Reviewer's report

Title: Insulin resistance as estimated by the homeostatic method at diagnosis of gestational diabetes in relation to its severity and beta cell function: implications for personalized therapy in population-based study.

Version: 1 Date: 27 November 2012

Reviewer: Seshiah V

Reviewer's report:

Comments
1. The rationale behind dividing the study population in quartile has to be mentioned with reference and to be included in the method section.

2. The conventional way of representing continuous variable will be mean ± sd. The use of statistical software for study analysis could be mentioned at the end of statistical analysis section.

3. Dependent and independent variable used in the LR analysis should be mentioned clearly in the method section.

4. Table -1 description is not there in the result section. The result should state briefly about the study population.

5. P-value should be mentioned in the appropriate place as it is mentioned for HOMA-IR and HOMA-B for all other write-up.

6. Mean cannot be used as dependent variable in the logistic regression analysis. Even if daily dose of insulin as categorical variable all the independent variable can be used simultaneously in the model to assess association between HOMA-IR and dose of insulin.

7. The present format of representing LR analysis is confusing. It is better follow some leading journal model like BMJ to represent the LR results.

8. Appropriate statistical methods to be employed to evaluate the study results in tune with the objective.

9. It would be better that the study can suggest cut off value of HOMA-IR in determining the Pathophysio logic hetrogenity or severity rather than comparing quartiles wise HOMA-IR. ROC analysis can be used for this.

10. In the section Results : “The A1C values in the fourth quartile were higher compare to first and second quartile” any explanation for this?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare that I have no competing interests.