NUOVE FRONTIERE NELLA SINERGIA TRA TERAPIA MEDICA E TERAPIA CHIRURGICA

LUCA BUSETTO

UNIVERSITA' DI PADOVA

LUCA BUSETTO - Disclosures

- Advisory Board Member:	Novonordisk
	Eli Lilly
	Pzifer
	Boehringer Ingelheim
	Bruno Farmaceutici
- Invited Speaker:	Rythm Pharmaceuticals
	Pronokal

ROLE OF OBESITY MANAGEMENT MEDICATION (OMM) FOR PATIENTS UNDEROGOING METABOLIC/BARIATRIC SURGERY

- **Preparation to surgery: pre-op weight loss**
- **Management of weight regain and insufficient weight loss after surgery**
- **Integrated medical-surgical management**

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

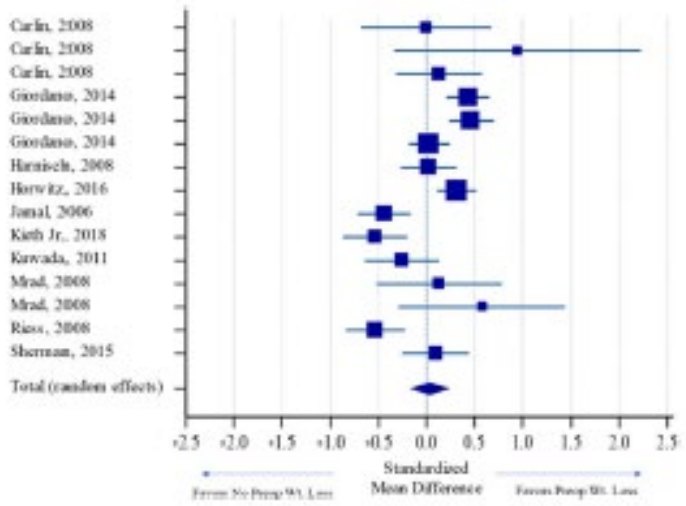

Fig. 2 Forest plot and meta-analysis of prospective and retrospective cohort studies included evaluating mean percent excess weight loss (%EWL) at 12 months for cohorts undergoing preoperative weight loss versus no preoperative weight loss

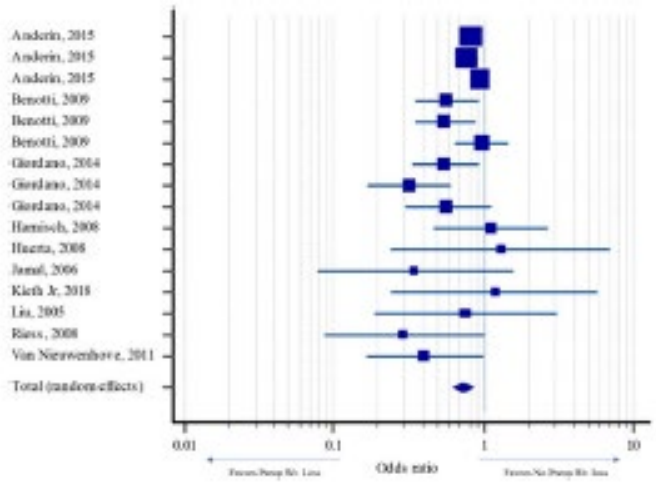

Fig. 3 Forest plot and meta-analysis of studies evaluating perioperative complications (perioperative to 90 days) for cohorts undergoing preoperative weight loss versus no preoperative weight loss

Kushner BS & Eagon JC. Obes Surg. 2021;31:5936

6-8

1

TIME TO SURGERY (months)

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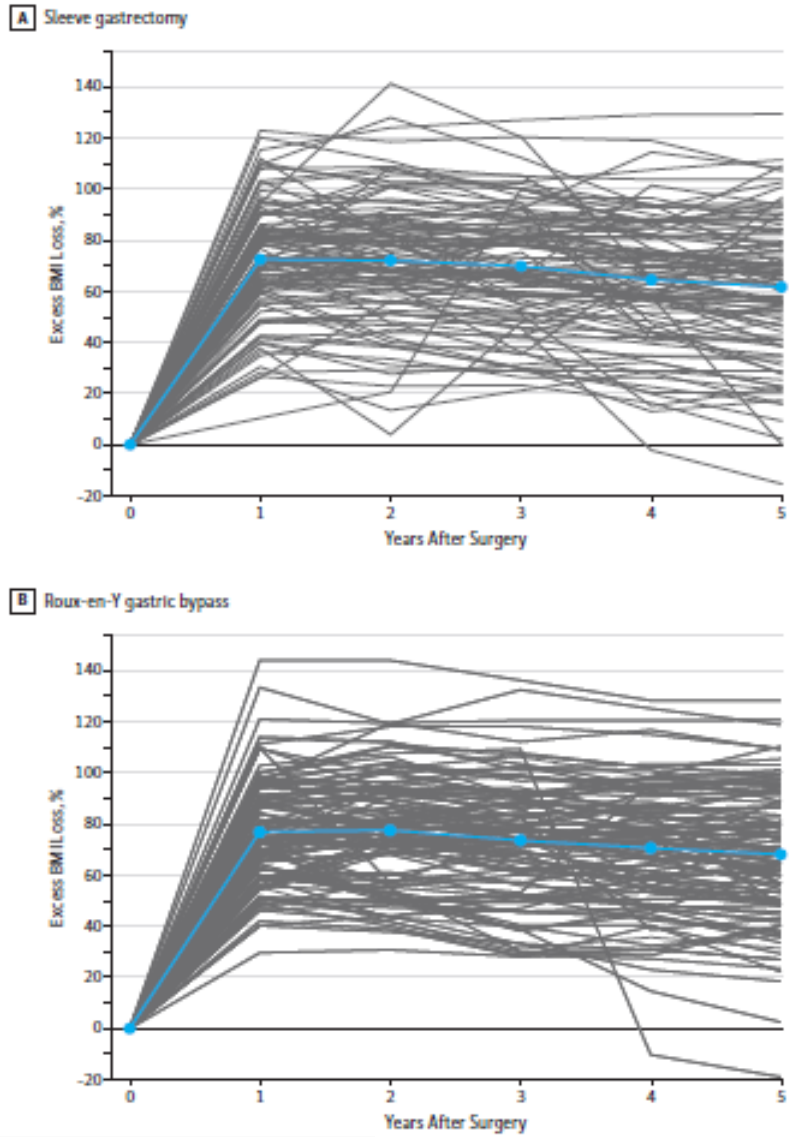
Effect of Laparoscopic Sleeve Gastrectomy vs Laparoscopic Roux-en-Y Gastric Bypass on Weight Loss in Patients With Morbid Obesity

