Reviewer’s report

Title: Seasonality, temperature and pregnancy oral glucose tolerance test results in Australia

Version: 1 Date: 28 Jun 2018

Reviewer: Emmanuel Cosson

Reviewer's report:

I thank the authors for their additional work.

I have still the following major issues:

- Tab1: show statistical comparison (p value)
  If statistically different, then adjustment should be performed
  - Do not show Tab2
  Instead Keep Tab3 (now 2) and show with signs according to the journal policy the statistically
differences between each season
- Tab 5 and Tab 6: show instead the points, and add in each figure the coefficient r and p
- Correlation between "delivery" temperature (or "OGTT temperature"?????): not clear at all, as it is
different in the Table and the text
142: Lastly, the role of seasonality on neonatal glucose metabolism can be seen in table 6. We found
umbilical cord C-peptide and glucose to correlate with mean temperature in the same direction as the
fasting VPG, HbA1c, and HOMA-IR: which temperature?
156: Table 6. Correlation of average monthly temperature at birth to cord C-peptide and cord glucose.
208: The observed trend towards elevated cord C-peptide and glucose relating to the OGTT
temperature and neonatal measures
- Tab 6
Data according to season should also been shown
- Discussion
208: "The observed trend towards elevated cord C-peptide and glucose relating to the OGTT
temperature and potentially to consequent higher glucose exposure (fasting glucose and HbA1c) is a
novel finding with potential utility in GDM diagnosis. Both neonatal hyperglycemia and elevated C-
peptide have been associated with increased fat mass, excessive neonatal growth, and increased skin
fold measurements [19, 20]. While we are unable to demonstrate causality, we note these parameters
which suggest an impaired neonatal glucose metabolism followed the directional trends in fasting VPG,
HbA1c, and HOMA-IR rather than the post-OGTT glucose values."
If so, please show us correlation between cord C measures and FPG, 1h, 2H OGTT etc
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.

Unable to assess

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.

Not relevant to this manuscript

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

Acceptable

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