DCE-MRI Formal Study Protocol Update  
Monday, November 24, 2008  
11:00 am, Central Standard Time  

Call Summary  

In attendance: 

Gudrun Zahlmann, PhD (Co-Chair)  
Michael H. Buonocore, MD, PhD (Co-Chair)  
Jeffrey L. Evelhoch, PhD (Co-Chair)  
Edward Ashton, PhD  
Edward F. Jackson, PhD  
Gregory Karczmar, PhD  
David E. Purdy, PhD  
Fiona Miller (RSNA)  

General discussion  

- Dr. Zahlmann reviewed Study Aims.  
- Fourth bulleted aim to be removed  
  o Not a primary aim  
  o Eliminate concern re compatibility (see below)  
- Suggested MIRC software to be used for upload to NCI sit  
- Secure ftp is also an option  
- Dr. Zahlmann to consult with Dr. Freymann to determine most practical approach  
- Dr. Freymann has offered to assist with process  
- Philips rep yet to be identified for committee ~ Dr. Karczmar receiving input from Philips directly  

Comparability of Phantoms  

- Same solution in phantoms should result in similar values  
- Focus on stable change analysis rather than absolute values between scanners  
- Data will be available for retrospective analysis of absolute values  
- Delta +/- 5% is ideal, 5-10% acceptable < 10% problematic  

Image and Data Analysis  

- More discussion needed on 11/26 Conference call  
- Need to generate instructions to enable software check  
- Need specifics for image analysis before clarification on data analysis can be made  
- Questions to be addressed  
  o How will SNR data be extracted  
  o What will be the output: Spatial or Temporal measurement  
- Preliminary data from phantom may be needed before programming  
- Dr. Buonocore could provide IRAT images prepared for T1 maps  
- Minimum commitment to one or more items listed under data analysis needed  

Future Discussions  

- Shipping concerns  
  o Shipping cuboid filled can break cuboid  
  o Shipping phantom without filling solution risks development of air bubbles  
  o Shipping filled risks freezing if delayed in transit  
  o Consider Styrofoam container for insulation  
  o 99% fill with onsite top-up would avoid air bubble problem  
- Fluid composition in phantom and cuboid
- On site adjustment possible for cuboid
- Consider filling cuboid with X% salt solution for coil loading
- Pre-measured salt vials to be shipped to each site and added to distilled water
- May want to use same saline filling solution in phantom (see if it is too late for Phantom Lab to do this)

- Data analysis needs further discussion - central or multi-site
- Statistical input from Dr. Gatsonis on 11/26
- Dr. Charles to be encouraged to join call to discuss solution fill concerns