EE631

Budget Impact of Semaglutide Loss of Exclusivity in Type 2 Diabetes in Canada

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Objective

To estimate the budget impact of semaglutide loss of exclusivity (LoE) on treatment costs and utilisation in type 2 diabetes mellitus (T2DM) from a Canadian payer perspective.

Background

- Semaglutide, a glucagon-like peptide-1 receptor agonist (GLP-1), is widely used in the management of T2DM.
- Following LoE in Canada in January 2026, lower-cost generic semaglutide may have substantial implications for healthcare expenditure and treatment uptake.
- This study evaluated the potential budget impact of semaglutide loss of exclusivity on costs and treatment utilisation in T2DM from a Canadian payer perspective.

Methods

- A budget impact model (BIM) assessed subcutaneous injectable branded semaglutide LoE over a 5-year time horizon in the GLP-1-treated T2DM population in Canada.

Patient Population

- The target population was assumed to increase linearly over time, in line with the trend observed between 2020 and 2024, reflecting expected continued uptake of GLP-1 therapies.[1]
- **Figure 1** shows the estimated patient numbers by treatment arm in a world without the introduction of generic semaglutide.

Market Shares

- In the world without generic semaglutide, patients were allocated to branded semaglutide or tirzepatide based on forecasted market shares, as demonstrated in **Figure 1**.
  - Tirzepatide market share was assumed to increase in line with uptake observed in the UK following payer reimbursement in T2DM, with corresponding reductions in branded semaglutide share, which was assumed to capture the entire GLP-1 market before tirzepatide reimbursement.[2]
- In the world with LoE, the model base case assumed that generic semaglutide would completely displace branded semaglutide in the market and predicted tirzepatide market shares would be unaffected. This is shown by the circles in **Figure 2**.
- To further explore uncertainty in market shares, two separate scenarios were modelled:
  - **Scenario 1:** In addition to the full displacement of branded semaglutide by generic semaglutide, the expected uptake of tirzepatide was reduced in line with the overall reduction of branded sodium-glucose cotransporter 2 inhibitors (SGLT2is) observed when generic SGLT2is became available in the UK.[3]
  - **Scenario 2:** Branded semaglutide and tirzepatide market shares were both reduced relative to the world without LoE, in line with the overall reduction in branded SGLT2i use observed when generic SGLT2is became available in the UK.[3]

Pricing

- In the base case, generic semaglutide price was calculated as 50% of the branded price across the modelled time horizon, in line with the Canadian Tiered Pricing Framework, assuming that there are two reimbursed manufacturers of generic semaglutide.[4] It was assumed that there would be no change to the branded price.
- **Scenario 3:** Generic semaglutide pricing was varied after year 1 to reflect the entry of a third manufacturer of generic semaglutide, reducing it to 35% of branded price, in line with the Canadian Tiered Pricing Framework.[4] Market shares were assumed to remain the same as in the base case.

Results

- Results from the base case and scenarios are included in **Figure 3**. In the base case, semaglutide LoE was projected to generate cumulative 5-year savings of C$7.4 billion for the Canadian payer.
  - When generic semaglutide was assumed to also partially displace tirzepatide uptake (**Scenario 1**), cumulative savings increased to C$8.7 billion*, reflecting the higher cost of tirzepatide relative to generic semaglutide.
  - The lowest savings were observed when branded semaglutide and tirzepatide were both only partially displaced in line with observed UK SGLT2i market changes on LoE (**Scenario 2**); under this assumption, cumulative savings reached C$2.4 billion.
  - Applying the Canadian Tiered Pricing Framework to reduce the generic semaglutide price to 35% of the branded price after year 1 (**Scenario 3**) further increased cumulative savings to C$9.2 billion.
- Total estimated annual expenditure for the years 2020–2025, along with predicted expenditure for 2026–2030 is shown in **Figure 4**.

