Single Anastomosis Duodenal Switch versus Roux-en-Y Gastric Bypass in patients with BMI ≥ 50 kg/m2: A Multi-centered comparative analysis

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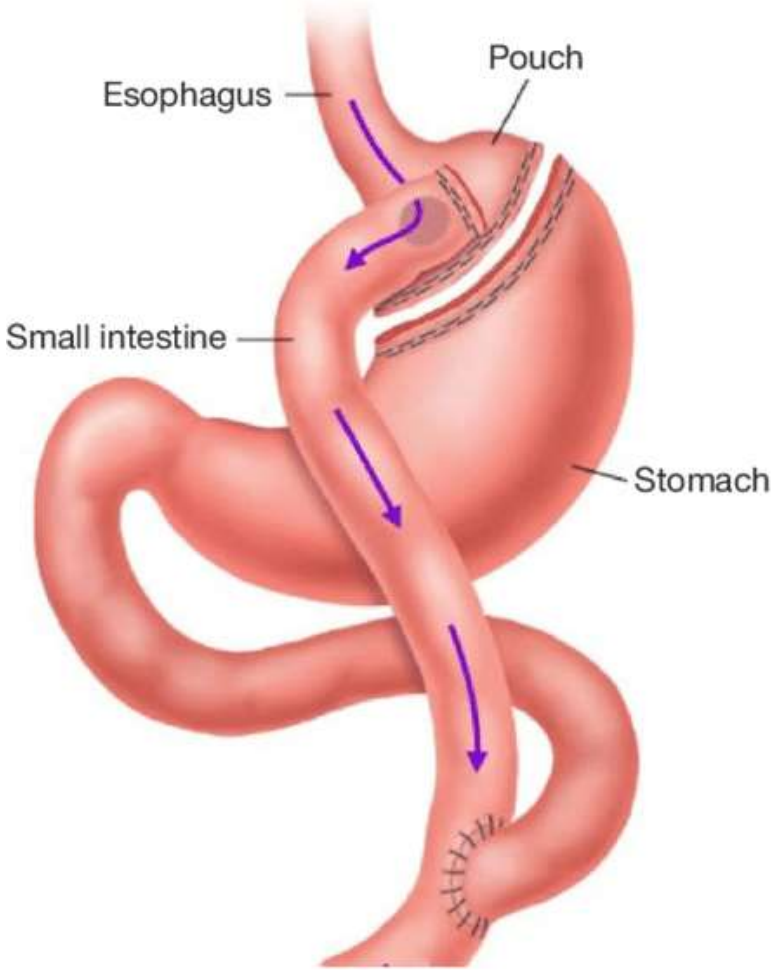
Disclosures

- The authors have no potential conflict of interest to report

Background



Outcomes of Roux-en-Y gastric bypass in the super obese: comparison of body mass index 50-60 kg/m(2) and≥60 kg/m(2) with the morbidly obese

Rena C Moon [1], Lars Nelson [1], Andre F Teixeira [1], Muhammad A Jawad [2]

Affiliations + expand

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Does BMI Matter? A 10-Year Single Institutional Experience on 571 Bariatric Surgery Patients With BMI >50 kg/m 2

Joseph N Badaoui [1], Justin W Maroun [1], Omobolanle O Oyefule [1], Jay Mandrekar [2], Travis J McKenzie [1], Michael L Kendrick [1], Todd A Kellogg [1], Omar M Ghanem [1]

