Reviewer’s report

Title: Quality Measure and Weight Loss Assessment in Patients with Type 2 Diabetes Mellitus Treated with Canagliflozin or Dipeptidyl Peptidase-4 Inhibitors

Version: 0 Date: 18 Jan 2017

Reviewer: Shinya Furukawa

Reviewer's report:

The weight loss and blood pressure control by SGLT2 inhibitor had been reported in many studies. However, the comparison between SGLT2 inhibitor and DPP4 inhibitor in a real-world setting was very important. This paper was well written and interesting. The authors showed the effect of canagliflozin compared to DPP-4 inhibitor among patients aged less than 65 years in this study.

In my opinion, it requires major revision before ready for publication.

Major

The authors did not mention the differences between alogliptin, linagliptin, saxagliptin, and sitagliptin. The previous study showed the incidence of hospitalization for heart failure among patients with saxagliptin was higher than those without. While incidence of hospitalization for heart failure in sitagliptin group was not significant compared to non-sitagliptin group. The authors should show the results between sitagliptin and canagliflozin.

The authors did not make adjust for family history of diabetes, renal function, waist, economic status and social insurance.

The dose of each drug was important to discuss the effect for glycemic control. However, the authors did not mention the maximum doses of canagliflozin and sitagliptin.

Incretin therapy among Asian patients with T2DM was effective for control hyperglycemia compared to non-Asian patients. I want to know the effect of SGLT2 inhibitor among Asian populations.

The incidence of adverse events was important for estimating the drug. The authors should show the adverse events.

The authors might mention the differences between canagliflozin and sitagliptin among patient aged 65 years or older.
Minor

Page 7 Line 20

The authors should not use "blood sugar level".

**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:

Acceptable

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