Reviewer’s report

Title: Nocturnal finger skin temperature in menstrual cycle tracking: Ambulatory pilot study using a wearable Oura ring

Version: 1 Date: 06 Aug 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses one or several testable research questions? (Brief or other article types: is there a clear objective?)

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

No - there are major issues

EXECUTION - Are the experiments and analyses performed with sufficient technical rigor to allow confidence in the results?

No - there are major issues

STATISTICS - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are major issues
OVERALL MANUSCRIPT POTENTIAL - Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution? If not, can further revisions be made to make the work technically sound?

No - manuscript has some fundamental flaw(s)

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: I am very sorry to acknowledge that all the points that I have highlighted were addressed, but the severe limitations of the study still represent a barrier which prevents me to suggest publication in the current form.

REQUESTED REVISIONS:

I can understand that this is only a pilot study, as appropriately stated by the authors, but I am actually concerned that data analysis based on such low sample size does not allow to draw a firm conclusion about the primary and secondary outcomes of the study design.

As I noticed from the new manuscript draft, my concerns were shared also by other reviewers.

I would like to invite authors to use selective inclusion/exclusion criteria (extremely low/high BMI, age and other variables such as concurrent pharmacological treatments and/or diseases), include more women, and perform another data analysis before to re-submit the article for peer review.

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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