Reviewer's report

Title: A cross-sectional study of different patterns of oral contraceptive use among premenopausal women and circulating IGF-1: implications for disease risk.

Version: 2 Date: 25 March 2011

Reviewer: Andrea Arikawa

Reviewer's report:

Major compulsory revisions

- The purpose of this manuscript is to understand the effects of different patterns of OC use on IGF-1 levels and its influence on disease risk. Based on previous studies examining OC use and IGF-1 levels, the contribution of this manuscript towards new knowledge in the field seems negligible. In my opinion, the lack of information on the formulation of OC is a major flaw of the study design.

- Another major point is the fact this manuscript leaves the reader confused as to the role of IGF-1 on disease risk. High IGF-1 levels are associated with cancer risk but low IGF-1 levels are associated with heart disease. The authors need to present this issue in a way that will no confuse readers.

- In the discussion (second to last paragraph), the authors mention that the findings were not expected in the context of breast cancer, because IGF-1 levels are not higher in current or recent OC users. This issue needs to be further addressed in a lot more detail, because this is an important finding of this manuscript.

- Overall, the manuscript is very well written, but the background and discussion need to be focused and less confusing to the reader.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.