The SM-BOSS Randomized Clinical Trial



Peterli R et al. JAMA 2018;319:255

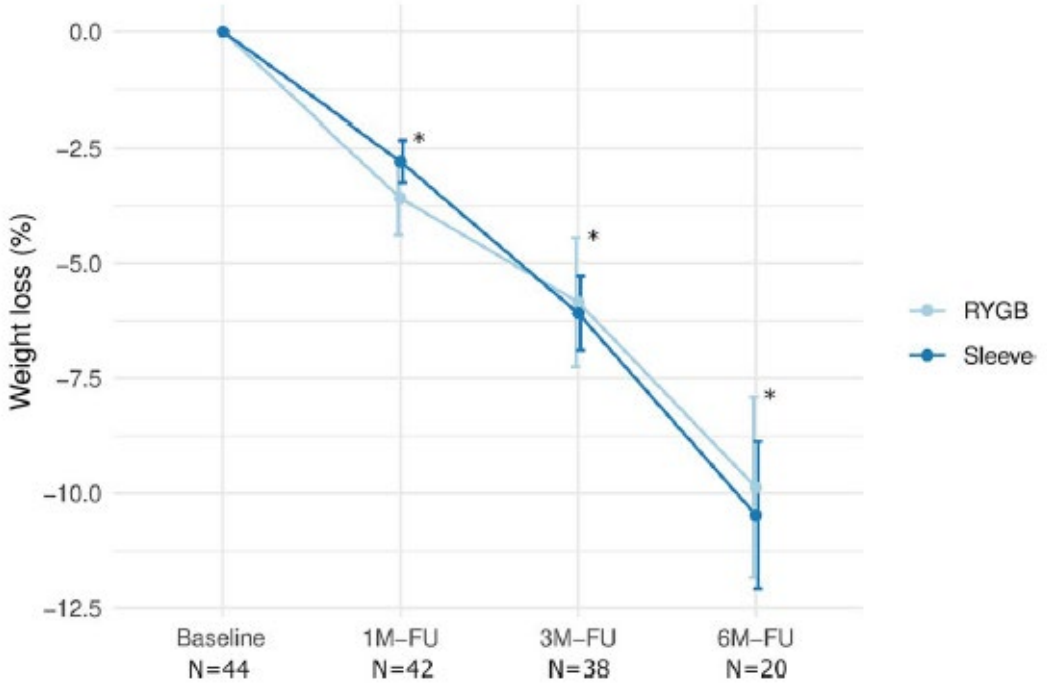
Liraglutide 3.0 mg for the management of insufficient weight loss or excessive weight regain post-bariatric surgery

TABLE 1 Patient characteristics by type of bariatric surgery

Variable	Roux-en-Y bypass	Gastric band	Gastric sleeve
Sample size (n)	53	50	14
Age (y)	49.9 ± 9.1	52.5 ± 9.5	51.4 ± 10.3
Men (n, %)	3 (5.7)[a]	8 (16.0)	4 (28.6)
Pre-bariatric surgery BMI (kg/m^2)	50.8 ± 11.2	47.6 ± 13.1[e]	52.2 ± 11.9
Maximum weight change post-bariatric surgery (kg)	−51.6 ± 23.5[a,b]	−29.8 ± 23.3[e]	−34.7 ± 19.5
Weight change from lowest post-bariatric surgery weight to initiation of liraglutide 3.0 mg (kg)	19.0 ± 13.5	25.4 ± 20.4[e]	15.8 ± 14.1
Weight change from lowest post-bariatric surgery weight to initiation of liraglutide 3.0 mg (%)[c]	44.8 ± 54.9[a]	80.0 ± 79.7[f]	48.4 ± 31.7[g]
Preliraglutide BMI (kg/m^2)	39.0 ± 7.0[a,b]	45.4 ± 11.0	45.4 ± 9.6
Weight change on liraglutide 3.0 mg (kg)	−7.1 ± 8.7[d]	−6.0 ± 7.2[d]	−4.5 ± 4.5[d]
Weight change on liraglutide 3.0 mg (%)	−6.6 ± 7.1	−4.9 ± 5.6	−3.6 ± 3.0
Attained 5% weight loss (n, %)	25 (47.2)	19 (38.0)	5 (35.7)
Attained 10% weight loss (n, %)	13 (24.5)[a]	6 (12.0)	0 (0.0)
Treatment time (mo)	8.0 ± 7.6	6.8 ± 6.7	8.6 ± 7.3
Reported nausea with liraglutide 3.0 mg (n, %)	15 (28.3)	12 (24.0)	5 (35.7)

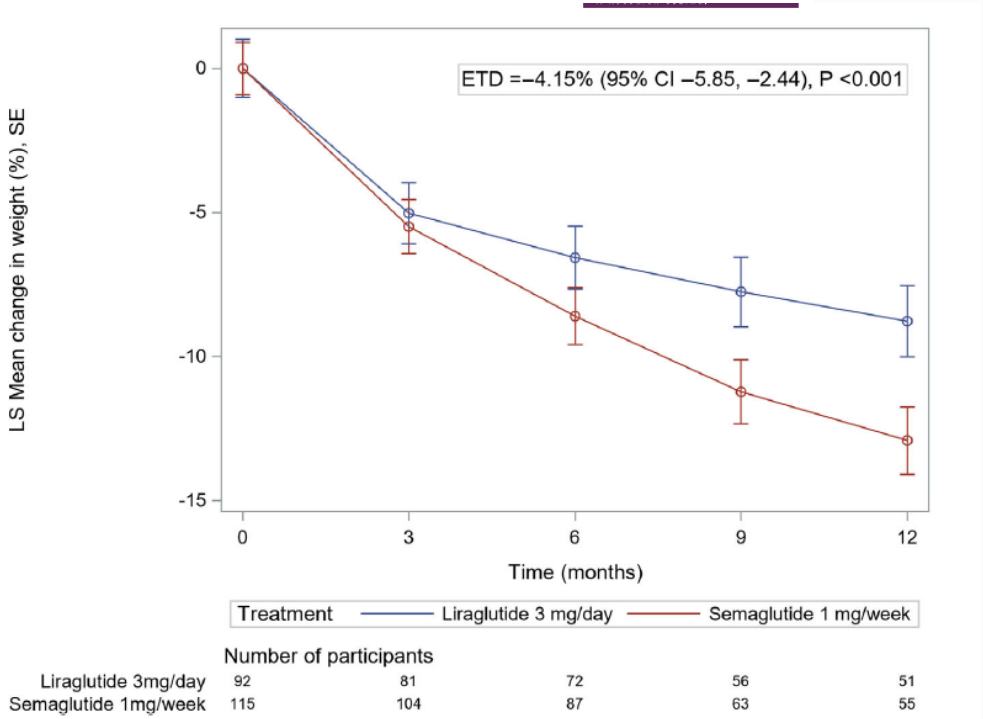
Wharton S et al. Clin Obes 2019;9:e12323

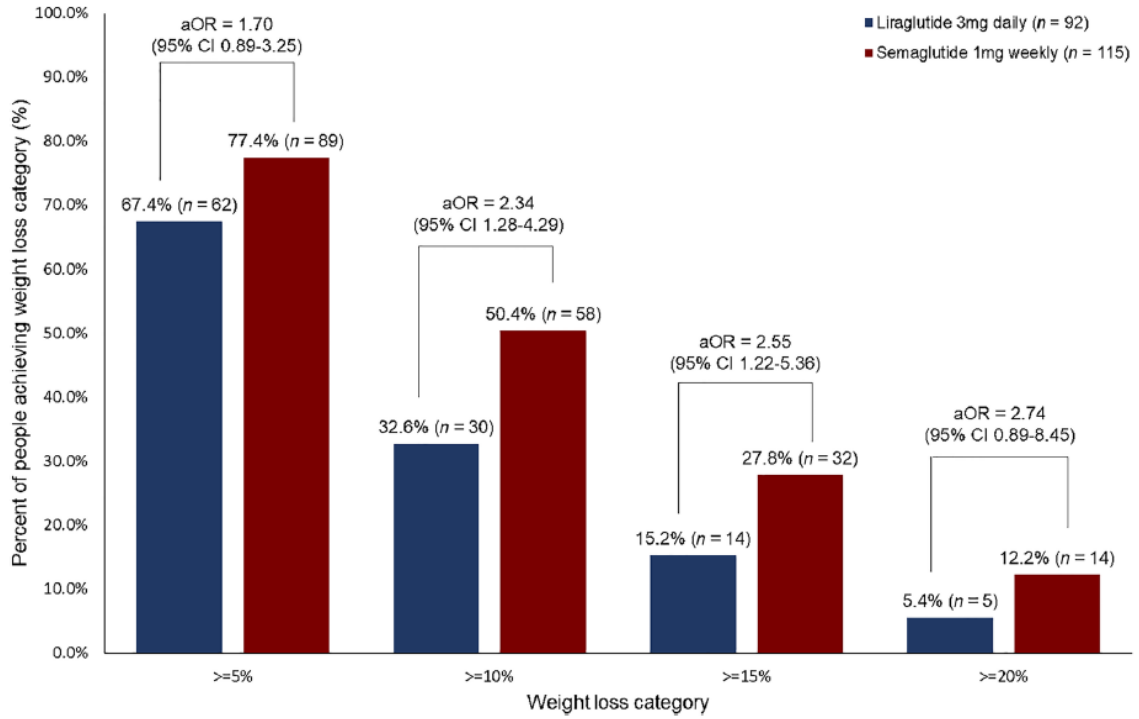
The Potential of Semaglutide Once-Weekly in Patients Without Type 2 Diabetes with Weight Regain or Insufficient Weight Loss After Bariatric Surgery—a Retrospective Analysis



Lautenbach A et al. Obes Surg 2022;32:3280

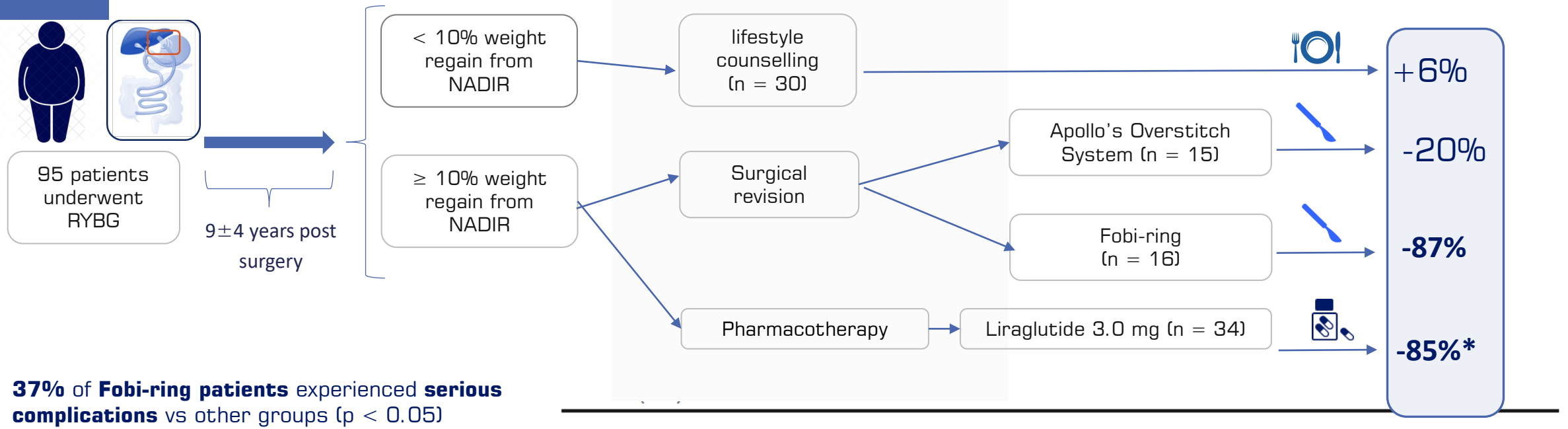
Effectiveness of semaglutide versus liraglutide for treating post-metabolic and bariatric surgery weight recurrence





Murvelashvili N et al. Obesity 2023;31:1280

Reversal of Long-Term Weight Regain After Roux-en-Y Gastric Bypass Using Liraglutide or Surgical Revision. A Prospective Study



