Reviewer’s report

Title: ADHD and Disruptive behavior scores are associated with MAO-A and 5-HTT genes and with platelet MAO-B activity in adolescents

Version: 3 Date: 15 October 2007

Reviewer: Anita Thapar

Reviewer’s report:

General

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

The authors have addressed each of my comments in a thoughtful way. However I have some remaining concerns.

1. I remain concerned about the analyses but this really needs a statistican’s advice. I agree that one can use each individual twin in population type analyses using STATA to adjust standard errors and that approach has been used in many standard analyses. However I am uncertain as to whether this is valid when undertaking genetic association analysis because some of the pairs share all their genetic risk factors in common (MZ twins). Kim-Cohen’s paper was surely not on twins-they used other types of samples including the Dunedin sample. At the very least, if I have doubts, then the readership may do so, so there needs to be further convincing here really!

2. Conclusions-the authors now mention some literature on MAOA but the meta-analyses for all the candidate genes tested in this study are not mentioned (Nb findings from Faraone et al, 2005 summary) and the findings not put in context of these (that the meta-analyses did not find association). The possibility of false positives is not considered and this is surely important given the previous lack of findings. Or at least the authors should tell us why they are found here but not in previous larger studies.

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

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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 of limited interest

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declar I have no competing interes