RESEARCH LETTER

WOMEN'S HEALTH

## Increasing Postpartum Use of GLP-1 Receptor Agonists

The use of glucagon-like peptide 1 receptor agonists (GLP-1RAs) for the treatment of diabetes and in weight management is increasing.[1] Although semaglutide and other GLP-1RAs have also been suggested to support postpartum weight loss,[2] little is known about the use of GLP-1RAs for this indication. It is unknown how these medications affect individuals subject to postpartum hormonal changes and natural weight reduction. Further, the safety and impact on early life weight gain in exposed children have been poorly studied.[3] Therefore this study aimed to provide contemporary data on the postpartum use of GLP-1RAs.

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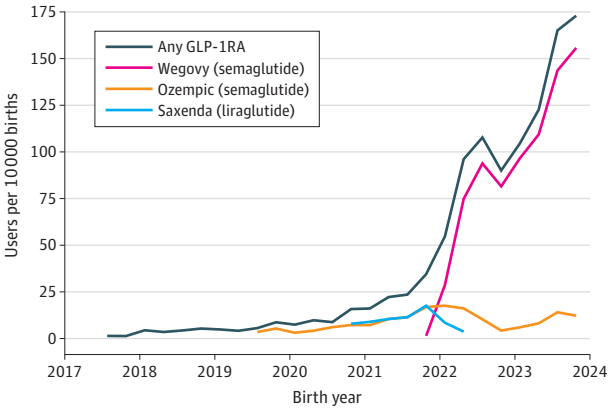
Supplemental content

**Methods** | We obtained individual-level data from the Danish Medical Birth Register[4] to identify all live births from January 1, 2018, to June 30, 2024. Data were linked to the National Prescription Registry[4] using the unique personal identification number assigned to all inhabitants in Denmark to identify all mothers who had filled a prescription for GLP-1RAs from day of delivery to 182 days post partum. In Denmark, GLP-1RAs are recommended for individuals with obesity (body mass index [BMI; calculated as weight in kilograms divided by height in meters squared] ≥30) or overweight with obesity-related comorbidities (BMI ≥27).

We calculated the number and percentage of mothers filling at least 1 prescription of GLP-1RAs within the first 182 days post partum during the study period. Mothers were counted from the birth date of their child, and the denominator was all mothers with delivery within the given quarter. We characterized the study population according to use by calendar year, prepregnancy BMI (≥27), history of a diabetes diagnosis prior to delivery date (*International Classification of Diseases and Related Health Problems, Tenth Revision* codes E10-14 or O24) (yes/no), history of GLP-1RAs prior to delivery date (yes/no), parity (1, ≥2), and age (<30, ≥30 years). We also classified the specific GLP-1RAs by drug name to indicate likely indication (eg, Wegovy for weight loss vs Ozempic for diabetes). Dulaglutide exposure was rare (n <5) and therefore not reported. This study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline.

**Results** | Among 382 277 pregnancies in Denmark from 2018 through June 2024, 1549 mothers filled a prescription for a GLP-1 RA within 182 days post partum. Use was initially low (n <5) but increased gradually to 34 per 10 000 by the second quarter of 2022, followed by a sharp increase to 173 per 10 000 in the second quarter of 2024 (**Figure**). Between 2018 and 2022, use was split between liraglutide (33%; 30% of which was Saxenda) and semaglutide (67%; 36% of which was Ozempic) (**Table**). From 2023 onward, semaglutide accounted for 97% of prescriptions, with 89% being Wegovy (n = 1086).

Figure. First Prescription Fills for GLP-1RAs Within 182 Days After Delivery




Mothers filling a least 1 prescription for glucagon-like peptide 1 receptor agonists (GLP-1 RAs) from date of delivery to 182 days postpartum in Denmark (2018-2024). Time was counted at date of delivery.

Across both periods, users were similar in age and parity—most were older than 30 years and two-thirds had more than 1 child. However, a higher percentage of users in 2018-2022 had a history of diabetes (37% vs 23%) and a high prepregnancy BMI (86% vs 80%) compared with those in 2023-2024. In the latter period, 73% were first-time users compared with 70% in 2018-2022.

**Discussion** | GLP-1RAs are increasingly used for postpartum weight loss since the introduction of semaglutide for weight loss in late 2022. Most users were overweight prior to pregnancy and only 23% had a documented diabetes diagnosis, suggesting that the primary indication for use was weight reduction.

The postpartum period represents a phase of maternal physiological and hormonal transition, during which the safety of semaglutide use is poorly documented. Further, the potential short- and long-term risks to the breastfeeding infant have been insufficiently studied.[5] A key limitation is the reliance on prescription redemption as a proxy for actual medication use, which may overestimate or underestimate the true postpartum use. Future research should prioritize pharmacovigilance and targeted studies to inform and substantiate clinical guidelines and shared decision-making for the use of GLP-1RAs for postpartum weight loss.

Table. Characteristics of Those Who Did and Did Not Use Glucagon-Like Peptide 1 Receptor Agonists (GLP-1RAs) Within 182 Days After Delivery, Denmark 2018-2023

| | No. (%) | | |
|---|---|---|---|
| | Did not use GLP-1RAs | Used GLP-1RAs | |
| | | 2018-2022 | 2023-2024 |
| No. | 380 728 | 488 | 1061 |
| Age, y | | | |
| <30 | 157 282 (41) | 157 (32) | 360 (34) |
| ≥30 | 223 446 (59) | 331 (68) | 701 (66) |
| Parity[a] | | | |
| 0 | 174 016 (46) | 161 (33) | 365 (34) |
| ≥1 | 206 675 (54) | 327 (67) | 696 (66) |
| Missing | 37 (<0.01) | 0 | 0 |
| BMI[b] | | | |
| <27 | 276 049 (72) | 61 (12) | 197 (19) |
| ≥27 | 97 950 (26) | 419 (86) | 852 (80) |
| Missing | 6729 (1.8) | 8 (1.6) | 12 (1.1) |
| History of diabetes[c] | | | |
| No | 353 706 (93) | 309 (63) | 819 (77) |
| Yes | 27 022 (7.1) | 179 (37) | 242 (23) |
| History of GLP-1RA use | | | |
| No | 379 384 (100) | 339 (70) | 774 (73) |
| Yes | 1344 (0.40) | 149 (30) | 287 (27) |
| Birth year | | | |
| 2018 | 59 585 (16) | 18 (3.7) | 0 |
| 2019 | 59 819 (16) | 28 (5.7) | 0 |
| 2020 | 59 710 (16) | 47 (9.6) | 0 |
| 2021 | 62 025 (16) | 98 (20) | 0 |
| 2022 | 56 922 (15) | 297 (61) | 0 |
| 2023 | 55 692 (15) | 0 | 597 (56) |
| 2024 | 26 975 (7.1) | 0 | 464 (44) |
| Drug generic | | | |
| Liraglutide | 0 | 162 (33) | 34 (3.2) |
| Semaglutide | 0 | 326 (67) | 1027 (97) |
| Drug name | | | |
| Ozempic | 0 | 175 (36) | 76 (7.2) |
| Saxenda | 0 | 146 (30) | 29 (2.7) |
| Wegovy | 0 | 146(30) | 947 (89) |
| Other | 0 | 21 (4.3) | 9 (0.80) |

[a] Prior to index birth in this study.

[b] Prepregnancy body mass index (BMI; calculated as weight in kilograms divided by height in meters squared).

[c] Any registered hospital diagnosis of diabetes (*International Classification of Diseases and Related Health Problems, Tenth Revision* codes DE10-14 or O24).

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*Concept and design:* Bliddal, Nohmie, Pottegård.
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