Reviewer's report

Title: Efficacy of Alogliptin in Type 2 Diabetes Treatment: A Meta-analysis on Randomized Double Blind Controlled Studies

Version: 1 Date: 11 October 2012

Reviewer: Apostolos Tsapas

Reviewer's report:

Major Compulsory Revisions

Introduction, paragraph 3: while commenting about safety and efficacy of DPP-4 inhibitors, it is advisable to refer to existing recent SRs regarding this and not narrative reviews or consensus papers (i.e. citation 11).

Study selection: please rephrase to make explicit that these were inclusion criteria, and it is not just description of the baseline characteristics of studies included.

Data synthesis and statistical analysis, paragraph 3: «Since the studies were conducted with different drug regimens and patients differ in experience for antidiabetic drugs,...». Please rephrase – explain what is meant more explicitly.

Methods (search to analysis): please explain who did every part, whether it was done by one or two reviewers, how did they work, how was disagreement resolved etc

Results, paragraphs 3 and 4: were subgroup analyses, sensitivity analyses, meta-regression etc predefined, or were they decided post-hoc? How did the authors correct for all these exploratory analyses?

Discussion, paragraph 1: put findings in context to other meta-analyses regarding all DPP-4 inhibitors.

Discussion, paragraph 5: Please use more recent findings.

Please provide table with PRISMA checklist points assessed and respective page/paragraph.

What is the clinical relevance of outcomes assessed? Please comment. Why use both HbA1c and FBG? CVD mortality is more patient important. Did the authors extract data for it? If not, why?

Minor essential revisions

Methods, search, paragraph 1: correct dipeptidyl to dipeptidyl.

Text needs to be checked by english native speaker – please correct text accordingly (i.e. standardized mean difference etc..)

Discretionary revisions

Data synthesis and statistical analysis, paragraph 3: Is funnel plot / visual inspection good enough for assessment of publication bias? See relevant articles
in BMJ and consider using formal assessment.
It would be helpful if the authors could list the details of the search strategy (syntax etc) in an appendix.
Did the authors assess risk of bias in their findings? Why/Why not? How does this affect the validity of findings?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

In the past Imy university has received research support from Novo Nordisk and Novartis.