



**9th Annual Digestive Disease New Advances:
Minimally Invasive vs Surgical Bariatric Interventions.
Winner?**

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Definitions

Total body weight loss (TBWL) %
 $(Wt_0 - Wt_{fu} / Wt_0) * 100$

Excess body weight loss (EWL) %
 $(Wt_0 - Wt_{fu} / Wt_0 - Wt_{ideal}) * 100$

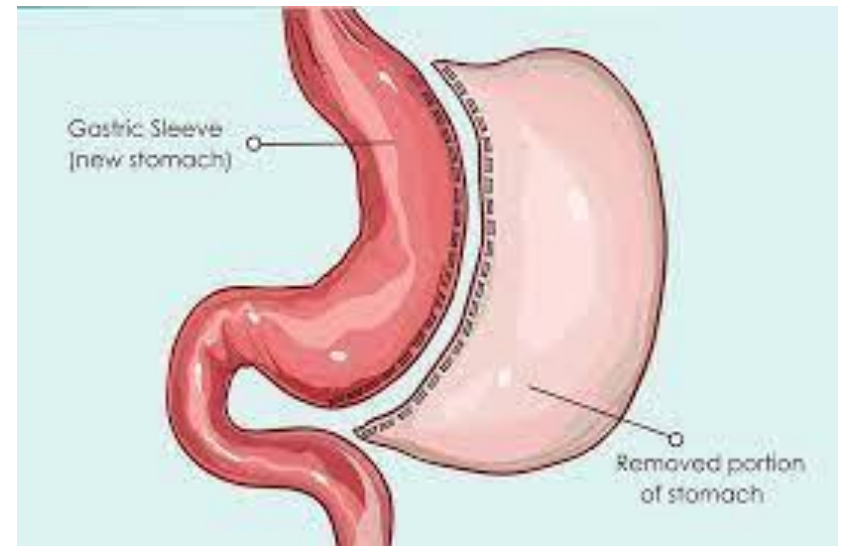
Sleeve Gastrectomy

70 to 80% decreased volume

Decreased Ghrelin

Increased GLP-1

Increased Gastric Emptying!



Sleeve Gastrectomy

5 year EWL: 60%

TBWL: $\geq 20\%$

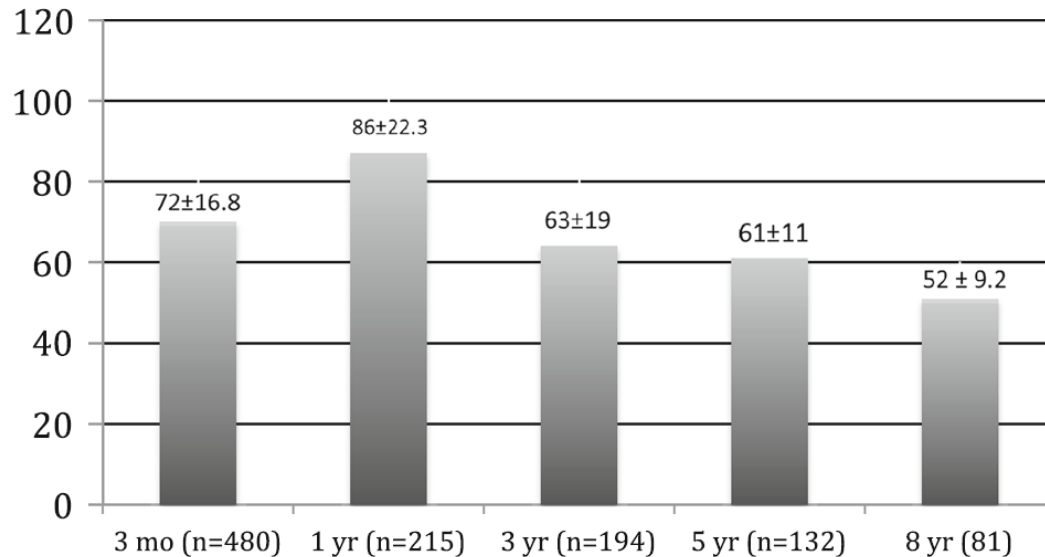


Fig. 1 Mean percentage of weight loss (EWL %). The values are mean standard deviation

