



# KELVIN HIGA LIFE MEMBER 2024



#### Professor Kelvin Higa

#### President of IFSO in 2016-2017.

President of ASMBS, the California chapter of the ASMBS and the ASMBS Foundation.

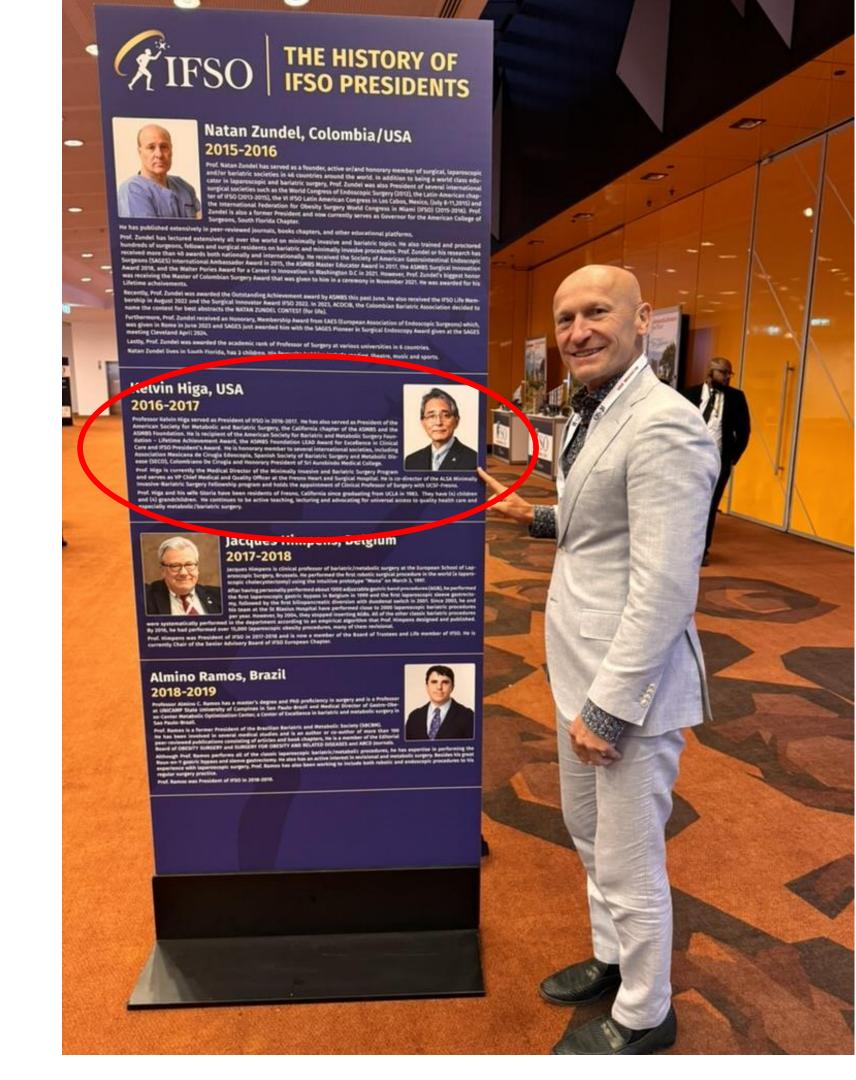
Recipient of the ASMBS Foundation - Lifetime Achievement Award, the ASMBS Foundation LEAD Award for Excellence in Clinical Care and IFSO President's Award.

Honorary member to several international societies, including Association Mexicana de Cirugia Edoscopia, Spanish Society of Bariatric Surgery and Metabolic Disease (SECO), Colombiano De Cirugia and Honorary President of Sri Aurobindo Medical College.

Medical Director of the Minimally Invasive and Bariatric Surgery Program and serves as VP Chief Medical and Quality Officer at the Fresno Heart and Surgical Hospital.

He is co-director of the ALSA Minimally Invasive-Bariatric Surgery Fellowship program and holds the appointment of Clinical Professor of Surgery with UCSF-Fresno.

Prof. Higa and his wife Gloria have been residents of Fresno, California since graduating from UCLA in 1983. They have (4) children and (4) grandchildren. He continues to be active teaching, lecturing and advocating for universal access to quality health care and especially metabolic/bariatric surgery.









# JOHN DIXON

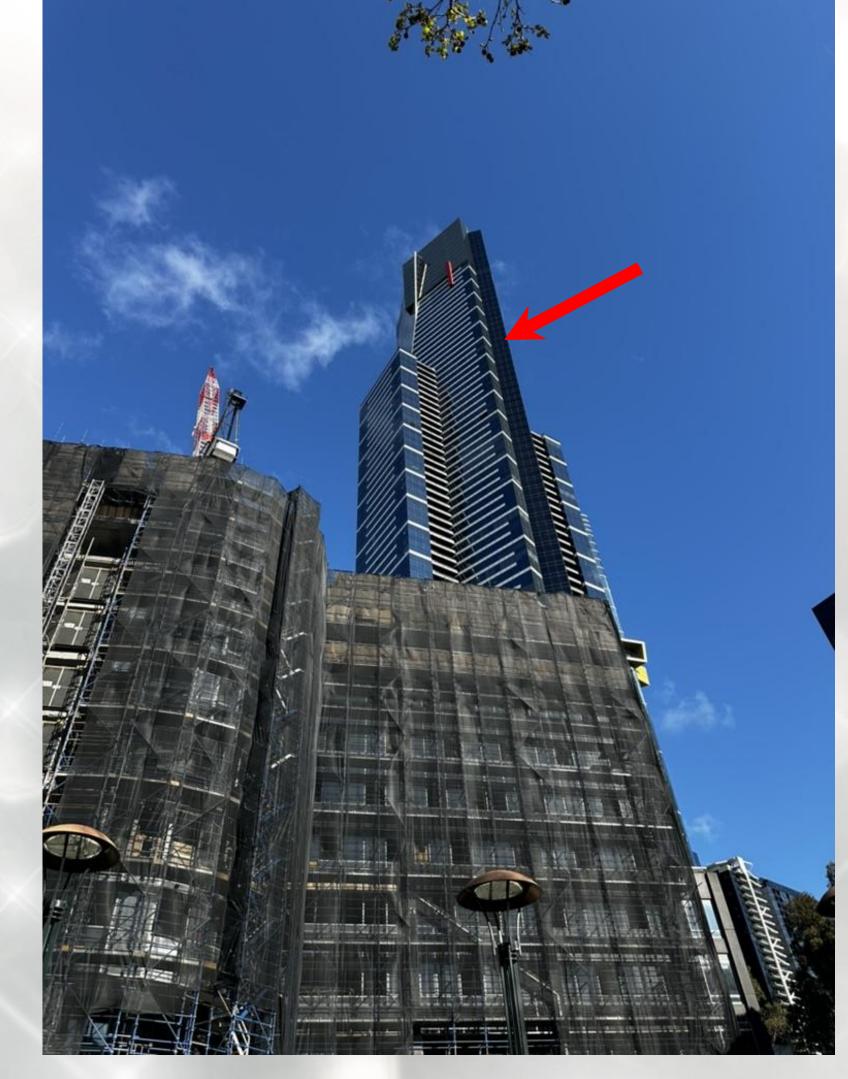
HONORARY MEMBER 2024

Dr John Dixon is one of the **leading clinical researchers into obesity**, creating impactful studies regarding the risks and complications of obesity in conjunction with weight loss treatments and their effect on our health.

Beginning his career as a country General Practitioner, Dr John Dixon became inspired to research and investigate the issue of obesity and the impact it has in Australia and globally.

The experienced clinician has produced **over 300 original research and review publications** in the obesity and weight gain area of health and is well-versed and experienced with all effective weight management therapies currently available.

Focused on seeing findings translated into clinical practice and on patient advocacy for patients with obesity, John is involved in a wide range of organizations both in Australia and internationally.









# WENDY BROWN

**SCIENTIFIC EXCELLENCE AWARD 2024** 

#### Scientific Excellence Award

Professor Wendy Brown was the first woman to be appointed Chair of the Monash University Department of Surgery in 2015.

She is also the Director of the Centre for Obesity Research and Education (CORE) and Clinical Lead for the National Bariatric Surgery Registry and the Victorian Upper GI Cancer Registry.

Professor Brown's areas of expertise include bariatric and upper gastrointestinal surgery, including cancer and reflux disease. Her research focuses on optimally managing the chronic disease of obesity and measuring the effects of weight loss on health, quality of life and survival.

Wendy contributed as a leader to the establishment and success of the IFSO Global registry

She contributed to numerous IFSO position statements







# SILVIA LEITE INTEGRATED HEALTH EXCELLENCE AWARD 2024





Johnson Johnson

MEDTECH

# Sandeep Makkar J&J MedTech

**CORPORATE PARTNER AWARD 2024** 





## LUIGI ANGRISANI

**WORLD CONGRESS PRESIDENT 2023** 





# CUNCHUAN WANG

APC CONGRESS PRESIDENT 2023





# DICK MANRIQUE

LAC CONGRESS PRESIDENT
2024





# GERHARD PRAGER

EC CONGRESS PRESIDENT
2024





# MORITZ FELSENREICH

EC CONGRESS 2024



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Sarfraz Khokhar, John Holden: Rasimo Systems, Rockford College of Medicine, University of Illinois, USA Sarfraz Khokhar Khokhar@rasimo.com





#### CONFLICT OF INTEREST DISCLOSURE

[] I have no potential conflict of interest to report

[X ] I have the following potential conflict(s) of interest to report:

Type of affiliation / financial interest: Research Scientist at Rasimo Systems



**Presenting** 

**Kevin Lee** 

**An Al Program** 



Sarfraz Khokhar, John Holden: Rasimo Systems, Rockford College of Medicine, University of Illinois, USA





Sarfraz Khokhar, John Holden: Rasimo Systems, Rockford College of Medicine, University of Illinois, USA

#### Background: Key points

#### **Al-based Digital Platform**

individualized approaches to weight loss and maintenance through lifestyle intervention.



#### **Weight Maintenance**

Challenge regardless of the weight loss methodology.

#### **Psychosocial Conditions**

Motivation, self efficacy, cognitive framing, accountability, social support,



Energy intake ≤ Energy expenditure

Desirable resetting body weight

IFSO MELBOURNE 2024



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## Objective

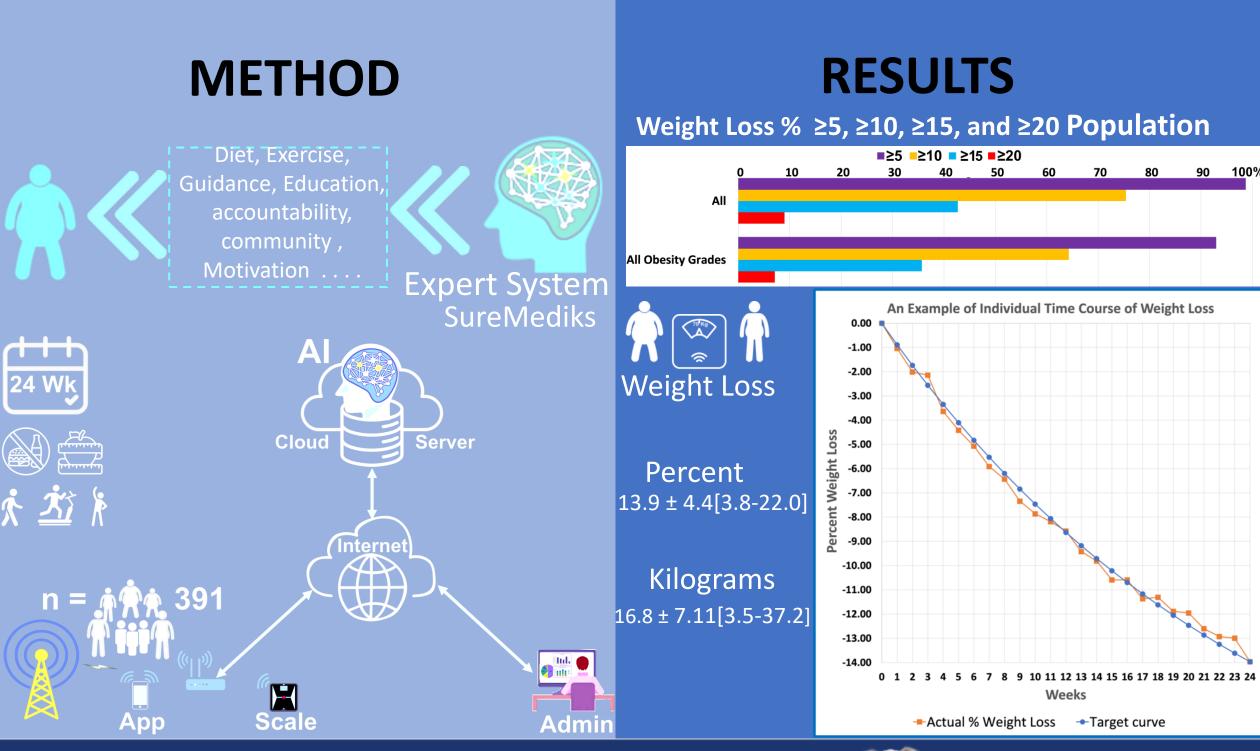
To validate and quantify the efficacy of an AI-based lifestyle intervention digital platform for nonmedical weight loss maintenance implementing multidisciplinary approach.

- > This 24-week long study presented now, is the second phase focusing on weight maintenance.
- First phase focused on weight loss, achieved mean weight loss of 13.9% of initial weight for n =391. Results published on April 4, 2024 in Obesity Surgery Journal.



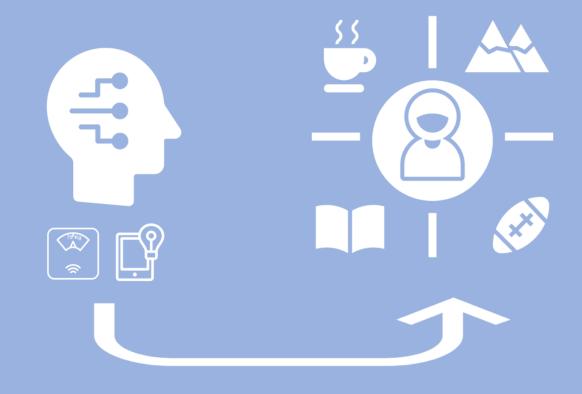
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#### Weight loss with an AI-powered digital platform for lifestyle intervention



#### CONCLUSION

Al-assisted lifestyle intervention with user friendly personalized features has extensive benefit for obesity management





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#### Method

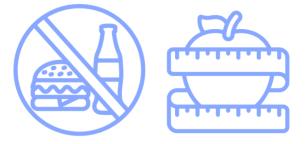
- **n=357** (58.5% female, 41.5% male) : Control to treated ratio 1:2
- $\mu_{Age}$ = 43.56 ,  $\sigma_{Age}$  =12.60 years, and range of 21-71 years
- 6 groups

#### Participants baseline weight (kg) and BMI

	Overweight 25 < BMI< 30		Obesity I 30 ≤ BMI < 35		Obesity II Obesity 35 ≤ BMI			/ III Obes < 50 50 ≤ B		ity IV MI < 60		Obesity V 60 ≤ BMI ≤ 70		Overall 25 < BMI ≤ 70	
	Treated	Control	Treated	Control	Treated	Control	Treated	Control	Treated	Control	Treated	Control	Treated	Control	
No. of participants	21	10	33	17	31	16	72	37	43	22	37	18	237	120	
Start weight mean, $\pmb{\mu}_{wt}$	82.2	78.6	87.6	86.1	102.4	100.2	120.4	121.8	146.6	141.4	159.1	162.0	116.4	115	
Start weight SD, $oldsymbol{\sigma}_{wt}$	10.1	10.7	10.5	10.4	13.2	9.3	17.4	17.7	18.3	17.5	12.1	7.5	13.6	73.1	
Start BMI mean, $oldsymbol{\mu}_{BMI}$	27.9	28	32.6	32.6	37.3	37.9	44.9	44.9	54.4	54.4	64.5	64.6	43.6	43.7	
Start BMI SD, $oldsymbol{\sigma}_{BMI}$	1.5	1.6	1.5	1.6	1.6	1.5	2.8	2.9	2.8	3.0	2.9	2.8	2.2	2.2	

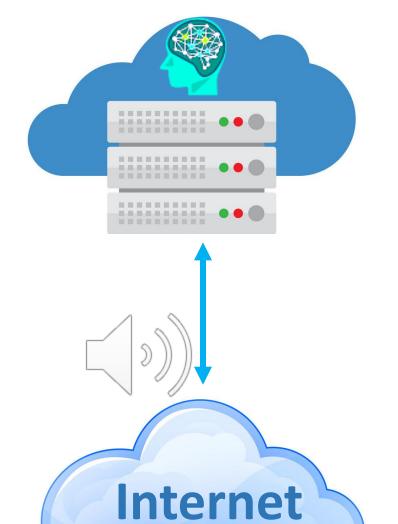








Calories intake based on Effective Metabolic rate and weight maintenance performance

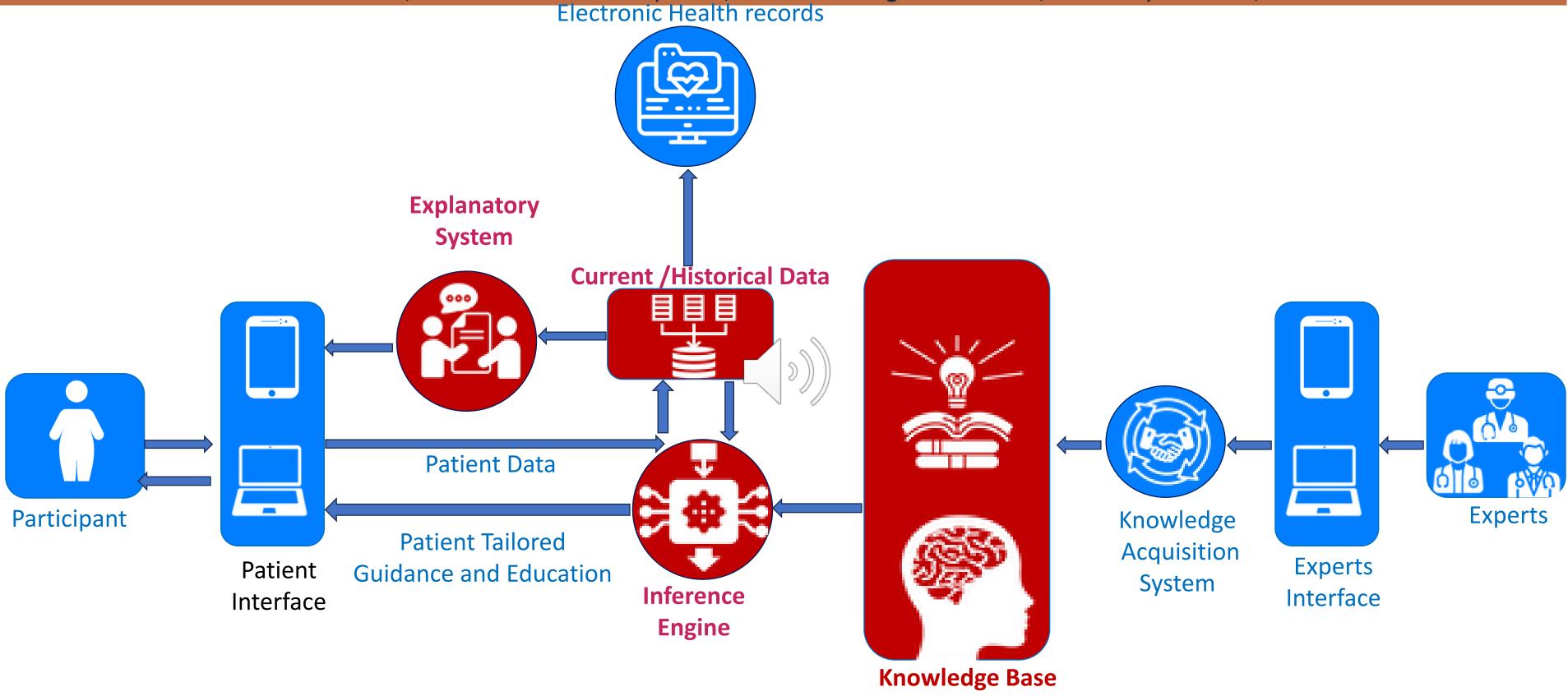








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#### **Implied Psychosocial Coaching**



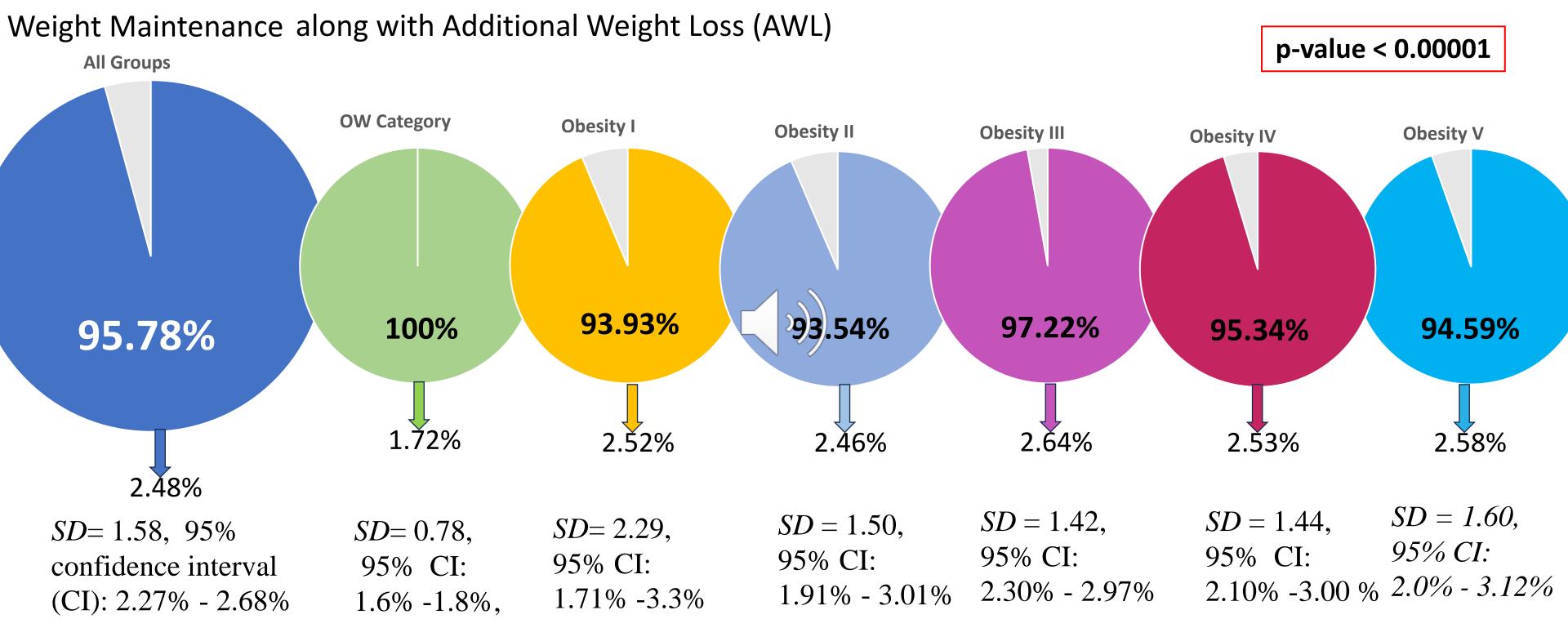
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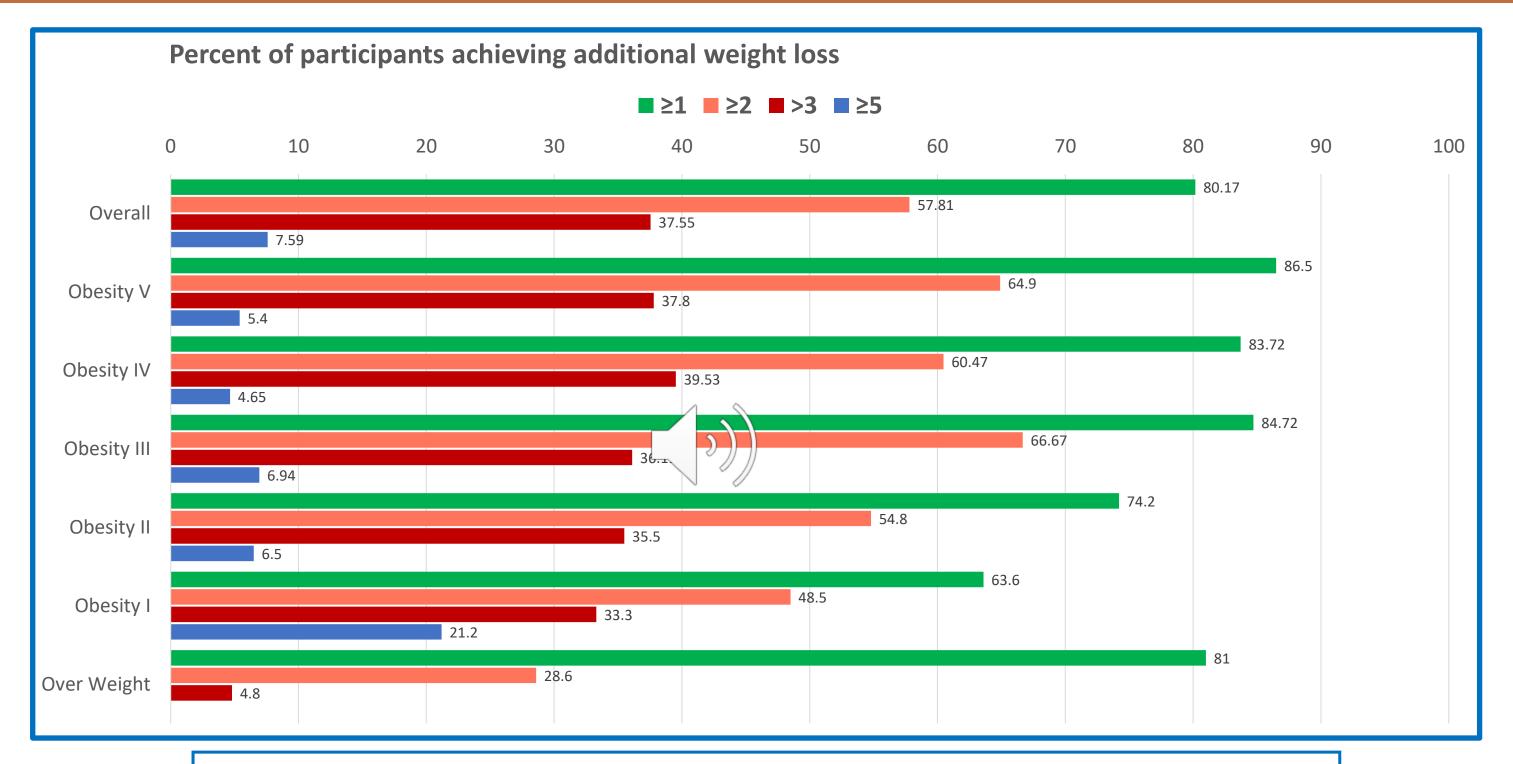
#### Results





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Results(2)



From control population (n= 120) 3% participants maintained their weight



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Results(4)

#### Features Correlation Matrix with p-values

	VVL%	Gender	Age	Bivii	Accountability circle members	Participation in gamification
WL%	1					
Gender	-0.0348242 0.59373007	1				
Age	-0.024826 0.70377485	0.02957402 0.65056446	1			
BMI	0.01118249 0.86402928	-0.0395937 0.54414829	-0.0671671 0.30314117		]	
Accountability circle size	0.78257761 2.836E-50	-0.0003332	-0.0640225	0.13149389	]	
Participation in gamification	0.66636133	-0.0258365	-0.0154766	0.1920321	0.72163621	
Strong corr	elation with	1 large sig	nificance	0.00299411	2.09443E-39 Signifi	cant correlation

AWL%  $\leftarrow \rightarrow$  Accountability, Gamification Accountability  $\leftarrow \rightarrow$  Gamification

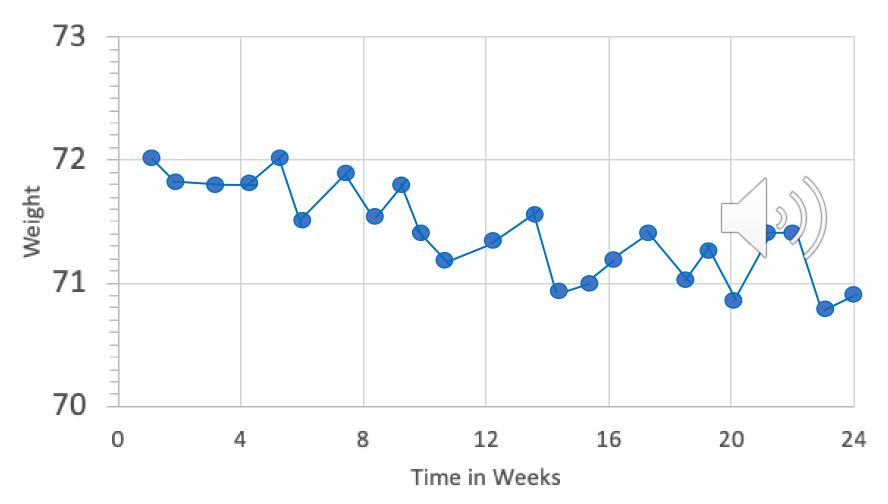
BMI ←→ Accountability, Gamification



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#### Results (5)



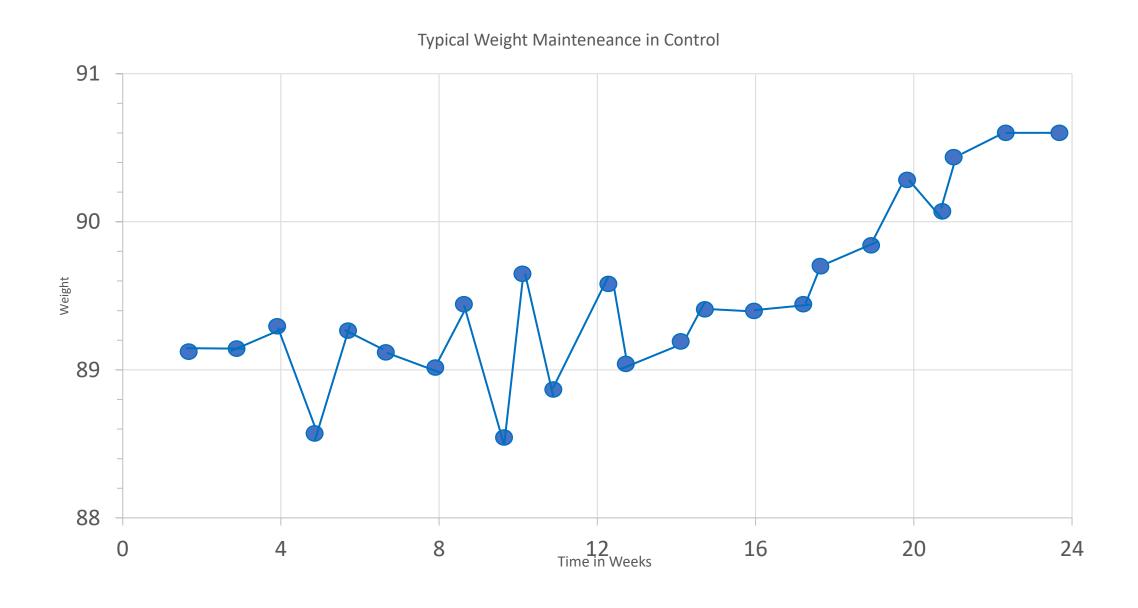


AI-based digital features brought down the rising weight gain trends



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#### Results (11)



- ➤ Phase 1 study average weight loss of this control population =13.7%
- ➤ Phase 2 study average weight gain of this control population = 5.35%

From control population (n= 120) 3% participants maintained their weight



Sarfraz Khokhar, John Holden: Rasimo Systems, Rockford College of Medicine, University of Illinois, USA

### Conclusion and Future Work

#### Conclusion

• Using an AI-assisted lifestyle intervention, with user-friendly and personalized features, people with all levels of obesity can maintain their weight loss. This type of intervention not only can help maintain the weight loss but also can contribute to additional eight drop.

#### Future Work

- We are planning to use this very AI-based digital system platform, to run a field study to test, and validate, its efficacy in complementing GLP-1 weight loss and weight maintenance.
- Another future work in planning is to test the efficacy of the platform post-metabolic surgery, exclusively.



#### AI-based Weight Maintenance Digital Platform For Bariatric Patient: A Multidisciplinary Approach

Sarfraz Khokhar, John Holden: Rasimo Systems, Rockford College of Medicine, University of Illinois, USA







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## Validation of the SF-BARI Score

With registry data from Northern-Europe

F. Bruinsma, S. Hurme, R. Liem, S. Grönroos, S. Nienhuijs, V. Vage, J. Ottosson, E. Stenberg, M. Bueter, R. Peterli, P. Salminen

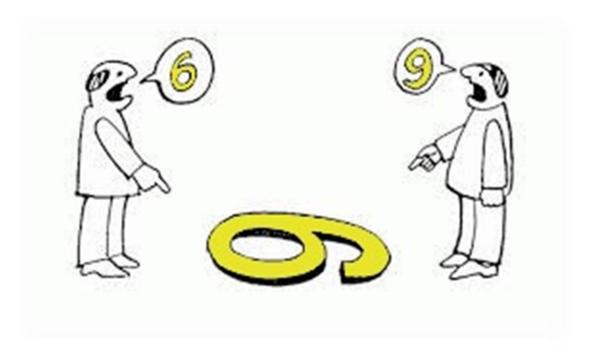
#### **Categorization of score**

Response	SF-BARI Score	SF-BARI Score QOL
Excellent	≥ 135	≥ 150
Very good	110 to <135	125 to <150
Good	70 to < 110	75 to <125
Fair	35 to < 70	40 to <75
Suboptimal	< 35	< 40





#### No conflicts of interest

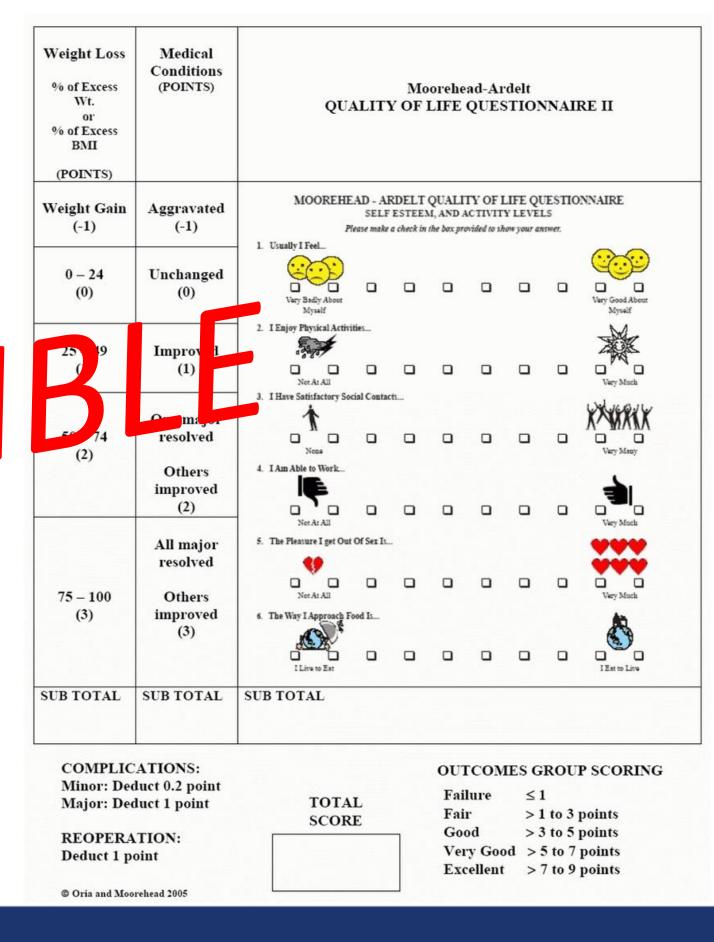




# Background

- A need to compare results
- Many important outcomes after MBS
- ♦ High weight loss ≠ best procedure
- \* BAROS scort?
  - Old (1998)
  - \* %EWL (categorized)
  - Unclear definitions

#### **BAROS Score**





## Background

Research

JAMA Surgery | Original Investigation

Standardized Assessment of Metabolic Bariatric Surgery Outcomes Secondary Analysis of 2 Randomized Clinical Trials

Ralph Peterli, MD; Saija Hurme, MSc; Marco Bueter, MD, PhD; Sofia Grönroos, MD; Mika Helmiö, MD, PhD; Paulina Salminen, MD, PhD



## Background (SF-BARI Score)

- Composite Outcome measure
  - %TWL
  - Comorbidity improvement
  - Complications
  - Quality of life (optional)
- ❖ Based on results from SLEEVEPASS and SM-BOSS

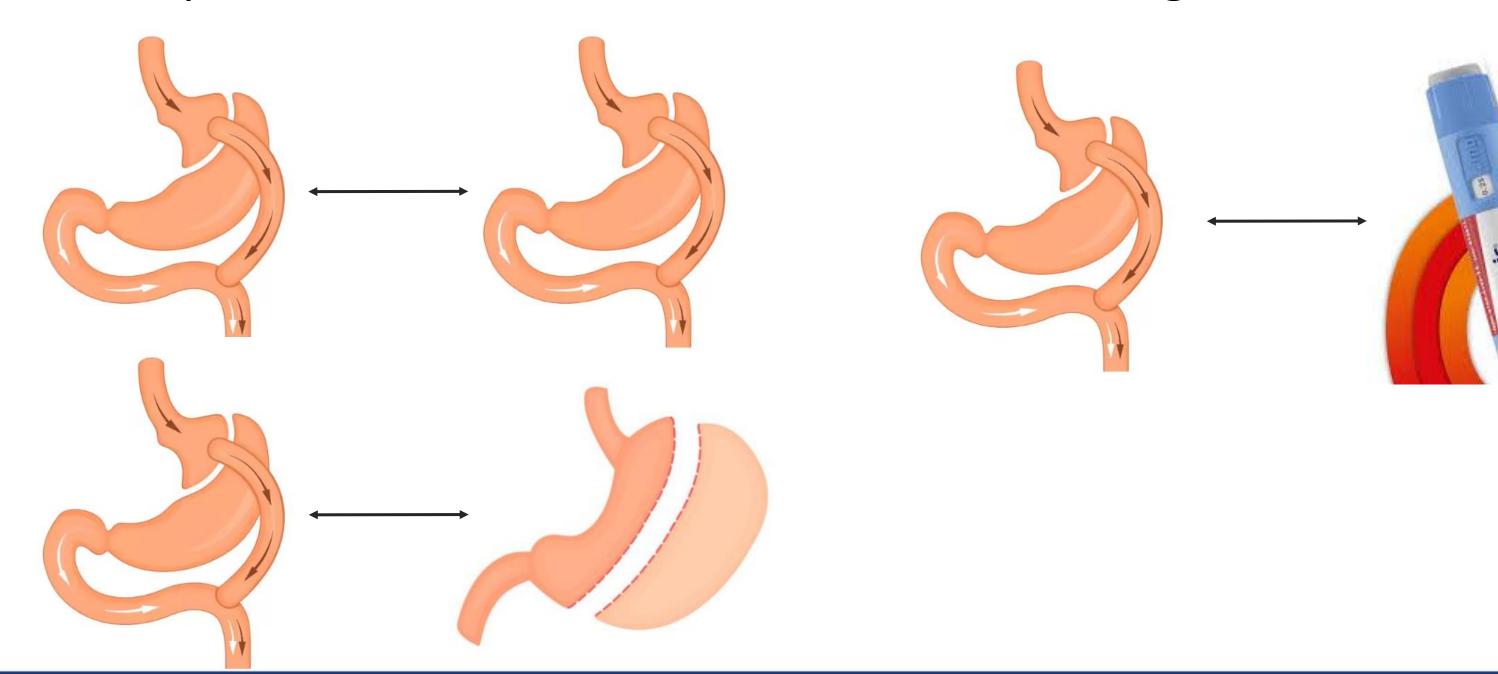
Table 2. Range of Scores by Main Outcome Areas and Categories of SF-BARI Score and SF-BARI Score QOL

Outcome	Score range
SF-BARI Score	
Weight loss	-20 to 130
Comorbidities	-30 to 70
Complications	-50 to 0
QOL	-30 to 30
Total score	-100 to 200
Response	
Excellent response	≥135
Very good response	110 to <135
Good response	70 to <110
Fair response	35 to <70
Suboptimal response	<35



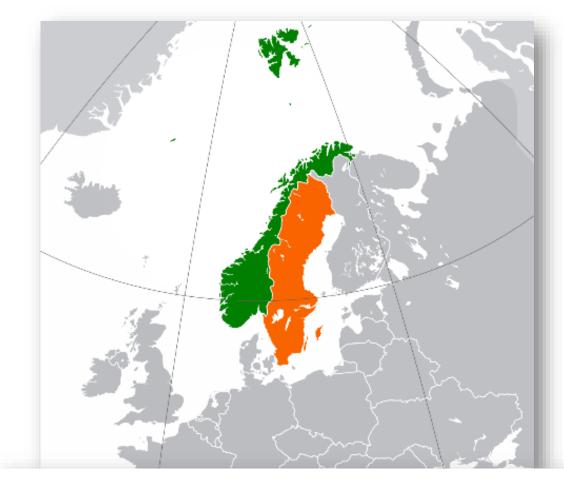
## Background

> Comparison between different treatment strategies





#### Patient selection











#### Patient selection

- Primary surgery
- Registered weight at 1 and 5 years
- Availability of all baseline characteristics incl. comorbidity status
- Availability of comorbidity status during follow-up (1 and 5 years)



- SOReg-S (Sweden)
  - N = 10,662
- SOReg-N (Norway)
  - N = 3,834



- **DATO** (the Netherlands)
  - N = 7,109

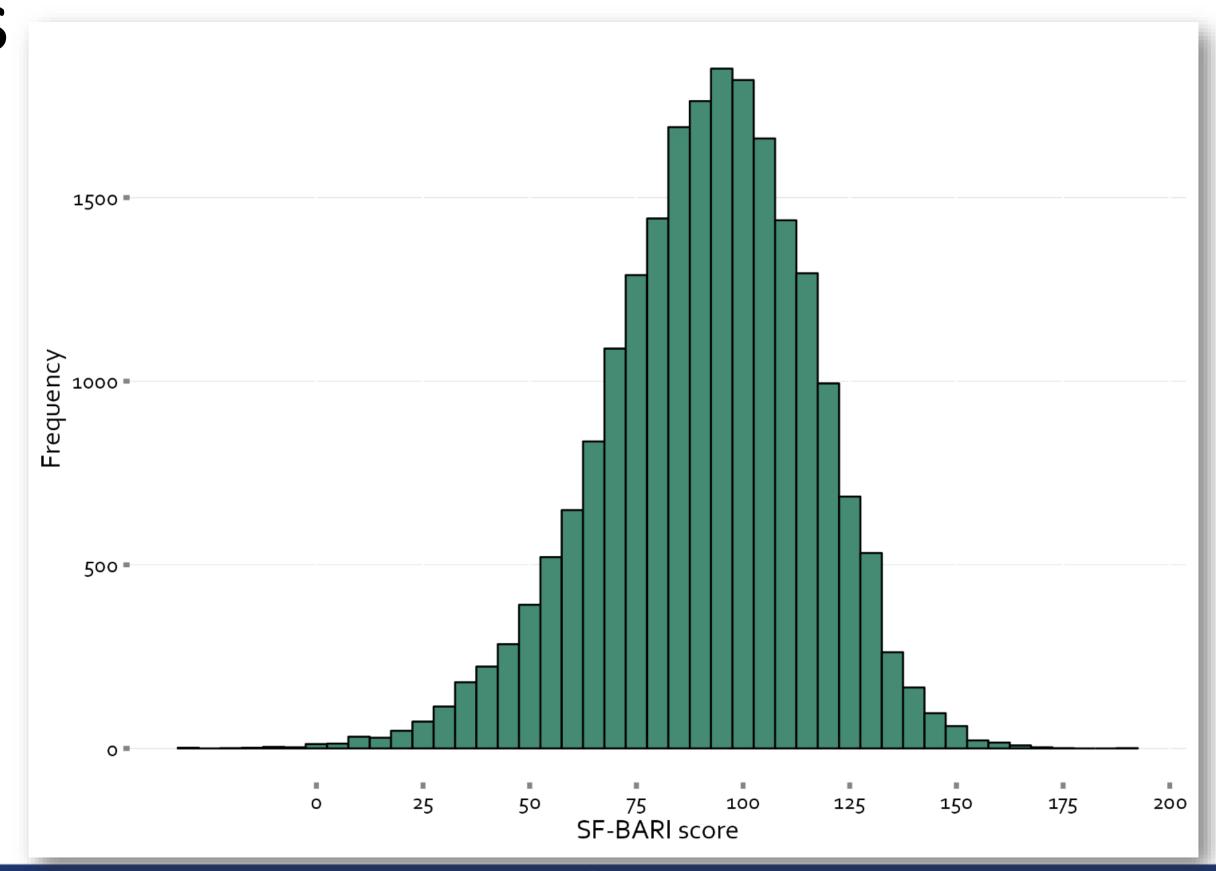


#### Baseline characteristics

		Merged registries	Merged RCTs
n		21,605	457
Age (mean (SD))		43.7 (11.1)	45.6 (10.7)
Sex (n, %)	Male	4,514 (20.9)	134 (29.3)
	Female	17,091 (79.1)	323 (70.7)
Operation (n, %)	Sleeve gastrectomy Roux-en-Y GB	16,071 (74.4)	228 (49.9) 229 (50.1)
	Other	1,006 (4.7)	na
Weight (mean (SD))		121.1 (19.7)	131.6 (23.5)
BMI (mean (SD))		42.3 (5.2)	46.0 (6.6)
Diabetes baseline (n, %)		3,604 (16.7)	155 (33.9)
Hypertension baseline (n, %)		6,577 (30.4)	293 (64.1)
Dyslipidemia baseline (n, %)		2,962 (13.7)	208 (45.5)
OSAS baseline (n, %)		2,599 (12.0)	161 (35.2)

x2!!

