Reviewer’s report

Title: DNA methylation differences at growth related genes correlate with birth weight: a molecular signature linked to developmental origins of adult disease?

Version: 2 Date: 27 February 2012

Reviewer: Gudrun Moore

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Major Compulsory Revisions
This is good paper but the data does need to take into account ethnicity and confounders with respect to the birthweight:
Although there is now a table of all the phenotypic data from the cohort I suggest it is essential to do two things:
Remove all minority ethnic samples ie just analyse the data from white couples:
Reanalyse the birthweight data accounting for parity; maternal weight/age and sex as well as GA. The authors have all this information and they ALL have a significant associations with birthweight not just GA.
Once reanalysed the differences can be assessed prpoerly.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

No competing interests