GLP-1 Agonists: Thoughtful Prescribing, Improved Outcomes Arriving

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Disclosure

- Dr. Bernard has no actual or potential conflicts of interest to disclose

- Off-label use of medications will not be discussed during this presentation

Objectives

1. Understand the mechanism of action of GLP-1 and dual GLP-1/GIP receptor agonists and the resulting effects on glycemic control and weight loss
2. Expand knowledge of prescribing GLPs, including patient selection, dosing strategies, monitoring, and managing potential side effects
3. Compare GLP insurance coverage requirements and patient assistance resources for public and private insurance plans

Introduction

What are GLP-1 and dual GLP-1/GIP receptor agonists?

- Synthetic analogs of glucagon-like peptide 1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP) used to treat type 2 diabetes and obesity

Why are they important?

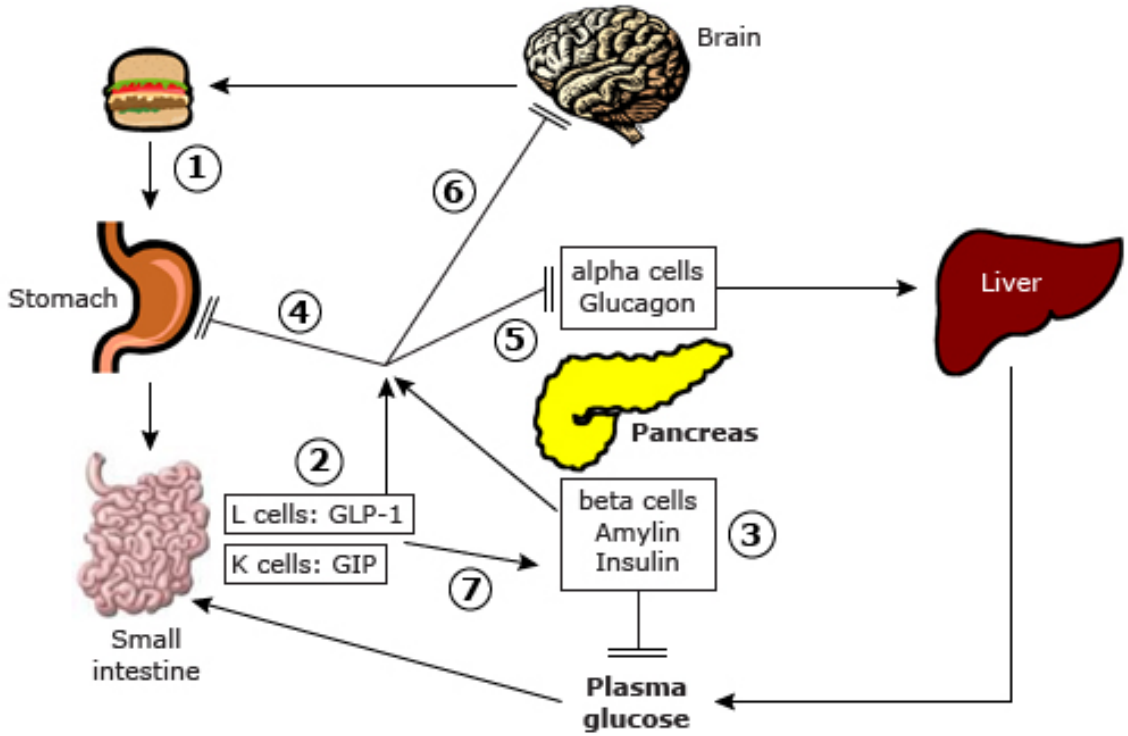
- Offer glycemic control, weight loss, and cardiovascular/renal benefits

Outline

I. Mechanisms of Action
II. Available GLP-1 RAs and dual GLP-1/GIP RAs and Their Pharmacology
III. Clinical Indications
IV. Safety & Side Effects
V. Practical Considerations
VI. Future Directions

Mechanisms of Action

Endogenous GLP-1/GIP Physiology



In healthy individuals, (1) ingestion of food results in (2) release of gastrointestinal peptides (GLP-1 and GIP) as well as (3) pancreatic beta cell hormones (insulin and amylin). GLP-1 and amylin, in particular, have inhibitory effects on (4) gastric emptying, (5) glucagon release, and (6) appetite. (7) Following the absorption of food, GLP-1 and GIP promote insulin secretion, otherwise known as the incretin effect. In diabetes, these steps are disrupted.

GIP: glucose-dependent insulinotropic polypeptide (formerly called gastric inhibitory polypeptide); GLP-1: glucagon-like peptide 1.

Graphic 59551 Version 6.0

Pharmacologic Actions

GLP-1

- Site of synthesis: small intestinal L cells
- Activates GLP-1 receptors on pancreatic β-cells, enhances glucose-dependent insulin release
- Slows gastric emptying
- Euglycemia or hypoglycemia: No effect
  Hyperglycemia: suppresses inappropriate glucagon secretion
- Promotes satiety and reduced food intake via CNS signaling, contributing to weight reduction

GIP

- Site of synthesis: small intestinal K cells
- Dual agonists stimulate GIP receptors on pancreatic β-cells, further amplifying glucose-dependent insulin secretion
- No effect on gastric emptying
- Euglycemia or hypoglycemia: stimulates glucagon
  Hyperglycemia: no effect
- GIP enhances weight loss effects when combined with GLP-1 receptor stimulation

Available GLP-1 RAs and dual GLP-1/GIP Ras and Their Pharmacology

GLP-1 Receptor Agonists – Type 2 Diabetes Treatment

Medication	Dosage Form	Dosing
Dulaglutide (Trulicity®)	pen-injector (single dose): 0.75 mg/0.5 mL, 1.5 mg/0.5 mL, 3 mg/0.5 mL, 4.5 mg/0.5 mL	• starting dose: 0.75 mg once weekly • titration: increase every 4 weeks • max dose: 4.5 mg once weekly
Exenatide (Byetta®)	pen-injector (multi-dose): 5 mcg/0.02 mL, 10 mcg/0.04 mL	• starting dose: 5 mcg twice daily • max dose: 10 mcg twice daily
Exenatide ER (Bydureon®)	auto-injector (single dose): 2 mg/0.85 mL	• starting dose: 2 mg once weekly • max dose: 2 mg once weekly
Liraglutide (Victoza®)	pen-injector (multi-dose): 18 mg/3 mL	• starting dose: 0.6 mg once daily x 7 days then increase to 1.2 mg daily • max dose: 1.8 mg once daily
Semaglutide (Ozempic®)	pen-injector (multi-dose): 0.25 or 0.5 mg per dose (2 mg/3 mL), 1 mg per dose (4 mg/3 mL), 2 mg/dose (8 mg/3 mL)	• starting dose: 0.25 mg once daily • titration: increase every 4 weeks • max dose: 2 mg once weekly
Semaglutide (Rybelsus®)	oral tablet: 3 mg, 7 mg, 14 mg	• starting dose: 3 mg once daily • titration: increase every 30 days • max dose: 14 mg once daily

Dual GLP-1/GIP Receptor Agonists – Type 2 Diabetes Treatment

Medication	Dosage Form	Dosing
Tirzepatide (Mounjaro®)	pen-injector: 2.5 mg/0.5 mL, 5 mg/0.5 mL, 7.5 mg/0.5 mL, 10 mg/0.5 mL, 12.5 mg/0.5 mL, 15 mg/0.5 mL	• starting dose: 2.5 mg once weekly • titration: increase every 4 weeks • max dose: 15 mg once weekly

GLP-1 and Dual GLP-1/GIP Receptor Agonists – Obesity Treatment

Medication	Dosage Form	Dosing
Liraglutide (Saxenda®)	pen-injector (multi-dose): 18 mg/3 mL	• starting dose: 0.6 mg once daily • titration: increase by 0.6 mg/day at weekly intervals • max dose: **3 mg daily**
Semaglutide (Wegovy®)	auto-injector: 0.25 mg/0.5 mL; 0.5 mg/0.5 mL; 1 mg/0.5 mL; 1.7 mg/0.75 mL; 2.4 mg/0.75 mL	• starting dose: 0.25 mg once weekly • titration: increase every 4 weeks • max dose: **2.4 mg once weekly**

Medication	Dosage Form	Dosing
Tirzepatide (Zepbound®)	pen-injector: 2.5 mg/0.5 mL, 5 mg/0.5 mL, 7.5 mg/0.5 mL, 10 mg/0.5 mL, 12.5 mg/0.5 mL, 15 mg/0.5 mL	• starting dose: 2.5 mg once weekly • titration: increase every 4 weeks • max dose: 15 mg once weekly

Indication-Specific Brand and Generic Names

liraglutide	semaglutide (SQ)	tirzepatide
Diabetes: Victoza®	Diabetes: Ozempic®	Diabetes: Mounjaro®
Obesity: Saxenda®	Obesity: Wegovy®	Obesity: Zepbound®

Pharmacokinetics

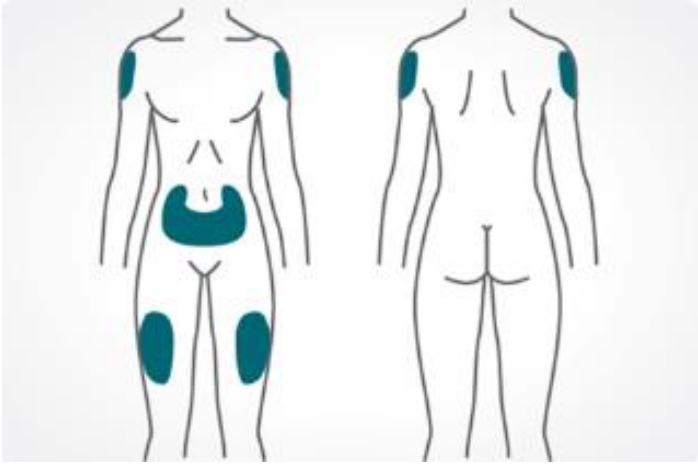
- Time to peak and duration of action
  - Short-acting agents (exenatide BID): duration ~6–10 hours, BID
  - Intermediate agent (liraglutide): half-life ~13 hours, daily injection
  - Long-acting agents (dulaglutide, semaglutide): achieve steady state after 4–8 weeks, half-lives ~90–160 hours, once-weekly dosing
- Impact on dosing frequency
  - Extended half-lives of newer GLP-1 RAs improve **treatment convenience and adherence**.
  - Less frequent dosing minimizes peaks and troughs in drug exposure, reducing GI side effects and maintaining consistent glycemic and appetite control

Pharmacokinetics

- Oral semaglutide considerations
  - Rybelsus® uses an absorption enhancer (SNAC) to promote gastric uptake.
  - Must be taken on an empty stomach with ≤4 oz of water, at least 30 minutes before eating, drinking, or taking other medications
  - Variable absorption and cost may limit use in some patients, but it offers an option for those hesitant about injections.

Administration

- Injection techniques
  - Administer via pre-filled single-use or multi-dose pens with fine-gauge needles
  - Common injection sites: abdomen, thigh
  - Prefilled, ready-to-use pens (e.g., Trulicity®, Mounjaro®) may be preferred by patients who wish to avoid handling or seeing needles



Clinical Indications and Benefits

GLP-1 Receptor Agonists

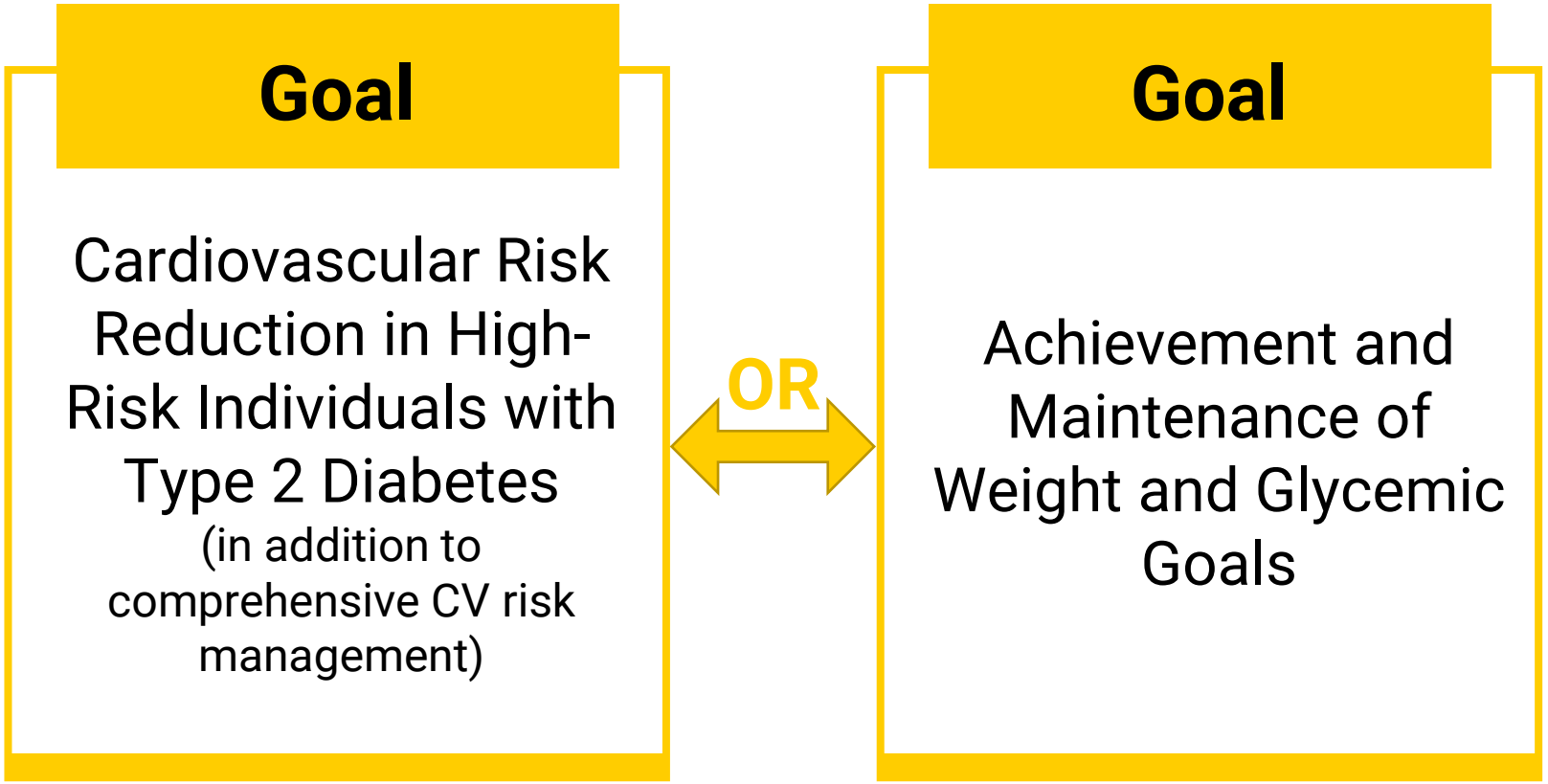
A1c Reduction	1.0 – 2.0%
Hypoglycemia	no
Weight Change	loss (intermediate to very high)
Effect on MACE	benefit: dulaglutide, liraglutide, semaglutide (SQ) neutral: exenatide once-weekly
Heart Failure	neutral
CKD Progression	benefit for renal endpoints in CVOTs driven by albuminuria outcomes: dulaglutide, liraglutide, semaglutide (SQ)

GLP-1/GIP Receptor Agonists

A1c Reduction	1.5 – 2.0%
Hypoglycemia	no
Weight Change	loss (very high)
Effect on MACE	benefit: tirzepatide
Heart Failure	under investigation
CKD Progression	under investigation

