

Reviewer's report

Title: Is FKBP5 a genetic marker of affective psychosis? A case control study and analysis of disease related traits.

Version: 4 **Date:** 15 September 2006

Reviewer: Elisabeth Binder

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1) The authors use the psychiatric disease classification according to Leonhard, its' use is very much limited to the University of Wuerzburg. To make their paper interesting and accessible to an international readership, the authors should mention what the diagnostic breakdown of their sample would be according to DSMIV, as this is used for almost all other genetic association studies in psychiatry.

2)The case and control groups are not matched by age (mean age of 48.1 vs. 30.2) and the case group also contains more male patients. The authors need to check that the genotypes are not associated with gender or age and then correct for age and sex and their case/control associations.

3)The authors mention that they corrected for multiple testing but do not name the method, also permutation-based results are mentioned in the discussion, but no details are given in the methods section.

4)The authors need to discuss that their assessment of disease course is very different from the one in Binder et al., which could also explain differences in results.

5) In figure 1, it looks like all 3 FKBP5 SNPs show at least a nominal trend for shorter duration of hospitalization for the same genotypes that have been associated with faster response to AD treatment in Binder et al., If in fact mean and SD are represented in this figure, it almost looks like it is a significant difference. The authors omitted the statistics for this phenotype in the results section. Have the authors tested a recessive model?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

On page 10 the percent unipolar patients in the Binder et al., study is cited as 77%. It is in fact about 90%.

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

- 1) no
- 2) no
- 3) yes: co-patent holder of "FKBP5: a novel target for antidepressant therapy. International publication number: WO 2005/054500"
- 4) no
- 5) no