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

Thursday, February 3, 2022, at 3 p.m. (CT)

Meeting Summary

Participants RSNA

Scott Reeder, MD, PhD (Co-chair) Takeshi Yokoo, MD, PhD (Co-chair) Mustafa Bashir, MD Jean Brittain, PhD Gavin Hamilton, PhD Diego Hernando, PhD Nancy Obuchowski, PhD Nikolaos Panagiotopoulos, MD Jonathan Riek, PhD Joe Koudelik Gary Schooler, MD Julie Lisiecki Claude Sirlin, MD

Topics Discussed:

- Overview of the BC's recent accomplishments
- Introduction of Dr. Panagiotopoulous
- New PDFF method for study of liver quantification
- Methodology for QIBA Profile Conformance testing of quantitative imaging biomarkers for liver using PDFF
- Claim is not yet in final form
- Simulation of artifacts to simulate motion and breath hold issues
- Representation across disease severity for patient enrollment

Study details:

- Studies were divided equally among 1.5 and 3 Tesla GE scanners
- The methodology formula included linearity, bias, and variability components
 - o Linearity and bias were tested with round robin phantom studies
 - Variability was evaluated via human test-retest studies between sites
- Tools included IdeallQ, IronQuant, and 2DFam
- Sites included Mayo Clinic, UCSD, and UW Madison

Action items:

- Dr. Reeder to follow up with Dr. Hall regarding whether it is feasible to publish the claim before completing the Profile, and if so, what publication would be preferable
- Dr. Sirlin to follow up with co-chairs regarding publication ideas
- Dr. Reeder to deidentify out-of-phase images and share with Dr. Sirlin

Next QIBA PDFF BC meeting: TBD

RSNA Staff attempt to capture all committee members participating in Zoom meetings. However, if attendees join only by phone, or do not use a recognizable name, identification is not possible. Participants are welcome to contact RSNA staff at QIBA@RSNA.org if their attendance is not reflected in meeting summaries.