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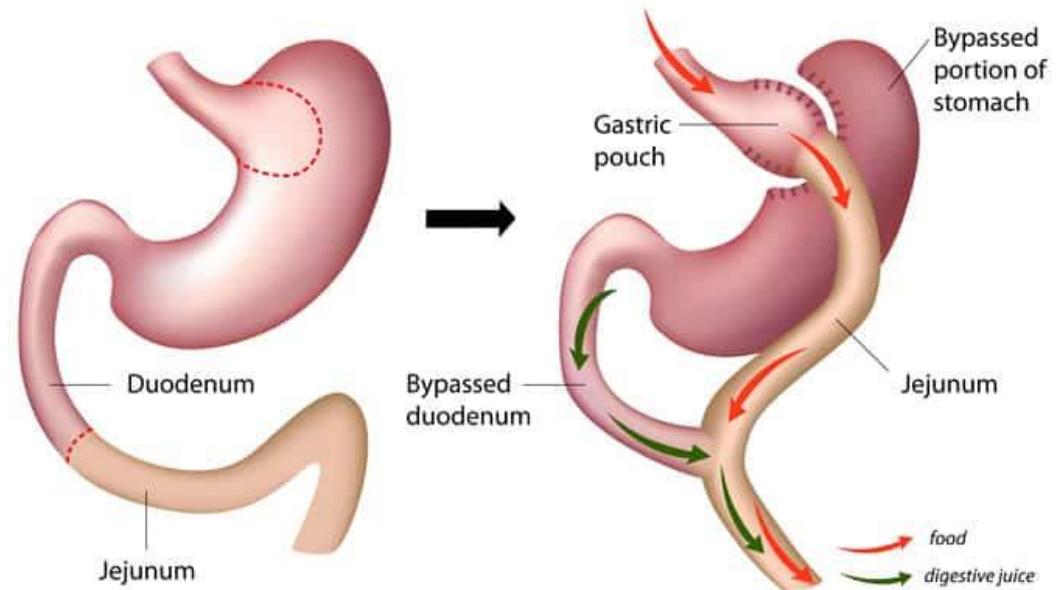
Gastric Bypass

90% or more decreased volume

Decreased Ghrelin

Increased GLP-1

Increased Peptide '^^'



Gastric Bypass

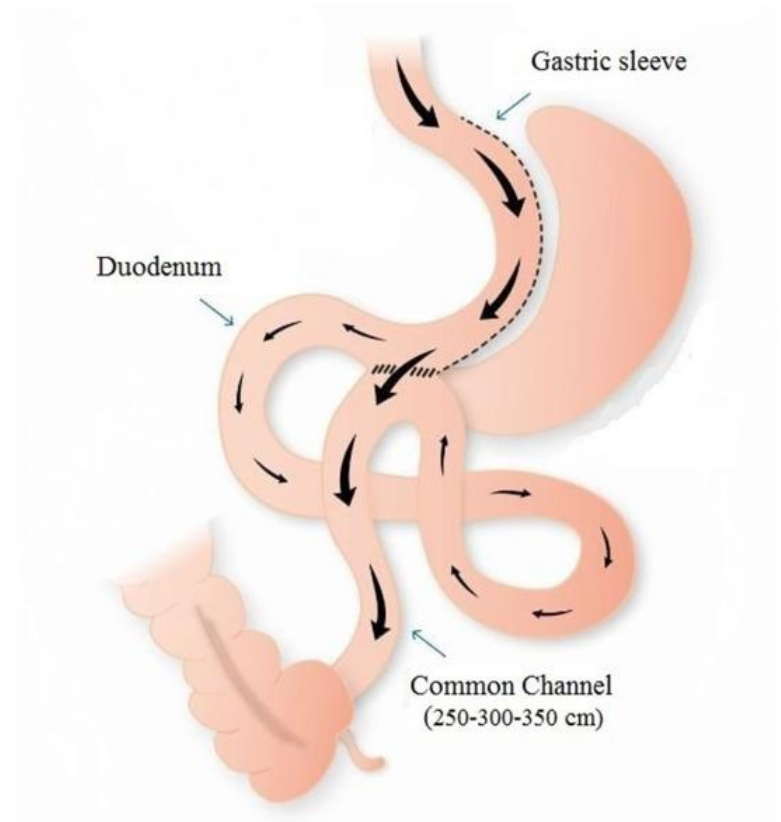
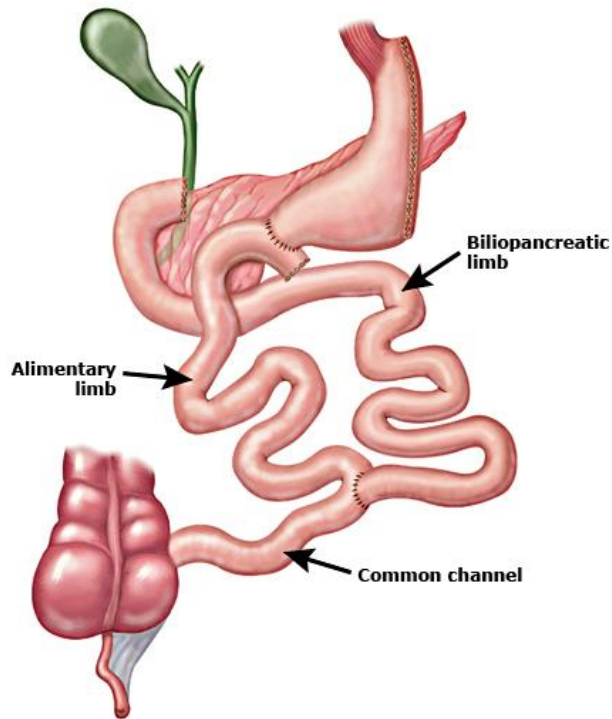
5 year TBWL: 29%

	Timing				Last assessment, by year since surgery ^c					
	Weight Nadir ^a		Last Assessment ^b		Year 5		Year 6		Year 7	
					n=54		n=475		n=876	
Weight loss, Median (25th -75th %-ile)										
Weight, kg	48.1	(39.9-59.0)	35.8	(26.8-47.6)	36.5	(28.6-47.6)	36.7	(27.2-47.6)	35.8	(26.3-47.2)
Body mass index, kg/m ²	17.4	(14.3-21.0)	12.9	(9.5-16.9)	13.1	(9.0-17.1)	12.9	(9.7-17.0)	12.9	(9.3-16.8)
Percentage of pre-surgery weight	37.4	(31.6-43.3)	28.0	(20.6-35.6)	28.9	(18.1-34.3)	27.9	(20.8-35.9)	28.0	(20.3-35.5)
Weight loss thresholds, No. (%)										
≥10% of pre-surgery weight	1405	(99.9)	1345	(95.7)	52	(96.3)	457	(96.2)	836	(95.4)
≥25% of pre-surgery weight	1304	(92.8)	857	(61.0)	34	(63.0)	288	(60.6)	535	(61.1)

^aParticipants post-surgery weight nadir occurred a median of 2.0 years (25th -75th %-ile: 1.0-3.2) post-surgery.

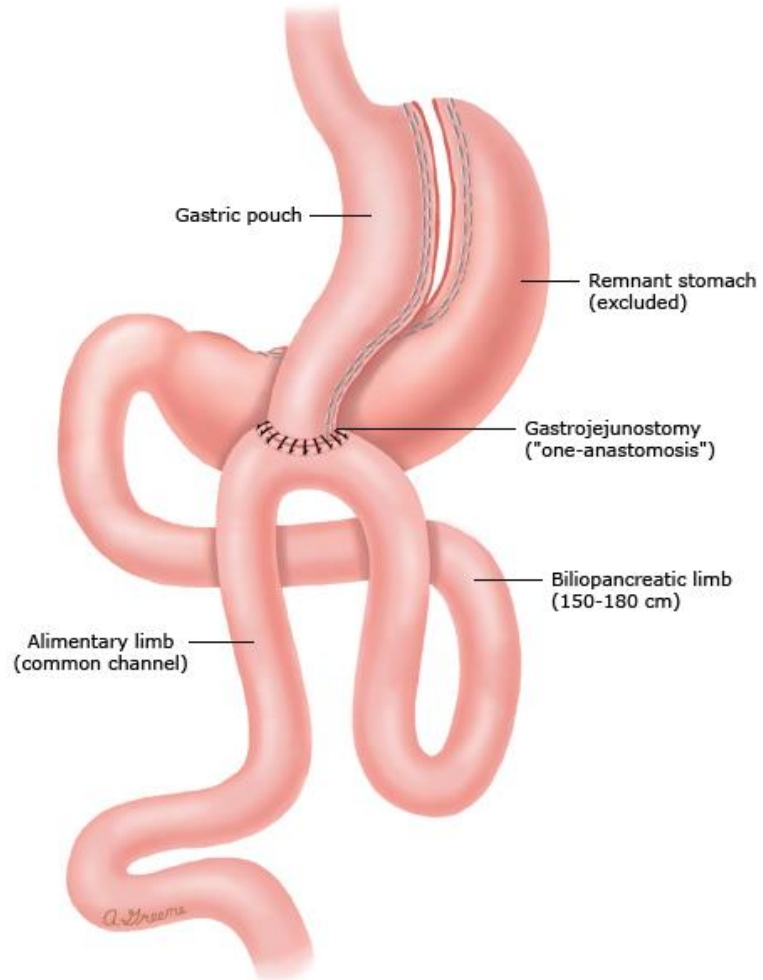
single anastomosis sleeve ileal (SASI) bypass

Similar to RYGB

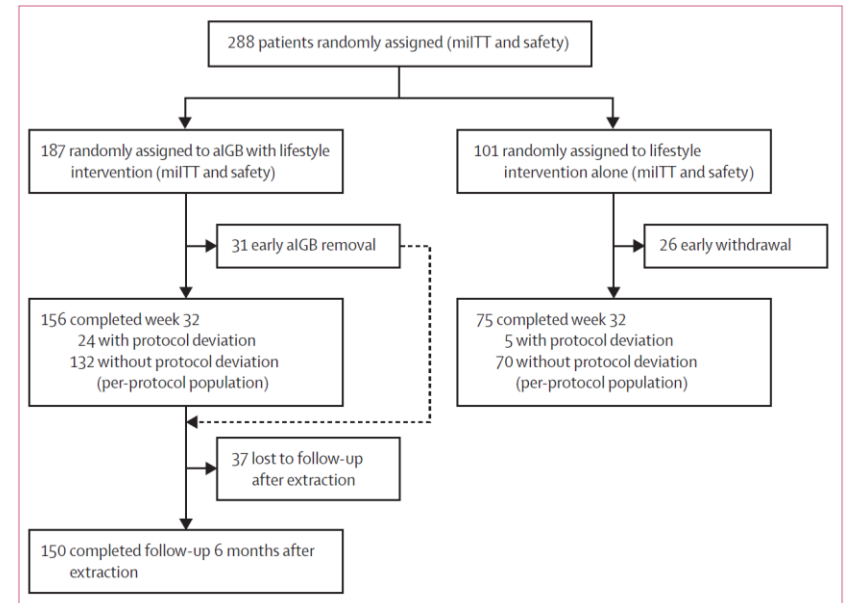


One anastomosis (“Mini”) Bypass

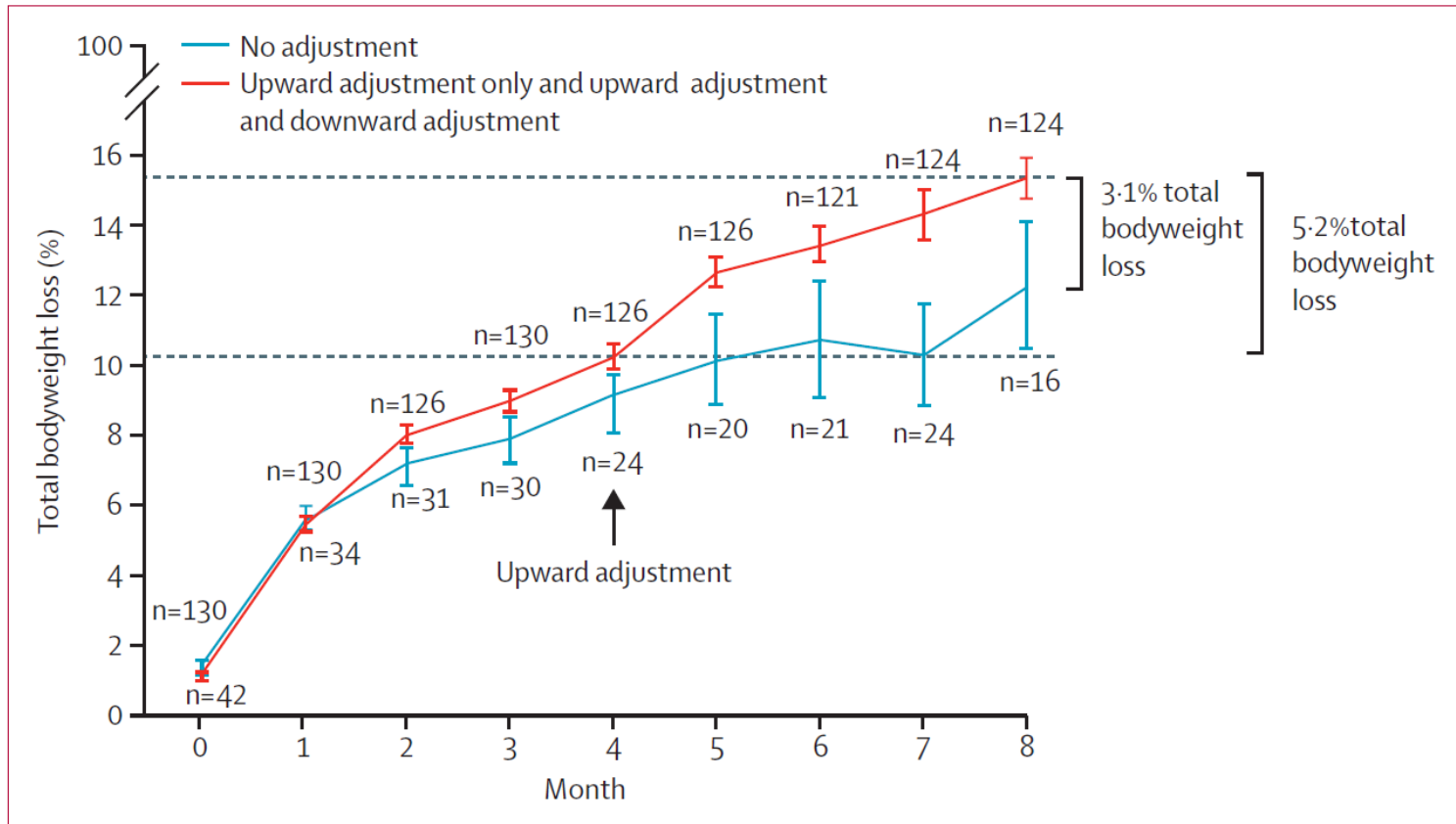
Similar to RYGB



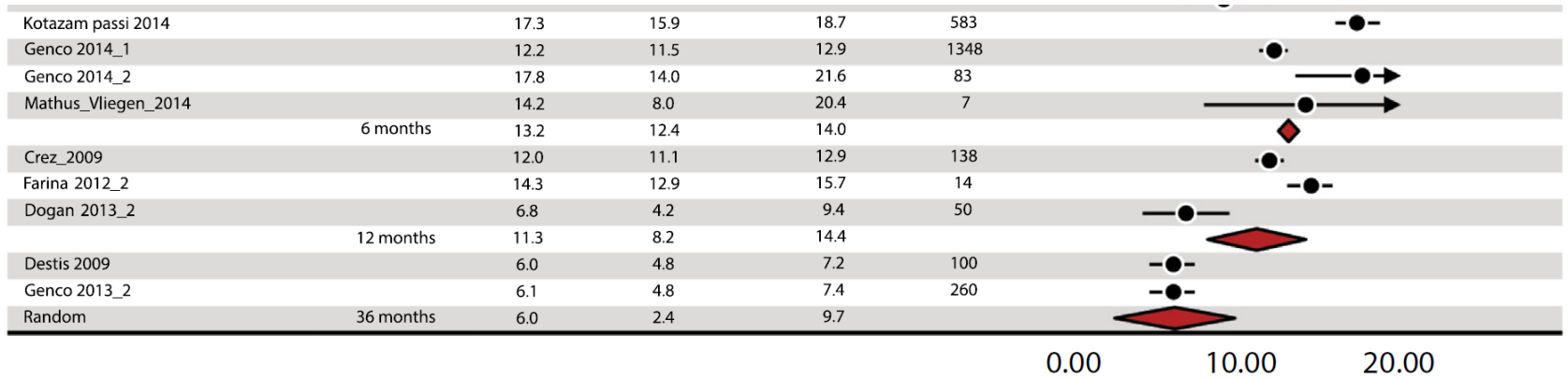
Spatz-3, New Kid on the Block



Spatz-3, New Kid on the Block



Is it any different?



GLP-1 Agonists

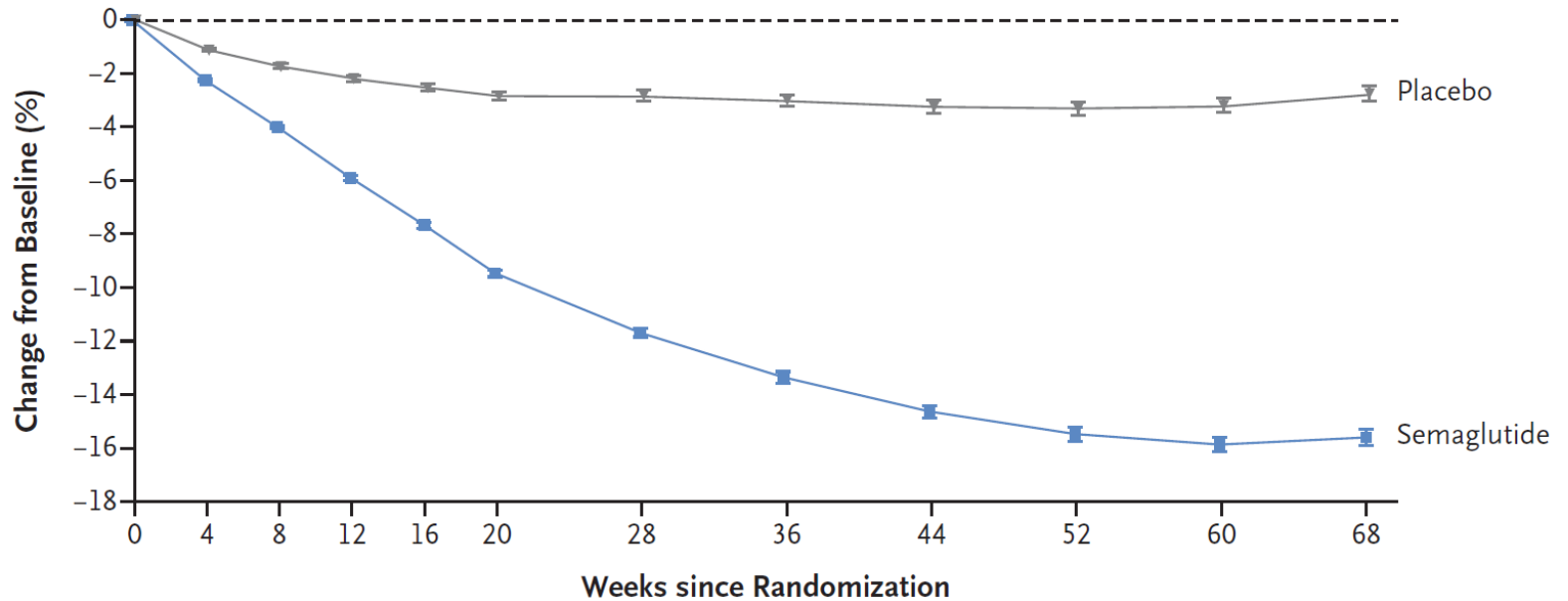
peptides that stimulate glucose-dependent insulin secretion and inhibit glucagon release and gastric emptying.

Semaglutide

Tirzepatide

Semaglutide

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



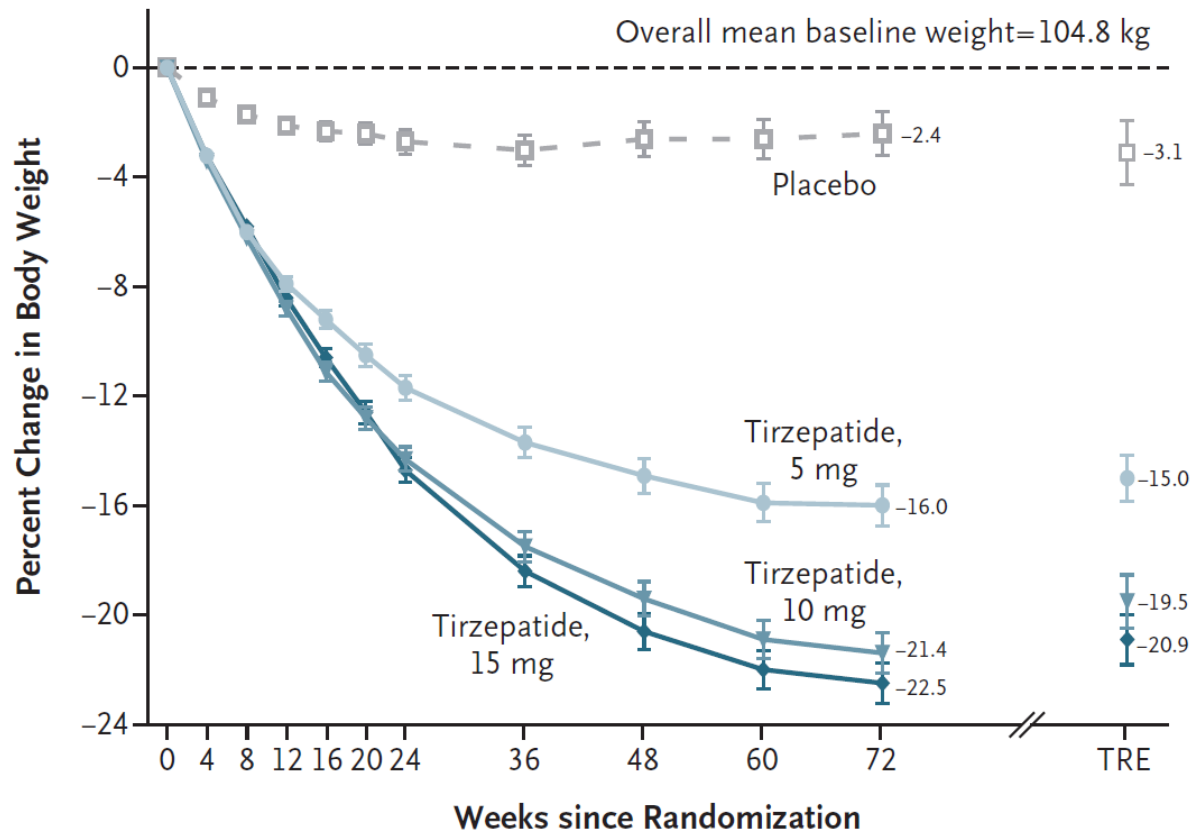
No. at Risk

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

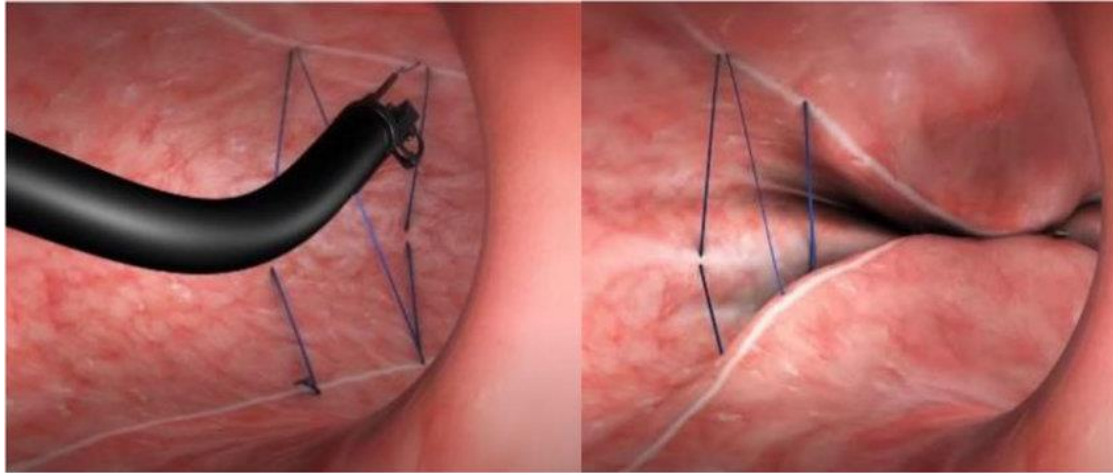
Tirzepatide

DUAL-ACTING GLP-1 AND GIP RECEPTOR AGONISTS

