**Reviewer's report**

**Title:** The Association between Gestational Weight Gain Z-Score and Stillbirth: A Case-Control Study

**Version:** 1  **Date:** 10 Dec 2018

**Reviewer:** Katherine Himes

**Reviewer's report:**

This review is in response to the manuscript entitled, "The Association between Gestational Weight Gain Z-Score and Stillbirth: A Case-Control Study". This is a secondary data analysis of the Stillbirth Collaborative Research Network case-control study that examines the association between gestational weight gain and stillbirth at greater than 20 weeks. The authors found that low gestational weight gain is associated with an increased risk of stillbirth. They use gestational weight gain z-scores to operationalize gestational weight gain given the correlation between weight gain and gestational age at delivery. This is an important area of study and the authors have done a nice job making z scores accessible as they are not always intuitive. Limited comments are enumerated below.

1. The etiology of stillbirth varies widely. I think the paper would be greatly strengthened by additional attempts to tease out the relationship between gestational weight gain and etiology of stillbirth.

2. The authors use two different gestational weight gain z-score charts. This is a bit confusing to the reader as written. Is one chart better or worse for their data. The discrepancy between the two is confusing.

**Minor points.**

Please outline all model confounders in the text for the ease of the reader.

Please be clear about how maternal height and weight were ascertained-- I had difficulty finding it in the text.
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 recommend additional statistical review

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

Acceptable

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