GREAT LAKES INTEGRATED NETWORK™

# Wegovy Backorder – What's Next?

In June of 2021, the FDA approved Wegovy (semaglutide), the first treatment for chronic weight management since 2014. Due to supply chain issues, Novo Nordisk has temporarily stopped shipments of the first two doses' strengths (0.25mg and 0.5mg) to minimize demand from new patients and increase the likelihood of enough product available in the market to meet the needs of the current patients prescribed Wegovy. With these shortages, it is important to take advantage of the previously approved therapies for chronic weight management. Examples include Saxenda, phentermine, Orlistat, Contrave/Qsymia, and Plenity. Belviq (Lorcaserin) is a previously used therapy that has been discontinued as of February 2020 due to safety concerns. More details on each available alternative are detailed below.

Of note, it is important to avoid using products that list weight loss as a side effect of use, instead of those agents that are FDA approved for weight management. The GLIN Pharmacy team strongly advises AGAINST using alternative GLP-1RA's such as Ozempic and Trulicity as an alternative to Wegovy as this can not only lead to supply concerns for patients diagnosed with type 2 diabetes but can also lead to patients being incorrectly identified by their insurance as carrying a diagnosis of T2DM. Once identified as having T2DM, patients can be identified as having open gaps in care related to diabetic management which they truly may not be eligible for.

| Drug | Indication | Mechanism of Action | Dose | Adjustments | Efficacy | Adverse Effects, Precautions, and Contraindications |
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| **Wegovy™ (Semaglutide)** | Adults with a BMI ≥ 30kg/m$^2$ OR BMI ≥ 27kg/m$^2$ with weight-associated comorbidities (i.e. HTN, T2DM, or dyslipidemia) | Semaglutide is a GLP-1 receptor agonist. Semaglutide binds and activates the GLP-1 receptor causing enhanced insulin secretion, slowed gastric emptying, reduction of food intake, and promotion of beta cell proliferation. | Titrate to target dose over 17 weeks:<br><br>**Weeks 1-4:** 0.25mg SQ once weekly<br>**Weeks 5-8:** 0.5mg SQ once weekly<br>**Weeks 9-12:** 1mg SQ once weekly<br>**Weeks 13-16:** 1.7mg SQ once weekly<br>**Weeks 17+:** 2.4mg SQ once weekly<br>* 2.4mg is considered the maintenance dose, if patient cannot tolerate 2.4mg, decrease to 1.7mg weekly for 4 weeks, then increase to 2.4mg. If patient cannot tolerate 2.4mg after temporary decrease, discontinue Wegovy™ | No hepatic or renal dose adjustments required by the manufacturer of Wegovy™. | After 68 weeks, weight loss of up to 15% of baseline body weight was achieved, 85% of patients achieved greater than 5% weight loss[12].<br><br>No guidance has been provided for discontinuation due to lack of results while using Wegovy™ | **ADVERSE EFFECTS:**<br>• Acute pancreatitis<br>• Acute gallbladder disease<br>• Hypoglycemia<br>• Acute kidney injury (AKI)<br>• Hypersensitivity<br>• Nausea<br>• Vomiting<br>• Abdominal pain<br><br>**PRECAUTIONS:**<br>• Breast-feeding<br>• Cholelithiasis<br>• Depression<br>• Pancreatitis<br>• Pregnancy<br>• Renal failure<br>• Suicidal ideation<br>• Thyroid cancer<br><br>**CONTRAINDICATIONS:**<br>• Medullary thyroid carcinoma<br>• Thyroid C-cell tumors<br>• Multiple endocrine neoplasia syndrome type 2 |
| **Saxenda® (Liraglutide)** | Adults with a BMI ≥ 30kg/m$^2$ OR BMI ≥ 27kg/m$^2$ with weight-associated comorbidities (i.e. HTN, T2DM, or dyslipidemia) | Liraglutide is a GLP-1 receptor agonist causing an increase in insulin secretion, slowed gastric emptying, reduction of food intake, and promotion of beta cell proliferation. | Initial: 0.6mg SQ daily for one week<br><br>Increase dose by 0.6mg/week to a maximum dose of 3 mg SQ once daily | No hepatic or renal adjustments required by the manufacturer of Saxenda[10]. | 56% of Saxenda users lost ≥5% of their baseline body weight after 1 year of use[2].<br><br>Saxenda should be discontinued if patient has not achieved 4% weight loss after 16 weeks of treatment[1]. | **ADVERSE EFFECTS:**<br>• Nausea<br>• Vomiting<br>• Diarrhea<br>• Constipation<br>• Headache<br>• Dizziness<br>• Increased lipase<br><br>**PRECAUTIONS:**<br>• Acute pancreatitis<br>• Acute gallbladder disease<br>• Hypoglycemia<br>• Suicidal ideation<br><br>**CONTRAINDICATIONS:**<br>• Medullary thyroid cancer<br>• Multiple endocrine neoplasia syndrome type 2<br>• Pregnancy<br>• Thyroid C-cell tumor |

