



XXVII IFSO World Congress

Melbourne Convention and Exhibition Centre
3 - 6 September 2024

A wide-angle photograph of the Melbourne city skyline, showing various skyscrapers and buildings under a cloudy sky. In the foreground, there are green trees and a bridge over a river.

*Appropriate preop workup for RWG after
MBS with or without GERD*

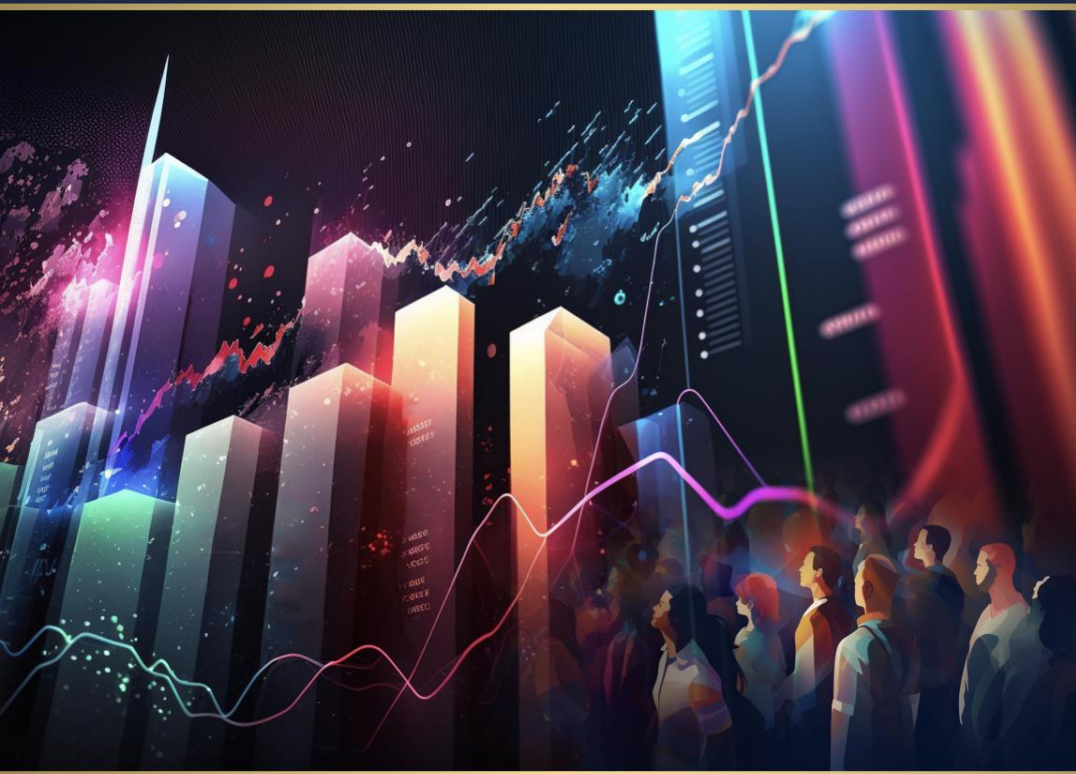
Lilian Kow OAM
President IFSO 2019-2022
Past President IFSO-APC
Past President ANZMOSS (OSSANZ)
Adelaide, South Australia

CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict of interest to report



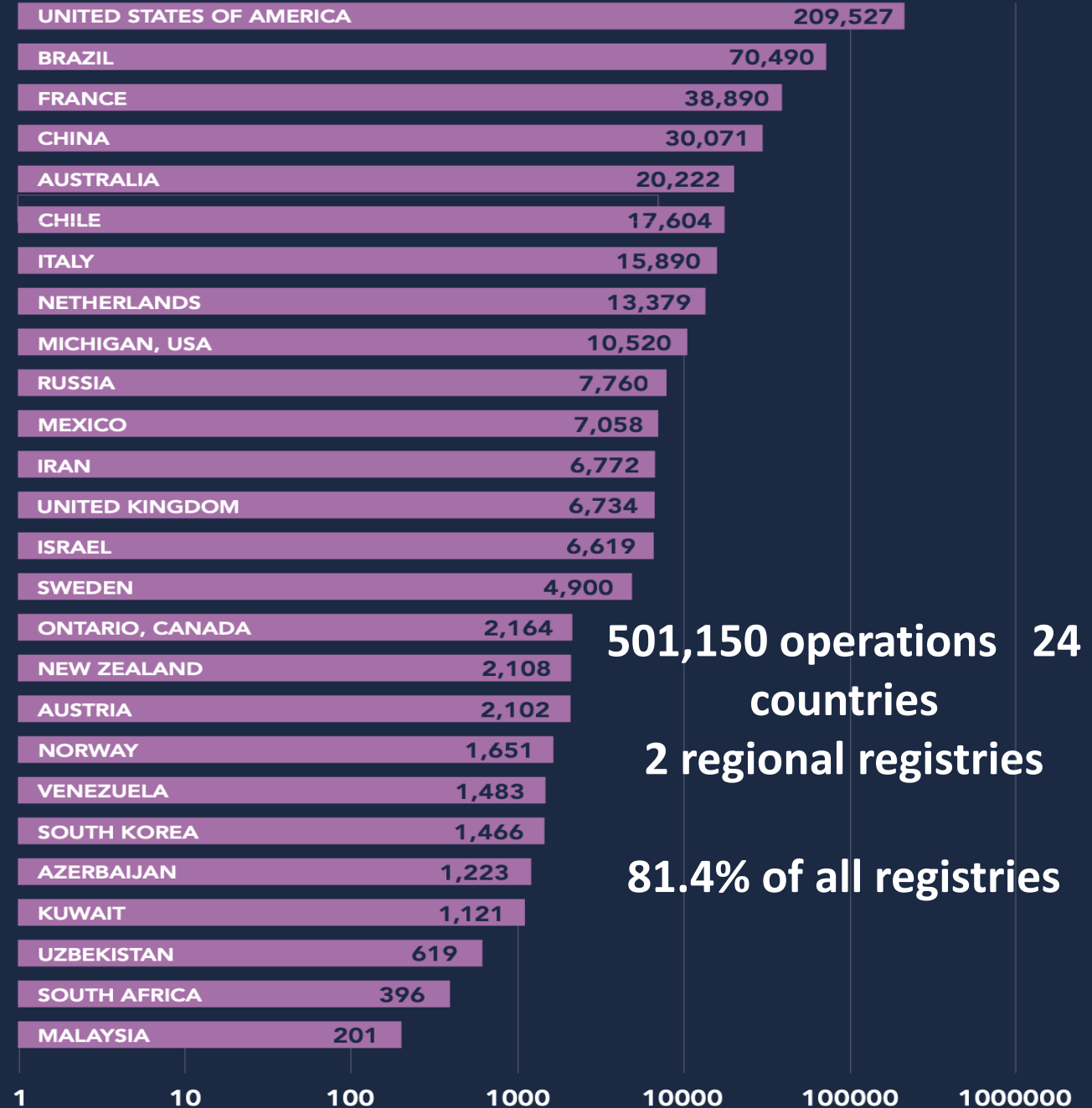
8TH GLOBAL REGISTRY REPORT



International Federation for Surgery for Obesity and Metabolic Disorders

2024

Contributors to the eighth report



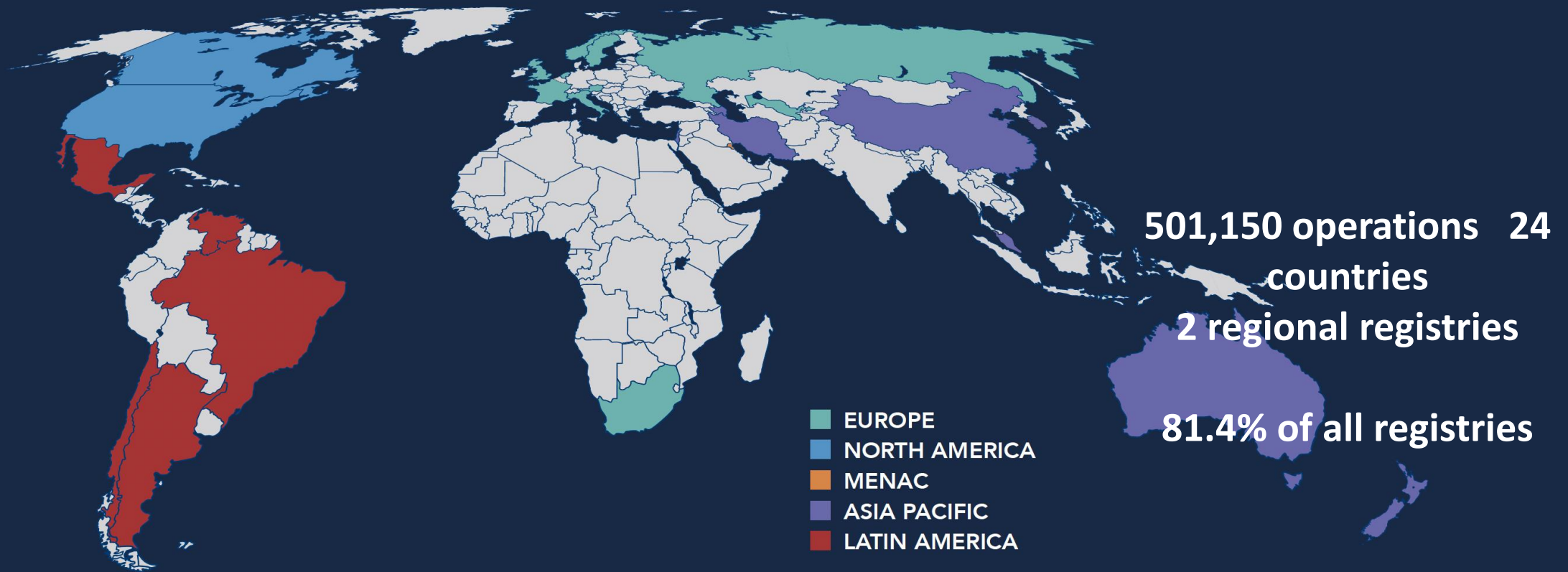


8TH GLOBAL REGISTRY REPORT

2024



Contributors to the eighth report

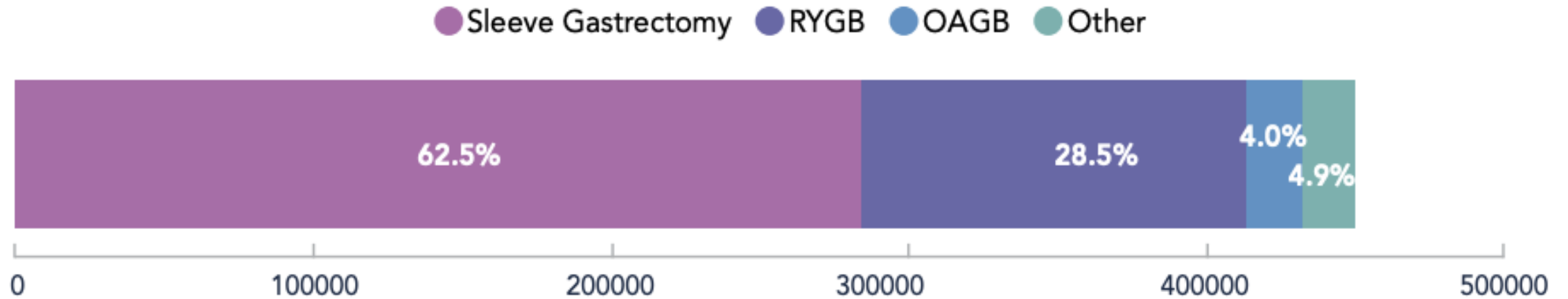


Geographic distribution of contributors to the eight IFSO global registry report - seen on the map above.

Each of the IFSO Chapters is represented. A list of key contacts can be found in Appendix 1.



Primary procedures



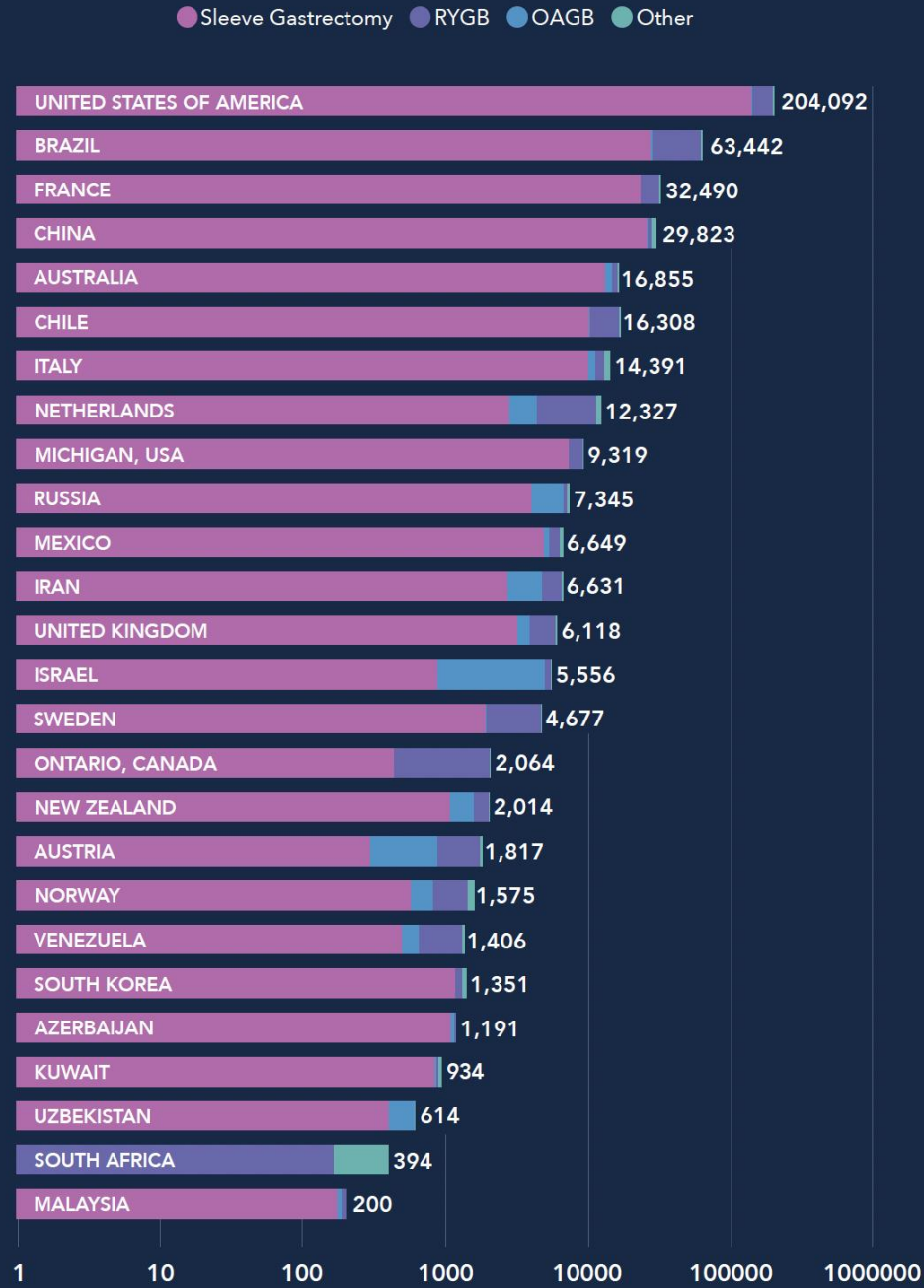
Primary procedure types (n=449,815).





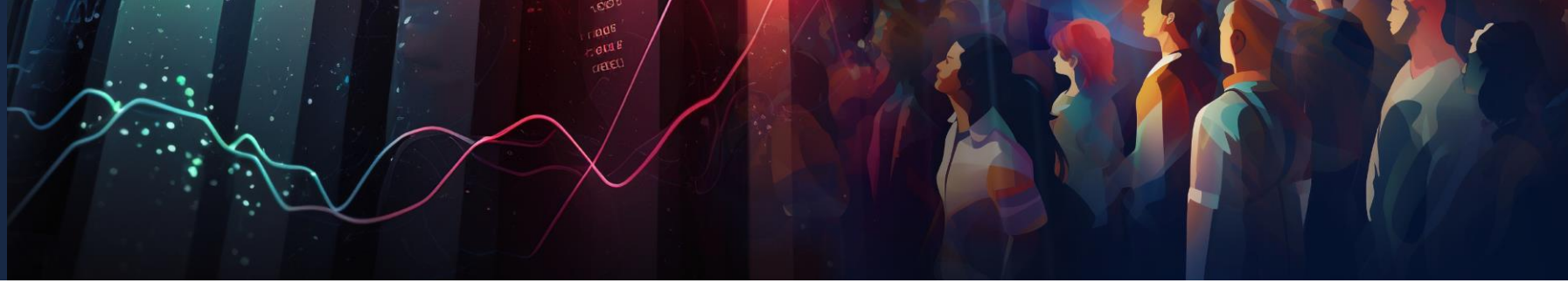
8TH GLOBAL REGISTRY REPORT 2024

Primary procedures

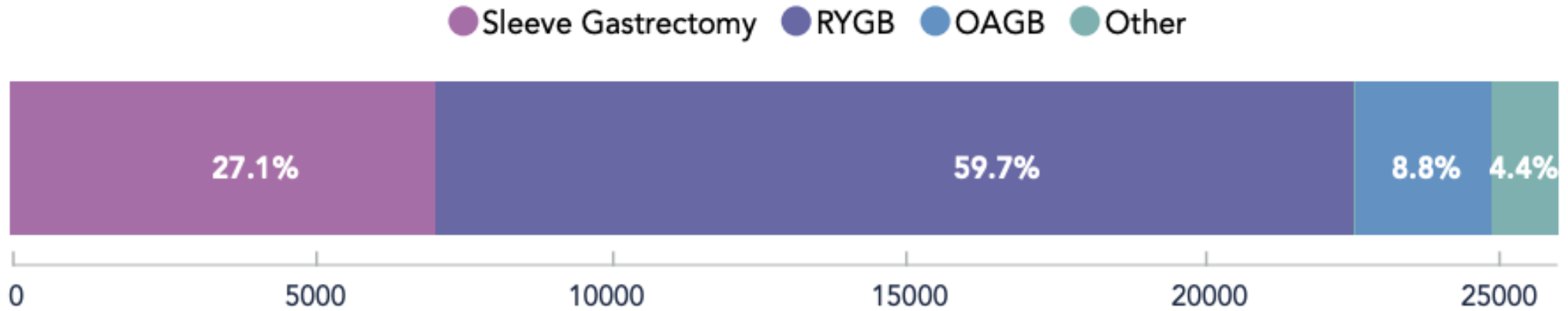


Types of primary procedures by country or region.





Revisional procedures



Revisional procedures (n= 25,938).

21,057 conversion procedures from USA excluded from analysis as no breakdown of procedure type provided



Revisional procedures

Revisional MB procedures

- defined as procedures to change one type of MBS → a different MBS
- **conversion** → revise index procedure → another MBS
 - required for- weight ↑
 - SE initial procedure or
 - recurrence metabolic disorders
- **corrective** → revise index to - change anatomy
 - address complications
 - reduction internal hernia
 - dilatation of a stricture

All acceptable reflecting the chronic nature of the disease of obesity.