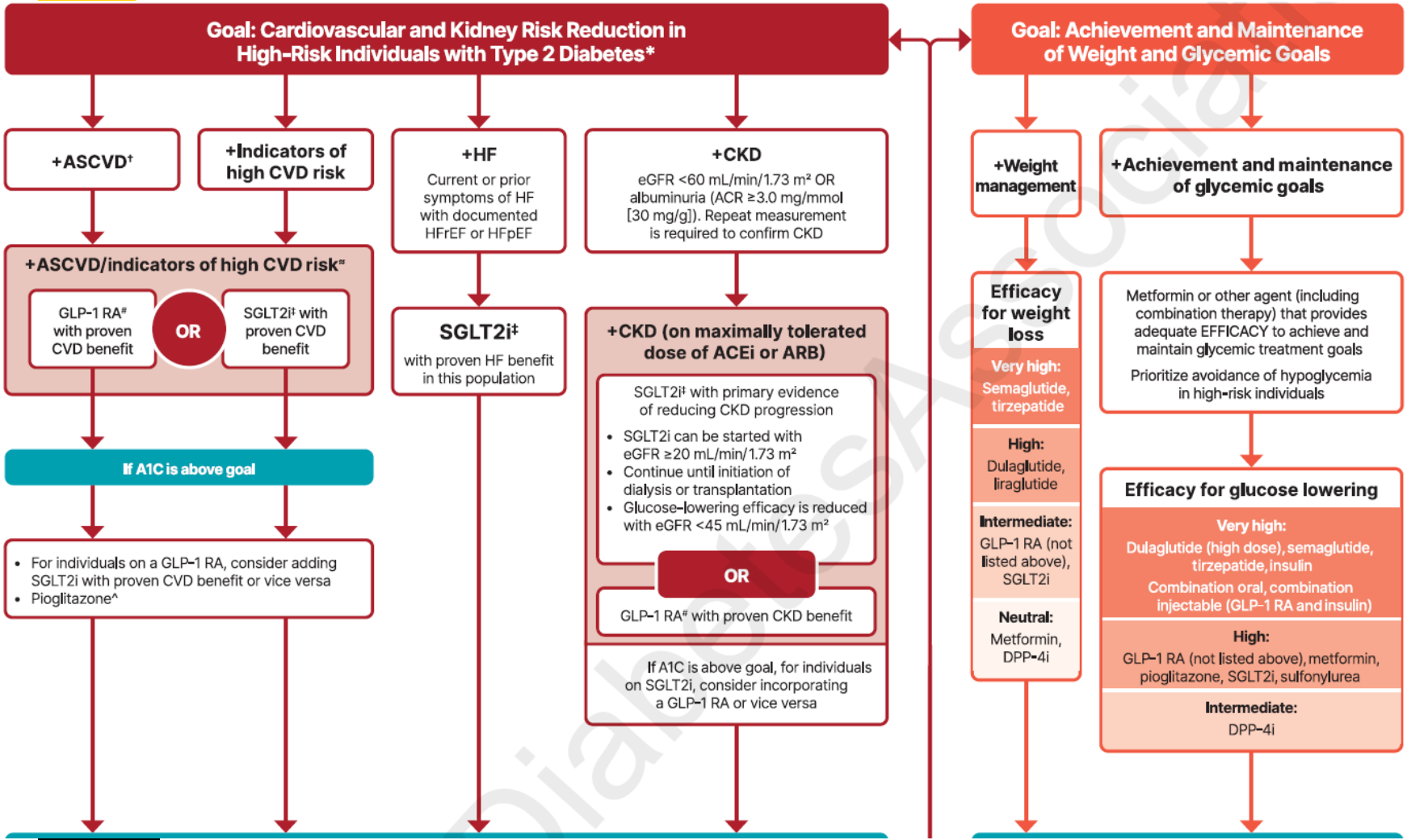
Type 2 Diabetes

Type 2 DM management



ADA. Standards of Care in Diabetes—2025. Diabetes Care. 2025;48(Suppl 1):S1-S352.

Type 2 DM management



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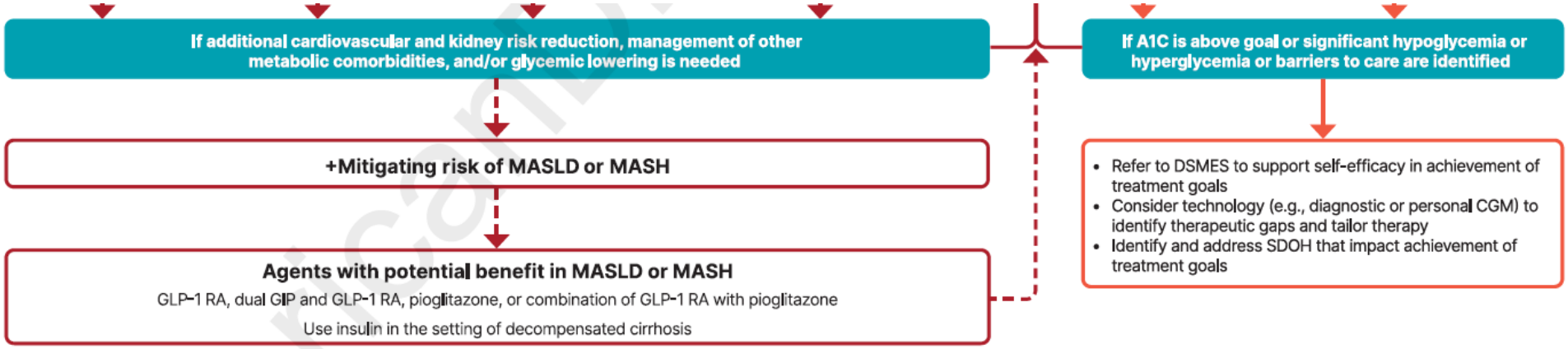
Type 2 DM management



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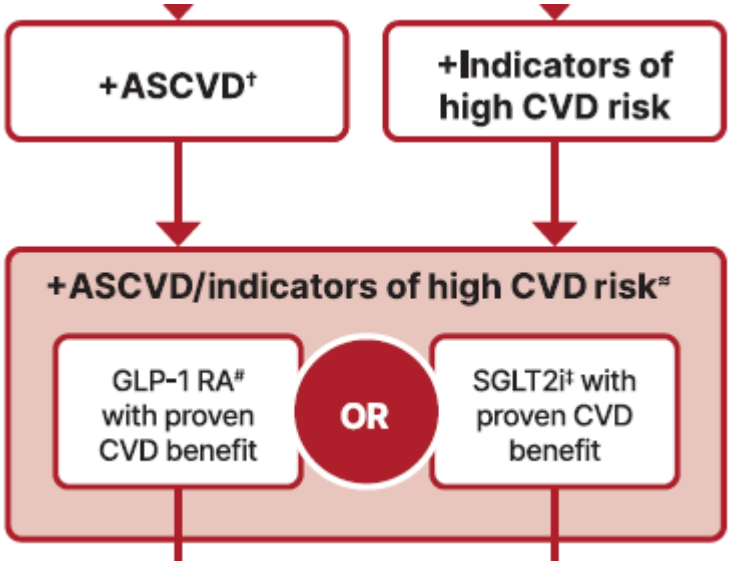
Cardiovascular Benefits



- Reduction in MACE (major adverse cardiovascular events)
- Preference in patients with ASCVD

