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The Impact of GLP-1 Receptor Agonists on Physical Functioning and Quality of Life in Adults with Obesity: A Narrative Review

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ABSTRACT

Background. Obesity is a chronic disease associated with impaired physical functioning and reduced quality of life. GLP-1 receptor agonists have emerged as an effective therapeutic option for weight reduction and may also provide additional benefits in these areas.

Aim. The aim of this study was to present the current state of knowledge on the effects of GLP-1 receptor agonists on physical functioning and quality of life in adults with obesity.

Material and methods. This study is a narrative literature review. The analysis was based primarily on publications identified in PubMed, as well as on full-text articles available in PubMed Central (PMC) and on publishers' websites. Publications from 2021–2025 concerning adults with overweight or obesity were primarily included.

Results. Available evidence indicates that GLP-1 receptor agonists, particularly semaglutide, effectively reduce body weight and may also have favorable effects on physical functioning

and quality of life. The most promising findings concern improvements in patient-reported physical functioning, limitations in daily activities, and weight- and health-related quality of life. Limitations of therapy include adverse effects, the possibility of weight regain after treatment discontinuation, high cost, and limited availability of these agents.

Conclusions. The evaluation of the efficacy of GLP-1 receptor agonists should not be limited solely to body weight reduction, but should also take into account the impact of therapy on physical functioning and quality of life.

Keywords: obesity, GLP-1 receptor agonists, semaglutide, physical functioning, quality of life, narrative review

1. Introduction

Obesity is a chronic, progressive, and relapsing disease that does not resolve spontaneously and requires targeted therapeutic interventions (1). According to the WHO definition, it is characterized by an abnormal, excessive, and health-damaging accumulation of adipose tissue that develops as a consequence of a long-standing positive energy balance. In clinical practice, the diagnosis of obesity in adults is most commonly based on a body mass index (BMI) of at least 30 kg/m² (1). The disease arises from the interplay of environmental, hormonal, genetic, psychological, and social factors, while excess energy stored in adipocytes initiates pathophysiological processes characteristic of obesity (1,2).

The clinical significance of obesity extends far beyond increased body weight alone. This disease increases the risk of numerous complications, including type 2 diabetes, hypertension, cardiovascular disease, atherogenic dyslipidemia, metabolic dysfunction-associated steatotic liver disease, osteoarthritis, obstructive sleep apnea, and certain cancers (1). Obesity is also associated with impaired physical functioning, increased mortality, reduced productivity, lower quality of life, and a substantial economic burden on the healthcare system (3,4). This problem is becoming increasingly widespread at the population level, as the prevalence of obesity continues to rise (1,3).

One important consequence of obesity is functional limitation. Individuals with obesity more often have lower levels of physical activity and are more likely to lead a sedentary lifestyle than

individuals with normal body weight (5,6). A meta-analysis including adults and older adults showed that 31% of participants with obesity exhibited sedentary behavior and 43% did not achieve the recommended level of physical activity; obesity itself was significantly associated with both a sedentary lifestyle and physical inactivity (5). As BMI increases and obesity becomes more severe, the likelihood of activity restriction also rises, while pain, comorbidities, and limited energy, time, and motivation may further hinder movement (6). Psychological barriers are also important, including fear of pain, injury, falling, or exertion itself, which may lead to avoidance of physical activity (7).

Obesity is also consistently and adversely associated with health-related quality of life, and the severity of this relationship generally increases with BMI (8,9). In population-based studies, individuals with obesity and severe obesity had lower quality-of-life scores than those with normal body weight, and high BMI remained independently associated with worse quality-of-life ratings even after adjustment for other health-related and demographic factors (8). This impairment particularly affects the physical domain, but may be further aggravated by coexisting chronic diseases, especially mental and somatic disorders (8,9).

The cornerstone of obesity treatment remains lifestyle modification, including changes in dietary habits, increased physical activity, and psychological and behavioral support. In clinical practice, however, behavioral and lifestyle interventions alone often yield limited effects; therefore, pharmacotherapy becomes necessary in some patients and surgical treatment in selected cases (1,4). At the same time, it has been shown that body weight reduction and BMI reduction may lower the frequency of obesity-related complications (4).

In recent years, GLP-1 receptor agonists have attracted particular attention and have assumed an important place in contemporary obesity treatment. GLP-1 plays a significant role in the regulation of metabolic processes, and drugs acting through this pathway exert both peripheral and central effects, leading, among other outcomes, to appetite suppression and reduced food intake (10,11). For this reason, agents from this class, originally used mainly in the treatment of type 2 diabetes, have also found application in obesity management (10). Review evidence further indicates that GLP-1-targeted therapy may, in addition to reducing body weight, provide additional metabolic benefits, such as improved lipid profile and lower blood pressure (11).

