Reviewer's report

Title: Immune cell counts and risks of respiratory infections among infants exposed pre- and post-natally to organochlorine compounds: a prospective study

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Reviewer: Gavin ten Tusscher

Reviewer's report:

The article assesses immune cell counts in 3-month old infants, in relation to organochlorine compounds. The exposure occurred prenatally and postnatally via breast milk.

General comments:
This reviewer enjoyed reading about this important and certainly very interesting study. The article is generally well written. The study was logically approached and the selected literature is relevant.

Specific comments:
Abstract and Introduction: well written and complete.

Methods:
1. It is not entirely clear how the 86 infants for blood sampling were selected. It is unclear whether or not a selection bias has occurred, although the authors mention the similarity between the groups. The authors should stipulate how the infants were selected.

2. The interviews were taken 3 months post partum. Did the mothers keep a diary or were the questionnaires based on recall? The former is more reliable than the latter.

3. Were the interviewers and mothers blinded to the OC concentrations during the study period or were they aware of the concentrations? In the case of the latter: could this play a role in the reporting of infections, etc?

Results:
The results section makes for difficult reading. I would suggest rewriting the section in a manner that makes it easier to understand.

Discussion: well written, balanced and complete.

References: complete

Figures: not completely clear how to interpret them. Scatter diagrams may be more illustrative.

Tables: not completely clear how to interpret them. I would suggest presenting
the data in a clearer manner.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

I declare that I have no competing interests.