

GLP1RA's - The Cool Kids on the Block

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Disclosures

- No relevant conflicts of interests or financial relationship that exists for this presentation
- This presentation is free from any type of commercial support

Objectives

1. Identify the emerging evidence supporting GLP-1 receptor agonists in improving cardiometabolic outcomes beyond glycemic control.
2. Develop strategies to incorporate GLP-1 receptor agonists into treatment algorithms, with a focus on cardiovascular risk reduction and individualized patient care.
3. Implement approaches to improve access to GLP-1RAs, including navigating insurance coverage, patient assistance programs, and cost-effective prescribing practices.

Obesity Comorbid Conditions

Premature
Mortality

Cardiovascular

Metabolic

Pulmonary

Musculoskeletal

Reproductive

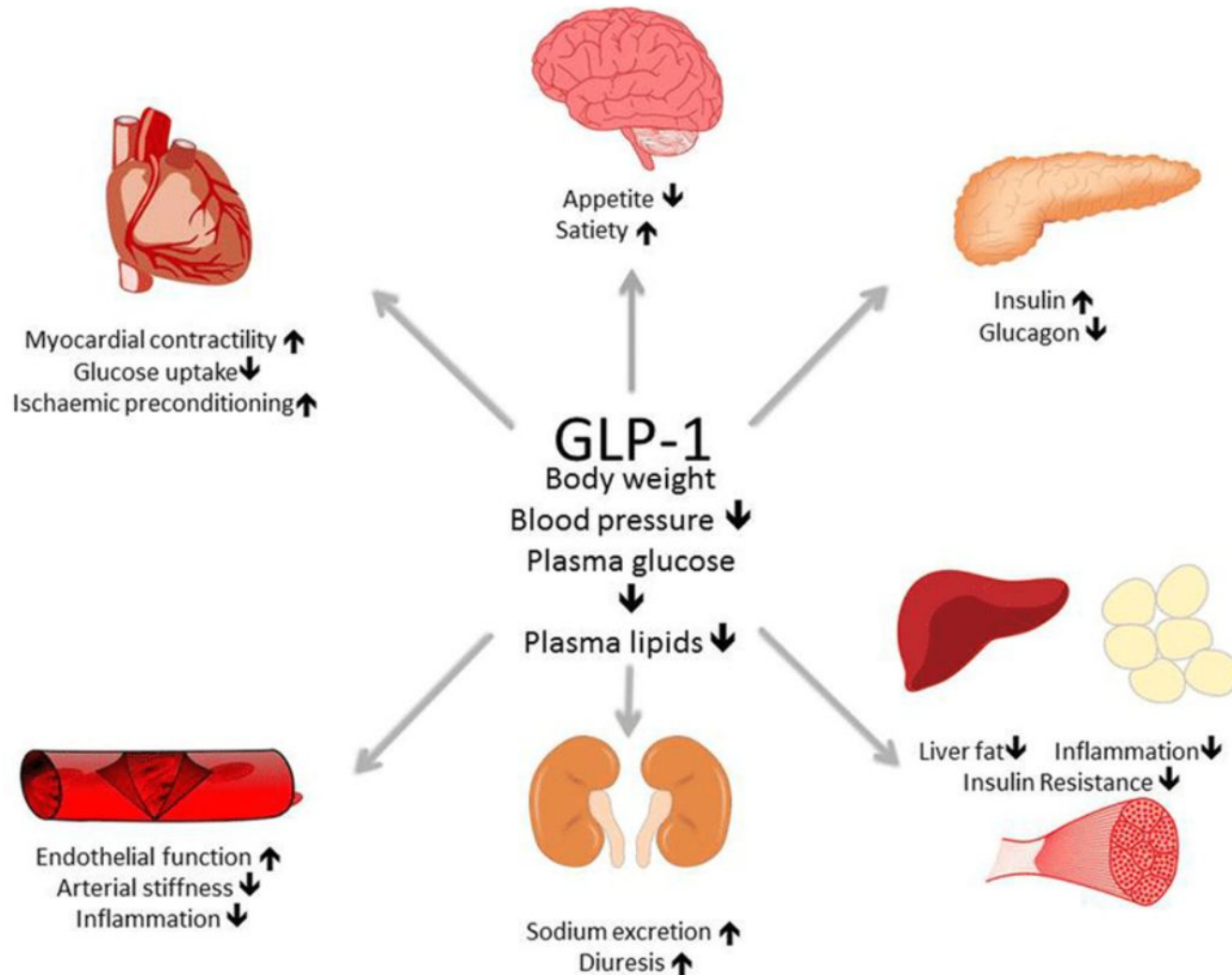
Genitourinary

Central
Nervous
System

Psychosocial

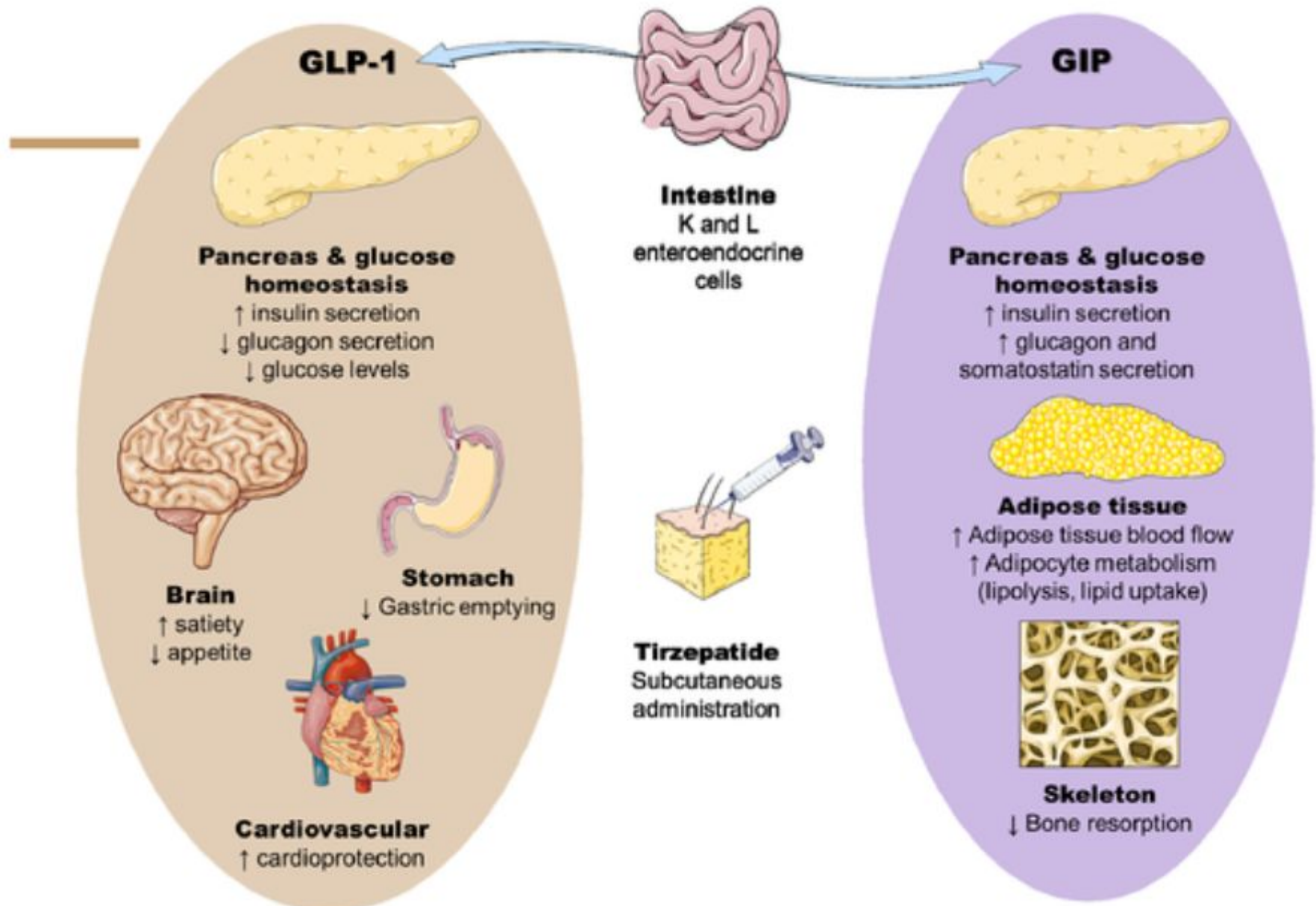
Cancer

GLP-1 Receptor Agonists



Boyle James G, Livingstone R, Petrie John R. Cardiovascular benefits of GLP-1 agonists in type 2 diabetes: a comparative review. *Clinical Science*. 2018;132(15):1699-1709.
