

QIBA DCE-MRI Technical Committee Update

Wednesday, June 08, 2011 at 11 AM CDT

Call Summary

In attendance

Gudrun Zahlmann, PhD (Co-Chair)
Edward Jackson, PhD (Co-Chair)
Michael Boss, PhD
Orest Boyko, MD
Andrew Buckler, MS
Martin Buechert, PhD
Daniel Gembris, PhD
Alexander Guimaraes, MD, PhD
Marko Ivancevic, PhD

Gregory Kaczmar, PhD
Hendrik Laue, PhD
Chen Lin, PhD
Thorsten Persigehl, MD
Mark Rosen, MD, PhD
John Waterton, PhD

RSNA

Joe Koudelik

DCE-MRI Profile Overview (Dr Guimaraes)

- Imaging Quality Control (Section 12) reviewed
- Specific requirements/qualification for image acquisition sites discussed
- Specific section references to be located in the Appendices for a “clean read”
- Power injection recommendation proposed, but not prescriptive or “How To”
- Technologist vs. anatomical expert (physician) oversight of acquisitions
 - Medical professional to be responsible for image integrity
- Phantom imaging requirements discussed
 - Dr Jackson to provide range of relaxation values for the QIBA phantom currently used
 - Tissue vs. vascular compartments to be addressed
 - Dr Jackson to forward literature rational for T1 values to Dr Guimaraes for incorporation
- Dr Ashton to provide additional data for current QIBA phantom to support signal stability text
- Coronal vs. oblique scanning planes discussed; acquisition sites to document both TE and TR for acquisitions
- “Imaging analysis center” too ambiguous (Section 12.2.4); analysis preferred and recommended at a single site for multi-site trials

Next steps:

- Dr Guimaraes to:
 - read through the Profile action items (bullets) for accuracy
 - complete Profile formatting with Mr Buckler’s assistance
 - follow up with Dr Ashton concerning signal/image stability data for the current QIBA phantom as well as the best way to determine this stability
 - follow up with Dr Barboriak for R1 precisions details (references)
- Dr Jackson to forward literature rational for T1 values to Dr Guimaraes for incorporation
- **Profile development time frame discussed:**
- **June 14th** Deadline - Dr Guimaraes to format the Profile with Mr Buckler’s assistance for the “pre-review” process
- **June 17th** Deadline - Deadline for pre-final Profile review; forward to “core” group of for a “final read” exercise
- **June 24th** Deadline - Final read completed by core group (Drs Zahlmann, Jackson, Guimaraes and Rosen); final comments/feedback to be incorporated by Dr Guimaraes (June 24-29)
- **June 30th** Deadline - DCE-MRI Profile v1.0 ready for Public Comment
- Next call scheduled for Wednesday, June 22, 2011 at 11 am CDT