



**CORSO SICOB III EDIZIONE
MILANO 11-12 APRILE 2024**

IL MANAGEMENT DELL'OBESITÀ

DIRETTORI DEL CORSO: MAURIZIO DE LUCA, GIUSEPPE NAVARRA

Corso sul management nutrizionale, psicologico-psichiatrico, motorio, farmacologico, endoscopico e chirurgico per i pazienti affetti da obesità.

**PROVIDER SICOB
EVENTO ACCREDITATO ECM 401500
15 CREDITI FORMATIVI**

FARMACI E CHIRURGIA

Trattamento farmacologico per il calo ponderale pre- operatorio

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Vice Presidente della European Association for the Study of Obesity (EASO)

Past President della Società Italiana dell'Obesità (SIO)



- **Luca Busetto**

- **Disclosures: - Advisory Board Member:**

Novonordisk

Bruno Farmaceutici

Pzifer

Eli Lilly

Boehringer Ingelheim

- Speaker:

Rythm Pharmaceuticals

Pronokal

Systematic Review and Meta-Analysis of the Effectiveness of Insurance Requirements for Supervised Weight Loss Prior to Bariatric Surgery

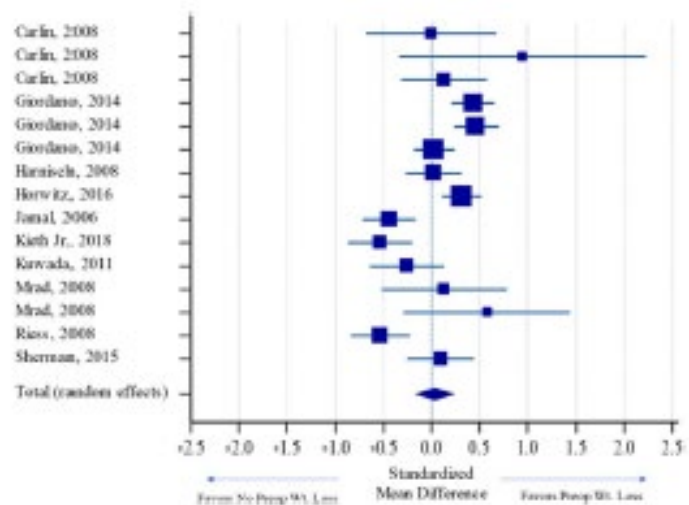


Fig. 2 Forest plot and meta-analysis of prospective and retrospective cohort studies included evaluating mean percent excess weight loss (%EWL) at 12 months for cohorts undergoing preoperative weight loss versus no preoperative weight loss

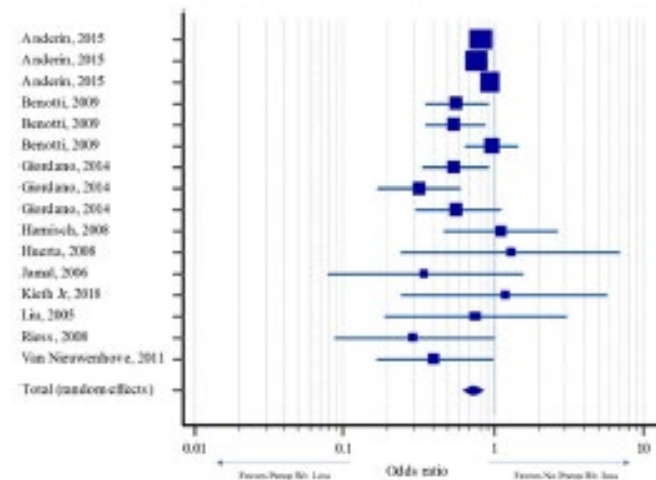
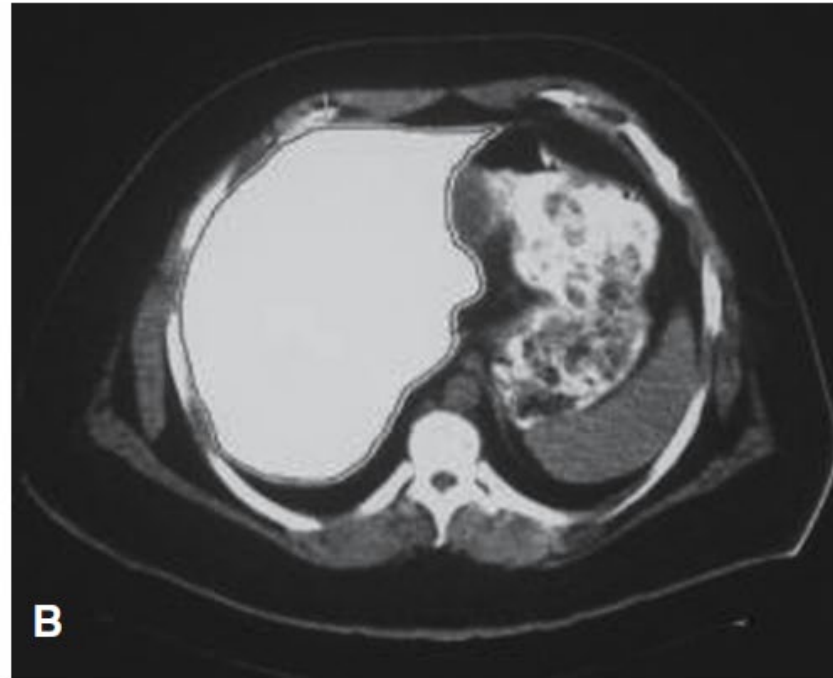
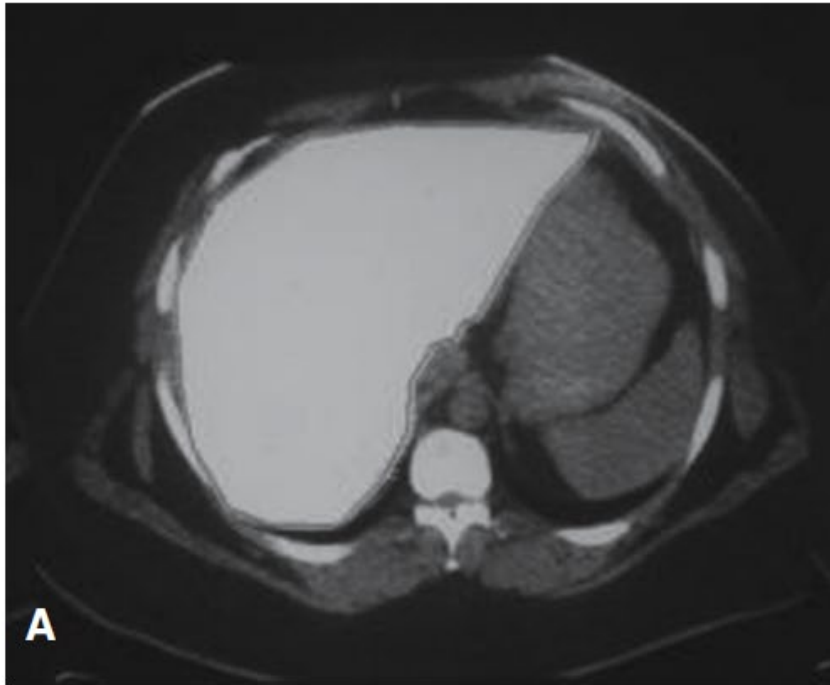


Fig. 3 Forest plot and meta-analysis of studies evaluating perioperative complications (perioperative to 90 days) for cohorts undergoing preoperative weight loss versus no preoperative weight loss

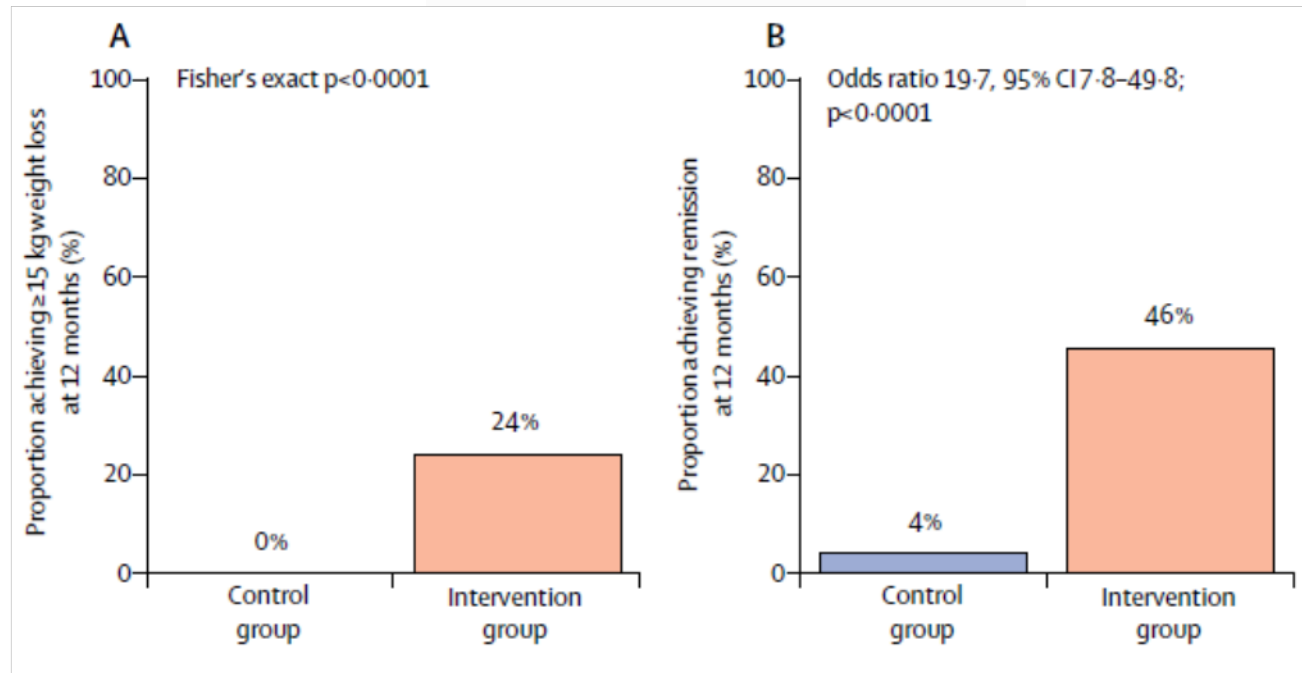
Intragastric Balloon Reduces Liver Volume in Super-Obese Patients, Facilitating Subsequent Laparoscopic Gastric Bypass



Primary care-led weight management for remission of type 2 diabetes (DiRECT): an open-label, cluster-randomised trial

Control group (N. 149 with T2DM): Best practice care by guidelines in 49 primary care practices in Scotland.

Intervention group (N. 149 with T2DM): Weight management programme in 49 primary care practices in Scotland.





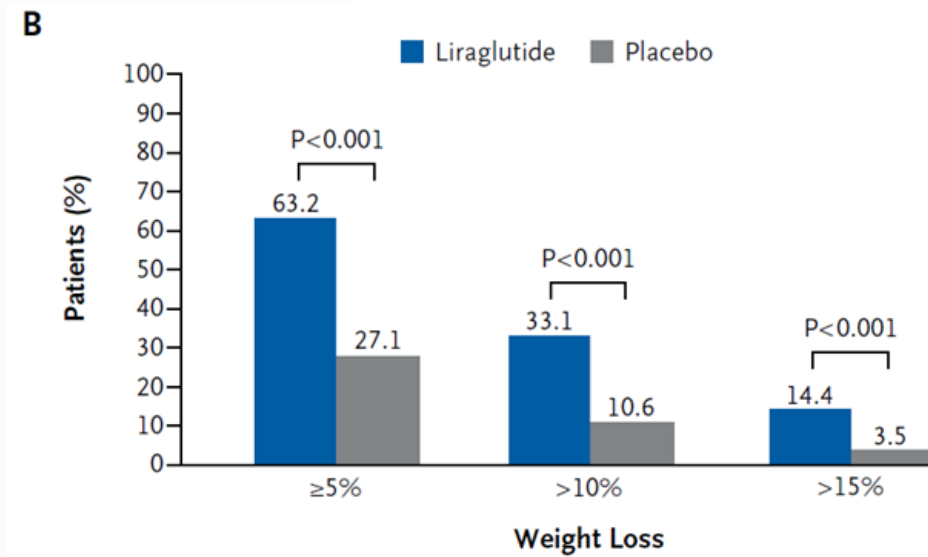
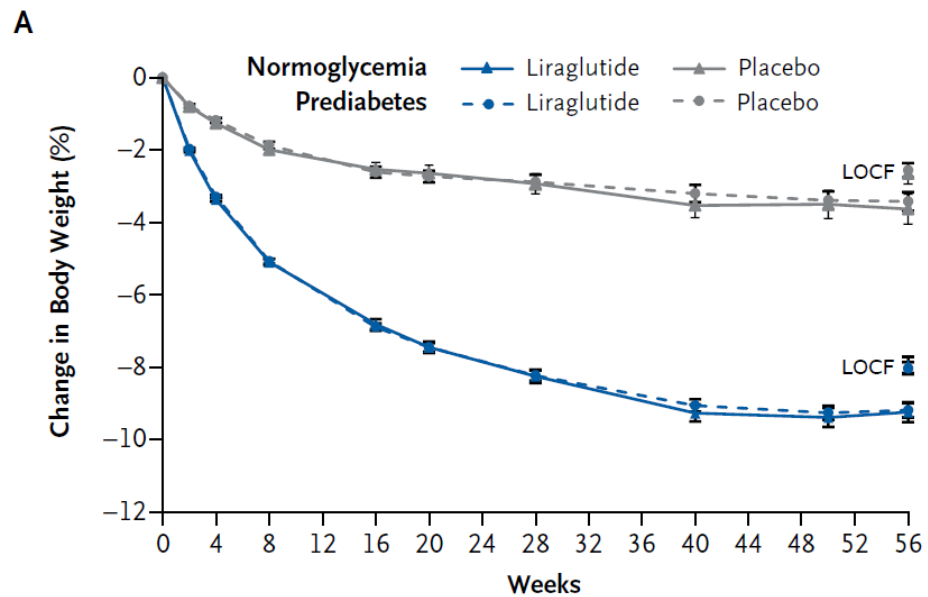
E.29 La riduzione preoperatoria del peso corporeo è consigliata nei pazienti candidati alla chirurgia bariatrica, soprattutto se in presenza di BMI molto elevato o di grave obesità viscerale, anche attraverso la prescrizione di una dieta a basso contenuto calorico/chetogena nel periodo preoperatorio (LIVELLO DI EVIDENZA: 2; GRADO DI RACCOMANDAZIONE: A).

La diminuzione del peso corporeo riduce notevolmente le dimensioni del grasso viscerale e del fegato facilitando l'esecuzione degli interventi laparoscopici^{1,2}, riducendo il tempo di esecuzione e il rischio di conversione^{3,4}, e migliora i risultati a breve e lungo termine⁵⁻⁷ soprattutto nei pazienti super-obesi⁸. Diversi metodi sono stati proposti per favorire la perdita di peso preoperatoria e dalle evidenze in letteratura pare chiaro come l'impiego di una dieta a basso contenuto calorico/chetogena da 15 a 30 giorni prima dell'intervento ottenga risultati soddisfacenti in minor tempo, con un costo minore e meno effetti collaterali rispetto al palloncino intragastrico⁸⁻¹⁴.

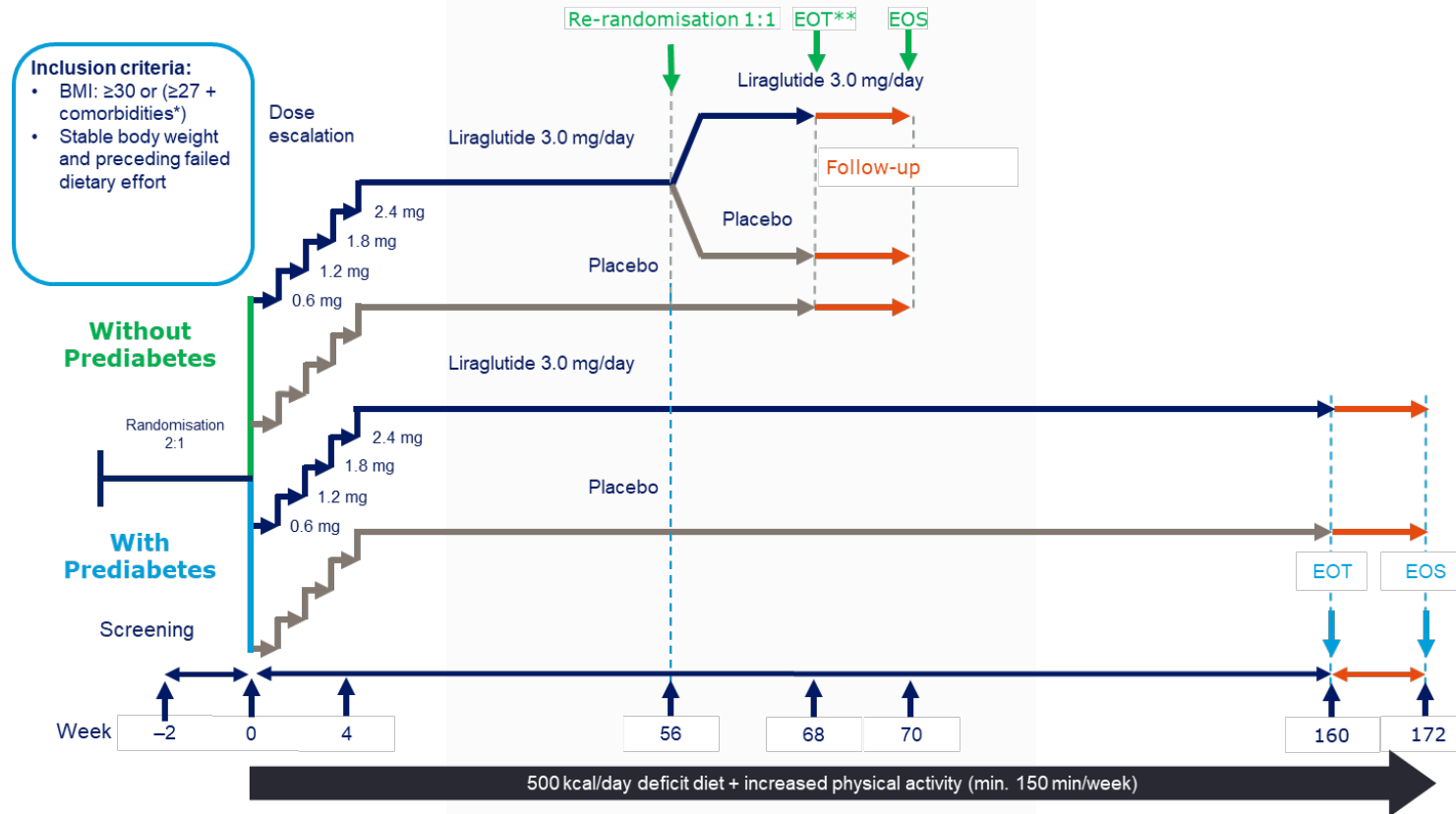
Clinical practice guidelines for the perioperative nutrition, metabolic, and nonsurgical support of patients undergoing bariatric procedures – 2019 update: cosponsored by American Association of Clinical Endocrinologists/American College of Endocrinology, The Obesity Society, American Society for Metabolic & Bariatric Surgery, Obesity Medicine Association, and American Society of Anesthesiologists

R12. (2013). Preprocedure weight loss can reduce liver volume and may help improve the technical aspects of surgery in patients with an enlarged liver or fatty liver disease and therefore may be recommended before a bariatric procedure (Grade B; BEL 1; downgraded due to inconsistent evidence). Preprocedure weight loss or medical nutritional therapy may be recommended to patients in selected cases to improve co-morbidities, such as preprocedure glycemic targets (Grade D).

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



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



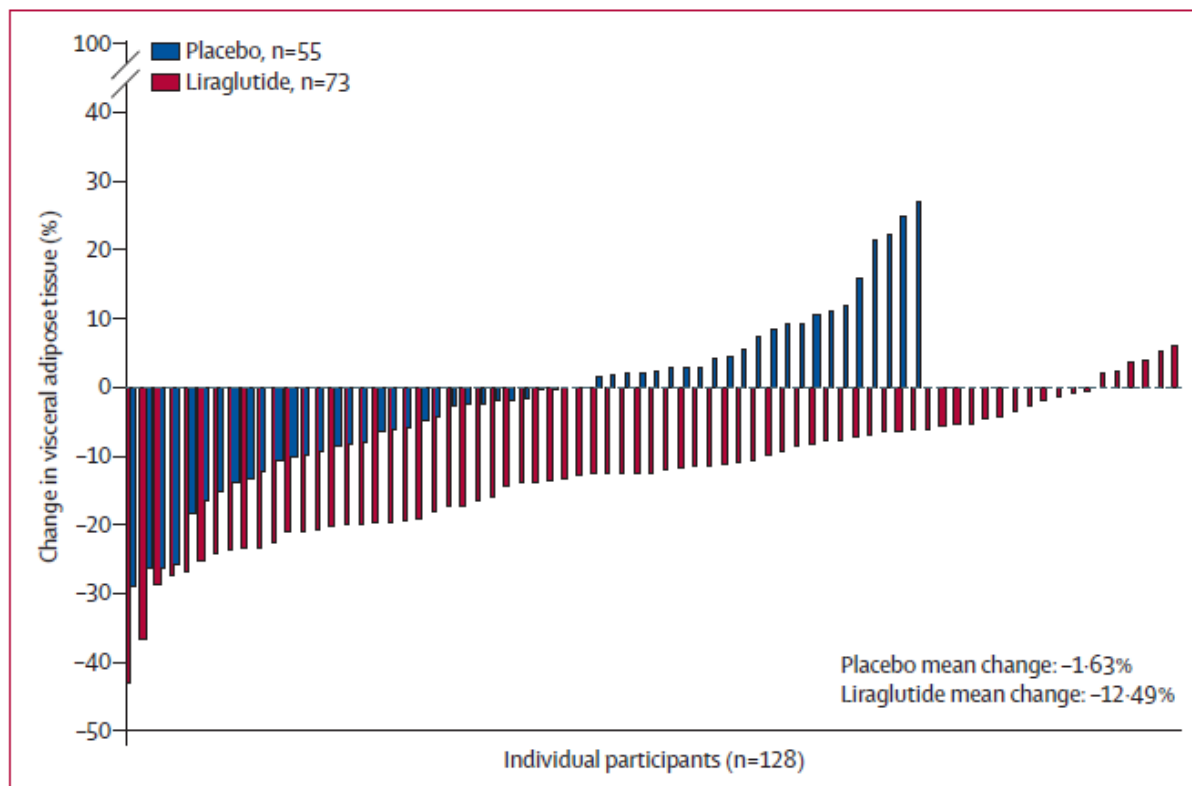


Figure 3: Participant-level relative changes in visceral adipose tissue

Individual, participant-level relative changes in VAT are shown in this waterfall plot. Participants assigned to liraglutide are in red and those assigned to placebo are in blue.

Effects of liraglutide on visceral and ectopic fat in adults with overweight and obesity at high cardiovascular risk: a randomised, double-blind, placebo-controlled, clinical trial

Neeland IJ et al. *Lancet Diabetes Endocrinol* 2021;9:595.

Efficacy of Liraglutide for Weight Loss Among Patients With Type 2 Diabetes

The SCALE Diabetes Randomized Clinical Trial

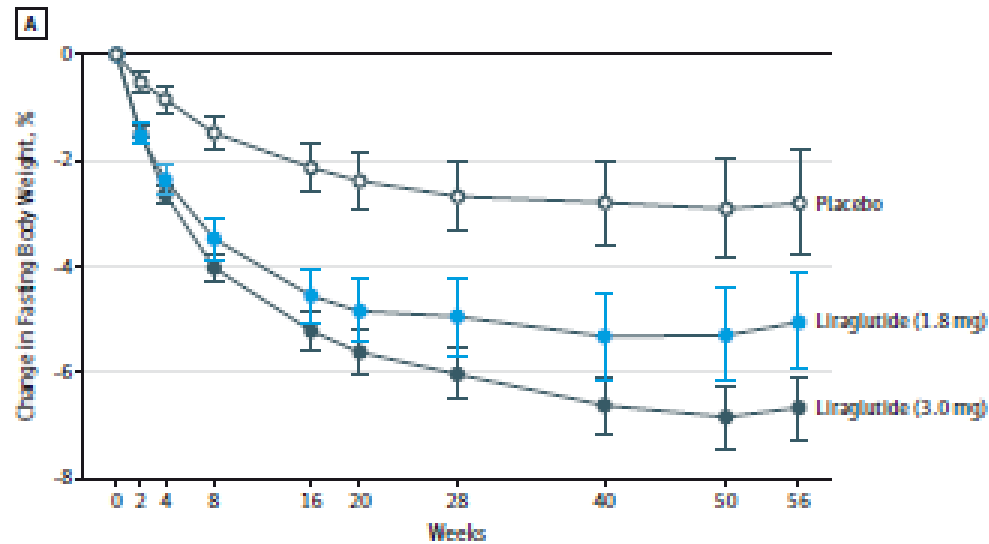


Table 3. Summary of Secondary Efficacy End Points At Week 56*

End Point	Change From Baseline to Week 56 or Percentage At Week 56			Estimate (95% CI)				
	Liraglutide 3.0 mg (n = 411)	Liraglutide 1.8 mg (n = 204)	Placebo (n = 211)	Estimate Type	3.0 mg vs Placebo	P Value	1.8 mg vs Placebo	P Value
HbA _{1c} , mean (SD), % change ^a	-1.3 (0.9)	-1.1 (1.0)	-0.3 (0.9)	Treatment difference	-0.93 (-1.08 to -0.78)	<.001	-0.74 (-0.91 to -0.57)	<.001
No. of individuals achieving HbA _{1c} target, No. % ^b				Odds ratio				
<7.0 %	278 (69.2)	130 (66.7)	56 (27.2)		8.79 (5.74 to 13.44)	<.001	7.71 (4.76 to 12.51)	<.001
≤6.5 %	227 (56.5)	89 (45.6)	31 (15.0)		9.61 (6.05 to 15.26)	<.001	5.98 (3.59 to 9.97)	<.001

	Liraglutide	Placebo	Relative risks or mean changes (95% CI) from baseline to 48 weeks (liraglutide vs placebo)	p value*
Primary outcome				
Number of patients with paired liver biopsies	23	22
Patients with resolution of non-alcoholic steatohepatitis	9 (39%)	2 (9%)	4.3 (1.0 to 17.7)	0.019
Changes from baseline in histopathological parameters				
Total NAFLD activity score				
Change in score	-1.3 (1.6)	-0.8 (1.2)	-0.5 (-1.3 to 0.3)	0.24
Patients with improvement	17 (74%)	14 (64%)	1.2 (0.8 to 1.7)	0.46
Hepatocyte ballooning score				
Mean change	-0.5 (0.7)	-0.2 (0.6)	-0.3 (-0.7 to 0.1)	0.15
Patients with improvement	14 (61%)	7 (32%)	1.9 (1.0 to 3.8)	0.05
Steatosis				
Change in score	-0.7 (0.8)	-0.4 (0.8)	-0.2 (-0.6 to 0.2)	0.32
Patients with improvement	19 (83%)	10 (45%)	1.8 (1.1 to 3.0)	0.009
Lobular inflammation				
Change in score	-0.2 (0.6)	-0.2 (0.5)	-0.01 (-0.3 to 0.3)	0.97
Patients with improvement	11 (48%)	12 (55%)	0.9 (0.5 to 1.6)	0.65
Kleiner fibrosis stage				
Change in score	-0.2 (0.8)	0.2 (1.0)	-0.4 (-0.8 to 0.1)	0.11
Patients with improvement	6 (26%)	3 (14%)	1.9 (0.5 to 6.7)	0.46†
Patients with worsening	2 (9%)	8 (36%)	0.2 (0.1 to 1.0)	0.04†

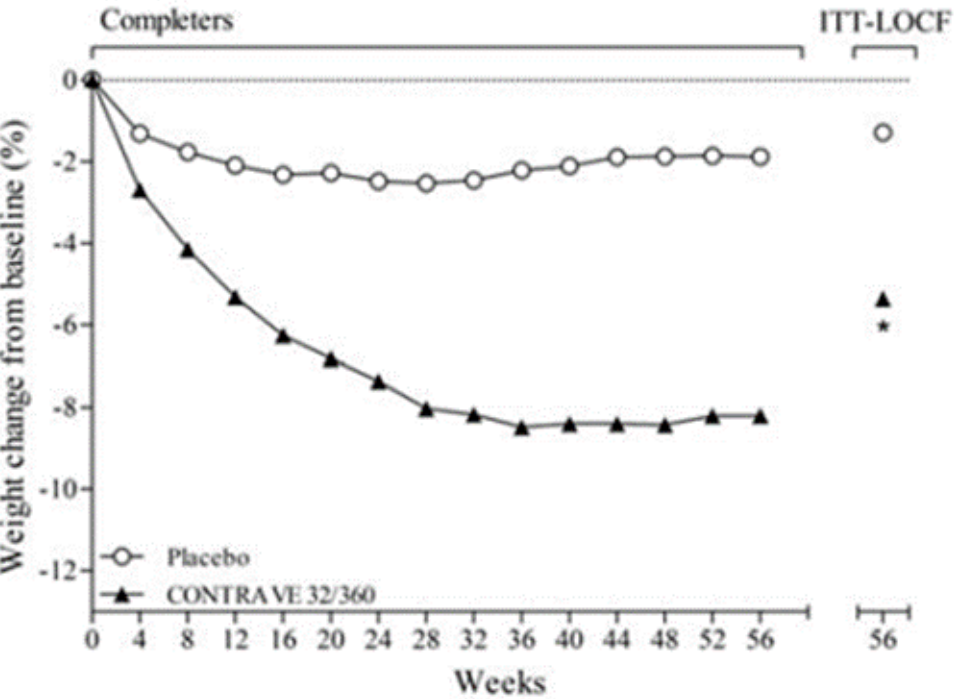
Data are n (%) or mean (SD). The mean of the two independent pathologists' scores for overall non-alcoholic fatty liver disease (NAFLD) activity score, steatosis, ballooning, inflammation, and fibrosis were used to compare the two treatment groups. The pathologists' agreement for overall NAFLD activity score using a weighted kappa was 0.854. *p values and mean changes from baseline were calculated by linear regression analysis using the baseline characteristic score and treatment as model covariates (equivalent to ANCOVA); for categorical comparisons, p values were determined by χ^2 analysis. †p value was determined by Fisher's exact test.

Table 2: Changes in liver histology after 48 weeks of treatment

Liraglutide safety and efficacy in patients with non-alcoholic steatohepatitis (LEAN): a multicentre, double-blind, randomised, placebo-controlled phase 2 study

Armstrong MJ et al. Lancet 2016;387:679

Comparison of Combined Bupropion and Naltrexone Therapy for Obesity with Monotherapy and Placebo

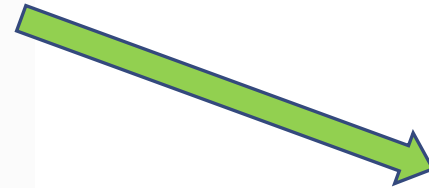
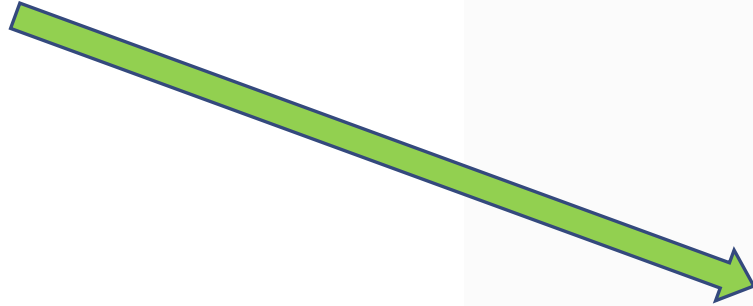


HOW TO TAKE CONTRAVE		
	Morning dose	Evening dose
Starting: Week 1		
Week 2		
Week 3		
Week 4-onward		

Image not of actual tablets.

Greenway et al. Lancet 2010; 376: 595–605.

	VLCKD	AOM
% WEIGHT LOSS	8-10%	8-10%
TIME TO TARGET (m)	1	6-8



6-8

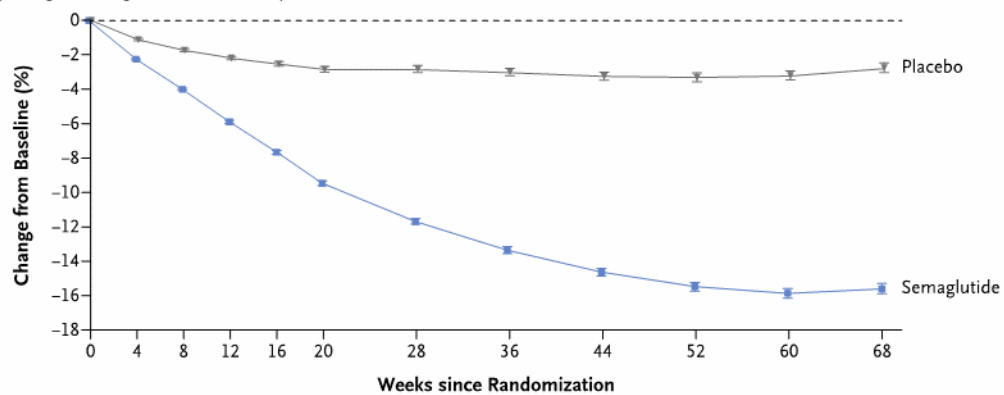
1



TIME TO SURGERY (months)

Once-Weekly Semaglutide in Adults with Overweight or Obesity

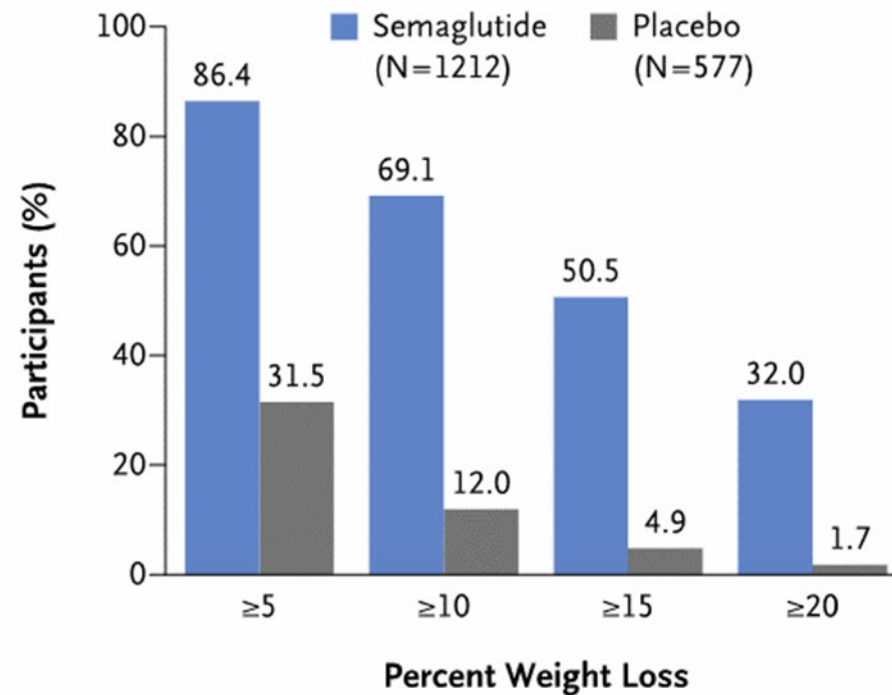
A Body Weight Change from Baseline by Week, Observed In-Trial Data



No. at Risk

Placebo	655	649	641	619	615	603	592	571	554	549	540	577
Semaglutide	1306	1290	1281	1262	1252	1248	1232	1228	1207	1203	1190	1212

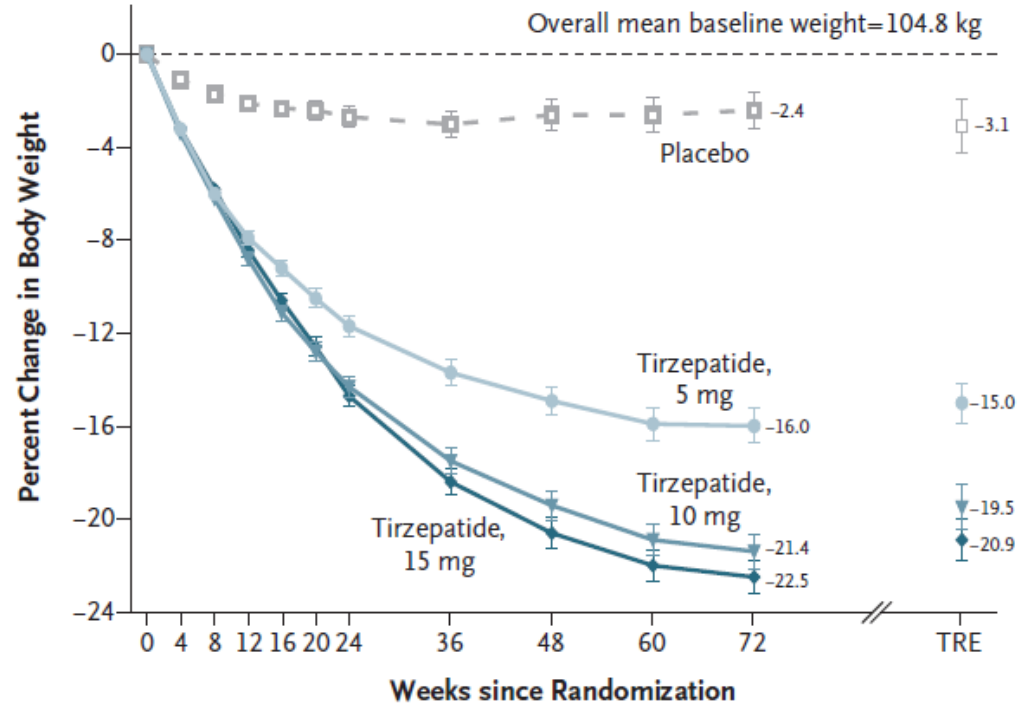
C In-Trial Data at Wk 68



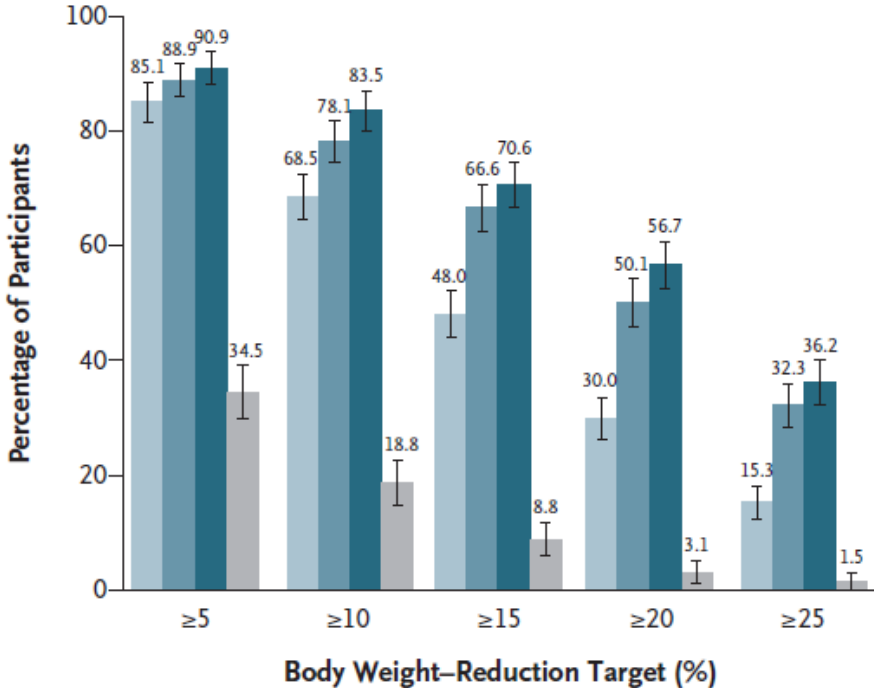
Wilding JPH et al. NEJM 2021;384:989.

Tirzepatide Once Weekly for the Treatment of Obesity

B Percent Change in Body Weight by Week (efficacy estimand)



C Participants Who Met Weight-Reduction Targets (treatment-regimen estimand)



Jastreboff AM et al. N Engl J Med 2022;387:205

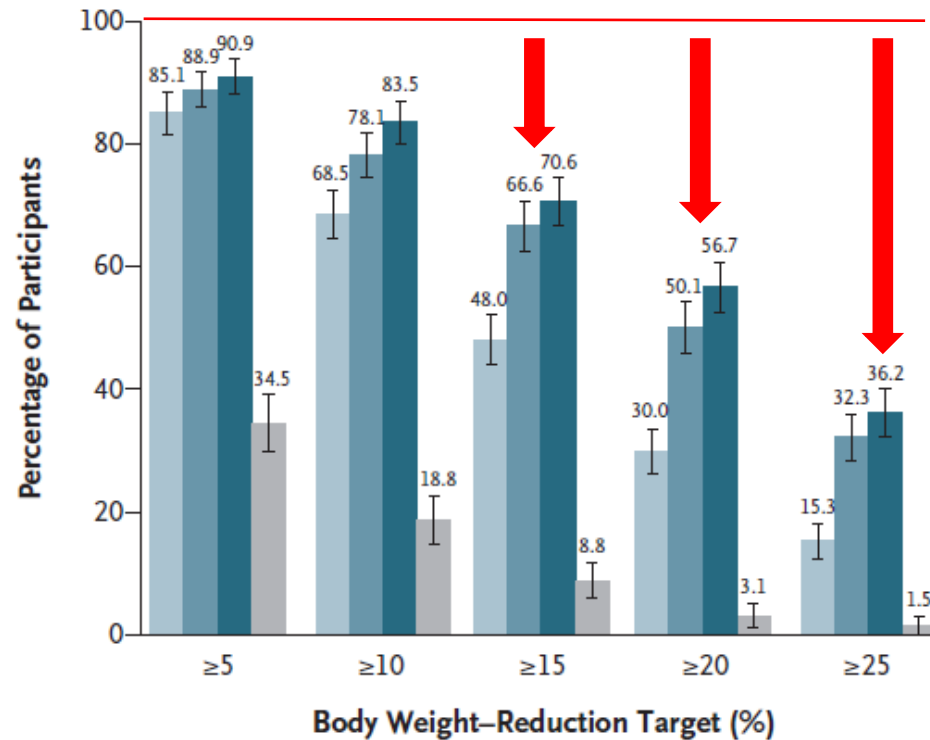
Will new pharmacological treatment for obesity and early diabetes replace bariatric surgery?

There is no magic bullet for obesity

Tirzepatide Once Weekly for the Treatment of Obesity

A significant proportion of patients do will not achieve the target with obesity management medications

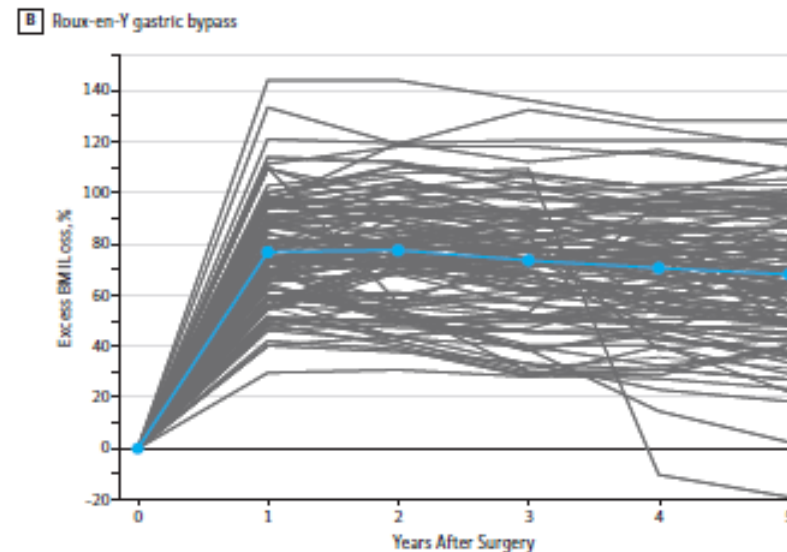
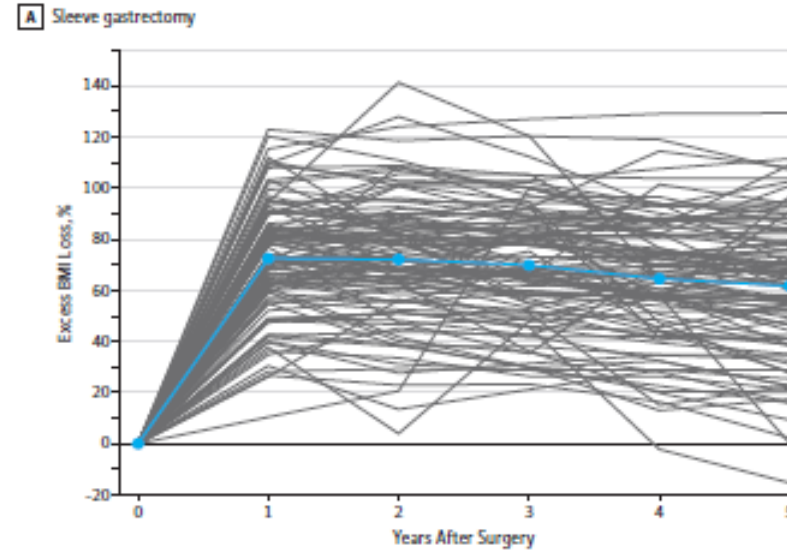
C Participants Who Met Weight-Reduction Targets (treatment-regimen estimand)



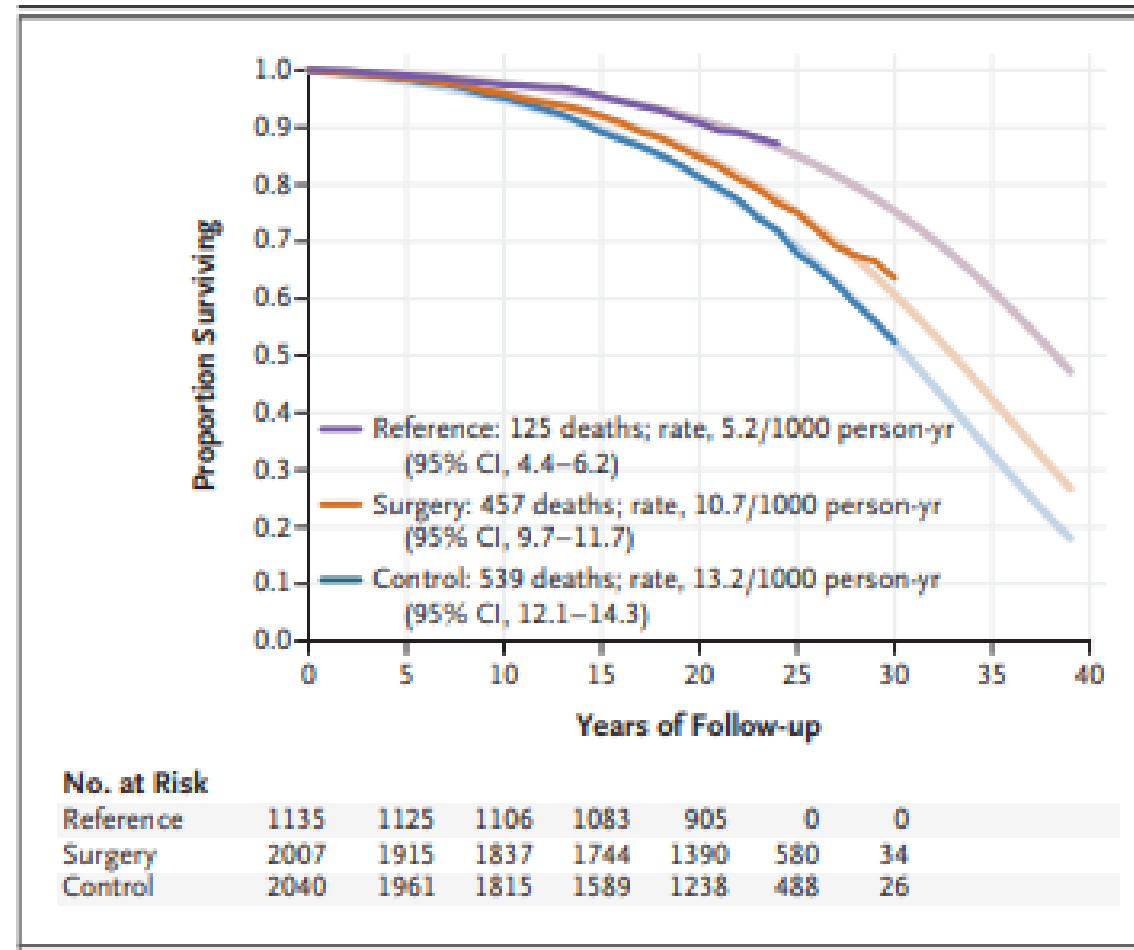
Effect of Laparoscopic Sleeve Gastrectomy
vs Laparoscopic Roux-en-Y Gastric Bypass
on Weight Loss in Patients With Morbid Obesity
The SM-BOSS Randomized Clinical Trial

