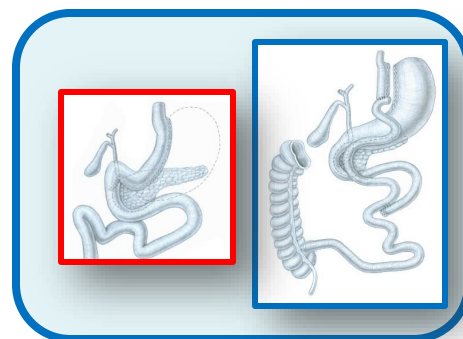


Medical Therapy & Surgery & Endoscopy: What Evidence really shows



Prof. Ralph Peterli

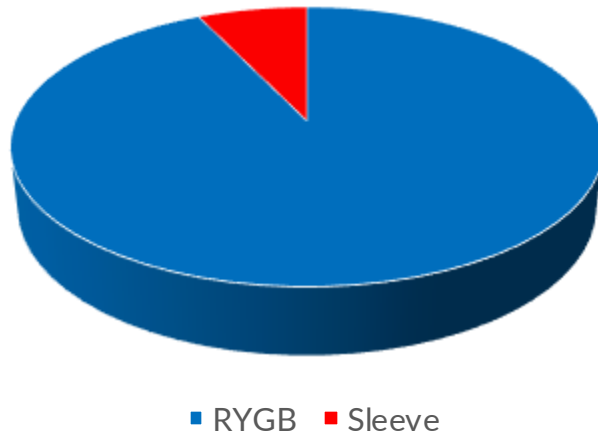
Department of Clinical Research University of Basel, Switzerland

Senior Consultant Visceral Surgery: ViszeraMed Zürich & Spital Männedorf

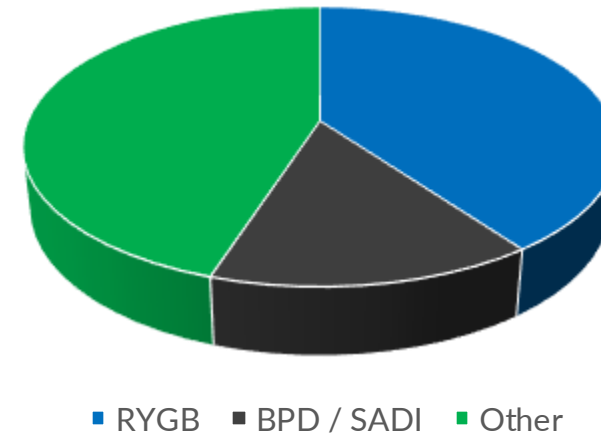
DISCLOSURES

- Research grants: Swiss National Science Foundation, Johnson & Johnson, Hirzbrunnen Foundation
NovoNordisk, UKBB, Novartis
- Lecture/consulting fees: Johnson & Johnson, Viatris, Falk Foundation, NovoNordisk, Lilly, Medtronic
- Case mix disclosure

Primary Procedures



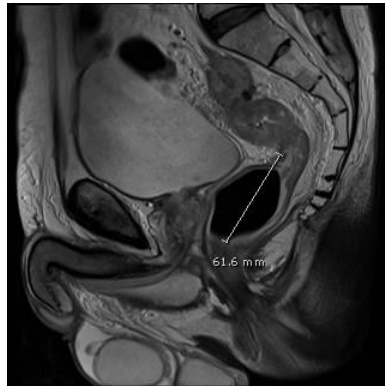
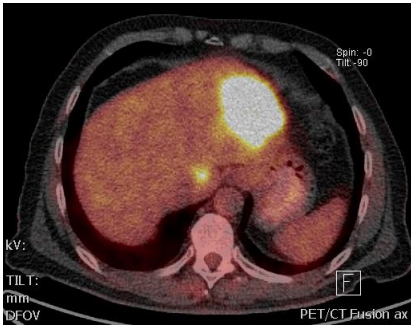
Revisional Procedures



BACKGROUND

Multimodal Cancer Treatment

- Interdisciplinary / interprofessional Tumorboards
 - Define together individual therapeutic strategy
- Example low rectal cancer
 - Neo-adjuvant Radio/Chemotherapy
 - Surgery
 - Adjuvant Chemo/Immunotherapy