GLP-1 RAs: Cardiovascular Outcomes

Trial	Drug	Established ASCVD (%)	Primary Endpoint and Results	NNT^
LEADER (*NEJM* 2016;375:3110)	**Liraglutide (Victoza®)** 1.5 mg daily or max tolerated	81.3	time to first 3-P MACE[#] 13.0% intervention vs. 14.9% placebo **HR: 0.87 (0.78–0.97)**	42
SUSTAIN-6 (NEJM 2016;375:1834)	**Semaglutide (Ozempic®)** 0.5-1.0 mg once weekly	58.8	time to first 3-P MACE[#] 6.6% intervention vs. 8.9% placebo **HR 0.74 (0.58–0.95)** (Primarily driven by stroke reduction)	17
REWIND (Lancet 2019;394:121)	**Dulaglutide (Trulicity®)** 1.5 mg once weekly	31.5	time to first 3-P MACE[#] 12% intervention vs. 13.4% placebo **HR 0.88: (0.79–0.99)**	71
EXSCEL (NEJM 2017;377:1228)	**Exenatide (Bydureon®)** 2 mg once weekly	73.1	time to first 3-P MACE[#] 11.4% intervention vs. 12.2% placebo **HR: 0.91 (0.83–1.00)**	125
PIONEER-6 (NEJM 2019;381: 841-851)	**Semaglutide (Rybelsus®)** semaglutide 14 mg orally daily	84.6	time to first 3-P MACE# 3.8% intervention vs. 4.8% placebo **HR: 0.79 (0.57–1.11)**	100

[#]3-P MACE: death from CV causes, nonfatal myocardial infarction (MI), nonfatal stroke

^ Composite of CV events

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Marso SP, Daniels GH, Brown-Frandsen K, et al. *N Engl J Med*. 2016;375(4):311
Marso SP, Bain SC, Consoli A, et al. N Engl J Med. 2016;375(19):1834-44.
Gerstein H, Colhoun H, Dagenais G, et al. *Lancet.* 2019;394(10193)
Holman RR, Bethel MA, Mentz RJ, et al. 2017;377(13):1228-39

GLP-1 RAs: Cardiovascular Outcomes

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2.0 mg weekly dose available

3.0 mg and 4.5 mg dose available

[#]3-P MACE: death from CV causes, nonfatal myocardial infarction (MI), nonfatal stroke

^ Composite of CV events

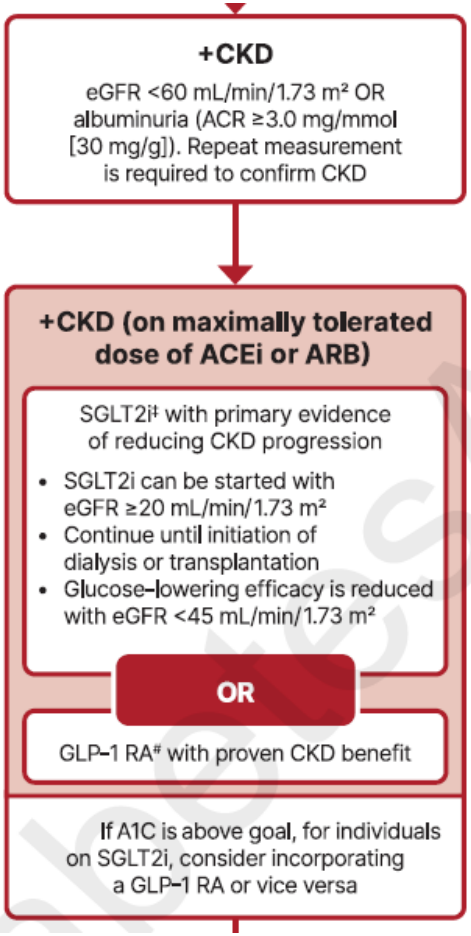
Marso SP, Daniels GH, Brown-Frandsen K, et al. *N Engl J Med*. 2016;375(4):311
Marso SP, Bain SC, Consoli A, et al. N Engl J Med. 2016;375(19):1834-44.
Gerstein H, Colhoun H, Dagenais G, et al. *Lancet.* 2019;394(10193)
Holman RR, Bethel MA, Mentz RJ, et al. 2017;377(13):1228-39

GLP-1/GIP RAs: Cardiovascular Outcomes

Trial	Drug	Established ASCVD (%)	Primary Endpoint and Results	NNT^
SURPASS-CVOT (*NEJM* 2016;375:3110)	**Tirzepatide (Mounjaro®)** 15 mg once weekly or max tolerated compared to dulaglutide (Trulicity) 1.5 mg once weekly	83	time to first 3-P MACE# 9.1% tirzepatide vs. 9.9% dulaglutide **HR: 0.92 (0.83–1.01)**	125

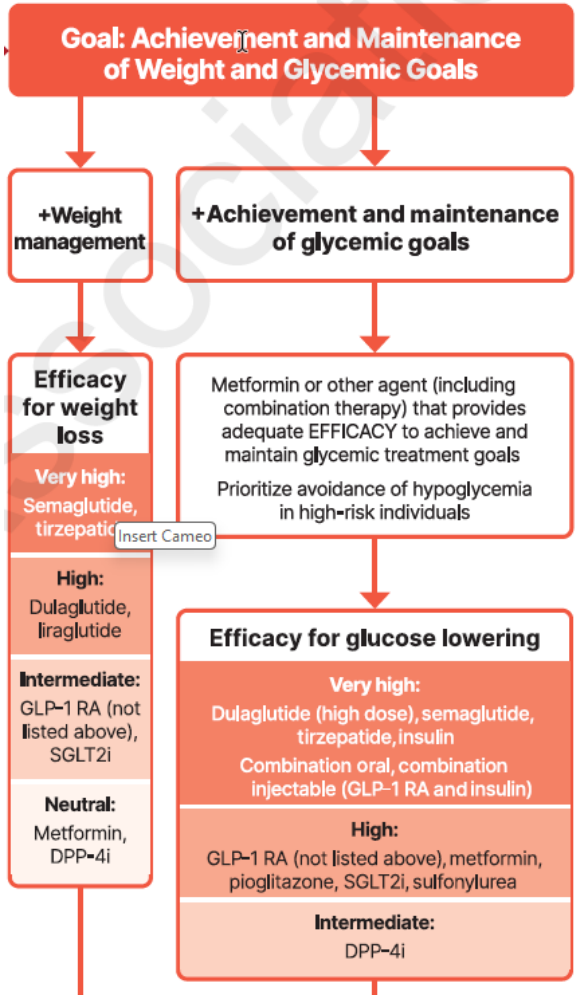
- It used an active comparator (dulaglutide) rather than placebo, which is uncommon in CVOTs

Renal Protection



- GLP-1 RAs have been shown to reduce albuminuria
- Liraglutide, dulaglutide, and semaglutide trials demonstrated reductions in composite renal outcomes
- GLP-1 RAs used in mild to moderate CKD without dose adjustments

Weight and Glycemic Benefits



- GLP-1 RAs are among the most effective non-insulin agents for A1C lowering
- Avg A1c reduction from baseline: 1.0–2.0%

Efficacy for Weight Loss

Very High	High	Intermediate
Semaglutide **Tirzepatide**	**Dulaglutide** **Liraglutide**	**Exenatide** SGLT2 inhibitors

ADA. Standards of Care in Diabetes—2025. Diabetes Care. 2025;48(Suppl 1):S1-S352.

Efficacy for Glucose Lowering

Very High

Semaglutide
Dulaglutide (high dose)
Tirzepatide

Insulin
Combination oral,
Combination Injectable
(GLP-1 RA/Insulin)

High

Liraglutide
Exenatide

SGLT2 inhibitors

Metformin
Sulfonylureas
Thiazolidinediones

Intermediate

DPP-4 inhibitors

ADA. Standards of Care in Diabetes—2025. Diabetes Care. 2025;48(Suppl 1):S1-S352.

