

**SADI versus OAGB as a revisional surgery for non responder sleeve  
gastrectomy:  
short-term outcomes of a single canadian bariatric center.**

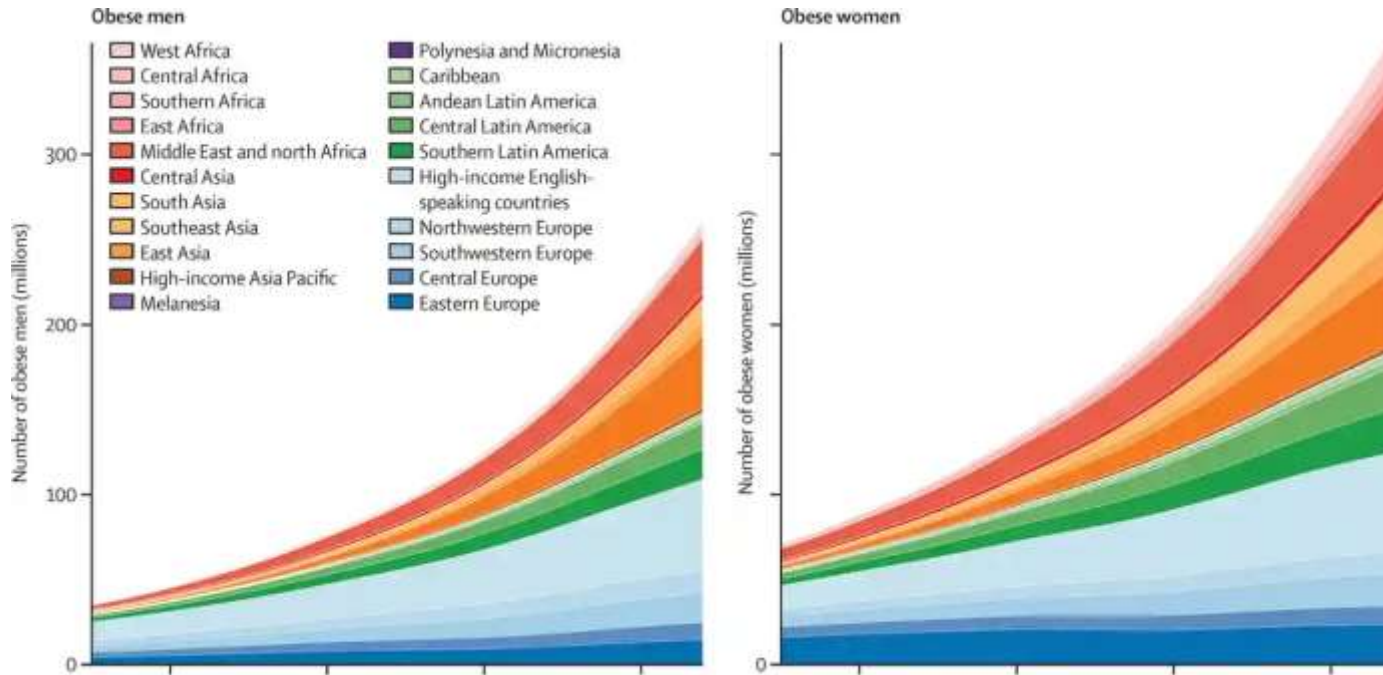
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No conflict of interest



# INTRODUCTION

- Obesity is a multifactoriel epidemic disease
- Approximately 650 million people and it rises



# INTRODUCTION

- World in 2018
  - 720 000 bariatric surgeries
  - 380 000 sleeves
- Weight recurrence after SG
  - 75% at 6 years,
  - **No clear consensus on the definition**
- Revisional surgery: SADI, BPD, OAGB, RYGB, re-Sleeve, SASI...

# METHODS

- Retrospective observational analysis (2016-2023)
- Cohorts of post-SG non responders
- **Objectives: Compares SADI vs OAGB at post op 1 year in terms of:**
  - Weight loss.
  - Resolution of associated comorbidities
  - Morbidity/mortality.
- **Statistics: inversed propensity score weighting.**

# METHODS

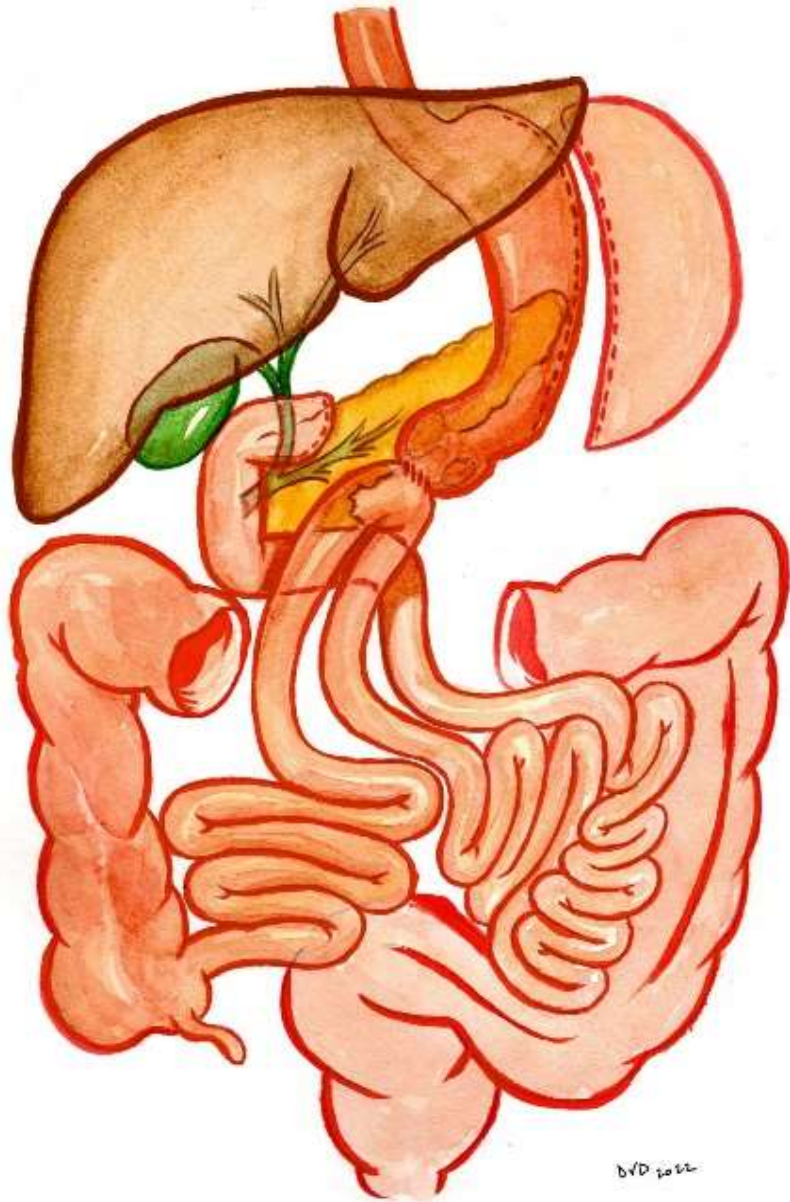
## Inclusion criteria

- SG non responders
  - Weight recurrence → joint decision between surgeon and patient
  - Insuffisance weight loss

