Reviewer's report

Title: Grey matter changes can improve the prediction of Schizophrenia in subjects at high risk

Version: 3 Date: 10 September 2006

Reviewer: Matcheri S Keshavan

Reviewer's report:

General

Discretionary Revisions (which the author can choose to ignore)

This is an interesting and clinically important study that reports the predictive value of gray matter changes for later development of schizophrenia in a series of young relatives at increased genetic risk for schizophrenia. The results are part of a large and well known study of genetic high risk relatives in Edinburgh.

The authors suggest that GM changes can be used as a predictive test for schizophrenia. While compelling, however, the results are to be viewed with caution because of a number of limitations which the authors themselves point out (relatively small sample size, and the low prevalence of schizophrenia leading the test to have relatively small positive predictive power). The abstract needs to be revised to reflect the preliminary nature of their conclusions.

The sample used in this study (n=65) is a subsample of the larger dataset this group of investigators have published. Can the findings be generalized to the full dataset, or only to those who participated in repeat scans. Is this sample representative?

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No