

Over GLP-1 Use Experts Call for Safer Weight Loss as Concerns Grow

A recent editorial published discussed the inappropriate use of [glucagon-like peptide 1](#) (GLP-1)-based medications from clinical and regulatory perspectives.

GLP-1 receptor agonists and glucose-dependent insulintropic polypeptide (GIP)/GLP-1 receptor dual agonists have transformed the therapeutic landscape of obesity. These drugs lead to marked weight loss while ameliorating several related complications, such as dyslipidemia, hypertension, and [type 2 diabetes](#) (T2D). Nevertheless, there are growing concerns about their inappropriate use, including cosmetic purposes and acquisition through unofficial channels and online prescriptions.

Japanese media reports indicate illegal resale of [tirzepatide](#), prescribed for T2D under insurance, to people for cosmetic weight loss, prompting regulatory attention. In addition, there are increasing reports of severe health consequences linked to these practices. In the editorial, the authors revisited the concept of inappropriate usage of GLP-1-based medications from clinical and regulatory perspectives.



Study

Inappropriate use of GLP-1-based medications should be viewed from two complementary perspectives: [Medical appropriateness](#) and regulatory appropriateness. Medical appropriateness encompasses whether treatment balances benefits and potential risks, while regulatory appropriateness reflects whether the prescription and use of medications comply with regulatory requirements, reimbursement policies, and applicable laws.

In Japan, Wegovy and Zepbound are reimbursed under government guidelines that restrict treatment to specialized institutions and require a structured six-month lifestyle intervention before pharmacotherapy. Mounjaro, prescribed for T2D, is not subject to the same requirements, despite containing the same molecule as Zepbound, a distinction the authors suggest may partly explain attempts to obtain it through inappropriate or [illegal channels](#).

GLP-1-based agents induce [weight loss](#) primarily by suppressing appetite, regardless of whether they are prescribed within or outside their approved indications. Medical appropriateness involves two distinct considerations: Risks caused by the medication itself and risks arising from

the weight-loss process. These risk categories are often considered together but represent distinct aspects of obesity care that should be addressed separately.

GLP-1-based therapies are recognized to induce [adverse effects](#) (AEs), especially gastrointestinal (GI) symptoms, such as diarrhea, nausea, and constipation. However, the severe health consequences of inappropriate use extend beyond known AEs. For instance, recent Japanese case reports describe ketosis or ketoacidosis in three people hospitalized following inappropriate use of tirzepatide.

All three subjects were young females aged 21 or 23 years without T2D, and two were non-obese. Ketoacidosis occurred at the lowest dose in two cases and upon dose escalation in the third. The only obese subject, who was on carbohydrate restriction, became non-obese by the time [ketoacidosis](#) developed. There was no documentation of appropriate medical supervision, including nutritional counseling, in any of the cases.

The authors suggest that inappropriate dietary restriction may have contributed to ketoacidosis alongside tirzepatide's [pharmacological effects](#). Further, many of the metabolic complications related to tirzepatide's inappropriate usage may more broadly reflect unsafe practices for weight reduction rather than its intrinsic toxicity, although intrinsic drug toxicity remains an important concern.

Findings

Weight loss through restricted food consumption carries substantial biological risks, warranting careful nutritional management. Appropriate weight loss involves proper medication usage, realistic weight targets, adequate [nutrition](#), and avoiding undernutrition and excessive weight loss. These principles, fundamental to obesity treatment, are often overlooked in the inappropriate cosmetic use of anti-obesity medications and during on-label prescription of GLP-1-based agents.

Notably, underweight is, per se, a clinically important condition and may lead to adverse health outcomes. The female underweight/[undernutrition syndrome](#) (FUS) is a recently proposed conceptual framework to understand the clinically significant psychological and physical consequences of undernutrition and underweight. It illustrates that weight loss should also be assessed by its clinical and nutritional consequences, not just by its magnitude.

Conclusion

Taken together, while current professional and regulatory guidance emphasizes avoiding inappropriate use and off-label prescription of GLP-1-based medications, these messages alone are unlikely to curb inappropriate use. As such, the concept of appropriate weight reduction should receive greater emphasis rather than simply discouraging off-label use, and weight-loss regimens should be supported by adequate nutrition, careful monitoring, and [medical supervision](#).

The authors posit that inappropriate use of GLP-1-based drugs should be interpreted more broadly than off-label prescription or regulatory non-compliance. They suggest that the discussion of GLP-1-based treatments should shift from appropriate drug use to appropriate weight reduction, whether used for cosmetic purposes or [health conditions](#), and that success should be judged by how appropriately and safely it is achieved.

Source:

<https://www.news-medical.net/news/20260830/Experts-call-for-safer-weight-loss-as-concerns-grow-over-GLP-1-use.aspx>