

The Medical Letter[®]

on Drugs and Therapeutics

GLP-1 and GIP/GLP-1 RECEPTOR AGONISTS FOR TYPE 2 DIABETES

Updated November 6, 2025

The Medical Letter[®]

Because the source matters.

To support more content like this, please consider making a [donation](#) or becoming a [subscriber](#).

The Medical Letter is a nonprofit organization* that relies solely on subscription fees and donations to support our mission of providing objective, practical, and timely information on drugs and therapeutics.

Our work relies on support from people like you who value credible, unbiased drug information that is free of any commercial interest.

For more information visit our [website](#) or call Customer Service at: 800-211-2769

*The Medical Letter is a nonprofit, tax-exempt organization under Section 501(C)(3) of the Internal Revenue Code.
Donations are tax-deductible as allowed by law.

GLP-1 and GIP/GLP-1 RECEPTOR AGONISTS FOR TYPE 2 DIABETES AND ITS COMPLICATIONS

Drug	Diabetes-Related Indications	Usual Dosage	Other Information
GLP-1 Receptor Agonists			
Dulaglutide – Trulicity (Lilly) 0.75, 1.5, 3, 4.5 mg/0.5 mL single-dose pens	- Treatment of type 2 diabetes in patients ≥10 years old - Reduce the risk of MACE in adults with type 2 diabetes and established CV disease or multiple CV risk factors	10-18 years old: 0.75-1.5 mg SC once/week Adults: 1.5-4 mg SC once/week Titration: 0.75 mg once/week x 4 weeks; increase to 1.5 mg once/week and, in adult patients, increase in 1.5-mg increments every 4 weeks as needed (max 4.5 mg/week in adults)	Mean reduction in A1C at 52 weeks with 4.5-mg dose: 1.8
Exenatide – generic 250 mcg/mL (1.2, 2.4 mL) prefilled pens	Treatment of type 2 diabetes in adults	Adults: 5-10 mcg SC bid 60 minutes before meals Titration: 5 mcg bid; increase to 10 mcg bid after 1 month if needed	Not recommended in patients with severe renal impairment or ESRD
Liraglutide – Victoza (Novo Nordisk), and generics 18 mg/3 mL pens	- Treatment of type 2 diabetes in patients ≥10 years old - Reduce the risk of MACE in adults with type 2 diabetes and established CV disease	10-18 years old: 0.6-1.8 mg once/day Adults: 1.2-1.8 mg SC once/day Titration: 0.6 mg SC once/day x 7 days, then 1.2 mg once/day; can increase to 1.8 mg once/day after 1 week if needed	- Mean reduction in A1C at 52 weeks with 1.8-mg dose: 1.14 - Liraglutide is also available as <i>Saxenda</i> (SC injection) for chronic weight management in patients ≥12 years old
Semaglutide – Ozempic (Novo Nordisk) 0.68, 1.34, 2.68 mg/mL (3 mL) prefilled pens	- Treatment of type 2 diabetes in adults - Reduce the risk of MACE in adults with type 2 diabetes and established CV disease - Reduce the risk of kidney disease worsening, kidney failure, and cardiovascular death in adults with type 2 diabetes and chronic kidney disease	Adults: 0.5-2 mg SC once/week Titration: 0.25 mg SC once/week x 4 weeks, then 0.5 mg once/week; if needed, increase every 4 weeks to 1 mg once/week and then to 2 mg once/week (max 2 mg/week)	- Mean reduction in A1C at 40 weeks with 2-mg dose: 2.2 - Semaglutide is also available as <i>Wegovy</i> (SC injection) for chronic weight management in patients ≥12 years old and other indications
Rybelsus (Novo Nordisk) R1: 3, 7, 14 mg tabs	- Treatment of type 2 diabetes in adults - Reduce the risk of MACE in adults with type 2 diabetes who are at high risk for these events	Adults: 7-14 mg PO once/day 30 min before food with ≤4 ounces of plain water Titration: 3 mg PO once/day x 30 days, then 7 mg once/day; increase to 14 mg once/day after 30 days if needed for glycemic control (14-mg dose was used to support MACE indication)	- Mean reduction in A1C at 26 weeks with 14-mg dose: 1.4 - Taking two 7-mg tablets to achieve 14-mg dose is not recommended
GIP/GLP-1 Receptor Agonist			
Tirzepatide – Mounjaro (Lilly) 2.5, 5, 7.5, 10, 12.5, 15 mg/0.5 mL single-dose pens or vials	Treatment of type 2 diabetes in adults	Adults: 5-15 mg SC once/week Titration: 2.5 mg SC once/week x 4 weeks, then 5 mg once/week; increase in 2.5-mg increments every 4 weeks as needed (max 15 mg once/week)	- Mean reduction in A1C at 40 weeks with 15-mg dose: 2.1 - Tirzepatide is also available as <i>Zepbound</i> (SC injection) for chronic weight management in adults and obstructive sleep apnea in patients with obesity

MACE = major adverse cardiovascular effects; CV = cardiovascular