## Exclusion criteria

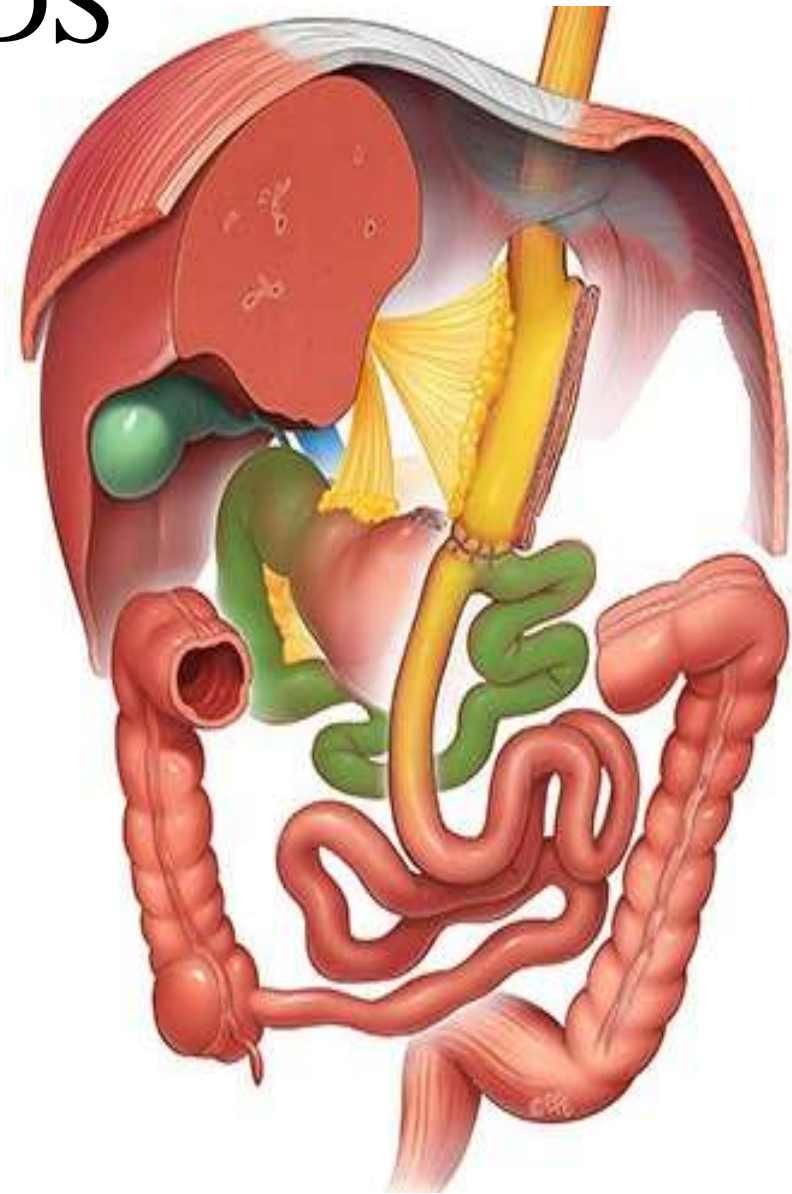
- Previous bariatric surgery other than SG or band
- Esophagitis B or C on preop EGD
- Poorly controlled GERD

