Reviewer’s report

Title: Use of metformin or other antidiabetic drugs is not associated with a decreased risk of thyroid cancer: a case-control study

Version: 2
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Reviewer: Mariusz Dabrowski

Reviewer’s report:

In my opinion there is no need for major compulsory revisions. However, some corrections and amendments to improve the quality of paper are required:

1. The case and control groups were adequate and properly designed. BMI is considered as a risk factors for several types of cancer, including thyroid gland cancer. This study confirmed that finding. Diabetes, although data in this field are scarce, seem to be not significantly associated with thyroid cancer risk. This study presented the same finding. Metformin appeared to has no (or even deleterious) impact on thyroid cancer risk both among all study subjects as well as in diabetic population.

However, for the study purpose, in my opinion, only data regarding antidiabetic drugs use among diabetic subjects are relevant and these data are the most important finding of this study (usually people without diabetes do not use such medications). Taking this into consideration, the primary objective of this study should be limited to diabetic population.

2. From this point of view, table 2 is redundant.

3. According to what was mentioned above, in abstract data for diabetic (and not total) population should be presented

4. Obesity was associated with increased risk of thyroid cancer in all study population. Additional analysis regarding impact of obesity on this risk among diabetic subjects would be also interesting.

Level of interest: An article of importance 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 in the area covered by this paper