Reviewer’s report

Title: High resolution chromosomal microarray analysis in paediatric obsessive-compulsive disorder

Version: 0 Date: 09 Mar 2017

Reviewer: Juan Rodriguez-Flores

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Grunblatt and colleagues conduct an interesting study of CNVs 50 kb or larger in OCD, and while none of the CNVs studied are enriched in the cases, the pathway-based distribution of the CNVs was different, with an excess of genes related to brain and synapse pathways. The results are very interesting and potentially of relevance, however a few minor concerns about the pathway analysis remain:

1. The p-values for enrichment are marginal (between 0.05 and 0.01). Were multiple tests conducted, and if so is a multiple testing correction applied?

2. Additional information about the details of the tests should be provided, in terms of model and test. Possibly a simpler and easier to conduct test result such as GSEA (as implemented in R) can be used. Tests based on proprietary tools and online tools are difficult to confirm and replicate.

3. In terms of gene expression, can the authors support their claims based on public gene expression data? Are these genes high/low expressed in brain tissue?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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