# METHODS



**SADI**

**VS**



**OAGB**



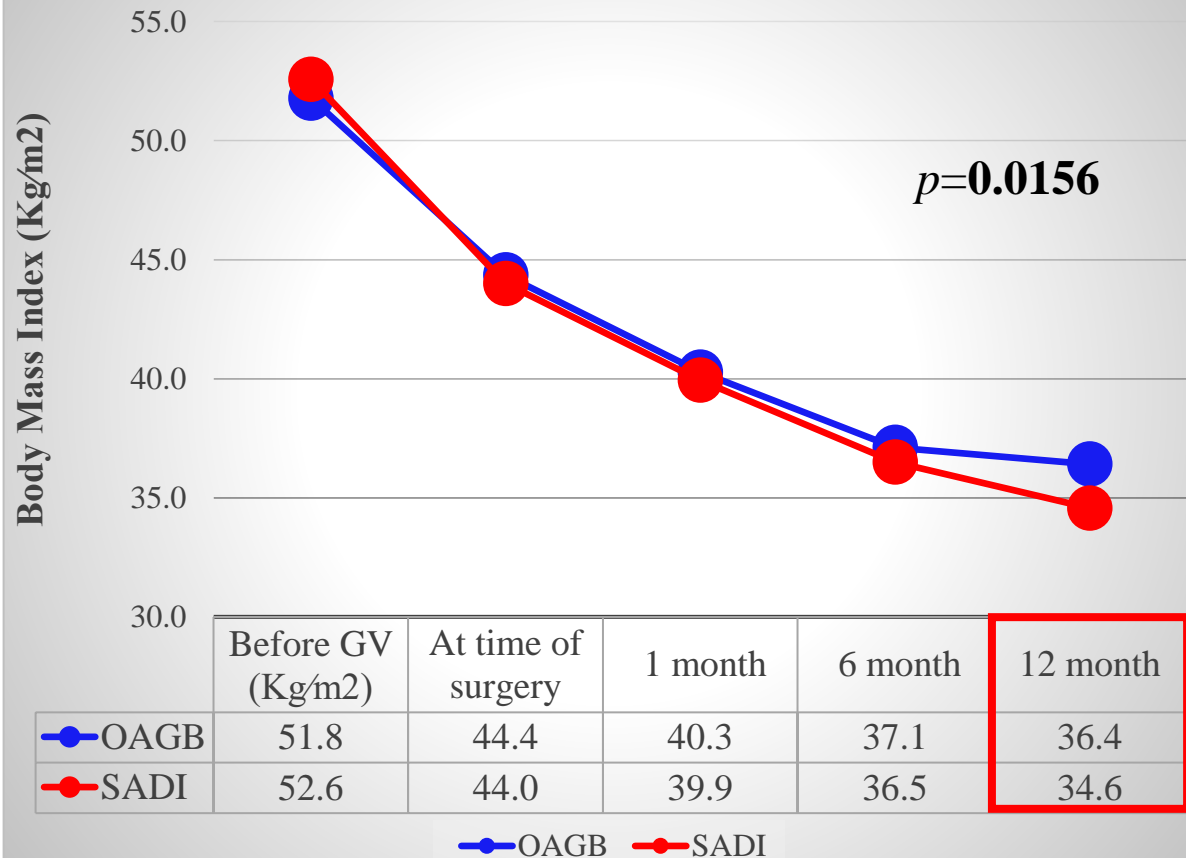
# RESULTS: population

			OAGB	SADI	<i>p</i>
<b>Valid N</b>			49	133	
<b>Age</b>	<b>Mean ± Standard Deviation</b>		47.2 ± 9.7	42.3 ± 9.1	<b>0.002</b>
<b>Gender</b>	<b>F</b>	<b>N (%)</b>	46 (93.9%)	114 (85.7%)	0.199
	<b>M</b>	<b>N (%)</b>	3 (6.1%)	19 (14.3%)	
<b>Weight before SG (kg)</b>	<b>Mean</b>		139.2 ± 27.2	144.3 ± 31.9	0.326
<b>Weight at time of revisional surgery (kg)</b>	<b>Mean</b>		118.7 ± 22.3	120.8 ± 20.8	0.546
<b>BMI before SG (kg/m<sup>2</sup>)</b>	<b>Mean</b>		51.8 ± 8.9	52.6 ± 10.4	0.65
<b>BMI at time of revisional surgery (kg/m<sup>2</sup>)</b>	<b>Mean</b>		44.4 ± 7.6	44 ± 6.1	0.741
<b>Preop Comorbidities</b>	<b>Type 2 diabetes</b>	<b>N (%)</b>	10 (20.4%)	34 (25.6%)	0.304
	<b>Insuline</b>	<b>N (%)</b>	2 (4%)	5 (3.8%)	
	<b>Hypertension</b>	<b>N (%)</b>	17(34.7%)	54 (40.6%)	0.292
	<b>Dyslipedemia</b>	<b>N (%)</b>	11 (22.4%)	45 (33.8%)	0.096
	<b>Obstrutive Sleep Apnea</b>	<b>N (%)</b>	19 (38.8)	62 (46.6%)	0.219