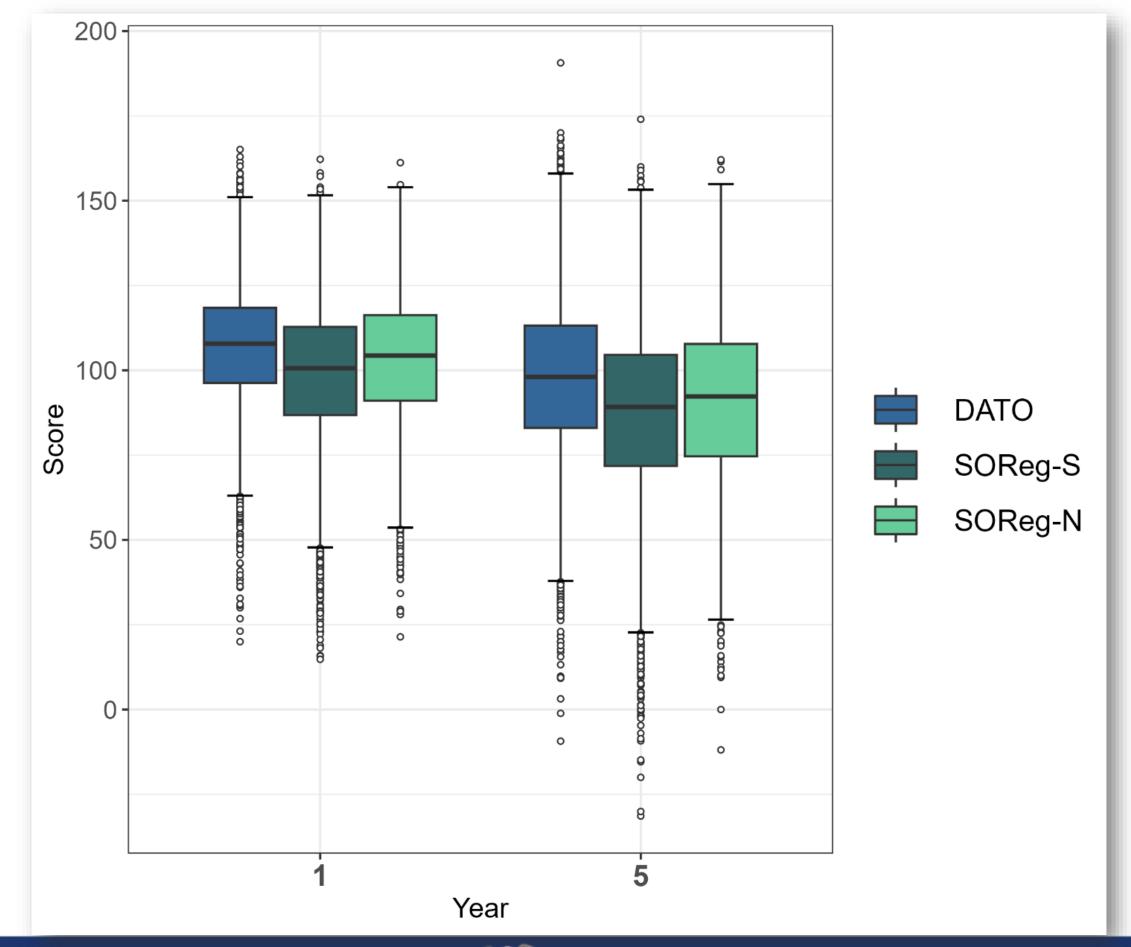




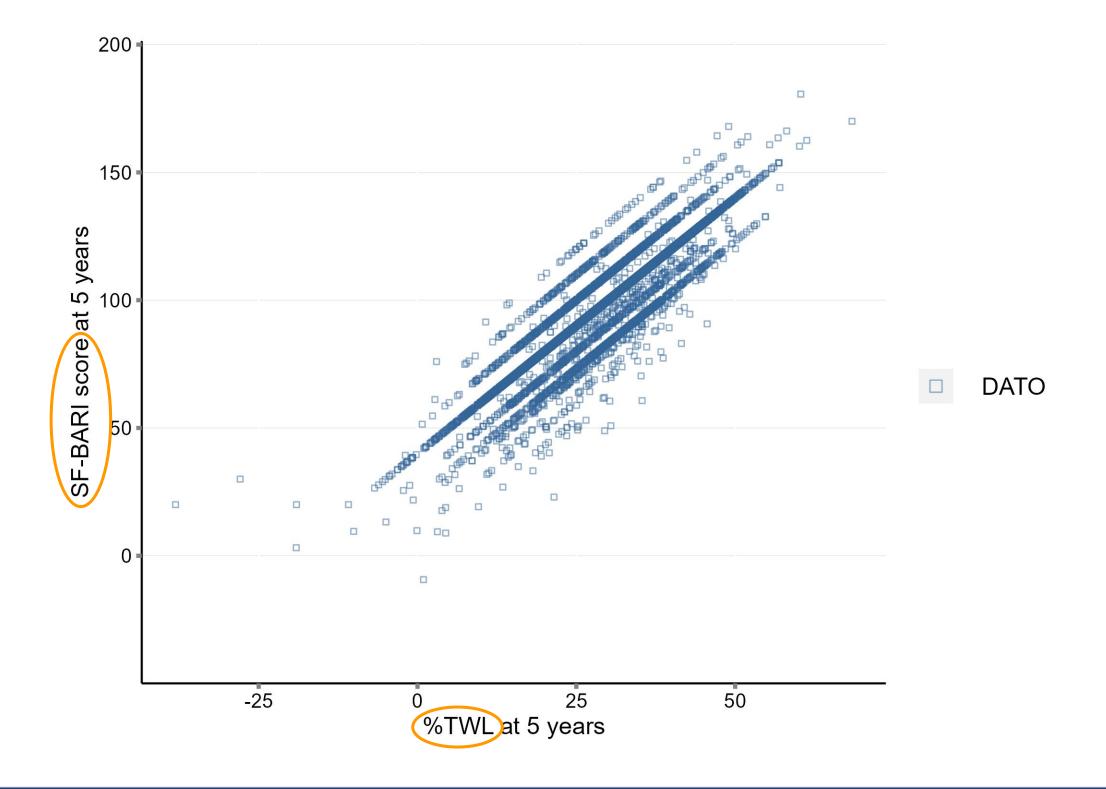


		Merged registries		Merged RCTs	
		1 year	5 years	1 year	5 years
n		21,605	21,605	435	398
SF-BARI Score (me	ean (SD))	101.9 (19.1)	90.9 (24.1)	93.0 (21.9)	89.1 (29.0)
Category (n, %)				1 1	
	Suboptimal (<35)	54 (0.2)	415 (1.9)	6 (1.4)	20 (5.0)
	Fair (35 to <70)	1,215 (5.6)	3,529 (16.3)	58 (13.3)	81 (20.4)
	Good (70 to <110)	12,569 (58.2)	12,965 (60.0)	276 (63.5)	194 (48.7)
,	Very good (110 to <135)	7,229 (33.5)	4,253 (19.7)	85 (19.5)	84 (21.1)
	Excellent (≥135)	538 (2.5)	443 (2.1)	10 (2.3)	19 (4.8)
Percentiles (%)		ı			
	5th	67.8	48.3	55.1	35.0
	25th	90.6	76.0	79.0	69.9
	<b>75th</b>	115.2	107.6	107.0	110.6
	95th	130.0	127.5	127.0	134.8
%TWL (mean (SD)	)	32.0 (7.7)	27.7 (9.9)	29.7 (8.0)	25.8 (10.7)

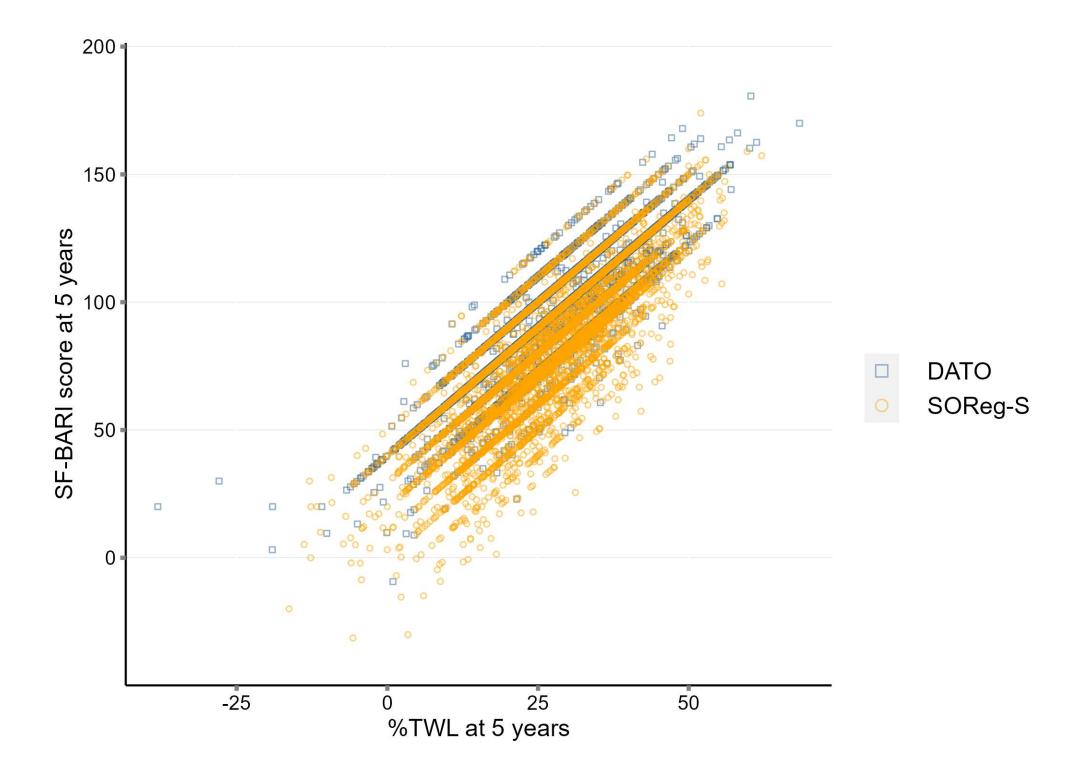


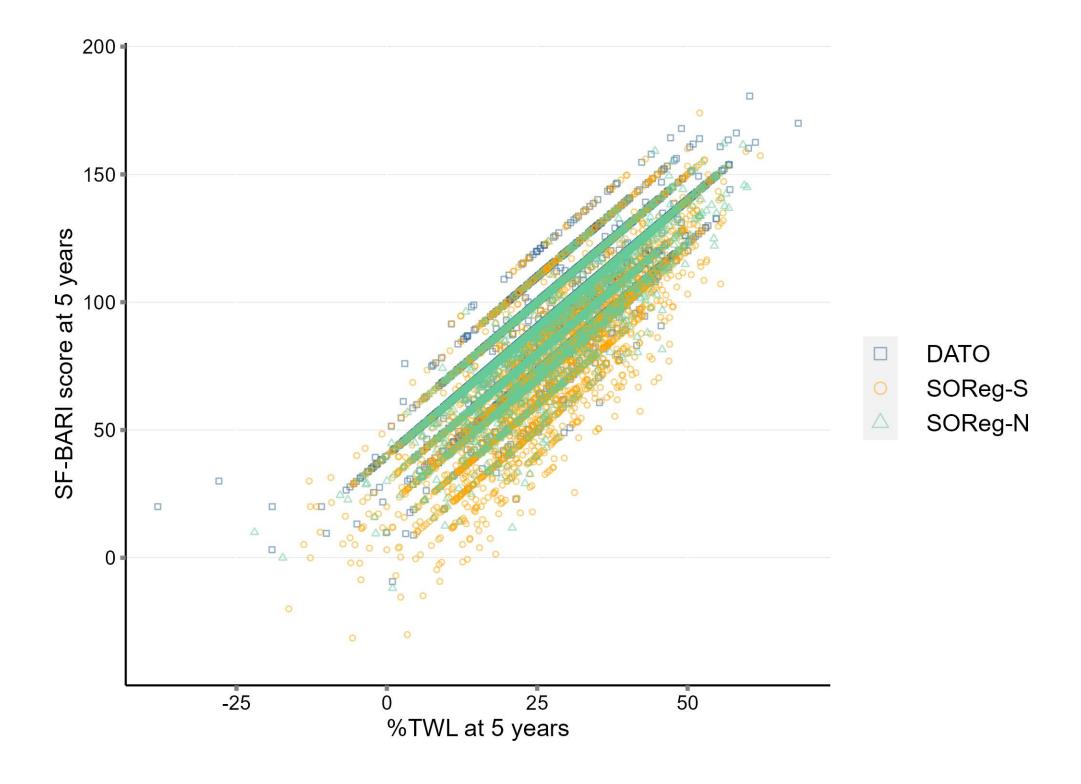


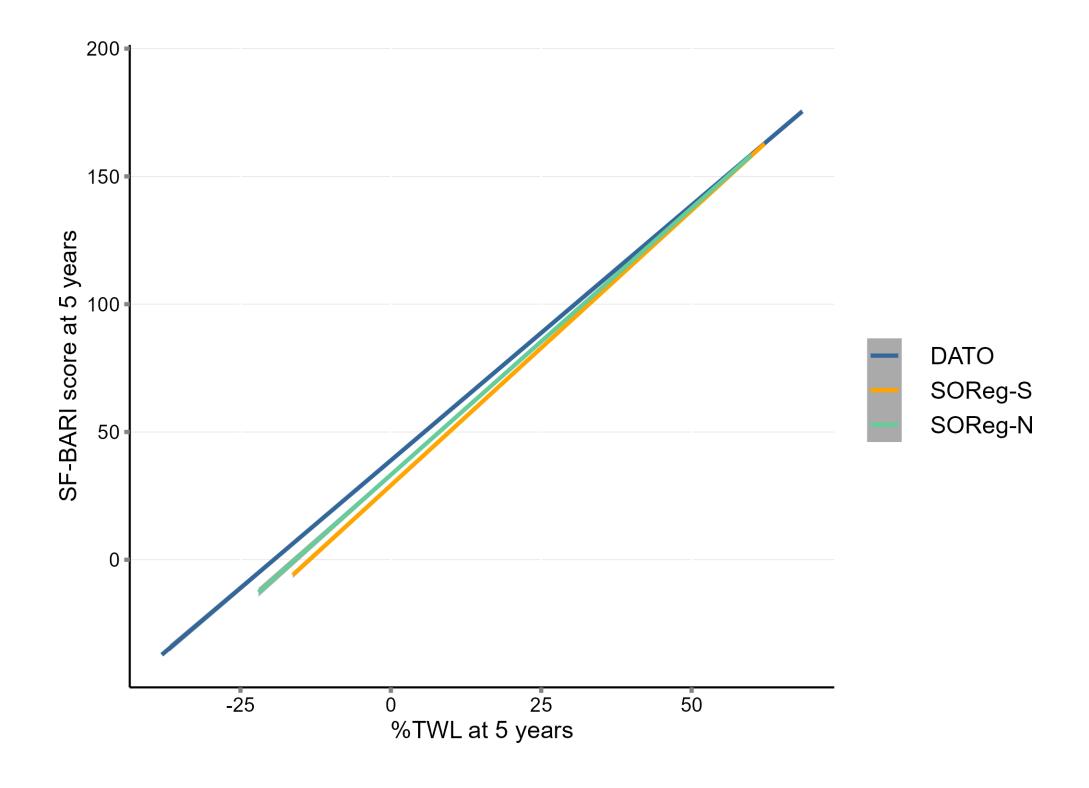






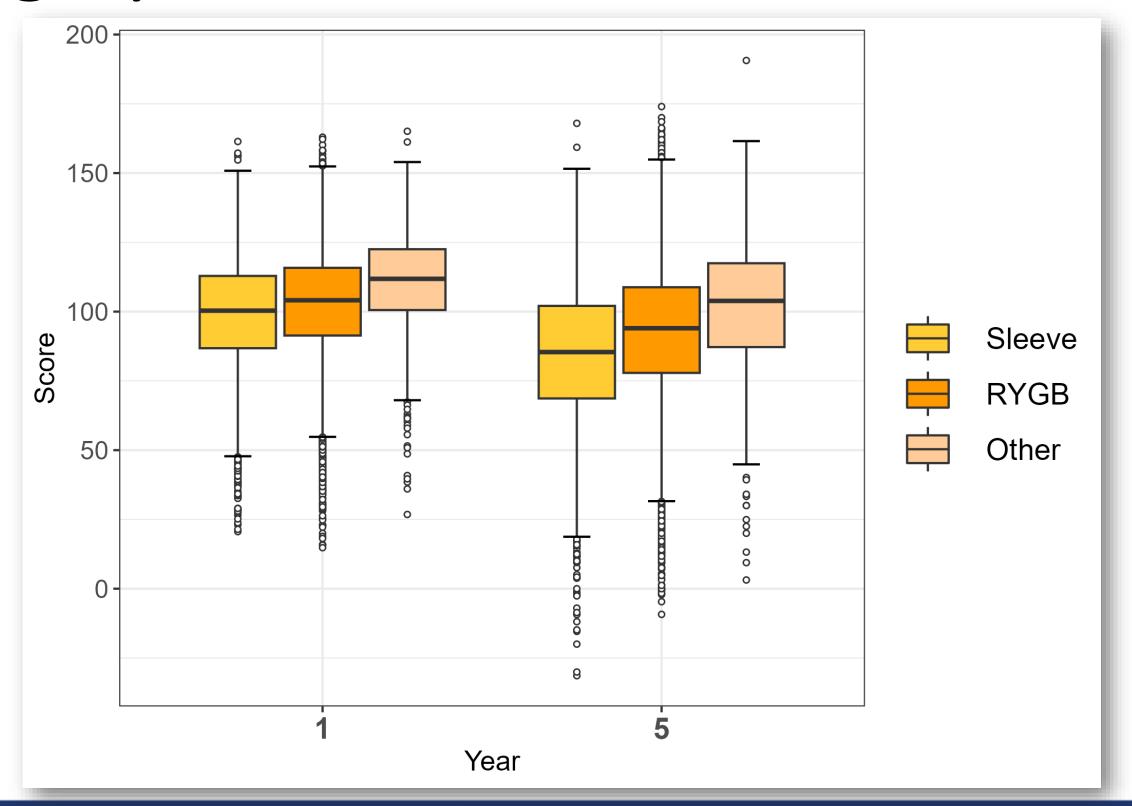








# Type of surgery





## Multivariable linear regression analysis

		Beta	95% CI	p-value
Registry				
	DATO	Ref.		< 0.01
	SOReg-S	-8.7	-9.4, -7.9	
	SOReg-N	-1.6	-2.5, -0.62	
Operation				
	Sleeve	Ref.		< 0.01
	RYGB	12	11, 12	
	Other	15	13, 16	
Sex				
	Male	Ref.		< 0.01
	Female	4.0	3.2, 4.8	
Age		-0.21	-0.24, -0.18	< 0.01
BMI		0.53	0.47, 0.59	< 0.01
T2D		-5.5	-6.4, -4.5	< 0.01
Hypertensi	on	0.7	-0.1, 1.5	0.09
Dyslipidem	nia	-1.4	-2.5, -0.4	0.01
OSAS		-3.3	-4.3, -2.3	< 0.01



#### Discussion

#### **Conclusion:**

- ❖ Validation showed comparable distribution of SF-BARI Score in external cohort
   → the RCT-based score is applicable to real-world data
- SF-BARI Score is only slightly influenced by baseline characteristics and therefore applicable in all patients



#### Discussion

#### Next step:

❖ Inclusion of PROMs in next validation (SF-BARI Score QoL)

#### Take home message:

- ❖ Research: → Reporting the SF-BARI Score in MBS research would aid in comparing outcomes
  - → Also between different treatment modalities
- ❖ Clinical setting: → Positive reinforcement for patients who are not satisfied with their outcome
  - → Start implementing the SF-BARI Score













#### **Special thanks to the contributors**

**Erik Stenberg** Ralph Peterli

Johan Ottosson Marco Bueter

Villy Våge Paulina Salminen

Hannu Sakari Lyyjynen Saija Hurme

Simon Nienhuijs Sofia Grönroos

**Ronald Liem** Floris Bruinsma

And many more...





















# Appendix



# Supplement

		DATO	SOReg-S	SOReg-N	P-value
n		7,109	10,662	3,834	
Age (mean (SD))		43.6 (11.1)	44.0 (11.1)	43.1 (10.9)	< 0.01
Sex (n, %)	Male	1,144 (16.1)	2,472 (23.2)	898 (23.4)	< 0.01
	Female	5,965 (83.9)	8,190 (76.8)	2,936 (76.6)	
T of	Classes anatomatasses	1 276 (10 1)	4 4 4 4 (4 0 7)	2 000 (52 4)	. 0. 01
Type of surgery (n, %)	Sleeve gastrectomy	1,376 (19.4)	1,144 (10.7)	2,008 (52.4)	< 0.01
	Roux-en-Y GB	4,855 (68.3)	9,518 (89.3)	1,698 (44.3)	
	Other	878 (12.4)	0 (0.0)	128 (3.3)	
Weight (mean (SD))		123.1 (18.8)	118.8 (19.9)	123.8 (20.3)	< 0.01
BMI (mean (SD))		43.1 (5.1)	41.7 (5.1)	42.9 (5.3)	< 0.01
		(3.2)	(5.2)	(0.0)	
Diabetes baseline (n, %)		734 (10.3)	2,329 (21.8)	541 (14.1)	< 0.01
Hypertension baseline (n, %)		1,367 (19.2)	4,049 (38.0)	1,161 (30.3)	< 0.01
Dyslipidemia baseline (n, %)		569 (8.0)	1,848 (17.3)	545 (14.2)	< 0.01
OSAS basalina (n. %)		402 (6.0)	1 440 (12 5)	666 (17.4)	< O O1
OSAS baseline (n, %)		493 (6.9)	1,440 (13.5)	666 (17.4)	< 0.01



### Supplement – Clavien-Dindo modification

eTable 1. The Clavien-Dindo Classification – modified for complications / adverse events after use of anti-obesity medications (AOMs, e.g., GLP-1R analogues)

The basis of this classification is the required therapy used to correct the specific complication / adverse event in order to rank the complication / adverse event in an objective and reproducible manner comparable to the Clavien-Dindo classification for surgical complications.

