

Off-label semaglutide: A call for monitoring protocols in non-obese populations

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Dear Editor, Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) have transformed the management of type 2 diabetes mellitus by lowering glucose and reducing cardiovascular events. Recent evidence from oral semaglutide trials has reinforced their role in cardiometabolic protection.¹ However, their use has expanded rapidly beyond traditional indications, raising important concerns.

Public interest in GLP-1 agents has surged, particularly for cosmetic weight loss. This growing demand is reflected in digital trend analyses, which highlight increasing off-label consumption unrelated to approved clinical use.² Such patterns underscore the societal pressures driving medication use outside regulated frameworks.

The emergence of GLP-1 use in bodybuilding communities is another concerning trend. Online forums reveal experimental practices, such as cycling and stacking with anabolic steroids, to maximise weight reduction while mitigating perceived side effects.³ These behaviours introduce unpredictable risks, including hypoglycaemia, muscle loss, and cardiovascular strain. They also emphasise the lack of medical oversight in populations pursuing enhancement rather than treatment.

Beyond lifestyle contexts, recent large-scale trials have shown that semaglutide reduces cardiovascular events even in obese individuals without diabetes.⁴ These findings expand the therapeutic horizon but also blur the boundaries between evidence-based prescribing and speculative off-label use. The translation of trial outcomes

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Submission completed: 03-10-2025 **1st Revision received:** 28-10-2025

Acceptance: 14-01-2026 **2nd Revision received:** 13-01-2026

into unmonitored personal experimentation risks exposing vulnerable groups to unforeseen harms.

Taken together, these developments raise a pressing need for structured monitoring protocols for non-obese individuals using GLP-1 agents off-label. Registry-based studies, pharmacovigilance systems, and collaborative reporting could provide crucial safety data in this population. Without such frameworks, enthusiasm for novel applications may outpace evidence, leaving clinicians unprepared to address complications.

In conclusion, semaglutide offers proven benefits in diabetes and obesity, but its unregulated use highlights an urgent gap in monitoring and oversight. As access broadens, integrating surveillance strategies is essential to balance therapeutic potential with patient safety.

Disclaimer: None.

Conflict of Interest: None declared.

Funding disclosure: None.

DOI: <https://doi.org/10.47391/JPMA.33096>

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Author Contribution:

MR: Concept, design, data acquisition, analysis, interpretation, drafting, revision, final approval and agreement to be accountable for all aspects of the work.