Chronic Weight Management

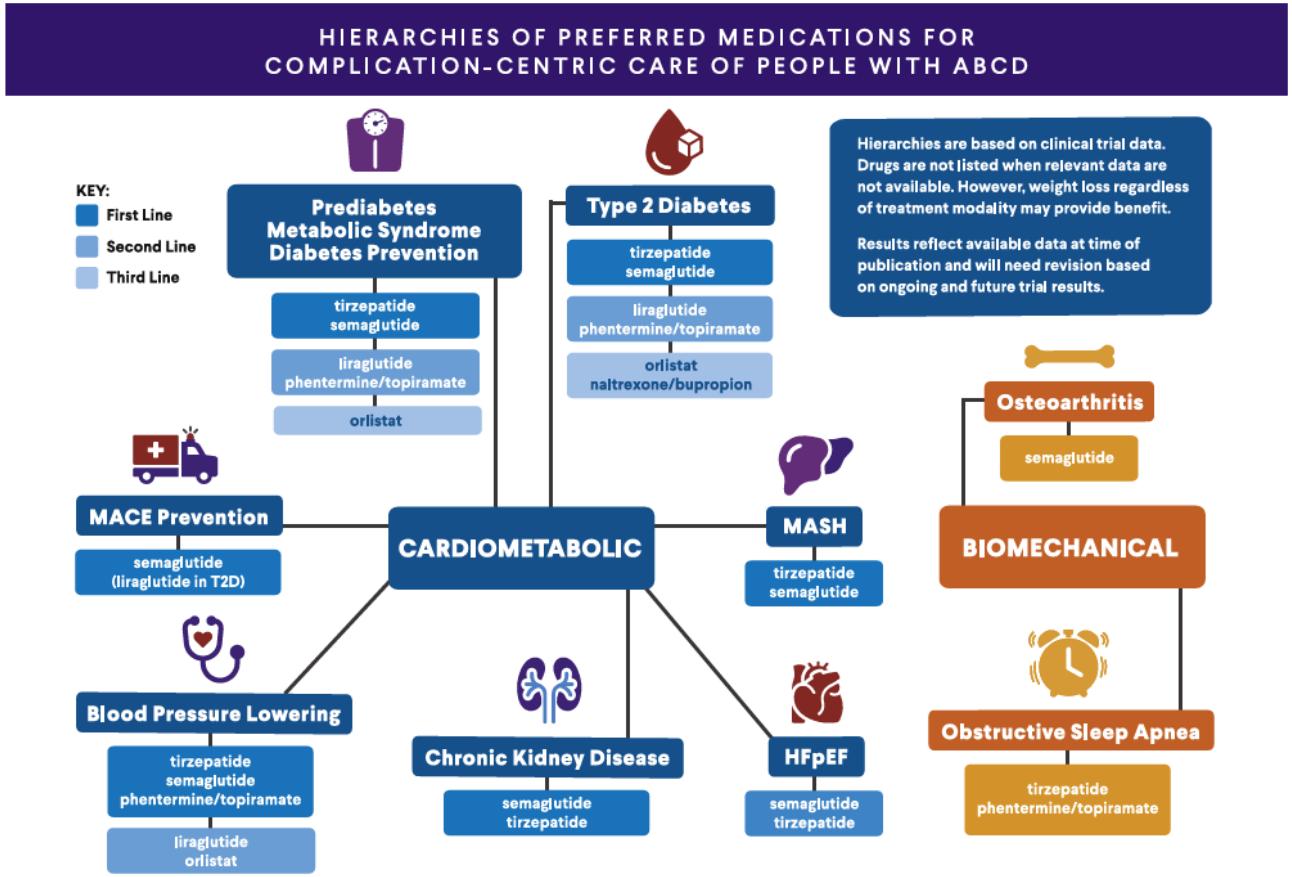
Obesity Management

WHO QUALIFIES FOR **PHARMACOLOGIC** TREATMENT?

- **Recommended for patients:**
  - BMI ≥ 30 kg/m^2
  - BMI ≥ 27 kg/m^2 + weight-related comorbidity

- Should always be used as an **adjunct** to lifestyle modifications

AACE Preferred Medication Hierarchies



Abbreviations: **ABCD**, adiposity-based chronic disease; **HFpEF**, heart failure with preserved ejection fraction; **MACE**, major adverse cardiac events; **MASH**, metabolic dysfunction-associated steatohepatitis ; **T2D**, type 2 diabetes

Algorithm Figure 8 - Preferred Medications Hierarchies

AACE

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Nadolsky K, Garvey WT, Agarwal M, et al. American Association of Clinical Endocrinology Consensus Statement: Algorithm for the Evaluation and Treatment of Adults with Obesity/Adiposity-Based Chronic Disease - 2025 Update. *Endocr Pract*. Published online September 18, 2025. doi:10.1016/j.eprac.2025.07.017

GLP-1 and dual GLP-1/GIP RAs: Obesity Treatment

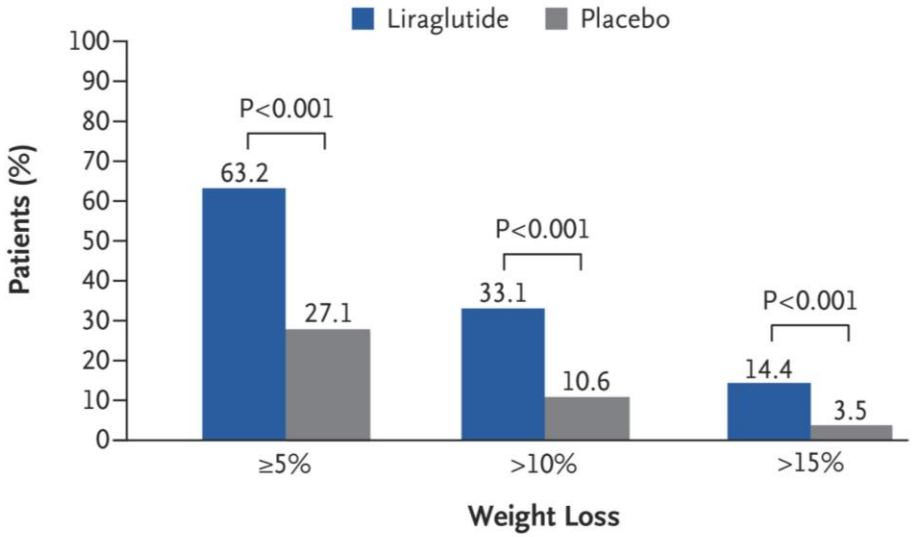
Medication	FDA Approval	Weight Loss
Liraglutide (Saxenda®)	2014	9.2% (56 weeks)
Semaglutide (Wegovy®)	2021	16.9% (68 weeks)
Tirzepatide (Zepbound®)	2023	22.5% (72 weeks)

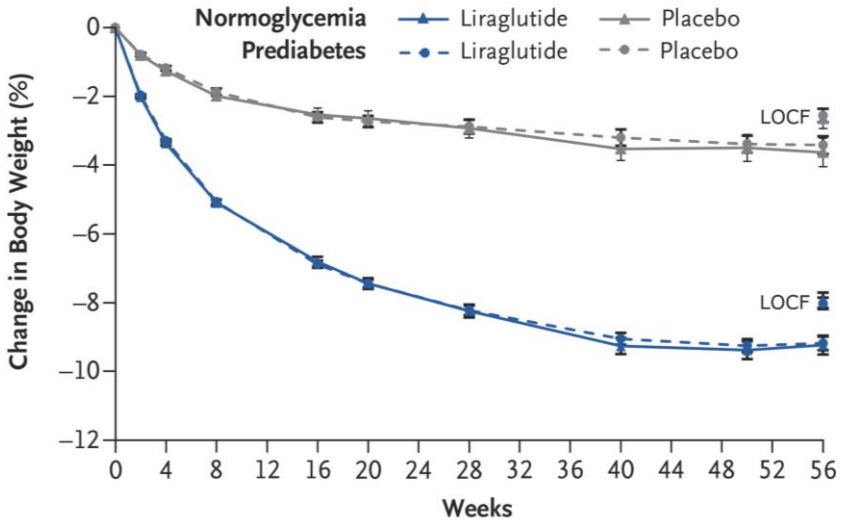
Liraglutide (Saxenda)