It consists of 7 grades (I, II, IIIa, IIIb, IVa, IVb and V). The introduction of the subclasses a and b allows a contraction of the classification into 5 grades (I, II, III, IV and V) depending on the size of the population observed or the of the focus of a study.

Grade	Definition
Grade I	Any deviation from the normal course without the need for pharmacological treatment or surgical, endoscopic and radiological interventions. Allowed therapeutic regimens are: drugs as antiemetics, antipyretics, analgesics, diuretics and electrolytes and physiotherapy. This grade also includes wound infections opened at the bedside.
	EXAMPLE: Gastrointestinal disorders symptoms, e.g., nausea, diarrhea, vomiting, constipation, abdominal pain, and dyspepsia <sup>1</sup> or headache <sup>2</sup> .
Grade II	Requiring pharmacological treatment with drugs other than such allowed for grade I complications. Blood transfusions and total parenteral nutrition are also included.
	EXAMPLE(S): (1) anaphylactic reactions or skin side effects at the injection site such as pruritus, urticaria, and angioneurotic edema requiring systemic antihistamine treatment <sup>a</sup> (2) antibiotic treatment due to upper respiratory and urinary tract infections such as nasopharyngitis, influenza, cystitis, and viral infection <sup>a,b,c</sup>
Grade III	Requiring surgical, endoscopic or radiological intervention
Illa	Intervention not under general anesthesia
IIIb	EXAMPLE: ERCP due to cholangitis/ common bile duct stones due to AOM induced sudden weight loss <sup>3</sup> Intervention under general anesthesia
	EXAMPLE(S): (1) cholecystectomy due to acute cholecystitis following gallstones due to AOM induced sudden weight loss <sup>3</sup> , (2)

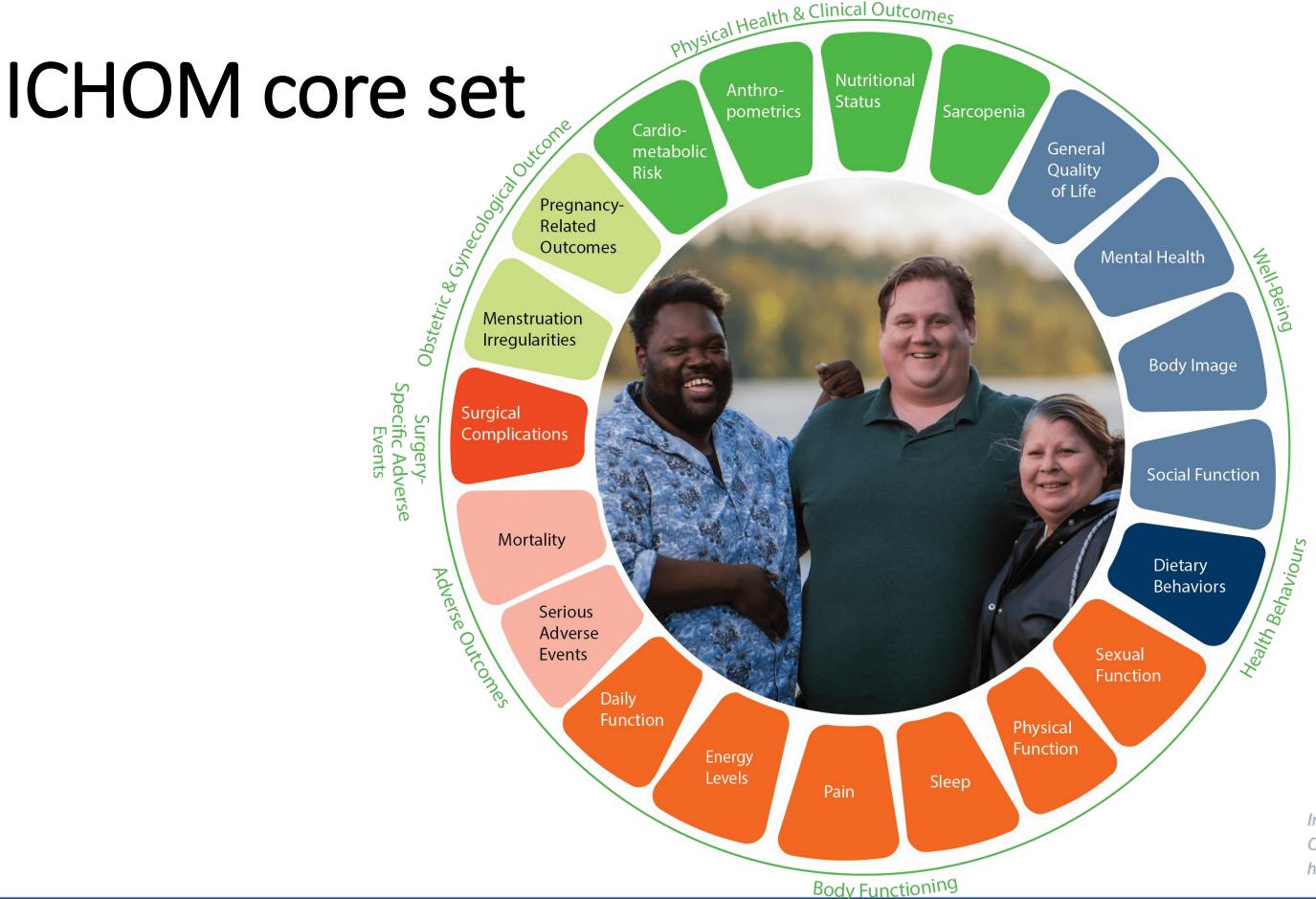


EXAMPLE(S): (1) cholecystectomy due to acute cholecystitis following gallstones due to AOM induced sudden weight loss<sup>3</sup>, (2) necrosectomy due severe acute pancreatitis caused by either AOM or biliary pancreatitis due to common bile duct stones after AOM induced sudden weight loss<sup>4</sup>

## Supplement – Clavien-Dindo modification

Grade	Definition
Iva	single organ dysfunction (including dialysis)
	EXAMPLE: acute kidney injury/ pre-renal acute failure due to AOM induced nausea and vomiting, decreased fluid intake, and significant loss of fluids <sup>5,6</sup>
IVb	Multiorgandysfunction
	EXAMPLE: septic shock due to severe acute necrotic pancreatitis with pulmonary, hepatic and kidney failure requiring organ—replacement therapy
Grade V	Death of a patient
	No example needed.









#### ICHOM core set



The ICHOM Set of Patient-Centered Outcome
Measures for Adults living with Obesity is the
result of hard work by a group of leading
physicians, measurement experts and patients. It
is our recommendation of the outcomes that
matter most to patients living with Obesity. We
urge all providers around the world to start
measuring these outcomes to better understand
how to improve the lives of their patients.

- The EQ-5D-5L measuring generic quality of life, mental health, pain, energy levels, and daily function.
- The BODY-Q Obesity Modules measuring social function, dietary behavior, sexual function, physical function, and psychological function.
- The STOP-BANG Questionnaire measuring sleep
- Cardiometabolic Risk including blood pressure, glycemic control, lipids, hepatic parameters, and renal function
- Anthropometrics including height, weight, and waist circumference
- Nutritional Status including Vitamin D, Vitamin B12, Ferritin, and Folic Acid
- Sarcopenia measured with grip strength via a hand dynamometer
- Surgical Complications captured with the Clavien-Dindo Classification System
- Obstetric & Gynecological Outcomes including fertility, menstruation irregularities, and pregnancy-related outcomes





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# GERHARD PRAGER IFSO PRESIDENT



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Nothing slows him down...















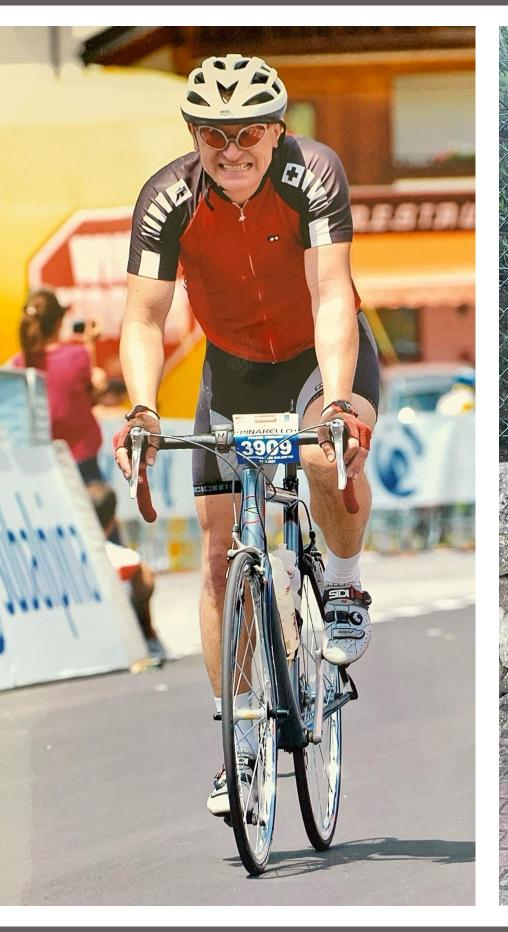












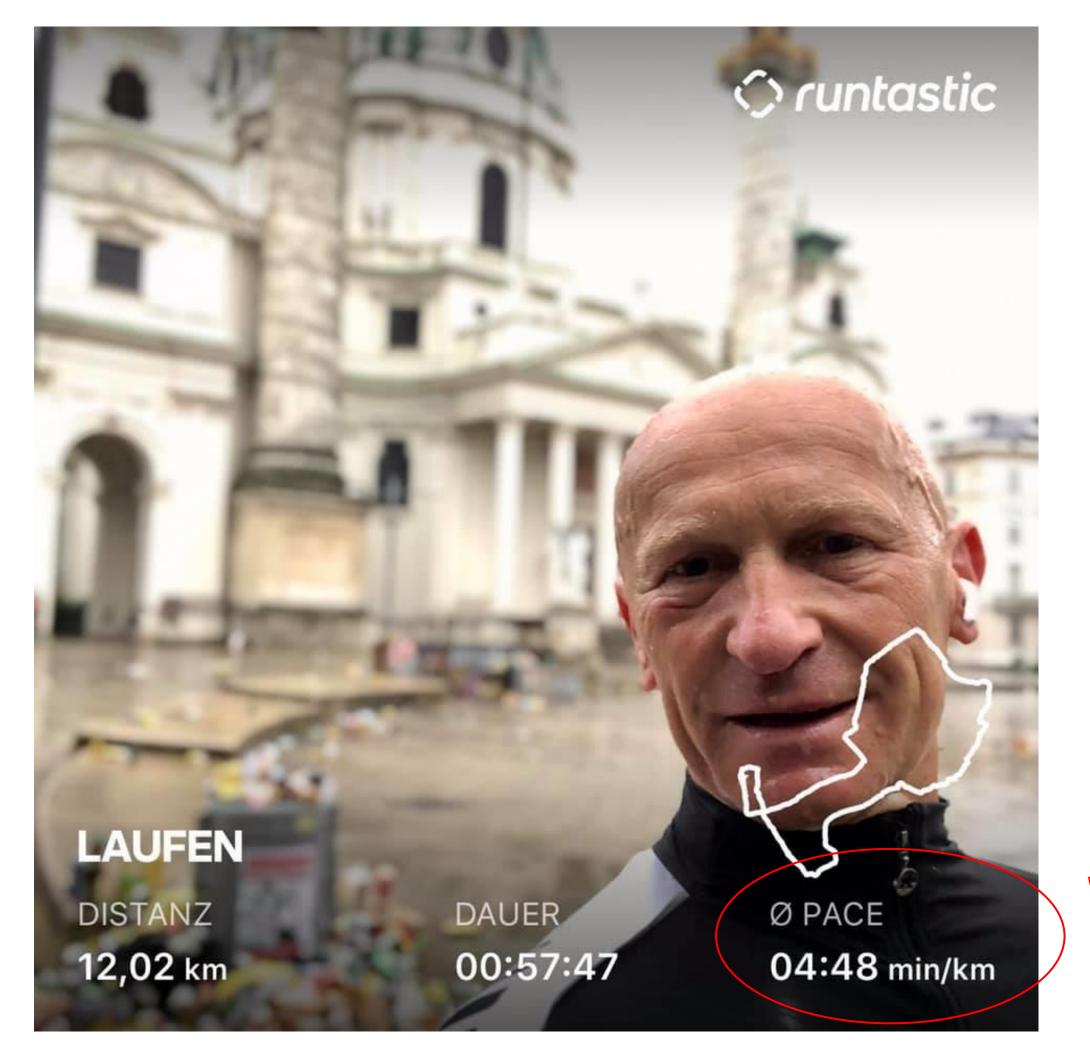




















Cadaver courses

Teaching young surgeons



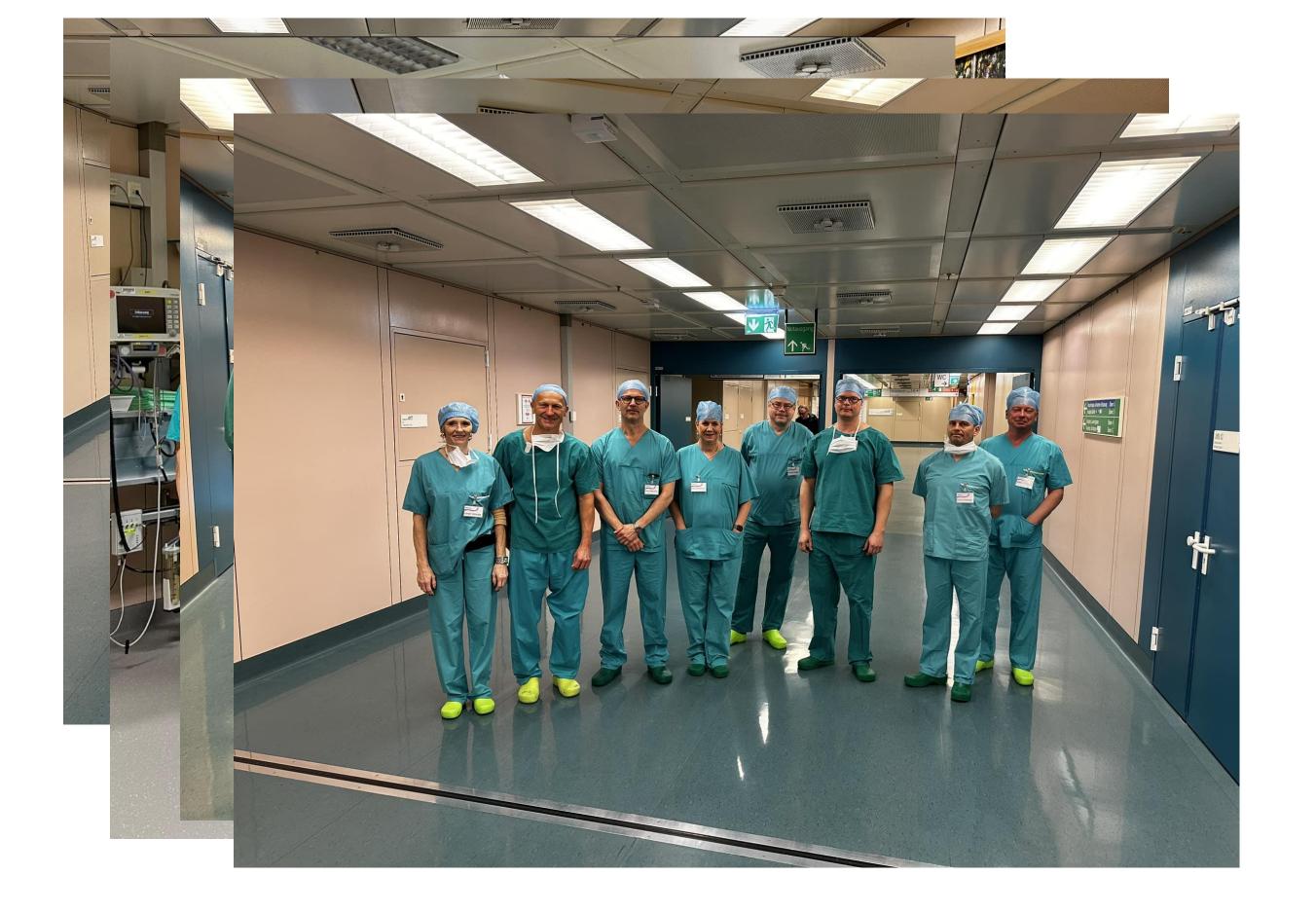
Cadaver courses

Teaching young surgeons













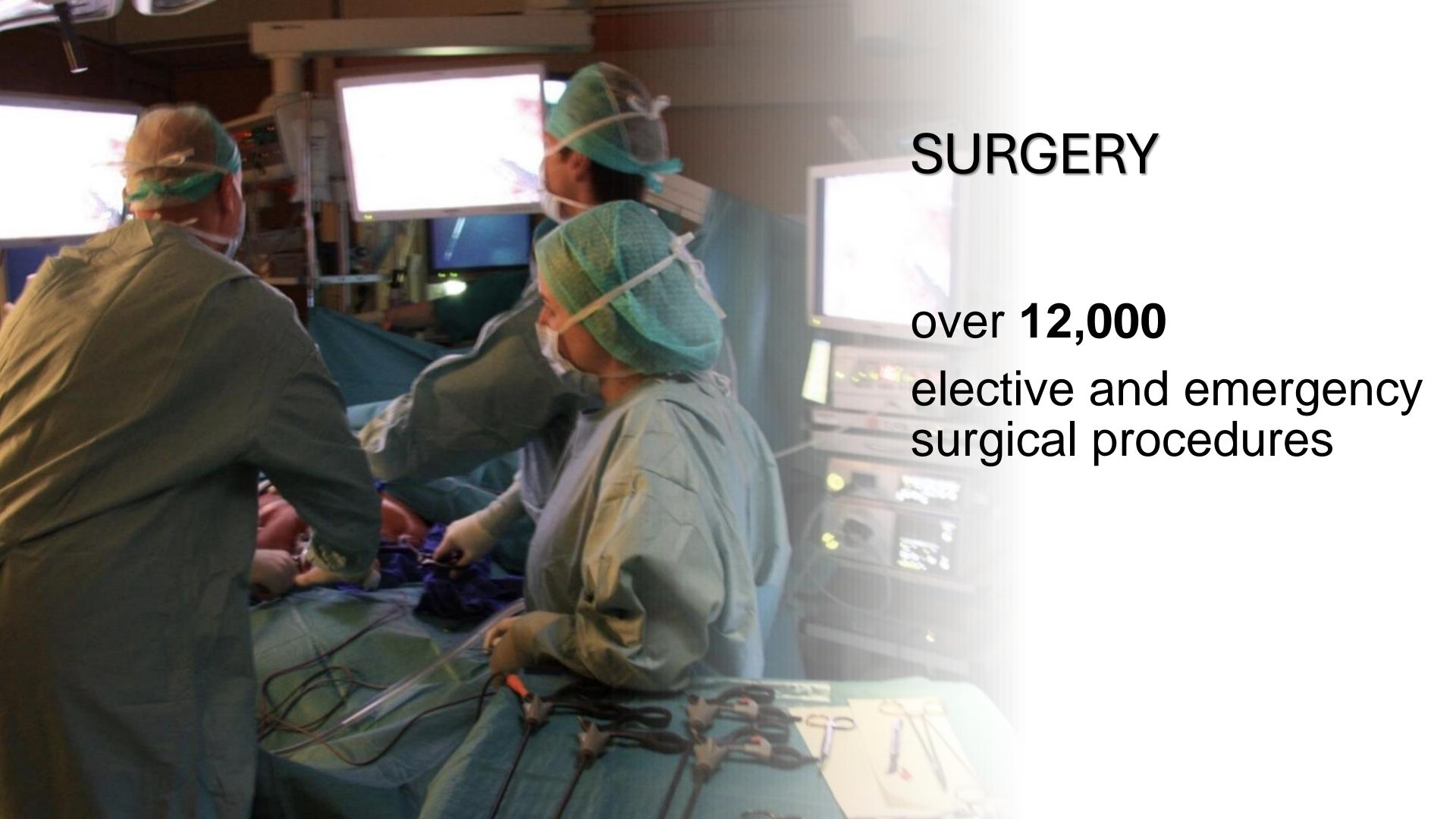












## **Gerhard Prager, MD**

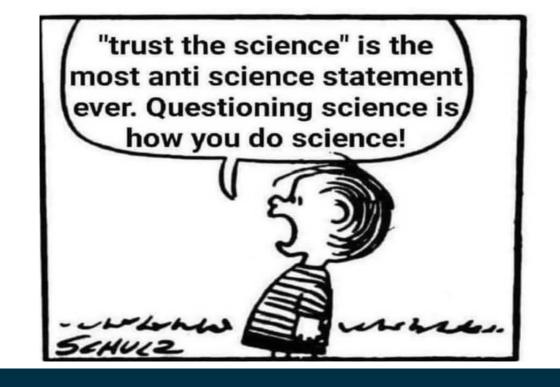
Professor of Metabolic Bariatric Surgery

- Academic surgeon and surgeon scientist
- Active clinical work: metabolic bariatric surgery

Over 200 peer-reviewed publications



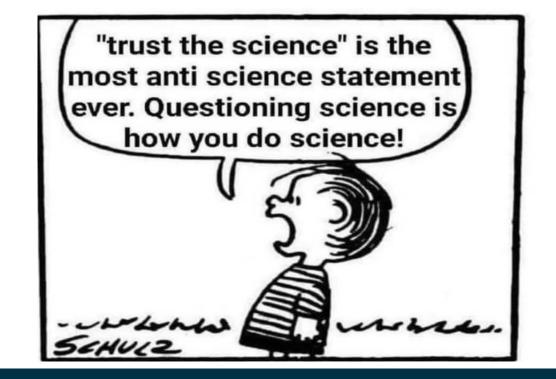




## **Gerhard Prager, MD**

Professor of Metabolic Bariatric Surgery

- Academic surgeon and surgeon scientist
- Active clinical work: metabolic bariatric surgery