A significant proportion
of patients do will not
achieve the target with
bariatric/metabolic
surgery

Peterli R et al. JAMA 2018;319:255

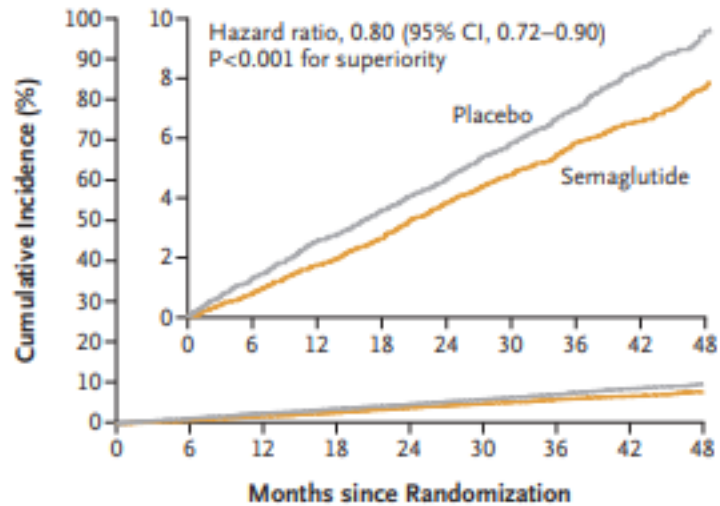


Life Expectancy after Bariatric Surgery in the Swedish Obese Subjects Study



Semaglutide and Cardiovascular Outcomes in Obesity without Diabetes

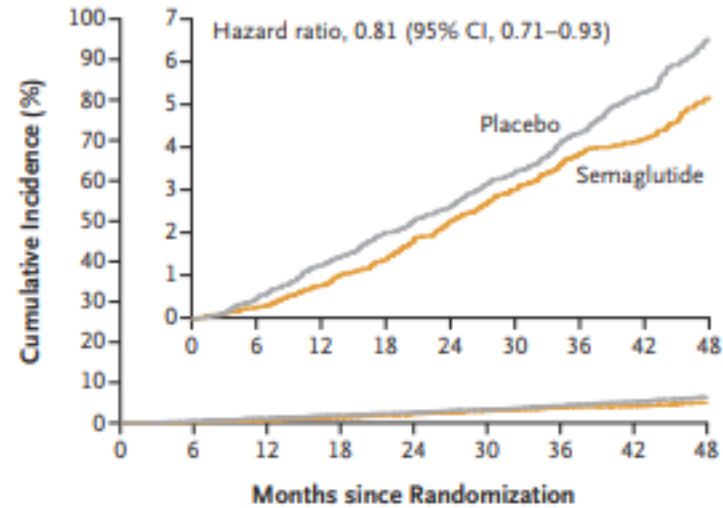
A Primary Cardiovascular Composite End Point



No. at Risk

Placebo	8801	8652	8487	8326	8164	7101	5660	4015	1672
Semaglutide	8803	8695	8561	8427	8254	7229	5777	4126	1734

D Death from Any Cause



No. at Risk

Placebo	8801	8733	8634	8528	8430	7395	5938	4250	1793
Semaglutide	8803	8748	8673	8584	8465	7452	5988	4315	1832

CLINICAL CASE: FRANCESCO

65 AA

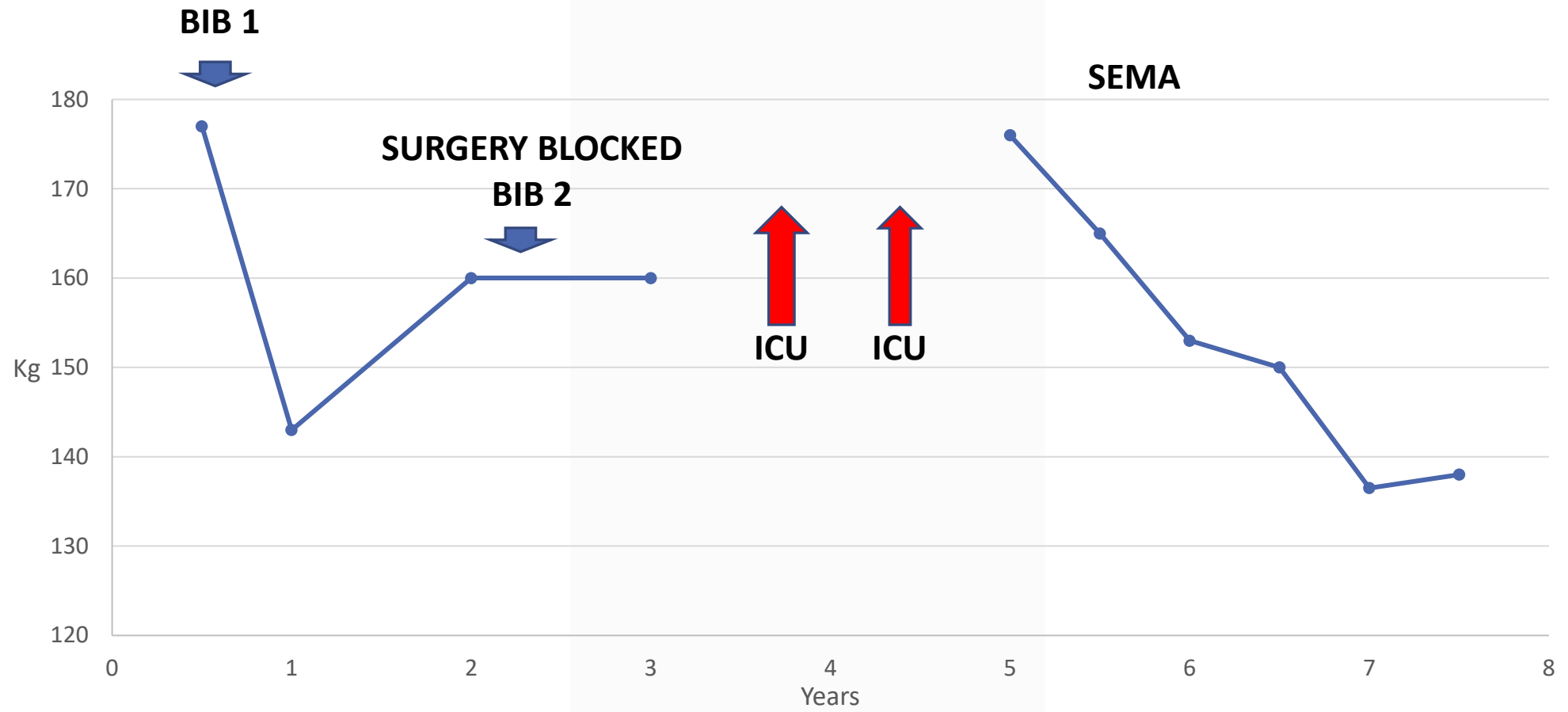
Height 172 cm

Weight 176.0 kg

BMI 59.5 kg/m²

Waist ?????

- **Heavy smoker**
- **Obesity/Hypoventilation Syndrome with C-PAP (2 previous ICU staying)**
- **CHD**
- **Mild type 2 diabetes**





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Grazie !!!



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EASO

European Association for the Study of Obesity



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12-15 MAY 2024 VENICE, ITALY



www.eco2024.org