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



Endoscopic Sleeve Gastroplasty



ESG Efficacy for weight loss

5 year TBWL: 16%

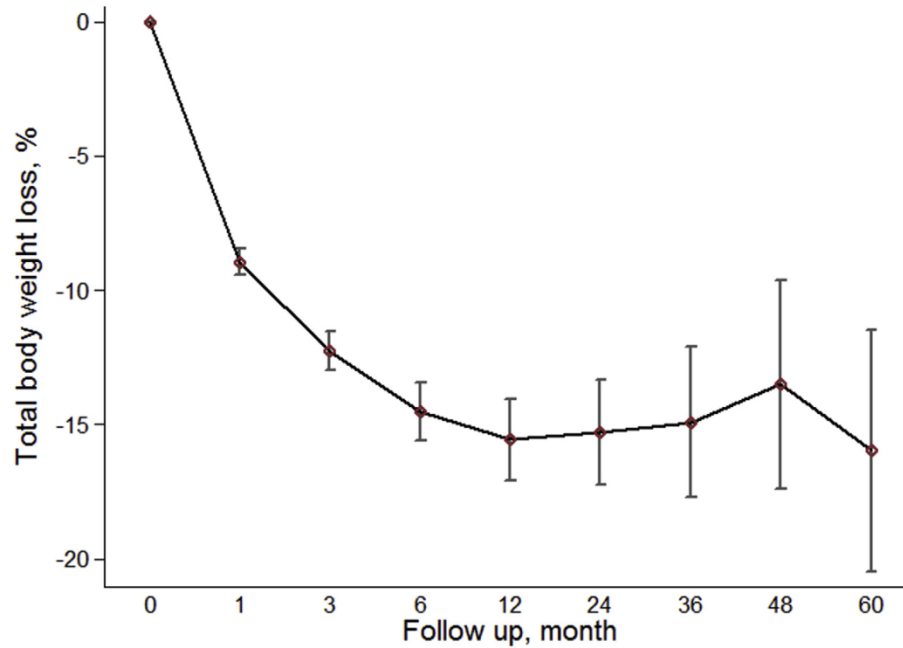


Figure 1. Percent total body weight loss (with 95% CI) after endoscopic sleeve gastroplasty.

ESG

**1 year:
EWL 50%
TBWL 14%**