16.5%

19.4%

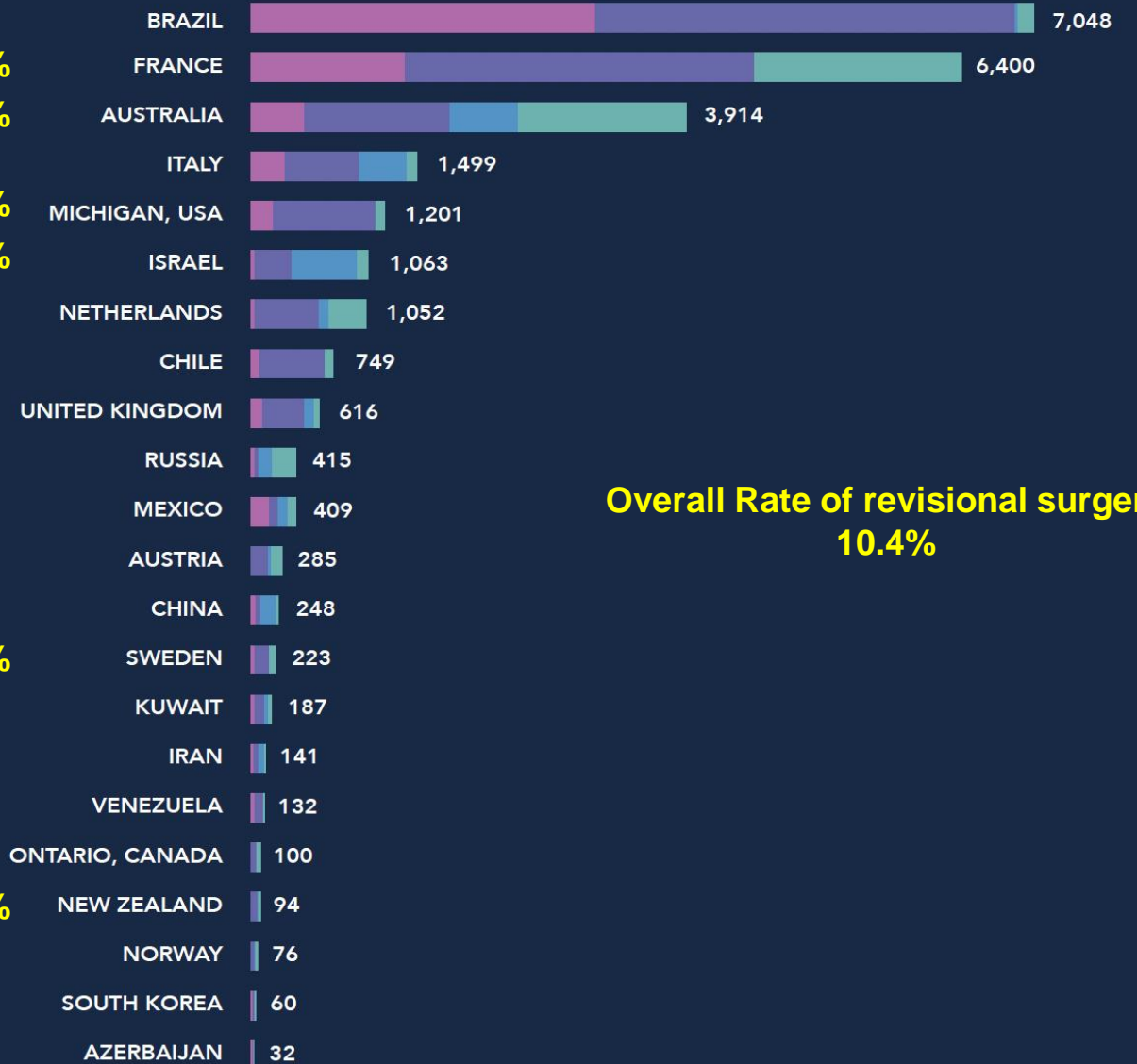
2.6%

16.1%

4.6%

4.5%

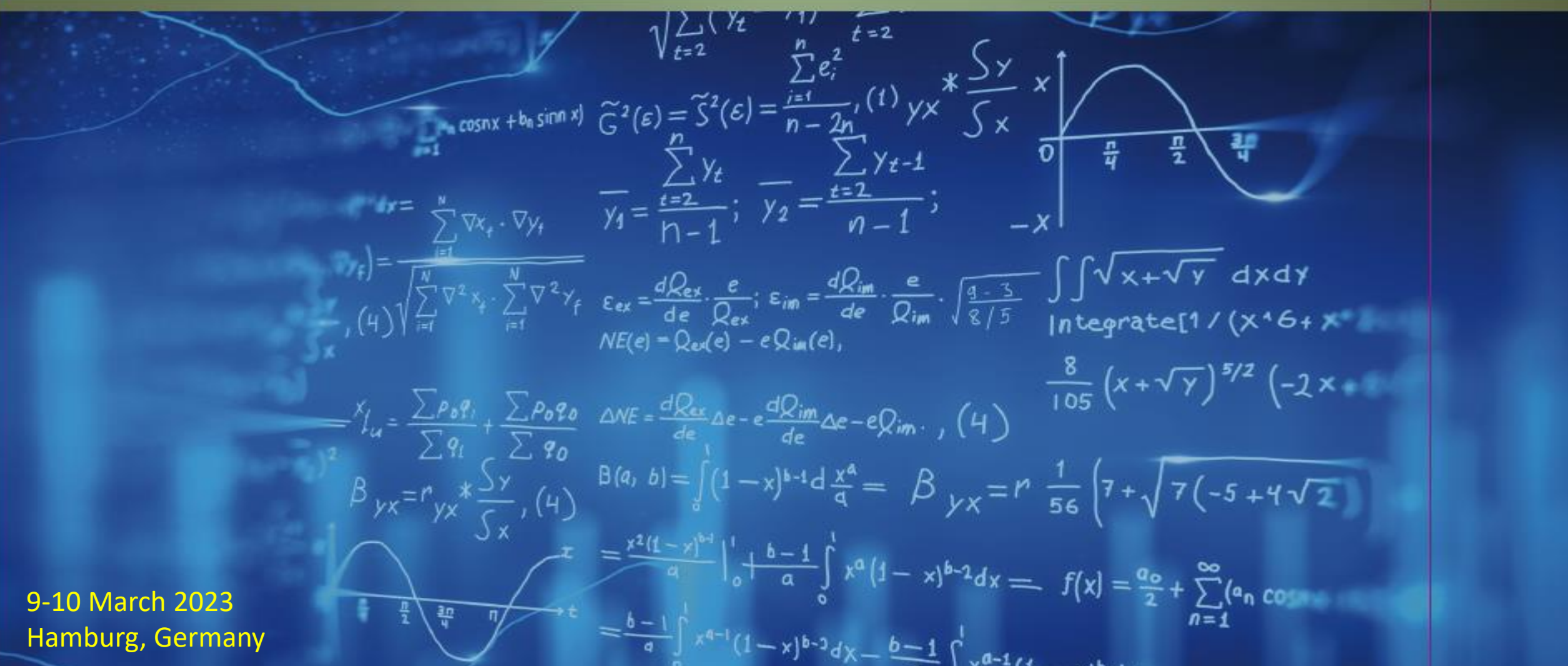
● Sleeve Gastrectomy ● RYGB ● OAGB ● Other



Overall Rate of revisional surgery
10.4%

CONSENSUS ON DEFINITIONS AND CLINICAL
PRACTICE GUIDELINES FOR PATIENTS CONSIDERING
METABOLIC-BARIATRIC SURGERY

9-10 March 2023
Hamburg, Germany



The background image shows a chalkboard filled with mathematical derivations and graphs. The formulas include:

- $\sum_{i=1}^n (a_i \cos nx + b_i \sin nx)$
- $\sqrt{\sum_{t=2}^n (y_t - \bar{y})^2}$
- $\tilde{G}^2(\varepsilon) = \tilde{S}^2(\varepsilon) = \frac{\sum_{i=1}^n e_i^2}{n-2}$
- $\bar{y}_1 = \frac{\sum_{t=2}^n y_t}{n-1}; \bar{y}_2 = \frac{\sum_{t=2}^n y_{t-1}}{n-1}$
- $\varepsilon_{ex} = \frac{dQ_{ex}}{de} \cdot e; \varepsilon_{im} = \frac{dQ_{im}}{de} \cdot e$
- $NE(e) = Q_{ex}(e) - eQ_{im}(e)$
- $\Delta NE = \frac{dQ_{ex}}{de} \Delta e - e \frac{dQ_{im}}{de} \Delta e - eQ_{im}$
- $B(a, b) = \int_0^1 (1-x)^{b-1} d\frac{x^a}{a} = \beta_{yx} = \frac{1}{56} (7 + \sqrt{7(-5 + 4\sqrt{2})})$
- $f(x) = \frac{a_0}{2} + \sum_{n=1}^{\infty} (a_n \cos nx + b_n \sin nx)$

There are also two graphs: one showing a sine wave with x-axis labels $0, \frac{\pi}{4}, \frac{\pi}{2}, \frac{3\pi}{4}$ and y-axis label $-x$; and another showing a curve with x-axis labels $\frac{\pi}{2}, \pi, \frac{3\pi}{2}$ and y-axis label x .



CONSENSUS ON DEFINITIONS AND CLINICAL
PRACTICE GUIDELINES FOR PATIENTS CONSIDERING
METABOLIC-BARIATRIC SURGERY

REPORTING STANDARDS : RECURRENT WEIGHT GAIN

Percentage
Consensus

In general, a suboptimal initial clinical response to MBS is demonstrated either by a total body weight or BMI loss of less than 20% OR by an inadequate improvement in an obesity complication that was a significant indication for surgery.

100%

In general, a late post-operative clinical deterioration after MBS is demonstrated either by recurrent weight gain of more than 30% of the initial surgical weight loss OR by worsening of an obesity complication that was a significant indication for surgery.

85%

Evidence regarding therapeutic weight loss for complications of obesity

| Obesity complication | Weight loss for substantial improvement (%) | Benefits increase with increasing weight loss |
|-----------------------------|---|---|
| Type 2 diabetes | 5-15 | ✓ |
| Hypertension | 15 | ✓ |
| Dyslipidemia | 10-15 | ✓ |
| Fatty liver disease (NAFLD) | 10 | ✓ |
| Sleep apnea | 10 | ✓ |
| Osteoarthritis | 5-15 | ✓ |
| Stress incontinence | 5-10 | ✓ |
| Gastroesophageal reflux | 10-15 | ✓ |
| Polycystic ovary syndrome | 10-15 | ✓ |

Appropriate preop workup for RWG after MBS with or without GERD

Assess Index procedure

Nutritional studies
Psychological evaluation
Endoscopy
Contrast study

- **endoscopy**
 - Volume of LSG or Proximal pouch of GB
 - Esophagitis
 - Hiatus Hernia +/- reflux : LSG → RYGB
 - BE - ↑ Prevalence BE after LSG - ↑ year by year. Not ↑ after RYGB (level 1:Qumseya et al.)
 - Assess anastomosis (Gastro-Jejunostomy/ Duo-Ileal)
- **H Pylori** must be evaluated before any MBS with gastric exclusion
 - HP may → gastric Ca, atrophy, ulceration or GIST (level 1: Wang et al)
 - HP should be eradicated before MBS to ↓ the risk of gastric Ca
 - HP protects however against esophageal adenoCa (level 1:Xie et al)

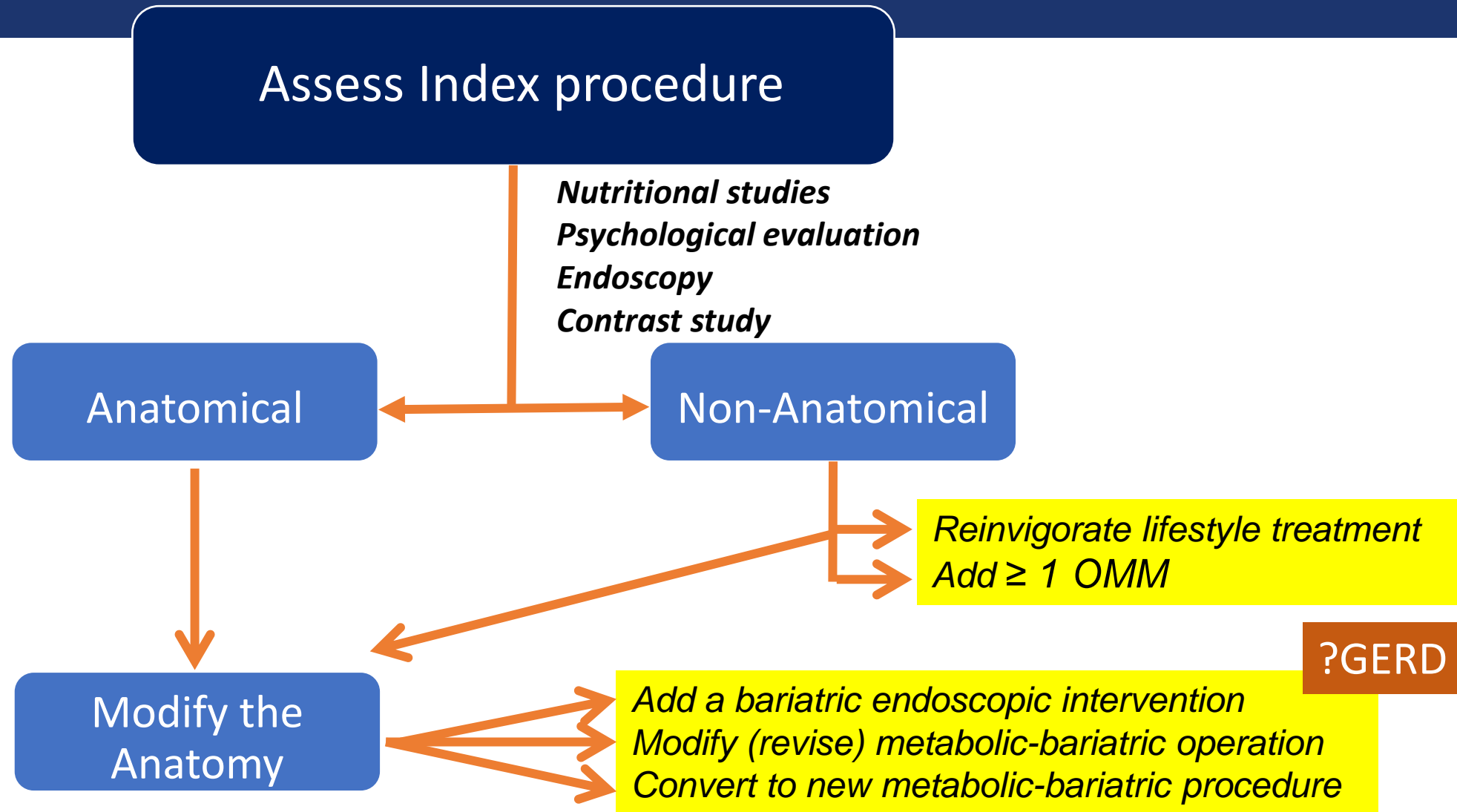
Wang et al Obesity surgery. 2021;31:337-42

Qumseya et al Obesity surgery. 2022;32:3513-22

Lewis et al SOARD 2021;17:72-80

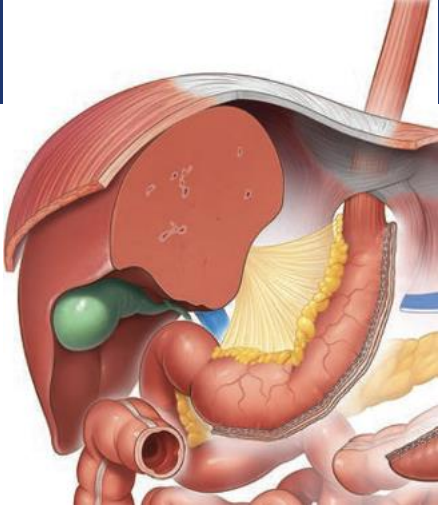
Xie et al World J Gastroenterology. 2013;19:6098-107

Appropriate preop workup for RWG after MBS with or without GERD



Each option has different benefit, risk and cost characteristics

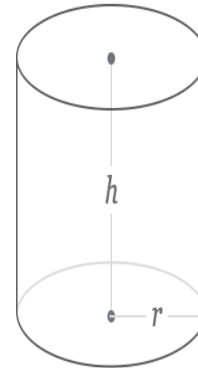
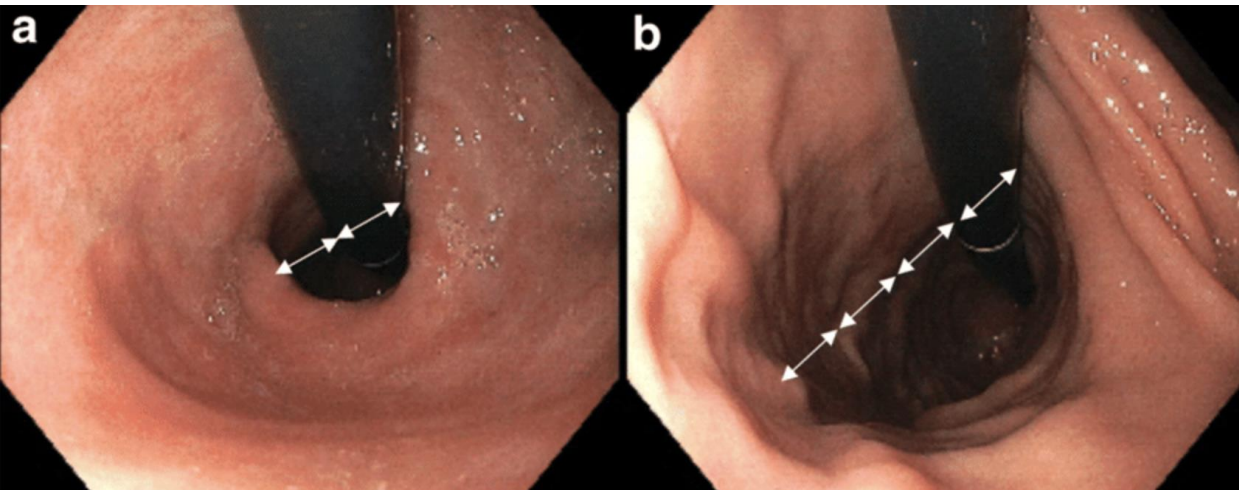
Appropriate preop workup for RWG after MBS with or without GERD



Assess Index procedure: SG

Volume
Sleeved Stomach

3D gastric CT fizzogram

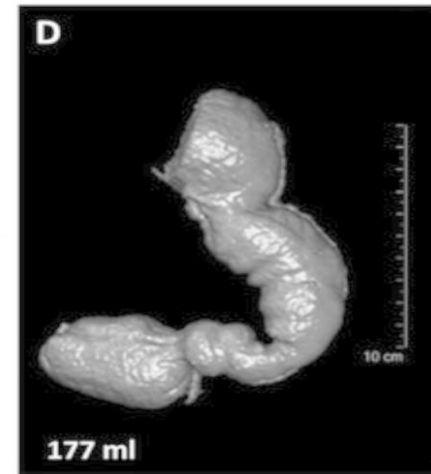
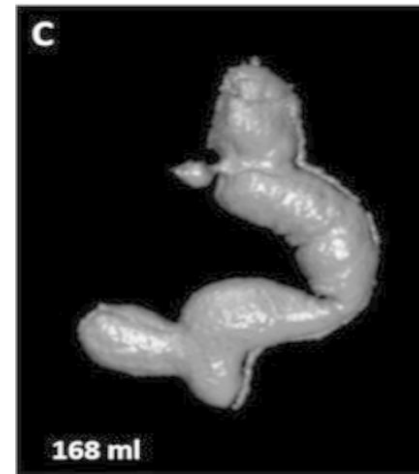
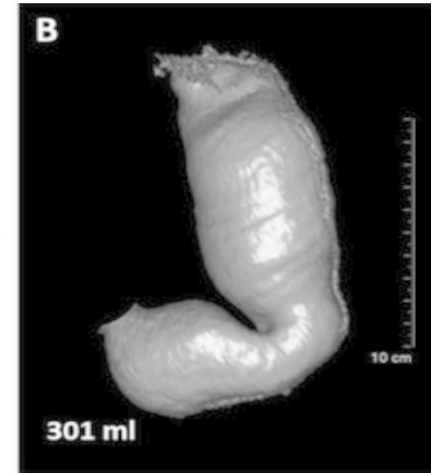
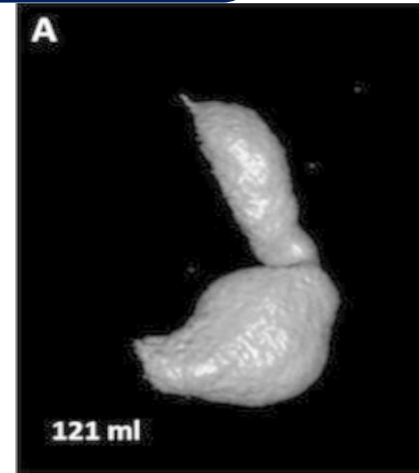


endoscopy

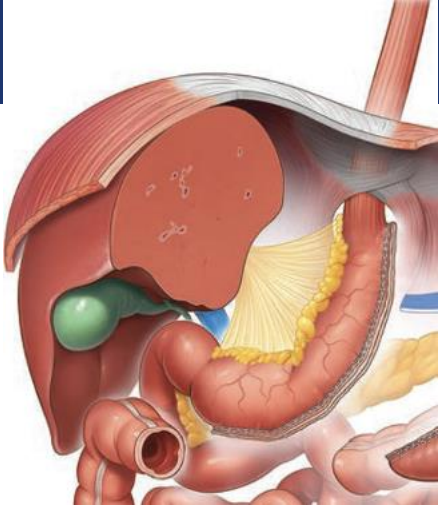
$$V = \pi \left(\frac{d}{2}\right)^2 h = \pi \cdot \left(\frac{2.5}{2}\right)^2 \cdot 30 \approx 147.26216$$

Lim et al Obesity Surgery (2019) 29:207–214

Disse et al: Obesity Surgery (2017) 27(1)



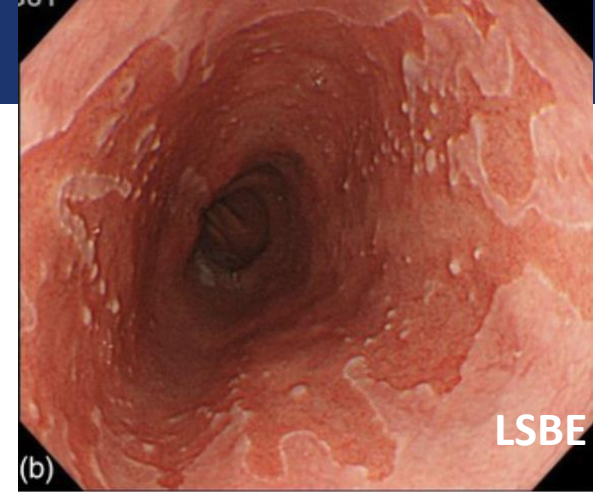
Appropriate preop workup for RWG after MBS with or without GERD



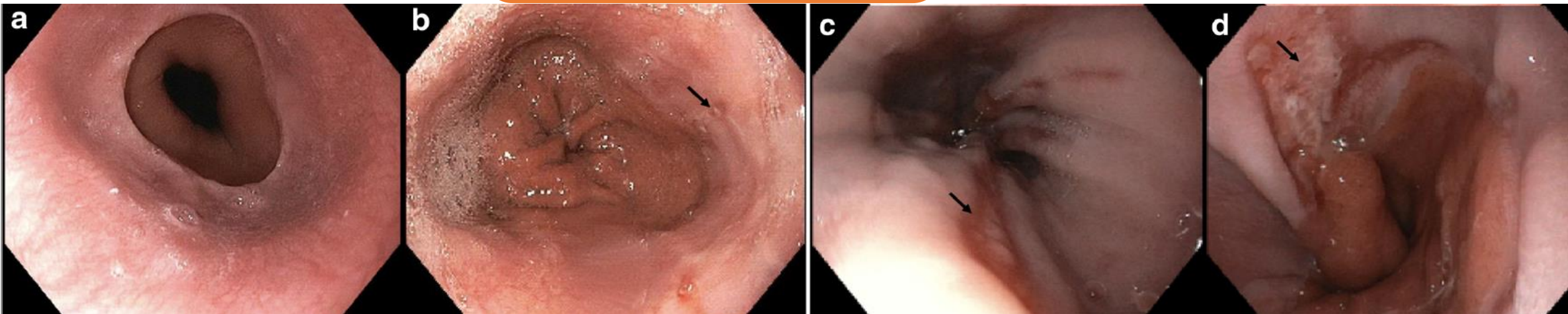
Assess Index procedure: SG

Endoscopy Sleeved Stomach

- Volume
- Esophagitis
- BE



DEN Open. 2022;2:e94 <https://doi.org/10.1002/deo2.94>



A Hiatal hernia

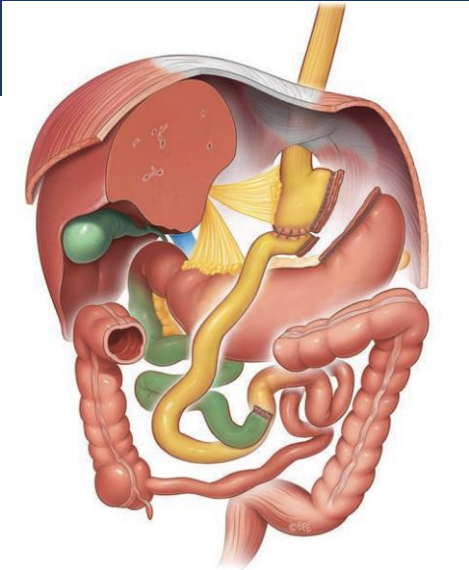
B grade A esophagitis

C grade B esophagitis

D grade C esophagitis

Los Angeles (LA) classification of erosive esophagitis.

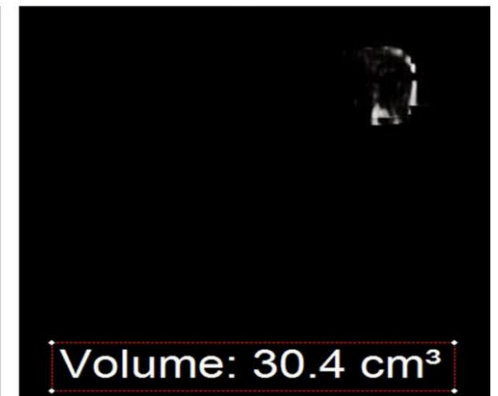
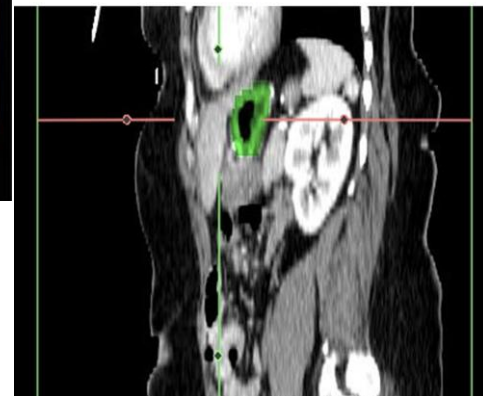
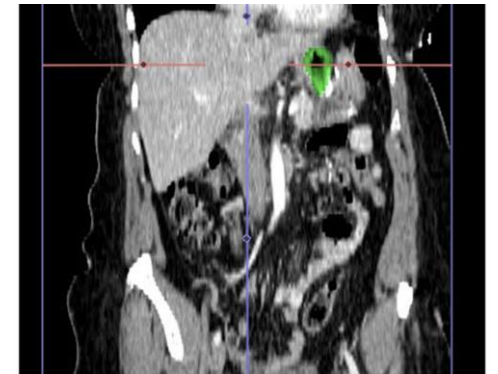
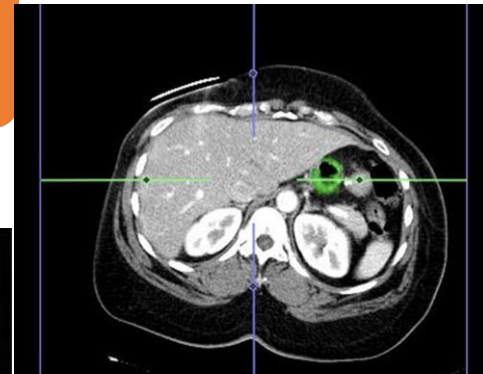
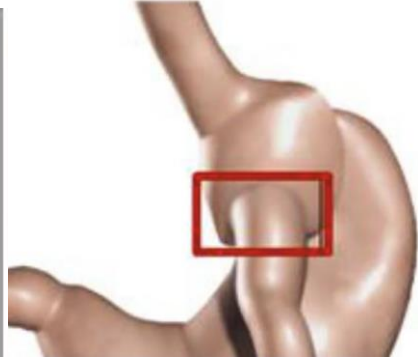
Appropriate preop workup for RWG after MBS with or without GERD



Assess Index procedure:RYGB

Volume gastric pouch
Diameter Gastro-Jejunostomy Stoma

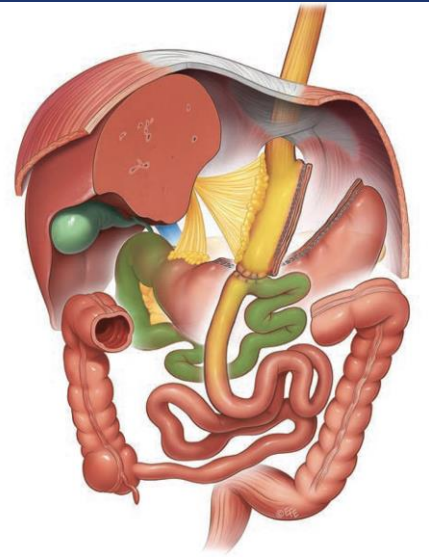
CT volumetric analysis



endoscopy

Volume: 30.4 cm³

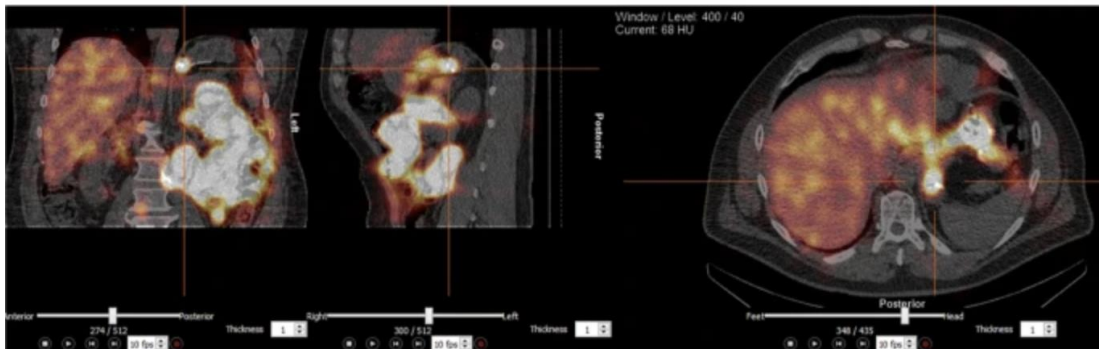
Appropriate preop workup for RWG after MBS with or without GERD