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| **Phentermine** | Patients aged 17+ for short term (≤12 week) therapy: BMI ≥ 30kg/m$^2$ OR BMI ≥ 27kg/m$^2$ with ≥ 1 weight-associated comorbidity (i.e. HTN, T2DM, or dyslipidemia) | Indirect sympathomimetic, increases release of and inhibits reuptake of norepinephrine and dopamine therefore reducing appetite | 15mg to 37.5 mg PO either once or twice daily | **Renal adjustments:** If eGFR 15-29ml/min/1.73m$^2$: Do not exceed 15mg/day<br><br>Avoid use if eGFR <15ml/min/1.73m$^2$<br><br>There are no hepatic adjustments required | A 12 week post marketing surveillance study demonstrated a mean weight reduction of 5-5.2% from baseline body weight[11].<br><br>No guidance has been provided for discontinuation due to lack of results while using phentermine. | **ADVERSE EFFECTS:**<br>• Dizziness<br>• Secondary hypertension<br>• Tachycardia and palpitations<br>• Insomnia<br>• Headache<br>• Euphoria<br><br>**PRECAUTIONS:**<br>• Co-administration with other weight loss therapies<br>• Primary pulmonary hypertension<br>• Valvular heart disease<br>• Development of tolerance<br>• Use with alcohol<br>• Use in patients using insulin or oral hypoglycemic medications<br><br>**CONTRAINDICATIONS:**<br>• Cardiac arrhythmias<br>• Coronary artery disease (CAD)<br>• Heart failure (HF)<br>• Stroke<br>• Uncontrolled hypertension<br>• Glaucoma<br>• Hyperthyroidism<br>• Pregnancy<br>• Use within 14 days of MAOIs |
| **Xenical® (orlistat)** | Patients 12 and older with a BMI ≥30kg/m$^2$ OR BMI ≥27kg/m$^2$ with ≥ 1 weight associated comorbidity (i.e. HTN, T2DM, or dyslipidemia) | Promotes weight loss through nutrient absorption. Binds covalently with gastric and pancreatic lipases within the lumen of the stomach and small intestine, causing less fat to be absorbed by the body | 120mg by mouth three times daily with each main meal containing fats, may miss dose if meal is missed or contains no fat | Studies in patients with renal and hepatic insufficiency were not conducted by the manufacturer due to the lack of systemic absorption | Average weight loss was found to be between 2.9-3.4% of baseline body weight[9].<br><br>No guidance has been provided for discontinuation due to lack of results while using Xenical® | **ADVERSE EFFECTS:**<br>• Abdominal pain<br>• Oily rectal leakage<br>• Fecal urgency<br>• Flatulence<br>• Steatorrhea<br><br>**PRECAUTIONS:**<br>• Anorexia nervosa<br>• Bulimia nervosa<br>• Pancreatitis<br>• Renal disease<br>• Seizure disorders<br><br>**CONTRAINDICATIONS:**<br>• Cholestasis<br>• Chronic malabsorption syndrome<br>• Pregnancy |