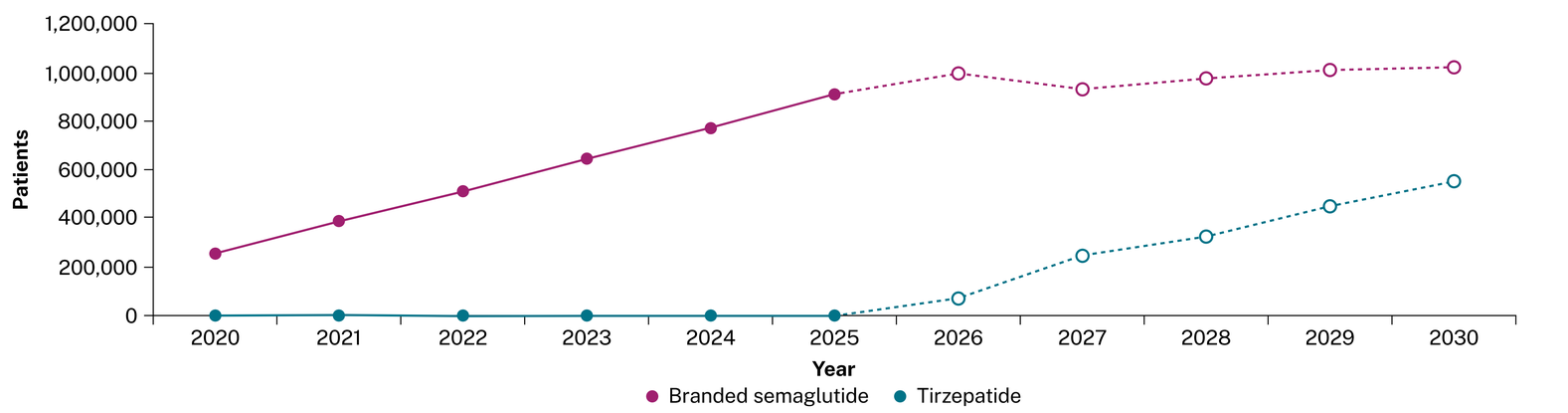
Conclusion

Semaglutide LoE was projected to substantially reduce drug acquisition expenditure in T2DM in Canada, with further savings possible if generic uptake also reduces use of other newer branded therapies.

Overall, savings were sensitive to assumptions around post-LoE market share redistribution where generic semaglutide displaced newer branded therapies, as well as the number of generic manufacturers that enter the market.

FIGURE 1

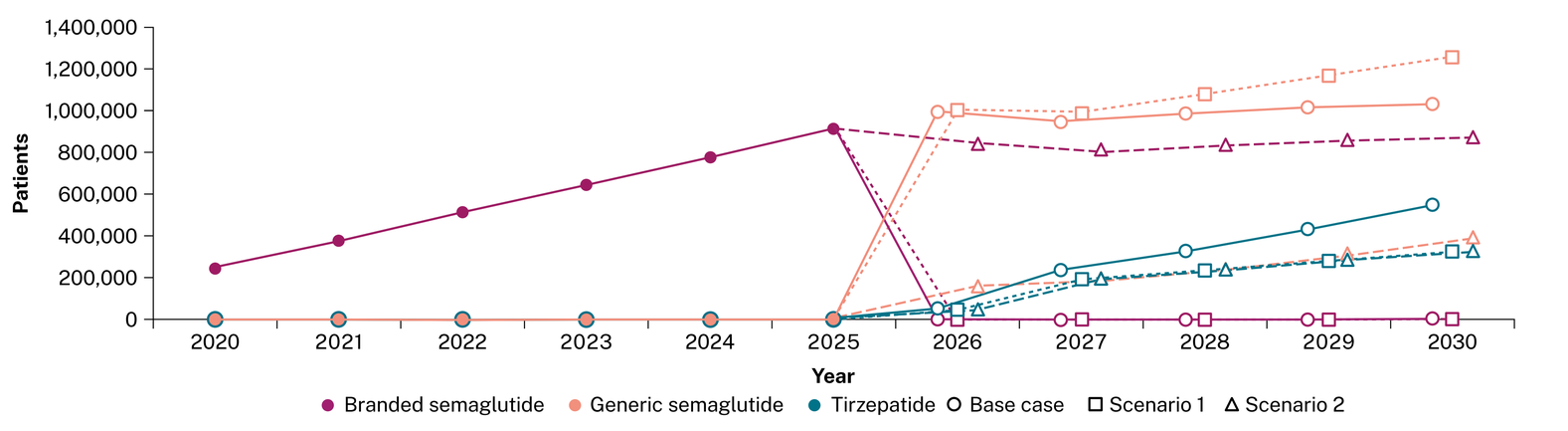
Projected annual GLP-1 treatment uptake in the world without generic semaglutide