Although the efficacy of GLP-1 receptor agonists is most often assessed through the lens of body weight reduction, this perspective does not fully reflect the clinical significance of therapy (12,13). It is increasingly emphasized that patient-perceived outcomes are equally important, including improved physical functioning, easier performance of daily activities, and favorable changes in quality of life and patient-reported outcomes (13,14). This is particularly relevant in

obesity, which in itself worsens physical functioning and reduces quality of life, especially in the physical domain (9).

2. Aim of the study

The aim of this study was to provide a concise overview of current knowledge on the effects of GLP-1 receptor agonists on physical functioning and quality of life in adults with obesity, with particular emphasis on the importance of these effects in the assessment of therapeutic efficacy.

3. Materials and methods

This paper is a narrative review of the literature. The analysis was based on publications concerning the clinical significance of obesity, its functional consequences, health-related quality of life, and the role of GLP-1 receptor agonists in the treatment of adults with obesity. The literature search was conducted primarily in PubMed, and when full-text articles were available, PubMed Central (PMC) as well as materials provided by publishers and scientific institutions were also used. Current Polish clinical recommendations for the management of obesity available through the Medycyna Praktyczna service were also included.

The literature search was performed in March 2026 using search terms including, among others: obesity, GLP-1 receptor agonists, semaglutide, tirzepatide, physical functioning, physical activity, quality of life, health-related quality of life, body composition, adverse effects, weight regain, and lifestyle intervention. Publications from 2021–2025 were primarily included in order to reflect the current state of knowledge as accurately as possible. In justified cases, publications outside this time range were also considered if they had substantial clinical or methodological relevance.

Publications in Polish and English concerning adults with overweight or obesity were eligible for analysis. The included sources comprised clinical guidelines, randomized trials, post hoc analyses, narrative reviews, systematic reviews, meta-analyses, and study protocols, provided they addressed physical functioning or quality of life as relevant outcomes. The selection of the literature was purposive and guided by the topic of the paper.

Because of the narrative nature of this review, no formal study-selection procedure according to the PRISMA framework was applied, no quantitative synthesis of results was performed, and no formal risk-of-bias assessment was conducted. The aim of the analysis was to synthesize the most important and most current evidence relevant to the evaluation of the effects of GLP-1 receptor agonists on physical functioning and quality of life in adults with obesity. Data on tirzepatide were included as supportive evidence, as an important reference point for

contemporary incretin pharmacotherapy, although this drug is not a classical GLP-1 receptor agonist. Nevertheless, GLP-1 receptor agonists remained the main focus of the analysis.

4. Main body

4.1. Functional consequences of obesity and their clinical significance

The functional consequences of obesity are not limited to increased body weight itself, but also include substantial limitations in daily activity, physical functioning, and the ability to engage in movement. Individuals with obesity are more likely to lead a sedentary lifestyle and less likely to achieve the recommended level of physical activity, and the risk of such difficulties increases with higher BMI and greater obesity severity (5,6). Reduced activity is influenced by both somatic factors, such as pain and comorbidities, and practical and psychological barriers, including lack of energy, time, motivation, and social support (6,7).

The clinical importance of these disturbances lies in the fact that they translate into poorer everyday functioning, reduced fitness, and difficulty performing routine tasks. In some patients, an additional problem may be the coexistence of reduced muscle mass or muscle strength, characteristic of sarcopenic obesity, which is associated with a more unfavorable functional profile than obesity alone (15). Functional limitations are also closely linked to impaired health-related quality of life, especially in the physical domain, which indicates that the clinical assessment of a patient with obesity should not be limited solely to body weight or BMI measurement (5,9).

4.2. GLP-1 receptor agonists: mechanism of action and place in therapy

GLP-1 receptor agonists constitute an important group of drugs used in contemporary obesity treatment. Their mechanism of action involves both the central nervous system, where they affect appetite control and satiety, and the gastrointestinal tract, where they delay gastric emptying and thereby reduce food intake (11,16). These drugs also exert favorable effects on glucose metabolism by increasing insulin secretion and reducing glucagon secretion; accordingly, they were initially used primarily in the treatment of type 2 diabetes and later also in obesity management (11).

The development of long-acting GLP-1 analogues, such as liraglutide and semaglutide, enabled more effective use of this therapeutic pathway in clinical practice (16). At present, GLP-1 receptor agonists occupy an important place in obesity therapy, particularly as an adjunct to lifestyle interventions, and the development of new incretin-based agents further strengthens the importance of this treatment strategy (11,16).

4.3. The effect of GLP-1 receptor agonists on body weight reduction and body composition

GLP-1 receptor agonists are among the best-documented pharmacological methods supporting obesity treatment. Their action leads to reduced appetite, earlier satiety, and lower food intake, which translates into clinically meaningful body weight reduction (17,19). Among the available studies, the effects of semaglutide have been particularly well described; when combined with a lifestyle intervention, semaglutide produced a substantially greater decrease in body weight than placebo. This benefit concerned not only the mean change in body weight, but also a greater proportion of patients achieving clinically meaningful reductions from baseline, such as at least 5%, 10%, or 15% (12).

The significance of these findings extends beyond the change in the number of kilograms alone. Greater body weight reduction may promote improvement in obesity-related parameters, including BMI and selected cardiometabolic indicators, thereby increasing the clinical value of therapy (12,17). At the same time, the durability of the effect remains strongly linked to treatment continuation. In the STEP 4 trial, participants who continued to receive semaglutide after the initial treatment period maintained further weight loss, whereas weight regain was observed after drug discontinuation, indicating that maintenance of the therapeutic effect largely depends on continued pharmacotherapy (18).

However, the evaluation of the efficacy of GLP-1 receptor agonists should not be limited solely to the change in body weight. Increasing attention is being paid to the effect of treatment on body composition, because from a clinical perspective it is important not only how many kilograms a patient loses, but also what proportion of this reduction consists of fat mass and what proportion consists of lean mass. Available data suggest that GLP-1RA therapy may be associated with favorable changes in body composition; however, this area remains less well understood than weight-loss efficacy itself and requires further study (17,21). This issue is of particular practical importance because maintaining the most favorable possible balance between fat mass reduction and preservation of muscle mass may affect later physical functioning, exercise capacity, and the ability to engage in activity (21).

4.4. Impact on physical functioning

Available data suggest that the effect of GLP-1 receptor agonists in obesity treatment is not limited exclusively to body weight reduction, but may also include improved physical functioning. This is particularly well illustrated by the analysis of the STEP 1–4 trials, in which not only weight-related effects but also patient-reported outcomes concerning physical

functioning and quality of life were assessed. In this analysis, semaglutide 2.4 mg was associated with greater improvement in physical functioning than placebo, and favorable changes more often reached the level considered clinically meaningful. Improvements in physical functioning were accompanied by favorable changes in weight-related quality of life and health-related quality of life, indicating that the therapeutic effect may be perceived by patients across a broader range of day-to-day functioning (14).

The practical relevance of these observations is well illustrated by the STEP 9 trial conducted in individuals with obesity and knee osteoarthritis. In this group, once-weekly semaglutide led to greater improvement in knee pain and joint function than placebo, together with greater body weight reduction (20). These findings are of major clinical significance because in patients with obesity, coexisting musculoskeletal complaints often further limit mobility, exercise tolerance, and the ability to engage in activity. These observations therefore suggest that therapy with GLP-1 receptor agonists may improve physical functioning also in situations in which excess body weight coexists with a condition that directly impairs motor performance.

It must be emphasized, however, that the number of studies specifically designed to assess physical function after treatment with GLP-1 receptor agonists remains limited. This is confirmed by the published protocol of a randomized trial in older adults with overweight and insulin resistance, in which outcomes such as 6-minute walk distance, handgrip strength, and the Short Physical Performance Battery were planned for assessment (21). The very inclusion of these endpoints shows that physical functioning is increasingly being treated as an important treatment outcome, but this area still requires further investigation, especially with the use of objective functional tools and in more diverse patient populations.

Based on current knowledge, it can therefore be cautiously concluded that GLP-1 receptor agonists, particularly semaglutide, may contribute to improved physical functioning in adults with obesity. To date, the strongest evidence concerns improvements assessed by patients themselves and in selected clinical groups, such as individuals with knee osteoarthritis; accordingly, further studies are needed to better define the magnitude of this effect and its significance in everyday clinical practice (14,20,21).

4.5. Impact on quality of life

Quality of life is an important endpoint in the assessment of obesity treatment efficacy from the patient’s perspective. Available evidence indicates that GLP-1 receptor agonists may also provide benefits in this area.

In an analysis covering the STEP 1–4 trials, treatment with semaglutide 2.4 mg was shown to improve both weight-related quality of life and health-related quality of life compared with placebo. Favorable changes were also seen in physical functioning, suggesting that patients may perceive the effects of treatment not only as weight loss, but also in terms of everyday activities and overall comfort of life (14).

A similar pattern was observed in the STEP 6 trial conducted in an East Asian population. This study showed that semaglutide may improve the overall score for weight-related quality of life, as well as selected psychosocial and physical domains (22). At the same time, these results indicate that the effect of treatment on quality of life is not uniform across all domains. The most visible benefits concerned areas related to physical functioning and to the impact of body weight on daily life, whereas improvement in other dimensions was less pronounced. This means that the response to treatment with regard to quality of life may vary depending both on the assessment instrument and on the characteristics of the study population.

The importance of these observations is reinforced by analyses based on health utility measures. Within the STEP program, semaglutide treatment was shown to improve health utility scores, indicating that the benefits of therapy can be captured not only by classical quality-of-life questionnaires, but also by more general measures of health status from the patient's perspective (23). However, the magnitude of improvement was not the same in all studies, which shows that the impact of treatment on quality of life is multidimensional and cannot always be described by a single indicator.

Results concerning tirzepatide also deserve attention and may be regarded as an important reference point for contemporary incretin therapy. In the SURMOUNT-1 trial, this treatment was associated with improved patient-reported outcomes encompassing physical functioning, psychosocial well-being, and overall health-related quality of life (24). Importantly, greater body weight reduction was usually associated with greater improvement in quality of life. This suggests that subjectively perceived benefits are related, at least in part, to the magnitude of the weight-loss effect, although they cannot be reduced to it entirely.

Taken together, the available data indicate that GLP-1 receptor agonists may have a beneficial effect on quality of life in individuals with obesity, although this improvement does not affect all dimensions equally. The best-documented changes appear to concern physical functioning, the impact of body weight on daily life, and selected psychosocial aspects. For this reason, the assessment of the efficacy of this class of drugs should take into account not only body weight reduction, but also treatment effects perceived by the patient, because these largely determine the true clinical significance of therapy (14,22,23,24).

4.6. Limitations of therapy and controversies

Despite the high efficacy of GLP-1 receptor agonists in the treatment of obesity, this therapy is associated with important limitations and remains the subject of several controversies. One of the most important issues is the durability of the treatment effect, because weight regain is frequently observed after semaglutide discontinuation. In the STEP 1 extension study, participants regained approximately two thirds of the body weight they had previously lost within one year after stopping treatment, and some metabolic benefits also diminished, underscoring the chronic nature of obesity and suggesting the need for long-term therapy (25). A similar line of reasoning emerges from a more recent meta-analysis on GLP-1RA discontinuation, which points out that previous studies have focused more often on weight reduction itself than on maintenance of the effect after the end of pharmacotherapy (26).

Another limitation is adverse effects, mainly gastrointestinal. Clinical trials and meta-analyses most commonly report nausea, vomiting, diarrhea, and constipation, and semaglutide treatment has also been associated with a higher risk of discontinuation due to adverse events; some analyses have additionally suggested a higher risk of serious adverse events, although these remained rare (12,27). At the same time, a safety review of semaglutide indicates that most of these symptoms are mild to moderate and transient, but it is also necessary to consider the possible increased risk of gallbladder disease and the fact that some safety issues have not yet been definitively clarified (28).

Controversies also concern the interpretation of effects beyond weight loss. Although physical functioning and quality of life are increasingly being assessed, there are still fewer studies focused on these endpoints than on body weight change, and recent reviews suggest that the effect of semaglutide on quality of life is not always unequivocal and in some analyses may remain limited or uncertain, alongside an increased risk of adverse events leading to treatment discontinuation (29). Practical barriers to therapy also include the high cost of treatment and limited availability of these agents, because the growing demand for GLP-1RAs may exceed supply, thereby hindering the widespread use of these drugs in routine clinical practice (30).

4.7. The importance of combining pharmacotherapy with physical activity and lifestyle change

Combining GLP-1 receptor agonists with physical activity and lifestyle modification is of major clinical importance because pharmacotherapy alone should not be regarded as a stand-alone solution to obesity. Current guidelines indicate that the foundation of treatment remains interventions concerning diet, physical activity, and health behaviors, whereas medication

should serve as an adjunct to these measures (31). Review data further suggest that combining GLP-1RAs with lifestyle modification is an effective and feasible strategy in practice, and that the benefits of such an approach include not only body weight reduction but also improvement in selected cardiometabolic parameters (32).

