ADNI Biostat conference call
23 May 2006

Present on call: Danielle Harvey, Qian Weng, Monica Chu, Karen Stokes, Rob Croop

Laurel had to interview a job candidate this morning, so was unable to join the call. Danielle chaired the call.

Executive committee update: Recruitment is going well and is averaging in the high 50s per month. MCIs continue to be a big challenge. LP participation is very good. CSF data will be the last data available for analysis groups, since the biomarker core will not look at the samples until all baseline recruitment is complete (and possibly even wait until there is some longitudinal data). MRI data will also be rather late in the timeline. Cliff is busy doing the pre-processing of the raw images, so individual labs may not have the cleaned images for a while. He figured that was at least two months away. The PET data may be the first data to come in.

The MR call last week focused on analysis issues related to MR and PET. There was a discussion about how the analysis groups would handle the large amount of data that will be available from PET, MR, and the biomarker cores. Since a goal of ADNI is to find the best markers to be used, a question came up about the approach that we will take. Will we consider all measures together from all modalities or will be work within one modality first, pick the best measure and then compare the "best" ones from each modality. Danielle said she was leaning more towards doing some data reduction first by comparing within one modality and then comparing the winners across the modalities (but this is something the Biostat Core needs to consider and think about). Another issue that came up was about making sure that all analysis groups were using similar data sets. Would the Biostat Core or ADCS/LONI provide a list of subjects to be used for each analysis? We need to think about how we can standardize this process. In discussion with Laurel yesterday, she mentioned that we could share with the other groups the subjects used in our analyses. She also said it would be important for each of the groups to also keep track of how many images could be "analyzed" using their technique (so that we have a sense of cost effectiveness of the different images).

Danielle also asked the MR group about Prep Phase papers. Norbert is still planning on writing a paper on the hippocampal volumes. Nick Fox had a draft of a paper sitting on his desk related to the N3 correction. No one else mentioned anything about a paper. So, it looks like there will only be 3 papers that come out of the Prep Phase unless we decide to use the data and write our own paper.

In response to the MR call and the last Biostat call, Danielle sent out several "discussion" emails: 1) focusing on validation analyses; 2) focusing on baseline comparisons; and 3) focusing on voxel based isssues. The validation email needs the clinical core to identify specific clinical measures to be used as the main clinical outcomes for correlative analyses with MRI, PET, and biomarker data (and the other cores need to identify which of their measures should be used for these analyses and which clinical measure they

should correlate with). The baseline comparison email was sent to all Cores including the industry folks to get feedback on baseline hypotheses of interest. The third email on voxel-based issues had to do with identifying a priori regions of interest, ways of coming up with the templates, and whether it was possible for the different voxel-based groups to use the same atlas. Some feedback has come in, but many of the groups were waiting for their next conference call to discuss the issues.

Rob Croop said that the industry call will be held tomorrow, so his group would be discussing some of the emails that I have circulated. One of the topics for their group to discuss is whether Rob will be the liaisons between ISAB and the Biostat Core or if it will Rob + others (possibly some of the industry statisticians). They are also still interested in a timeline for the training session, which is still up in the air due to the need for data to be available. We are still thinking Fall 2006, but that depends on when data starts coming in.

Danielle will email Devon Gessert and Karen Crawford to find out where the numerical summary data from the images will be stored. These data had been stored at ADCS during the Prep Phase, but the data dictionary for the Execution Phase for ADNI does not list any of these measures. Monica thought that LONI was going to store these data, since she said ADCS was only going to store the clinical data.

The next call will be in two weeks (June 6).