

QIBA DCE-MRI Formal Study Protocol Discussion
November 26, 2008
10AM CST
Draft Call Summary

In attendance:

Michael Buonocore, MD, PhD
Jeffrey Evelhoch, PhD
Edward Ashton, PhD
Edward Jackson, PhD
Michael Knopp MD, PhD

David Purdy, PhD
Annette Schmid, PhD
Mitchell Schnall, MD, PhD
Fiona Miller (RSNA)
Joe Koudelik (RSNA)

General Discussion

Cuboidal Phantom Filling Solutions - Issues

- Loading with distilled water may produce potential problems
- RF distribution and flip angle issues possible
- Body coils respond to loading variability
- Need to load with something more than water
- More understanding of variability needed here
- Body scan correction based on RF coil to be looked into
- Match cuboid to sphere with NaCl to avoid any dielectric affect and throwing the signal away
- 30mM NaCl loading for both sphere and cuboid to provide stable coil loading
- Dr Jackson to contact Phantom Labs and inquire whether the main/central sphere of phantom could be loaded with 30mM NaCl
- Dr Jackson to perform cuboidal scan with and without 30mM NaCl as a coil loading control
- Dr Jackson to email Dr Charles (Duke) concerning loading issues

Image Analysis

- VirtualScopics (core site) to perform Image Analysis
- Dr Ashton to draft a MS-Excel spreadsheet for image analysis based on reporting parameters
 - Concise list of parameters to report out included on the image analysis protocol
- NEMA vs. Temporal Method – perform both initially, then decide on recommendation later
 - Dr Ashton to define two ways this is calculated
 - Dr Purdy to provide language for protocol on SNR and CNR evaluation
- More details would be helpful to Dr Ashton concerning both Image and Data Analysis
 - Need to define specifications of what's needed up-front
 - Extract what is needed for SNR, CNR, etc.
- Stat corrections (degrees of freedom) proposed to be added to future protocols
- Nail down as much detail as possible during the Dec 4th QIBA Working Meeting at RSNA '08

Next Steps:

- Dr Jackson to contact Josh Levy at Phantom Labs – inquire about 30mM NaCl loading
- Dr Jackson to contact Dr Charles re test on phantom filling solutions
- Dr Ashton to draft a MS-Excel spreadsheet for image analysis
- Group to work our details of SNR and CNR evaluation during the Dec 4th QIBA Working Meeting at RSNA '08