At the same time, the loss of kilograms alone does not exhaust the significance of treatment, because physical activity, especially resistance training, plays an important role in preserving muscle mass, maintaining fitness, and safeguarding the functional value of body weight reduction (33). This is particularly relevant during GLP-1RA therapy, in which part of the lost body mass may consist of lean mass, while appropriately selected exercise may limit this effect and support physical functioning. Combining pharmacotherapy with physical activity may also promote more sustained health behavior change and facilitate long-term maintenance of treatment effects. Nevertheless, there is still no full consensus as to the optimal exercise model to be used concurrently with GLP-1RA therapy, and this area therefore requires further research (31,32,33).

5. Discussion

The findings presented in this review indicate that GLP-1 receptor agonists currently occupy an important place in obesity treatment and that their significance extends beyond their effect on body weight alone. The collected evidence suggests that this therapy may also provide benefits in physical functioning and quality of life, which is particularly important in a disease that itself worsens physical performance, limits daily activity, and reduces patient well-being. At the same time, analysis of the available literature shows that the strength of the evidence is not uniform across all evaluated endpoints. The best-documented effects remain those concerning body weight reduction, whereas data relating to physical functioning and quality of life are still less abundant and more often secondary to the main objectives of clinical trials (12,14).

The most consistent findings concern the effect of GLP-1RAs on subjectively assessed physical functioning and patient-reported outcomes. The STEP 1–4 analysis showed that semaglutide 2.4 mg improved physical functioning and selected quality-of-life indicators more than placebo, and the observed changes more often reached a clinically meaningful level. In addition, the STEP 9 trial showed that in individuals with obesity and knee osteoarthritis, semaglutide treatment was associated with improved pain and joint function, giving these findings a more practical dimension and suggesting that the benefits of therapy may be particularly visible in groups burdened by musculoskeletal problems (14,20). Even so, caution in interpretation is

warranted because a substantial proportion of the data is based on questionnaires and ancillary analyses, while the number of studies primarily designed to assess objective parameters of physical functioning remains limited, as also confirmed by the publication of a trial protocol specifically focused on such endpoints (21).

A similar picture emerges with regard to quality of life. Findings from semaglutide trials and data on contemporary incretin therapy suggest improvements in both weight-related quality of life and health-related quality of life, with benefits appearing greatest in physical domains and in areas directly related to the impact of body weight on everyday life (14,22,24). At the same time, not all analyses are equally unequivocal. Some reviews indicate that the effect of therapy on quality of life may be limited or uncertain, which means that although the overall direction of findings is promising, further studies using consistent assessment tools and longer follow-up are needed (29).

An important interpretive issue concerns the extent to which observed improvement in physical functioning and quality of life results from the direct effect of pharmacotherapy and to what extent it is a secondary effect of body weight loss. Available data support the view that body weight reduction plays a central role in this regard, because greater weight loss was usually associated with greater improvement in patient-reported outcomes. This does not mean, however, that the number of kilograms lost alone exhausts the clinical significance of treatment. Changes in body composition, pain levels, the ability to engage in movement, and maintenance of functioning also remain important for the patient's overall status. From this perspective, weight-loss efficacy alone should not be the sole criterion for evaluating therapy, especially in a disease that affects daily life as strongly as obesity (14, 24).

The results of this review also indicate clear limitations of therapy. The most important of these is the durability of the treatment effect. In the STEP 1 extension, participants regained a substantial proportion of the body weight they had previously lost after semaglutide discontinuation, and a more recent meta-analysis on GLP-1RA discontinuation confirmed that weight regain is common (25,26). This finding strengthens the view that obesity requires long-term treatment and that pharmacotherapy is most beneficial when treated as part of chronic management rather than a short-term intervention. Practical limitations also include adverse effects, especially those affecting the gastrointestinal tract. Although these are most often mild or moderate in nature, they may worsen treatment tolerability and increase the risk of discontinuation. In addition, the literature points to a possible association with gallbladder disease and to the fact that some safety issues still require further observation (27,28).

Practical barriers to implementation also warrant separate comment. The high cost of medication and limited availability of preparations may reduce the possibility of broad use of GLP-1RAs in routine clinical practice, even if their efficacy has been well documented (30). As a result, the actual population-level impact of this therapy may be smaller than registration trials would suggest. This problem has not only economic but also organizational and ethical relevance, because access to effective treatment may remain unequal.

