Semaglutide in the spotlight: weighing benefits against rising concerns

Patrick Ashinze, Toufik Abdul-Rahman^D and Andrew Awuah Wireko

Keywords: diabetes, metabolism, obesity, semaglutide

Received: 8 November 2023; revised manuscript accepted: 4 December 2023.

Dear editor,

The recent surge in popularity of the antidiabetic drug, Semaglutide, marketed under the names Wegovy (which has the highest concentration of the active drug), Rybelsus, and Ozempic,¹ for its notable efficacy in weight loss has raised pertinent considerations. Semaglutide is a glucagon-like peptide-1 receptor agonist (GLP-1 RA) that is administered once weekly. It is effective in reducing hemoglobin A1C levels and promoting weight loss in patients with type 2 diabetes.²

Further studies demonstrated significant weight loss and improvements in cardiometabolic risk factors with evidence showing good toleration, although gastrointestinal adverse effects were common.^{2,3}

While it is commendable to find a drug that offers promising results beyond its primary intended purpose, the skyrocketing demand in developed nations necessitates vigilance.

First and foremost, there is potential for off-label abuse. With societal pressure to attain perceived ideal body weights, it is conceivable that individuals may seek this medication outside of its primary indication, potentially exposing themselves to unforeseen risks. Long-term side effects, especially when taken by non-diabetics, are not yet well documented and require continued monitoring.

Furthermore, the surge in demand can invariably drive up costs. This inflation could inadvertently limit access for diabetic patients who genuinely require Semaglutide for glycemic control. Price escalation also means increased out-of-pocket expenses, further burdening the healthcare systems of many developed countries and by extension, stifling the likelihood of patronage and usage in low- and middle-income countries.

It is imperative that endocrinologists and by extension other medical professionals, policymakers, strategic stakeholders, and regulatory bodies remain vigilant. Best still, it is most convenient to note that Semaglutide is a prescription medication and should be used under the guidance of a physician. It is not intended for recreational or non-medical use. Ongoing research, public awareness campaigns about potential risks, a vetting system for usage, and a structured pricing mechanism are vital to ensuring that Semaglutide remains both accessible and safe.

Declarations

Ethics approval and consent to participate Not applicable.

Consent for publication Not applicable.

Author contributions

Patrick Ashinze: Conceptualization; Writing – original draft.

Toufik Abdul-Rahman: Supervision; Writing – review & editing.

Andrew Awuah Wireko: Writing – review & editing.

Acknowledgements

The authors would like to acknowledge Toufik's World Medical Association for providing the invaluable resources to kick start, culminate, and leverage this research project.

Ther Adv Endocrinol Metab

2024, Vol. 15: 1-2 DOI: 10.1177/ 20420188231222394

© The Author(s), 2024. Article reuse guidelines: sagepub.com/journalspermissions

Correspondence to: Toufik Abdul-Rahman

Department of Research, Toufik's World Medical Association, Sumy, Ukraine; Medical Institute, Sumy State University, 2, Rymskogo-Korsakova, Sumy 40007, Ukraine drakelin24/dgmail.com

Patrick Ashinze

Saint Francis Catholic Hospital, Okpara Inland, Delta State, Nigeria

Faculty of Clinical Sciences, University of Ilorin, Ilorin, Nigeria

Department of Research, Toufik's World Medical Association, Sumy, Ukraine

Andrew Awuah Wireko Department of Research, Toufik's World Medical Association, Sumy,

Medical Institute, Sumy State University, Sumy, Ukraine

Ukraine

journals.sagepub.com/home/tae



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the Sage and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage).

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Competing interests

The authors declare that there is no conflict of interest.

(iD

Availability of data and materials Not applicable.

Visit Sage journals online journals.sagepub.com/ home/tae

Sage journals

ORCID iD

Toufik Abdul-Rahman org/0000-0003-0153-287X

https://orcid.

References

- Drugs.com. What is Semaglutide, https://www. drugs.com/semaglutide.html (accessed 13 October 2023).
- Collins L and Costello RA. Glucagon-like peptide-1 receptor agonists. In: *StatPearls* [Internet]. Treasure Island (FL): StatPearls Publishing, 2023.
- 3. Chao AM, Tronieri JS, Amaro A, *et al.* Clinical insight on semaglutide for chronic weight management in adults: patient selection and special considerations. *Drug Design Dev Ther* 2022; 16: 4449–4461.