

QIBA Proton Density Fat Fraction Biomarker Committee (PDFF BC) Update Call

Thursday, October 4, 2018 at 3 PM (CT)

Call Summary

Participants

Thomas Chenevert, PhD

Gavin Hamilton, PhD

Harry Hu, PhD

Dariya Malyarenko, PhD

Nancy Obuchowski, PhD

Jonathan Riek, PhD

RSNA

Joe Koudelik

Susan Stanfa

Moderator: Harry Hu, PhD

Review of Previous Call Summary

- The 09.13.2018 call summary was approved as presented

Multi-Vendor Calimetrix Phantom Study Update (Dr. Hu)

- Dr. Hu is leading this round-robin multi-vendor study to determine bias in image acquisition and reconstruction
- Dr. Hu is collecting all true phantom PDFF values (measurements) and performing ROI measurements; this ground truth data is not to be distributed to participating sites in efforts to avoid introducing possible measurement bias
- Three protocols are being run at each site: vendor-specific, QIBA-recommended and LipoQuant
- Site 1 → University of Wisconsin - Madison: scanning has been successfully completed
- Site 2 → University of Michigan: scans performed on 1.5T and 3T Philips machines went well
- Site 3 → Children's Hospital of Philadelphia (CHOP): encountered issue with 1.5T and 3T Siemens machines
 - Water and fat PDFF maps were swapped, rendering the data unusable, so the phantom was sent to the next site
 - Dr. Hu to attempt to replicate this issue and resolve it in order to make it possible for the phantom to be scanned at other Siemens sites, otherwise, the phantom transportation schedule will need to be modified
 - Dr. Chenevert reported reasonable numbers from his site's Siemens scanners and suggested that perhaps the issue is site-specific or related to the software version, e.g. U Michigan has the latest scanner software and shows no imaging issues
 - Dr. Jonathan Riek (BioTelemetry Research / VirtualScopics) volunteered to examine the data to help identify the issue; Dr. Hu to consult with Dr. Reeder regarding whether the data should be distributed/shared to committee members
- Site 4 → Nationwide Children's Hospital in Columbus, OH
 - Phantom arrived on Oct. 4
 - Scanning on 3T Siemens and 3T GE to begin soon

- Site 5 → University of California, San Diego (UCSD)
- Not all scanning expected to be done, but scanning at 3-4 sites may be completed prior to the 2019 ISMRM Annual Meeting abstract deadline on November 7th

*****QIBA Working Meeting and Meet-the-Experts Sessions at RSNA 2018*****

- All are encouraged to RSVP for the [QIBA Working Meeting](#) on Wednesday, November 28th
- All are invited to volunteer for the poster [Meet-the-Expert](#) session times

Next call: Thursday, November 1, 2018 at 3 PM CT

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