Reviewer’s report

Title: The effects of treatment with liraglutide on atherothrombotic risk in obese young women with polycystic ovary syndrome and controls

Version: 3 Date: 23 January 2015

Reviewer: Joanna Stewart

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Minoressential
While the authors have attempted to respond to my previous comments point 1 and 3 are still not sufficiently resolved.

1. While I agree that it is clear in the methods that both arms received liraglutide my concern was that the consequence of this is that you can not attribute changes over time to be as a result of receiving it. More care needs to be taken in wording conclusions both in the abstract and the discussion. The second sentence in the conclusion section of the abstract needs to be reworded to not state that 'liraglutide treatment was associated with ... - you could perhaps say in both groups there was ... Similarly in the discussion, second sentence - you can't say the treatment resulted in the changes - you can state that the changes occurred but not that they were a result of the treatment - it is not sufficient to include a caution in the limitations while wording the conclusions as if the study had tested something it was not designed to be able to test.

3. Although it has now been stated that the 2 groups were not one to one matched and the methods do state that they were recruited to be in the same age and BMI range the text still, in many places refers to age and BMI matched - The word matched should be changed throughout to say something like of similar age and weight

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests