

MR Imaging Teleconference Minutes 9/17/2018

MRI Core Call Agenda Items:

1. Review 8/21 Teleconference Minutes

a. Minutes will be posted to the LONI website.

Reviewed the last call's minutes and confirmed with the MRI core and Karen that we will begin posting minutes on MRI Core Calls on the LONI website.

2. ADNI3 GE DTI protocol

- a. Have noted that PURE is not available on DTI scans on Widebore systems.
- b. GE is not aware of a reason why pure would not be available even with different headcoil configurations. Mayo tested widebore systems using different coil configurations.
- c. If we can turn on for GE 750w systems. Should we? (David Scott)
 - i. "Given PURE is applying a static filter based on a reference scan, it would seem there is potential for bias by switching this on / off during a longitudinal trial".
- d. GE may have changed the PURE algorithm in SW 26 if change is unavoidable in 26, should we be concerned about longitudinal being pristine in consistency.

It was determined that even within a longitudinal study, we want the sequences maximized to best quality so changing mid study is less of a concern. That being said, Mayo noted that GE seems to be unavailable with some coil configurations on DTI. More work needs to be done with GE and sites using 32 Channel systems to verify why this is happening

3. ADNI3 GE ASL protocol

- a. PURE: Per GE, disabled for ASL, as it's a quantitative method, applying PURE to the images is not desired.
- b. FAT SAT Should ADNI enable at 26x?

At this time, Duygu is not in favor of enabling FAT SAT at 26x + systems.

4. ADNI3 GE protocol changes

- a. FLAIR Enable FAT SAT 24x
- b. fMRI Enable FAT SAT MR750 25x and 24x

These were protocol oversites, changes are already being implemented at sites.

5. ADNI3 Data Analysis Consistency

a. Nothing new from Mayo currently.

6. ADNI3 Breakdown

- a. 60 Certified Systems
- b. 755 subjects received.
 - i. 112 Subjects scans with Siemens VE11C
 - ii. 367 Subject scans VB17-VE11B
 - iii. 107 Philips 3.2.3 5.4.0
 - iv. 44 Subject scans with GE 24x
 - v. 125 Subject scans with GE 25x-27x
- c. Experimental Sequence Breakdown
 - i. 2D PASL vs. 3D PASL vs. 3D pCASL
 - 1. Axial 2D PASL 206
 - 2. Axial 3D PASL 285
 - 3. Axial 3DpCASL 154
 - ii. Axial rsfMRI vs. Axial MB rsfMRI
 - 1. rsfMRI 658
 - 2. MultiBand fMRI 91
 - iii. Axial DTI vs. Axial MB DTI
 - 1. DTI 659
 - 2. MultiBand DTI 93

Bret, reviewed the current status of data available. Danielle Harvey requested via email that all sites send in ADNI3 analysis data as soon as possible.

7. LONI Website Updates (Please review and send along any updates)

- a. Website: http://adni.loni.usc.edu/
 - i. (Example of previous requests attached)

Bret reviewed the changes that were requested to LONI and displayed the attachment so that other users could document visually any changes they wish to see made.

8. October Meeting - 10/16/2018