Reviewer's report

Title: The TXA2R rs1131882, P2Y1 rs1371097 and GPⅢa rs2317676 three-loci interactions may increase the risk of carotid stenosis in patients with ischemic stroke

Version: 2 Date: 24 Dec 2018

Reviewer: Li He

Reviewer's report:

1. In the Ethics statement section, the authors declared that "This study protocol was reviewed and approved by the Ethics Committee of the Ethics Committee of the Third Affiliated Hospital of Wenzhou Medical College and the People's Hospital of Deyang City", they should provide the approval certificate and ID number.

2. In the Study population section, the authors declared that "The diagnosis of IS is based on brain magnetic resonance imaging", this diagnostic criteria may not be suitable, according to the guidelines. What were the detailed diagnostic criteria of IS in this study?

3. In the inclusion criteria, the authors said that "IS in carotid artery territory", it was not clear in this way of saying. How about other arteries? Did they include IS only with carotid artery territory, or both with carotid artery and other arteries territory? There was the same problem in their exclusion criteria, "IS in vertebrobasilar territory".

4. In the Carotid ultrasonography section, "The patients with 15%-49% carotid stenosis or intracranial arterial stenosis were also excluded in this study", the authors should provide the (reference) link or tell us the reasons. Besides, "The patients with asymptomatic carotid stenosis were excluded in this study", but their exclusion criteria did not include these criteria.

5. What is the basis that choosing 28 randomly selected patients?

6. The sample size of this study is limited, so how about the power of the SNPs in the BDNF gene which included in this study?

7. In the methods section, the authors should provide their methods of DNA extraction.
8. Please give a brief description of the diagnostic criteria for each high-risk factor. If not described in this article, please comment in table 1.

9. In the result section, "While compared with patients carrying low-risk interactive genotypes of rs1131882, rs1371097 and rs2317676", there is no specific description in this article, Please describe in this article or comment in table 4, table 5.

10. Table 4 lacks the heading row.

11. It is suggested to streamline the results section, some of which can be described in detail in the discussion section.

12. In the result part, the author's narration is inaccurate, and the detailed description is suggested according to the locus. It should be described in detail the correlation of different SNP genotypes and combination of different SNP. There should be corresponding annotations for specific SNP genotypes under tables and supplementary notes for which no specific description in this paper.

13. There were not described whether to use statins, antiplatelet therapy, and their effect on arterial stenosis.

14. In this study, subjects and controls both are IS patients, so these words, "in Chinese population" in their title, may not be appropriate.

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.

No

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

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