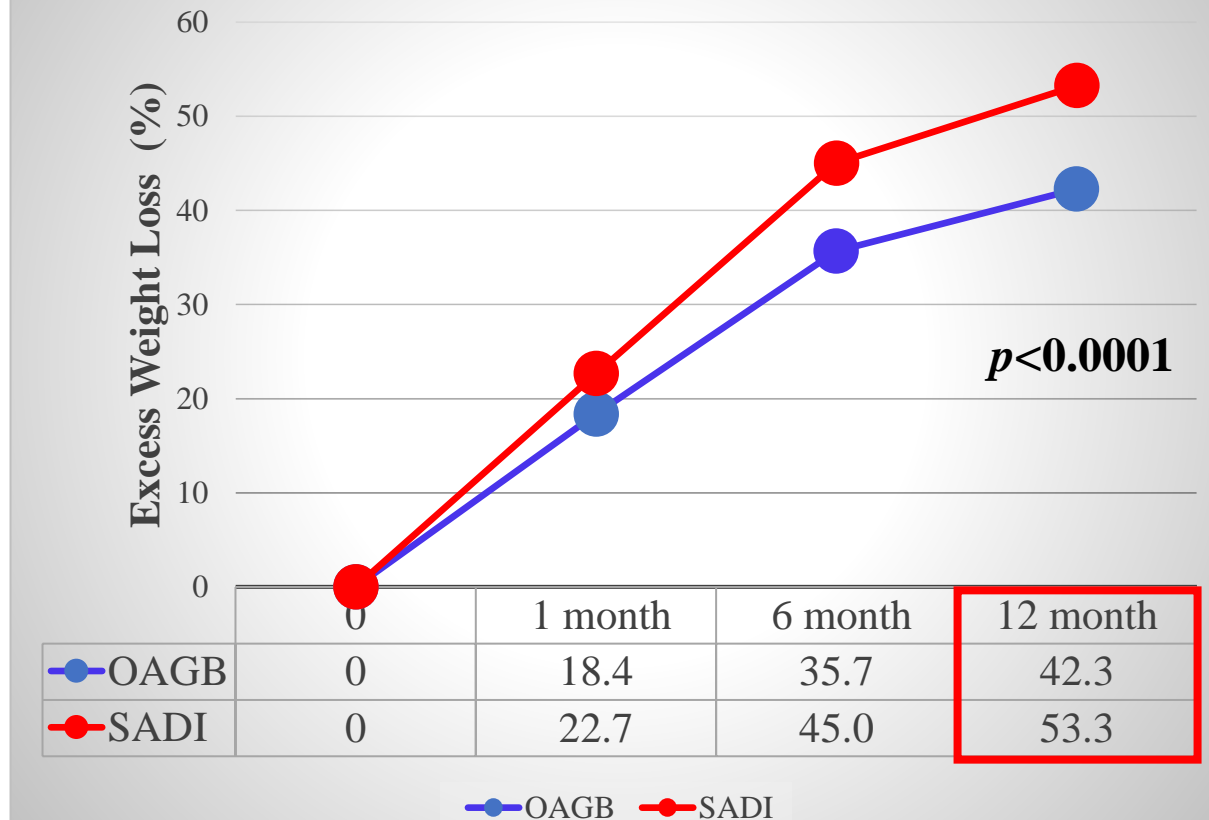


# RESULTS: weight loss

## Body Mass Index evolution

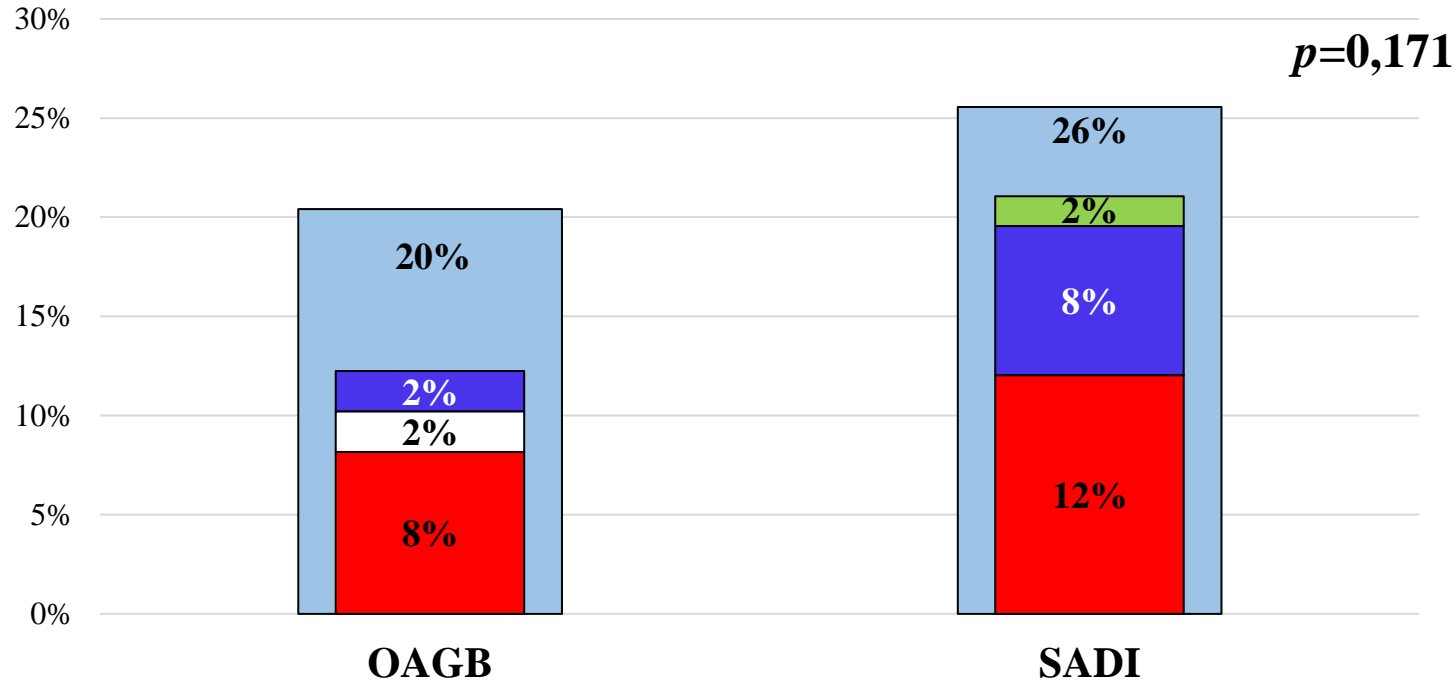


## Excess Weight Loss evolution



# RESULTS: comorbidities

## Diabetes Evolution



**Complete remission** : HbA1c < 6% without medication

**Partial remission** : HbA1c < 6.5% without medication

**Glycemic control** : < 7% with or without diabetic medications

**Glycemic improvement** HbA1c  $\geq 7$  but reduced by 1.5% compared to preoperative level

■ Preop

■ Complete remission

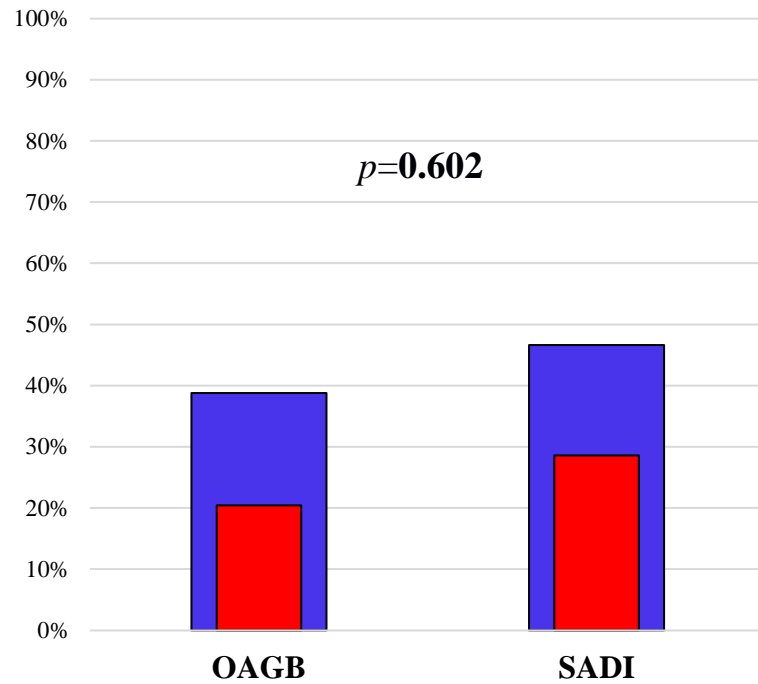
□ Partial remission

■ Glycemic control

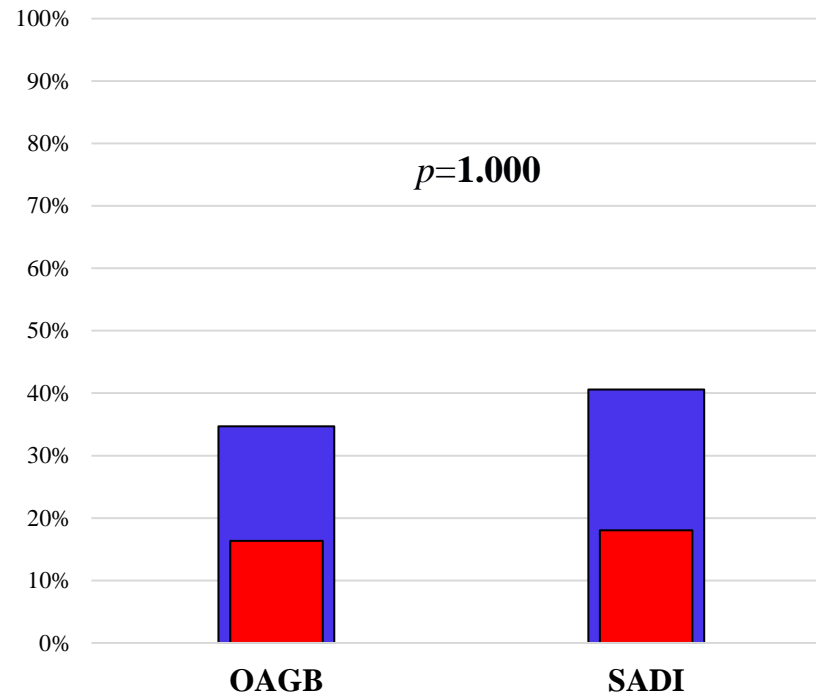
■ Glycemic improvement

# RESULTS: comorbidities

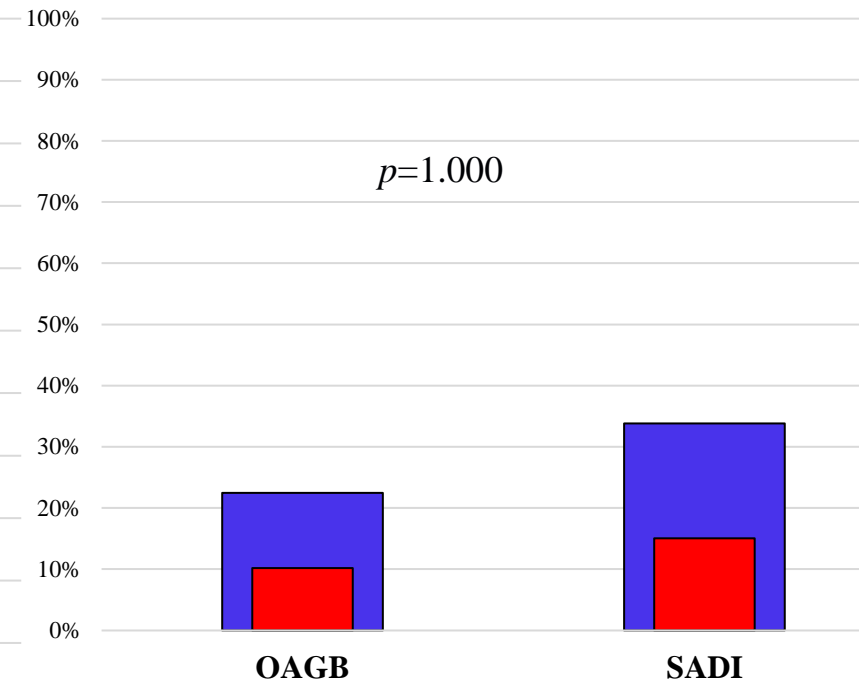
## Obstructive Sleep Apnea



## Hypertension



## Dyslipidemia



■ Preop ■ Remission

# RESULT: early morbidity

## 30 days major morbidity rates

Clavien-Dindo	I	II	IIIa	IIIb	IV	V	
<b>OAGB</b>							} 12.5% (n=6)
Marginal ulcers		2					
Gastro-jejunostomy stenosis				1			
Gatro-jejunostomy leak				1			
Internal hernia				1			
<b>SADI</b>							} 3% (n=4)
Duodeno-ileostomy leak				1			
Intra-abdominal collections		1	2				

*Dindo D, and al. Classification of surgical complications: a new proposal with evaluation in a cohort of 6336 patients and results of a survey. Ann Surg 2004.*

