

# “Neo-adjuvant” Semaglutide Reduces Weight-Loss with Bariatric Surgery and Does Not Improve Overall Outcomes

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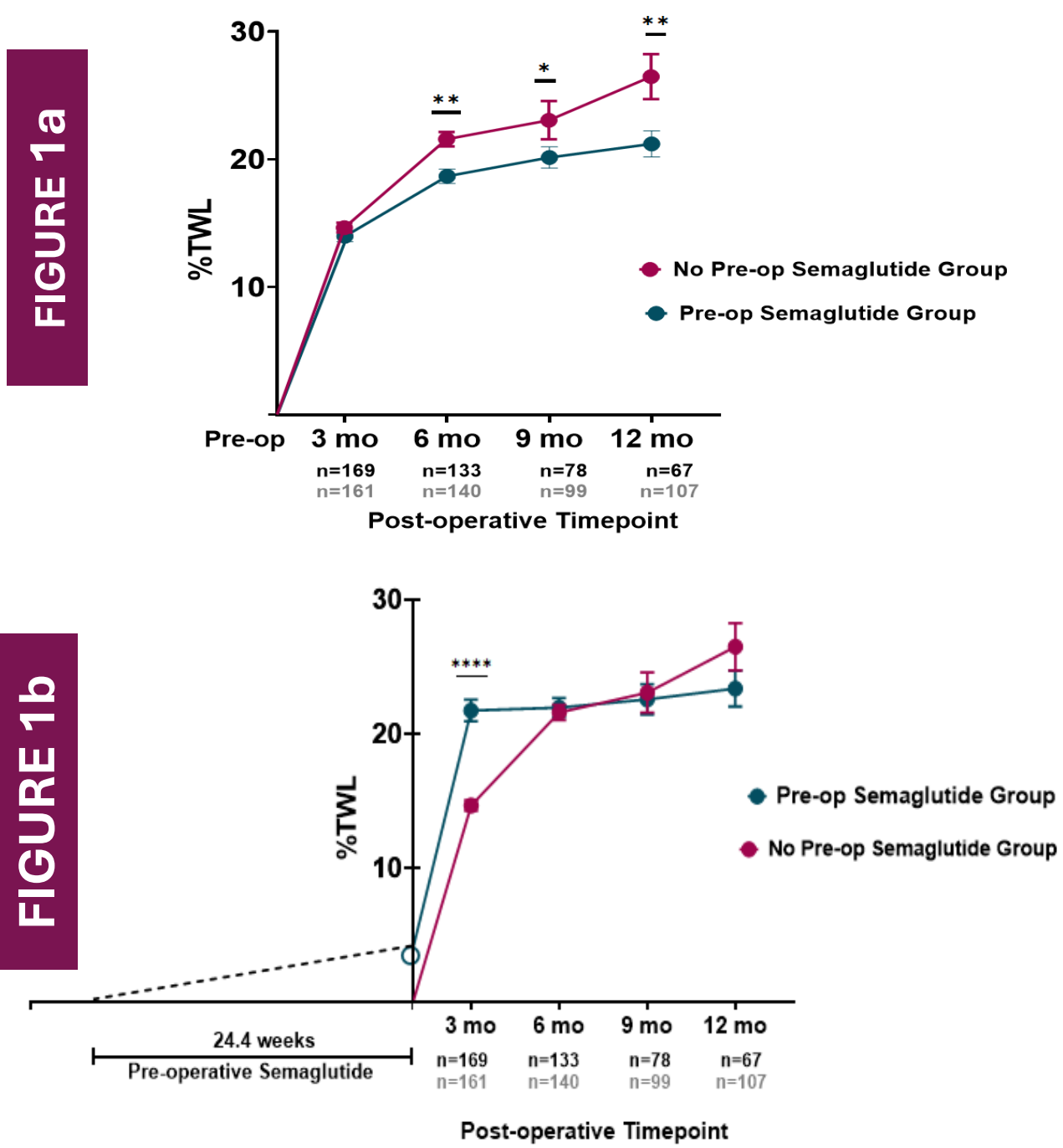
## BACKGROUND

- Semaglutide is a GLP1 receptor agonist that is an effective anti-obesity medication
- Effect of multi-modality therapy with neo-adjuvant Semaglutide on metabolic/ bariatric surgery (MBS) outcomes is unknown

## METHODS

- 182 patients with neoadjuvant Semaglutide use were matched to 182 patients without neoadjuvant Semaglutide use based on age, weight and BMI at surgery, sex, race, ethnicity, diabetic status, and type of surgery
- Total weight loss (%TWL) and 30-day post-op complications data was collected at 3-, 6-, and 12 months post-op
- %TWL was calculated using weight immediately prior to surgery as baseline for those with no pre-operative semaglutide use. In patients who received pre-op semaglutide, it was calculated using the weight at the time of semaglutide initiation as baseline.

## RESULTS



**Figure 1a.** Surgical weight loss and **1b.** %TWL in patients who did and did not receive pre-operative semaglutide

Table: Characteristics of cohort

Variable	Pre-op Semaglutide Use		P value
	Present	Absent	
Pre-op BMI, kg/m2, median (IQR)	42.6 (39.2 – 48.6)	43 (39.1 – 47.9)	0.75
Diabetes Status, n (%)			0.53
- Non-diabetic	72 (40)	65 (36)	
- Diabetic	31 (17)	39 (21)	
- Pre-Diabetic	79 (43)	78 (43)	
Type of Surgery, n (%)			0.72
- Sleeve	160 (88)	165 (91)	
- Roux-en-Y	22 (12)	17 (9)	
Maximum dose of neo-adjuvant semaglutide (mg per week) reached, median (IQR)	1 (0.5 -2)	Not applicable	NA
30-Day Post-op Complications, n (%)	4 (8.3)	7 (9.7)	0.8

## CONCLUSIONS

- Neoadjuvant Semaglutide resulted in lower surgical weight loss (Figure 1a)
- Total weight loss from all therapies was no different with MBS alone and MBS and neoadjuvant Semaglutide (Figure 1b)
- Neoadjuvant use of Semaglutide did not significantly improve the safety profile of MBS