37% of **Fobi-ring patients** experienced **serious complications** vs other groups ($p < 0.05$)

- lead to **hospitalization** in 2 cases
- **endoscopic dilatation** of the upper anastomosis (up to 32 times) due to an inability to eat and vomiting

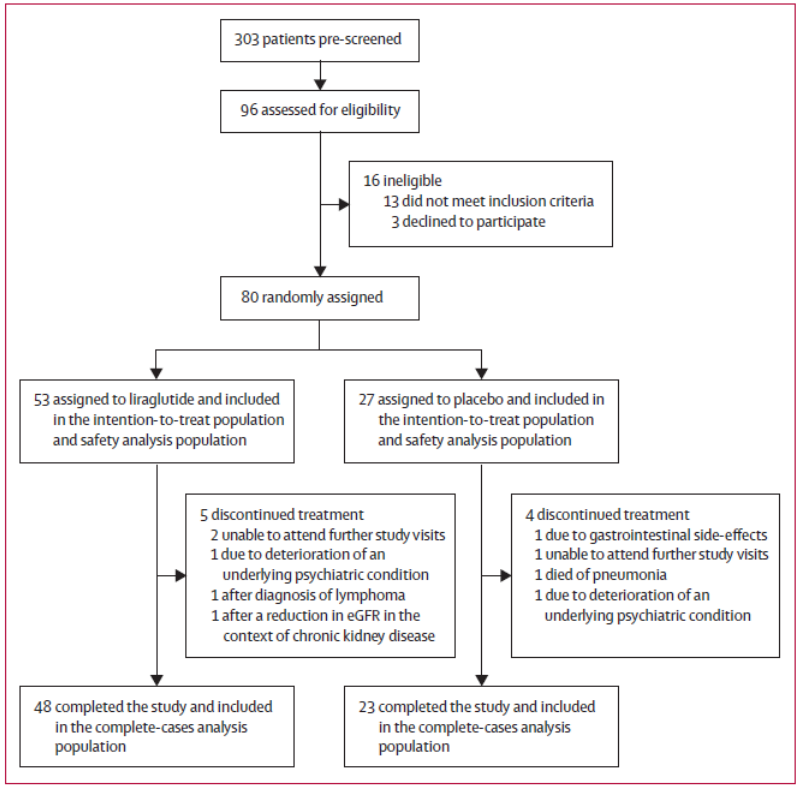
Table 2 Impact of treatment modality on weight regain 9 years after RYGB

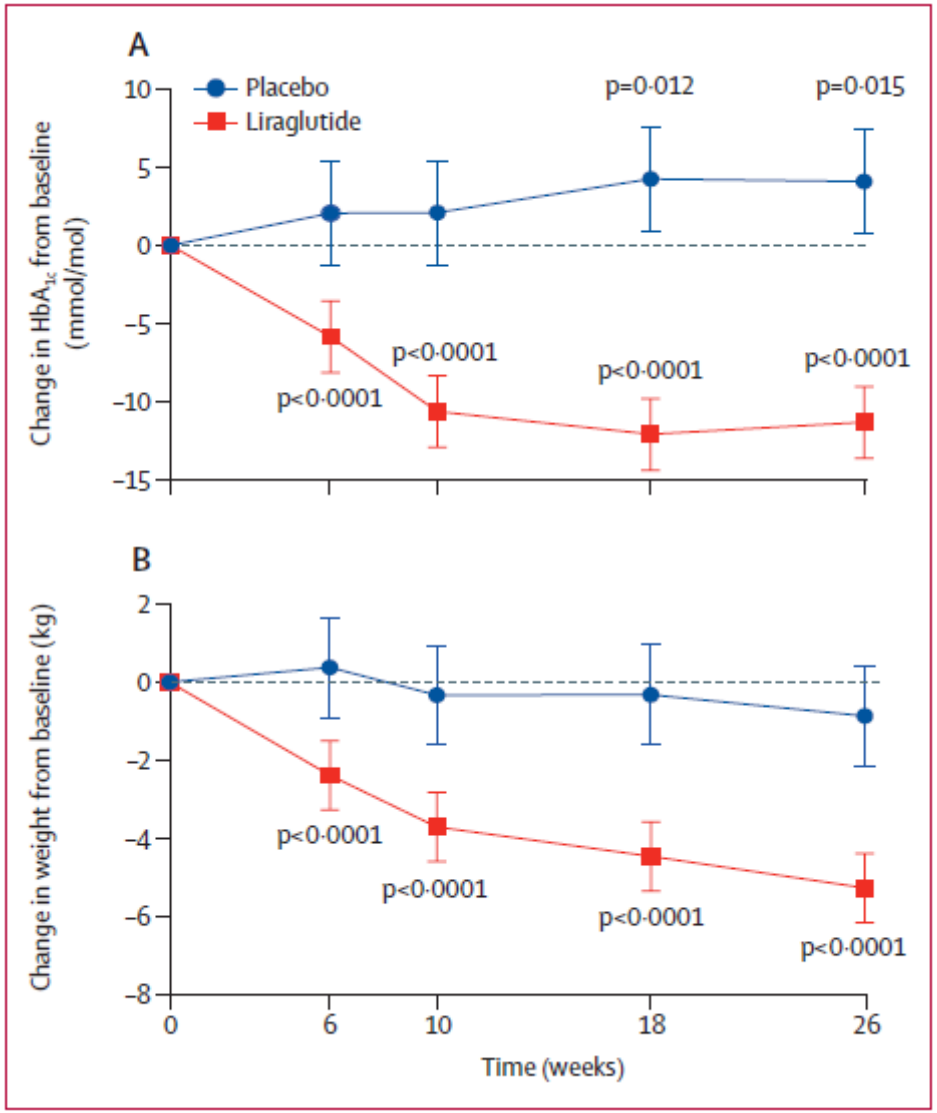
Group	N	BMI-0[+] kg/m²	BMI-24* kg/m²	delta BMI-lost kg/m²	Follow-up of weight change (kg) after intervention (months)						
					0 months	3 months	6 months	9 months	12 months	18 months	24 months
DC (controls)	30	27.1 ± 5.0	27.2 ± 4.5	− 0.1 ± 1.7	75 ± 15	75 ± 15	75 ± 15	76 ± 14	76 ± 13	75 ± 13	75 ± 13
LG (liraglutide)	34	31.2 ± 4.0[#]	26.4 ± 3.5	4.8 ± 2.9[£]	84 ± 13[#]	80 ± 13	77 ± 12	76 ± 12	74 ± 11	73 ± 10	72 ± 9[£]
ES (endosurgery)	15	31.0 ± 4.2[#]	30.0 ± 4.4[$]	1.0 ± 0.9	83 ± 14[#]	80 ± 14	80 ± 14	80 ± 14	80 ± 14[$]	--------	--------
FP (Fobi)[§]	16	34.2 ± 4.9[#]	28.7 ± 4.6	5.5 ± 2.9[£]	96 ± 12[#]	90 ± 12	88 ± 12	85 ± 12	83 ± 11	82 ± 12	79 ± 10[£]

Horber FF et al. Obes Surg 2021;31:93

Adjunctive liraglutide treatment in patients with persistent or recurrent type 2 diabetes after metabolic surgery (GRAVITAS): a randomised, double-blind, placebo-controlled trial

RYGB or LSG patients with persistent or recurrent type 2 diabetes at least 1 year after surgery from five hospitals in London, UK.





Miras AD et al. Lancet Diabetes Endocrinol 2019;7:549

Safety and Efficacy of Liraglutide, 3.0 mg, Once Daily vs Placebo in Patients With Poor Weight Loss Following Metabolic Surgery
The BARI-OPTIMISE Randomized Clinical Trial

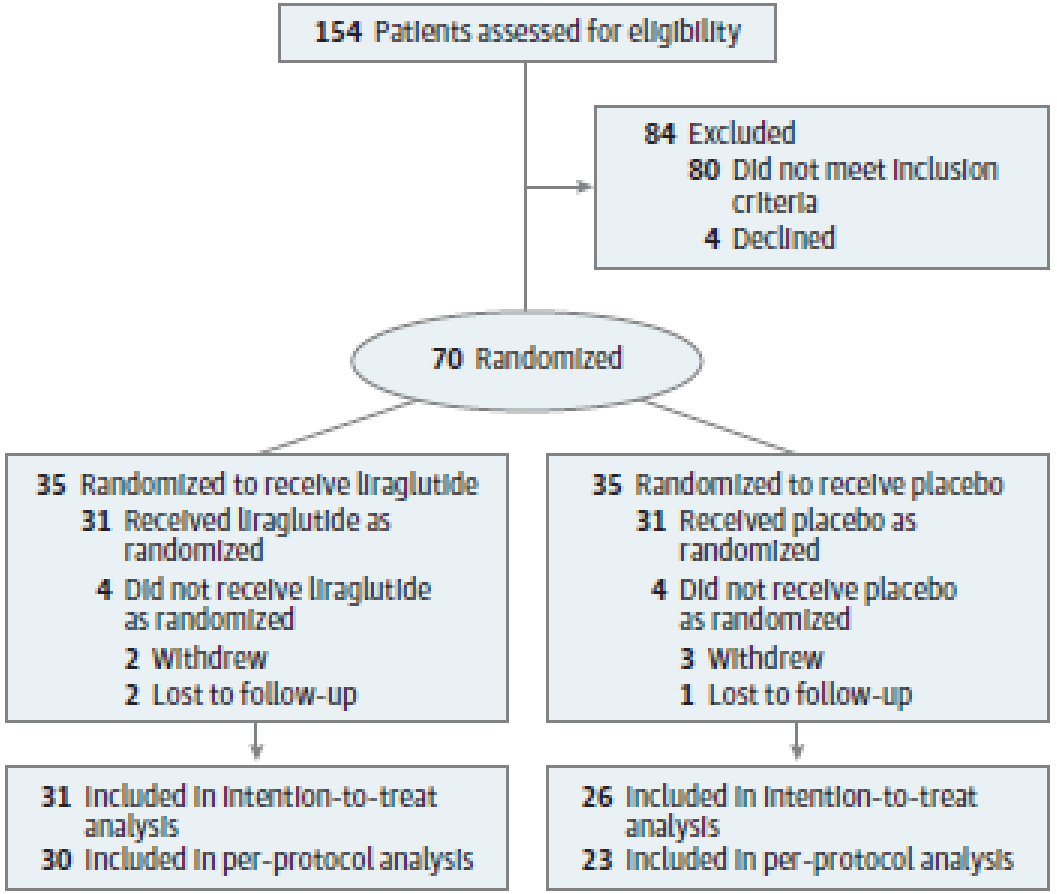
Inclusion criteria:

- **Poor weight loss after MS (RYGB or LSG)**

  ≤ 20% body weight loss at least 1 year after MS

- **Suboptimal nutrient-stimulated GLP-1 response**

  ≤ 2-fold increase in circulation GLP-1 between 0 and 30 min following a standardised 500 kcal mixed liquid meal



Mok J et al. JAMA Surg 2023;158:1003

Safety and Efficacy of Liraglutide, 3.0 mg, Once Daily vs Placebo in Patients With Poor Weight Loss Following Metabolic Surgery
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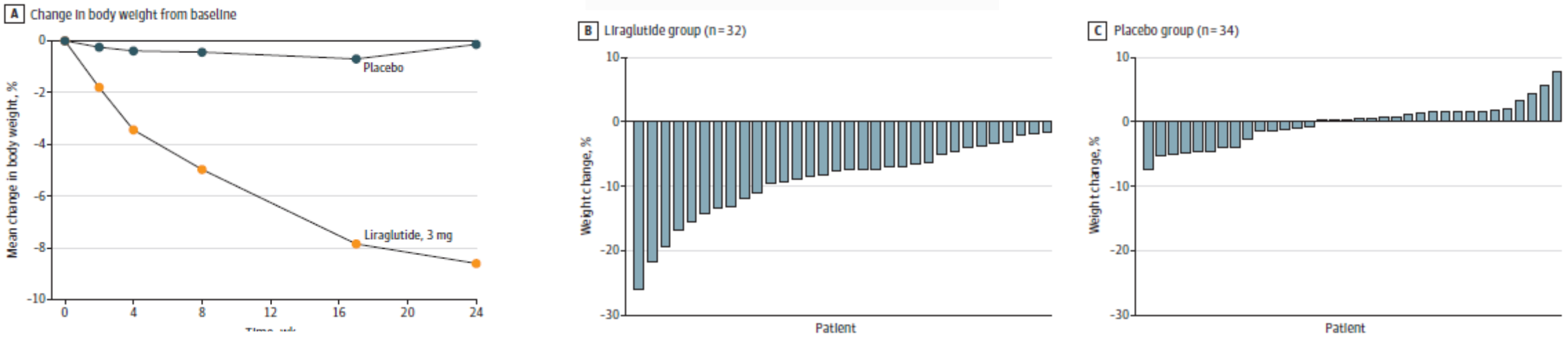

Mok J et al. JAMA Surg 2023;158:1003

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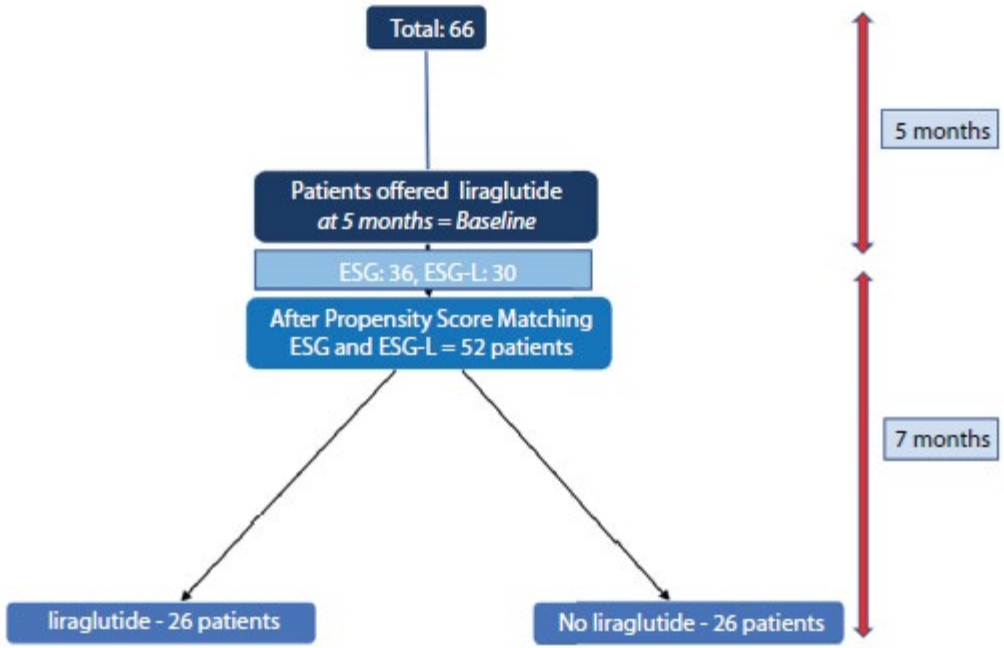
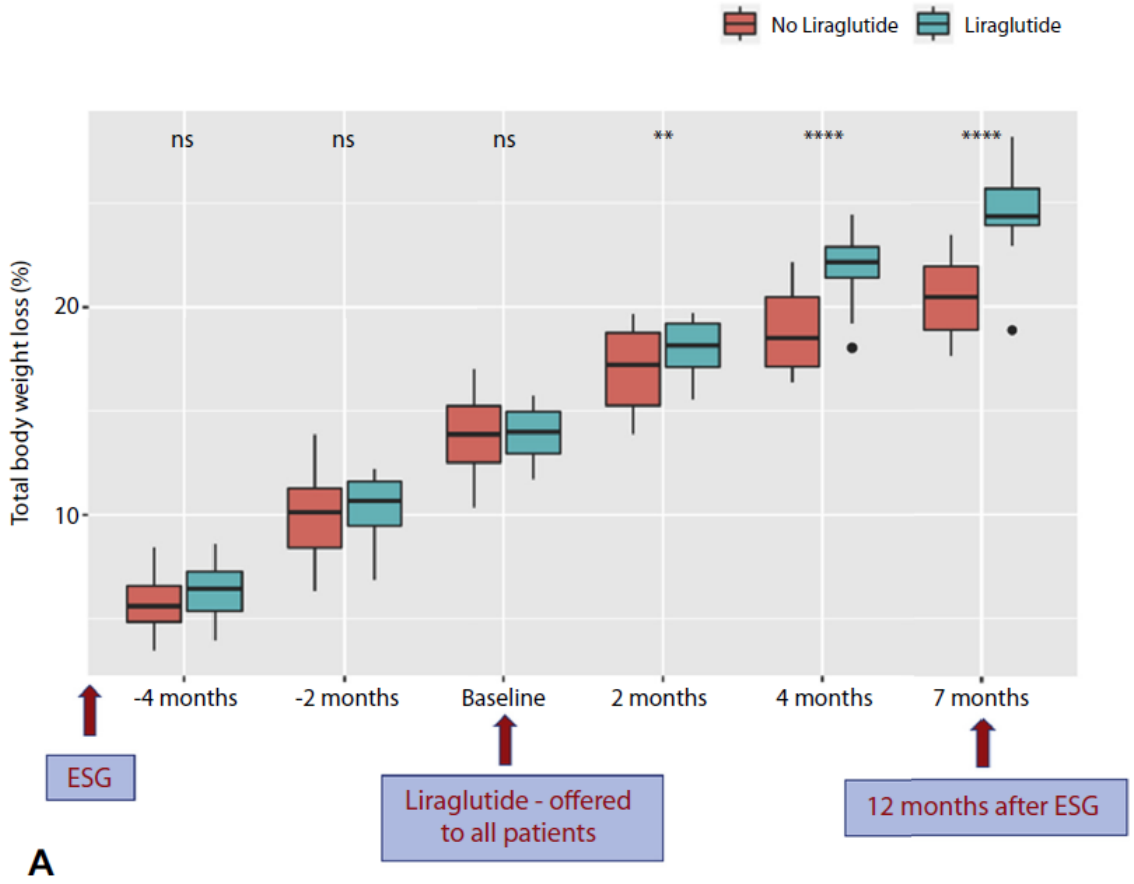
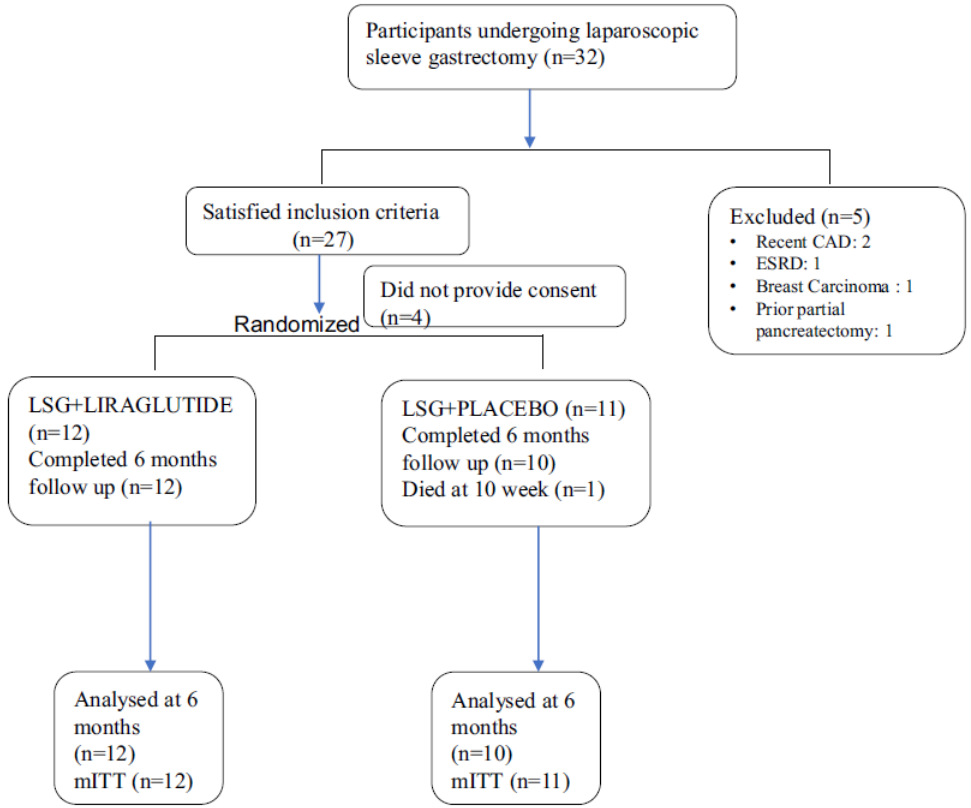
Endoscopic sleeve gastroplasty plus liraglutide versus endoscopic sleeve gastroplasty alone for weight loss (CME)





