

Can surgery rescue medicine non responders?

Carel le Roux

University College Dublin

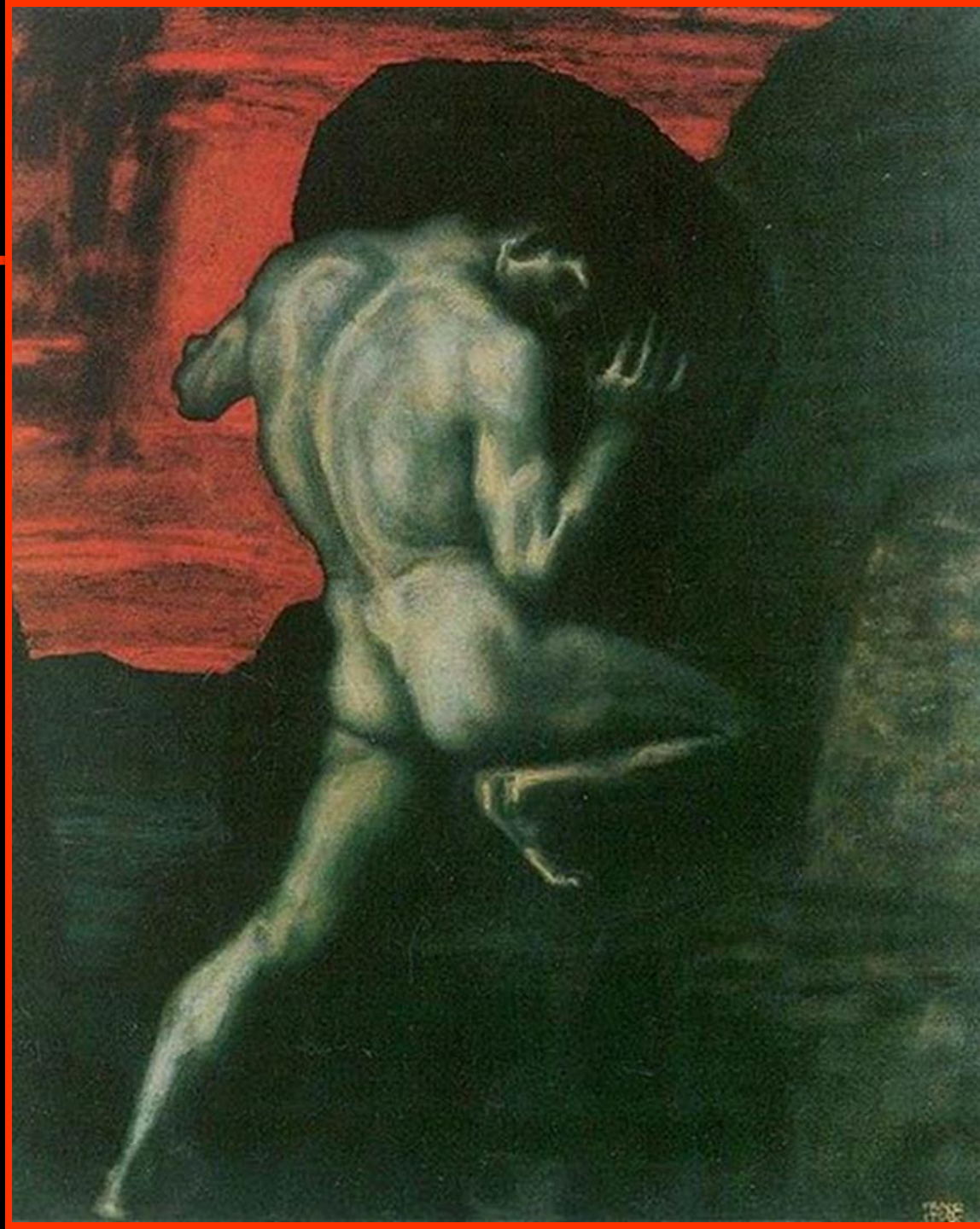
Ulster University

A girl reading a letter with an old man reading over her shoulder Joseph Wright of Derby, 1767, Private Collection

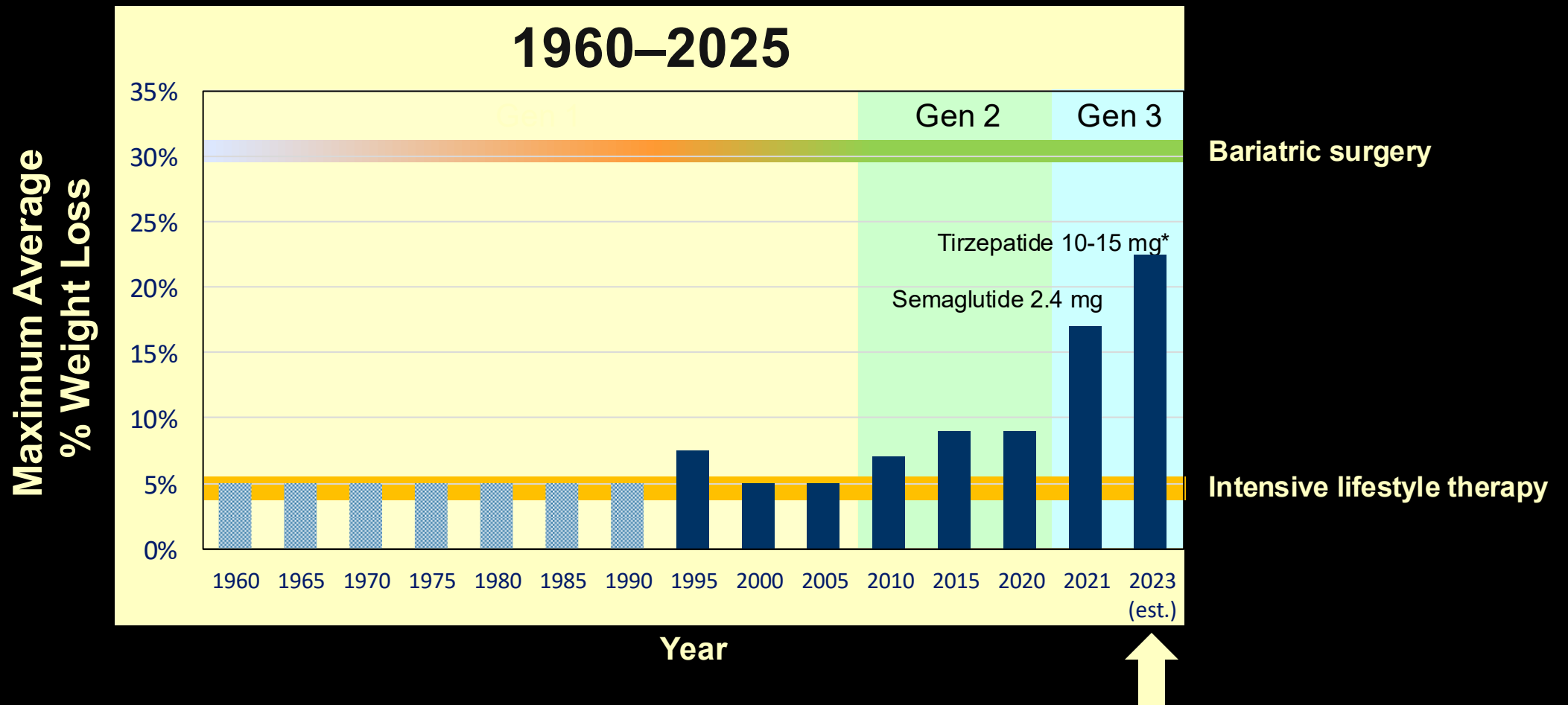


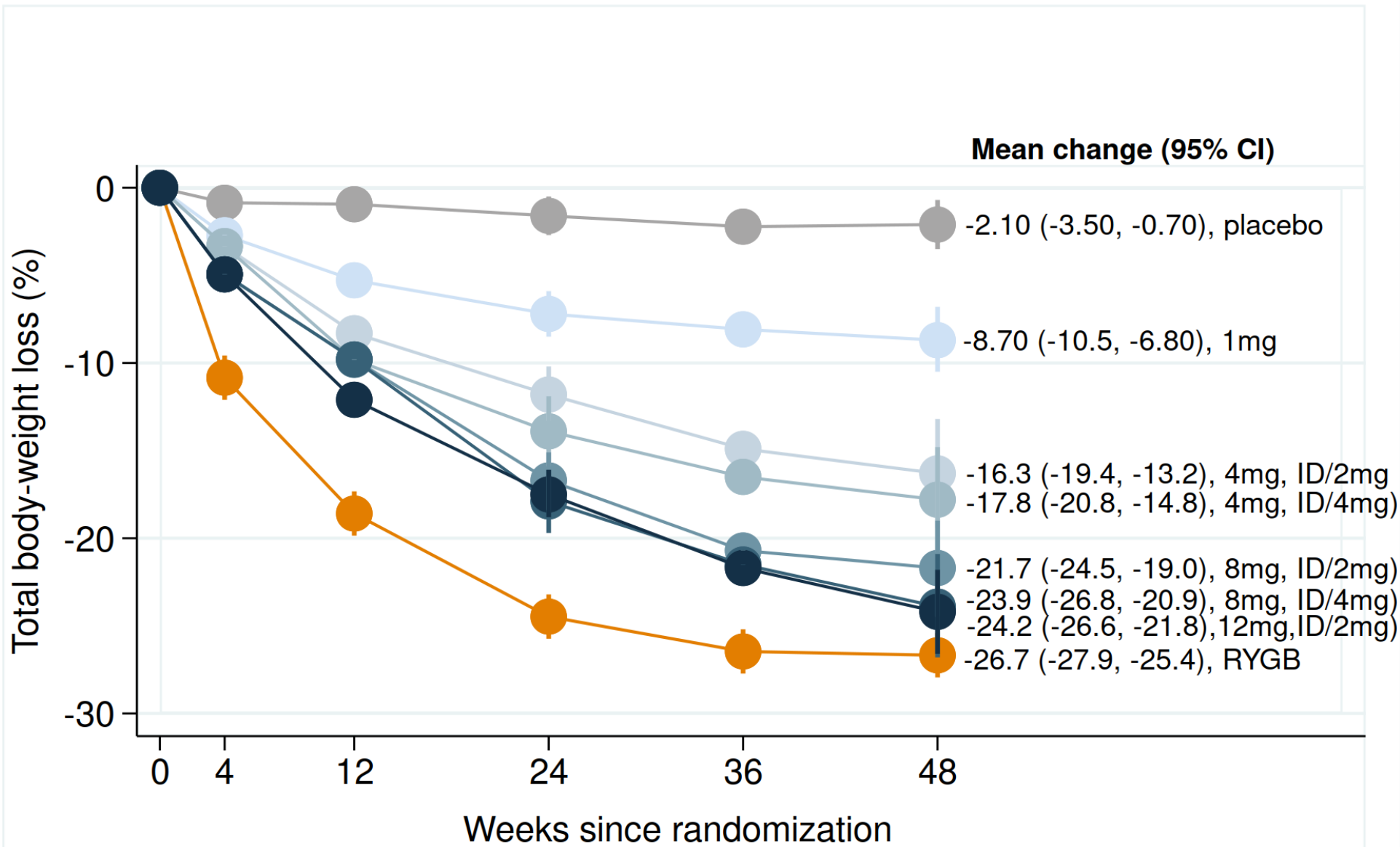
Conflicts of interest

- Consilient Health
- Novo Nordisk
- Herbalife
- Johnson & Johnson
- Covidien
- Fractyl
- GI Dynamics
- Lilly
- Boehringer Ingelheim
- Keyron
- Amgen
- Arrowhead
- Roche
- AstraZeneca



The emergence of highly effective anti-obesity medications





RYGB in MOMS
(JAMA surgery 2020)
vs
retatrutide
(NEJM 2023)
#over 48 weeks

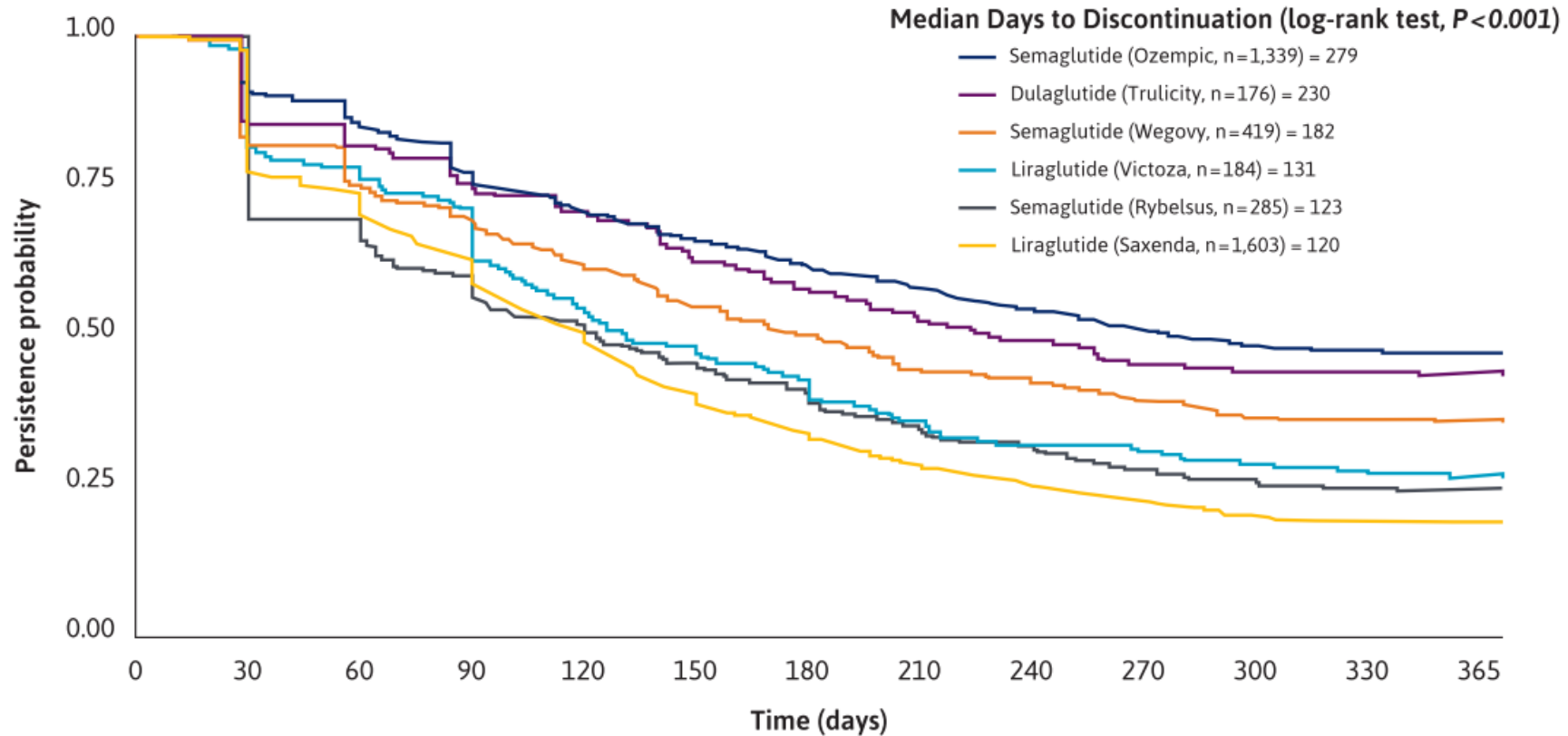
Ricardo Cohen

1-year discontinuation rates for GLP-1 agonists remain high

Gleason PP, et al. *J Manag Care Spec Pharm.* 2024; 30(8):860-867

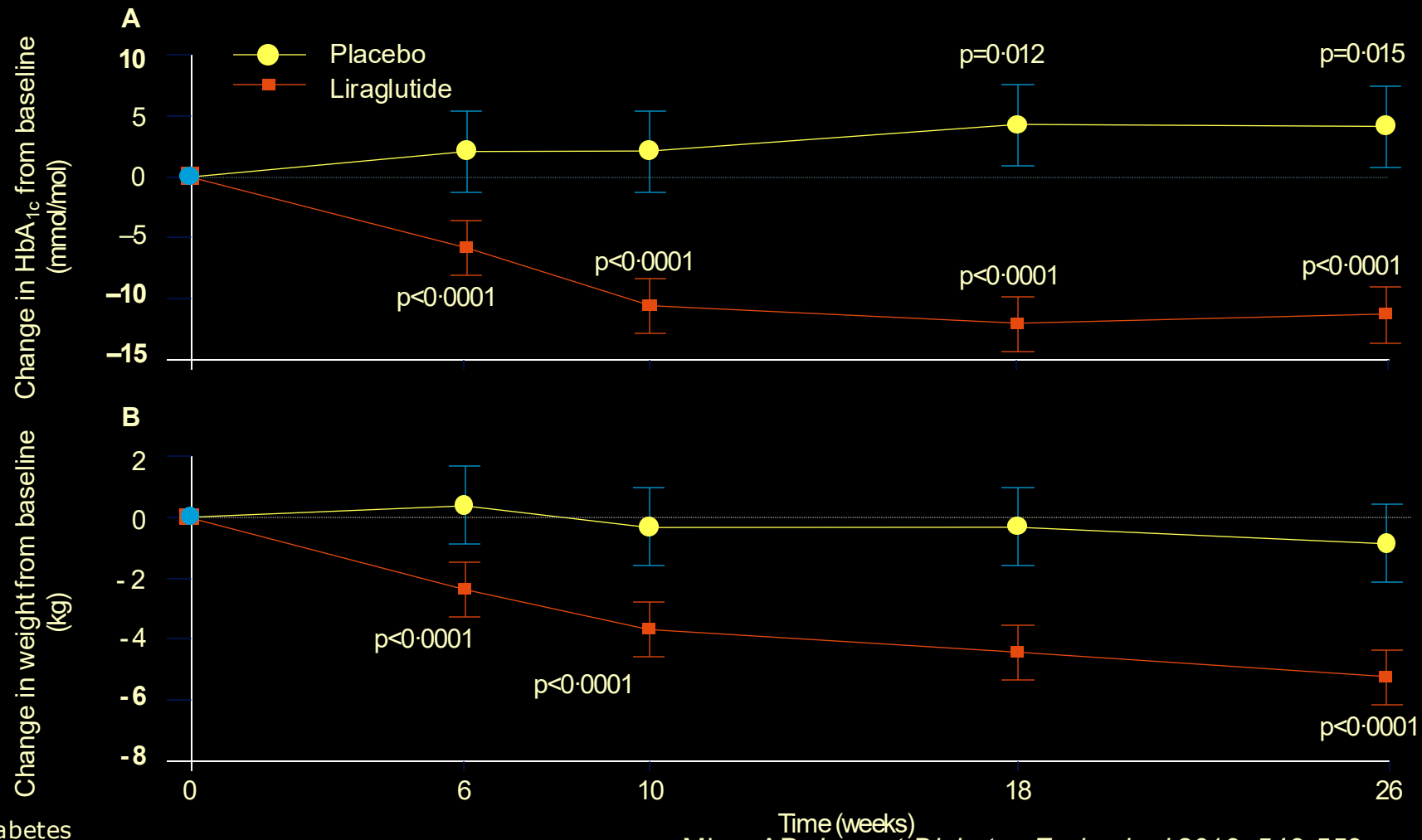
FIGURE 1

Glucagon-Like Peptide-1 Agonists: Kaplan-Meier 1 Year Therapy Persistence (n=4,066)



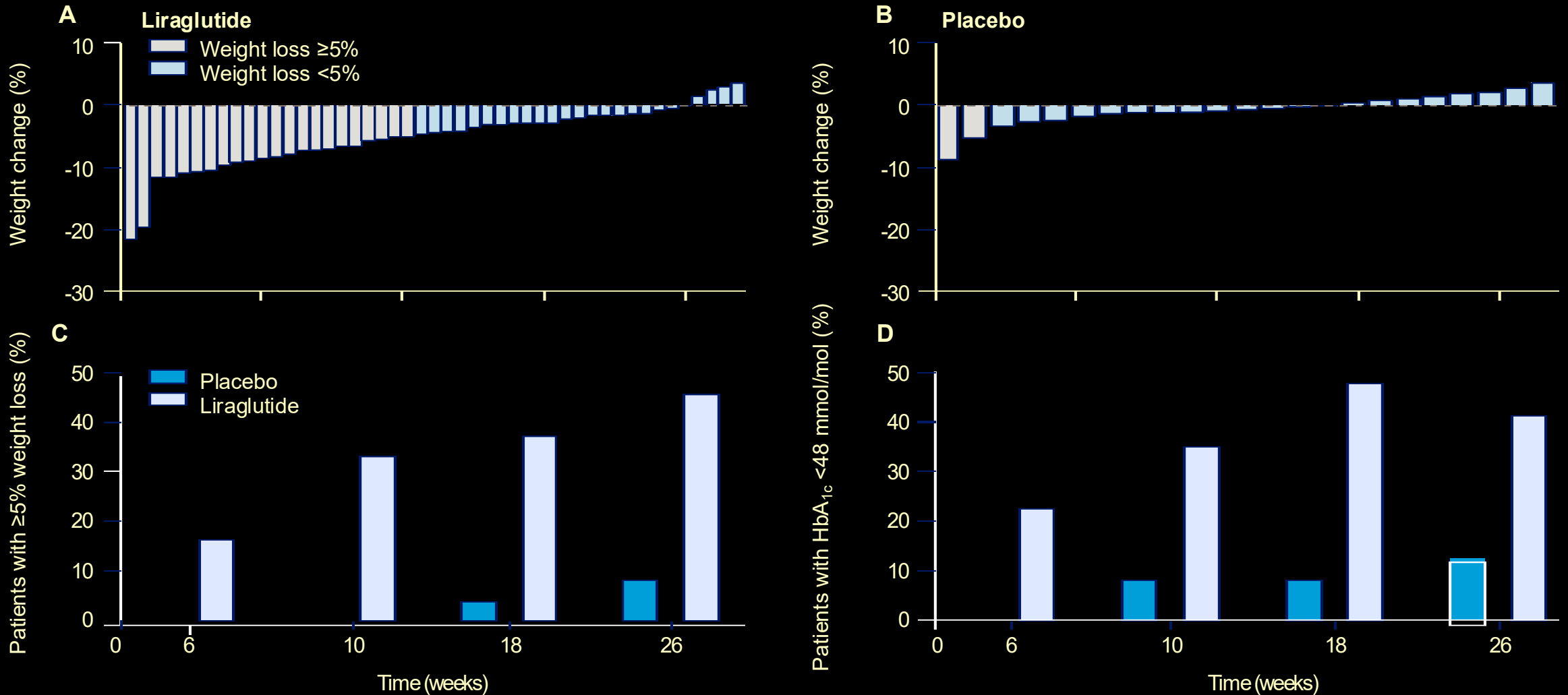
Kaplan-Meier curve represents 4,066 obese commercially insured adults without diabetes initiating a GLP-1 product during calendar year 2021. All persistency and adherence measurements were conducted at the GLP-1 product level. Members were considered persistent if they did not have a 60-day gap in therapy and were censored at the end of the 365-day period.

Adjunctive liraglutide treatment in patients with persistent or recurrent T2D after metabolic surgery

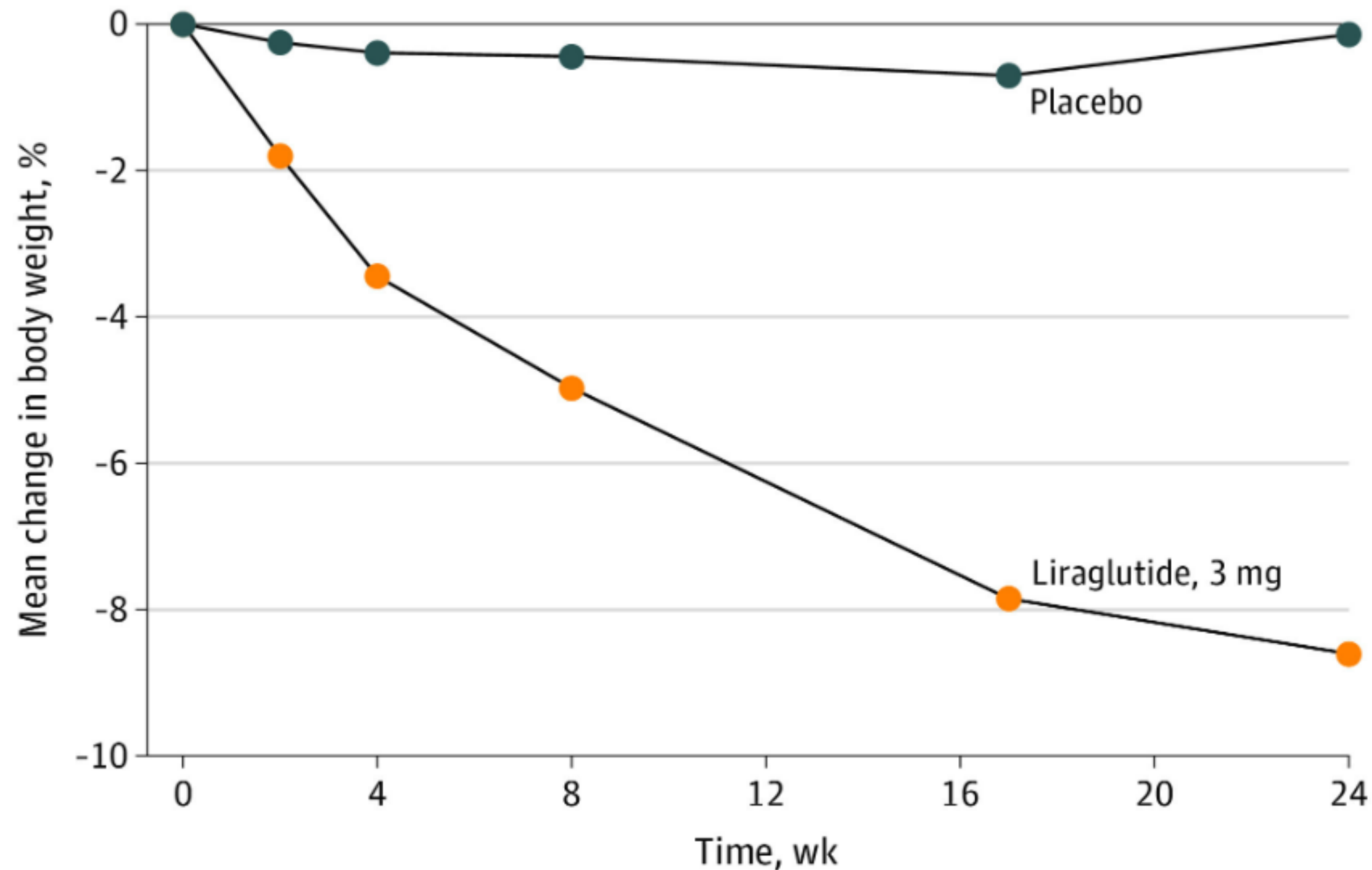


T2D, type 2 diabetes

Weight loss and glycaemic improvement responses in participants who completed the trial



A Change in body weight from baseline



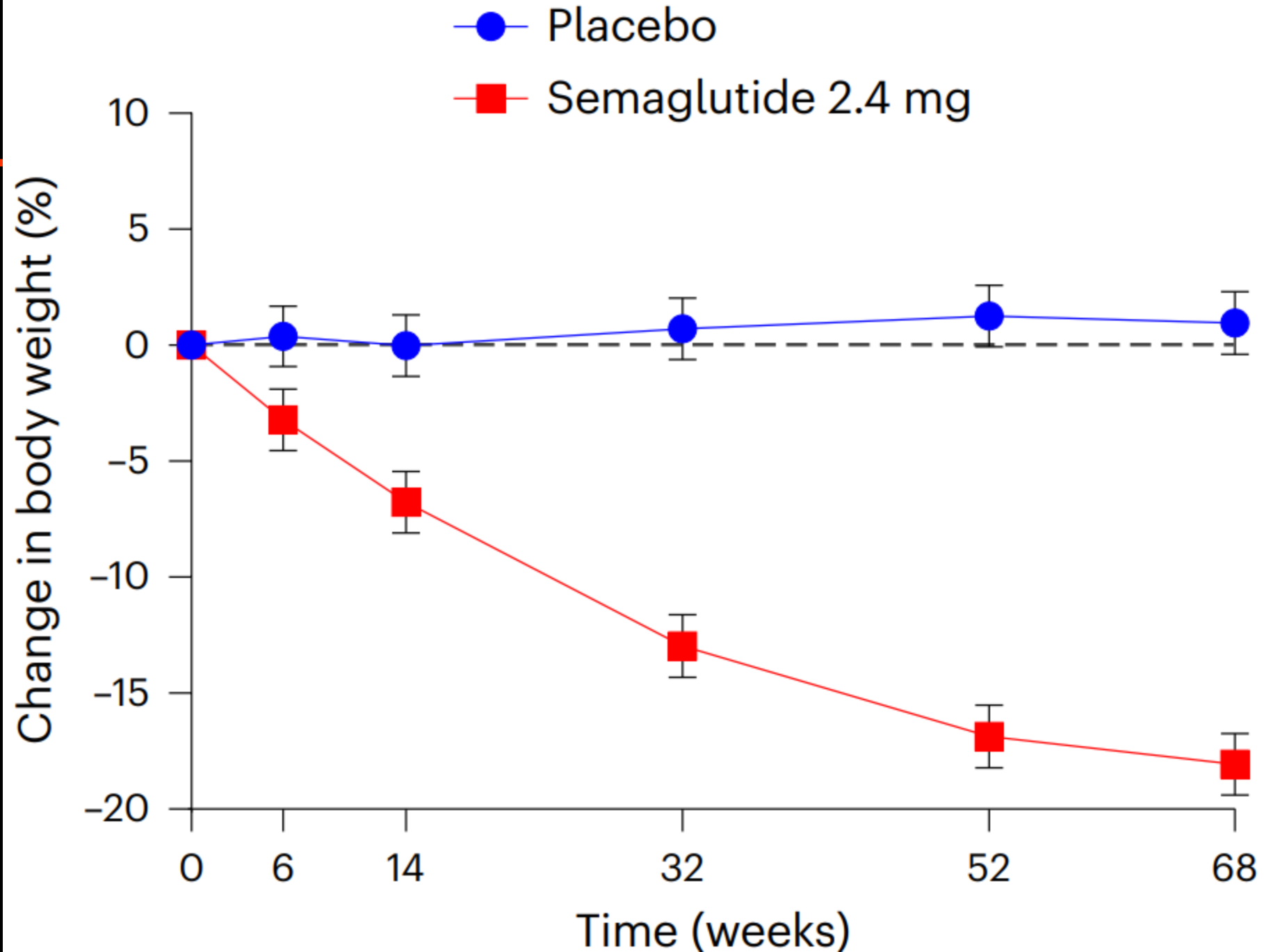
Bari-optimize
Patients with
suboptimal
response after
surgery

Batterham et al
JAMA Surgery
2023

BariSTEP

Semaglutide after bariatric surgery

Stanley et al Nature
Medicine 2026



BRIEF REPORT

Preoperative weight loss with glucagon-like peptide-1 receptor agonist treatment predicts greater weight loss achieved by the combination of medical weight management and bariatric surgery in patients with type 2 diabetes: A longitudinal analysis

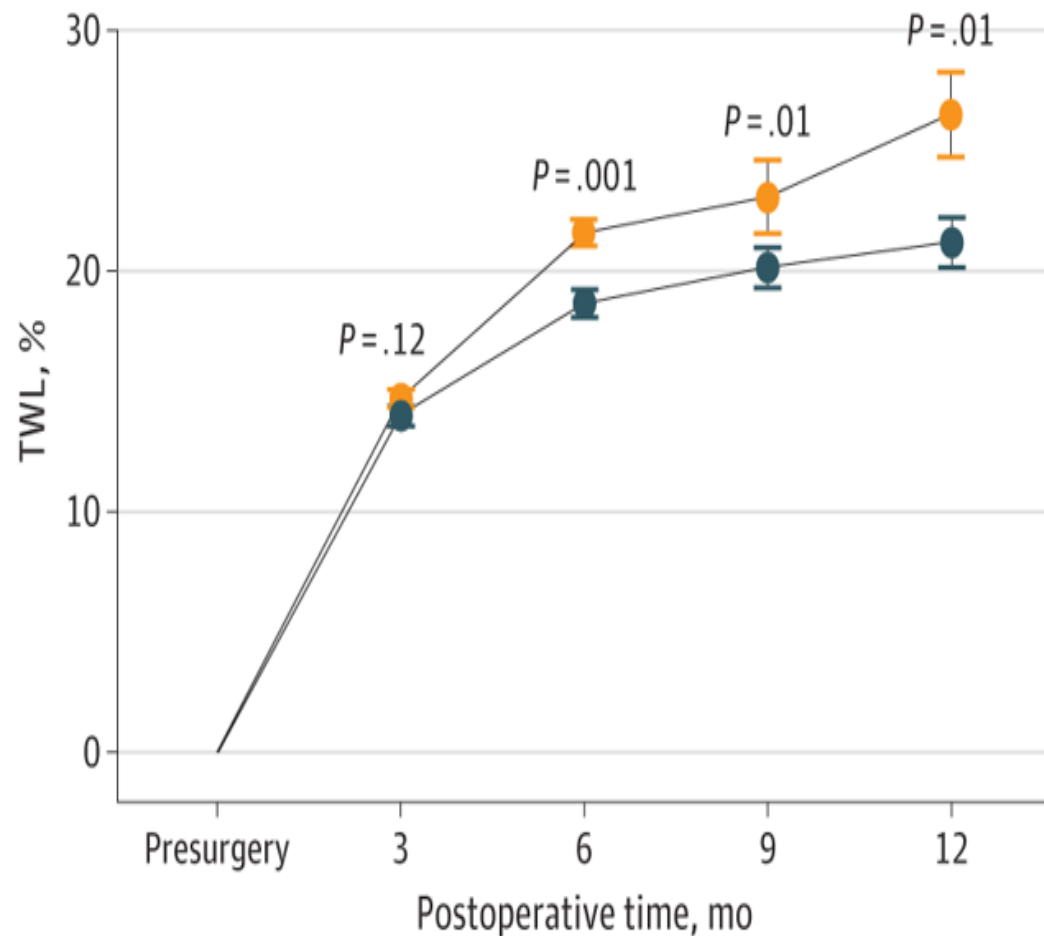
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GLP-1RA-induced weight change did not predict the weight loss induced by the surgical component alone. Surgery still produced significant weight loss regardless of response to preoperative intervention. Failure to lose weight after GLP-1RA treatment should not be considered a barrier to undergoing bariatric surgery.