A Randomized, Controlled Trial of 3.0 mg of Liraglutide in Weight Management (SCALE)

phase 3 double-blind RCT | 56 weeks | 3,731 adults with BMI ≥ 30 or ≥ 27 + HTN or HLD

liraglutide 3 mg daily vs placebo





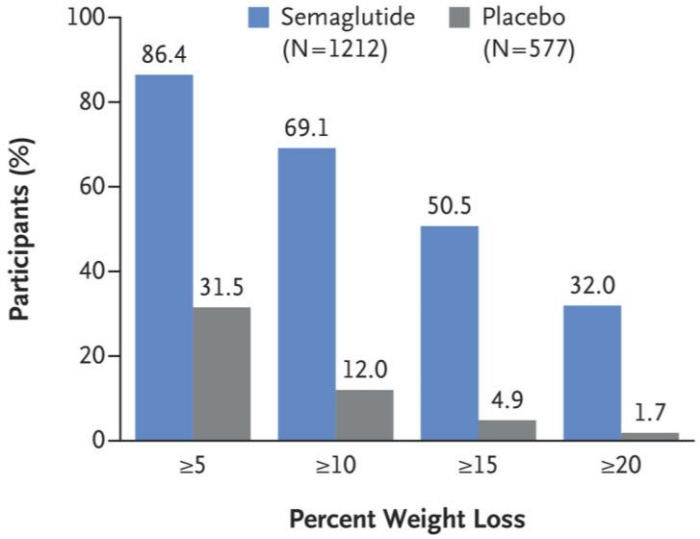
Pi-Sunyer X, Astrup A, Fujioka K, et al. A Randomized, Controlled Trial of 3.0 mg of Liraglutide in Weight Management. *N Engl J Med*. 2015;373(1):11-22. doi:10.1056/NEJMoa1411892

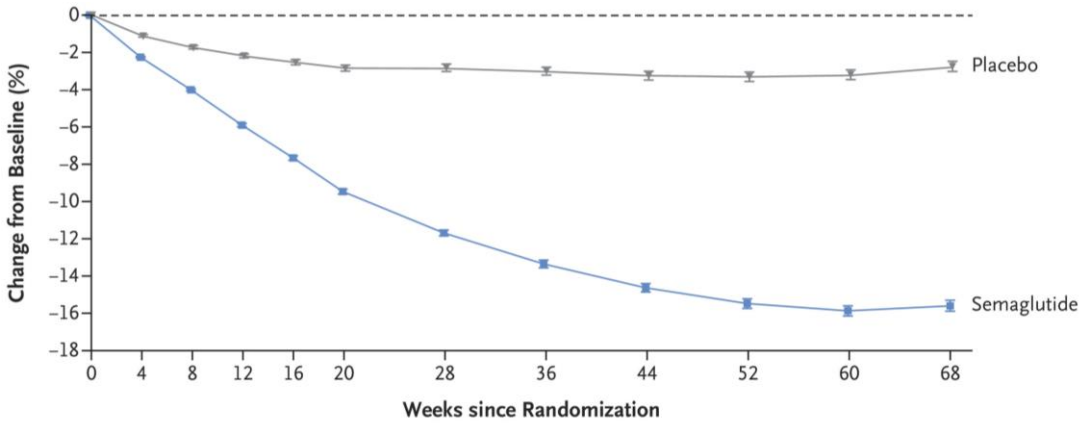
Semaglutide (Wegovy)

Once-Weekly Semaglutide in Adults with Overweight or Obesity (STEP 1)

phase 3 double-blind RCT | 68 weeks | 1,961 adults with BMI ≥ 30 or ≥ 27 + ≥ 1 complication

semaglutide 2.4 mg weekly vs placebo





Wilding JPH, Batterham RL, Calanna S, et al. Once-Weekly Semaglutide in Adults with Overweight or Obesity. *N Engl J Med*. 2021;384(11):989-1002. doi:10.1056/NEJMoa2032183

Semaglutide (Wegovy)

Weight Regain and Cardiometabolic Effects After Withdrawal of Semaglutide (STEP 1 Trial Extension)

observational study | 52 weeks | 327 adults from Step 1 trial who stopped therapy

change in weight and cardiometabolic risk factors after treatment withdrawal in STEP 1 trial

- After stopping semaglutide, participants **regained around two-thirds of prior weight loss**
- Semagltuide group maintained **mean weight loss of 5.6% from baseline at end of 120 weeks** compared with 0.1% loss in placebo group
- Cardiometabolic improvements seen from week 0 to week 68 with semaglutide **reverted towards baseline** at week 120 for most variables

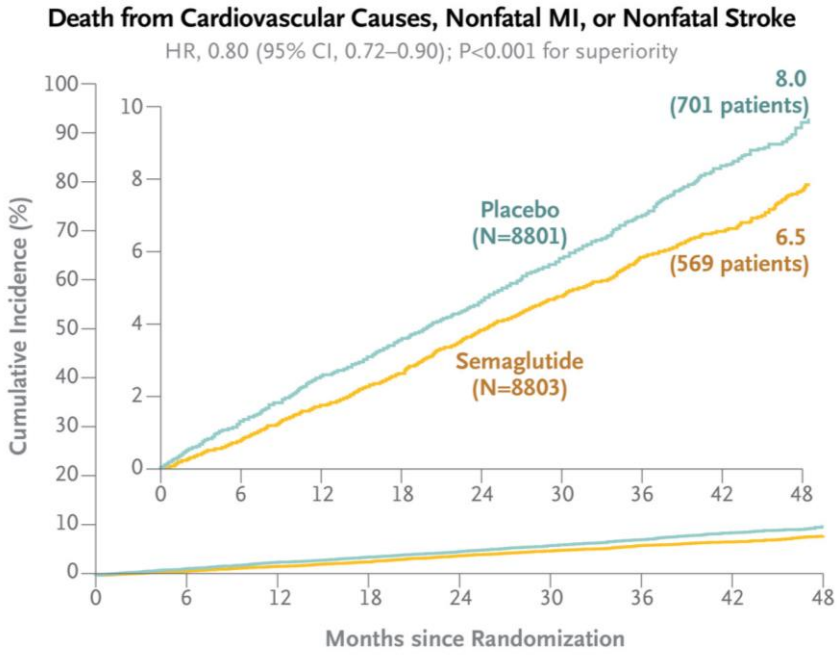
Wilding JPH, Batterham RL, Davies M, et al. Weight regain and cardiometabolic effects after withdrawal of semaglutide: The STEP 1 trial extension. *Diabetes Obes Metab*. 2022;24(8):1553-1564. doi:10.1111/dom.14725

Semaglutide (Wegovy)

Semaglutide and Cardiovascular Outcomes in Obesity without Diabetes (SELECT)

double-blind superiority trial | 39.8 months | 17,604 adults age 45+ with preexisting CVD + BMI ≥ 27

semaglutide 2.4 mg weekly vs placebo



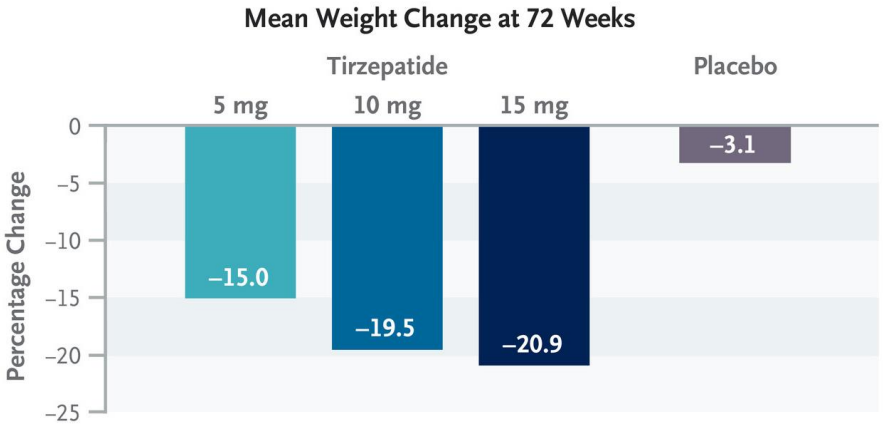
Wilding JPH, Batterham RL, Davies M, et al. Weight regain and cardiometabolic effects after withdrawal of semaglutide: The STEP 1 trial extension. *Diabetes Obes Metab*. 2022;24(8):1553-1564. doi:10.1111/dom.14725

