Reviewer’s report

Title: Left Ventricular Diastolic Dysfunction in Nonhuman Primate Model of Dysmetabolism and Diabetes

Version: 0 Date: 17 Aug 2015

Reviewer: Bledar Daka

Reviewer's report:

Dear editor,

The manuscript "Left ventricular diastolic dysfunction in Nonhuman Primate model of dysmetabolism and diabetes" investigates the association between diabetes and LV diastolic dysfunction in 89 cynomolgus monkeys. The results of this study might be of interest in the research of the field however some major concerns should be taken in consideration by the authors.

Major concerns:

1. The selection: It must be stated how the monkeys were chosen to the study.

2. It is stated in the manuscript that the typical value of FBG is about 20mg/dl however in table 1 even in the group without diabetes the levels are about 66mg/dl. Are these monkey somehow special? This needs to be stated and described in the methods.

3. The authors decide to give cut-offs for the diabetes in the monkey. These cut-offs are at 4 to 5 folds higher than the normal levels of FBG in a normal monkey-population. If the population you choose has levels of FBG that are very high why don't compare the tertiles or quartiles? Is there any reference for the chosen cut-offs? Was the choice of cut-offs made before or after the echocardiography-measurements? There must be a clear statements in this points in order to better understand the analyses.

4. P. 10 In the first paragraph the association between low EF and age, and HbA1c is done using cut-offs not described previously in the methods. It should be done before presenting these results

Minor concerns:

1. The use of the abbreviations in the abstract make it difficult thread and to follow the redline.
2. A multivariable logistic regression analysis is mentioned in the abstract but it is not stated whether the association between DM and LV diastolic dysfunction was significant after adjustments. This is not mentioned in the results.

3. The sentence of the aim at p 5 second paragraph must be more clear and probably shorter.

4. Was the diagnosis DM based in one measurement?

5. P 10 It is stated that gender seemed not an independent predictor of LV dysfunction: While the result are not shown still a gender stratified analyses is necessary in this context as the impact of diabetes in humans is very different with regard to the sex.

6. p10 last paragraph: it is stated that 2 representative monkeys with DM ...How were they chosen? That needs a clearer statement on why you chose them

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.

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 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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