



# Refills

Your dose of drug information in between sessions

## What is the rationale for potentially holding GLP1 agonists, such as semaglutide (Ozempic®), preoperatively?

**Conclusion: Case reports indicate a possible increased risk of regurgitation of residual gastric contents and pulmonary aspiration during anesthesia in people taking GLP1 agonists. Holding the GLP1 agonist medication for at least 3 half-lives prior to the procedure, if feasible, is suggested (e.g., holding semaglutide for 3 weeks prior to the procedure).**

The BC Provincial Academic Detailing (PAD) service is currently delivering the topic [Type 2 Diabetes Focused Update: SGLT2 Inhibitors & GLP1 agonists](#). This topic reviews clinical considerations which support treatment decisions, including: doses, adverse events, dosage forms, cost and coverage.<sup>1</sup>

In Canada, GLP1 agonists are indicated for the management of type 2 diabetes. Semaglutide and liraglutide are also indicated for chronic weight management. One of the physiologic effects of GLP1 agonists is a delay in gastric emptying. Recently the Institute for Safe Medicine Practices Canada and the Canadian Anesthesiologists' Society described case reports of aspiration occurring during anesthesia in patients taking GLP1 agonists, despite appropriate preoperative fasting.<sup>2,3</sup>

The [Canadian Anesthesiologists' Society](#) recommends inquiring about the use of GLP1 agonists during preoperative assessments.<sup>3</sup> A recent anesthesiology editorial included the following preoperative considerations while acknowledging that evidence is still too limited to develop clinical practice guidelines:<sup>4</sup>

- Discuss with the care team whether holding the GLP1 agonist for a time period of at least 3 half-lives before the procedure is feasible, weighed against the possible interim changes to glucose control and body weight
- Example: semaglutide has a half-life of 1 week and would potentially be held for 3 weeks preoperatively (3 half-lives is when approximately 88% of the drug is estimated to be eliminated)

Additional perioperative considerations are provided by the [Canadian Anesthesiologists' Society](#) if holding the GLP1 agonist preoperatively is not feasible.<sup>3</sup>

GLP1 agonists: half-lives and possible holding periods preoperatively <sup>5-12</sup>			
Medication	Dosing frequency	Approximate half-life	Possible holding period
dulaglutide (Trulicity®) subcutaneous	once a week	5 days	~ 2 weeks
liraglutide (Victoza®, Saxenda®) subcutaneous	once a day	13 hours	~ 2 days
lixisenatide (Adlyxine®) subcutaneous	once a day	3 hours	~ 1 day
semaglutide (Ozempic®, Wegovy®) subcutaneous	once a week	1 week	~ 3 weeks
semaglutide (Rybelsus®) oral	once a day		
tirzepatide* (Mounjaro®) subcutaneous	once a week	5 days	~ 2 weeks

\*glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide-1 (GLP1) agonist

<sup>1</sup>BC Provincial Academic Detailing Service 2023 Type 2 Diabetes Focused Update: SGLT2 Inhibitors & GLP1 Agonists; <sup>2</sup>ISMP Canada Safety Bulletin 2023;23:9; <sup>3</sup>Canadian Anesthesiologists' Society Safety Bulletin June 2023; <sup>4</sup>Jones Can J Anaesth 2023;70:1281-6 (PMID:37466910); <sup>5</sup>Health Canada Drug Product Database Trulicity; <sup>6</sup>Health Canada Drug Product Database Victoza; <sup>7</sup>Health Canada Drug Product Database Saxenda; <sup>8</sup>Health Canada Drug Product Database Adlyxine; <sup>9</sup>Health Canada Drug Product Database Ozempic; <sup>10</sup>Health Canada Drug Product Database Wegovy; <sup>11</sup>Health Canada Drug Product Database Rybelsus; <sup>12</sup>Health Canada Drug Product Database Mounjaro