Reviewer's report

**Title:** Comparing the growth of preterm infants through the gestational period of 37 to 50 weeks with the reference fetus

**Version:** 5  **Date:** 30 April 2013

**Reviewer:** Pieter Sauer

**Reviewer's report:**

The authors have responded to a number of questions asked. However, in my opinion the real limitations of the message of this paper is not yet made clear. From this paper we can conclude: 1. Growth (weight gain) in preterm infants is not reduced between 37-40 weeks, 2. Nutritional intake of the infants included in this paper is far from optimal, resulting in reduced weight gain till term age.

The hypothesis that weight gain might be lower between 37-40 weeks is not based on physiology, but is the result of using cross sectional data. Most likely is weight gain reduced at the end of pregnancy, due to a reduced transplacental transfer. Increase in length or head circumference does not falter. The findings in this paper therefore are not very surprising. It is not unreasonable to assume that the best way to extrapolate the period between 37-40 weeks from connecting the i.u. growth curves directly from 37 weeks to the postnatal data and ignore the data of 37-40 weeks. I hope the authors will include in the paper that there is no physiological basis for a reduction in weight gain from 37-40 weeks, and it is only the result of cross sectional data.

Secondly, I see in this paper no arguments for the "smoothing" done in the Fenton curves. This should be deleted from the conclusions.

Finally, giving both tables and figures is redundant.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

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