings to review and discuss Profile draft; call frequency may increase to twice per month as momentum builds
- Profile to be sent to NIF by end of April 2023; basis for implementation of this version in Australia to be discussed
- QIBA Profile development process to continue, e.g., initiate public comment process to reach a consensus Profile

IMMEDIATE ACTION ITEMS:

- Drs. Hernando, Hu, Reeder, and Yokoo to meet offline on 2/2 and evaluate the current Profile draft to determine areas for development
- Drs. Hernando and Hu to correspond with Drs. Boss, T. Hall, and Zahlmann to request a meeting with key NIF stakeholders
- Latest published version of DCE-MRI, DWI-MR and MRE Profiles to be reviewed for reference
- Dr. Reeder and Ms. Kravitz to review QIBA/ISMRM collaboration details outlined in the MoU

Next QIBA PDFF BC meeting: TBD – ISMRM staff to coordinate with Co-chairs and schedule

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