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| **Contrave® (Bupropion and Naltrexone)** | Adults with BMI ≥ 30kg/m$^2$ OR BMI ≥ 27kg/m$^2$ with ≥ 1 weight associated comorbidity (i.e. HTN, T2DM, or dyslipidemia) | Naltrexone and bupropion impact the hypothalamus and mesolimbic dopamine circuit which controls the appetite and reward systems respectively. Contrave increases the firing rate of POMC neurons, which regulates the appetite. | Titrate to target dose over 4 weeks:<br><br>**Week 1**: 1 tablet by mouth every morning<br>**Week 2**: 1 tablet by mouth in the morning, 1 tablet by mouth in the evening<br>**Week 3**: 2 tablets by mouth in the morning, 1 tablet in the evening<br>**Week 4+**: 2 tablets by mouth in the morning and evening | **Renal Adjustments:**<br>CrCl 30-49ml/min: Max daily dose of 1 tablet twice daily<br><br>CrCl <30ml/min: Do not use<br><br>**Hepatic Adjustments:**<br>A dose of one tablet daily should not be exceeded in patients with hepatic impairment | 3.7%-8.1% weight loss after 56 weeks of use, with the mean weight loss being 5.4%[7] from baseline body weight.<br><br>If a patient has not lost at least 5% of baseline body weight after 12 weeks of maintenance therapy, Contrave should be discontinued[6] | **ADVERSE EFFECTS:**<br>• Constipation<br>• Headache<br>• Nausea<br>• Vomiting<br>• Abdominal pain<br><br>**PRECAUTIONS:**<br>• Suicidal behavior<br>• Seizures<br>• Opioid use<br>• Increase in blood pressure and heart rate<br>• Angle closure glaucoma<br><br>**CONTRAINDICATIONS:**<br>• Pregnancy<br>• Uncontrolled hypertension<br>• Seizure disorders<br>• Eating disorders<br>• Chronic opioid use<br>• Use within 14 days of MAOis |
| **Plenity®** | Adults with a BMI of 25kg/m$^2$ to 40kg/m$^2$ | Plenity consists of modified cellulose and citric acid, which are two naturally derived products. The capsule contains hydrogel particles that mix with ingested foods resulting in particle release. The hydrogel particles occupy about 1/4$^{th}$ of the patient's stomach volume, promoting satiety and fullness. Plenity is non-systemic and works directly in the GI tract | Take 2.25g (3 capsules) by mouth with water 30 minutes before lunch and dinner for a total of 6 capsules daily. If pre-meal dose is missed, administer during or immediately after the meal.[10] | Plenity® is not systemically absorbed and does not require adjustments in patients with hepatic and renal impairment | 6.4% average weight loss from baseline weight after 24 weeks of treatment[4]<br><br>Results are typically seen after 4 weeks of use. No guidance has been provided for discontinuation due to lack of results. | **ADVERSE EFFECTS:**<br>• Bloating<br>• Stomach pain<br>• Diarrhea, constipation, and gas<br><br>**PRECAUTIONS:**<br>• Dysphagia<br>• GERD<br>• Esophageal anatomic abnormalities<br>• Suspected strictures<br>• Complications from prior gastrointestinal surgery<br><br>**CONTRAINDICATIONS:**<br>• Pregnancy<br>• History of allergic reaction to cellulose, citric acid, sodium stearyl fumarate, gelatin, or titanium oxide |
| **Qsymia® (Phentermine and Topiramate)** *REMS program required | Patients age 12+ with a BMI ≥ 30kg/m$^2$ OR BMI ≥ 27kg/m$^2$ with ≥ 1 weight associated comorbidity (i.e. HTN, T2DM, or dyslipidemia) | Phentermine is a sympathomimetic amine with pharmacologic properties similar to amphetamine. CNS effects reduce appetite including stimulation of the hypothalamus to release norepinephrine<br><br>Topiramate effects on weight management may be due to its effects on appetite suppression and satiety enhancement and based on the combination of potential mechanisms such as blocking neuronal voltage-depending sodium channels, enhancing GABA activity, antagonizes AMPA/kainite glutamate receptors and weakly inhibits carbonic anhydrase. | Initiate 3.75/23mg by mouth once daily in the morning for 14 days.<br><br>Increase to 7.5mg/46mg by mouth once daily for 14 days.<br><br>After 12 weeks, if patient has not lost at least 3% of baseline weight, increase the dose to 11.25mg/69mg by mouth once daily for 14 days, with a final increase to 15mg/92mg once daily.<br><br>*Discontinue the 15mg/92mg formulation by dosing every other day for one week before stopping treatment to avoid precipitating a seizure[11] | **Renal Adjustments:**<br>In CrCl ≤50ml/min do not exceed 7.5mg/46mg once daily<br><br>**Hepatic Adjustments:**<br>In patients with Child-Pugh score 7-9, dosing should not exceed 7.5mg/46mg daily | Average weight loss of 9.8% from baseline weight after using the highest dose for 1 year, demonstrated[9]<br><br>Discontinue or escalate dose if 3% weight loss is not achieved after 12 weeks on 7.5mg/46mg daily[10]. | **ADVERSE EFFECTS:**<br>• Tachycardia<br>• Constipation<br>• Headache<br>• Xerostomia<br>• Insomnia<br><br>**PRECAUTIONS:**<br>• Suicidal behavior and ideation<br>• abrupt discontinuation<br>• COPD<br>• Use with CNS depressants<br>• Coronary artery disease,<br>• Insomnia<br>• Myocardial infarction history<br><br>**CONTRAINDICATIONS:**<br>• Glaucoma<br>• Hyperthyroidism<br>• Use within 14 days of MAOis<br>• Pregnancy<br>• Substance abuse |

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