Reviewer’s report

Title: Apolipoprotein E Gene Polymorphism and the Risk of Cardiovascular Disease and Type 2 Diabetes

Version: 1 Date: 05 Aug 2019

Reviewer: Lupe Furtado-Alle

Reviewer’s report:

The authors answered properly to this reviewer questions and corrected the pointed mistakes.

Some points still need to be taken into account before publication:

1) The text still needs important language corrections.

2) Hady-Weinberg equilibrium is a test for genotype distribution fitting and not for allele frequencies. Authors should correct the text bearing this distinction in mind.

3) I understood your reasoning regarding the use of cholesterol control drugs, but I think you may be losing some important information inside the patients group. The use of cholesterol control drugs may lead to a bias inside the patients group if you considering that the use of such medicaments may mask the effect of genotypes/alleles. I suggest you try to investigate (statistically) if you are not losing some relevant genetic effect by not correcting for the use of cholesterol control drugs inside the patients group.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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.

Yes

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:

Needs some language corrections before being published

**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/](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