**Reviewer’s report**

**Title:** Prevalence of cardiovascular risk factors in non-menopausal and postmenopausal inpatients with type 2 diabetes mellitus in China

**Version:** 0 **Date:** 11 Aug 2019

**Reviewer:** Silvia Pieralice

**Reviewer's report:**

1. For the present study, a mixed group of non-menopausal and postmenopausal women with type 2 diabetes was evaluated. It is well known that hypoglycemic agents are different in term of cardiovascular safety and protection, as well as in term of hypoglycaemia risk, which is an independent risk for cardiovascular events. The authors should specify the hypoglycemic therapy of patients enrolled and report the percentage of sulfanylureas (SU) treatment in the different groups.

2. Have insulin-treated patients been excluded from the analysis?

3. The authors state that "previous study demonstrated that the incidence of CVD among postmenopausal women were higher in women who did not experience menopause " (Pag 2, lines 36-37). This sentence can be quite ambiguous, please clarify the sentence.

4. In this survey, history of ketoacidosis was significantly higher in non-menopause group compared to others. A recent post-hoc analysis of UKPDS found a lower long-term risk of cardiovascular disease in individuals with T2D having ≥1 autoantibody test positive compared to autoantibodies test negative patients (Diabetes Obes Metab, 2019). Was there any difference of autoantibodies positivity and C-peptide levels in non-menopause group vs menopause groups?

5. Pag. 11, line 7-29. Authors found a higher risk of CVD among diabetic patients who experienced menopause compared with non-menopausal women. However, due to the observational nature of the study, the mechanisms proposed to explain the association between higher risk of CVD, menopausal status and FPG is merely speculative. Indeed, no measures of sex hormones have been performed.

**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.

Yes

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 declare that I have no competing interests
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.