Badurdeen D et al. Gastrointest Endosc 2021;93:1316

Liraglutide Augments Weight Loss After Laparoscopic Sleeve Gastrectomy: a Randomised, Double-Blind, Placebo-Control Study



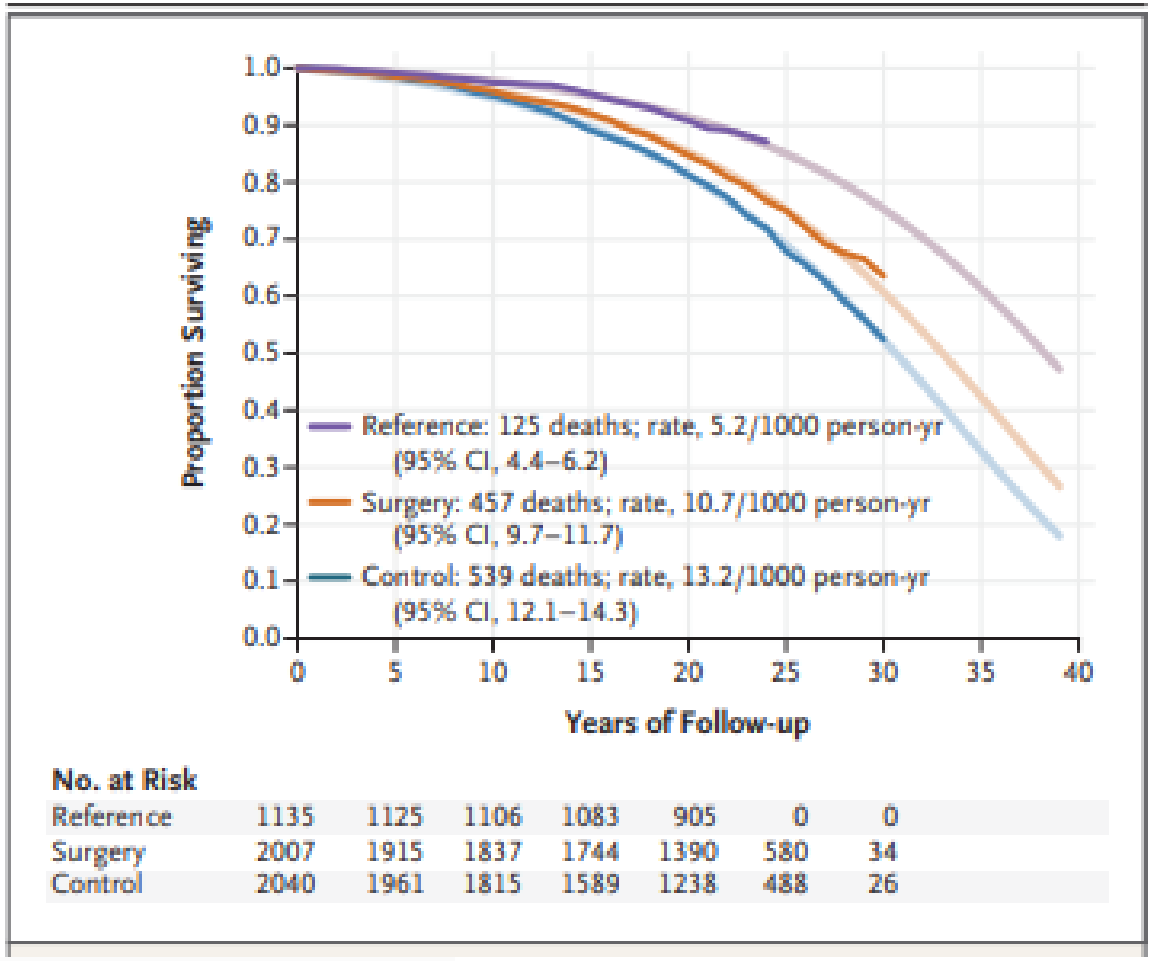
Parameters	Follow-up	L-L group ($n = 12$)	L-P group ($n = 11$)	p value
IBW (kg)		60.1 ± 11.6	50.2 ± 6.4	0.069
Weight (kg)	Baseline	118.6 ± 24.6	103.1 ± 16.4	0.190
	6 weeks	103.5 ± 20.3	92.0 ± 32.4	0.237
	12 weeks	94.2 ± 17.6	84.8 ± 11.4	0.258
	24 weeks	85.1 ± 13.5	79.2 ± 10.6	0.381
BMI (kg/m^2)	Baseline	42.6 ± 6.3	41.6 ± 5.1	0.734
	6 weeks	36.5 ± 5.2	37.0 ± 3.9	0.848
	12 weeks	34.0 ± 4.4	34.5 ± 3.5	0.833
	24 weeks	30.9 ± 4.0	32.1 ± 3.0	0.554
EBW (kg)	Baseline	58.5 ± 18.3	52.9 ± 12.5	0.520
TWL (%)	6 weeks	12.7 ± 4.1	10.7 ± 3.9	0.198
	12 weeks	20.6 ± 6.3	17.7 ± 6.1	0.188
	24 weeks	28.2 ± 5.7	23.2 ± 6.2	0.116
BMI loss (kg/m^2)	6 weeks	6.2 ± 2.4	4.6 ± 2.6	0.267
	12 weeks	8.6 ± 3.0	7.1 ± 3.3	0.381
	24 weeks	11.7 ± 3.5	9.5 ± 4.0	0.287
EWL (%)	6 weeks	27.2 ± 10.1	20.4 ± 6.8	0.168
	12 weeks	42.6 ± 10.3	34.1 ± 8.1	0.112
	24 weeks	58.7 ± 14.3	44.5 ± 8.6	0.043*

