Reviewer's report

Title: Antioxidant defense system and family environment in adolescents with family history of psychosis

Version: 1 Date: 8 May 2012

Reviewer: Stephen Wood

Reviewer's report:

The authors present an interesting but limited study which shows a significantly lower total antioxidant level in the blood of young people who have a second degree relative with psychosis, when compared to group without such family history. The finding seems secure, and potentially important. Of course, it would be better if the authors had information about people more closely related to people with psychosis, but this seems to be a useful addition to the literature nonetheless.

Major Compulsory Revisions

The main issue I have with the manuscript as submitted is that the introduction does not usefully guide the reader as to the purpose of the study. It is only once one is well into the methods section that it is apparent that a) there are no patients in this study and b) that the family history group is 2nd degree and a sample of convenience. The introduction also gives no background as to the role of genetics or family history in oxidative biology, either in schizophrenia or healthy subjects.

Minor Essential Revisions

I recommend that the authors reread (or get a native English speaker to read) the text to tighten up the grammar and remove some clumsy sentences that impede the reader’s understanding.

I think it would be useful to include tobacco use in Table 1, since the authors clearly have the data and they are highly relevant to oxidative stress.

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

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