Reviewer’s report

Title: Two-year assessment of the efficacy and safety of sitagliptin in elderly patients with type 2 diabetes: Post hoc analysis of the ASSET-K study

Version: 2 Date: 27 March 2015

Reviewer: Masahito Ogura

Reviewer’s report:

Comments to the Author

Dr. Umezawa et al demonstrated that sitagliptin is a useful oral hypoglycemic drug for elderly Japanese patients with type 2 diabetes. Their report is interesting. However, I have some concerns regarding this manuscript as following.

Major

Comment #1

Poor glycemic control (line 137) should be defined exactly.

Comment #2

What is the definition of hypoglycemia in this manuscript?

Comment #3

I think figure 1-3 include the information about table 2. It is preferable that standard deviation of each data was presented by error bar in each figure 1-3 and table 2 is removed (or shown in supplemental data).

Comment #4

The type and dose of sulphonylurea used in each age group is recommended to be shown.

Comment #5

It is mentioned that 831 patients were enrolled in this study. However figure 4 exhibits the number of patient is 1327. Why such a discrepancy occurred?

Comment #6

Limitation of this study should be described in manuscript.

Minor

Comment #1

It is mentioned that “approximately 9.5 million Japanese people could be strongly suspected of having diabetes, while the total number with suspected diabetes was 20.5 million, including 11 million persons who were possibly suspected to
have it.” (Line 90-92). This sentence is redundant.

Comment #2
“pancreas” (line 119 and 248) should be replaced to “pancreatic beta cell”

Comment #3
What is the exact meaning of the word “overseas” (line 120)? In addition, where is there have only been a few reports about use of DPP-4 inhibitors in elderly patients with T2DM (line 122-123), in Japan?

Comment #4
The correct one is not cAMC (line 232) but cAMP.

Comment #5
Ref.29 has reported sulphonylurea binds to Epac2 (cAMP effector protein) and stimulate insulin secretion from pancreatic beta cell. I think description in the manuscript is incorrect. Please check the original text.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests’