ADNI biostat conference call, 5 December 2006

Present on call: Laurel Beckett, Danielle Harvey, Yevgen Timofyef, Qian, Monica, John Kornak.

Mike and Laurel and Danielle have been working together and editing the analytic plan. We hope to get this finalized as soon as possible so we can send out to executive committee. Mike feels it is very close now. John has a few more edits for the voxel-based and multiple-comparisons parts. Mike would like this to be available for Steering Committee by April (it should in fact be available well before then.)

Yevgen raised the question of whether we ought to discuss the possibility of using metrics for classification cross-sectionally. The group noted that the sample for this study was chosen to give very crisply defined subgroups that would look like those to be considered in clinical trials.

Cliff asked Danielle by e-mail about priorities for processing images to prepare for statistical analysis. One strategy would be to try to complete as much longitudinal data as possible first, then fill in people as they get added. Another would be to fill in as much of the baseline as possible, then successive visits. They have over 400 pre-processed images already and they will be getting much more shortly. Data will be available at LONI shortly. What guidance can the committee give?

Mike says he is the origin of these comments and questions! In a perfect study with all the time in the world, we would do sequentially the quality control, cross-sectional, then longitudinal. But ADNI has been going on 2.5 years and everyone is eager to see some results. Mike suggested processing data in such a way that the longitudinal data get priority. That is, process the subjects in order of how many time points they have, then prioritize longitudinal time points for existing subjects, then new baseline data.

The group agrees that this makes sense; the principles will be:
- The earliest individuals should be caught up as a top priority because they will have longitudinal data.
- We also want to get longitudinal data on MCI, AD, and enough controls to match the AD as a priority.
- A lower priority is to fill in the data on missing controls and on baseline.
- It will also be critical to try to get as many metrics as possible on the same people.

We have 598 subjects, 192 controls, 131 AD, 275 MCI. We have longitudinal data on 105 controls, 126 MCI and 56 AD basically available now.

We also need a system for uploading univariate summary measures for images. ADCS, LONI and Danielle have been trying to get a list of the summary measures so they can design the forms to do uploading. Danielle reports that they have not gotten a list of what is going to be sent so they can't design the forms. Mike says ask them again, cc him, and

let him know if there is no response in a week. Danielle will do this. Monica says there have been a few vague responses.

Action items:
1. Danielle and John to add J's text on voxel based methods and multiple comparisons to the document. Laurel will add any other comments. We will send final version out to group and to Mike to share.
2. Danielle will send out e-mail and ask for what data summaries are to be generated, cc Mike.
3. The executive committee will determine whether those summaries will go to LONI or ADCS.
4. John will be on the MRI call this Friday.
5. Qian will write data partitioning code and get that to ADCS and LONI.

The next call is scheduled on 19 December.