**Reviewer’s report**

**Title:** Parameters of ovarian reserve in relation to urinary concentrations of parabens.

**Version:** 1  **Date:** 13 May 2019

**Reviewer:** María José Molina Torres

**Reviewer's report:**

This is an interesting study since parabens are preservatives commonly used in personal care products, pharmaceuticals and foods. In this area, there are few epidemiological studies that relate the use of parabens with fertility problems. Fertility problems are unfortunately increasingly. Therefore it is very relevant to know the effects of these products on the health of women. However, this work only includes women with fertility problems. It would have been convenient to include women without fertility problems to be able to better compare the results.

In my opinion, I think it should review certain points listed below.

The manuscript should be carefully reviewed so that it can be published.

Abstract

1) **Objective.** Specify that the sample corresponds to women with fertility problems.

2) **Methods.** When the study was conducted? (Duration, year of the study)

3) **Results needs explain more.**

4) **Conclusions.** What kind of association has been found? Specify.

5) **Keywords.** Some words do not match to MeSH terms (Review)

Manuscript

Background

6) **Lines 55-62:** Improve the wording and structure of the text (Citation: the same structure of all document).

7) **Lines 88-89:** The aim should specify that the sample corresponds to women with fertility problems.
Methods

8) Lines 93-94: Reference is needed to justify the infertility criterion.

9) Lines 106-107: It would be interesting to list issues that were collected in the interview. Explain more.

10) Line 113: "...of Broekmans et al., 2010...". Bibliographical citations should adopt the appropriate format. Check here and in the rest of the document.

11) Lines 115-117: "Antral follicles with dimensions of 2 to 10 mm was considered for the assessment. The sum of antral follicles from the left and right ovaries was used for the analysis." Reference is needed.

12) Line 118: "The intravenous blood sample was drawn in the morning....". Why in the morning? At what time? What protocol or procedure is it based on? Explain and reference.

13) Lines 128-130: Clarify why sample is 120 in this point. Justify. I don't understand. Why two urine samples are collected? Explain.

14) Line 135: "The limit of detection was ...". Reference is needed.

15) Lines 128-137: The methods and reference values used must be justified.

Results

16) Table 1 isn't necessary because the information can explain in the text.

17) Table 2 has a lot of information (min, Q25, median, Q75, Q95 and max). Is necessary? Clarify.

18) Lines 180-185: Respect to comments of first and second urine sample, the author hasn't explained well this point. Explain.

19) Line 186: In the text, the value MP doesn't match Table 3. Fix it.

20) Table 3 has a lot of information. Clarify (to synthesize the information or change the format).

21) Table 4: Review format and convenience. The relevant information can be written in the text.
Discussion

22) Lines 209-212: Compare with published studies.

23) Lines 213-214: Reference is needed.

24) Review all the section. Arguments are needed.

25) Lines 261-264: This text could be placed in the Methods section.

26) Missing the conclusions of the study. They must include.

References

27) References should be in the format of the journal. Check all.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interes

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

Needs some language corrections before being published

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