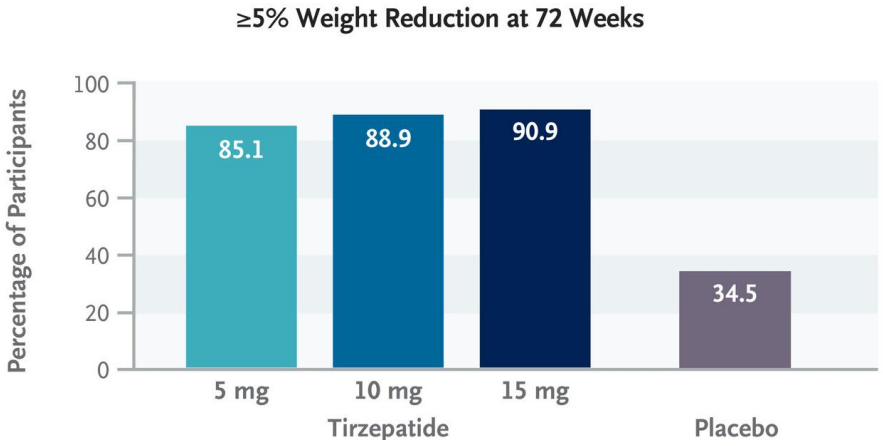
Tirzepatide (Zepbound)

Tirzepatide Once Weekly for the Treatment of Obesity (SURMOUNT-1)

phase 3 double-blind RCT | 72 weeks | 2,539 adults with BMI ≥ 30 or ≥ 27 + ≥ 1 complication

tirzepatide 5 mg, 10 mg, or 15 mg weekly vs placebo

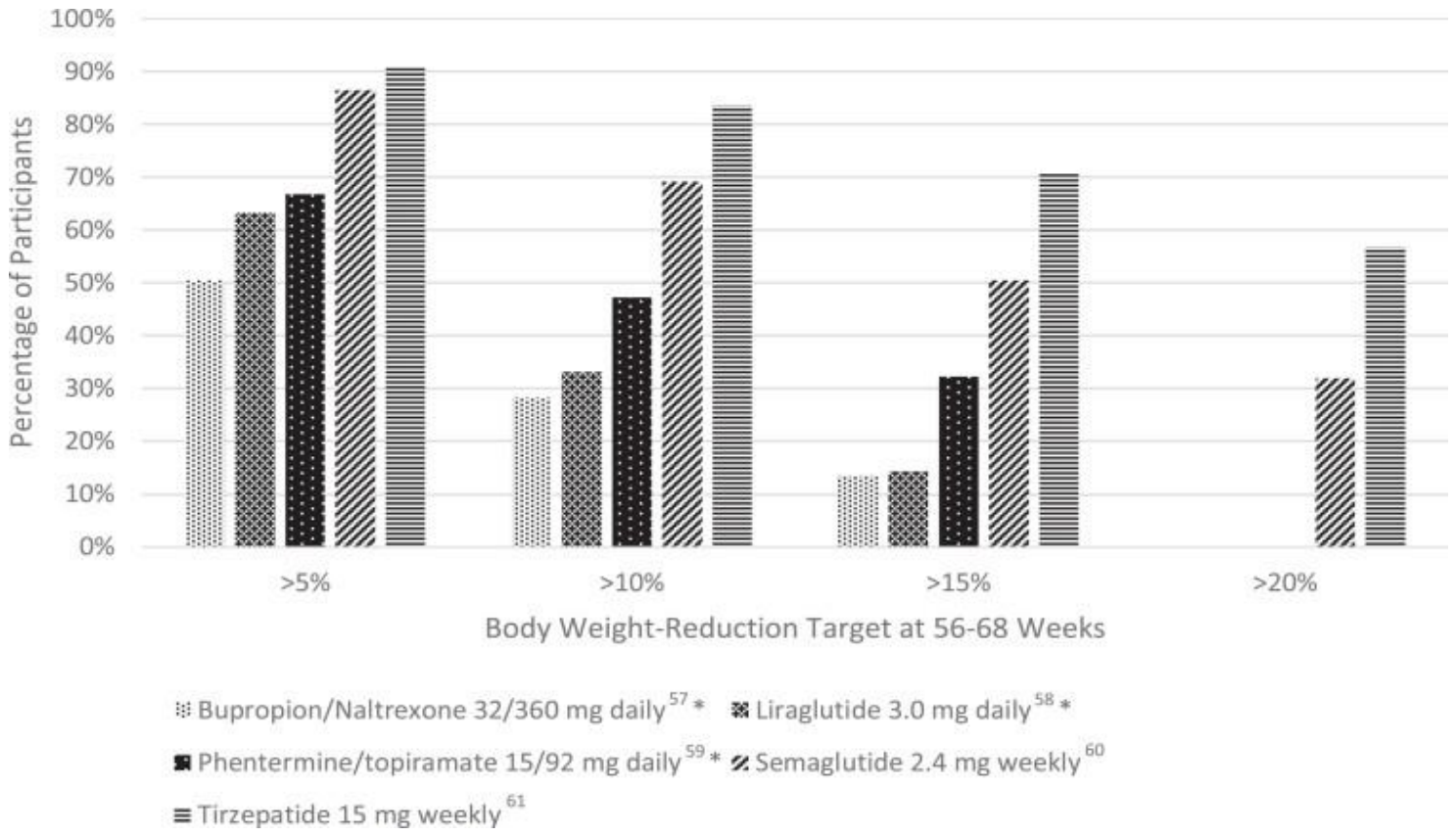




Jastreboff AM, Aronne LJ, Ahmad NN, et al. Tirzepatide Once Weekly for the Treatment of Obesity. *N Engl J Med*. 2022;387(3):205-216. doi:10.1056/NEJMoa2206038

Medication Comparison

Percentage of study participants who met the following weight-reduction targets (>5, >10, >15, >20% weight loss) after 56-68 weeks of treatment



Enright C, Thomas E, Saxon DR. An Updated Approach to Antiobesity Pharmacotherapy: Moving Beyond the 5% Weight Loss Goal. *J Endocr Soc.* 2023;7(3):bvac195. Published 2023 Jan 10. doi:10.1210/jendso/bvac195

Pharmacologic Therapy Key Points

- First-line therapy is **always** non-pharmacologic
- Weight loss in clinical trials reflects **extensive lifestyle changes** in addition to medications and often **lack generalizability**
- Evaluate therapy **monthly** for safety and tolerability
- Stop medication if patient does not lose **> 5% of body weight after three months** of treatment

WEIGHT REGAIN AFER MEDICATION DISCONTINUATION IS LIKELY UNLESS SUSTAINED LIFESTYLE MODIFICATIONS ARE IMPLEMENTED

Safey and Side Effects

GLP-1 and GLP-1/GIP RA Contraindications

- Type 1 Diabetes
- Contraindicated in patients with personal or family history of medullary thyroid carcinoma (MTC)
  - Other thyroid cancers not a contraindication
- Patients with multiple endocrine neoplasia syndrome type 2 (MEN2)
- Do not use in patients with a history of pancreatitis

Thyroid. 2011: 21, 2; 125-134

A note on pancreatitis

- Pancreatitis
  - Causality has not been established
  - Meta-analysis study found no significant increase in the risk of pancreatitis associated with the use of GLP-1 agonist.
  - Second meta-analysis concluded no significant difference than placebo arm
  - Few consider use if/after explainable cause of pancreatitis adequately managed

Endocrine. 2020:68,3: 518-525.
Diabetes research and clinical practice. 2014 103,2: 269-75
Brady SM. *AACE Clinical Case Reports* 2016 2,2