# RESULTS: late morbidity

## Late morbidity rates 1PO year

- OAGB-group
  - 3 dumping syndrome
- SADI-group
  - 2 surgical revisions for malabsorption
  - GERD:

GERD		OAGB	SADI	<i>p</i>
Preop	GERD	57%	15%	0.009
Post op	No GERD	38.8%	63.1%	
	Well controlled 100%	61.2%	36.9%	0.009
	Poorly controlled	12.2%	5.3%	

# RESULTS: late morbidity

			OAGB	SADI	<i>p</i>
<b>Albumin (U/L)</b>	<b>Severe undernutrition &lt;32</b>	<b>N (%)</b>	0 (0%)	3 (2.9%)	0.625
	<b>Undernutrition 32-35</b>	<b>N (%)</b>	5 (14.7%)	11 (10.5%)	
<b>Vitamin D (nmol/L)</b>	<b>D vitamin deficiency &lt;50 nmol/L</b>	<b>N (%)</b>	6 (21.4%)	23 (27.4%)	0.855
	<b>D vitamin insufficiency 50-75nmol/L</b>	<b>N (%)</b>	11 (39.3%)	31 (36.9%)	
<b>Vitamin B12 (pg/mL)</b>	<b>B12 Vitamine deficiency &lt;200</b>	<b>N (%)</b>	6 (18.8%)	9 (9.1%)	0.197
<b>Hb</b>	<b>Iron deficiency anemia*</b>	<b>N (%)</b>	3 (8.3%)	17 (15.5%)	0.296

\*Hb<130g/L (M)- 120 g/L (F) and ferritine <30 ng/mL

# CONCLUSION

## At 1 PO year

- Weight loss: **SADI > OAGB**
- Remission of comorbidities and vitamino-proteic profile:  
**SADI=OAGB**



# CONCLUSION

## At 1 PO year

- Early morbidity: **OAGB > SADI**
- Late Morbidity:
  - GERD?
  - Revision surgery: **SADI > OAGB**

# THANK YOU FOR YOUR ATTENTION

IFSO Naples. **2023.08.25**  
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