Reviewer's report

Title: Periodic Assessment of Plasma sFlt-1 and PLGF Concentrations and it's Association with Placental Morphometry in Gestational Hypertension (GH) - A Prospective Follow Study

Version: 1 Date: 11 April 2010

Reviewer: Chloe Zera

Reviewer's report:

Major Compulsory Revisions:

• It seems from the introduction that the goal of looking at the angiogenic markers is prediction, while in reading the study I think that the goal was actually to correlate angiogenic markers and placental pathology. This should be more clear, as there isn’t actually predictive data in the manuscript.

• The text references table 1, which I cannot find in the PDF. I would have liked to see a traditional “table 1” with baseline characteristics of gestational hypertensives vs. the controls, including BMI, race/ethnicity, gestational age at time of sampling, some sort of BP measure (highest SBP/DBP?) as well as birthweight and GA at delivery, given the placental pathology piece. If the baseline characteristics are similar it helps support the analytic approach that was used (univariate), however without this information readers will not be able to evaluate that piece.

• If the goal is to look at longitudinal trends in sFlt/PIGF, then the analysis should be longitudinal (accounting for repeated measures) and not cross-sectional (ANOVA). Also, there was no adjustment for confounders (eg. severity of disease such as IUGR, maternal BMI, smoking, etc). If this was an intentional choice, then there should be some mention in the statistical analysis section.

• I think the inverse correlation between sFlt and PlGF is well-established, even in normal pregnancies.

• What is the significance of intrapartum and postpartum angiogenic markers? Any utility to measuring them once the placenta is delivered?

• In terms of putting this in context, I think it’s important to directly compare to the Levine paper that showed no difference between GH and normals in cross-sectional analysis.

• There was not a clear discussion of limitations.

Minor Essential Revisions:

• There are a few sentences scattered throughout that don’t read clearly—recommend revising.

Level of interest: An article whose findings are important to those with closely
related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.