



# MBSAQIP DATA ON OAGB & SADI-S

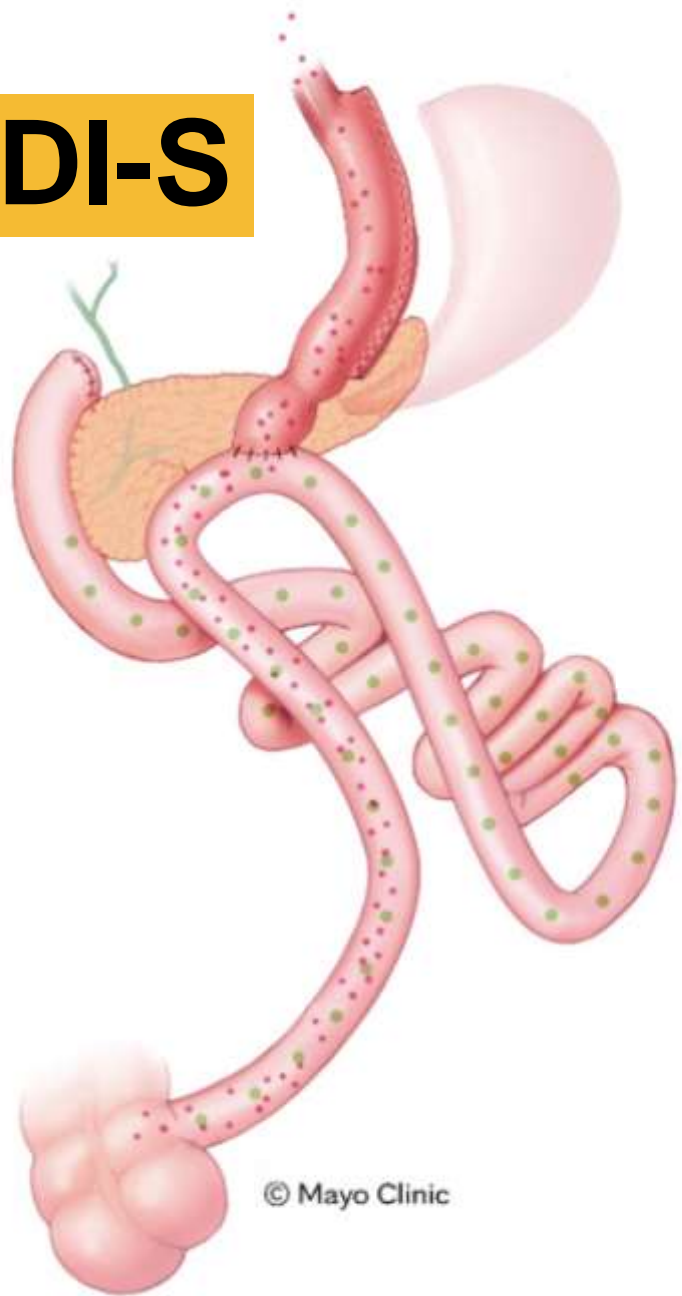
**OMAR M. GHANEM MD FACS**  
ASSOCIATE PROFESSOR OF SURGERY  
MAYO CLINIC