Over 200 peer-reviewed publications

> 12.000 citations

h-index 58

PhD supervision: 1 completed





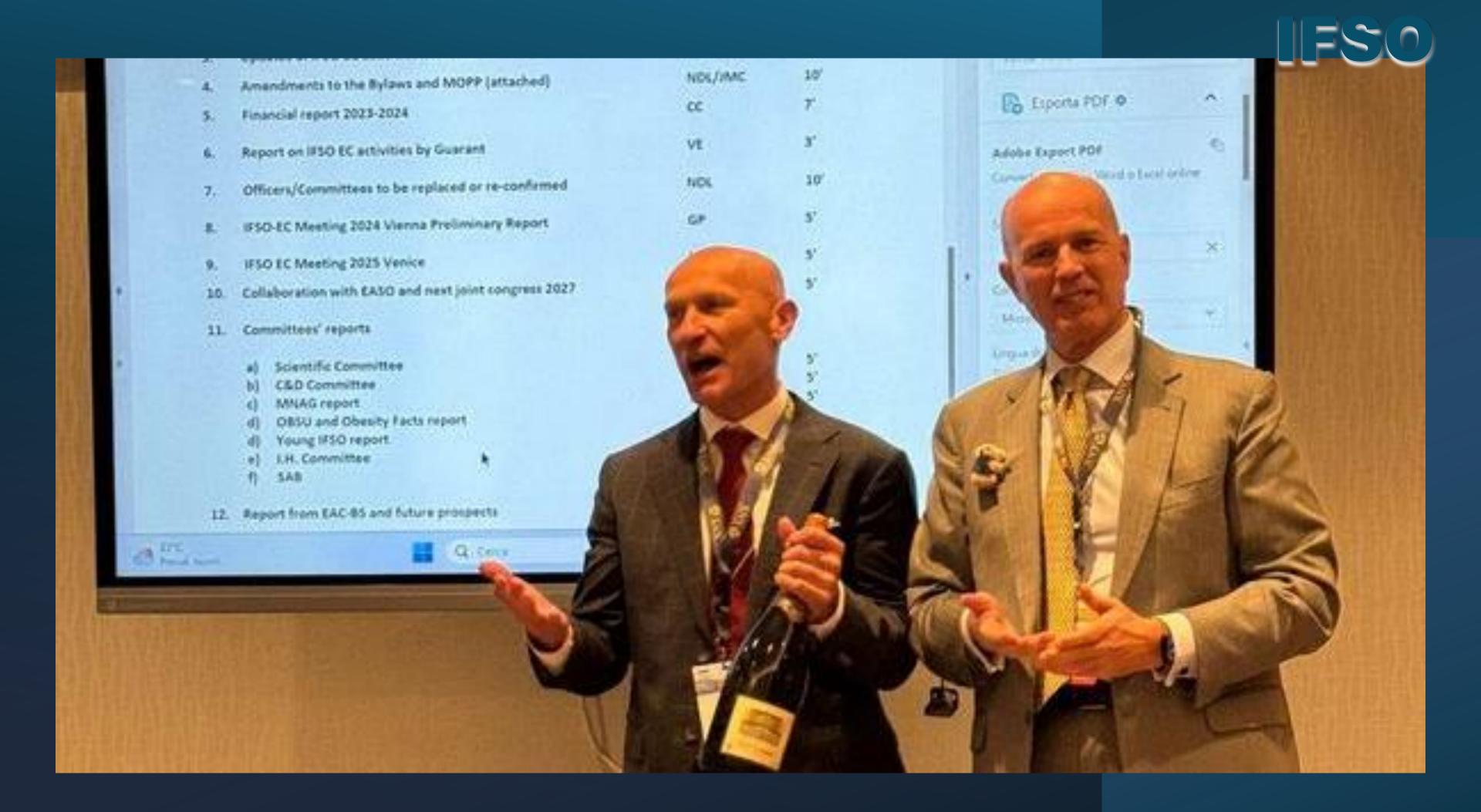






















IFSO 2028 SEOUL, KOREA













IFSO-EC AND IFSO-NAC WORKING HARD IN THE IFSO-LAC MEETING IN LIMA, PERU





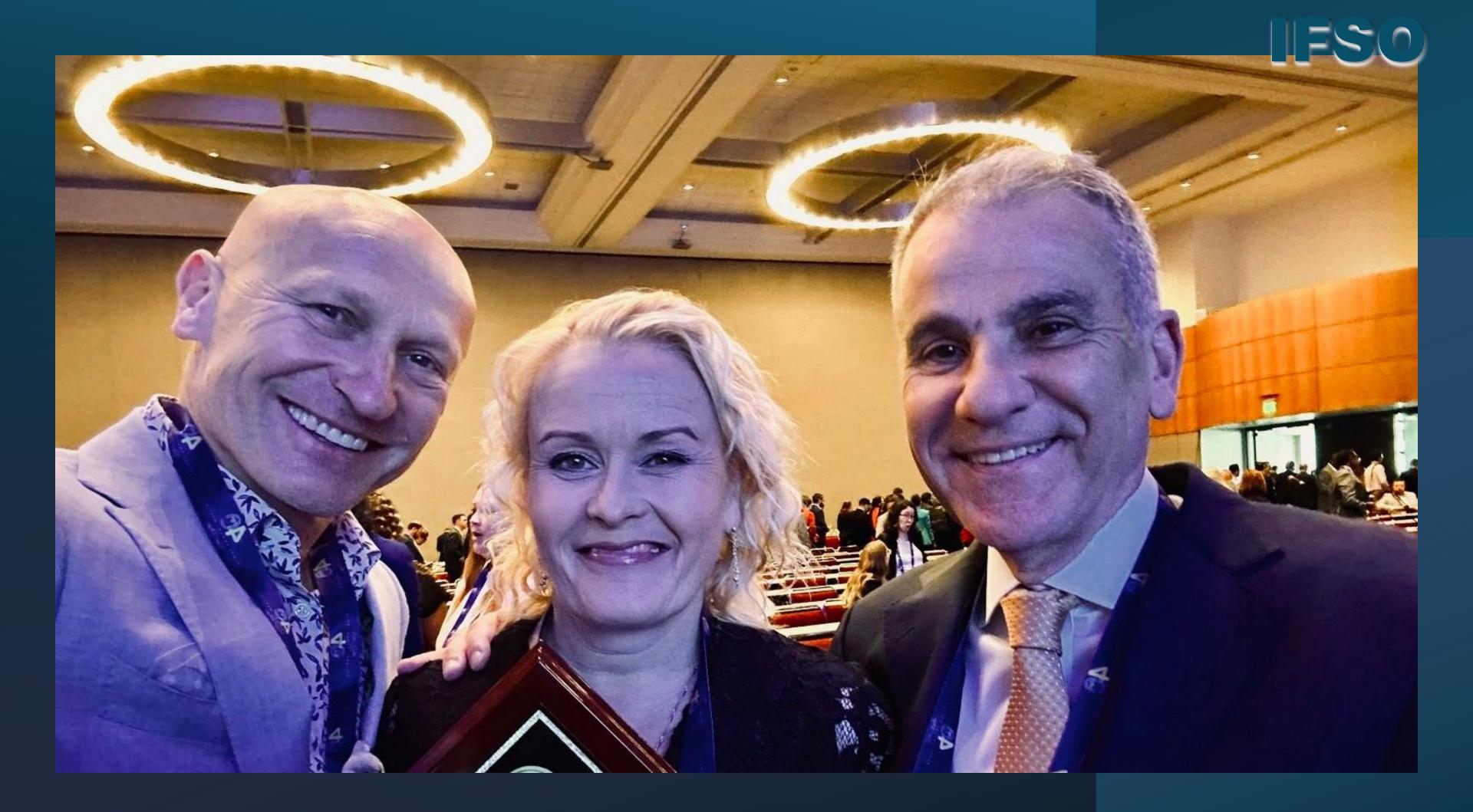
IFSO-EC VIENNA 2024 CONGRESS PRESIDENT GERHARD PRAGER

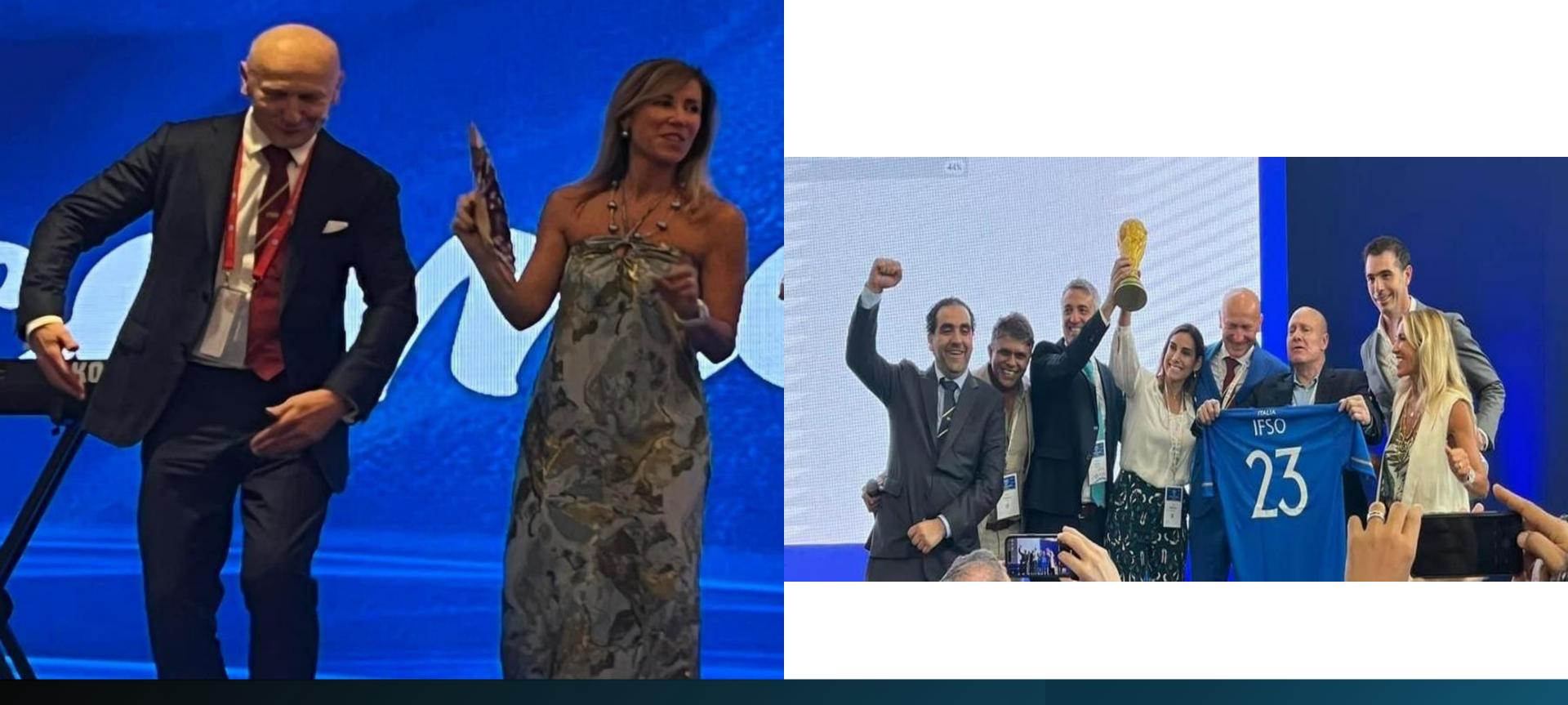














# IFSO: Best dressed man





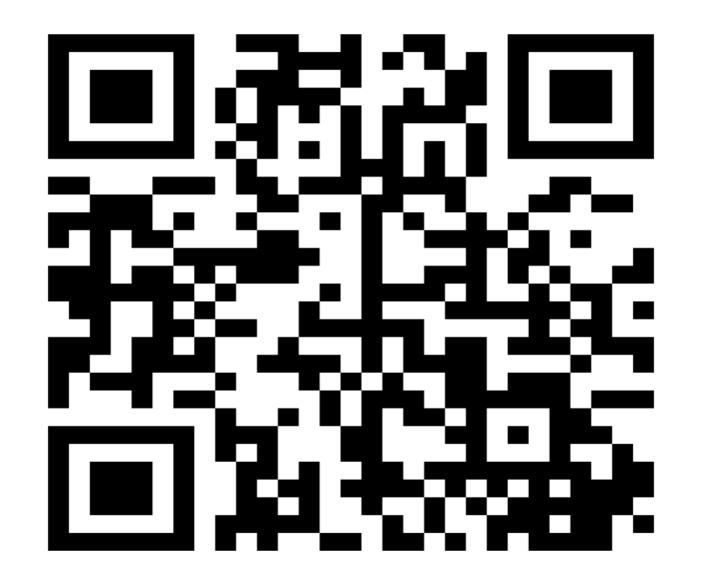








Join at menti.com | use code 7112 0572



# Gerhard has done the following...



https://www.menti.com/al6cym8xbu72

# All of the above...



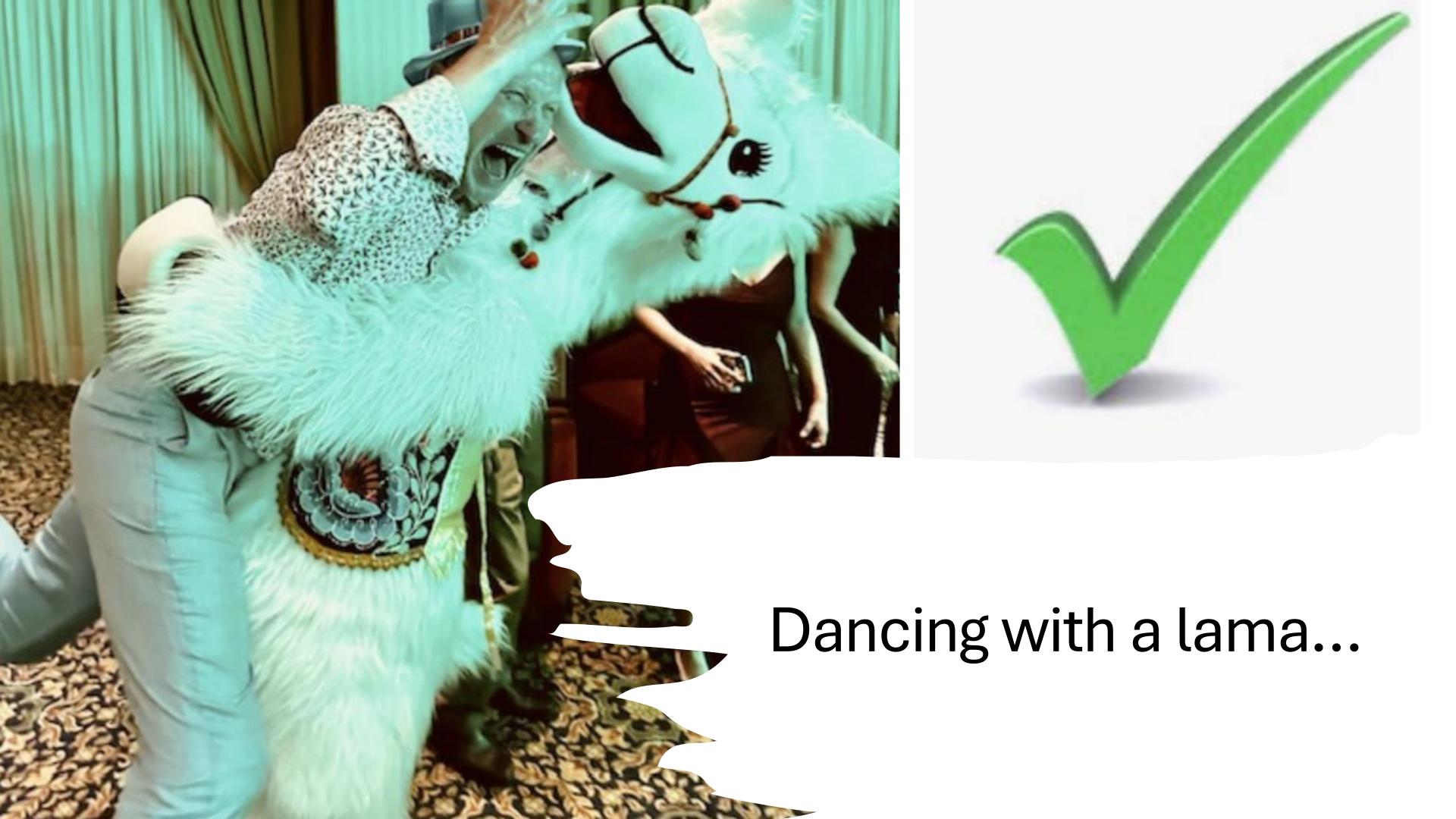
#### **EATING GUINEA PIG**



### **DANCING ON A TRAIN**



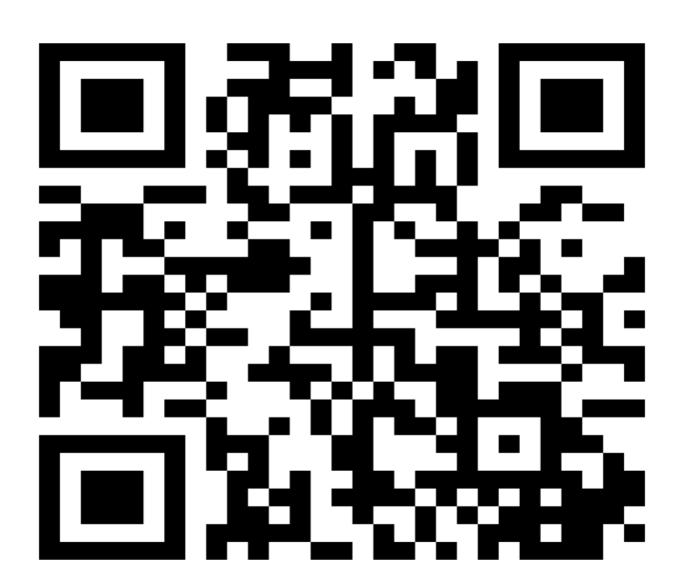






# How would you describe Gerhard Prager with one or two words?

0 responses





INTEGRATE YOUR



## Presidential adress 2024



#### **VISION:**

"TO OPTIMIZE THE CONTROL OF ADIPOSITY-BASED CHRONIC DISEASES"

#### MISSION:

"TO UNIFY THE GLOBAL SCIENTIFIC, SURGICAL AND INTEGRATED HEALTH COMMUNITIES, FOR THE PURPOSE OF DISSEMINATION OF KNOWLEDGE, COLLABORATION AND ESTABLISHING UNIVERSAL STANDARDS OF CARE FOR THE

