Reviewer's report

Title: ESPECTRA: Searching the Bipolar Spectrum in Eating Disorder patients

Version: 1 Date: 11 November 2010

Reviewer: Carl Birmingham

Reviewer's report:

1. Will the study design adequately test the hypothesis? This depends on the experimental group, the control group, acceptance of the method of diagnosis, and the sample size.

2. Are sufficient details provided to allow replication of the work or comparison with related analyses: if not, what is missing? The authors are clearly in one camp regarding the diagnosis of bipolar disorder. However, not every agrees with them - as they point out in the article. If the measurement of the outcomes (diagnoses) aren't agreed to before starting the impact of the article will be greatly reduced.

The inclusion and exclusion criteria for both the cases and the controls must be defined at a much more practical step-by-step level. Where are the study patients to be chosen from (e.g. an intensive ward, a follow-up group, a drop in clinic), who will decide whether they are a case, will there be a list of those not included with their characteristics.

How many patients are to be assessed? A power calculation must be included.

3. Is the planned statistical analysis appropriate? No, it must be simplified. There can be only one primary hypothesis and this can only be analyzed by one statistic. All other analyses will be of little importance. The most important specific hypothesis most appropriate statistic will depend on the sample size, the distribution of the factors, and the type of data (e.g. nominal, ordinal). The stats will depend on the rest of the changes.

4. Is the writing acceptable? It isn't bad but it will need to be rewritten to meet the journal's standards.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.