Reviewer's report

Title: Improved prediction of gestational hypertension by inclusion of Placental Growth Factor and Pregnancy Associated Plasma Protein-A in a sample of Ghanaian women

Version: 0 Date: 13 Jan 2018

Reviewer: Shahla Alalaf

Reviewer's report:

Paper number: REPH-D-17-00388

This study was a prospective cohort study on 373 pregnant women attending antenatal care in two public hospitals in Accra with gestational age at recruitment between 56 and 97 to investigated whether adding the biomarkers, placental growth factor and pregnancy associated plasma protein A, to a prediction model based on maternal clinical characteristics improved the predictive ability of the model. The authors concluded that adding the biomarkers PAPP-A and PlGF to maternal characteristics in a prediction model for gestational hypertension in a cohort of Ghanaian pregnant women improved Predictive ability.

This paper has a potential to be accepted, but some important points have to be clarified or fixed before a positive action can be taken.

We here summarize these points:

1. Introduction: line 95 aims of the study have to be shifted to the end of the introduction

2. Study design and study population: was there any power for sample size estimation? Surveying for the biomarkers in 1010 pregnant women in Accra dose it represents whole Ghanaian pregnant population or not? if it is yes statistically then in the title Ghanaian will remain

If not you have to change the title to a sample of Ghanaian pregnant population, or in Accra if again the sample size is representing this city only.
3. Methods line 114: less than 17 weeks gestation and without known preexistent hypertension and a singleton pregnancy: in Obstetrics it is accustomed to use gestational age in weeks or trimesters, you have mentioned in the introduction that estimation of biomarkers in 8-14 weeks gestation, and at the beginning of the methods you used less than 17 weeks gestation, then you have used 54-96 days. Please unify the gestational age at which you have estimated the biomarkers level.

Why did you exclude the primigravid women? They are the main group that is risky for gestational hypertension, just for having no history of previous pregnancy?????

Line 141: Two readings were taken at interval of five minutes and the average used as the woman's blood pressure. Blood pressure should be repeated 4 hours apart.

4. Flow chart: 1st correct the word days please, 373 women were included in the article having gestational hypertension, were there any cases whom the gestational hypertension progressed to preeclampsia and you have exclude them ????

5. Table 1: Nulliparous means woman who have never had a delivery more than 24 weeks gestation. primiparous means a woman who have only one delivery more than 24 weeks gestation. Please change the word to primigravid women

**Level of interest**
Please indicate how interesting you found the manuscript:

An article of importance in its field

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

Needs some language corrections before being published
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

'I declare that I have no competing interests"

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal