

Recurrent Weight after Bariatric RYGB: When Should Weight Loss Medication be Initiated

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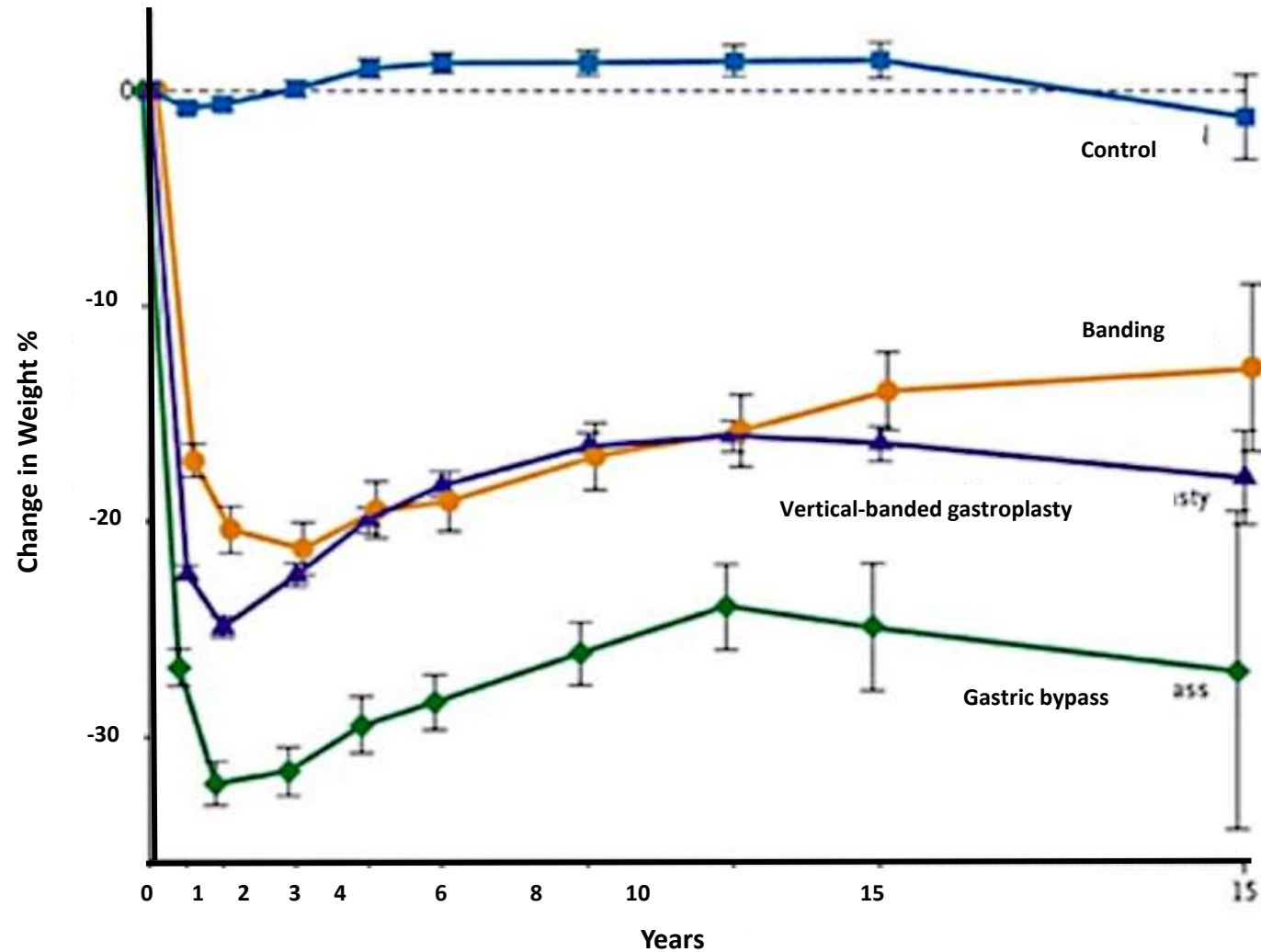


Disclosures

- Consultant: None



Bariatric Surgery is The Most Effective Treatment Modality for Obesity

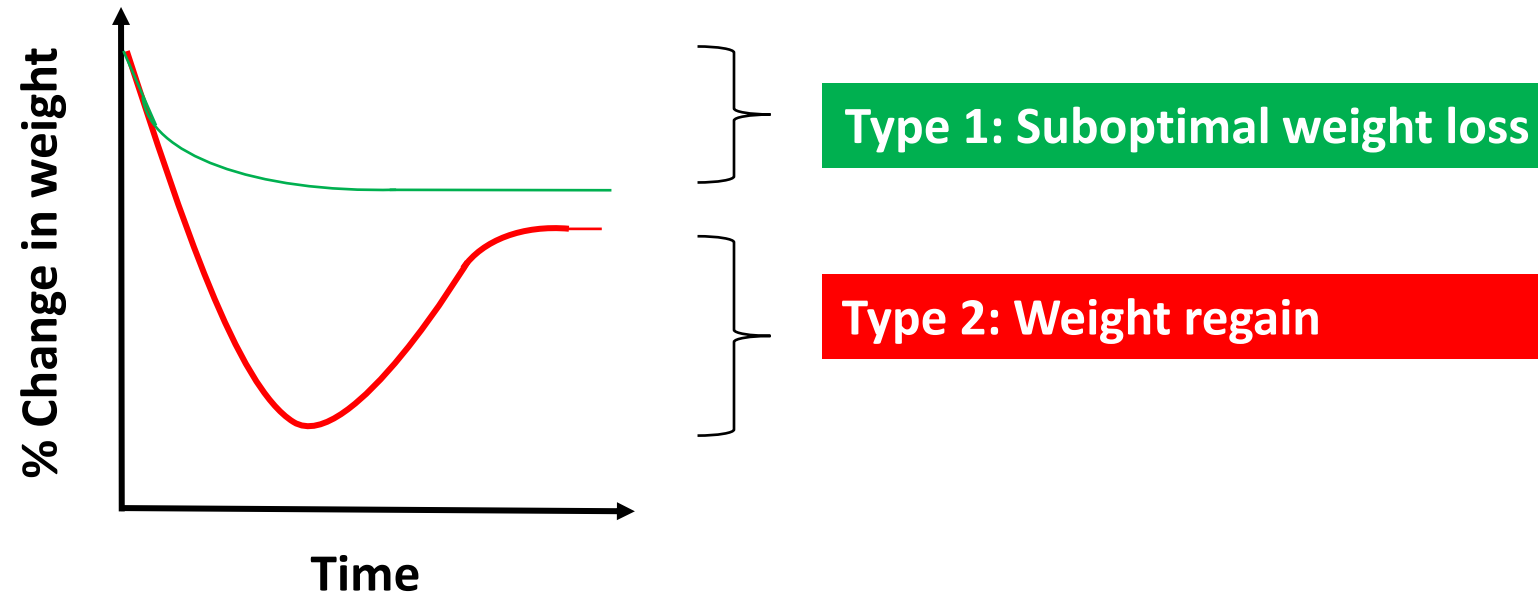


But...

Obesity is a chronic, progressive, relapsing disease process ..



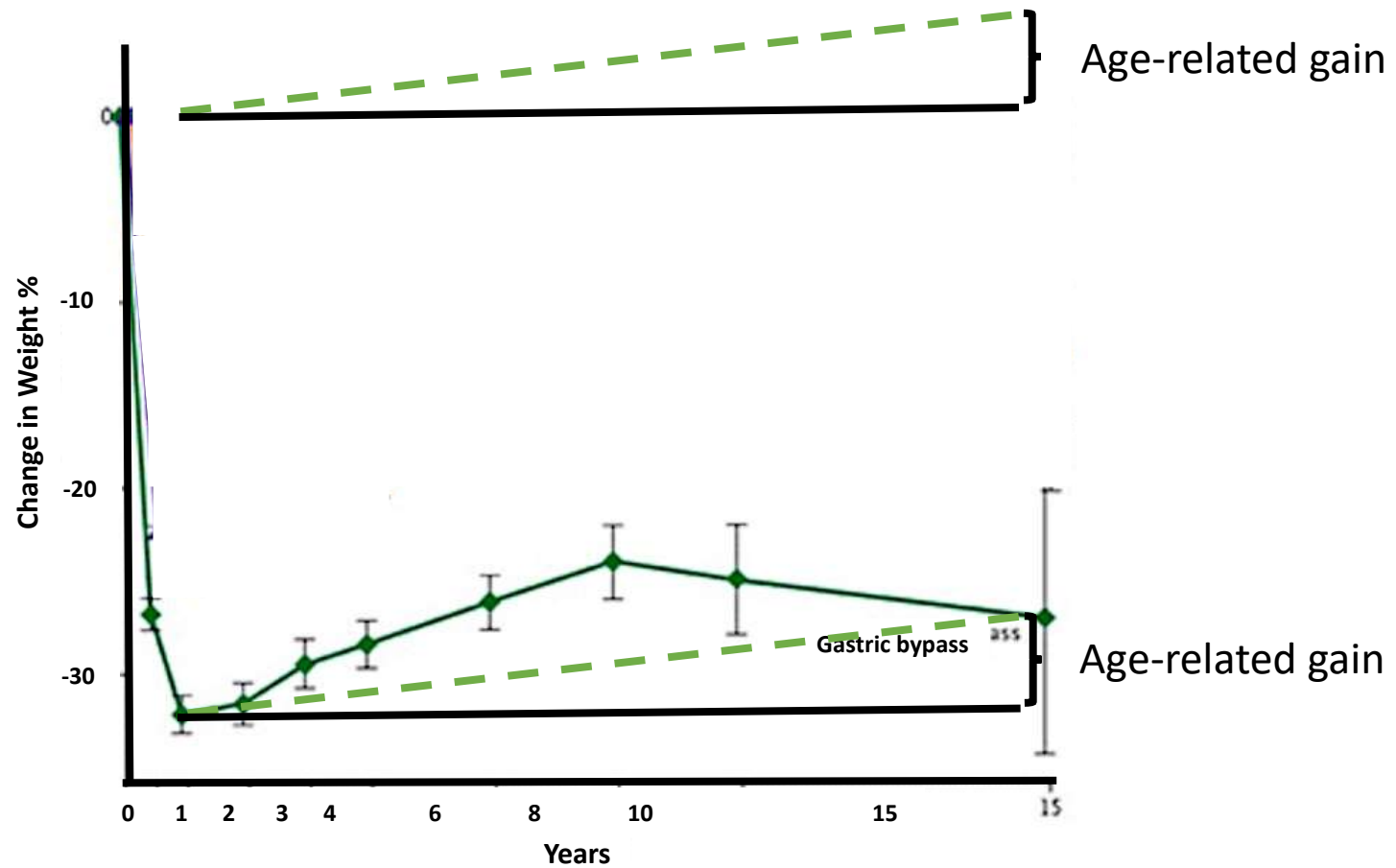
Types of Surgical Failure



Type 2: Weight Regain



Some amount of regain can be expected



Weight Regain

No clear definition

Definition	% of patients with regain
Increase > 10 kg from nadir	64
Increase >EWL 25%	40
Increase in BMI 5 kg/m ² from nadir	53
Any weight regain after T2DM	9
Weight regain to a BMI > 35 kg/m ² after successful loss	20
Any weight regain	91

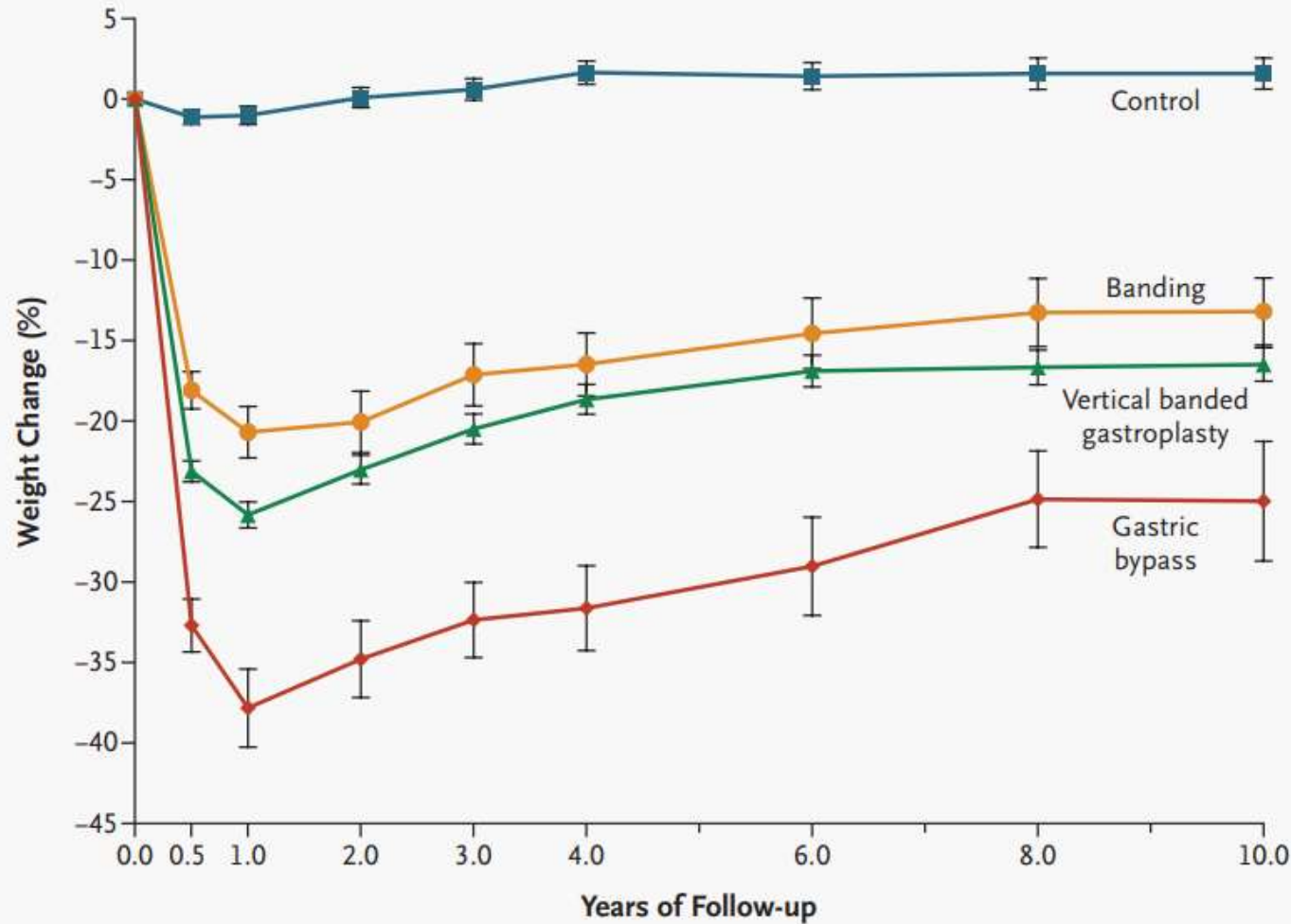


IFSO Consensus Statement 2023

- Redefining weight regain ..
- Weight recurrence..
- Recurrence of complications (T2DM, HTN, etc..)



SOS 10 year data

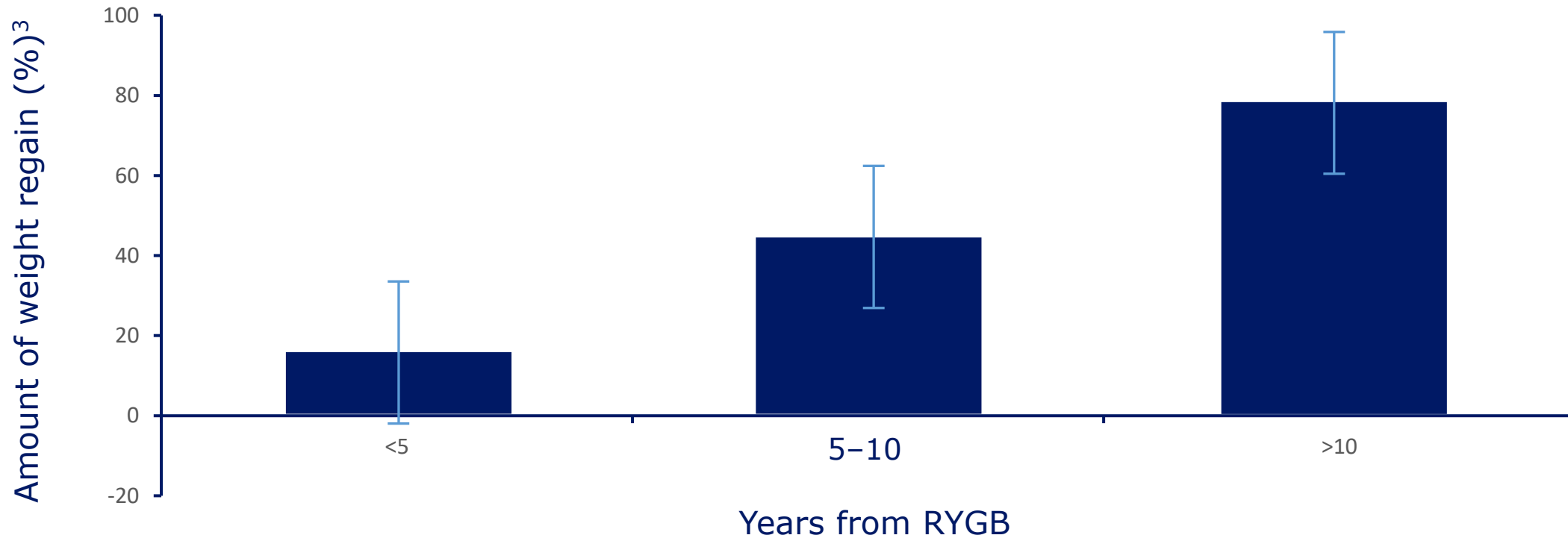


34% of maximal weight loss



Weight regain after bariatric surgery

- Significant WR ($\geq 15\%$) occurs in **25–35%** of patients 2–5 years after surgery



BMI, body mass index; EWL, excess weight loss; RYGB, Roux-en-Y gastric bypass; WR, weight regain



Always assess patients for symptoms of relapse

- Increased hunger
- Decrease Satiation
- Decreased satiety
- Cravings



Biological Causes of Weight Regain

- **Weight regain may be neurohormonally mediated**
 - Data on long-term changes in gut hormones and correlation to weight regain are lacking
 - Conflicting data on ghrelin, PYY, GLP-1
- **Weight regain may be related to developmental changes**
 - Age-related changes in energy regulation
 - Pregnancy
 - Menopause



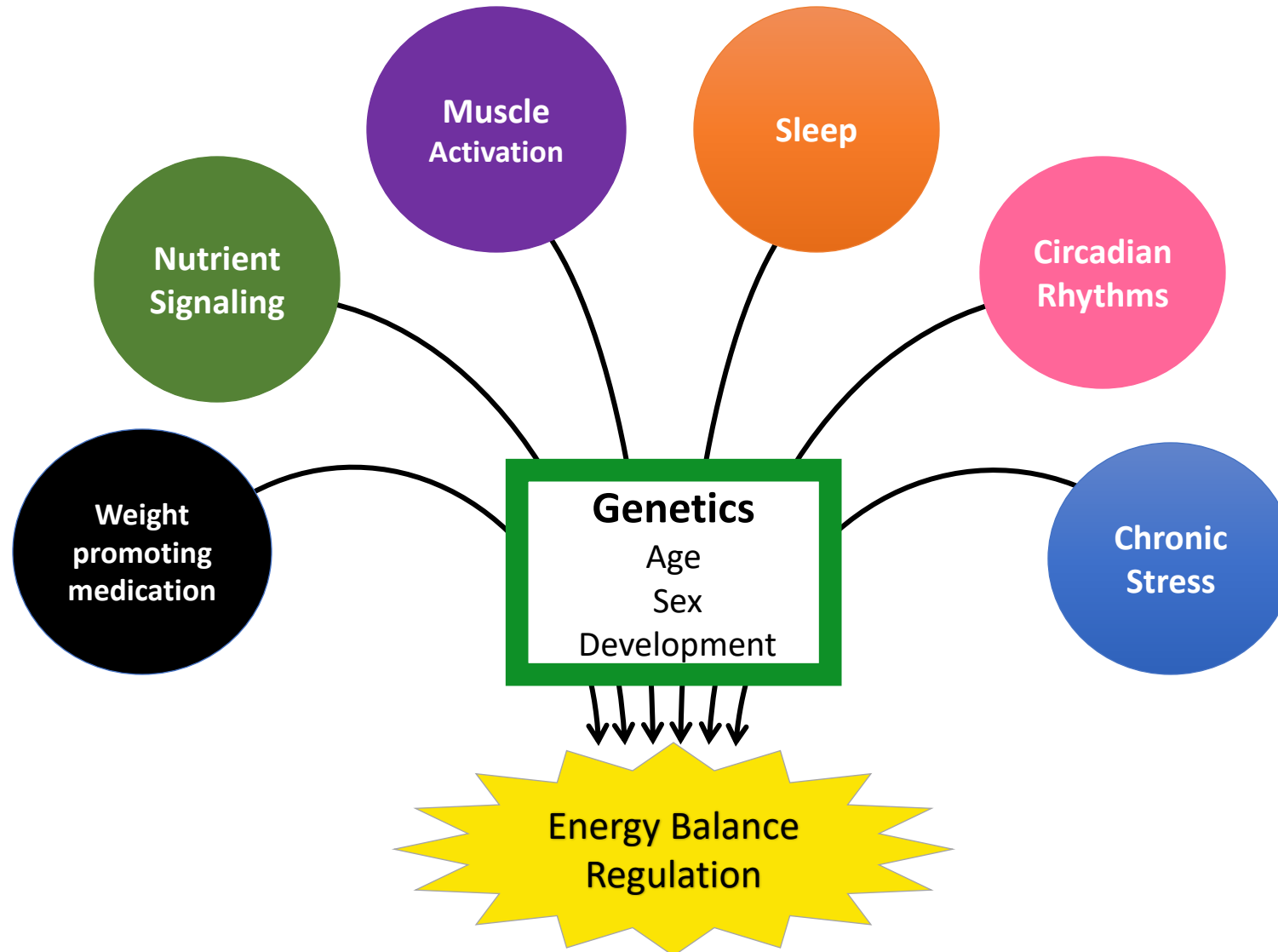
5 Etiologies of Weight Regain

- Anatomical
- Behavioral
- Psychological
- Iatrogenic
- Biological

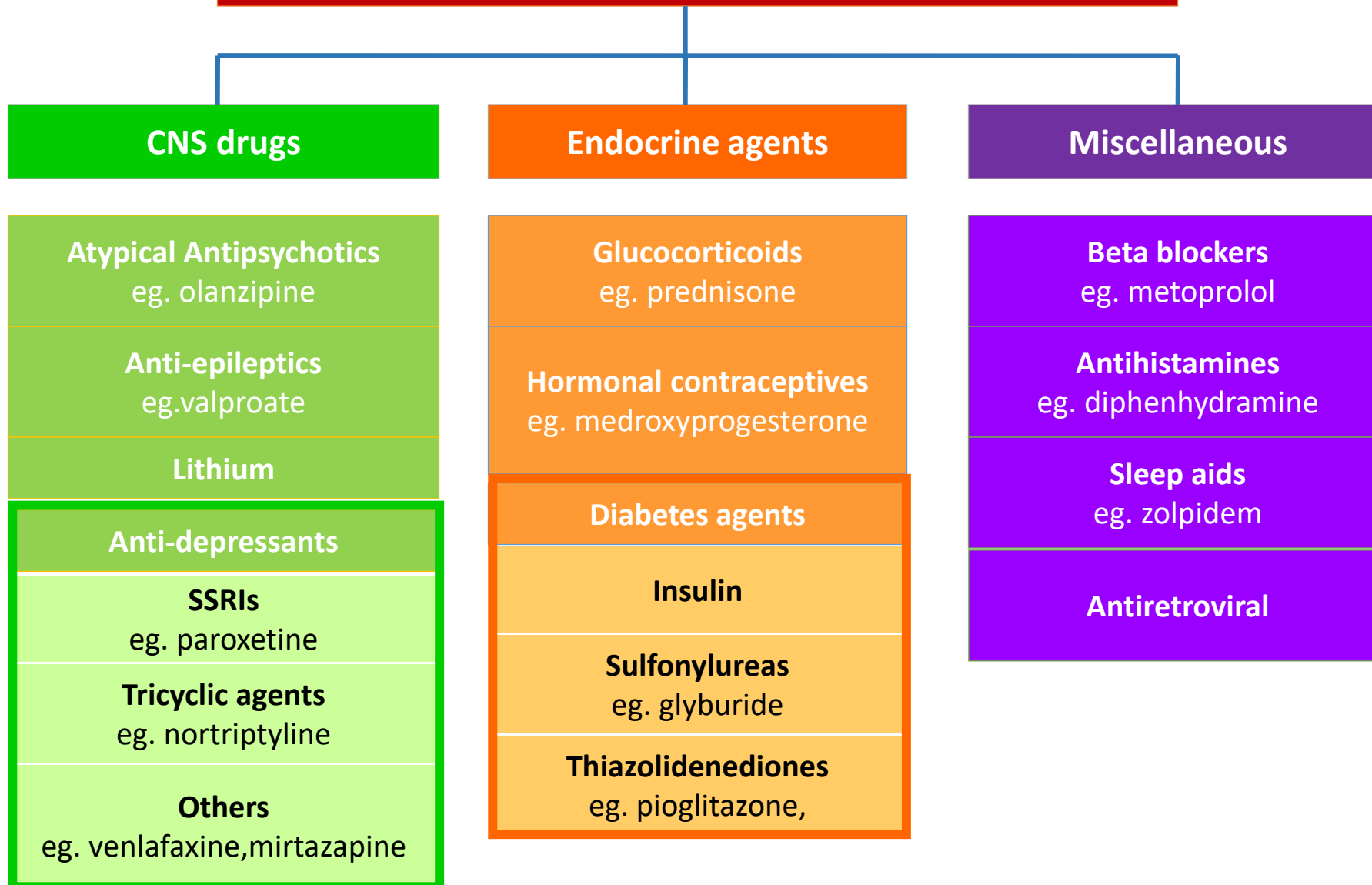
MULTIFACTORIAL



Modifiable Micro-environmental Factors



Medications that promote weight gain



Psychological Factors Associated With Weight Regain After Bariatric Surgery

- Binge-eating disorder
- Emotional eating
- Mood disorders: depression, anxiety, bipolar



Management of Weight Regain

Treat the underlying cause

Etiology

- Behavioral/lifestyle →
- Psychological →
- Iatrogenic →
- Anatomic →
- Biological →

Treatment Ex:

Lifestyle change

CBT, Psych counseling

Remove culprit medication

Surgical revision

Pharmacotherapy

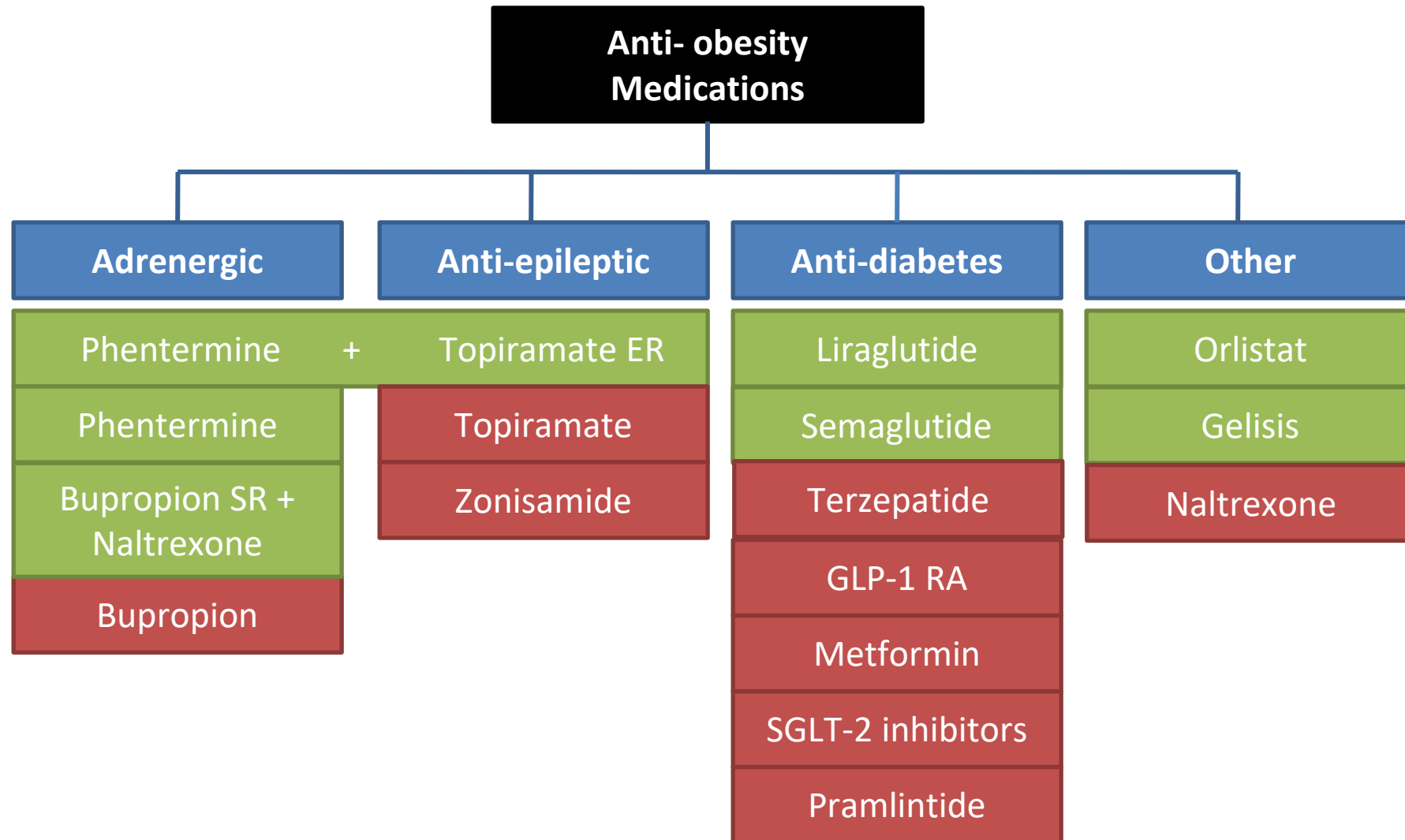
+ Pharmacotherapy



What is the role of Anti-Obesity Medication in post bariatric surgery?



Anti-obesity Medication



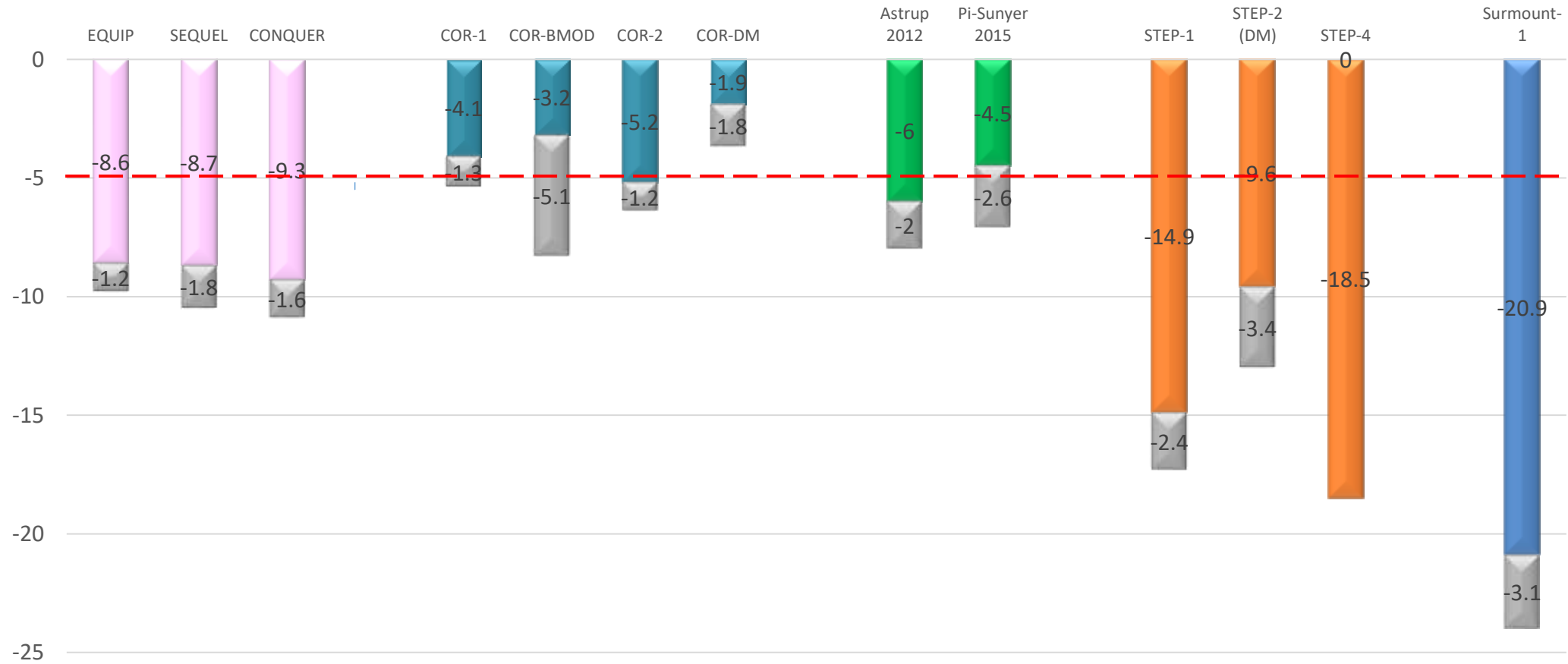
Phentermine 15- topiramate 92

Naltrexone SR 32- Bupropion SR 360

Liraglutide 3

Semaglutide 2.4

Terzepatide 15

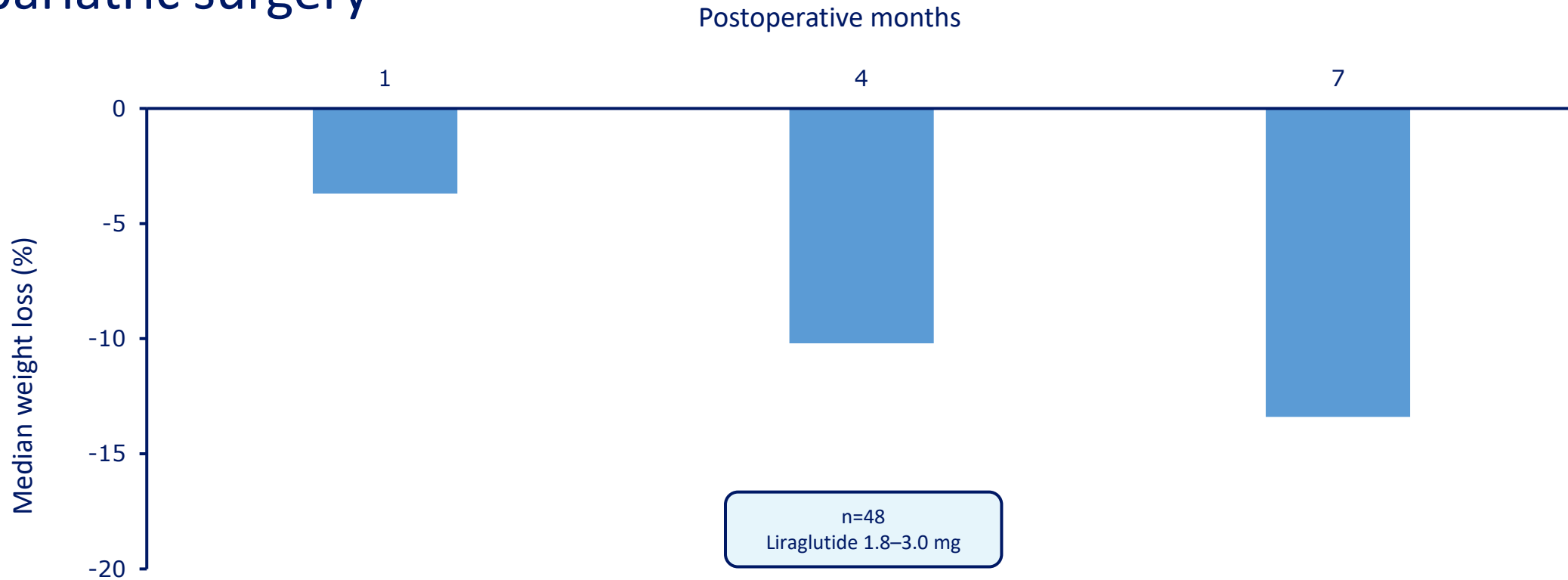


Placebo



Pharmacotherapy

AOM induces further weight loss in patients with a partial response to bariatric surgery

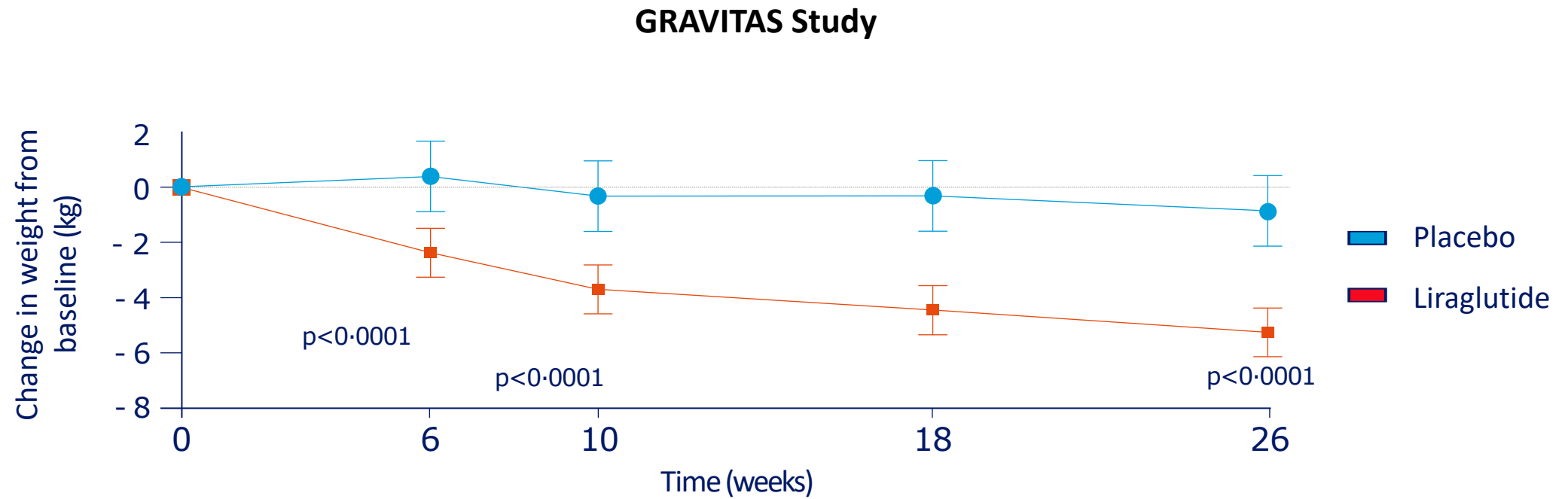


Retrospective analysis of 48 patients after LSG, GBP or LAGB with earlier than anticipated weight-loss plateaus. AOM, anti-obesity medication; GBP, laparoscopic gastric bypass; LAGB, laparoscopic gastric band; LSG, laparoscopic sleeve gastrectomy



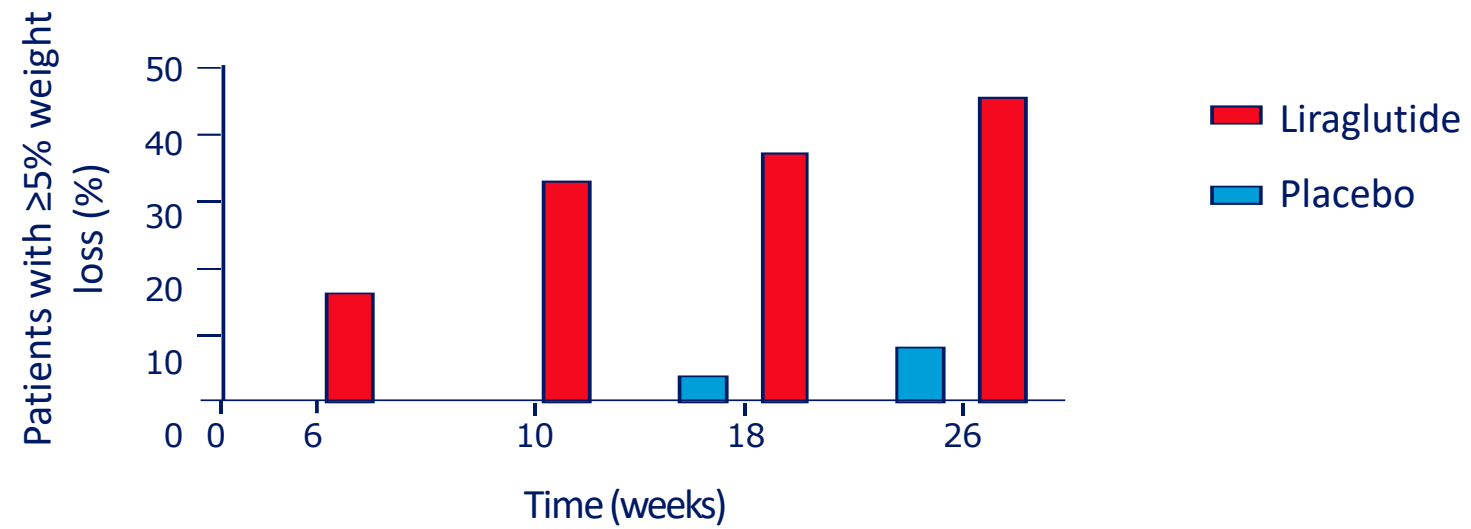
GRAVITAS

Postoperative pharmacotherapy augments surgical weight loss



GRAVITAS

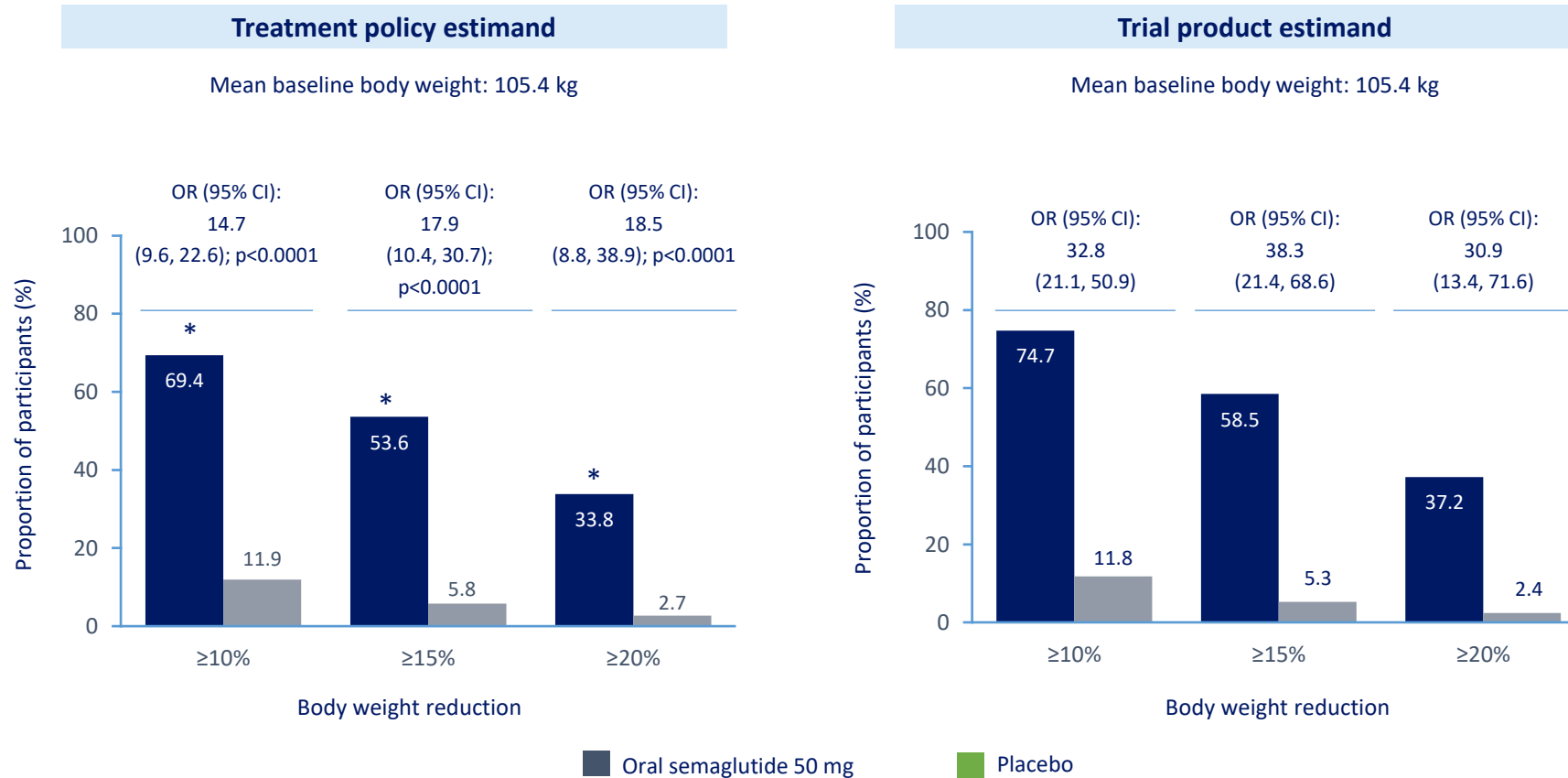
GRAVITAS Study



Oral semaglutide

Categorical body weight reductions at week 68

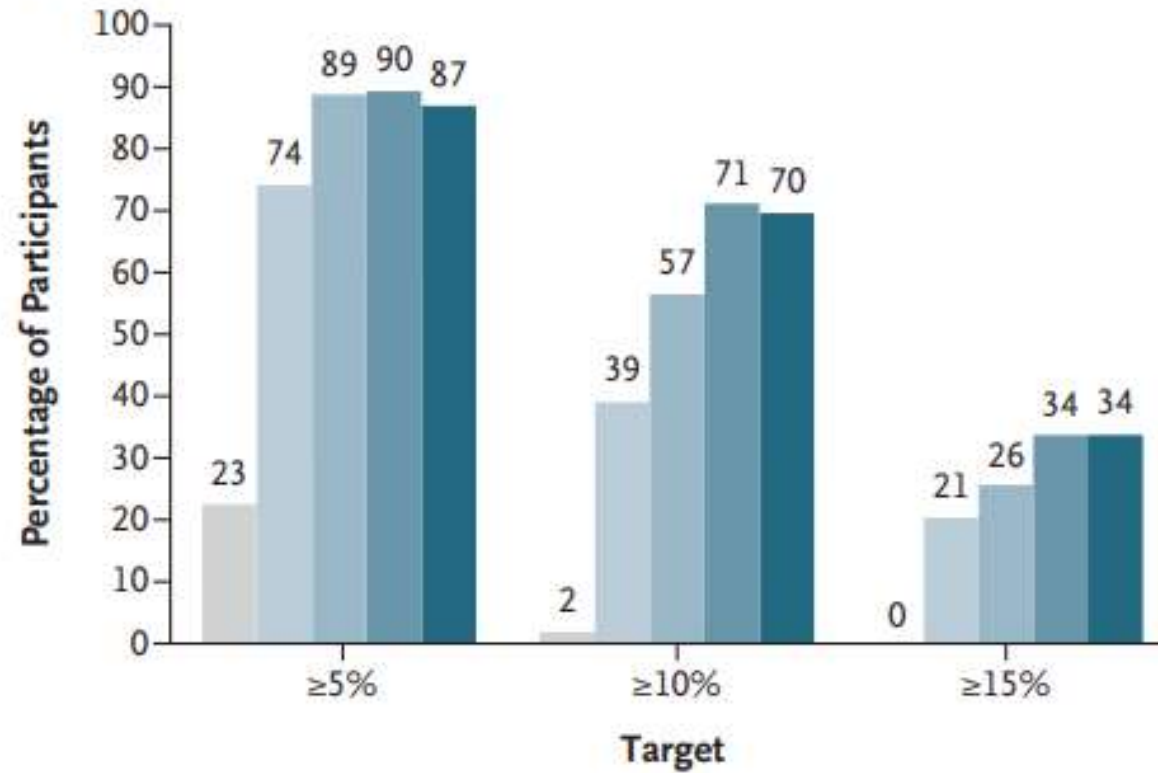
Confirmatory secondary endpoints



*Statistically significant vs placebo (full analysis set).
CI, confidence interval; OR, odds ratio.
Knop et al. The Lancet 2023; doi:[https://doi.org/10.1016/S0140-6736\(23\)01185-6](https://doi.org/10.1016/S0140-6736(23)01185-6)

Oral Orforglipron

C Weight Reduction by Week 26

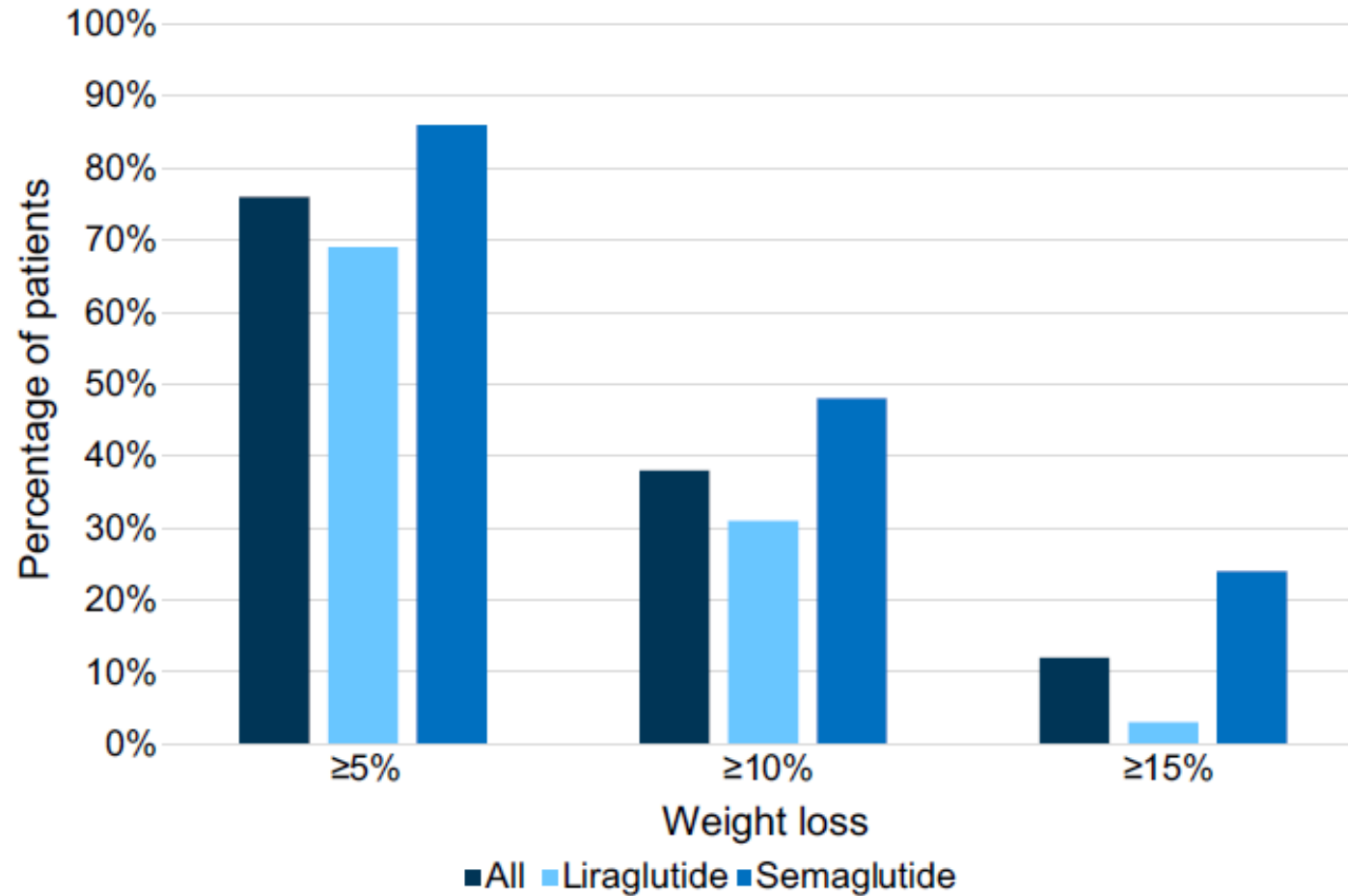


RYGB and Oral options

May not work ...

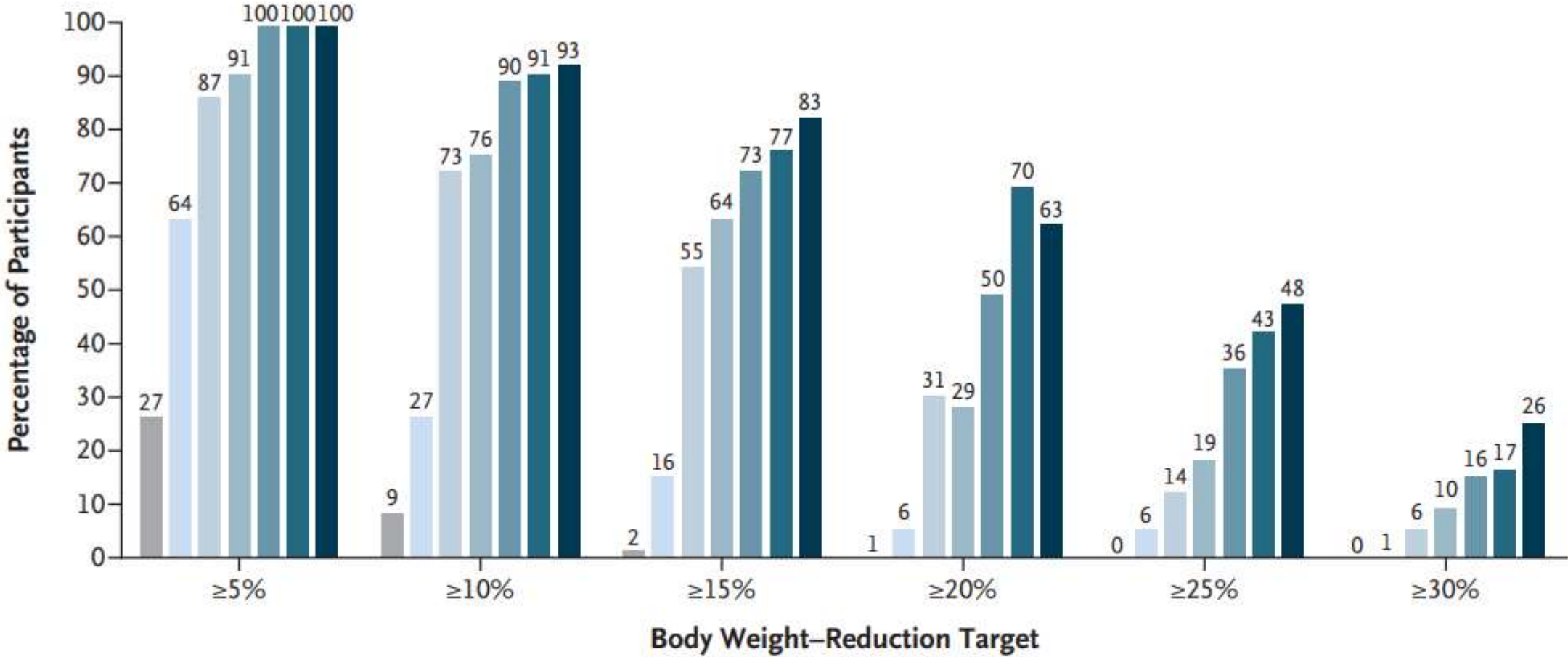


Liraglutide Vs. Semaglutide

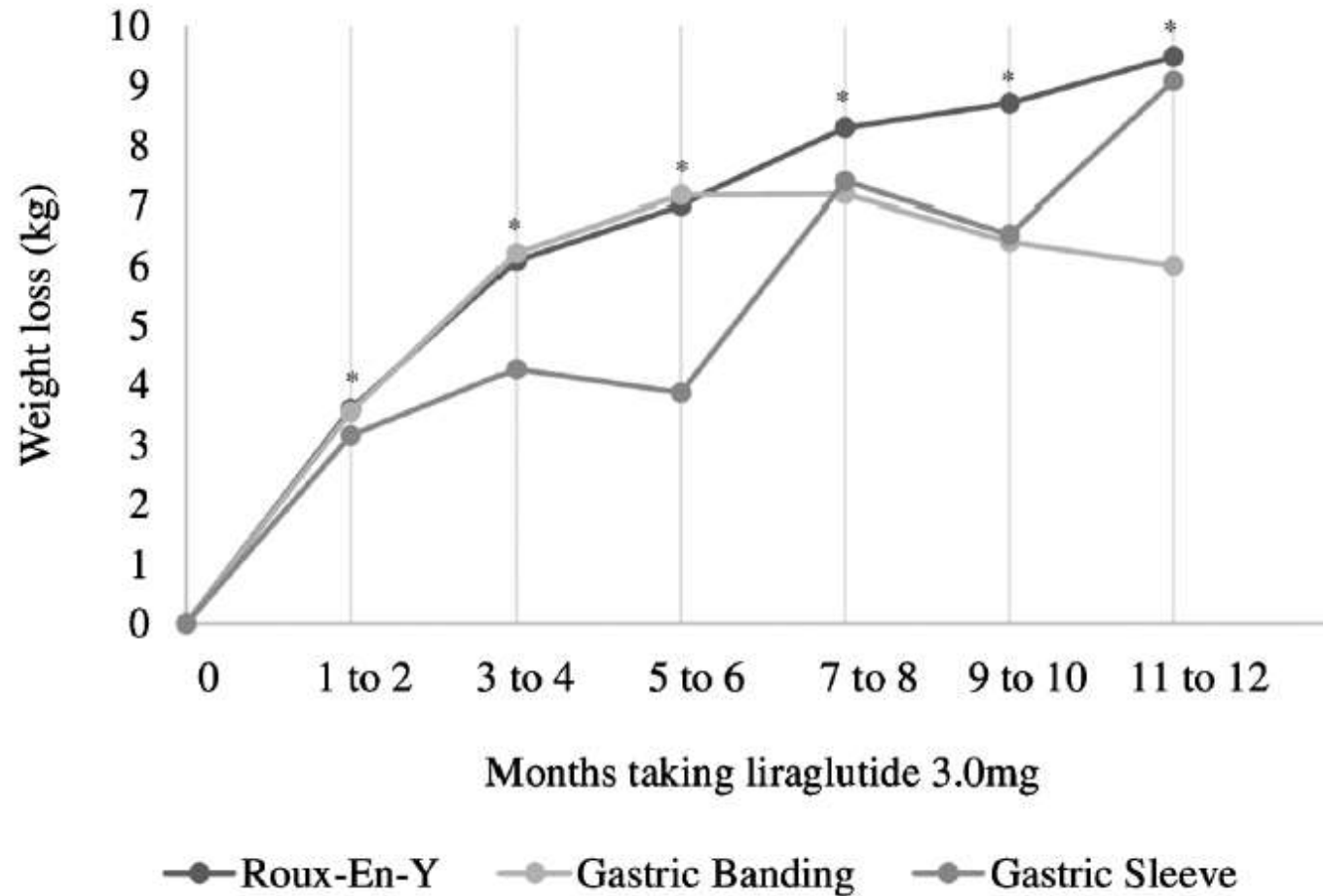


Retatrutide (triple agonist)

3 Attainment of Weight-Reduction Targets



Liraglutide 3.0 mg for different surgeries

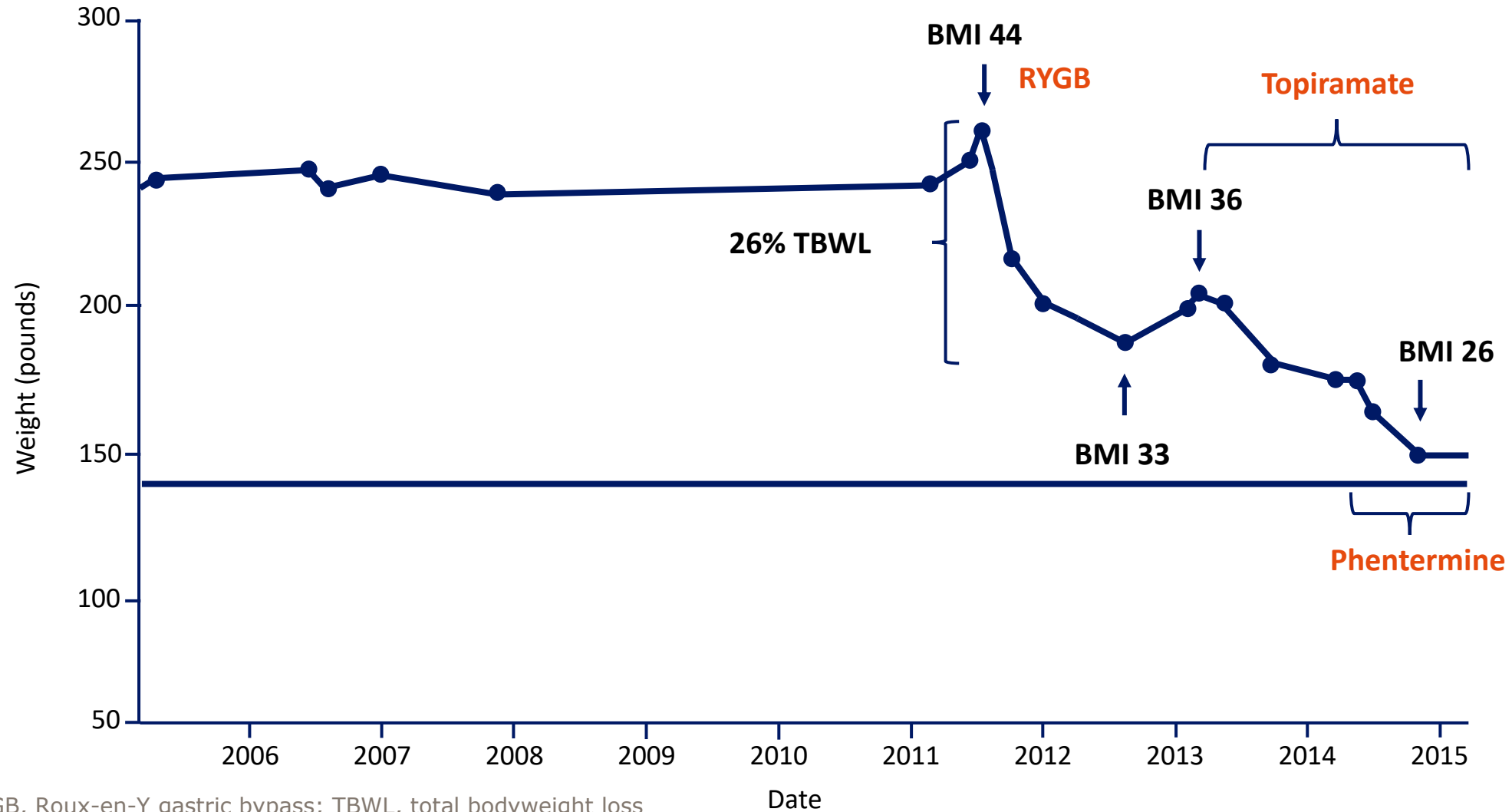


Pharmacotherapy

Author	Study type	Weight Loss
Jester et al. <i>Obes Surg.</i> 1996	Prospective	8-65 % EBWL at 3 m
Pajecki D et al. <i>Rev Col Bras Circ.</i> 2013	Retrospective	6.8% TBWL
Schwartz J et al. <i>Obes Surg.</i> 2016	Retrospective	% EBWL 13% at 3 m
→ Stanford FC, et al. <i>SOARD.</i> 2017	Retrospective	All ≥ 5% TBWL 30% ≥ 10% TBWL 15% ≥ 15 % TBWL
Hanipah ZN et al. <i>SOARD</i> 2017	Retrospective	33% ≥ 5% TBWL
Srivastava G et al. <i>Obes surg</i> 2018	Retrospective	6% TBWL at 6m
Rye P et al. <i>Obes Surg.</i> 2018	Retrospective	with weight regain 12.9% TBWL with wight plateau 8.9% TBWL with inadequate wt loss 8.2% TBWL
Toth T A. <i>Children.</i> 2018	Retrospective	54% ≥ 5% TBWL 34.3% ≥ 10% TBWL 22.9% ≥ 15% TBWL
Wharton S et al. <i>Clinical Obesity.</i> 2019	Retrospective on 3 mg liraglutide	RYGB: ≥ 5% TBWL: 47.2% ≥ 10% TBWL: 24.5% AGB: : ≥ 5% TBWL: 38% ≥ 10% TBWL: 12% SG: : ≥ 5% TBWL: 5% ≥ 10% TBWL: 0%