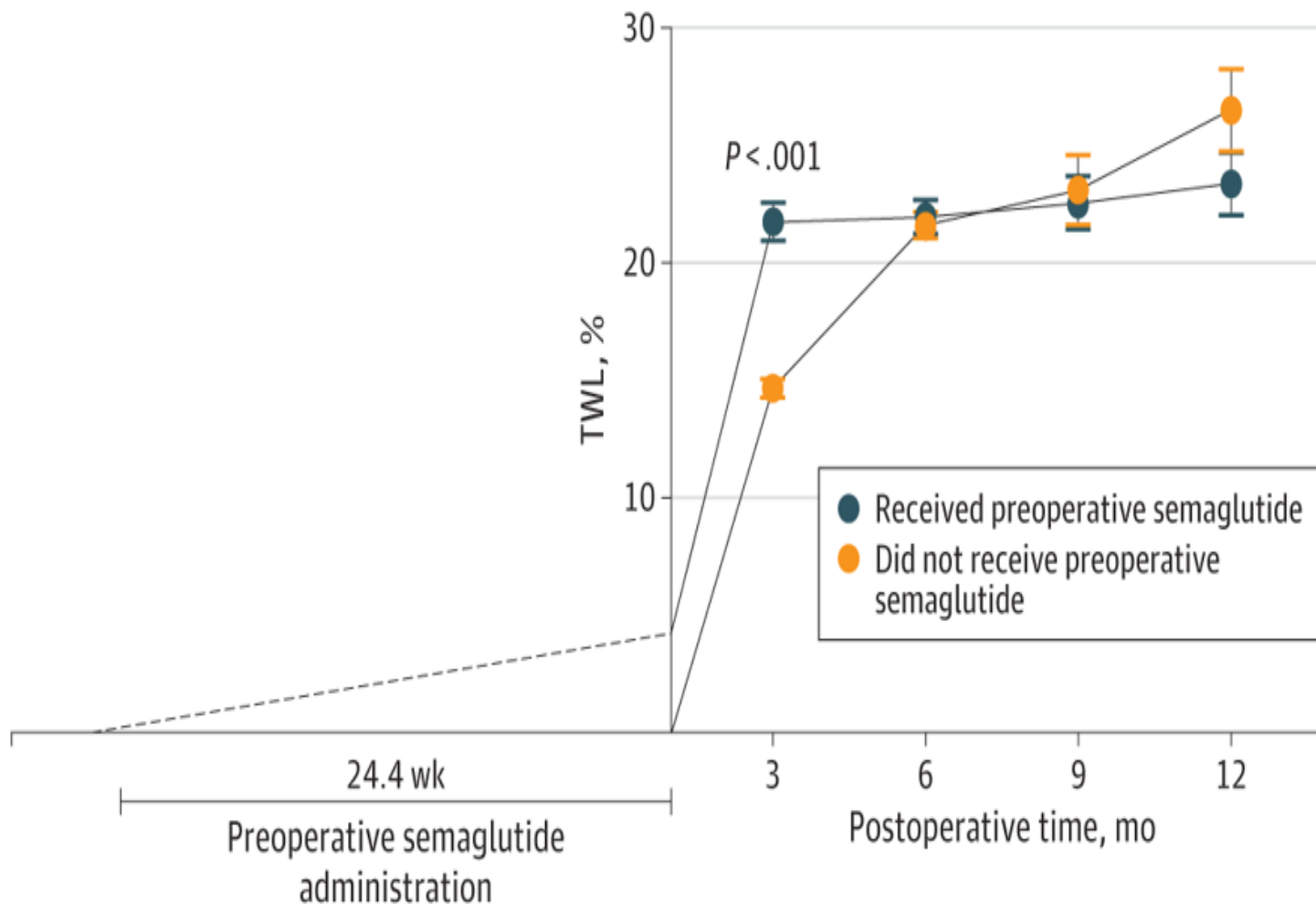
Responses to semaglutide and surgery were not associated.

Mathur V, JAMA Surgery 2025

A Surgical TWL

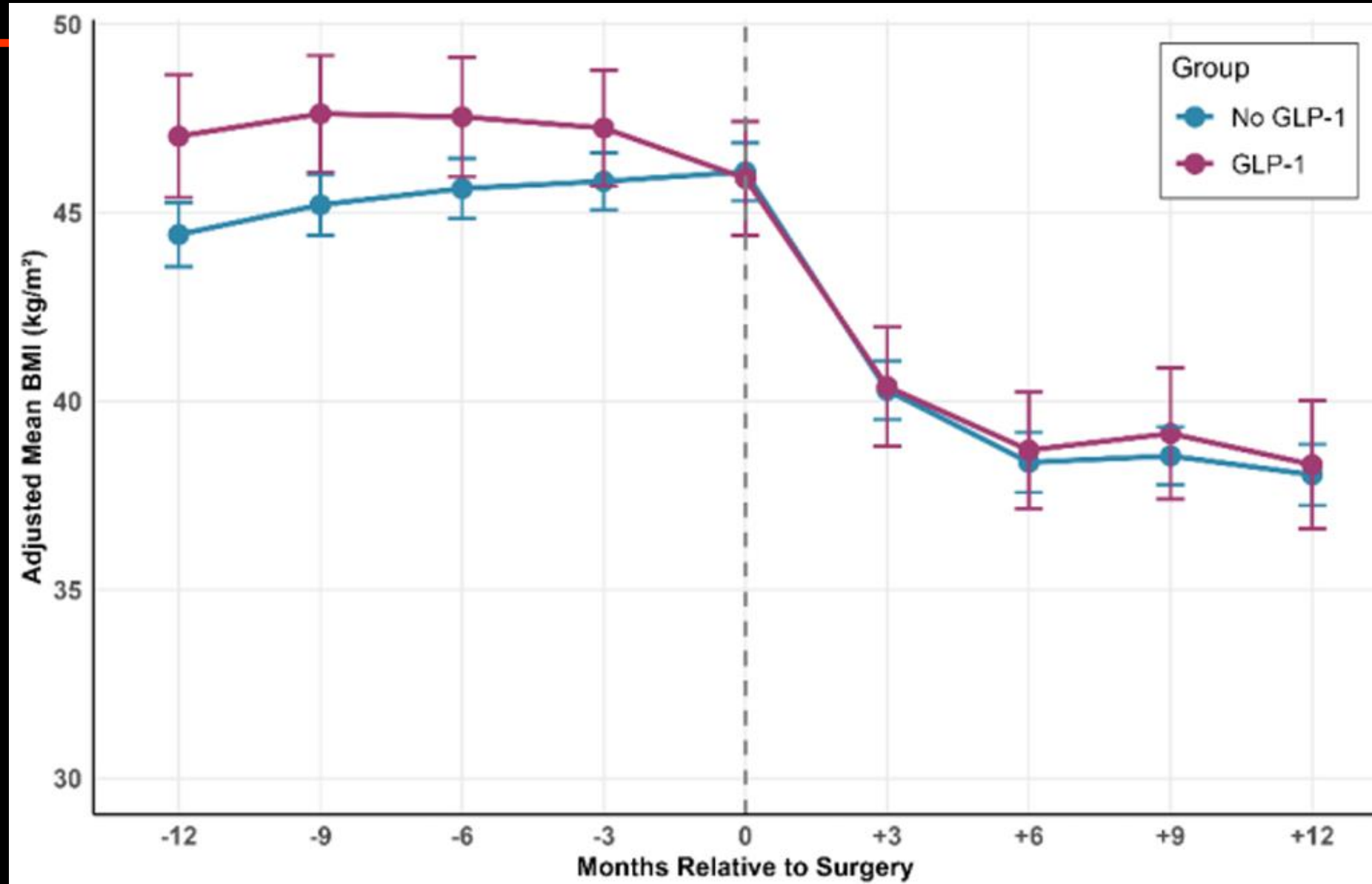


B Surgical and medical TWL



Preoperative GLP-1 not associated with postoperative weight loss.