# DISCLOSURE

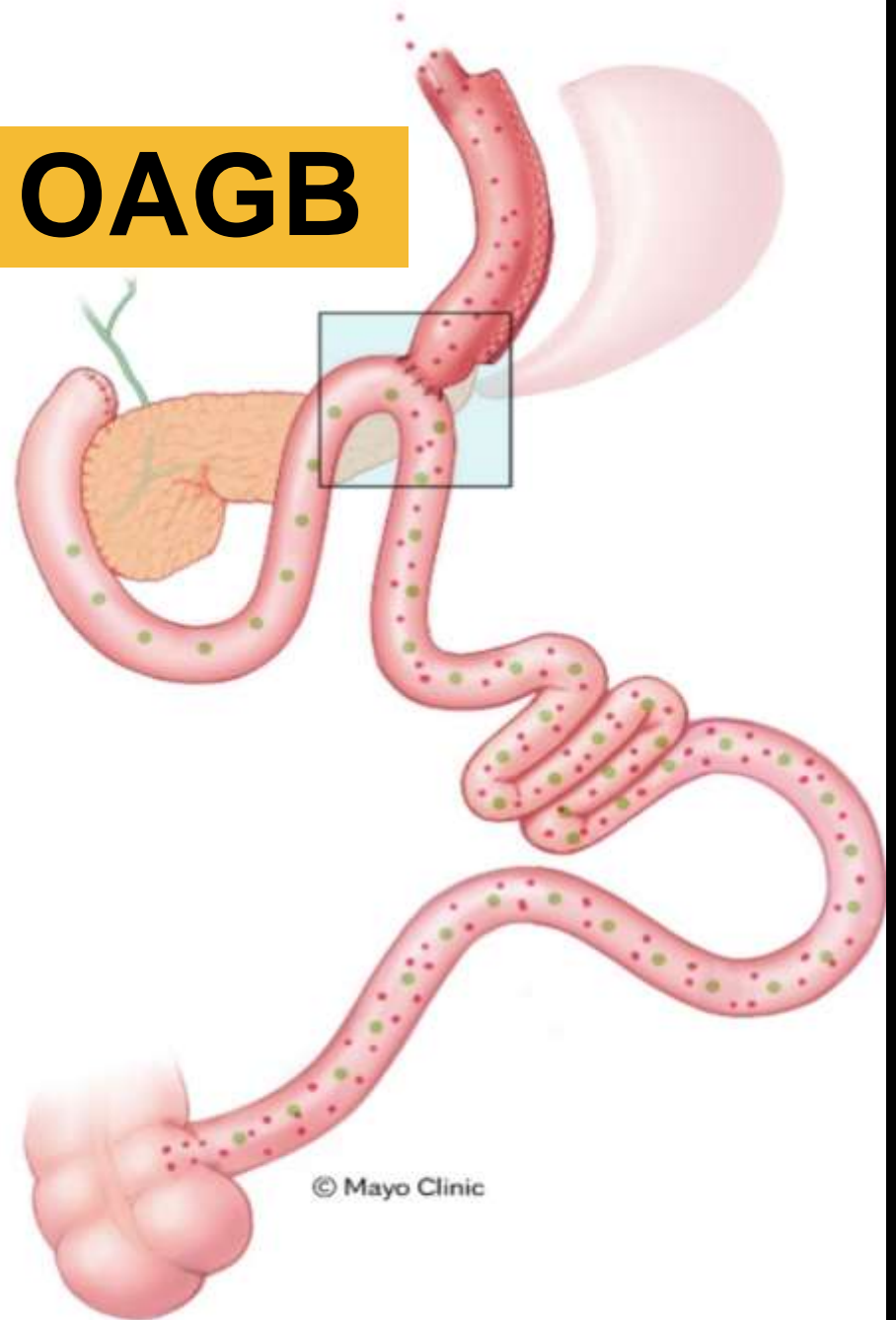


# SADI-S



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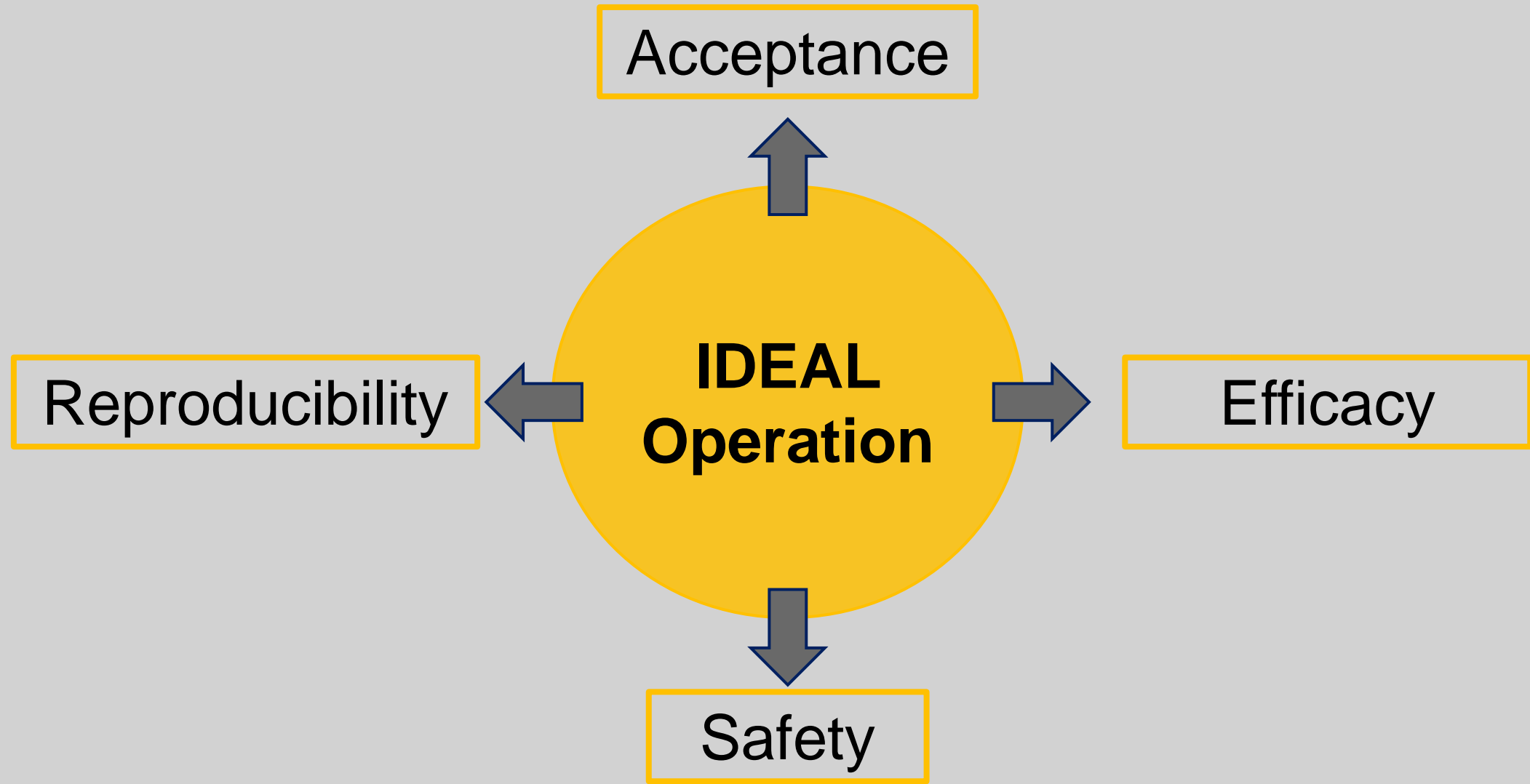
# OAGB



