Author’s response to reviews

Title: Dysglycemia and increased left ventricle mass in normotensive patients admitted with a first myocardial infarction: prognostic implications of dysglycemia during 14 years of follow-up

Authors:

Gokulan Pararajasingam (gokulan.pararajasingam@rsyd.dk; gokulan@hotmail.com)

Brian Løgstrup (bbl@dadlnet.dk)

Dan Høfsten (dan@hoefsten.dk)

Thomas Christophersen (thomas.broecher.christophersen@rsyd.dk)

Søren Auscher (sorenauscher@sol.dk)

Jørgen Hangaard (joergen.hangaard@rsyd.dk)

Kenneth Egstrup (kenneth.egstrup@rsyd.dk)

Version: 1 Date: 14 Feb 2019

Author’s response to reviews:

Dear reviewers and handling-editor

First of all, we would like to thank you for considering our paper for publication. The constructive criticism that we received is highly appreciated. We have looked into your criticism and have adapted our paper as requested. We believe that our paper has improved considerably.

The overall finding is unchanged. The relation between dysglycemia and left ventricle mass has not changed. It was possible to detect a significant association in patients with NEW T2DM in relation to all-cause mortality, but not any significant association in the other OGTT-groups. Increased rates of both MACE and mortality were observed, but dysglycemia did not predict these findings independently.

We found your criticism reasonable and every query has been answered individually.

The changes you requested are highlighted in the document.

Kind Regards

Gokulan Pararajasingam and the author team
Reviewer 1

1. The long-term follow-up period of the patients was not specified in the study. Please specify that.

- The long-term follow-up has been provided in the RESULTS-section and in TABLE 1.

2. In addition, your clinical prediction model is not correct. You should have Cox regression analysis instead of logistic regression. Moreover, in the logistic regression model you are choosing, it is not clear how you choose the variables and whether they are overfitting.

- The logistic regression model has been changed to a more appropriate cox proportional hazard model. This model is considered more suitable for regression analysis considering our follow-up time.

- The potential confounders in the cox proportional hazard model have also been specified in the METHODS-section.

- We did not evaluate whether our previous logistic regression model was overfitted, but the number of confounders was only 4. Considering the fact that we had 46 events of deaths and 80 events of MACE in the logistic regression model, we do not believe our previous model was overfitted.

- Figures have been added (Kaplan-Meier curves) in relation to all-cause mortality and MACE.

3. When the Cox regression is performed, the selection of variable should be followed by the rule 1:10.

- We have adapted our cox proportional hazard model, so the number of confounders does not exceed “the rule of ten”. We have specified this in the METHODS-section.

4. Author names are not written in the ninth (9. ref) reference. Please write the names of the authors. I think this paper can be accepted after revisions.

- The relevant author group has been added to the reference.

Reviewer 2

1. I suggest to better discuss the role of hyperinsulinemia (since the increase in LVM is more pronounced in patients with overt T2DM).
- A separate section has been added in the DISCUSSION-section.

2. In the definition of normotensive patients, were they excluded if during the index admission pressure values were constantly high (i.e. if unknown hypertension was discovered?)

- A section has been added to HYPERTENSION in the METHODS-section emphasizing the term hypertension in our paper.

3. I also suggest to improve and join together the tables.

- We have joined many of the tables, so they are presented as 2-in-1.