Affiliations + expand

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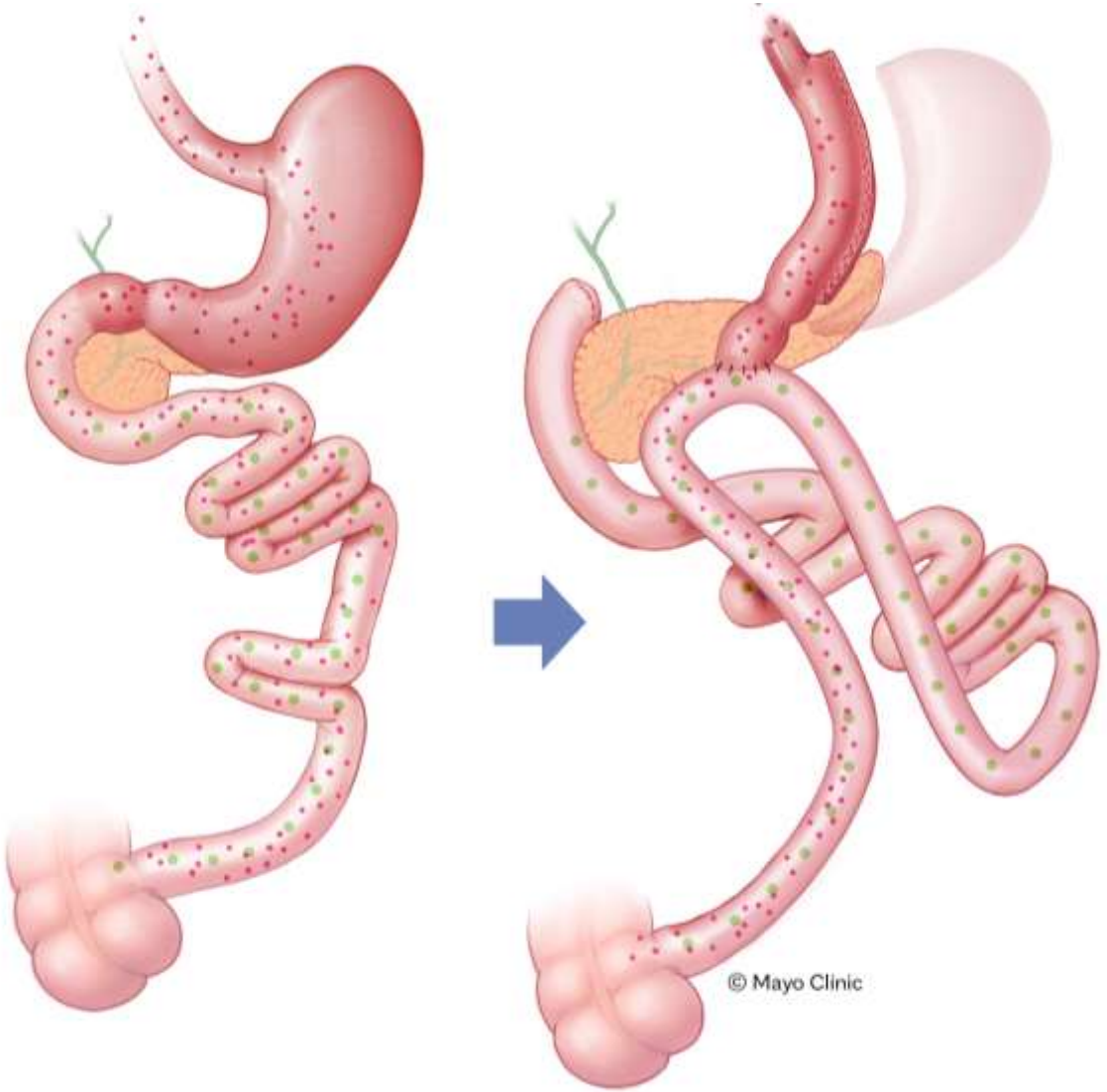
Background



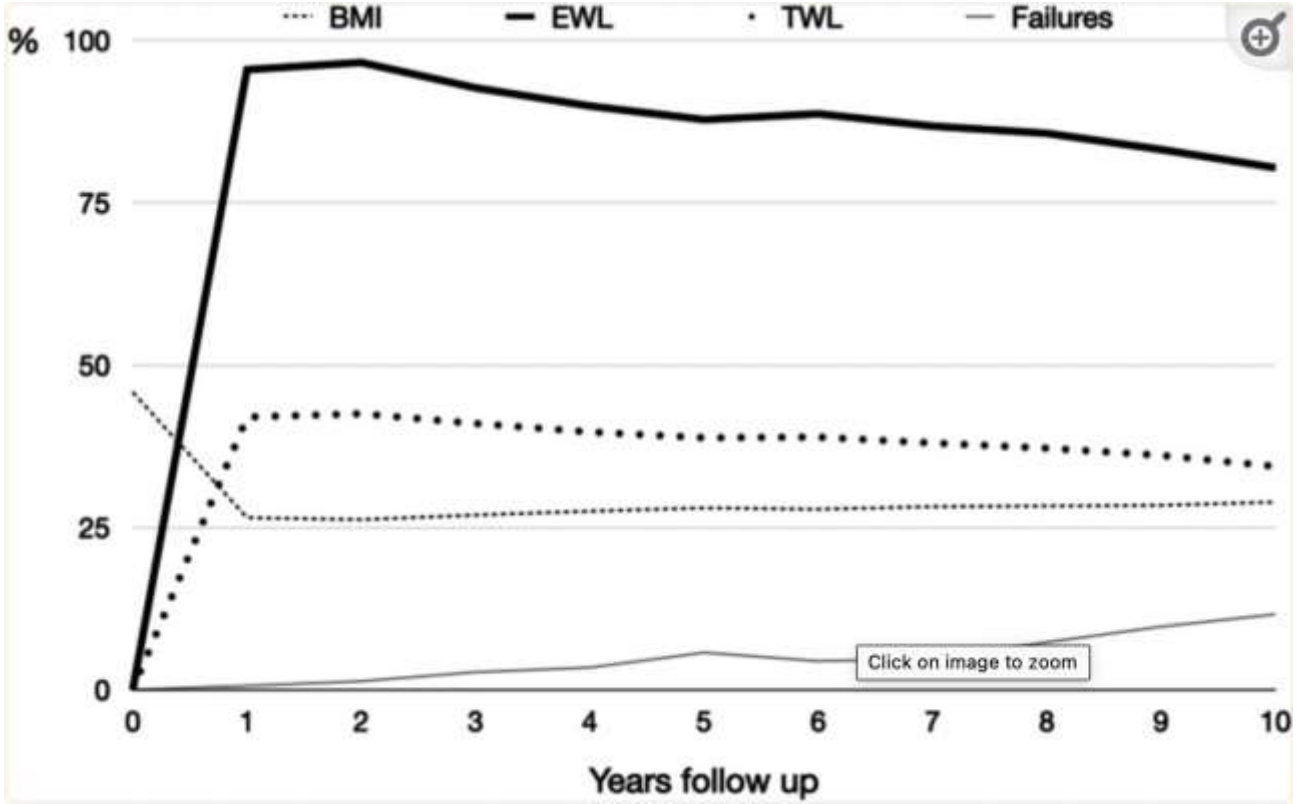
Background

SADI-S, in its early adoption stage, has a higher incidence of perioperative complications than RYGB[1].

	All Cohort (Pre-Match)			Match Cohort		
Clavien-Dindo Class	Roux-en-Y 24452	SADI 255	p-value	Roux-en-Y 1275	SADI 255	p-value
Grade 1						
Superficial Incisional SSI	153 (0.6%)	1 (0.4%)	1.0	8 (0.6%)	1 (0.4%)	1.0
Grade 2						
UTI	103 (0.4%)	1 (0.4%)	1.0	7 (0.5%)	1 (0.4%)	1.0
Pneumonia	82 (0.3%)	3 (1.2%)	0.06	7 (0.5%)	3 (1.2%)	0.22
Venous Thrombosis	39 (0.2%)	1 (0.3%)	0.34	3 (0.2%)	1 (0.3%)	0.52
Transfusion	245 (1.0%)	4 (1.6%)	0.33	9 (0.7%)	4 (1.6%)	0.25
Grade 3a						
Deep Incisional SSI	17 (0.1%)	0 (0%)	1.0	1 (0.1%)	0 (0%)	1.0
Grade 3b						
Pulmonary Embolism	44 (0.2%)	0 (0%)	1.0	5 (0.4%)	0 (0%)	0.60
Grade 4a						
Acute Renal Failure	21 (0.1%)	1 (0.4%)	0.20	0 (0%)	1 (0.4%)	0.17
Cardiac Arrest	9 (0%)	1 (0.4%)	0.10	0 (0%)	1 (0.4%)	0.17
Myocardial Infarct	6 (0%)	1 (0.4%)	0.07	0 (0%)	1 (0.4%)	0.17
Progressive Renal Failure	9 (0%)	1 (0.4%)	0.10	1 (0.1%)	1 (0.4%)	0.31
Grade 4b						
Ventilator	23 (0.1%)	1 (0.4%)	0.22	1 (0.1%)	1 (0.4%)	0.31
Organ Space SSI	95 (0.4%)	5 (2.0%)	<0.01	7 (0.5%)	5 (2.0%)	0.04
Anastomosis Leak	58 (0.2%)	5 (2.0%)	<0.01	4 (0.3%)	5 (2.0%)	0.01
Sepsis	26 (0.1%)	2 (0.8%)	0.03	0 (0%)	2 (0.8%)	0.03
Septic Shock	20 (0.1%)	2 (0.8%)	0.02	1 (0.1%)	2 (0.8%)	0.07
Unplanned ICU Admissions	151 (0.6%)	3 (1.2%)	0.21	5 (0.4%)	3 (1.2%)	0.13
Grade 5						
Death	47 (0.2%)	1 (0.4%)	0.39	1 (0.1%)	1 (0.4%)	0.31

[1] Clapp et al (2023)

Background



In the long term (10 years), SADI-S offers satisfactory weight loss and comorbidities resolution[1].

[1] Sánchez-Pernaute et al (2022)

Hypothesis and Aims

- **Question:**
  - Is SADIS an efficient and safe bariatric surgery for patients with BMI ≥ 50 kg/m2 ?
- **Aims:**
  - Our study aims to comprehensively compare the safety and efficacy of **SADI-S** and **RYGB** for patients with a preoperative **BMI ≥ 50 kg/m2**.

Methods

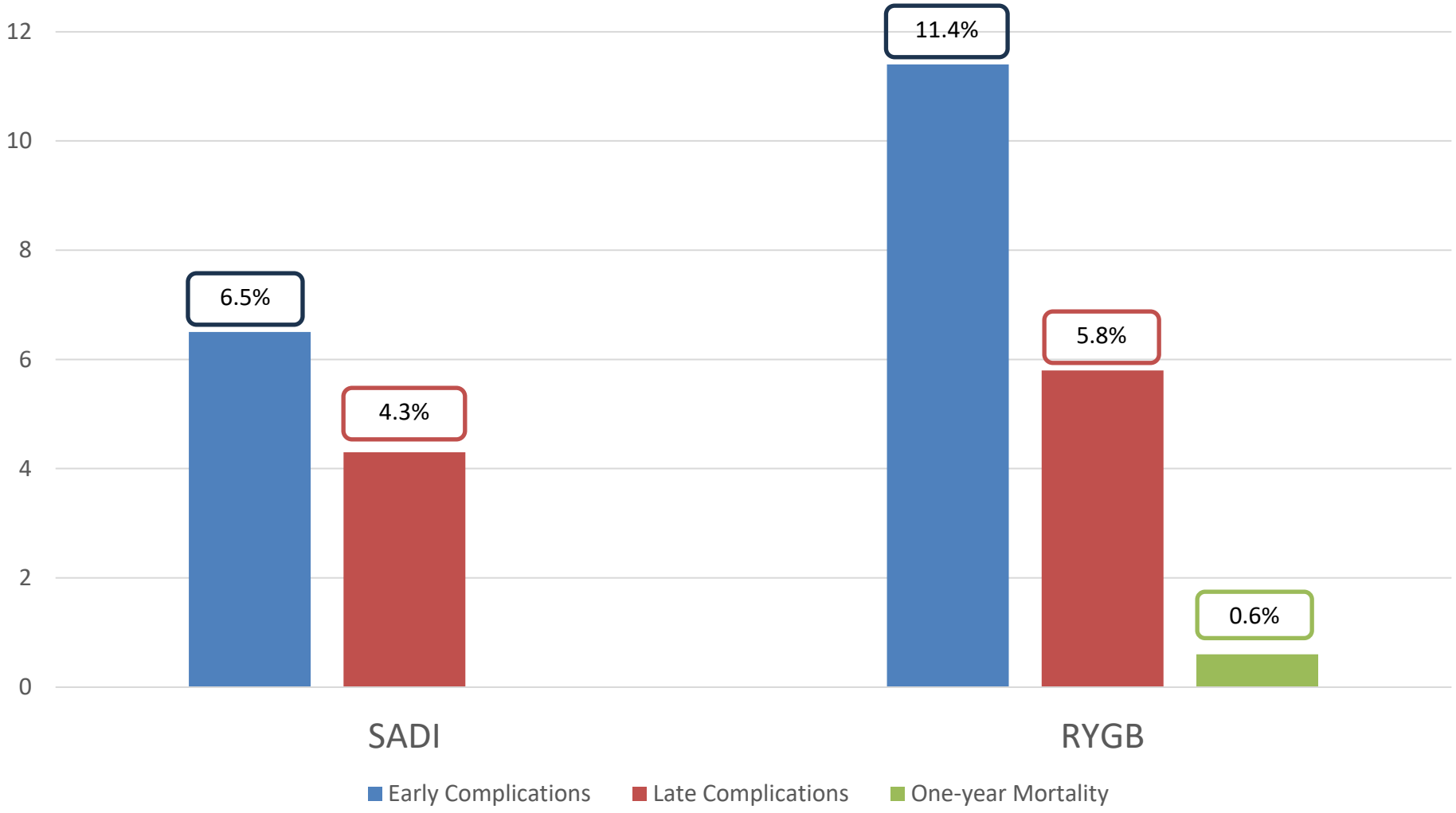
- Multicentered retrospective cohort study.
- **Inclusion Criteria:**
  - 1. Adult patients with preoperative BMI ≥ 50 kg/m^2
  - 2. Underwent RYGB or SADI-S from 2008-2020
- **Exclusion Criteria:**
  - 1. No follow-up data
  - 2. Pediatric population

Results: Demographics and Baseline Characteristics

Patient Demographics	Bariatric Procedure			
	RYGB (N=343)	SADI-S (N=120)	Total (N=463)	*p-value*
Age at procedure, years (SD)	44.9 (13.1)	41.4 (9.9)	43.9 (12.4)	0.0011[1]
Sex, Female (%)	256 (74.6)	81 (67.5)	337 (72.8)	0.131[2]
Race, White (%)	315 (91.8)	80 (66.7)	395 (85.3)	< 0.001[2]
BMI Pre-op, kg/m^2 (SD)	56.8 (6.1)	59.9 (8.2)	57.6 (6.8)	< 0.001[1]
Obesity-related comorbidities				
Sleep Apnea (%)	255 (74.3)	56 (46.7)	311 (67.2)	< 0.001[2]
Hypertension (%)	189 (55.1)	68 (55.5)	257 (55.5)	0.088[2]
GERD (%)	183 (53.4)	26 (21.7)	209 (45.1)	< 0.001[2]
Hyperlipidemia (%)	174 (50.7)	34 (28.3)	208 (44.9)	< 0.001[2]
Diabetes Mellitus (%)	124 (36.2)	39 (32.5)	163 (35.2)	0.520[2]

