

ADNI Biostatistics conference call, 15 July 2008

Present on call: Laurel Beckett, Hao Zhang, David Shera, Kurt Engleman, John Kornak, Mike Donohue, Mike Weiner, Bill Billings.

Laurel reported on plans for the ICAD presentation. A summary has been sent out of the analysis that she, Danielle and Hao are doing. They are restricting analysis to a common subset of MRI data, a common subset of PET, and an interaction subset that omits a couple of MRI labs that have little overlap with the PET labs. They are also doing lab-specific comparisons of 1.5T and 3T. Thus all findings can be compared across summary measurement/ lab. Three general sets of analyses will be presented: the standard summary including sample size, as in previous presentations; a direct comparison of sample size using a two-way ANOVA with individual subject as a block and lab measurement as a "treatment" and using Tukey's adjustment for pairwise comparisons; and a comparison of relationship to cognitive test change, again using a two-way ANOVA of the results of regression models. We will send out a draft presentation by Monday next week.

Mike Donohue and Anthony Gamst are doing an analysis of the impact of the biomarkers on sample size calculations, by including them in regression models on cognitive function. The impact is about a 20% reduction. There were originally some very large apparent reductions, but they seem to have been artifacts from not standardizing the data, which Danielle noted at WNAR. These comparisons are not directly comparable to the ones Danielle, Laurel, and Hao are doing, as they are not restricted to a common subset and thus inferences are not being done to compare across labs. Mike Weiner suggested including WMH in this analysis if time permitted.

Mike Weiner suggested early sharing of slides and presentation for discussion. He wants to be sure that the analyses we did for Neil Buckholtz also make it in. Laurel is very much in agreement on that as the findings in normals are quite exciting.

Mike Weiner asked Bill Billings if anyone at Pfizer is doing such analyses; Bill says he is not personally, yet, but they are eager to get involved. Kurt reported that he is not, but there is a group working. He will follow up before ICAD to see what they have found. Mike would like folks to bring up at the meeting if they have found anything of interest, to the extent that is possible and not proprietary.

Note to folks not on the call: we would love to hear if you are doing analyses at your site, so we can comment on use being made of the data, even if you are not yet ready to share results!

The next call is Tuesday, July 29, at 10 AM Pacific time.