Reviewer's report

Title: Estrogen Receptor 1 Gene Polymorphisms Are Associated with Metabolic Syndrome in Postmenopausal Women in China

Version: 0 Date: 07 Feb 2018

Reviewer: Dhanasekaran Bodhini

Reviewer's report:

Essential Revisions:
1. One of the major concerns is that correction for multiple testing has not been done. Conclusions should be drawn depending on whether the findings are statistically significant after correction.
2. The other major concern is whether the study has adequate power to arrive at a meaningful conclusion. Power calculation should be presented in the manuscript.
3. Was the genotyping checked by direct sequencing. This is very important as a quality control measure. Atleast 10% samples should be checked by sequencing.

Minor suggestions:
4. The size of fragments after restriction digestion to be mentioned in the methodology.
5. Comparison of biochemical characteristics genotypewise has been done on all study individuals. The study participants must also be classified into cases and controls and the biochemical characteristics can be compared genotypewise.
6. The results of LD estimation between the SNPs (D'/r2 values) should also be presented.
7. The title of the manuscript can be modified as only ESR1 gene polymorphisms have shown association and not the ESR2.

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.
Yes

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?
2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.
'I declare that I have no competing interests'

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal