Reviewer’s report

Title: Cholinergic receptor nicotinic alpha 5 subunit polymorphisms are associated with smoking cessation success in women

Version: 2 Date: 16 Aug 2017

Reviewer: David J. Vandenbergh

Reviewer's report:

The authors do not need to share unpublished data on phenotypes they wish to study in the future, only the data that would allow the study to be analyzed by independent investigators.

The authors' response that they did not perform any correction for multiple testing continues to be unacceptable. Doing so does not prevent the authors from having publishable data, but it aids the reader in understanding the significance to place on the analyses. They could use some other method than Bonferroni.

The lack of testing for genetic ancestry due to cost will be acceptable, given the correlation between self-report and genotype estimates of ancestry.

The results can be accepted in spite of the genetic ancestry issue.

General comments:

The ISSA score description remains inadequate. Please explain how the psychoactive effects of nicotine are assessed.

A simple statement concerning which diagnostic tools were used to assess anxiety and depression is still required.

The discussion still needs some statements interpreting the sex/gender limited effect based on their study.
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.

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/). 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.