ADNI Biostatistics Core Conference Call, 4, October 2011

Present on call: Danielle Harvey, Arnold Huang, Naomi Saito, Nandini Raghavan, David Verbel, Peter Quarg, Mike Ward, Mike Donohue, David Shera

Mike Donohue reported that item level data associated with the ADNI neuropsychological battery (obtained by Jeremy Hobart for a project) has been sent to ADCS. It should be available for download on LONI soon.   He also reported that an update to the UCSF Cross-sectional FreeSurfer (using FreeSurfer 5.1) data has been made that includes some ADNI-GO and ADNI-2 participants. It should be reflected on the LONI website soon.

Danielle reported that the PET Core plans to submit numeric summary data from the florbetapir (AV45) images in the next couple of months. The MRI core plans to submit numeric summary data from ADNI-GO, ADNI-2 images, including some from the new sequences acquired as part of ADNI-GO and ADNI-2 in late December or early January. Clinical and neuropsychological testing data from ADNI-GO and ADNI-2 are available for download through the LONI website.

Mike Donohue reported that we currently have 47 newly recruited NL, 162 newly recruited EMCI, 25 newly recruited LMCI, and 12 newly recruited AD subjects as part of ADNI-GO and ADNI-2.   There is some longitudinal data available. ADCS is using similar quality control measures and data checks with the ADNI-GO and ADNI-2 data as were in place for ADNI-1.

In terms of ongoing analyses, Danielle reported that Laurel was finally able to submit the ADNI-1 summary paper that looks at the added value of MRI, FDG-PET, or CSF measures above and beyond "cheap" predictors of baseline cognitive function, demographics, and ApoE4 genotype in predicting change in cognitive function. Nandini requested that the paper be circulated once we feel it is appropriate to do so. Naomi Saito is currently working on a baseline description of the ECog, a measure of everyday function that has been added to the protocol for ADNI-GO and ADNI-2. She is looking at differences between diagnostic groups as well as correlations with demographics and cognitive measures. Nandini mentioned that she will be presenting an evaluation of the ADAS-Cog and other cognitive measures at CTAD. Mike Donohue is currently working on a comparison of continuous time versus categorical time models with ADCS data, looking at estimated treatment effects and standard errors as well as a simulation study to see if there are any types of models that are prone to problems. There will be a special issue of Brain Imaging and Behavior that includes articles from the workgroups from the Advanced Psychometric Workshop held in Friday Harbor in June. Articles will be submitted later this month and sent out for peer review. The workgroups used ADNI-1 data in the analyses. Danielle also mentioned her two papers: one that looks at the neuropsychiatric symptoms at baseline in ADNI-1 and the other that is a comparison paper across imaging markers.

Future plans include continuing to analyze the vast amounts of ADNI-1 data, beginning to look at available clinical and neuropsychological data for ADNI-GO and ADNI-2, and once imaging data is available, looking at those data as well (especially any new measures that are submitted so we know how they behave.)

Next call: Tuesday, November 1, 2011