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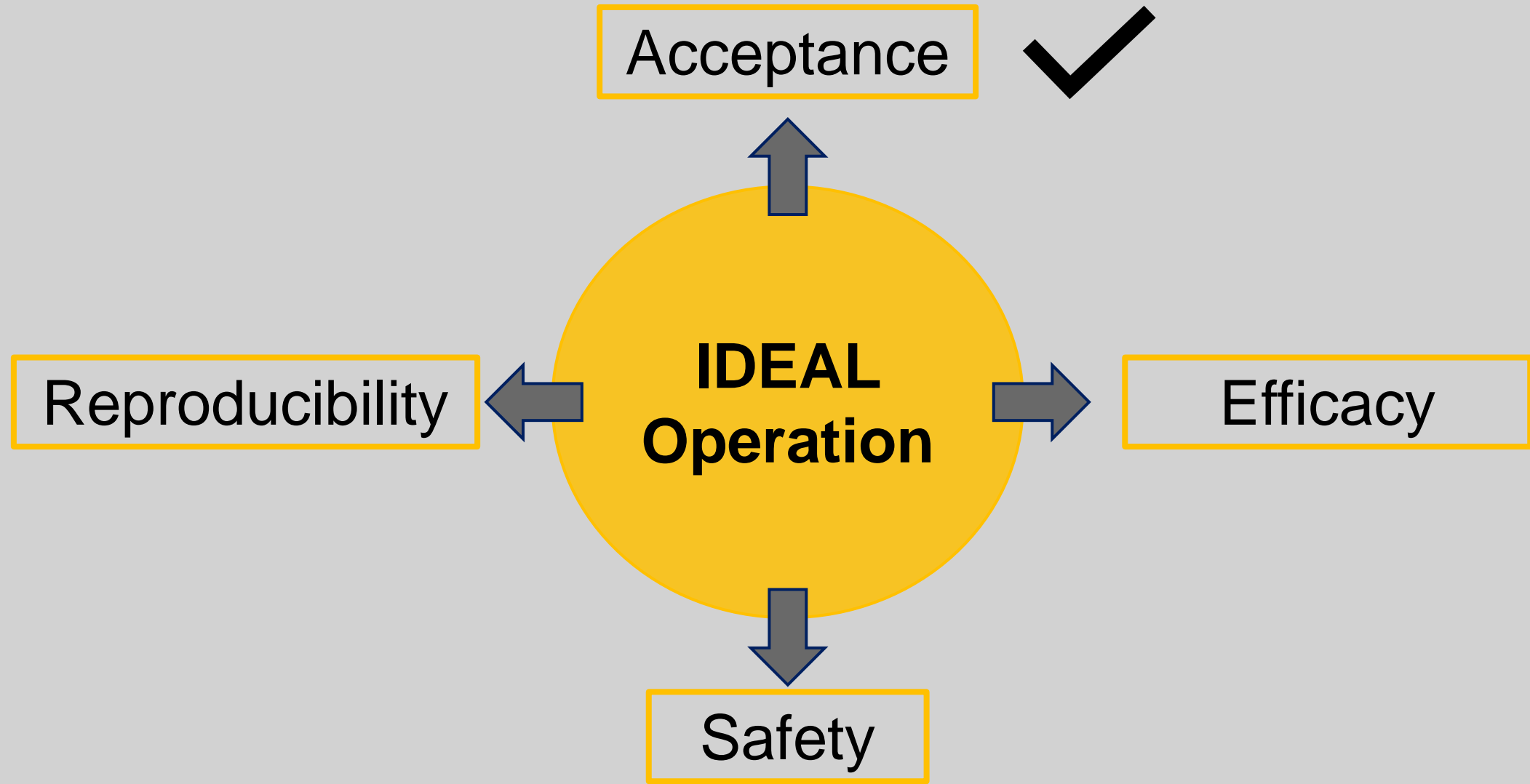
# WHY THE COMPARISON?

- Recent endorsement by ASMBBS
- Loop configuration
- Hypoabsorptive
- Scarce comparative data



# ACCEPTANCE

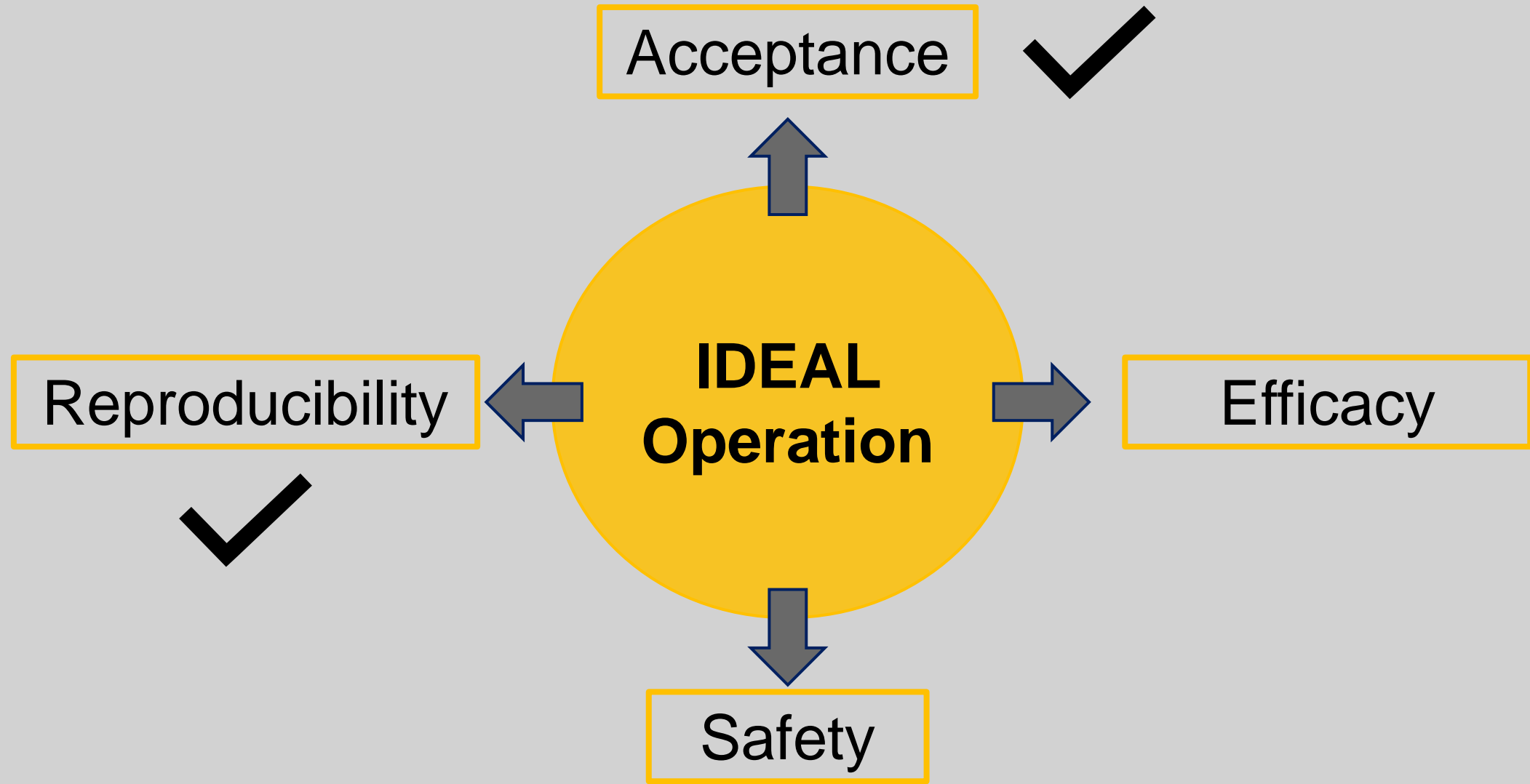




# REPRODUCIBILITY?

How many versions?





# COMPARATIVE STUDY

Obesity Surgery (2020) 30:4715–4723  
<https://doi.org/10.1007/s11695-020-04933-2>



ORIGINAL CONTRIBUTIONS



## Single Anastomosis Duodeno-ileostomy (SADI-S) Versus One Anastomosis Gastric Bypass (OAGB-MGB) as Revisional Procedures for Patients with Weight Recidivism After Sleeve Gastrectomy: a Comparative Analysis of Efficacy and Outcomes

Moataz Bashah<sup>1,2</sup> • Ammar Aleter<sup>1</sup> • Jawher Baazaoui<sup>1</sup> • Ayman El-Menyar<sup>3,4</sup> • Antonio Torres<sup>5</sup> • Asaad Salama<sup>1</sup>

**SAME EFFICANY**

# COMPARATIVE STUDY



ELSEVIER



Surgery for Obesity and Related Diseases 16 (2020) 1060–1066

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SURGERY FOR OBESITY  
AND RELATED DISEASES

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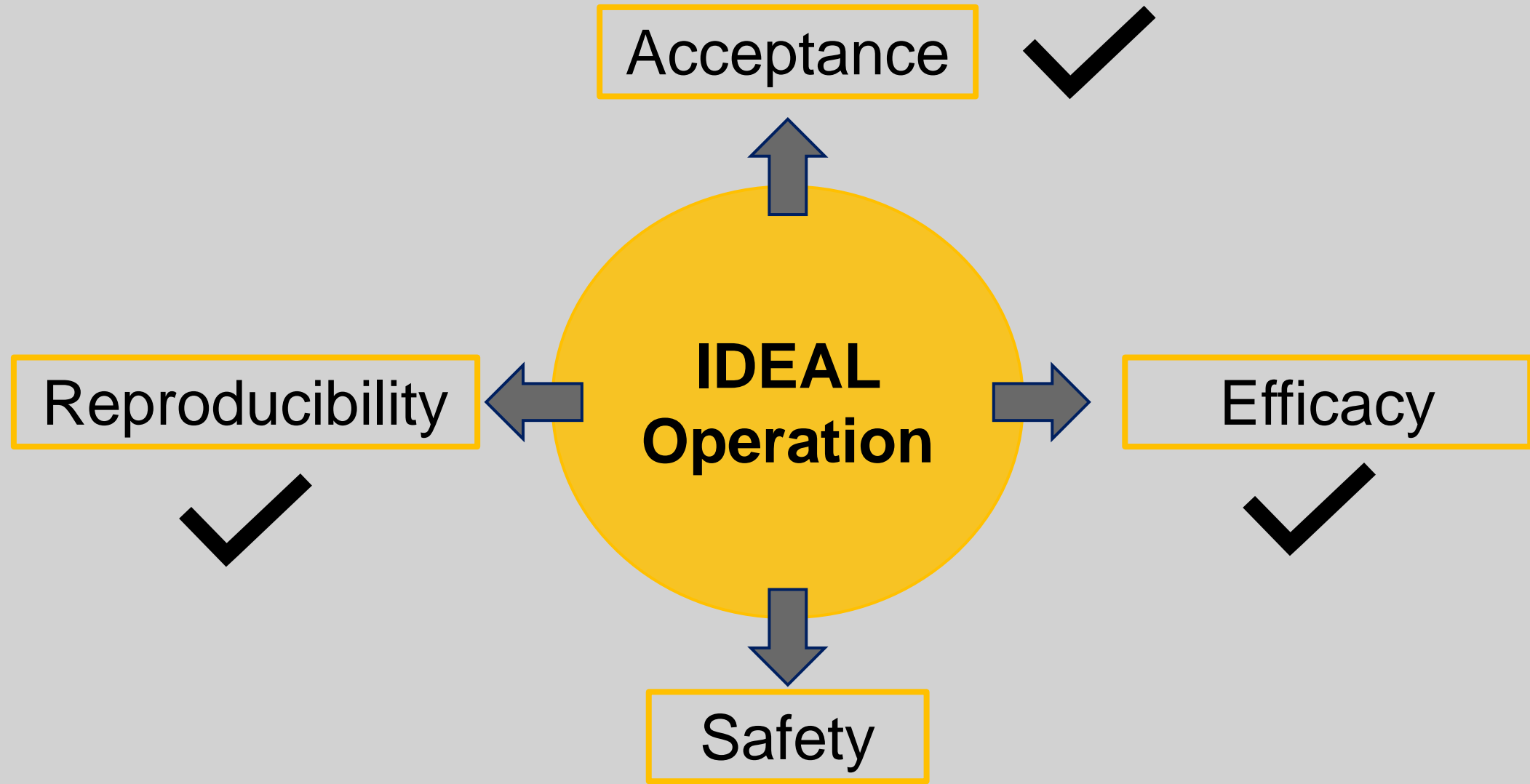
Original article

Short- to medium-term results of single-anastomosis duodeno-ileal bypass compared with one-anastomosis gastric bypass for weight recidivism after laparoscopic sleeve gastrectomy

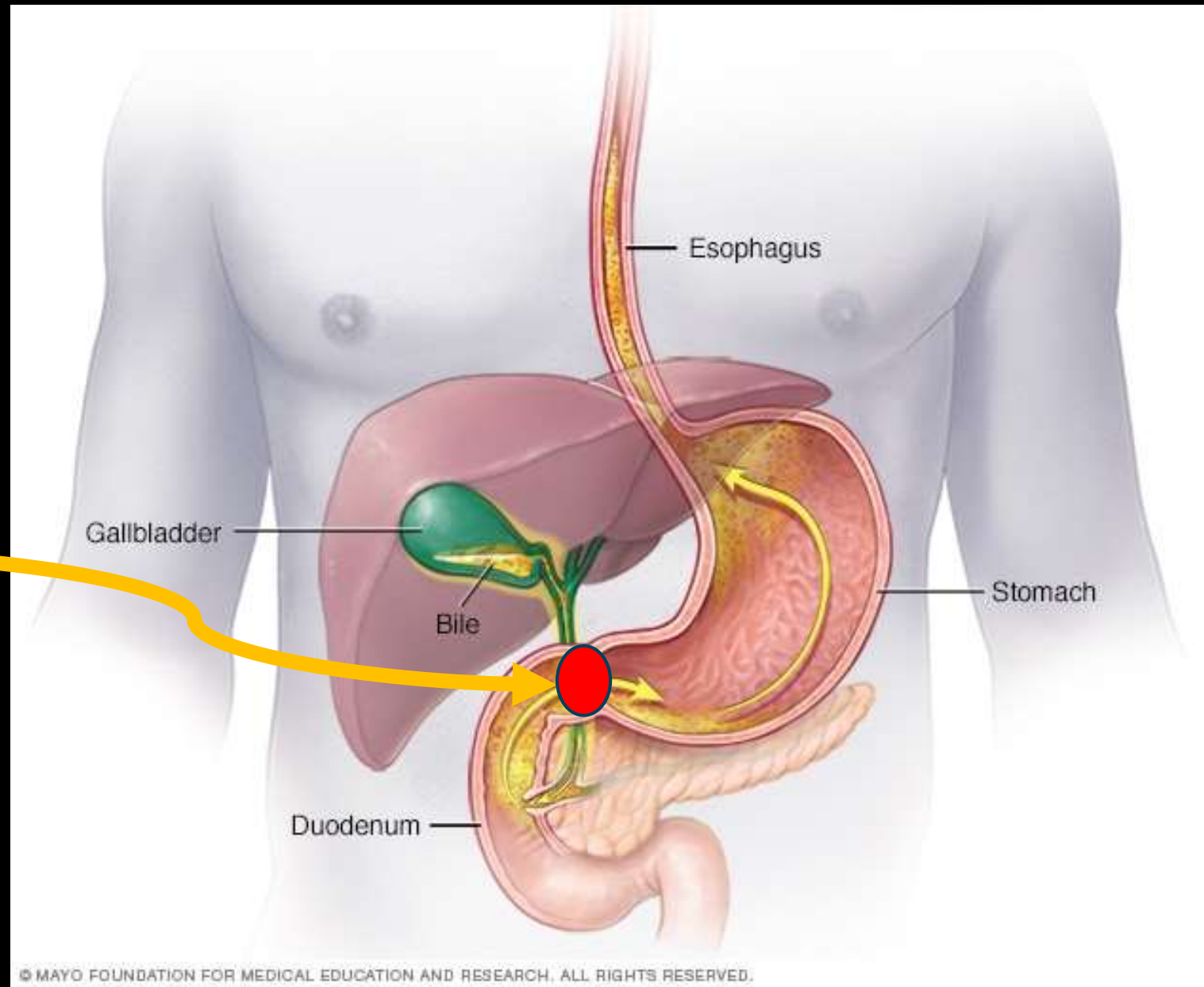
Marlon de la Cruz, M.D.<sup>a</sup>, Martin Büsing, M.D.<sup>a</sup>, Radostina Dukovska, M.D.<sup>a</sup>,  
Antonio José Torres, M.D., Ph.D.<sup>b</sup>, Markus Reiser, M.D.<sup>c,\*</sup>

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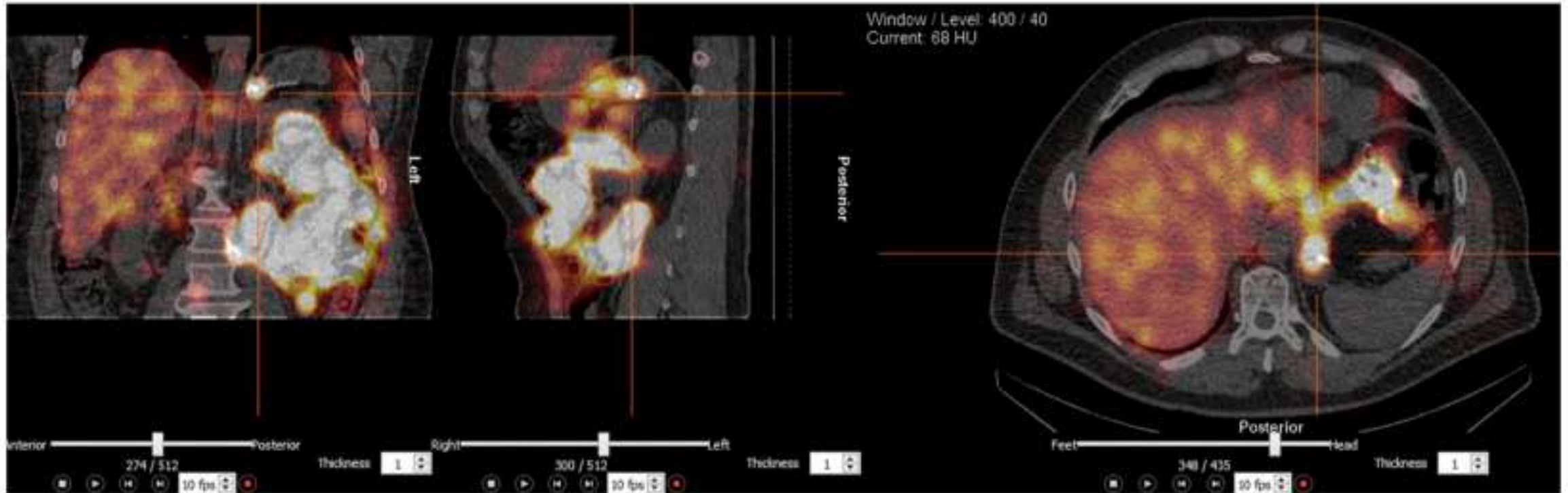
**SAME EFFICACY**



# THE EFFECT OF THE PYLORUS



# Safety



- 29% had bile in gastric pouch
- 2.6% had bile reaching esophagus

# BILE REFLUX IN SADI-S

Obesity Surgery (2022) 32:1516–1522  
<https://doi.org/10.1007/s11695-022-05943-y>



ORIGINAL CONTRIBUTIONS



## Bile Reflux After Single Anastomosis Duodenal-Ileal Bypass with Sleeve (SADI-S): a Meta-analysis of 2,029 Patients

Ray Portela<sup>1</sup> · Katie Marrerro<sup>2</sup> · Ahmet Vahibe<sup>1</sup> · Carlos Galvani<sup>3</sup> · Helmuth Billy<sup>4</sup> · Barham Abu Dayyeh<sup>5</sup> · Benjamin Clapp<sup>6</sup> · Omar M. Ghanem<sup>1</sup> 

**BILE REFLUX IN SADI-S = 1.23%**

# OAGB: DUMPING SYNDROME AND ULCERS

Obesity Surgery (2020) 30:1230–1240  
<https://doi.org/10.1007/s11695-019-04250-3>



ORIGINAL CONTRIBUTIONS



## One Anastomosis Gastric Bypass–Mini-Gastric Bypass (OAGB-MGB) Versus Roux-en-Y Gastric Bypass (RYGB)—a Mid-Term Cohort Study with 612 Patients

Karl P. Rheinwalt<sup>1</sup> • Andreas Plamper<sup>1</sup> • Marcia V. Rückbeil<sup>2</sup> • Andreas Kroh<sup>3</sup> • Ulf P. Neumann<sup>3</sup> • Tom F. Ulmer<sup>3</sup>

OAGB DUMPING = 3.35%  
OAGB ULCERS = 3.23%

# SADI-S: DUMPING SYNDROME AND ULCERS

Article

## Marginal Ulcer and Dumping Syndrome in Patients after Duodenal Switch: A Multi-centered Study

Marita Salame <sup>1</sup>, Andre F. Teixeira <sup>2</sup>, Romulo Lind <sup>2</sup>, Gilberto Ungson <sup>3</sup>, Muhammad Ghanem <sup>2</sup>, Kamal Abi Mosleh <sup>1</sup>, Muhammad A. Jawad <sup>2</sup>, Barham K. Abu Dayyeh <sup>4</sup>, Michael L. Kendrick <sup>1</sup>, Omar M. Ghanem <sup>1,\*</sup>



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**Abstract: Background:** The current design of biliopancreatic diversion with duodenal switch (BPD/DS) and single anastomosis duodenal-ileal bypass with sleeve (SADI-S) emphasizes the importance of the pylorus' preservation to reduce the incidence of marginal ulcer (MU) and dumping. However, no institutional studies have yet reported data on their prevalence. We aimed to assess the incidence of MU and dumping after duodenal switch (DS) and identify the associative factors. **Methods:** A multicenter review of patients who underwent BPD/DS or SADI-S between 2008 and 2022. Baseline demographics, symptoms and management of both complications were collected. Fisher's exact test was used for categorical variables and independent t-test for continuous variables. **Results:** 919 patients were included (74.6% female; age 42.5 years; BMI 54.6 kg/m<sup>2</sup>) with mean follow-up of 31.5 months. 8 patients (0.9%) developed MU and 7 (0.8%) had dumping. Patients who developed MU were more likely to be using non-steroidal anti-inflammatory drugs (NSAID) (p=0.006) and have longer operation time (p=0.047). Primary versus revisional surgery, and BPD/DS versus SADI-S were not associated with MU or dumping. **Conclusions:** The incidences of MU and dumping after DS were low. NSAID use and longer operation time were associated with MU, whereas dumping was attributed to poor dietary habits.

DS/SADI-S DUMPING = 0.9%

DS/SADI-S ULCERS = 0.8%

**SADI-S**



**OAGB**



**Comparative early SAFETY data is LACKING**



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ORIGINAL CONTRIBUTIONS



# One Anastomosis Gastric Bypass Versus Single Anastomosis Duodenoileostomy with Sleeve: Comparative Analysis of 30-Day Outcomes Using the MBSAQIP

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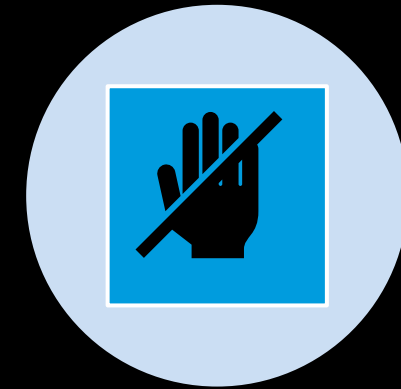
# METHODS



MBSAQIP PUF DATA  
2020-2021



CPT CODES



EXCLUSIONS

**Table 1** Patient characteristics for SADI-S and OAGB procedures

Characteristics	SADI 694	OAGB 1068	<i>p</i>
Age, years	42.2 ± 10.8	43.7 ± 12.2	0.005
Sex (female)	552 (75.2%)	887 (83.1%)	0.068
Body mass index, kg/m <sup>2</sup>	50.6 ± 9.1	45.3 ± 7.1	0.001
ASA 1	0 (0%)	3 (0.3%)	0.285
ASA 2	66 (9.5%)	165 (15.4%)	0.001
ASA 3	559 (80.5%)	880 (82.4%)	0.345
ASA 4	69 (9.9%)	20 (1.9%)	0.001
History of myocardial infarction	4 (0.6%)	10 (0.9%)	0.585
Previous cardiac stent	9 (1.3%)	11 (1.0%)	0.649
Diabetes mellitus	200 (28.8%)	278 (26.0%)	0.207
Hypertension	332 (47.8%)	480 (44.9%)	0.205
Hyperlipidemia	147 (21.2%)	253 (23.7%)	0.222
Deep venous thrombosis	13 (1.9%)	11 (1.0%)	0.145
Pulmonary embolism	8 (1.2%)	9 (0.8%)	0.619
Therapeutic anticoagulation	17 (2.4%)	31 (2.9%)	0.654
COPD	9 (1.3%)	14 (1.3%)	1.0
Current smoker	38 (5.5%)	51 (4.8%)	0.507
Renal insufficiency	3 (0.4%)	7 (0.7%)	0.749
Dialysis	0 (0%)	5 (0.5%)	0.164
Sleep apnea	314 (45.2%)	446 (41.8%)	0.154
GERD	173 (25.0%)	423 (39.6%)	0.099
Immunosuppressive therapy	24 (3.5%)	17 (1.6%)	0.015
Functional status (non-dependent)	691 (99.6%)	1062 (99.4%)	1.0
Operative times (minutes)	129.8 ± 54.0	93.3 ± 52.7	0.001

ASA American Society of Anesthesiologists, COPD chronic obstructive pulmonary disease, GERD gastroesophageal reflux disease

## BASELINE CHARACTERISTICS

SADI-S group had higher:

- BMI
- ASA 4 status
- Immunosuppression

# OUTCOMES



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**Table 2** Thirty-day outcomes for SADI-S and OAGB procedures based on Clavien-Dindo class

30-day outcome	SADI	OAGB	<i>p</i> value
	694	1068	
Clavien-Dindo class			
Grade 1	1 (0.1%)	2 (0.2%)	1.0
Grade 2	18 (2.6%)	9 (0.8%)	0.005
Grade 3a	0 (0%)	1 (0.1%)	1.0
Grade 3b	2 (0.3%)	1 (0.1%)	0.566
Grade 4a	5 (0.7%)	4 (0.4%)	0.329
Grade 4b	20 (2.9%)	7 (0.7%)	<b>0.001</b>
Grade 5	1 (0.1%)	1 (0.1%)	1.0

# OUTCOMES

**Table 3** Thirty-day outcomes for SADI and SAGB procedures based on readmissions, reoperation, and reintervention

30-day outcome	SADI	OAGB	<i>p</i> value
	694	1068	
Readmissions	26 (3.7%)	20 (1.9%)	0.021
Reoperation	17 (2.4%)	18 (1.7%)	0.296
Reintervention	4 (0.6%)	10 (0.9%)	0.585

# SUMMARY

## One Anastomosis Gastric Bypass versus Single Anastomosis Duodenoileostomy with Sleeve: Comparative Analysis of 30-day Outcomes using the MBSAQIP



Clapp B, Abi Mosleh K, Corbett J, Hage K, Moore RL, Billy H, Ponce J, Ghanem OM



# Thank You

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