Scenario in which no generic semaglutide enters the market. Branded semaglutide market share declines from 95% to 65% over 2026–2030, with tirzepatide uptake rising from 5% to 35%. Eligible GLP-1 population grows in line with the IQVIA-derived trend (2020–2024).[1] Hollow points denote the predicted treatment uptake during the model time horizon.

FIGURE 2

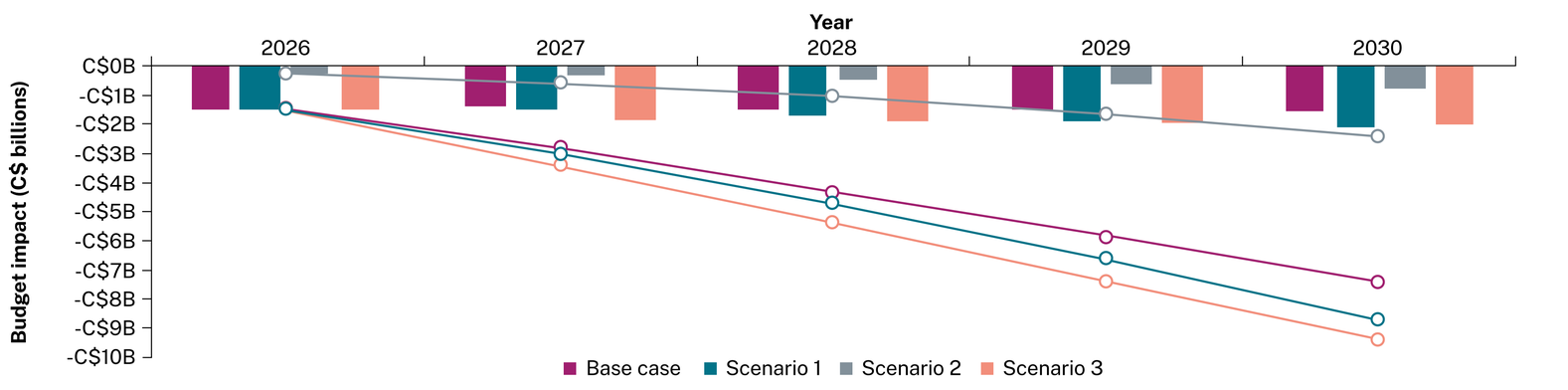
Projected annual GLP-1 treatment uptake in the world with generic semaglutide



Base case assumes patients anticipated to receive branded semaglutide instead receive generic semaglutide from 2026 onwards and tirzepatide uptake is identical to the world without generic. Hollow points denote the predicted treatment uptake during the model time horizon.

