Reviewer’s report

Title: An economic analysis of human milk supplementation for very low birth weight babies in the USA

Version: 0 Date: 24 Sep 2018

Reviewer: Dmitry Dukhovny

Reviewer's report:

I think this is an interesting article on a very important and controversial topic given the expense of Prolacta. There are several things that in my opinion should be addressed prior to publication:

1) Patient population - the title suggests US cohort, but you are only putting 1,000 (rather than roughly 60,000 VLBWs annually) through the model

2) The base line parameters:
   - NEC rates in the trials mentioned are higher than overall rate
   - the table with the parameters for the models should have the references within the table to help reader to easier identify the sources (and it would help to make the text more concise when the authors go on to explain it)

3) Sensitivity analyses - visual graphics of one way and multi-way sensitivity analyses would be helpful

4) Economic evaluation
   - Please explicitly state in the methods the time horizon up front (it's presumed one year, but it's not really stated clearly until the end of the methods)
   - The statement in the conclusion about cost-effectiveness does not account for the sensitivity analyses (95% CI from bootstrap/probabilistic Sn analyses) nor is there iCER table in the manuscript
   - While the authors discussion on QALYs is correct, it can still be modeled under certain assumptions and may help bring multiple outcomes together

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.

No

**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 am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

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If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.
I declare that I have no competing interests. While I have not received any consulting or honorarium from Prolacta Biosciences, the company has reached out to me in the past and I have met with the people (including Dr. Martin in the acknowledgment section) from the company in the past to discuss economic of this topic (since that is my academic interest). I have never discussed this project with them.

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