doi:<https://doi.org/10.1042/cs20171299>

The “Twincretin”: Tirzepatide



Medication	FDA Approvals
Semaglutide*	● Treatment of Type 2 Diabetes Mellitus ● Weight Management ● Reduction of cardiovascular death, non-fatal myocardial infarction, or non-fatal stroke
Dulaglutide*	● Treatment of Type 2 Diabetes Mellitus
Liraglutide*	● Treatment of Type 2 Diabetes Mellitus ● Weight Management
Tirzepatide	● Treatment of Type 2 Diabetes Mellitus ● Weight Management ● Moderate to Severe Obstructive Sleep Apnea
*Semaglutide, dulaglutide, and liraglutide are all FDA approved for cardiovascular risk reduction in patients with T2DM with ASCVD with or without use of metformin	

GLP-1 and GLP-1/GIP Agonists Overview

- **Safety**

- Gastrointestinal side effects
- CI/precautions:
 - gastroparesis
 - pancreatitis
 - retinopathy
 - medullary thyroid cancer

- **Utilization**

- Importance of using this class of medications alongside therapeutic lifestyle changes
- Injection devices
- Medication Access



LM SKINCENTRE. GLP-1 medication and its types. LM SKINCENTRE. Published April 11, 2024. Accessed July 29, 2025.
