Reviewer’s report

Title: Lack of Association of the Opioid Receptor mu 1 (OPRM1) A118G Polymorphism (rs1799971) with Alcohol Dependence: Review and Meta-analysis of Retrospective Controlled Studies

Version: 0 Date: 15 May 2017

Reviewer: David Jeffries

Reviewer's report:

Major comments

The fixed versus random effects model should be based on sampling population and not purely on heterogeneity considerations. It seems likely that there are considerable phenotypic variations between populations in the different studies, so it is difficult to justify a fixed effect model.

The definitions of alcohol dependence were not discussed.

What is the justification for combining population and hospital based studies? What is the sensitivity to this issue?

Although mentioned in the discussion, this could have a major confounding effect.

The paper needs proof reading throughout - there are many issues.

Minor comments

There is no explicit description of how the odds ratio is defined

Figure 2 is difficult to follow - perhaps separate heterogeneity form the other plots.

Table 5 is just a repeat of the data in the forest plots.

Are Figures 8 and 9 relevant to the meat analysis?

The word 'correlation' is used throughout, when it really refers to a more general relationship/dependence.

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

No
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.

No

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:

Not suitable for publication unless extensively edited

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