Reviewer’s report

Title: Association of rs610604 in TNFAIP3 and rs17728338 in TNIP1 gene polymorphisms with psoriasis susceptibility: A meta-analysis of case-control studies

Version: 0 Date: 18 Dec 2019

Reviewer: Xuejun Zhang

Reviewer's report:

In this study, authors performed a meta-analysis to analyze the association of rs610604 in TNFAIP3 and rs17728338 in TNIP1 gene polymorphisms with psoriasis susceptibility. However, the following key issues should be solved.

1. The logic of the part of "introduction" was confusing. Multiple genes were identified with psoriasis in previous studies, more reasons should be presented in why the authors choose TNFAIP3 and TNIP1 into meta-analysis. And why authors only focused on the polymorphism of rs610604 and rs17728338 in these two genes respectively.

2. It was hard to understand why authors illustrate the "interrelation network of TNFAIP3 and TNIP1 with their nearest associated functional protein". It did not seem to be relevant with the purpose of this study. And the "interrelation" was not be describe clearly just by showing with a figure.

3. Including age, gender and other clinic characteristics of patients should be included for further analysis.

4. The result of this study showed the heterogeneity of rs610604 was 70%. Exploring the reasons of high heterogeneity is necessary. Different ethnics, age might affect the heterogeneity.

5. In addition to the funnel plot, quantitative detection method of publication bias should be added such as Egger's test. More details of sensitivity analysis need to be supplied in the part of "Results".

6. Functional analysis should be strengthened. The associations between the polymorphism of two variants (rs610604 and rs17728338) and psoriasis should be discussed in-depth.

7. Some details should be checked and revised. For example:

(1) In the part of "Data extraction", authors mentioned that "all necessary data from each candidate article including HWE results". However, missing value of HWE were found in Table 1 and 2.
(2) In the part of "Inclusion and exclusion criteria", authors mentioned that "published studies on the association of TNFAIP3 or TNIP1 polymorphisms with BD susceptibility". What is meaning of "BD"?

(3) In the part of "Introduction", Authors mentioned that "To data, five types of psoriasis have been identified: psoriasis vulgaris, guttate, flexural psoriasis, pustular psoriasis, pustular psoriasis." This statement is incorrect.

8. The paper needs to be revised by somebody who is English native speaking.

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.

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:

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