<https://lmskincentre.com/en/skin-blog/body-contouring-and-weight-loss/glp-1-medication-and-its-types/>

Current Pivotal GLP-1 and GLP-1/GIP Agonist Trials

Abbreviation	Clinical Trial
SELECT (2023)	Semaglutide and Cardiovascular Outcomes in Patients with History of Myocardial Infarction, PAD, or Ischemic Stroke with Obesity
SURMOUNT-OSA (2024)	Tirzepatide and Treatment of Obstructive Sleep Apnea with Obesity
SUMMIT (2024)	Tirzepatide and HFpEF Outcomes in Patients with Obesity
STEP HFpEF (2023)	Semaglutide and HFpEF Outcomes in Patients with Obesity
REWIND (2019), LEADER (2016), SUSTAIN 6 (2016)	Dulaglutide, Liraglutide, Semaglutide • Cardiovascular Outcomes in Type 2 Diabetes

	SELECT	SURMOUNT OSA
Population	Pre-existing cardiovascular disease and a BMI of 27 or greater	Moderate to severe obstructive sleep apnea and a BMI of 30 or greater
Intervention	Semaglutide 2.4 mg weekly (n=8803)	Tirzepatide 10 mg or 15 mg (n= 114 trial 1 and 120 trial 2)
Comparator	Placebo (n=8801)	Placebo (n=120 trial 1 and 115 trial 2)
Primary Outcome	MACE	Change in the apnea-hypopnea index from baseline