FIGURE 3

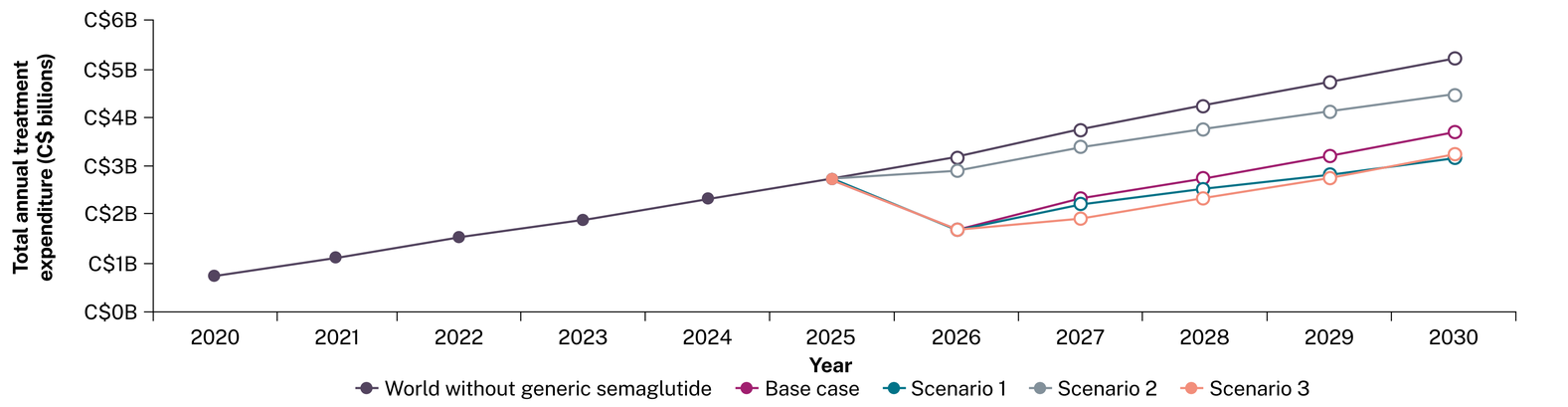
Annual and cumulative net budget impact of generic semaglutide entry



Net budget impact is the difference in total annual cost of the GLP-1 treatment pathway in the world with and world without generic semaglutide; negative values denote savings to the Canadian public payer. Drug acquisition costs only. Plotted bars show net budget impact, whereas plotted lines show cumulative budget impact.

FIGURE 4

Estimated annual total GLP-1 treatment expenditure before and after generic semaglutide entry



Historical estimates cover 2020–2025; projected estimates cover 2026–2030 and are presented for the world without generic semaglutide, the base case world with generic semaglutide, and each scenario.

Abbreviations: BIM: budget impact model; **GLP-1:** glucagon-like peptide-1; **LoE:** loss of exclusivity; **SGLT2i:** sodium-glucose cotransporter 2 inhibitors; **T2DM:** type 2 diabetes mellitus.

References: [1]IQVIA (2025). Medication Treatments for Diabetes and Obesity in Canada: An independent IQVIA report on drug utilization data, 2020–2024. Available at: https://www.iqvia.com/-/media/iqvia/pdfs/canada/publications/diabetes-and-obesity-2020-2024-report_en-web.pdf[Last accessed 16 Sep 26]; [2]Viering T et al. EPH261. Presented at ISPOR Europe 2025, 9-12 November 2025; [3]Bennett Institute for Applied Data Science, University of Oxford (2026). OpenPrescribing.net. Available at: https://openprescribing.net/measure/dapagliflozin/sicbl/11M/ [Last accessed 16 Sep 26]; [4]pan-Canadian Pharmaceutical Alliance (2014). Tiered pricing framework. Available at: https://pcpa-app.ca/negotiations/processes-and-frameworks/tiered-pricing-framework [Last accessed 08 Sep 26]. **Acknowledgements:** The authors thank Ashleigh Farthing, Costello Medical, for graphic design assistance. **Footnotes:** *In the corresponding abstract for this poster, there was an error presenting this result as $9.5 billion.

Presented at ISPOR Europe 2026 | Vienna, Austria | 8–11 November

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