1Equal variance two sample t-test; 2Chi-Square test

Results: Operative Outcomes



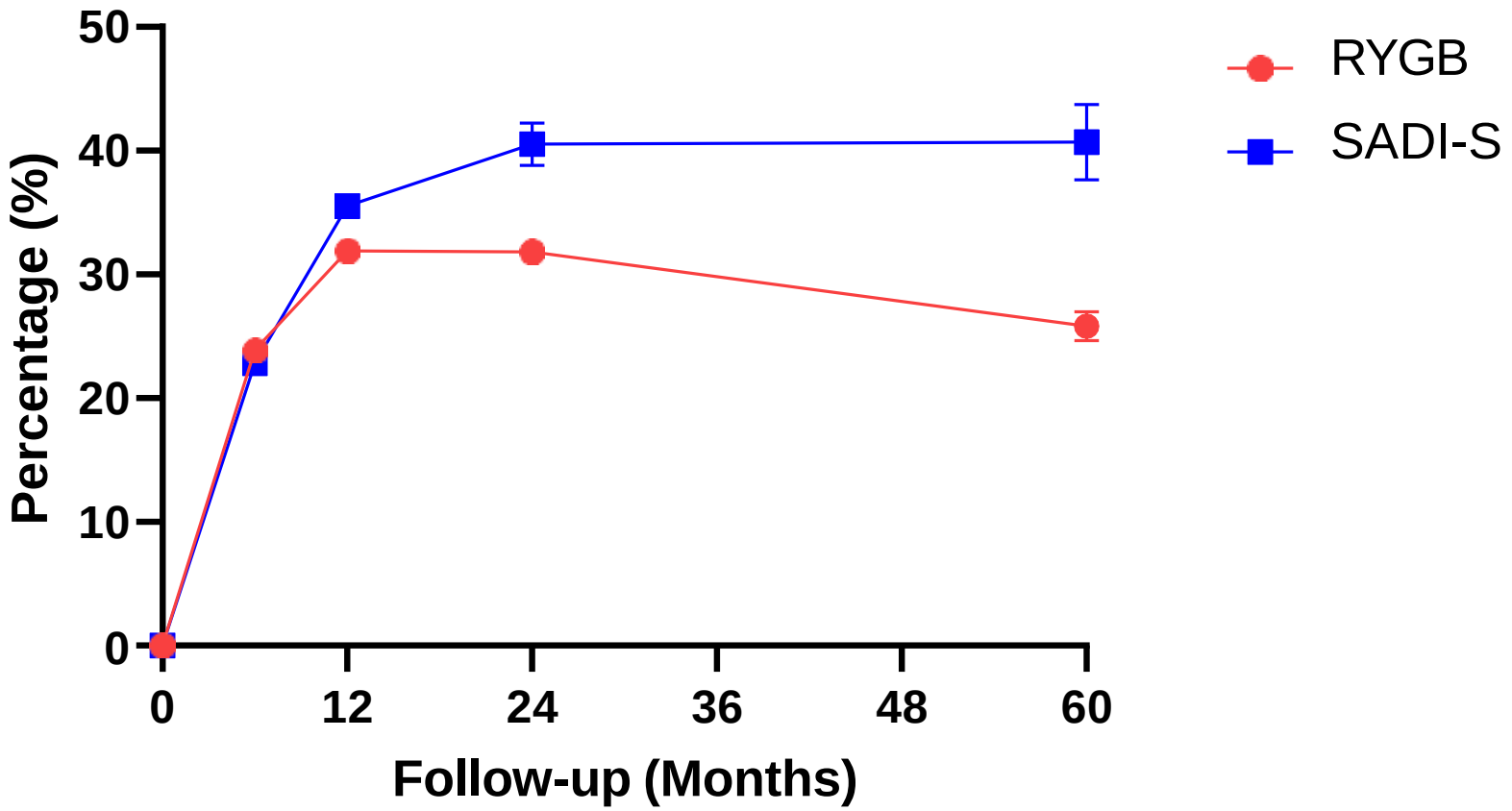
Results: Weight loss Outcomes (%TWL)

SADI-S vs RYGB:

12 Mo – **35.6%** vs 31.9%

24 Mo – **41.2%** vs 31.8%

60 Mo – **40.7%** vs 25.8%



Conclusion

- SADI-S was associated with **higher** and **sustained** mid- and long-term weight-loss results compared to RYGB for patients with BMI $\geq$ 50 kg/m^2.
- Both SADI-S and RYGB presented a **similar early and late safety profile** with a relatively low one-year mortality rate.

Thank you for your attention!
Questions or Comments?