Reviews and response

**Reviewer 1:**

**Scientific Quality:** Grade C (Good)

**Language Quality:** Grade B (Minor language polishing)

**Conclusion:** Minor revision

Currently, there is limited real clinical data proving the excellent therapeutic effects of using semaglutide in diabetes management. Most studies are predominantly randomized controlled trials and observational research. This article retrospectively studies the effectiveness and safety of using semaglutide in treating diabetes patients at a large academic hospital in the United Kingdom. Data on glycated hemoglobin (HbA1c), weight, and insulin dose adjustments were collected at the sixth month, twelfth month, and the latest follow-up after the use of semaglutide medication. The data indicates that, compared to RCTs and other observational studies, the use of semaglutide in real-world diabetes management leads to better clinical and biochemical results, with an average weight loss of 12.3%, an average HbA1c improvement of 14.5 mmol/mol (over one year), and an average reduction in insulin dose of 18.6 units. The article also mentions relevant limitations, such as insufficient data, the inability to obtain sufficient data on cardiovascular metabolic parameters, and inadequate reporting of adverse events in case records, resulting in a lower observed incidence of side effects. Here are some suggestions I would give to the authors: First, the article mentions that researchers followed up with patients three times at the sixth month, twelfth month, and the latest follow-up after using semaglutide, with the HbA1c indicator showing a slight increase in the last follow-up compared to the previous one. Therefore, researchers might consider increasing the frequency of follow-ups to obtain more comprehensive and sufficient data. Second, the future directions of this study and related research to be conducted next can be further elaborated.

**Answer:**

Thanks for the encouraging comments and suggestions for modifications.

Unfortunately, we don’t have meaningful data for follow ups except for the above follow up periods mentioned in the manuscript (6 months, 12 months and latest). There were at least annual follow up for some of the patients but as the numbers were insufficient for meaningful data capture and analysis, we were unable to get those in the paper.

We have mentioned this as another limitation of the study in the revision.

We have now added new sentences in the discussion and conclusion to update the implications of this study and direction for future research in the revision as suggested by the expert reviewer.

Hope the revision meets the requirements of the Journal.

**Editor’s comments**
Specific comments:

(1) Please provide the Figures cited in the original manuscript in the form of PPT. All text can be edited, including A,B, arrows, etc. With respect to the reference to the Figure, please verify if it is an original image created for the manuscript, if not, please provide the source of the picture and the proof that the Figure has been authorized by the previous publisher or copyright owner to allow it to be redistributed. All legends are incorrectly formatted and require a general title and explanation for each figure. Such as Figure 1 title. A: ; B: ; C: .

Answer: The figures are now provided as power point slides. But please note that the figures can’t be decomposed as they are created by statistical software.

(2) The “Article Highlights” section is missing. Please add the “Article Highlights” section at the end of the main text (and directly before the References).

Answer: This is now added to the paper.

(3) The structure of Abstract does not meet the requirements. Please add "AIM" to Abstract.

Answer: The Aim of study is now added to abstract.

(4) Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

Answer: The table files are now provided as standard table files separately.

7 Recommendation: Conditional acceptance.