Pharmacotherapy for Weight Regain



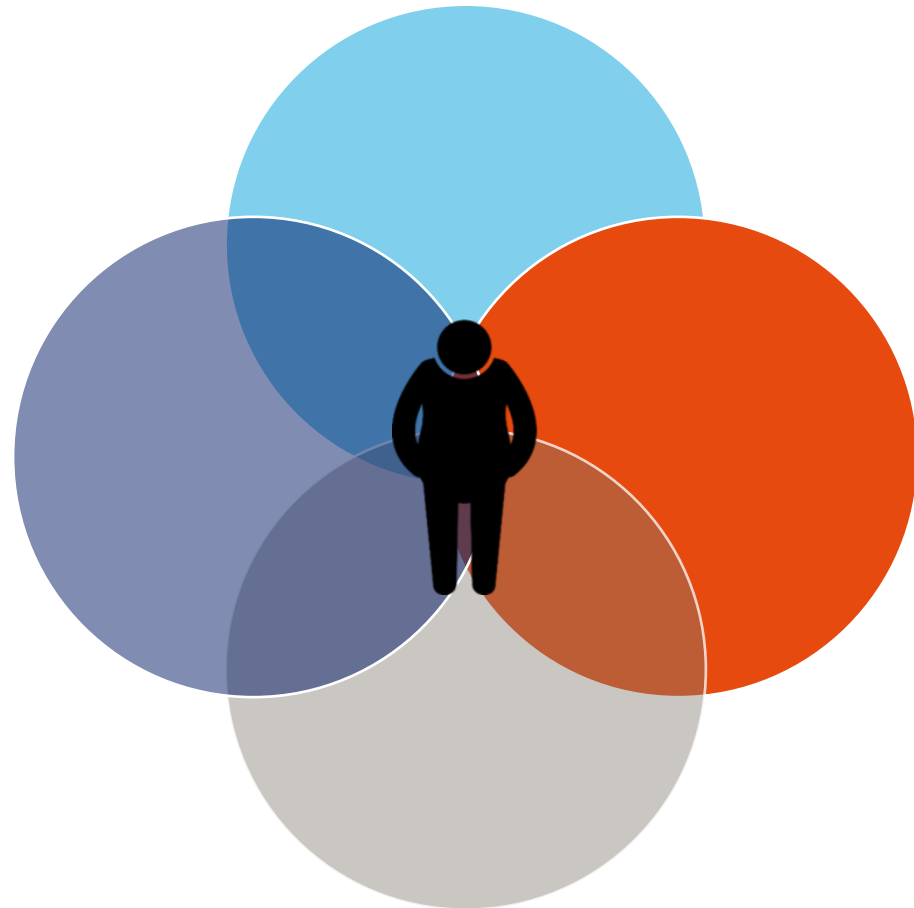
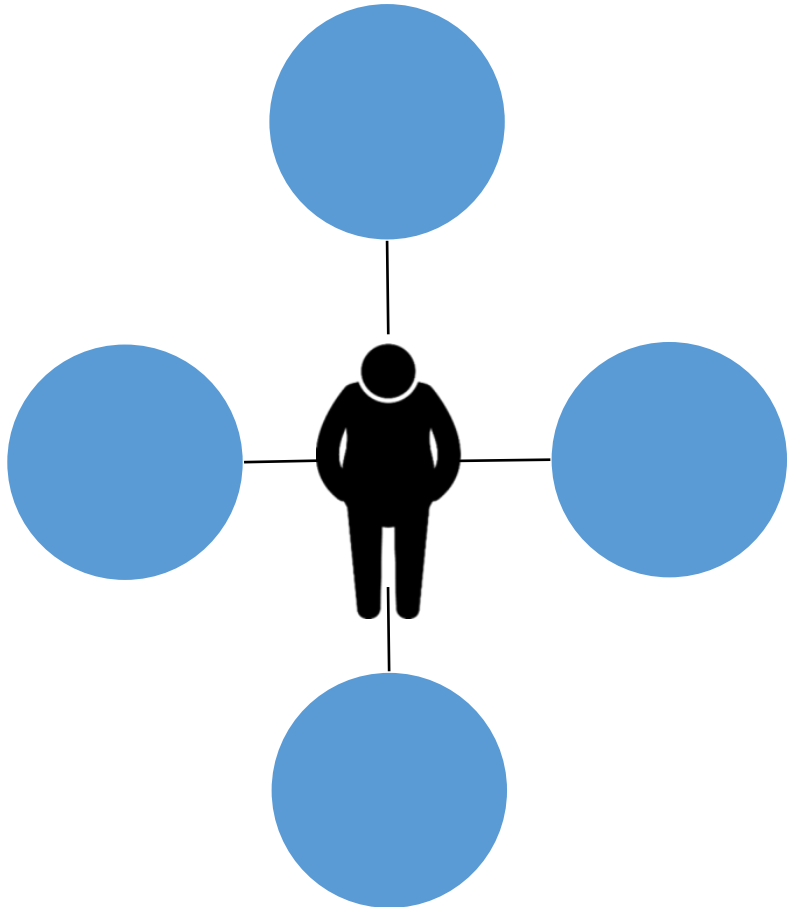
RYGB, Roux-en-Y gastric bypass; TBWL, total bodyweight loss

Date

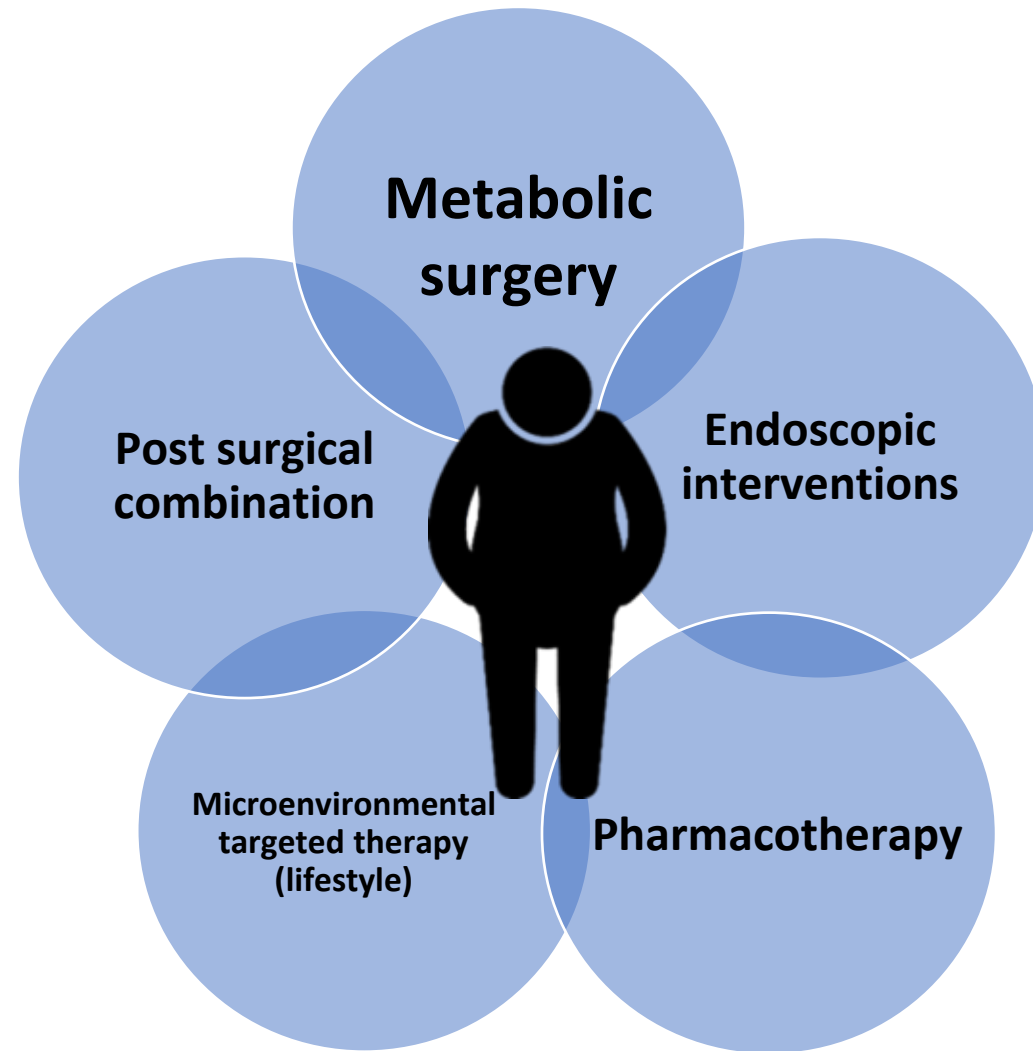


How can we maximize benefit ?

- A patient-centred transdisciplinary approach to obesity



Obesity Treatment Algorithm: The way we should act



Summary

- Obesity is a chronic, progressive, multifactorial, heterogeneous relapsing disease that requires **chronic treatment**
- Careful assessment of patients helps to guide treatment for surgical failure
- Anti-obesity agents are essential tools for management of a heterogeneous disease such as obesity and they should be started as soon as possible
- **Combination therapy** is essential in managing weight regain after bariatric surgery
- Follow up after metabolic surgery is essential to detect relapse early and offer interventions
- It is important to evaluate appropriateness of medication for our patients (orals vs. injectable)

