

## **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
  - Not a primary aim
  - 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
  - How will SNR data be extracted
  - 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
  - Shipping cuboid filled can break cuboid
  - Shipping phantom without filling solution risks development of air bubbles
  - Shipping filled risks freezing if delayed in transit
  - Consider Styrofoam container for insulation
  - 99% fill with onsite top-up would avoid air bubble problem
- Fluid composition in phantom and cuboid

- On site adjustment possible for cubiod
- Consider filling cuboid with X% salt solution for coil loading
- Premeasured 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 tool 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