*$p < 0.05$ was considered significant

L-L, LSG +liraglutide; *L-P*, LSG + placebo

Takur U et al. Obes Surg 2021;31:84

Life Expectancy after Bariatric Surgery in the Swedish Obese Subjects Study

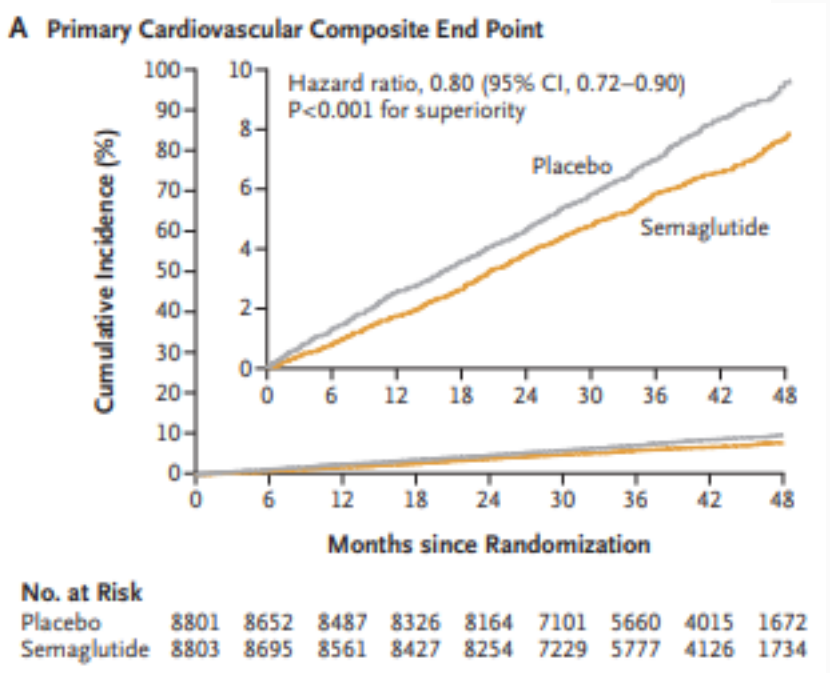


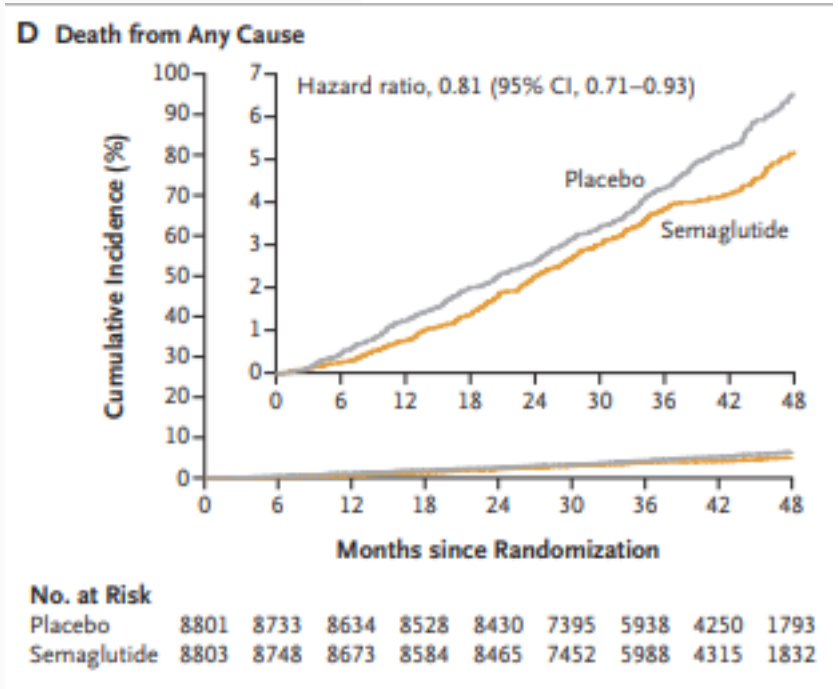
No. at Risk

Reference	1135	1125	1106	1083	905	0	0
Surgery	2007	1915	1837	1744	1390	580	34
Control	2040	1961	1815	1589	1238	488	26

Carlsson LMS et al N Engl J Med 2020;383:1535

Semaglutide and Cardiovascular Outcomes in Obesity without Diabetes





Lincoff AM et al N Engl J Med 2023;389:2221

Gerhard Prager
Randy Levinson (Delphi Expert)
Ricardo Cohen
Luca Busetto

SICOB FALL MEETING

LIVESURGERY

28 - 29 OTTOBRE 2024

MILANO, FONDAZIONE CARIPLO

Presidenti del Congresso **P. Gentileschi, M. A. Zappa**

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Grazie

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