Based on the publications reviewed, it also appears justified to emphasize the role of combined treatment. Current guidelines regard lifestyle modification as the foundation of obesity therapy, and more recent data suggest that combining GLP-1RAs with physical activity and behavioral intervention may increase clinical benefits and support long-term maintenance of treatment effects (31,32). Training aimed at preserving muscle mass and physical functioning may be particularly important here, because body weight reduction is not always synonymous with functional improvement if it is accompanied by unfavorable loss of lean mass (33). Nevertheless, it remains unclear which model of physical activity is optimal during GLP-1RA therapy, and this area therefore requires further investigation.

In summary, the available literature supports the view that GLP-1 receptor agonists may play an important role not only in body weight reduction but also in improving physical functioning and quality of life in adults with obesity. The strongest evidence currently concerns semaglutide, whereas data relating to other incretin agents remain promising but require further confirmation. At the same time, these findings should be interpreted cautiously because of heterogeneity of study populations, differences in assessment tools, the limited number of studies with objective endpoints, and issues related to durability of the effect, treatment tolerability, and therapy availability. From a clinical perspective, the most justified approach is therefore to view GLP-1RAs as an important component of comprehensive treatment rather than a stand-alone solution to obesity (14,25,29,30).

6. Conclusions

GLP-1 receptor agonists are an important component of contemporary pharmacotherapy for obesity in adults, and the available evidence indicates that their effects may also include improvement in physical functioning and quality of life. The best-documented effects currently concern semaglutide, whereas data relating to other incretin agents remain promising, although they require further confirmation in long-term studies. At the same time, the assessment of obesity treatment efficacy should not rely exclusively on changes in body weight and BMI. Equally important are the effects of therapy as perceived by the patient, including improved

physical functioning, easier performance of daily activities, and a beneficial impact on quality of life.

The main limitations of therapy with GLP-1 receptor agonists include adverse effects, the possibility of weight regain after treatment discontinuation, the high cost of therapy, and limited availability of these agents. For this reason, the most clinically justified approach is to treat this class of drugs as an element of comprehensive obesity management, conducted in parallel with lifestyle modification, physical activity, and behavioral support. Further studies are needed, especially those using objective tools for the assessment of physical functioning and standardized methods for evaluating quality of life, in order to more precisely determine the long-term significance of GLP-1 receptor agonists in improving the functioning of adults with obesity.

Table 1. Key studies on the effects of GLP-1 receptor agonists on physical functioning and quality of life in adults with overweight or obesity

Authors' own elaboration based on the literature.

Study	Drug	Outcomes assessed	Main findings	Limitations
Wilding et al., 2021 (STEP 1)	Semaglutide 2.4 mg	Body weight, physical functioning, quality of life	Greater body weight reduction than with placebo, together with improvement in physical functioning and quality of life.	Physical functioning and quality of life were not primary endpoints.
Rubino et al., 2024 (STEP 1–4)	Semaglutide 2.4 mg	Physical functioning, PROs, quality of life	Semaglutide improved physical functioning and patient-reported outcomes more than placebo.	Secondary analysis; predominance of subjective assessment tools.
Kolotkin et al., 2023 (STEP 6)	Semaglutide 2.4 mg / 1.7 mg	Quality of life, physical functioning	Improvement in quality of life, particularly in areas related to body weight and physical functioning.	Not all domains improved to the same extent.
Bjorner et al., 2023	Semaglutide 2.4 mg	Health utility scores	Treatment was associated with improvement in general health utility measures.	The improvement was moderate and depended on the assessment tool used.
Bliddal et al., 2024 (STEP 9)	Semaglutide 2.4 mg	Pain, physical function, quality of life	In patients with obesity and knee osteoarthritis, improvement in pain and physical function was observed.	The study concerned a specific patient group.

Study	Drug	Outcomes assessed	Main findings	Limitations
Gudzune et al., 2025 (SURMOUNT-1)	Tirzepatide	PROs, HRQoL, physical functioning	Improvement in quality of life and physical functioning; greater body weight reduction was usually associated with greater improvement in PROs.	Tirzepatide is not a classical GLP-1 receptor agonist.
Cortes et al., 2024	Semaglutide	Objective indicators of physical function	The trial protocol highlights the growing importance of objective assessment of physical functioning.	Protocol only; no final results available.

Abbreviations: PROs, patient-reported outcomes; HRQoL, health-related quality of life.

Disclosure

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In preparing this work, ChatGPT was used solely for linguistic and grammatical corrections. The authors reviewed and edited the text and accept full responsibility for the content.

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