REATMENT OF INDIVIDUALS WAPPH ADIPOSITY-BASED CHRONIC



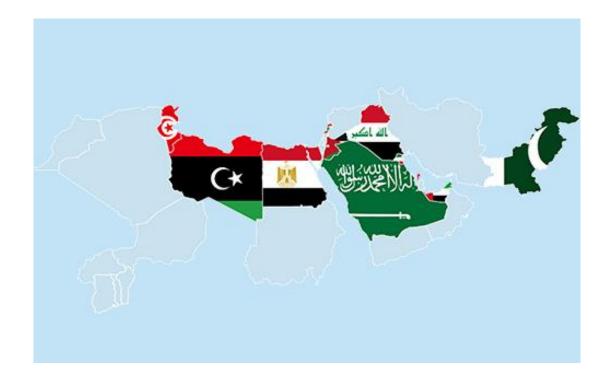
# Growth from 2010-2024

## 5 IFSO CHAPTERS: 76 national societies



**EUROPEAN CHAPTER** 





MIDDLE EAST NORTH AFRICAN CHAPTER

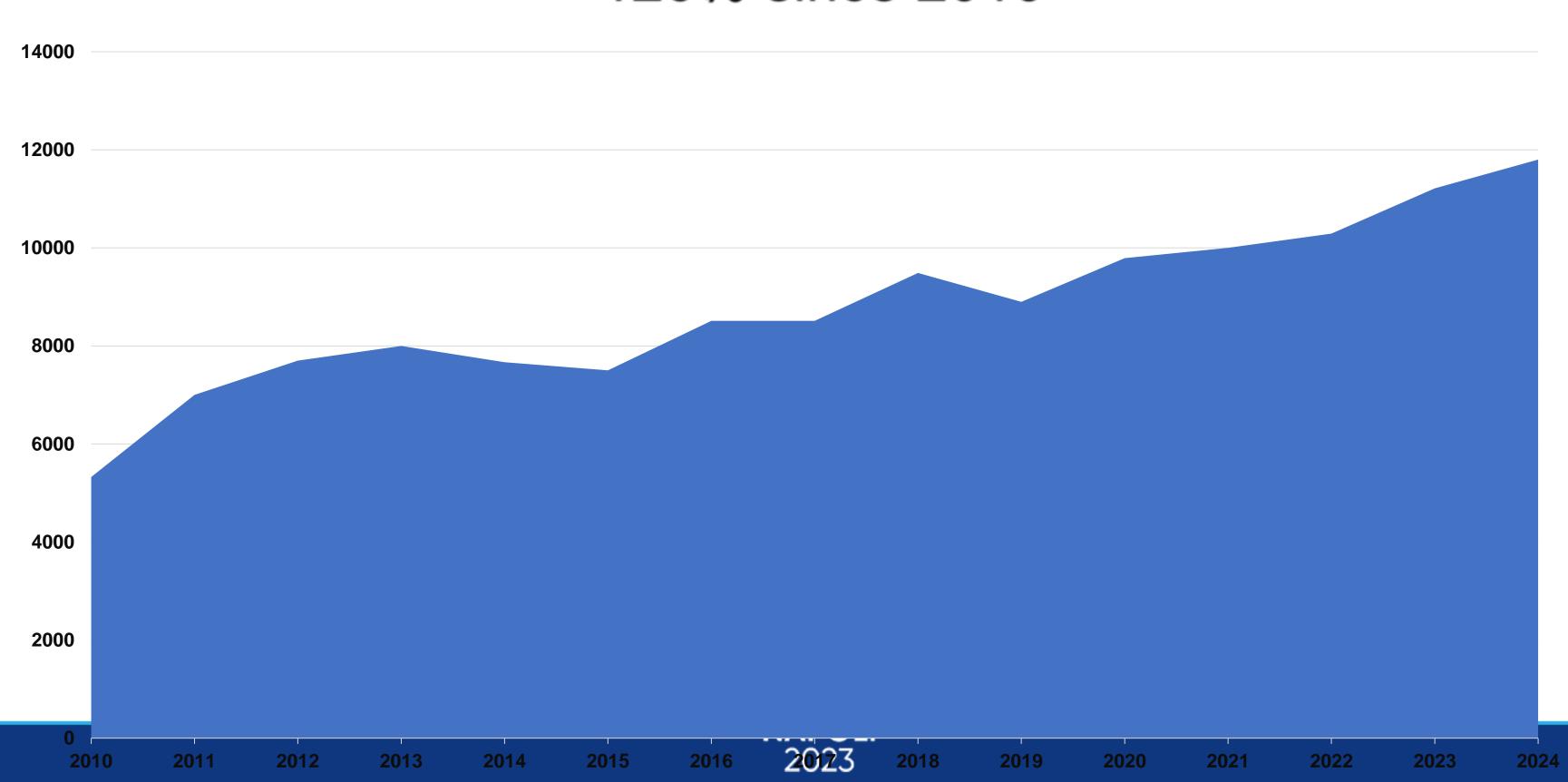


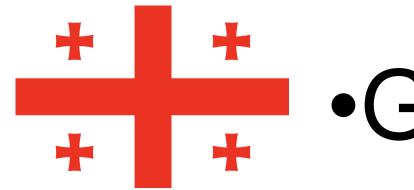




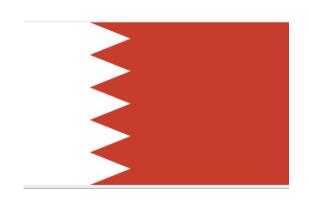
LATIN AMERICAN CHAPTER

### NUMBER OF MEMBERS: 11,800 +120% since 2010





# •GEORGIA



**•BAHRAIN** 



•SERBIA

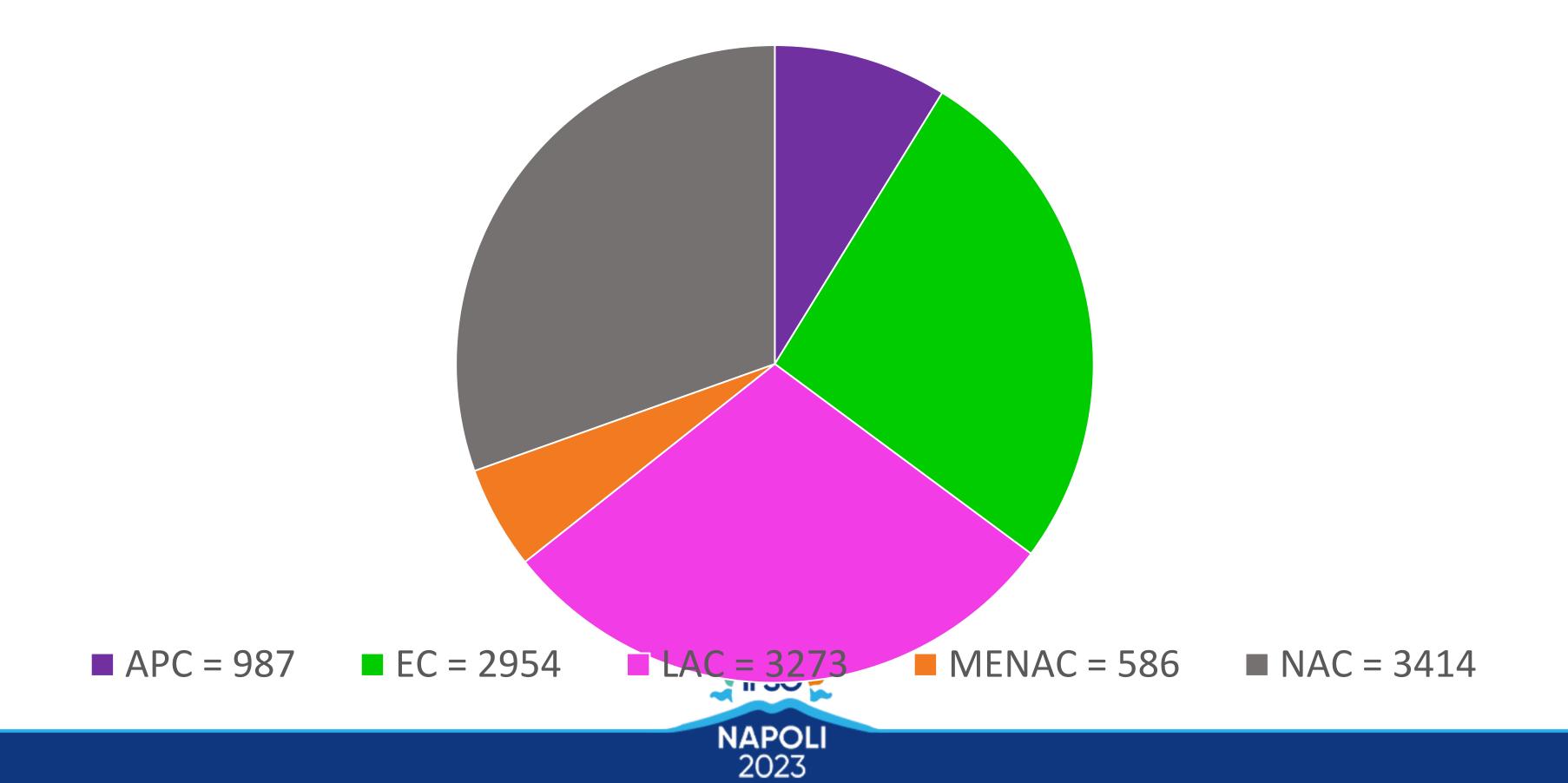


•TUNISIA



•MALAYSIA

### NUMBER OF IFSO MEMBERS PER CHAPTER IN 2024





## XXVI World Congress of the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO)









































**IBSC** 

Madrid 26-28<sup>th</sup> of September

9<sup>th</sup>Central European Congress on Obesity Prague October 13-14th 2023







German Obesity Congress

Gera 27-29<sup>th</sup> of September







Dr. R. Padmakumar



Dr. D. Madhukara



21st Narsonal Conference of Coasts Obesity & Metabolic Surgery So





IFSO B E M

V CONGRESO NACIONAL APCBEM

DECIRUGÍA BARIÁTRICA Y METABÓLICA

> 20 AL 23 FEBRERO 2024

swissôtel LIMA







Dr. Luis Poggi Presidente IFSO LAC



Gerhard Prager





### جمعية جراحة السمنة الأردنية Jordanian Society for Obesity Surgery(JSOS)

المؤتمر الدولي الرابع لجمعية جراحة السمنة الأردنية The 4<sup>th</sup> International Congress of the Jordanian Society for Obesity Surgery







Dr. Tagleb Mazahreh







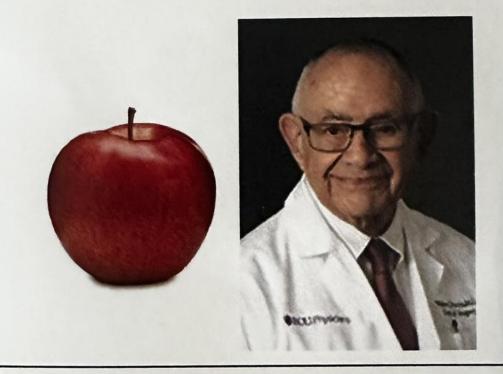












Millions saw the apple fall, but Newton was the one who asked why... And so did Pories...

Walter Pories Festschrift Sat., June 85h San Diego







### Guidelines for creating a Position Statement for IFSO

#### I. IFSO POSITION STATEMENT (PS) DEVELOPMENT PROCESS:

- 1. The Executive Board (EB) of IFSO decides which topic should be addressed.
- 2. The EB assigns a chair of the writing group for the position statement (PS) and *can* assign further members of the writing group.
- 3. Certain topics may need to pursue co-endorsement from other pertinent societies or organizations at the discretion of the EB.
- The chair of the writing group designates further members these should preferably be experienced in following GRADE, Joana Briggs Institute (JBI) -tools, PRISMA (or similar) methodology.
- The literature search (and evaluation) should follow GRADE, JBI-tools, PRISMA (or similar) methodology. IFSO will support the writing group with a statistician early on in the process.
- 6. The format of structuring the PS is described separately below
- 7. The draft of the PS is reviewed by the entire writing group.
- 8. Thereafter the PS is reviewed and approved by the Scientific Committee
- 9. Before Publication in Obesity Surgery the PS needs approval by the EB.

#### II. Structuring a Position Statement (PS):

Creating a PS for IFSO, involves careful consideration of multiple factors. Here are some guidelines to help in developing an effective and well-structured PS:

- 1. Define the Purpose: Clearly articulate the purpose of the PS and stay focused on that purpose. State whether it aims to provide guidance, recommendations, or opinions on a specific issue or topic related to Metabolic/Bariatric Surgery (MBS).
  Alternatively to a PS, a narrative review might be appropriate according to the level of evidence of the published literature.
- **2. Conduct Comprehensive Research:** Gather relevant and up-to-date scientific evidence, studies, and literature on the topic.

Preferably a recently published systematic review/meta-analysis should be existing If there is no systematic review/meta-analysis IFSO encourages the writing group to create a systematic review/meta-analysis.

The evaluation of the existing literature should be done using the GRADE, JBI (Joana Briggs Intstitute) tools (or similar) methodology. To help in this, IFSO will support the writing group with a statistician from the very beginning.

The information and workflow within the writing group must be transparent, comprehensible and well documented. IFSO recommends the use of research assistants like Zotero (freeware).

- 3. Identify Key Points: Determine the key points that the position statement should address. These points should reflect the scientific society's stance on important aspects of MBS, such as patient selection, surgical technique(s), outcomes, safety measures, or ethical considerations. Aim to cover the most critical and current issues in the field.
- 4. Organizational Structure: Plan the organization and structure of your PS. Typically, it should include an introduction, background information, key points, supporting evidence, potential limitations, and a conclusion or summary. This structure will help ensure clarity and cohesiveness throughout the statement.
- **5. Introduction:** Clearly state the objective and significance of the position statement, as well as the *context within* which the statement is being made.
- **6. Background Information:** Provide relevant background information about the topic of the position statement, its purpose, prevalence, and importance.
- 7. **Key Points and Supporting Evidence:** Present each key point that will be addressed in the statement. For *each point, provide a clear statement or recommendation*,

followed by supporting scientific evidence, such as published studies, systematic reviews, or meta-analyses. Use citations to ensure transparency and credibility.

- 8. Address Potential Limitations: Acknowledge the limitations or controversies associated with certain aspects of the topic of the PS. Discuss alternative perspectives or conflicting evidence, if applicable. This demonstrates that the PS considers different viewpoints and acknowledges potential challenges in the field.
- 9. Conclusion: Summarize the key points discussed in the statement.
- 10. Review and Stakeholder Involvement: The finalized document will be reviewed by the scientific committee and after its approval presented to IFSO Executive board. This process ensures accuracy, scientific validity, and clarity of the PS before publishing it.
- 11. Dissemination/Publication: The PS is published in Obesity Surgery and on IFSO's website. The maximum number of words should not exceed 3000. The number of references is limited up to 300.

Remember, a PS should reflect the collective expertise and knowledge of the scientific surgical society and be grounded in scientific evidence. By following these guidelines, a robust and informative PS that represents the society's stance on MBS can be created.

Preexisting PS on the same topic published by other societies (like ASMBS or other IFSO-Chapters, EASO, TOS, WOF etc.) should be identified and considered.

Position statements or existing practice guidelines are not meant to offer rigid rules or mandatory practice requirements. They should not be used to define or establish legal standards of care at the local, regional, or national levels. In the end, there are multiple suitable treatment approaches for each patient, and surgeons must exercise their discretion in choosing from the available and feasible treatment options.

GRADE (Grading of Recommendations Assessment, Development and Evaluation) is a method of assessing the certainty in evidence (also known as quality of evidence or confidence in effect estimates) and the strength of recommendation in health care. https://gdt.gradepro.org/app/handbook/handbook.html

#### Joana Briggs Institiute (JBI) tools

JBI's critical appraisal tools assist in assessing the trustworthiness, relevance and results of published papers. The JBI tools provide evaluation/grading tools for all types of studies (including case series, cohort studies, RCTs etc.) https://jbi.global/critical-appraisal-tools

PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses): Evidence
Based minimum set of items for reporting in systematic reviews and meta-analyses.

http://www.prisma-statement.org/documents/PRISMA 2020 expanded checklist.pdf

### IFSO Bariatric Endoscopy Committee Evidence-Based Review and Position Statement on Endoscopic Sleeve Gastroplasty for Obesity Management

### **Executive Summary**

### Introduction

Obesity is a significant global health issue. Metabolic and bariatric surgery (MBS) is the gold standard in the treatment of obesity due to its proven effectiveness and safety in the short and long term. However, MBS is not suitable for all patients. Some individuals are at high surgical risk or refuse surgical treatment, while others do not meet the criteria for MBS despite having obesity-related comorbidities. This gap has driven the development of endoscopic solutions like Endoscopic Sleeve Gastroplasty (ESG), which offers a less invasive alternative that preserves anatomy and reduces risks.





### Position Statement on revisional MBS

Therapeutic Options for Recurrence of Weight and Obesity related complications After Metabolic and Bariatric Surgery: An IFSO Position Statement

A. Haddad, B. M Suter, J.W. Greve, S. Shikora, Prager, G Abu Dayyeh, M. Galvao, , K. Grothe, M. Herrera, L. Kow, C. Le Roux, M. O'Kane, C. Parmar, G. Quadros, A. Ramos, J. Vidal, R V Cohen





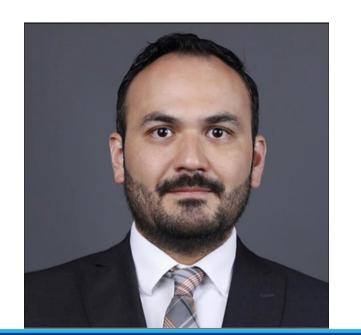
- A. Introduction
- B. Methods
- C. Definitions
- D. What has changed since 1991
- E. How do we define success after MBS?
- F. Definition of suboptimal clinical response (SoCR)
- G. Definition of recurrent weight gain (RWG)?
  - Definition of RWG
  - The difference between Suboptimal Clinical Response (SoCR) and Recurrent Weight gain
- H. The Importance of preoperative nutritional and behavioral counseling prior to revisional surgery
  - Dietetic/nutritional assessments
  - Behavioral health assessments
  - Addressing patient's expectations
  - Multidisciplinary discussion
- I. Surgical options and outcomes
  - Management for RWG after RYGB
    - 1. Endoscopic techniques
    - 2. Surgical revision options
  - Management for RWG after LSG
    - 1. Conversion to RYGB short and long BPL
    - 2. Conversion to OAGB
    - 3. Conversion to SADIS and DS
- J. Pharmacotherapy for RWG post Bariatric Surgery
  - Oral Medications
  - Injectable Medications (Glucagon-like peptide type 1 receptor agonists)

**Ashraf Haddad** 

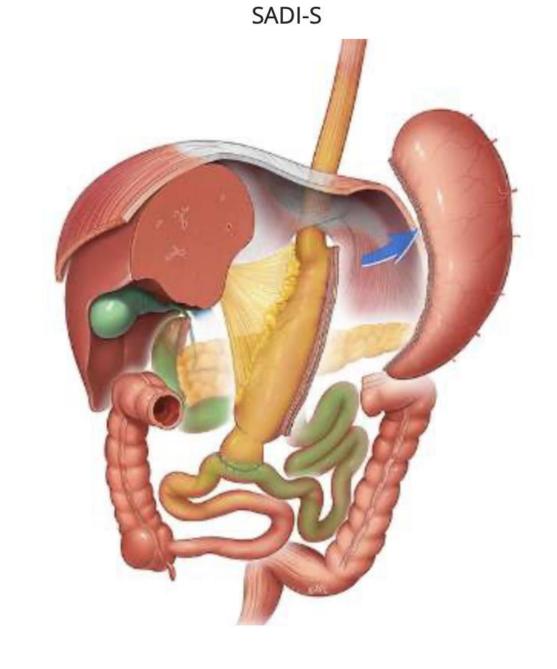
# Single Anastomosis Duodeno-Ileostomy with Sleeve Gastrectomy / Single Anastomosis Duodenal Switch (SADI-S/SADS) IFSO Position Statement - update 2023

Guillermo Ponce de Leon Ballesteros, Gustavo Romero Velez, Kelvin Higa, Jacques Himpens, Mary O'Kane, Antonio Torres, Gerhard Prager and Miguel F. Herrera

(On behalf of the IFSO appointed task force reviewing the literature on SADI-S/SOADS)





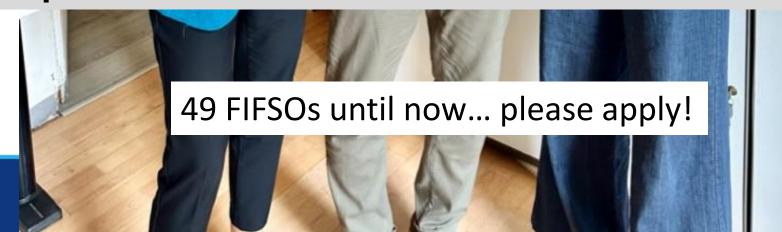








### https://www.ifso.com/standard-fifso/



### Requirements:

Applicant should:

- 1. be a Regular IFSO member in good standing for the last 3 years
- 2. have an active practice of Metabolic and Bariatric surgery in his/her Country documenting completion of a minimum of 25 approved Metabolic/Bariatric surgeries per year for the last 3 years as primary surgeon.

Certificate has to be provided by the national society/hospital/clinic/university or other relevant institution.

- 3. provide two letters of recommendation from IFSO Regular Members in good standing (with FIFSO status preferably) who practice in the same Country of the Applicant including:
  - **a.** Length of time known the Applicant
  - **b.** Statement on the applicant's good standing practice in Metabolic/Bariatric Surgery

Please note that letters of recommendation can be submitted only using this form.

4. have attended either two IFSO World Congresses or one World and one Chapter Congress in the last 3 years

Proof of attendance (certificate of attendance) has to be provided by the applicant

5. have at least one accepted abstract as author or co-author (oral, poster or video) OR have been an invited speaker during the last 3 years

Proof of invited presentation/abstract acceptance has to be provided by the applicant

6. disclose not to be an Industry/Corporate executive, employee or doing active dedicated work with a single corporation





# OBSERVERSHIP PROGRAM IN METABOLIC BARIATRIC SURGERY 2024



Upgrade your skills in MBS Learn from the most experienced experts in the world

APPLY NOW!

Deadline June 8, 2024

The Observership is meant to offer members in the early phase of their career the chance to visit the best MBS centres in the world for a period of one to three weeks, to do an amazing experience and bring back home knowledge and new skills

max amount of the grant: 2,500 USD\$ 20 observerships

50.000 USD\$ in 2024

### 97 applications

16 Surgical Observerships (EC sponsored 1 extra)

5 IH: Criteria to be defined

### **Educational Committee**



**Chair - Natan Zundel** 

Vice-Chair: Daye Rodriguez

### **Members:**

- Marcos Berry
- ▶ Shanu Khotari
- ▶ Farah Husain
- Raquel Sanchez
- Mario Musella
- Khaled Gawdat
- Mousa Khoursheed
- Muffazal Lakdawala
- CK Huang
- Julie Parrott

### → IFSO Fellowship Program



### Scopinaro Foundation Committee:





Chair: Martin Fried

**Goals:** To help to develop Metabolic/Bariatric Surgery (MBS) in countries where there is a need. The intention is to support and promote preferably but not only young surgeons and IH members (<45 years) and national societies.

NAPOLI

### supported activities:

- -travel
- -grants
- -training courses
- -help in establishing/developing national societies
- -support in establishing national registries

### **Foundation Committee composition:**

Chair: Martin Fried

Vice-Chair: Luigi Angrisani

4 members of the BOT including the chair of the BOT

5 members nominated by the Chapters

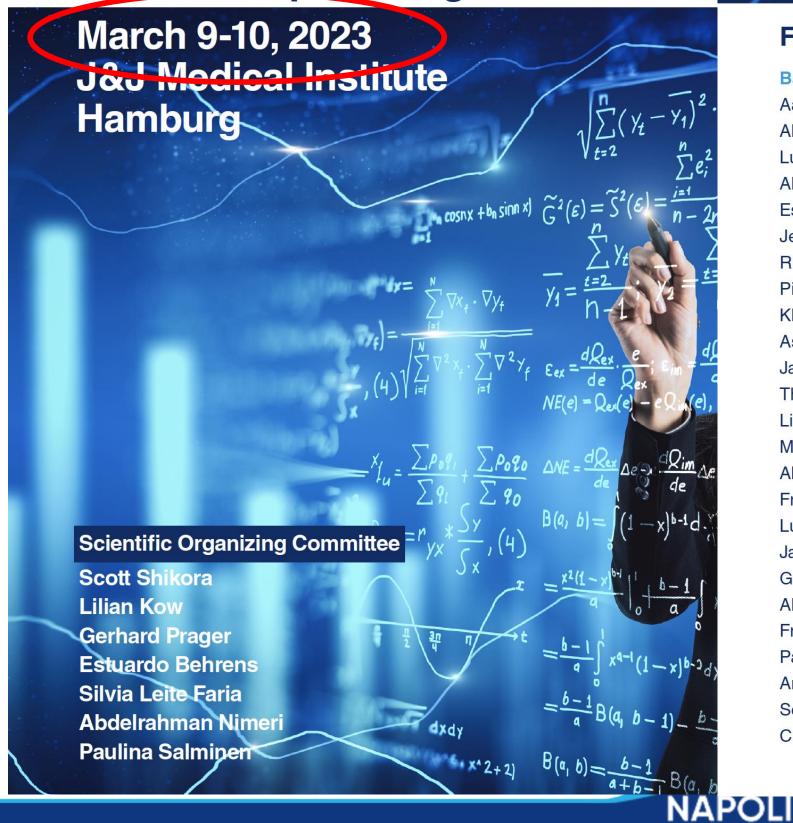
Young IFSO president

IH president

-mentoring and tutoring.



### IFSO Consensus on definitions and clinical practice guidelines





### **FACULTY**

#### **Bariatric Surgeons**

Aayed Alqahtani, Saudi Arabia Ali Aminian, USA Luigi Angrisani, Italy Ahmad Bashir, Jordan Estuardo Behrens, Guatemal Jean Marc Chevallier, France Ricardo Cohen, WOF, Brazil Pierre Garneau, Canada Khaled Gawdat, Egypt Ashraf Haddad, Jordan Jacques Himpens, Belgium Thomas Inge, USA Lilian Kow, Australia Marina Kurian, USA Abdelrahman Nimeri, USA Francois Pattou, France Luis Poggi, Peru Jaime Ponce, USA Gerhard Prager, Austria Almino Ramos, Brazil Francesco Rubino, UK Paulina Salminen. Finland Andres Sanchez Pernaute, Spain Scott Shikora, USA Cunchuan Wang, China

#### hysicians

Nasreen Al Faris, Saudi Arabia
Caroline Apovian, USA
Rachel Batterham, UK
Dror Dicker, Israel
Claudia Fox, USA
Lee Kaplan, USA
Nabijsa Lalic, IDF, Serbia
Guilherme Macedo, WGO, Portugal
Alex Miras, UK
Tarissa Petry, Brazil
Arya Sharma, Germany
Josep Vidal, Spain

#### **Endoscopists**

Barham Abu Dayyeh, *USA*Mohit Bhandari, *India*Christine Stier, *Germany*Christopher Thompson, *USA* 

#### **Integrated Health Professionals**

Barbara Andersen, *Austria*Dale Bond, *USA*Silvia Leite Faria, *Brazil*Violeta Moizé Arcone, *Spain*David Sarwer, *USA* 

### Health Survey Design and Analysis

Kevin White, USA

# IFSO Consenus on Definitions and Clinical Practice Guidelines Hamburg, March 9-10, 2023



NAPOLI 2023



#### **ORIGINAL CONTRIBUTIONS**



### IFSO Consensus on Definitions and Clinical Practice Guidelines for Obesity Management—an International Delphi Study

Paulina Salminen<sup>1,2</sup> · Lilian Kow<sup>3</sup> · Ali Aminian<sup>4</sup> · Lee M. Kaplan<sup>5</sup> · Abdelrahman Nimeri<sup>6</sup> · Gerhard Prager<sup>7</sup> · Estuardo Behrens<sup>8</sup> · Kevin P. White<sup>9</sup> · Scott Shikora<sup>6</sup> · IFSO Experts Panel

Received: 18 July 2023 / Revised: 13 October 2023 / Accepted: 18 October 2023 © The Author(s) 2023

### 43-member expert panel

There were **26 bariatric surgeons** including 2 pediatric bariatric surgeons, among whom 11 also performed endoscopic bariatric procedures.

The remaining expert panel members were four endoscopists, eight endocrinologists, one internist, one pediatrician, two nutritionists, and two counsellors (psychology, exercise).

Obesity Surgery 2023 https://doi.org/10.1007/s11695-023-06913-8

# IFSO Consensus Conference 2023 Section 1. Definitions and Reporting Standards

Former "non responder":

In general, a <u>suboptimal initial clinical response</u> to MBS is demonstrated either by total body weight or BMI loss of less than 20%

OR

by inadequate improvement in an obesity complication that was a significant indication for surgery.

# IFSO Consensus Conference 2023 Section 1. Definitions and Reporting Standards

Former "weight recurrence/failure"

In general, a late post-operative clinical deterioration after MBS is demonstrated either by a 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 and that occurs after an initially adequate post-operative clinical response.

Given the different average effectiveness of different MBS procedures, and variable effects in different populations, these criteria should be applied to individual patients in the context of expert clinical judgement.

NAPOLI

# https://link.springer.com/journal/11695/submission-guidelines



#### IFSO ACCEPTED DEFINITIONS FOR PUBLICATIONS

#### People's first language/ IFSO accepted nomenclature:

- Eliminate "success/failure" "recidivism" "non-compliant" "gold-standard" "last-resort" sort of language
- Imagery (no headless, stereotypical/stigma = takeaway boxes, fast food, ill-fitting clothes, etc.)

### New reporting standards and nomenclature to use as Obesity Surgery Journal/ IFSO policy:

Old and not accepted per Journal Policy	New replacement nomenclature		
Morbid obesity	Severe obesity		
Obese	Patient or individual with obesity		
Subject/s	Patient/s or individual/s		
Comorbidity/ies	Obesity complication/s. Comorbidity/ies can only still be used for medical problems that are seen in patients with obesity but not directly caused by obesity as defined by the medical community		
Weight loss surgery	Bariatric & metabolic surgery		
Super or super-super obesity	Please use Body Mass Index reference BMI>50 or BMI>60 to refer to this patient population respectively		
Gold standard	Avoid using this term please		
Revision procedure	'Revision or modification' for any procedure that does not encompass conversion to a new procedure with a new mechanism of action or reversal of the anatomy. Revision or		

	encompasses correction or an				
	enhancement of the same				
	procedure (revision of a gastric				
	pouch, <u>distalization</u> of gastric				
	bypass)				
Conversion procedure	'Conversion' entails converting				
	one procdure to another with a				
	different mechanism of action.				
	Revision is not accepted as a				
	substitution anymore				
Reversal procedure	Term can still be used to describe				
	reversing a procedure to the				
	normal standard anatomy				
Insufficient or inadequate weight	'Suboptimal initial clinical				
loss	response' encompasses				
	maximum total weight loss				
	outcome (TWL%) <20%, while				
	also covering no improvement or				
	worsening of any obesity				
	complication that was present				
	preoperatively				
Weight loss failure	Failure is not an acceptable term				
	anymore. Use suboptimal initial				
	clinical response if fits this criteria				
Adequate weight loss	Optimal initial clinical response				
	which follows the criteria of				
	TWL% >20% and/or improvement				
	of obesity complication/s				
Success	Term is not acceptable anymore.				
	Please use Optimal initial clinical				
	response for primary procedures				
	or optimal clinical response for				





The Role of Obesity Management Medications (OMMs) in the Context of Metabolic/Bariatric Surgery (MBS)

An IFSO Consensus Conference

Vienna, Hotel Hilton Vienna Park 30<sup>th</sup> of April - 1<sup>st</sup> of May 2024



Core Scientific Committee
Gerhard Prager, Ricardo Cohen, Luca Busetto

### WHY a Consensus Conference?

No top level evidence regarding efficacy of <u>preoperative</u> OMM treatment for reducing perioperative risks

Still scarce evidence for use of OMMs as <u>adjunct therapy</u> to MBS

Role in - suboptimal responders - recurrent weight gain unclear so far...



### Objectives:

Bringing together leading physicians, surgeons, researchers and thought leaders in the realm of obesity medicine and MBS

Explore latest developments in OMMs and their synergies with MBS

Active participation: ASMBS, WOF, EASO, IDF

#### Core Scientific Committee

Gerhard Prager, *Austria* Luca Busetto, *Italy* Ricardo Cohen, *Brazil* 

#### **Systematic Review Committee**

Mohammad Kermansaravi, *Iran* Chetan Parmar. *UK* 

#### **Delphi Expert**

Randy Levinson, USA

#### **Invited Experts**

### METABOLIC BARIATRIC SURGEONS

Ali Aminian, USA Ricardo Cohen, Brazil Nicola Di Lorenzo, Italy Khaled Gawdat, *Egypt* Mohammed Hadad, UAE Mohammad Kermansaravi, Iran Lilian Kow, Australia Marina Kurian, USA Muffazal Lakdawala, India Abdelrahman Nimeri, USA Chetan Parmar, UK Silvana Perretta, France Luis Poggi, Peru Jaime Ponce, USA Gerhard Prager, Austria Francesco Rubino, *UK* Paulina Salminen, Finland Phil Schauer, USA Scott Shikora, USA

Michel Suter, Switzerland

#### **OBESITY PHYSICIANS**

Nasreen Al Faris, Saudi Arabia
Matthias Blüher, Germany
Luca Busetto, Italy
Lena Carlsson, Sweden
David Cummings, USA
Dror Dicker, Israel
Linong Ji, China
Lee Kaplan, USA
Arya Sharma, Germany
Sara Suliman, UAE

Wei Tham, Singapore
Josep Vidal, Spain
Tariana Zanata Patry, Pr

Tarissa Zanata Petry, Brazil

#### **INTEGRATED HEALTH EXPERTS**

Silvia Leite, *Brazil*Mary O'Kane, *UK*Andrea Schroeder, *New Zealand* 

### PARTNER SOCIETIES' REPRESENTATIVES

Jason Halford EASO President, *UK* 

Carel Le Roux,

WOF Clinical Care Committee

Ireland

Peter Schwarz

IDF President elect, Germany

#### PATIENTS' REPRESENTATIVES

Vickey Mooney, *Ireland* Ximena Ramos Salas, *Sweden* 

41 experts: Endocrinology, diabetology, internal medicine, gastroenterology, allied health, surgery, and patients

Impact on advancing collective understanding of obesity management in the context of MBS

# FIFSO

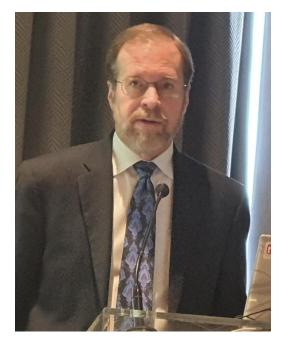
The Role of Obesity Management Medications (OMMs) in the Context of Metabolic/Bariatric Surgery (MBS)

An IFSO Consensus Conference

Vienna, Hotel Hilton Vienna Park 30<sup>th</sup> of April - 1<sup>st</sup> of May 2024



Core Scientific Committee Gerhard Prager, Ricardo Cohen, Luca Busetto

















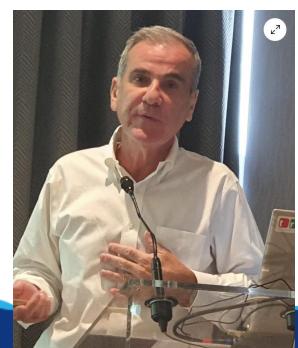
















### Core Group:

Gerhard Prager Ricardo Cohen

Luca Busetto Randy Levinson (Delphi Expert)

Mohammad Kermansaravi Chetan Parmar



Systematic Review

- 1. Systematic Review
- 2. Evidence Paper sent to all experts
- 3. Each Expert 3-4 Delphi statements
- 4. Delphi process:
  - a. 3 Delphi rounds BEFORE meeting (for B or less including feedback for each round)
  - b. Delphi process at the meeting

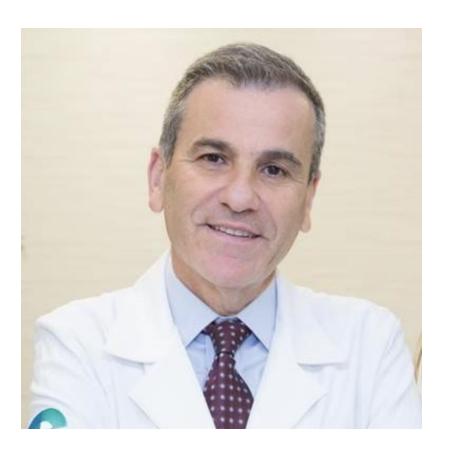


The Role of Obesity Management Medications in the Context of Metabolic/Bariatric Surgery: An International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO) Consensus

### **Abstract**

Introduction

Metabolic/bariatric surgery (MBS) remains an effective and durable treatment for obesity and its complications, but a small number of patients may have suboptimal outcomes. Obesity-management medications (OMMs) may have synergistic benefits in addition to MBS. This may result in more effective obesity treatments. However, more evidence of using OMMs before and after MBS is needed.





# **2022 ASMBS and IFSO Guidelines**Indications for Metabolic and Bariatric Surgery

Obesity Surgery (2023) 33:3–14 https://doi.org/10.1007/s11695-022-06332-1



#### **ORIGINAL CONTRIBUTIONS**



2022 American Society of Metabolic and Bariatric Surgery (ASMBS) and International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO) Indications for Metabolic and Bariatric Surgery

Dan Eisenberg <sup>1</sup> · Scott A. Shikora <sup>2</sup> · Edo Aarts <sup>3</sup> · Ali Aminian <sup>4</sup> · Luigi Angrisani <sup>5</sup> · Ricardo V. Cohen <sup>6</sup> · Maurizio de Luca <sup>7</sup> · Silvia L. Faria <sup>8</sup> · Kasey P.S. Goodpaster <sup>4</sup> · Ashraf Haddad <sup>9</sup> · Jacques M. Himpens <sup>10</sup> · Lilian Kow <sup>11</sup> · Marina Kurian <sup>12</sup> · Ken Loi <sup>13</sup> · Kamal Mahawar <sup>14</sup> · Abdelrahman Nimeri <sup>15</sup> · Mary O'Kane <sup>16</sup> · Pavlos K. Papasavas <sup>17</sup> · Jaime Ponce <sup>18</sup> · Janey S. A. Pratt <sup>1,19</sup> · Ann M. Rogers <sup>20</sup> · Kimberley E. Steele <sup>21</sup> · Michel Suter <sup>22,23</sup> · Shanu N. Kothari <sup>24</sup>

Published online: 7 November 2022

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#### Major updates to 1991 National Institutes of Health guidelines for bariatric surgery

Metabolic and bariatric surgery (MBS) is recommended for individuals with a body mass index (BMI)  $\geq$ 35 kg/m<sup>2</sup>, regardless of presence, absence, or severity of co-morbidities.

MBS should be considered for individuals with metabolic disease and BMI of 30-34.9 kg/m<sup>2</sup>.

BMI thresholds should be adjusted in the Asian population such that a BMI  $\geq$ 25 kg/m<sup>2</sup> suggests clinical obesity, and individuals with BMI >27.5 kg/m<sup>2</sup> should be offered MBS.

# Evidence for the Updated Guidelines on Indications for MBS (IFSO/ASMBS)



Maurizio de Luca

Systematic Review on different items according to PRISMA methodology

Delphi survey to address nine statements that did not have strong backing from the literature search

Level of Evidence
Degree of recommendation



Obesity Surgery https://doi.org/10.1007/s11695-024-07370-7

#### ORIGINAL CONTRIBUTIONS





- Scientific Evidence for the Updated Guidelines on Indications
- for Metabolic and Bariatric Surgery (IFSO/ASMBS)
- <sup>4</sup> Maurizio De Luca<sup>1</sup> · Scott Shikora<sup>2</sup> · Dan Eisenberg<sup>3</sup> · Luigi Angrisani<sup>4</sup> · Chetan Parmar<sup>5</sup> · Aayed Alqahtani<sup>6</sup> ·
- Ali Aminian<sup>7</sup> · Edo Aarts<sup>8</sup> · Wendy Brown<sup>9</sup> · Ricardo V. Cohen<sup>10</sup> · Nicola Di Lorenzo<sup>11</sup> · Silvia L. Faria<sup>12</sup> ·
- 6 Kasey P. S. Goodpaster<sup>13</sup> · Ashraf Haddad<sup>14</sup> · Miguel Herrera<sup>15</sup> · Raul Rosenthal<sup>16</sup> · Jacques Himpens<sup>17</sup>
- <sup>7</sup> Angelo lossa<sup>18</sup> · Mohammad Kermansaravi<sup>19</sup> · Lilian Kow<sup>20</sup> · Marina Kurian<sup>21</sup> · Sonja Chiappetta<sup>22</sup> ·
- <sup>8</sup> Teresa LaMasters<sup>23</sup> · Kamal Mahawar<sup>24</sup> · Giovanni Merola<sup>25</sup> · Abdelrahman Nimeri<sup>2</sup> · Mary O'Kane<sup>26</sup>
- Pavlos Papasavas<sup>27</sup> · Giacomo Piatto<sup>28</sup> · Jaime Ponce<sup>29</sup> · Gerhard Prager<sup>30</sup> · Janey S. A. Pratt<sup>3</sup> · Ann M. Rogers<sup>31</sup> ·
   Paulina Salminen<sup>32</sup> · Kimberley E. Steele<sup>33</sup> · Michel Suter<sup>34</sup> · Salvatore Tolone<sup>35</sup> · Antonio Vitiello<sup>36</sup> · Marco Zappa<sup>37</sup> ·
- Shanu N. Kothari<sup>38</sup>
- 12 Received: 14 May 2024 / Accepted: 21 May 2024
- O The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2024

#### A01 Abstract

The 2022 American Society of Metabolic and Bariatric Surgery (ASMBS) and International Federation for the Surgery of
Obesity and Metabolic Disorders (IFSO) updated the indications for Metabolic and Bariatric Surgery (MBS), replacing the previous guidelines established by the NIH over 30 years ago. The evidence supporting these updated guidelines has been strengthened to assist metabolic and bariatric surgeons, nutritionists, and other members of multidisciplinary teams, as well as patients. This study aims to assess the level of evidence and the strength of recommendations compared to the previously AQ4 published criteria.

<sup>1</sup> Keywords Obesity · Metabolic and bariatric surgery · IFSO · ASMBS · Guidelines · Indications

22	Abbreviation		HTN	Hypertension	42
23				• •	
24	AAHKS	American Association for Hip and Knee	IFSO	International Federation for the Surgery of	43
		Surgeons		Obesity and Metabolic Disorders	44
25	ACS-NSQIP	American College of Surgeons National	LOS	Length of stay	45
26		Surgical Quality Improvement Program	LVAD	Left ventricular assist device	46
27	AGB	Adjustable gastric banding	LVEF	Left ventricular ejection fraction	47
28	ASMBS	American Society for Metabolic and Bari-	MACE	Major adverse cardiovascular event	48
29		atric Surgery	MAFDL	Metabolic dysfunction-associated liver	49
30	BMI	Body mass index		disease	50
31	BPD	Bilio-pancreatic diversion	MBS	Metabolic bariatric surgery	51
32	EAES	European Association for Endoscopic	<b>MBSAQIP</b>	Metabolic and Bariatric Surgery Accredita-	52
33		Surgery		tion and Quality Improvement Program	53
34	EASO	European Association for the Study of	MDT	Multidisciplinary team	54
35		Obesity	NIH	National Institute of Health	55
36	EBMIL	Excess of BMI loss	OAGB	One anastomosis gastric bypass	56
37	EWL	Excess weight loss	OSA	Obstructive sleep apnea	57
38	GI	Gastrointestinal	PRISMA	Preferred Reporting Items for Systematic	58
39	GRADE	Grading of Recommendations, Assess-		Reviews and Meta-Analyses	59
40		ment, Development and Evaluations	PWS	Prader Willi syndrome	60
41	HF	Heart failure	RCT	Randomized controlled trial	61
			RWG	Recurrent weight gain	62
	Estandad author	:-f	RYGB	Roux en Ygastric bypass	63
A1 Extended author information available on the last page of the article				IN NYOC	

In oress

## April 2024:



Including US data provided by ASMBS

The data were collected from 502.150 Metabolic and Bariatric Surgeries (MBS) that were performed in 24 countries and from 2 regional registries representing 81.4% of known registries. During the past year we welcomed new members including Azerbaijan, Iran, and South Korea.



# IFSO MBS trial collaboration group meeting

27 May 2024

Monash University, Prato

Attendees: Mehran Anvari, Johan Ottoson, Nasser Sakran, Wendy Brown, Ronald Liem, Amir

Ghaferi, Villy Vage (zoom).

Apologies: Ricardo Cohen, Scott Shikora, Anthony Petick, Andrew Currie

#### **Overview**

- There are currently 32 MBS registries known to IFSO
  - 28 contribute to IFSO Global Registry
- Of these registries, there are 10 registries that have "mature" data and well-established platforms
  - Ontario
  - Michigan
  - Sweden
  - Norway
  - Netherlands
  - Israel
  - Australia/New Zealand
  - USA MBSAQIP
  - United Kingdom
  - Brazil



Wendy Brown

## **In-Registry Trial Collaborative:**

in-registry cluster-randomised, crossover, registry-nested trials





### The Past...

Historical reports claim that the first bariatric surgery was performed in

Spain, in the 10th century. D. Sancho, king of Leon (935-966)

was reported to be such an obese man that he could not walk, ride a horse or pick up a sword. This led him to lose his throne. He was then escorted by his grandmother to Cordoba to be treated by the famous Jewish doctor *Hasdai Ibn Shaprut*.

He **sutured the kings' lips** who could only be fed on a liquid diet through a straw, consisting of *teriaca*: a mixture of several herbs, including opium, whose side effects stimulated weight loss.

NAPOLI



Am Surg 2022 Jul;88(7):1526-1529. Endocrinol Nutr. 2016;63:100–101.

### The Past...

### King Sancho I ("the Fat")

lost half his weight (app 120kg), returned to Leon on his horse and regained his throne!

... he later became a regular eater of fruits...





Am Surg 2022 Jul;88(7):1526-1529. Endocrinol Nutr. 2016;63:100–101.

## Learn from The Past I...

An apple the day keeps the doctor away...





Am Surg 2022 Jul;88(7):1526-1529. Endocrinol Nutr. 2016;63:100–101.

# The History of Bariatric/Metabolic Surgery I



End-to-end jejunoileostomy with ileo-caecostomy

1953: Varco, University of Minnesota 1954: Kremen, Linner & Nelson: University of Minnesota



Gastric transection with loop gastrojejunostom

1953 – 90s: Open procedures,

Focus: Weight loss

1967 - Mason & Ito, Iowa



**Bilio-Pancreatic Diversion** 

1979 - Scopinaro



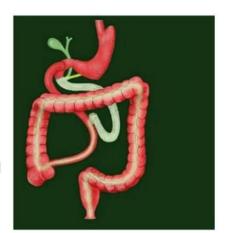
Vertical Banded Gastroplasty

1982 - Mason



Vertical gastric division with interposed Roux-en-Y gastrojejunostomy and proximal silastic ring

1991- Fobi



Duodenal switch with cross-stapling of the duodenum

1993 - Marceau

# The History of Bariatric/Metabolic Surgery II



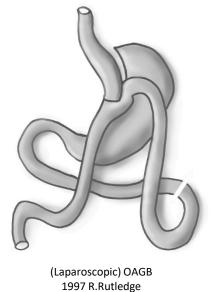
Laparoscopic adjustable gastric band

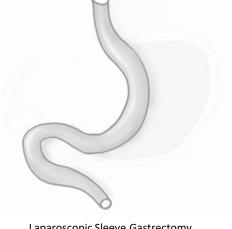
1993 - Forsell



Laparoscopic Roux-en-Y gastric bypass

1994 – Wittgrove and Clark

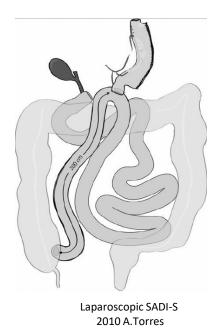




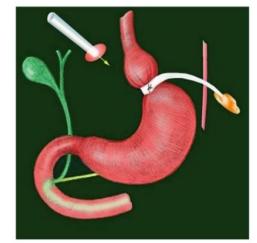
Laparoscopic Sleeve Gastrectomy 1999 M. Gagner