Assess Index procedure: OAGB

6 RCTs/Prosp/retrosp cohort studies n=134

- Bile Reflux 47% asso RWG
- Inadequate Weight loss 8%
- Malnutrition 31 %



SPECT-CT scan at the end of bile reflux scintigraphy of a representative patient. Bile tracer activity in the gastric pouch and esophagus are shown

endoscopy

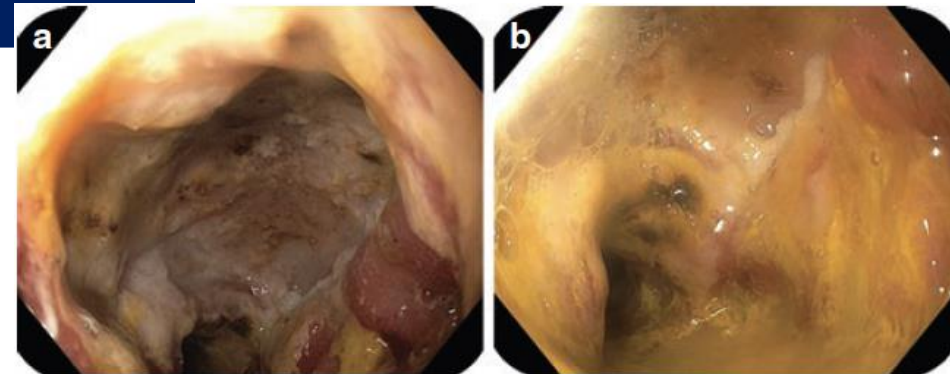


Fig. 42.7 (a, b) Bile reflux in a patient who underwent OAGB one year prior, complaining of severe abdominal pain, bilious vomiting and poor appetite. (a) Extensive and deep GJ ulcer. (b) Bile noted in the gastric pouch and esophagus



Sargsyan N et al. Outcomes of OAGB Conversion to RYGB for Severe Obesity: A Systematic Review and Meta-analysis *Obesity Surgery* 2024 (34): 976–984.

Del Gobo & Kroh M. The SAGES Manual of Physiologic Evaluation of Foregut Diseases: Reflux After RYGB and OAGB. P573-590

Saarinen T et al Bile Reflux is a Common Finding in the Gastric Pouch After One Anastomosis Gastric Bypass Obesity Surgery 32020(30) 875–881,

Options for RWG after MBS with or without GERD

LAGB (level 3 and 4)

- conversion to SG
- conversion to RYGB
- conversion to OAGB
- conversion to BPD/DS or SADI-s

Sleeve Gastrectomy (level 3 and 4)

- conversion to RYGB
- conversion to OAGB
- conversion to BPD/DS or SADI-s
- Endoscopic gastroplasty/TORe

RYGB (level 4 and 5)

- Lengthening of BP limb
- conversion to BPD/DS?
- Endoscopic gastroplasty/TORe

VBG (level 4 and 5)

- conversion to RYGB
- conversion to BPD/DS
(high complication rate)

SADI-S (level 4)

- conversion to BPD/DS

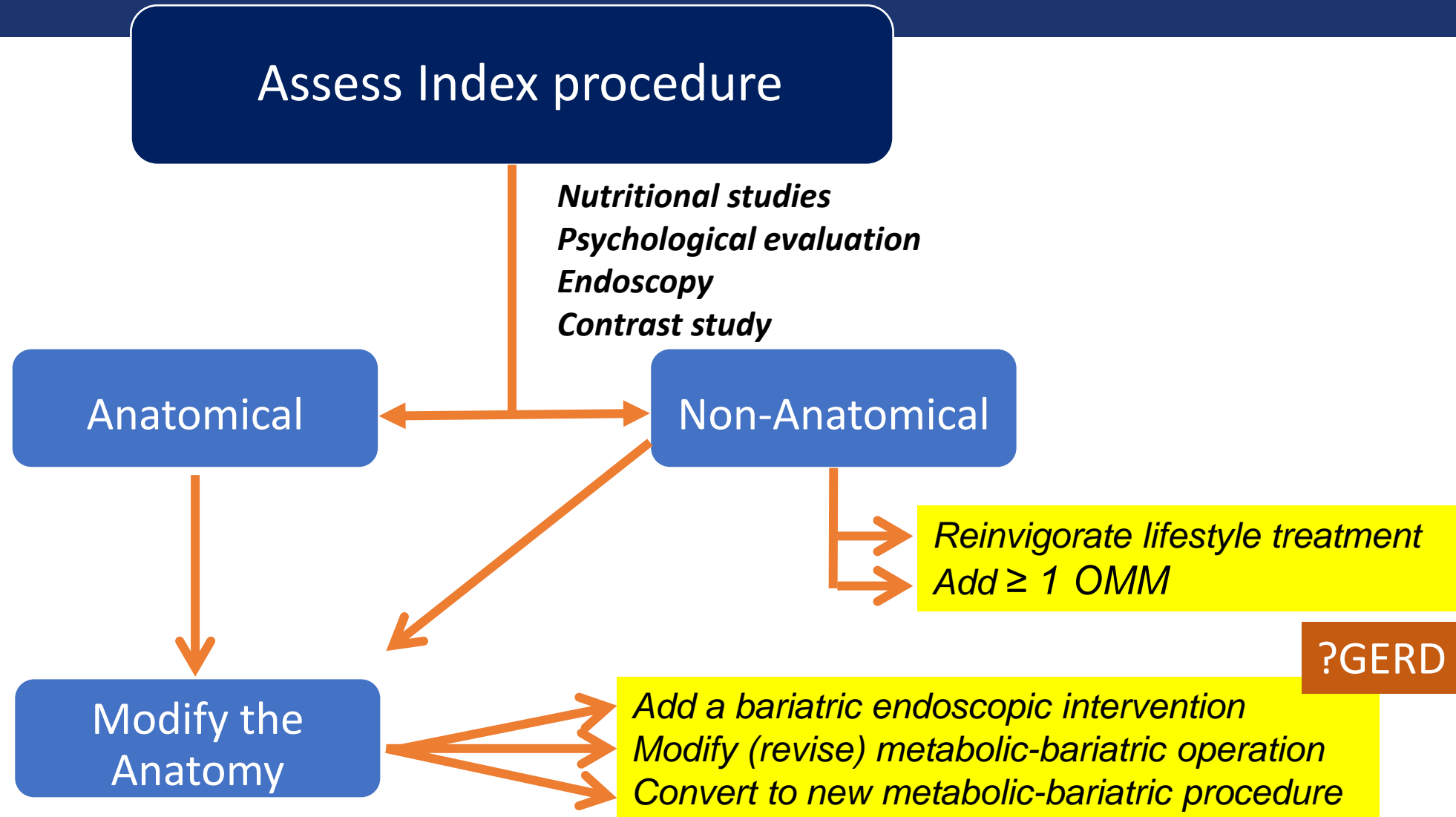
OAGB (level 4 and 5)

- Conversion to RYGB
- conversion to BPD/DS?
- Endoscopic gastroplasty/TORe

BPD/DS (level 5)

- conversion to

Appropriate preop workup for RWG after MBS with or without GERD



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A wide-angle photograph of the Melbourne city skyline. In the foreground, the Yarra River flows past a stone bridge with decorative arches. The middle ground is filled with a mix of historic and modern architecture, including the prominent spire of St. Paul's Cathedral. The background is dominated by several tall, modern glass skyscrapers under a clear sky. A white rectangular box with the text 'Thank you' is centered over the middle of the image.

Thank you