Reviewer’s report

Title: A model to predict unstable carotid plaques in population with high risk of stroke

Version: 1 Date: 16 Jan 2020

Reviewer: Aldo Bonaventura

Reviewer's report:

The paper by Yin et al investigated a model for the prediction of carotid plaque instability in patients at high risk of stroke. I have some concerns about the study, which are listed below.

Methods- Controls have not been included. Why didn't you include age- and gender-matched controls? Please explain.- How was the CNSSPP structured? If possible, include the questionnaire as well as Supplementary Material: it may be of help to readers to better understand the paper.- Why was hs-CRP not collected? This represents a flaw. It is now considered the most important indicator of CV disease.

Statistics- Did you first check for normality since you chose to express continuous variables as mean and SD? Please explain.- No sample size is provided. This is welcome to improve the manuscript.- All in all, this section needs to be re-phrase as it is confusing in the present form.

Results- Please provide a diagram summarizing the total number of enrolled patients and those excluded with the reasons of the exclusion. This will make the reading of the results easier.- What about obesity that was not considered? Take a look to this paper: Cardiovasc Diabetol. 2018 Mar 29;17(1):46.- Which were the covariates considered for analyses in Table 3?- Table 3: the CI for the different ages are very wide, maybe it is worth considering age as a continuous variable rather than to categorize it. Please try to perform again the analysis following this indication.

Discussion- This section is too long and poorly focused on the results presented by the authors. Please change it accordingly.

General comments- A wide English editing is needed. Please consider to have the manuscript read and corrected by an English native speaker.

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.

No

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?

No
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:

Not suitable for publication unless extensively edited

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