90s until now: Laparoscopic Procedures

Focus: Weight loss → Metabolic Diseases



# The History of Bariatric/Metabolic Surgery II



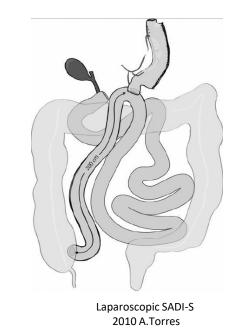
Laparoscopic adjustable gastric band

1993 - Forsell

Weight Loss Surgery

Diabetes Surgery MASH Surgery **Kidney Protection Heart Protection** 

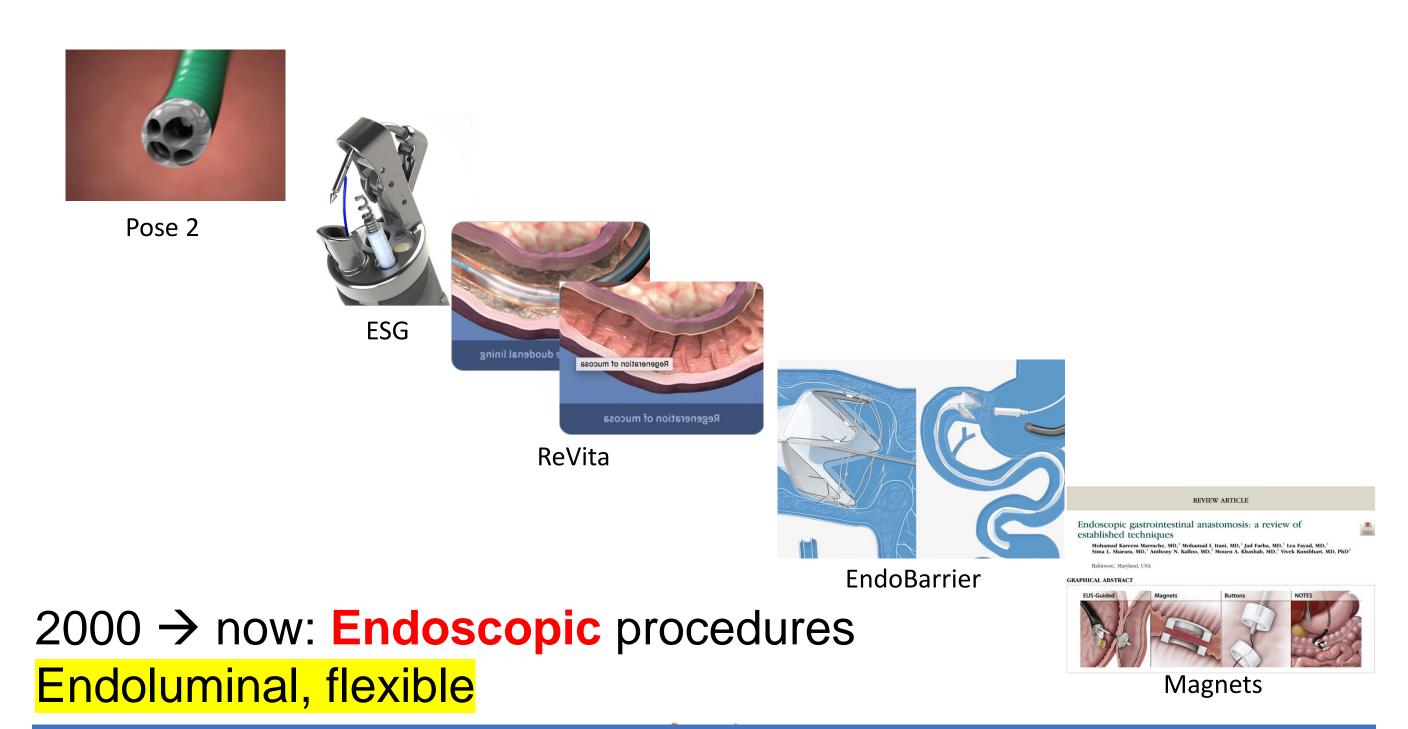
**Cancer Prevention** 

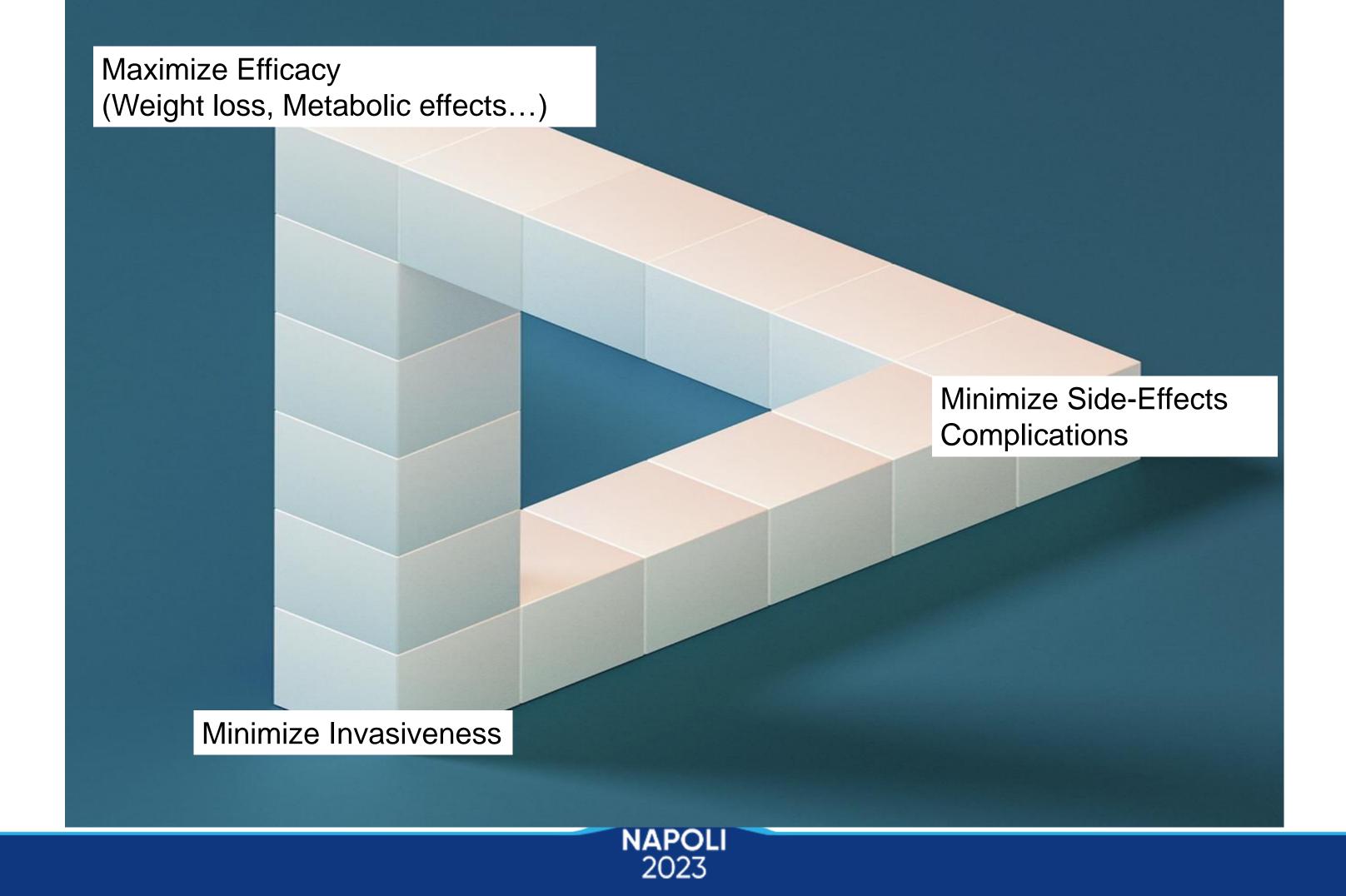


90s until now: Laparoscopic Procedures

Focus: Weight loss → Metabolic Diseases

# The History of Bariatric/Metabolic Surgery III



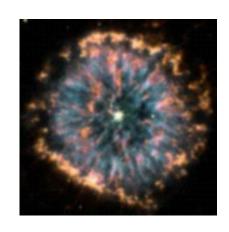


# Adipose Tissue:

# Storage Organ -> Endocrine Organ



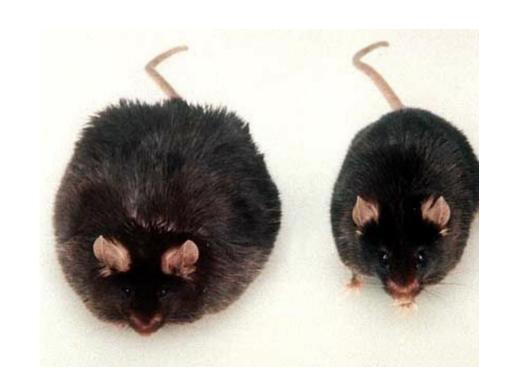
# "Big Bang" in Obesity research



1994 Leptin → Jeffrey Friedman

1<sup>st</sup> antiobesity hormone, "magic bullet"?

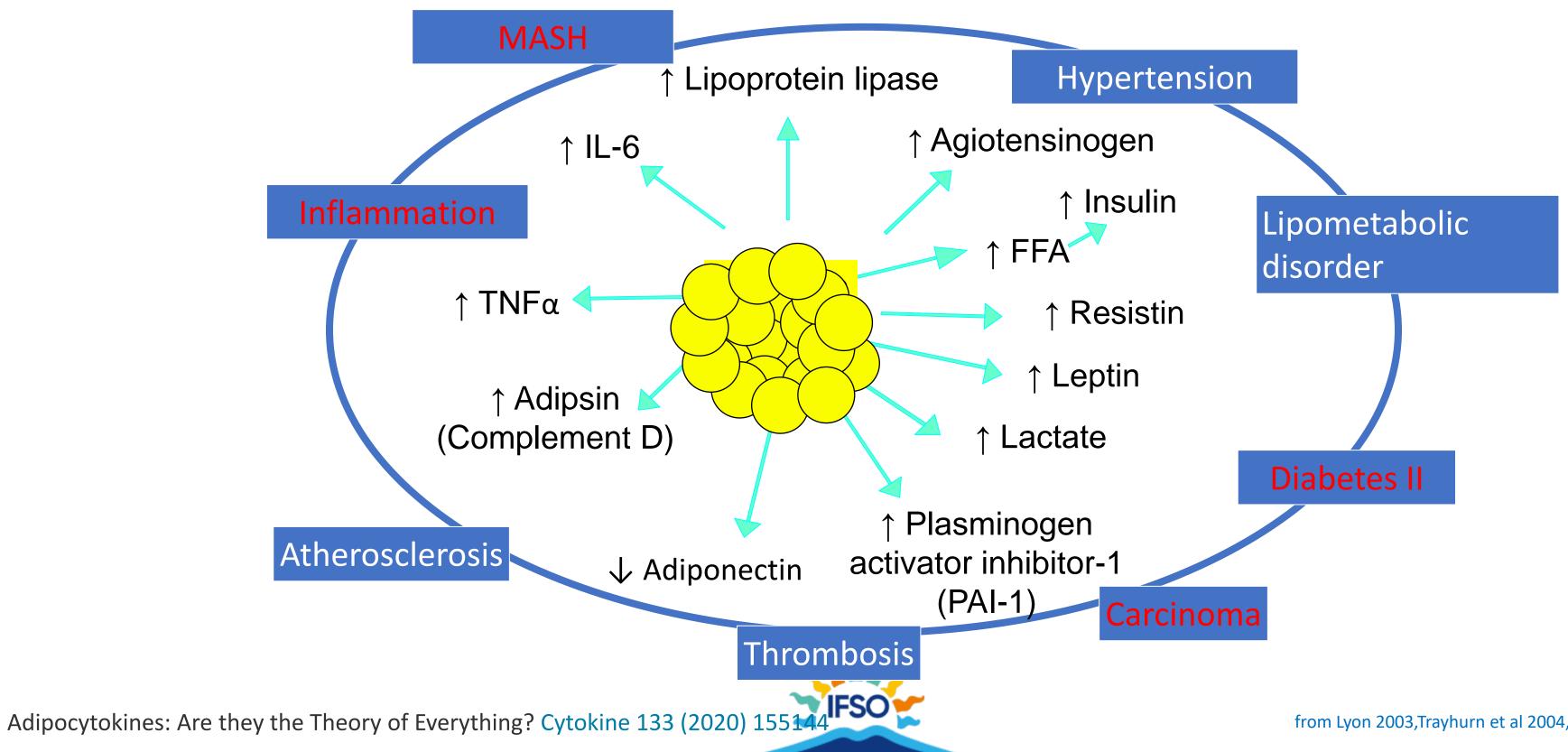
Adipocytes = Endocrine Cells



Visfatin	Adiponectin	Adrenomedullin	Lactate	
Apelin	TGF-ß	Vaspin	Prostaglandin	
IL-6	PAI-1	Lipocalin-2	Prostacyclin	
Leptin	Angiotensinogen	Free Fatty Acids	Monobutryn	
TNF-α	Metallothionein	Galectin 12	Lipoprotein Lipase	
Resistin	Resistin ASP Phos		Sfrp5	
RBP-4 Adipsin		Cholesterol Transfer Prot.	TNF	



# Metabolic effects

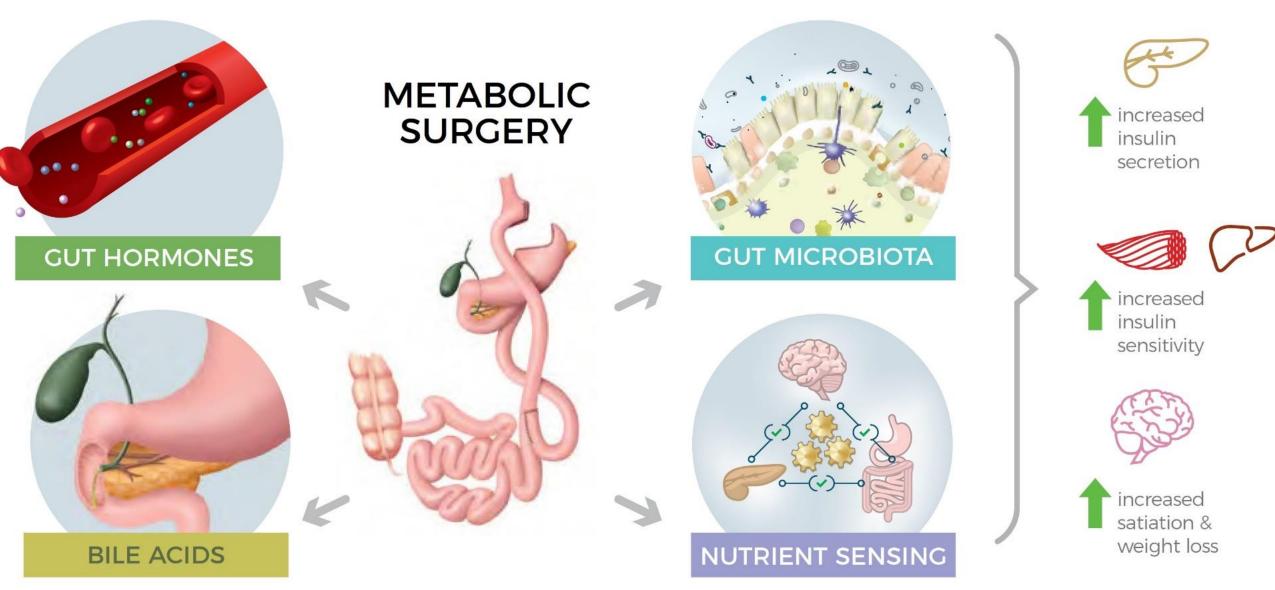


from Lyon 2003, Trayhurn et al 2004, Eckel et al 2005

# Improving Metabolism: MBS

"Gut hormones" regulate a variety of metabolic Processes

- Appetite, Satiety
- Food Intake
- Digestion processes
- Insulin Secretion





# New OMMs: The Paradise?...

mono/dual/triple/quadrupel... Agonists







#### Contents lists available at ScienceDirect

#### **Peptides**



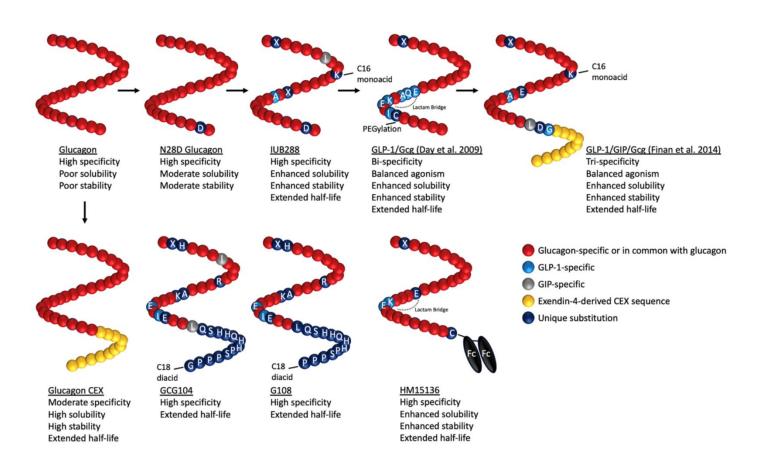


The molecular pharmacology of glucagon agonists in diabetes and obesity



Aaron Novikoff a,b,\*, Timo D. Müller a,b,\*

<sup>&</sup>lt;sup>b</sup> German Center for Diabetes Research (DZD), Neuherberg, Germany



Peptide characterization of glucagon-based mono-, dual-, and triple-agonists.

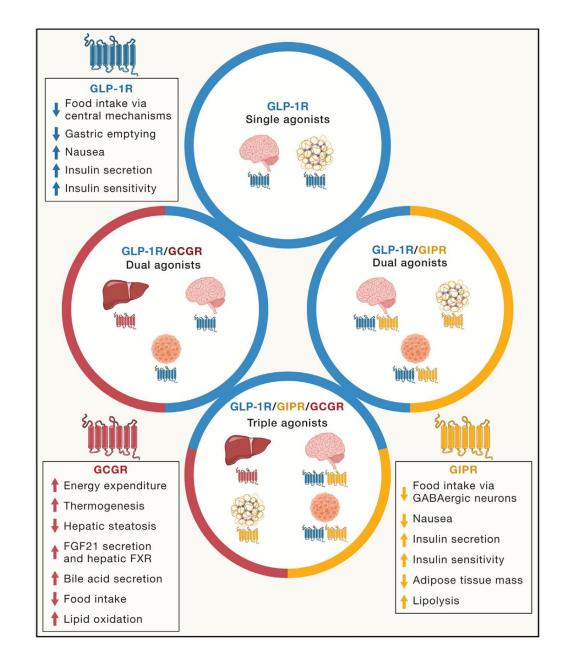




#### **Review**

# Transforming obesity: The advancement of multi-receptor drugs

Christine M. Kusminski,<sup>1</sup> Diego Perez-Tilve,<sup>2</sup> Timo D. Müller,<sup>3,4</sup> Richard D. DiMarchi,<sup>5</sup> Matthias H. Tschöp,<sup>6,7</sup> and Philipp E. Scherer<sup>1,\*</sup>





<sup>&</sup>lt;sup>a</sup> Institute of Diabetes and Obesity, Helmholtz Center Munich, Neuherberg, Germany



Contents lists available at ScienceDirect

### Peptides



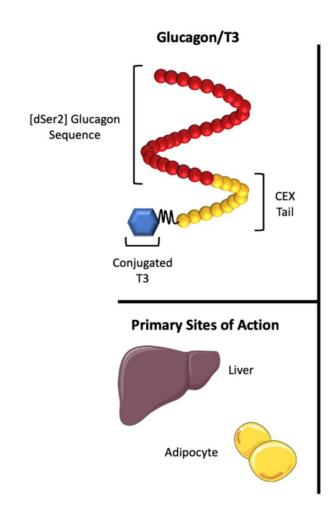


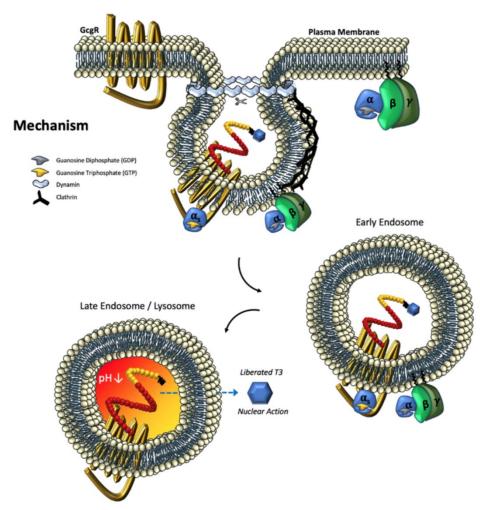
The molecular pharmacology of glucagon agonists in diabetes and obesity

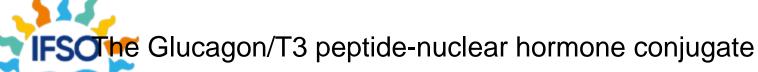


Aaron Novikoff a,b,\*, Timo D. Müller a,b,\*

Peptides can act as tissue-specific targeting agents to introduce DNA, antisense nucleic acids, oligonucleotides and small molecules into the intracellular space







<sup>&</sup>lt;sup>a</sup> Institute of Diabetes and Obesity, Helmholtz Center Munich, Neuherberg, Germany

<sup>&</sup>lt;sup>b</sup> German Center for Diabetes Research (DZD), Neuherberg, Germany

**Brain Stimulation** 

Pharmacological Add on (GLP-1, GIP, Glucagon)

Pharmacological
Tissue specific
Targeting

**Endoscopic Procedures** 

Robotic Surgery

Laparoscopic Surgery

**Open Surgery** 







# Obesity treatment comparable to cancer treatment:

Escalation of therapy according to the severeness of the disease

In case of recurrence: Adapt therapy (2<sup>nd</sup>/3<sup>rd</sup>/4<sup>th</sup> line)

Individualisation of therapy, prediction models of success

→ Precision Medicine: Get the treatment with the highest probability of success for your stage of disease

## The past... returns in the future

# Reinventing the bariatric wheel: what we know, thought we knew and hope to learn

"Although we have made considerable progress in improving the safety and efficacy of bariatric operations, we still have a lot to learn".

Keep in mind: Enthusiasm about VBG, LAGB

Evaluation of a procedure: at least sound 5a Fup data!



IFSO Position Statements Brolin R.E.: SOARD 4 (2008) 563-566

Maximize Efficacy (Weight loss, Metabolic effects...) Different new Metabolic **Interventions** Minimize Side-Effects Complications Standardization of interventions Minimize Invasiveness Robotic/SILS/Flexible Endoscopic/Endoluminal

### Learn from The Past II...

An apple the day keeps the doctor away...

How old became Sancho I?

Sancho I died in 966 (31a) – by a poisoned apple by the rebel count Gonzalo Menéndez.



Am Surg 2022 Jul;88(7):1526-1529. Endocrinol Nutr. 2016;63:100–101.



### Learn from The Past III...

Too much of a good thing might be bad...







Am Surg 2022 Jul;88(7):1526-1529. Endocrinol Nutr. 2016;63:100–101.

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Middle East North African Chapter Member at Large: Mohammed Al Hadad



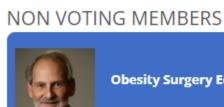
**Immediate Past President: Scott Shikora** 



Integrated Health Past President: Mary O'Kane



Latin American Chapter Member at large: Estuardo Behrens



Obesity Surgery Editor in Chief: Scott Shikora



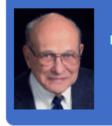
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**North American Chapter President: Jaime Ponce** 



Historian: George Cowan





Asia Pacific Chapter Member at large & IFSO 2024 Melbourne Congress President: Manish Khaitan



North American Chapter Member at large: Pierre Garneau

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Lilian Kow

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Chair - Jan Willem Greve

Vice Chair

Abdelrahman Nimeri

### Bariatric Metabolic Endoscopy Committee



Chair - Christine Stier

Vice Chair

Aayed Alqahtani

### Registry Committee

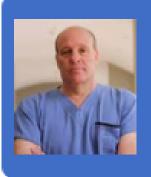


Chair - Ronald Liem

#### Vice Chair

Mehran Anvari

#### **Educational Committee**



NAPOLI 2023 Chair – Natan Zundel

Vice-Chair: Daye Rodriguez

# IFSO HEADQUARTERS



# IFSO HEADQUARTERS



Super-Girl Manuela



Wonder Woman Stefanie





gerhard.prager@meduniwien.ac.at





INTEGRATE YOUR







# RICARDO COHEN

IFSO PRESIDENT 2024 - 2025



# PRESIDENT'S OATH

I do solemnly swear that I will faithfully execute the office of President of the International Federation for the Surgery of Obesity and Metabolic Disorders, and will to the best of my ability carry out the Mission of IFSO