Holler E et al. Annals of
Surgery 2026



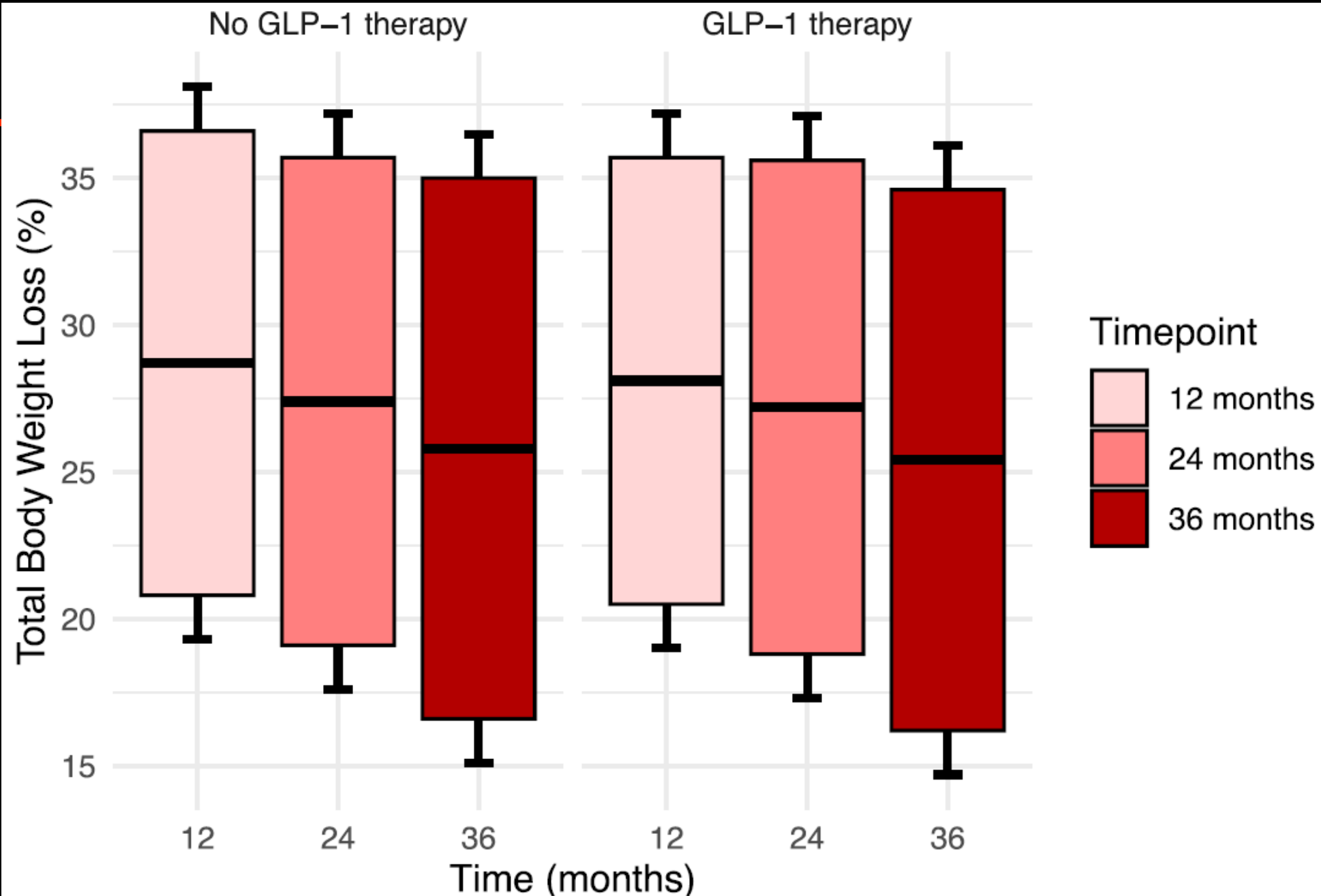
Preoperative GLP-1 not associated with 30-day outcomes or differences in %TWL at 1 year.

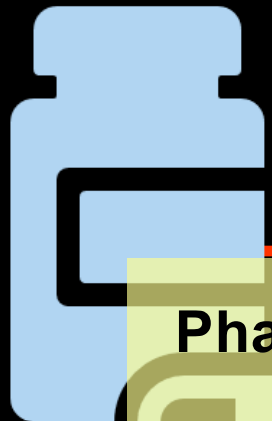
AbuHasan Q et al Obesity Surgery 2025;

Total <i>n</i> (%)	Semaglutide 109 (37.2%)	Dulaglutide 77 (26.3%)	Liraglutide 71 (24.2%)	Tirzepatide 34 (11.6%)	<i>p</i> -value
Readmissions	6 (5.5%)	4 (5.2%)	2 (2.8%)	1 (2.9%)	0.89
ED visits	18 (16.5%)	14 (18.2%)	10 (14.1%)	4 (11.8%)	0.86
Complications	3 (2.8%)	0	0	0	0.28
%TWL at 1 year ^a	25.1% (17.8–30.3)	24.9% (19.3–31.9)	28.0% (19.8–36.7)	22.8% (18.2–27.1)	0.10

**Prior GLP-1
use was not
associated
with surgical
outcomes.**

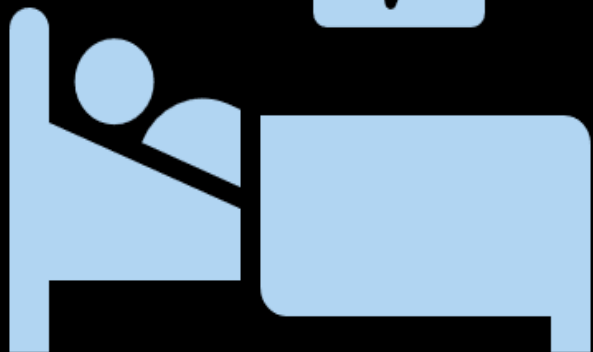
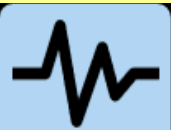
Poljo A et al. Obesity
Surgery 2025





Pharmacotherapy:
10%

Metabolic surgery:
1%



All people living
with obesity

20% are
non-responders

Conclusions

- Response to obesity medication
 - Biological determined and variable
 - Does not predict weight loss after metabolic bariatric surgery
 - Complement and not compete with bariatric surgery
 - Presents an opportunity to increase surgical numbers



**METABOLIC
MEDICINE**

HEROES