



MR Imaging Teleconference Minutes 02/19/2019

1. Review January 2019 Teleconference Minutes (Appended Below)

- a. Minutes will be posted to LONI website. -
<http://adni.loni.usc.edu/methods/documents/>

Minutes: Approved

2. ADNI Deliverables – Due 1/31/2019 – Update from Danielle Harvey

Minutes: BSI, MCH, and Mayo QC are the only measures that have been posted to LONI

3. Updated MRI scanner/subject spreadsheet [*csv attachment*]

- a. List is now a subject level list (1 row for each timepoint).
- b. List is generated programmatically by query of Mayo database any changes are highlighted and categorized.
- c. Any changes in software/hardware are noted as minor (green)/major (red)
- d. Any changes in head coil are noted minor/major
- e. Subject change over from ADNI2 to ADNI3 is noted in as study (orange)
- f. **The list is still being worked on for auto filling of values so only the first 10 sites have had the “study” values entered in orange.
- g. Any additional information needed for the list? Y/N If Y, what?

Minutes: There will be a separate document that posts the generic protocol sequences from ADNI2 and ADNI3. DeCarli at UCD says no major change has happened at UCD – asking where the DICOM data comes from and we may need to use a python DICOM dump – Mayo and UCD will take the discussion offline. Make people aware that some software upgrades can sometimes be a major change.

4. Analysis Site QC

- a. How to link Mayo + PI-specific QC info at sequence level?
- b. Examples have been provided. (Zip File)

Minutes: Reviewed QC summaries from DeCarli and Fox. Three options starting only with ADNI2 to present: 1) have every site send in their QC quarterly to LONI; 2) combine all QC information into one spreadsheet; 3) integrate all QC information in the scanner spreadsheet. Things to consider if we integrate, we would need to add series UIDs for each series and the spreadsheet would get wide. Paul Thompson likes the process of everyone adding their own QC to LONI and would be more manageable at a reasonable time frame. Sandy thinks that the analysis values and QC should be linked together instead of needed to be read separately. Ian includes QC with their results. Check to see what the numeric data download looks like to a user. Danielle – each lab could easily add a QC summary measure to each file that gets sent to ATRI (to Mike Donohue) which is then available for download at ADNI. Cliff Jack– manufacturer/model changes are just as bad as coverage and the MRI

core is somewhat responsible for making sure there's a way for users to know scans are bad. ****Most investigators are in favor of option 1.** New policy proposal: quarterly deliverables will have at least two values: 1) numeric metric; 2) QC value(s) relevant to processing – these will be NOT be harmonized across sites.

5. ADNI3 Breakdown

a. 60/60 Certified Systems

b. 936 subjects received. (17 Failed Studies)

- i. 179 Subjects scans with Siemens VE11C
- ii. 400 Subject scans VB17-VE11B
- iii. 145 Philips 3.2.3 – 5.4.0
- iv. 47 Subject scans with GE 24x
- v. 165 Subject scans with GE 25x-27x

c. Experimental Sequence Breakdown

i. 2D PASL vs. 3D PASL vs. 3D pCASL

1. Axial 2D PASL – 280
2. Axial 3D PASL – 375
3. Axial 3DpCASL - 212

ii. Axial rsfMRI vs. Axial MB rsfMRI

1. rsfMRI – 785
2. MultiBand fMRI - 149

iii. Axial DTI vs. Axial MB DTI

1. DTI – 783
2. MultiBand DTI – 154

6. Next meeting: 03/19/2019

Minutes: Cliff will work on getting analysis summaries (needs in April) from investigators as well as comments on improved diagnostic performance from ADNI2 to ADNI3, for the steering committee meeting (in May).

Bioclinica: Will there be a data lock for ADNI2 and ADNIGO? Danielle isn't sure of a date.