A. Michael Lincoff, Kirstine Brown-Frandsen, Colhoun HM, et al. Semaglutide and Cardiovascular Outcomes in Obesity without Diabetes. *N Engl J Med.* 2023;389(24). doi:<https://doi.org/10.1056/nejmoa2307563>
Malhotra A, Grunstein RR, Fietze I, et al. Tirzepatide for the Treatment of Obstructive Sleep Apnea and Obesity. *N Engl J Med.* 2024;391(13). doi:<https://doi.org/10.1056/nejmoa2404881>

Demographics

	SELECT	SURMOUNT OSA
Age	Semaglutide: 61.6 yrs Placebo: 61.6 yrs	51.7 yrs
Sex	MALE Semaglutide: 6355 (72.2%) Placebo: 6377 (72.5%)	FEMALE 65 (27.7%)
BMI	Semaglutide: 33.3 Placebo: 33.4	38.7
Cardiovascular Baseline	MI only: Semaglutide: 5962 (67.7%); Placebo: 5944 (67.5%)	
AHI score		49.5

A. Michael Lincoff, Kirstine Brown-Frandsen, Colhoun HM, et al. Semaglutide and Cardiovascular Outcomes in Obesity without Diabetes. *N Engl J Med.* 2023;389(24). doi:<https://doi.org/10.1056/nejmoa2307563>

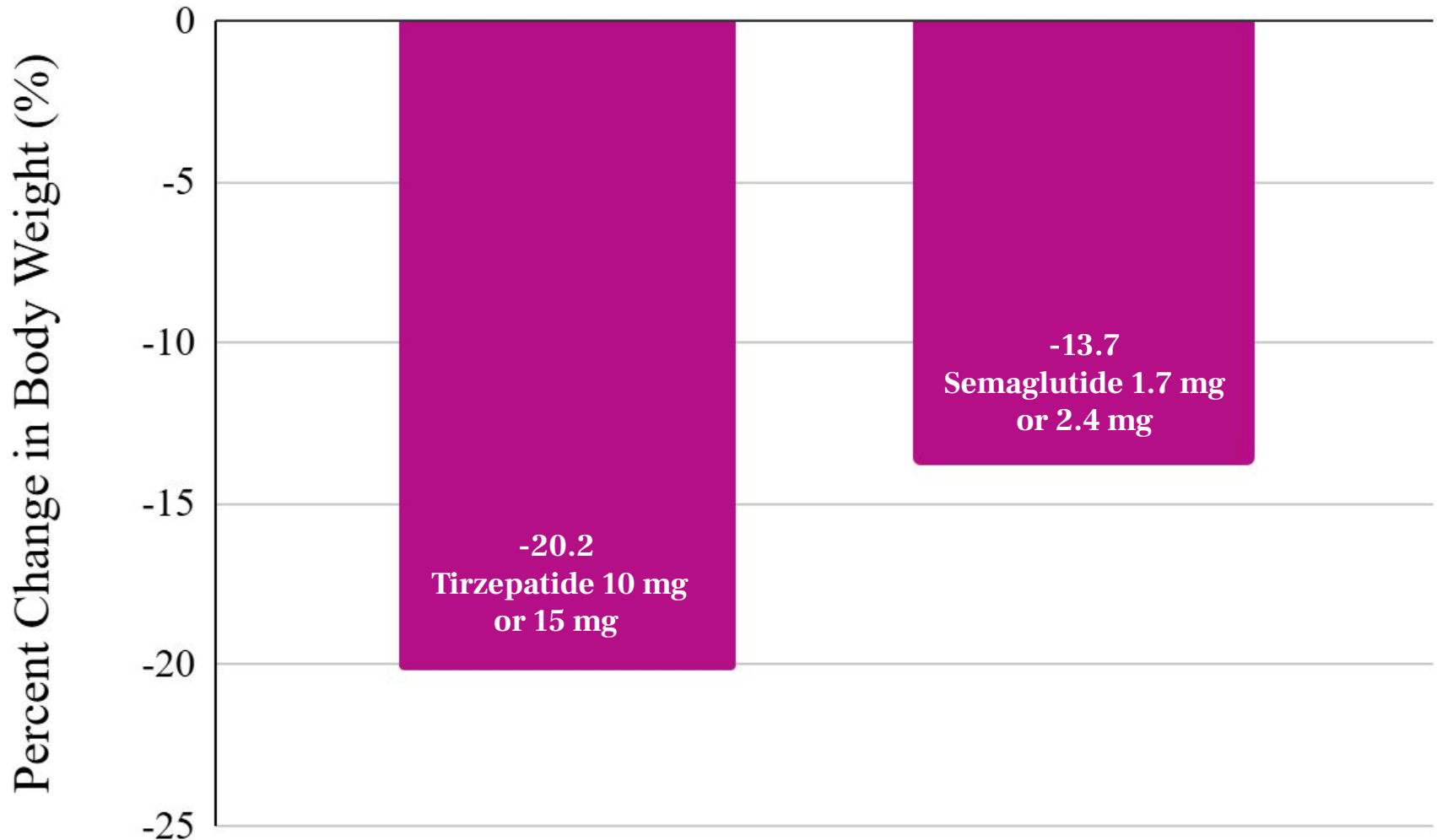
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Outcomes (Hazard Ratios)

OUTCOME	SELECT	SURMOUNT OSA
Composite CV endpoint (death from CV causes, nonfatal MI, or nonfatal stroke)	0.80 (0.72-0.90)	
Death	0.80 (0.72-0.88)	
Nonfatal MI	0.72 (0.61-0.85)	
Nonfatal Stroke	0.93 (0.74-1.15)	
Change in AHI score		-23.8 (-29.8- -17.9)

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Tirzepatide as Compared with Semaglutide - Aronne et al. (2025)



Aronne LJ, Horn DB, le Roux CW, et al. Tirzepatide as Compared with Semaglutide for the Treatment of Obesity. *N Engl J Med*. 2025;393. doi:<https://doi.org/10.1056/nejmoa2416394>

Equivalent Dosing of GLP-1 RA's

***Profession clinical judgment necessary**

Drug	Estimated Equivalent Dose				
Tirzepatide	2.5mg		5mg	7.5mg 10mg	12.5mg 15mg
Semaglutide	0.25mg	0.5mg	1mg	1.7mg	2.4mg
Dulaglutide	0.75mg		1.5mg	3mg	4.5mg
Liraglutide	0.6mg	1.2mg	1.8mg	2.4mg	3mg

Beth Israel Lahey Health GLP-1RA Conversion Guide.; 2022. Accessed July 28, 2025. <https://www.nepho.org/wp-content/uploads/2023/01/BILH-GLP1RA-Conversion-Guide.pdf>

Medication Access

Indication

Diabetes Mellitus Type 2

Medicare and Self Pay

PAP: Semaglutide

Medicare: \$2000 deductible

Commercial: Coupon Cards

Cardiovascular Risk
Reduction ONLY

Medicare: \$2000 deductible

Commercial: Coupon Cards

Self Pay: Can utilize mail order
manufacturer pharmacy

Upcoming GLP-1 and GLP-1/GIP Agonists Trials

SURPASS-CVOT	Tirzepatide vs. Dulaglutide for CV Outcomes in T2DM (Completed)
ACHIEVE-1	Phase 3, <u>Orforglipron</u> vs. Placebo for Weight Loss in T2DM (Completed)
REDEFINE series	<u>Semaglutide/Cagrilintide</u> vs Placebo for Weight Loss (est completion 11/01/2028)
Retatrutide Phase 3 Obesity Trial	<u>Retatrutide</u> vs. Tirzepatide for Weight loss (est completion 12/2026)
SURMOUNT-MMO	Tirzepatide vs. Placebo on Reduction of Morbidity and Mortality (est completion 10/2027)
IDEAL-COR	Tirzepatide vs Placebo on Coronary Plaque Lipid Content and Myocardial Microvascular Function in Overweight and Obese People with Coronary Disease (est completion 8/1/2028)

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