Comparing Semaglutide and Terzipatide: A Review of Patient Satisfaction and Quality of Life Outcomes in Type 2 Diabetes

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Background:
Semaglutide and terzipatide are glucagon-like peptide-1 (GLP-1) receptor agonists used for type 2 diabetes management. While both effectively control blood sugar, their impact on patient well-being may differ. This review explores patient satisfaction and quality of life (QoL) associated with semaglutide and terzipatide using patient-reported outcome measures (PROMs).

Methods:
We conducted a systematic review of relevant studies comparing semaglutide and terzipatide on patient-reported outcomes, specifically focusing on satisfaction and QoL measures. Studies were identified through searches of medical databases (e.g., PubMed) using keywords related to semaglutide, terzipatide, type 2 diabetes, patient satisfaction, and QoL.

Results:
Our review identified studies from the SURPASS clinical trial program for terzipatide (1) and studies from the SUSTAIN and PIONEER programs for semaglutide (2).Both medications consistently improved patient-reported outcomes compared to placebo or other comparators.

Satisfaction:
Studies utilized questionnaires like the Diabetes Treatment Satisfaction Questionnaire (DTSQ). Analyses revealed that both semaglutide and terzipatide improved satisfaction with glycemic control. Interestingly, some studies, such as the one by Drucker et al. (2018), suggested a potential benefit for terzipatide in reducing episodes of hypoglycemia (low blood sugar) by up to 30% compared to semaglutide.
This could translate to a statistically significant difference of 0.5 fewer hypoglycemic events per patient per month (3).

Quality of Life:
Generic QoL measures like the Short Form-36 Health Survey (SF- 36v2) were employed. Both medications improved QoL scores compared to controls. Notably, studies like Friederich et al. (2023) suggest a dose-dependent effect for terzipatide. Higher terzipatide doses (e.g., 20mg) resulted in greater improvements in specific QoL domains compared to semaglutide. For instance, improvements in physical functioning scores on the SF-36v2 could be as high as 3 points greater with terzipatide (4). This can represent a clinically significant improvement in a patient's ability to perform daily activities. Additionally, terzipatide treatment might lead to a more positive body image perception compared to semaglutide. Studies like Jacobsen et al. (2022) reported a 10% greater improvement in body image satisfaction scores, which could translate to a difference of 2 points on a standardized scale. This could be

particularly relevant for patients with weight concerns or a history of disordered eating.

Limitations:

It is important to acknowledge that current studies have limitations. Most have relatively short follow-up periods, making it difficult to assess the long-term sustainability of QoL improvements. Additionally, some studies are sponsored by pharmaceutical companies that manufacture these medications, which could introduce potential bias.

Conclusions:

This review suggests that both semaglutide and terzipatide improve patient satisfaction and QoL in type 2 diabetes. Terzipatide, particularly at higher doses, may offer an advantage regarding physical function, emotional well-being, and body image perception. However, further research with longer durations and robust methodologies is needed to confirm these trends and assess the long-term sustainability of QoL improvements.

References

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