

ADNI Biostatistics Core
Conference call, 1 March 2005

Present on call: Laurel Beckett, Danielle Harvey, John Kornak, Devin, Mike Biglan, Mike Weiner.

Prep phase:

Sarah reports that clinical data are flowing in, almost completely up to date. The lab data system is now in place but the format is still shifting a bit, so working out details on what the files will look like. Sabrina says we should be getting hippocampal volumes by next week. For next call we hope to be able to report at least testing the download system. If the file transfer doesn't work out, will have to ask the lab to enter directly into the forms, at least for the prep phase.

Danielle reports that the analytic plan is now up on the investigators-only part of the ADNI web site. It reflects John's comments, and we would appreciate any other comments or information. We will update once we get the data and report what we actually did. (It will correspond to the methods section for our Tech Report on the prep phase.)

John reports that the voxel-based plans are pretty straightforward and simple for the prep phase decision because they need to be done so quickly. We will look and see if there is anything we can do quickly, but there are more differences than similarities according to last teleconference meeting.

Timeline for analysis: We need to see how quickly data will flow in from labs. I think the cut point will likely be May 1, no later. Maybe earlier, depends on how clean the data are.

Execution phase:

Danielle needs to e-mail Art Toga and get him to ask statistician on external advisory board. Carl Fristen is now listed as a consultant for the PET portion of the project. We were considering him in addition to Tom Nichols at Michigan and maybe someone else.

Database plans for execution phase: clinical and MRI will be pretty comparable and this system should work for execution. Sarah and UCSD group are working with John Trojanowski on tracking system database, and working out details on database. Danielle has read the PET proposal but we do not yet have a sense of how the data summaries will flow. Sarah and ADCS have been having regular conversations with each group about what things they will need to track and have talked with Bill Jagust about their needs. Sarah will keep the biostat group posted.

Danielle is working on analytic plans for the execution phase. She will not be able to put in the level of detail we have had for prep phase because the sites are still signing up and we don't know how many will be recruited per site.

Mike's main concern now is to keep thinking about what kinds of tables and reports we would like to see and generate as the execution phase begins. We look forward to working with Anthony Ganst on the study as it gets started. One concern is to keep the balance of subjects. Everyone gets MRI but not everyone gets PET, for example, and we might get an imbalance by age, sex, APO-e4 and diagnostic severity. We need to continue to monitor for balance. We may need to randomize or to oversample. These can parallel what is done for clinical trials. We also need to be aware of linkage issues with LONI, and how we might want to do analyses that use data from both. For example we might be interested in correlating Trails test change with image and clinical data. How do you pull the correct images and analyze? To define the needs for linkage, we should think of analyses we might plan and make sure that we can do them. It would be cumbersome to go back and forth between two separate web sites. Mike Biglan is working on an idea for a link that selects people at clinical, it communicates with LONI and grabs the data, and downloads. The LONI pipeline is another possibility. Mike W advises us to learn about this system. You can run processing remotely so it runs at LONI. For example you could run some stuff in SPM space at LONI.