ADNI biostat conference call, 26 September 2006

Present: Danielle Harvey, Laurel Beckett, UC Davis; John Kornak, UCSF; Yevgen Tymofyeyev, Merck; Zhengning Lin, Eisai, Rob Croop, BMS; Monica, UCSD; Mike Welch and Jyotie Zalkikar, FDA.

Main goal for today: to go over working document on statistical analysis. Updates from previous document include cross-validation design, table of ROI for MRI, start on this for PET, and some further information on voxel-based analysis.

We began call with an overview of the analytic plan and a summary of goals to bring the new members up to date on biostat activities and goals.

Mike Welch suggests longitudinal ROC may be considered; Andrew X at UW is working on that. Maybe concepts are more useful for diagnostic classification. We are focused on trying to identify markers that can be used as surrogates for clinical trials, that is, drug A shows a bigger change (or less change) in marker than drug B. Even though this study will not actually have drug interventions, we can get at the first kind of evidence: degree to which the proposed marker correlates with clinical change or lack of it. We will also look for performance stability across sites and platforms.

We requested feedback on the entire document, but most urgently on the cross-validation scheme, which we'd like to implement after Chicago so that people can use it as data come online. One suggestion is that we add stratification by age (younger, older, two strata).

The meeting in Chicago should provide additional feedback. Laurel and Rob will be there; presentation is Monday, and Rob won't make it for that. Laurel will update the group in two weeks.

Next call: Tuesday 10 October, 10 AM Pacific time.