GLP-1 and GLP-1/GIP RA Precautions

- Gastroparesis
  - All GLP-1 RA slow gastric emptying
  - Use GLP-1 RAs with caution
- Bariatric surgery
  - Monitor for dehydration/nausea
  - Endogenous postprandial GLP-1 concentrations may be increased
- The American Society of Anesthesiologists recommends holding GLP-1 and GLP-1/GIP RAs before surgery to ↓ the risk of complications

Nakatani Y, et al. *Diabetes Metab.* 2017;43(5):430

GLP-1 RECEPTOR AGONISTS

ADVERSE EFFECTS

- **Common:**
  - GI: abdominal pain, nausea, vomiting, diarrhea, constipation, GERD
- **Rare:**
  - Diabetic retinopathy complications
  - Gallbladder disease
  - Hypersensitivity/injection site reaction
  - Pancreatitis
  - Tachycardia
- **US Boxed Warning:**
  - Risk of thyroid C-cell tumors

CLINICAL PEARLS

- Slow dose titration recommended to ↓ risk of GI side effects
  - Dietary modifications: smaller meal size, decrease high-fat or spicy food
  - Most symptoms are temporary
- Injection site reactions more common with exenatide
- The American Society of Anesthesiologists no longer recommends holding GLP-1 RAs for most before surgery to ↓ the risk of complications
- Monitor renal function when initiating or escalating doses in patients with renal impairment with severe adverse GI reactions

Drucker DJ, et al. *Lancet.*2008;372(9645):1240

GLP-1/GIP RECEPTOR AGONISTS

ADVERSE EFFECTS

- **Common:**
  - GI: abdominal pain, nausea, vomiting, diarrhea, constipation, GERD
- **Rare:**
  - Diabetic retinopathy complications
  - Gallbladder disease
  - Hypersensitivity/injection site reaction
  - Pancreatitis
  - Tachycardia
- **US Boxed Warning:**
  - Risk of thyroid C-cell tumors

CLINICAL PEARLS

- Slow dose titration recommended to ↓ risk of GI side effects
  - Dietary modifications: smaller meal size, decrease high-fat or spicy food
  - Most symptoms are temporary
- The American Society of Anesthesiologists updated its guidance: most patients should NOT stop GLP-1/GIP receptor agonists (RAs) before elective surgery but should follow a 24-hour liquid diet beforehand
- Monitor renal function when initiating or escalating doses in patients with renal impairment with severe adverse GI reactions

Practical Considerations

Baseline labs and clinical evaluation

- Baseline Labs:
  - A1c
  - Renal function (eGFR) – when combining with SGLT2
  - Liver enzyme and lipids – for assessing metabolic status and comorbid conditions
  - Weight and BMI – evaluating therapy response if using for weight management
- Oral semaglutide
  - Review other meds that might interact with its absorption
- Review concurrent medications that could increase hypoglycemia risk (insulin, sulfonylureas)

Initiation and Titration

- Begin at the **lowest available** dose to minimize GI intolerance, then increase gradually every 4 weeks as tolerated
- Document baseline GI symptoms and establish a plan for monitoring tolerance
- Advise **smaller**, slower meals and to avoid high-fat or greasy foods during dose escalation
- Delay titration if GI side effects (nausea, vomiting) persists
- Consider antiemetic therapy briefly if needed, but most symptoms resolve with time

Follow-Up and Monitoring

- Initial follow-up
  - 2-4 weeks after initiation to assess tolerance, side effects, and injection technique
- Subsequent follow up
  - Monitor A1c (every 3-6 months), weight/BMI
  - Review GI symptoms and medication adherence
  - Consider renal function periodically (especially baseline CKD)
  - Evaluate whether glycemic or weight-loss targets are being met

Insurance Navigation - Diabetes

Medicaid

- Preferred agents covered with Prior Authorization (PA): Victoza, Trulicity, Ozempic
- Non-preferred agents may be covered with PA

Medicare

- Preferred agents vary by plan
- annual deductible (2025 max was $590) then a monthly copay, often go into coverage gap later in year
- Not eligible for copay savings cards

Commercial

- Preferred agents vary by plan
- Eligible for copay savings cards

Insurance Navigation - Obesity

Medicaid

- Not covered

Medicare

- Not covered

Commercial

- Varies by plan

Cost assistance

Generic name	Brand name	Generic Available?	Copay card available?	Link to copay card	Patient Assistance Program
liraglutide	Victoza (diabetes)	Yes	No		Yes for uninsured or Medicare with income below 400%. No OOP requirements for Medicare patients. Will not help patients with commercial insurance and a high copay
	Saxenda (weight loss)	No	copay as little as $25 or save up to $200 per 30 day supply prescription. Uninsured patients can also save $200 per fill	Saxenda	

Cost assistance

Generic name	Brand name	Generic Available?	Copay card available?	Link to copay card	Patient Assistance Program
semaglutide	Ozempic (diabetes)	No	copay as little as $25; up to $100 in savings per 30 day supply prescription. For CI patients where the e-voucher doesn't kick in due to the high copay, you can still enter the copay card manually to apply	Ozempic	Yes for uninsured or Medicare with income below 400%. No OOP requirements for Medicare patients. Will not help patients with commercial insurance and a high copay
	Wegovy (weight loss)	No	copay as little as $25 or save up to $225 per 28 day supply prescription. Patients with commercial insurance but no coverage for Wegovy, or non-government beneficiaries can save up to $500 per fill	Wegovy	No
	Rybelsus	No	copay as little as $10 for a 1- , 2 - , or 3-month prescription prescription; maximum savings of $300 per 1 month supply, $600 per 2 month supply, or $900 per 3 month supply.	Rybelsus	Yes for uninsured or Medicare with income below 400%. No OOP requirements for Medicare patients. Will not help patients with commercial insurance and a high copay

Cost assistance

Generic name	Brand name	Generic Available?	Copay card available?	Link to copay card	Patient Assistance Program
dulaglutide	Trulicity	No	Must have coverage through commercial insurance to pay as little as $25 for up to 12 pens. Copay card for Trulicity will cover up to $150 after patient pays the first $25. Monthly cap $150, annual cap $1800. *Copay card is e-mailed to patient, not available immediately online.*	Trulicity	No
exenatide	Byetta	No	copay as little as $25, maximum of $100 covered	Byetta	Yes for uninsured or Medicare with income below 300%. No OOP requirements for Medicare patients. Will not help patients with commercial insurance and a high copay
	Bydureon Bcise	No	copay as low as $0 with max $150 covered	Bydureon	

Cost assistance

Generic name	Brand name	Generic Available?	Copay card available?	Link to copay card	Patient Assistance Program
tirzepatide	Mounjaro (diabetes)	No	Copay card for Mounjaro for commercial insurance patients whose plans covers the drug will cover up to $150 for one month, $300 for 2 months or $450 for 3 months after patient pays the first $25. Annual cap $1800. For commercial insurance patients denied coverage for Mounjaro, the card will pay $575 per fill up to a maximum of $3450 per year	Mounjaro	No
	Zepbound (weight loss)(sleep apnea)	No	For patients with commercial drug insurance coverage for Zepbound: You must have commercial drug insurance that covers Zepbound™(tirzepatide) and a prescription consistent with FDA-approved product labeling to pay as little as $25 for a 1-month, 2-month, or 3-month prescription fill of Zepbound. Card savings subject to maximum monthly savings of up to $150 per 1-month prescription, $300 per 2-month prescription, or $450 per 3-month prescription fill and maximum annual savings of up to $1,800 per calendar year. Patients who have commercial drug insurance that does not cover Zepbound can obtain savings of up to $469 off your 1-month prescription fill of Zepbound. Month is defined as 28-days and up to 4 pens. Card savings are subject to a maximum monthly savings of up to $469 and a separate maximum annual savings of up to $6,097 per calendar year	Zepbound	No

Future Directions

Future Directions

- Pipeline Medications
  - Triple agonists (GLP-1/GIP/glucagon) – retatrutide
  - Amylin analogue – cagrilintide
- Combination Therapies
  - GLP-1 + SGLT2 inhibitors
- Expanding Indications
  - NAFLD/NASH treatment

Questions?

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Thank you

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