Reviewer’s report

Title: The role of maternal homocysteine concentration in placenta-mediated complications: findings from the Ottawa and Kingston Birth Cohort

Version: 0 Date: 28 Sep 2018

Reviewer: Tinku Thomas

Reviewer’s report:

This is an interesting paper with very rigorous statistical analysis on a cohort of pregnant mothers. The authors examine the association of plasma homocysteine on placenta mediated complications. However, there are a couple of issues that could be examined to improve clarity

1. In the objective the authors are set to examine the association of elevated Hcy. It would be interesting to see the effect of elevated Hcy using existing cut-off for on PMC instead of Hcy as a continuous variable.

2. Line 37 to 41: There is an increase odds of PMC with Hcy in the high risk group. However this higher odds was not significantly greater than what was observed in the low risk group. Therefore the statement of increased odds needs to be revised.

3. Please state the p value cut off considered for interaction effects in the statistical methods. In the results authors state evidence of interaction both for p=0.12 and p=0.07 (lines 22, 35). The authors may state that p<0.1(for example) was considered statistically significant for interaction effect and restrict all mention of effect of intervention to such estimates with p<0.1 (for example).

4. Additional file 1. Please explain the values that are plotted and what is the X-axis.

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:

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