Reviewer’s report

Title: Glucose levels as a prognostic marker in patients with ST-segment elevation myocardial infarction: a case-control study

Version: 0 Date: 06 Nov 2015

Reviewer: Trayambak Basak

Reviewer's report:

There are some serious concerns which needs to be addressed before the manuscript can be considered for publication:

1. Diabetes is known for long as a traditional risk factor for cardiovascular disease and myocardial Infarction (MI). There are enough evidence in the literature also and also it is well understood in the field.

So the rationale of the study design is not appropriate in a case-control set up. It would make some sense, if the glucose levels are monitored in a prospective manner. Not just the day before the patients got admitted and also time based follow ups after the procedure. That may lead to interesting observation.

2. The sample size used in this study is not too large. Although a statistical power calculation should be performed.

3. For diabetic status; glycosylated hemoglobin HBA1c should be measured in all the patients.

4. Table 1 is really confusing and hard to understand.

5. Correlation performed in Table 5 have no statistical measures which is a serious concern. So the U shaped inference is far extrapolated I suppose. The authors should perform multiple testing and a proper statistical correlation to show a u shape curve.
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 recommend additional statistical review

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 have no conflict of interest

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.