Reviewer’s report

Title: A Risk Score for Predicting Atrial fibrillation in Individuals with Preclinical Diastolic Dysfunction: a retrospective study in a single large urban center in the United States

Version: 0 Date: 13 Oct 2018

Reviewer: Celestino Sardu

Reviewer's report:

Dear editor,

about the study entitled "A Risk Score for Predicting Atrial fibrillation in Individuals with Preclinical Diastolic Dysfunction: a retrospective study in a single large urban center in the United States ", enclosed my suggestions:

Please report more in detail study population characteristics, including the diagnostic criteria for each variables. As example, how did you have the diagnosis of obesity? What method did you use?

To study the predictor of AF is really interesting, and it may be used in clinical practice to reduce worse prognosis. However, in my opinion You have to diagnose AF as paroxysmal, persistent, and permanent, as suggested by international guidelines (European Heart Journal (2016) 37, 2893-2962 ). Therefore, please let me know in detail as first what kind of AF are you looking for in your study. Secondly, let me know the percentage of paroxysmal vs. persistent vs. permanent AF in your study population, and in addition the percentage of patients for each group of AF. In addition, if possible perform a statisticla analysis for each form of AF. Please respond. On other hand if you do not have these data it is a great study limitation.

Did you register your study? In what registry?


Conversely, the diabetes may also influence a pro-arrrhythmic status with autonomic dysfunction and this may favor AF burden, risk of AF events and clinicla outcomes, as evidenced by authors ( J Diabetes Complications. 2015 Jan-Feb;29(1):88-92. doi: 10.1016/j.jdiacomp.2014.09.002). What is your opinion about this point? Please discuss it, and clarify it.
It is not correct to report data about AF recurrences including paroxysmal, persistent and permanent AF all together. Apart from this, because your study population includes also AF recurrence after catheter ablation, in my opinion it is relevant to have data about the inflammatory status of study population, and diabetics. In fact, the inflammatory status may cause higher rate of AF recurrence in general population and in patients treated by catheter ablation (Am J Cardiol. 2017 May 1;119(9):1382-1386. doi: 10.1016/j.amjcard.2017.01.040). Please discuss this point and this reference.

Another point to discuss, is the use of continuous monitoring systems to detect AF events. In fact, these systems may help clinicians in the diagnosis of AF events, and subclinical AF events (Int J Clin Pract. 2016 Jul;70(7):569-76. doi: 10.1111/ijcp.12823). Did you use this kind of systems to detect AF recurrences or not? Please discuss this point.

In addition, a more clear measurements of study outcomes has to be included in this study. As example, outpatients’ clinic visits, ecg, ecg Holter, continuos monitoring etc. please include a sub-paragraph with a clear description of study and patients follow up.

Please re-write the Discussion in a more clear, short and well focused paragraph including the more relevant observation point, and "what is new vs. what is known".

Include high quality figures and tables. Actually this is not acceptable.

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?
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:

Acceptable

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.

None.

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