Reviewer's report

Title: A Repeated Measures Study of Phenol, Paraben and Triclocarban Urinary Biomarkers and Circulating Maternal Hormones during Gestation in the Puerto Rico PROTECT Cohort

Version: 1 Date: 30 Jan 2019

Reviewer: Carmen Messerlian

Reviewer's report:

Thank you for the opportunity to re-review this manuscript. While the authors have made some important changes and aimed to address the comments made in the first round of review, I still have some major concerns that should be fully addressed before recommending publication. My concern stems from an unclear prespecified direction/hypothesis/purpose of this body of research, which becomes evident as the manuscript progresses to the results and discussion. The results are still not streamlined and remain difficult to follow - the results section reads like a laundry list of exposure-outcome associations. Perhaps consider grouping the results by biologically relevant endpoints of interest (again this should be grounded by a clear pre-specified direction) and then by windows of exposure, rather than listing each chemical one by one down a list. The discussion also suffers from the same concern - at more than 2700 words, it is difficult to know what is important and why. I urge the authors to read this editorial by the previous Editor in Chief of Human Reproduction, Hans Evers, entitled "The Texas Sharpshooter Fallacy" ([https://doi.org/10.1093/humrep/dex103](https://doi.org/10.1093/humrep/dex103). I think most of the concerns I have raised in my first review and now in this second round stem from a the need for a clear a priori direction that guides the study and its communication. The findings of this study are relevant, important, and worthy of publication, however, in its current form, it lacks utility to the audience you wish to reach. Please consider re-packaging your results and discussion so that a primed reader can discern the results and their relevancy.

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