Reviewer’s report

Title: Association between Pre-and Postnatal Growth and Longitudinal Trends in Serum Uric Acid Levels and Blood Pressure in Children aged 3 to 7 years

Version: 1 Date: 29 Oct 2018

Reviewer: A. G. van Wassenaer-Leemhuis

Reviewer's report:

The manuscript examines the whether LBW and postnatal, growth are associated with uric acid concentrations in blood at 3, 5 and 7 years and blood pressure measure in a one center cohort of initially 365 newborns.

I have several concerns:

- The lack of a clear definition of catch up growth
- The mix of preterm and term infants with BW <2500 gram
- The large loss to follow up of >50% without description of who is lost to follow up.
- The lack of numbers of individuals at each measure in table 1.
- The lack of normal values for uric acid in childhood and the number of children that have too high levels.
- The lack of information about the relation of uric acid to BMI (since uric acid is dependent on intake of protein, one would think that it is higher in those of higher BMI).

Because LBW infants have similar BMI's compared to those born NBW, LBW preterm infants might just have grown appropriately and gaining weight and height at a normal pace while reaching term age; then they are misclassified. Therefore I would recommend separating the cohort from the start of the analyses in term SGA and preterm children.

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.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
No

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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