QIBA Perfusion, Diffusion and Flow – MRI Technical Committee Update Call

Wednesday, 20-August-2014 at 11 AM CDT

Call Summary

Participants

Marko Ivancevic, PhD (Co-Chair)
Mark Rosen, MD, PhD (Co-Chair)
Gudrun Zahlmann, PhD (Co-Chair)
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Daniel M. Krainak, PhD
Hendrik Laue, PhD
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Joe Koudelik
Julie Lisiecki

Agenda

- Status report on QIBA DRO Evaluation Tool by Dr. Hendrik Laue
- Any other Business

Status report on QIBA DRO Evaluation Tool by Dr. Hendrik Laue

- The QIBA DRO Evaluation Tool (QDET) is an open source python software solution which allows the user to evaluate the results of DCE-MRI analysis software based on the General Kinetic Model (GKM), using a digital reference object (DRO).
- The tool may be used to create summary metrics, reference values, and a range of variables
- It may be effective in reviewing errors, where and how they are generated, as well as determining what biases may be present
- Dr. Laue has posted an open source version of the software on the QIBA wiki:
    - http://qibawiki.rsna.org/index.php?title=QIBA_Artificial_Data_Evaluation_Software
        - Feedback is encouraged: Hendrik.Laue@mevis.fraunhofer.de
    - The Co-chairs are also requesting feedback regarding experiences with testing of this tool :
        - marko.ivancevic@philips.com; mark.rosen@uphs.upenn.edu; gudrun.zahlmann@roche.com

Questions and Suggestions Related to QDET

- Dr. Obuchowski to collaborate with Dr. Barboriak's statistician and develop an approach for determining whether an algorithm meets QIBA performance criteria
- Procedural questions regarding how users would get access, who would be able to test the software, and how feedback could be provided must be answered
- Goal to make the tool available as open-source software
    - Limited beta-testing among core Technical Committee members was recommended prior to wider/ public release

Next t-con: QIBA PDF-MRI Tech Ctte Update T-Con, Wednesday, September 3, 2014 at 11am (CT)