Reviewer’s report

Title: MAMI: a birth cohort focused on maternal-infant microbiota during early life

Version: 0 Date: 30 Oct 2018

Reviewer: Norbert Sprenger

Reviewer's report:

The authors describe their prospective observational, longitudinal cohort study including 185 mother infant pairs. The aim of this birth cohort study is to better understand the influence of nutrition on the maternal microbiome during the last trimester of pregnancy, the seeding of maternal microbiome to the infants and the influence of feeding type on the infant microbiome maturation, as well as the impact of the early life microbiome maturation for health of the infant.

These are relevant aims of utmost importance. However, it is not clear whether the proposed methods will be sufficiently specific to answer all questions. Further, sampling methods of breastmilk and stool for microbiota analysis are not sufficiently detailed. To fully appreciate the value of any association to health measures in the infants, it seems important to provide details on the health assessments especially related to infections and metabolic health.

Several typos, incomplete or unclear sentences and the use of past and present tense need attention.

L 98, sentence incomplete

L 132, 'infant' seems missing in the overall objective. Rephrase.

L 132, 'and' is double

L144, 'Drop out' instead of 'drop off'

L 146, use past tense when something was already done

L 179, detail maternal stool, milk collection

L 185, detail urine, stool collection

L 222, detail health outcome measures (how, when, retrospective parent reported or physician diagnosed etc.)

L 237, detail on food intake questions during pregnancy (when) how close to stool sampling and how close to birth was stool sampling? Etc

L 248, detail on type of formula, with probiotics, prebiotics, HMOs, etc.
L 256, details on determination of infections

L 267, detail diagnosis of infections

L 318, detail for which sample this analysis is done, (blood sampling not mentioned in the sample collection, clarify)

L 325, no power calculation is described, title is misleading, correct/clarify.

L 370, states that study ended, earlier the MS says the follow-up is still ongoing, clarify and correct.

L 371, strengths and weaknesses not clearly elaborated, present first strengths, then weaknesses.

L 388, how is metabolic health assessed

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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:

Needs some language corrections before being published
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