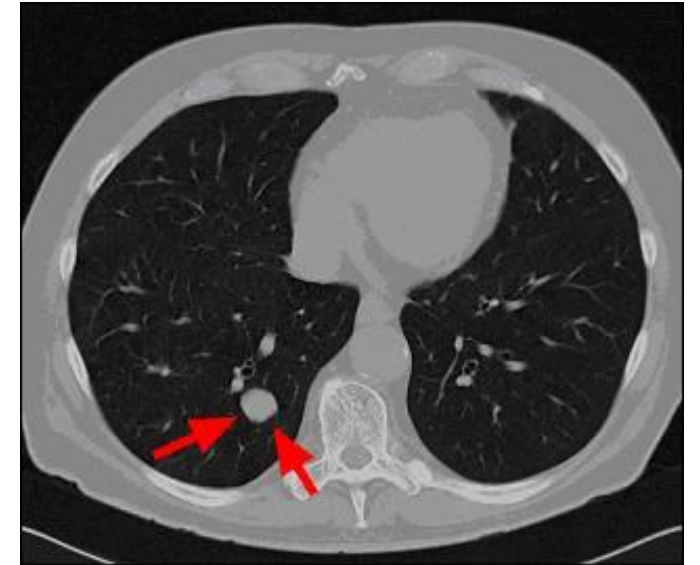
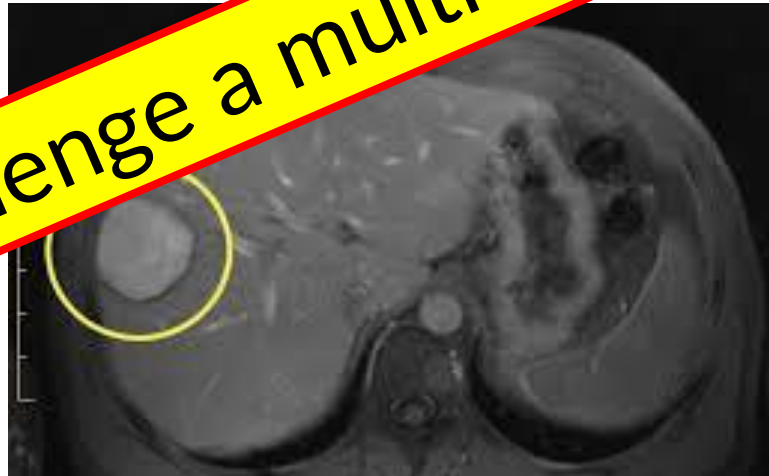


BACKGROUND

Multimodal Cancer Treatment

- Interdisciplinary / interprofessional Tumorboards
 - Define together individual therapeutic strategy
- Example low rectal cancer
 - Neo-adjuvant Radio/Chemotherapy
 - Surgery
 - Adjuvant Chemo/Immunotherapy
- In case of recurrence:
 - Curative concept ?
 - Palliative
 - How far can we go?
 - Surgery
 - Chem
 -

Nobody would challenge a multi-modal therapeutic concept

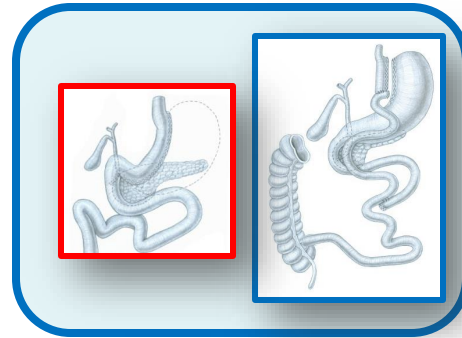


CONTENT

1. Comparison of different modalities with one another
2. “Neo-adjuvant” modalities
3. “Adjuvant” concepts
4. Concepts in pts with suboptimal clinical response or recurrent weight gain



OMM



MBS



EBP

Sources



Collaborative Research

BJS, 2024, znae283

<https://doi.org/10.1093/bjs/znae283>

Collaborative Research Proceedings

International consensus position statement on the role of obesity management medications in the context of metabolic bariatric surgery: expert guideline by the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO)

Ricardo V. Cohen^{1,*} , Luca Busetto² , Randy Levinson³, Carel W. Le Roux⁴, Paulina Salminen^{5,6}  and Gerhard Prager⁷ on behalf of the experts of the International Consensus on the Role of Obesity Management Medications in the Context of Metabolic Bariatric Surgery

- Vienna 4/2024
- Literature after 2024
 - RCT's
 - Other



1. Comparison of Different Modalities with one Another

- 139 RCT's comparing OMM & EBP & MBS with
 - Another modality
 - Lifestyle changes
 - Placebo
 - No therapy
- 54 evaluated MBS (n = 61,961)
- 21 EBP (n = 2'934)
- 64 OMM (n = 5'991)

- Network Meta-Analysis:
 - Direct & indirect comparisons
 - Enables ranking of modalities (more than in pairwise comparisons)
- Min. FU
 - 52 weeks for OMM, MBS
 - 6 months for EBP

Obesity 2026; 34:279–293

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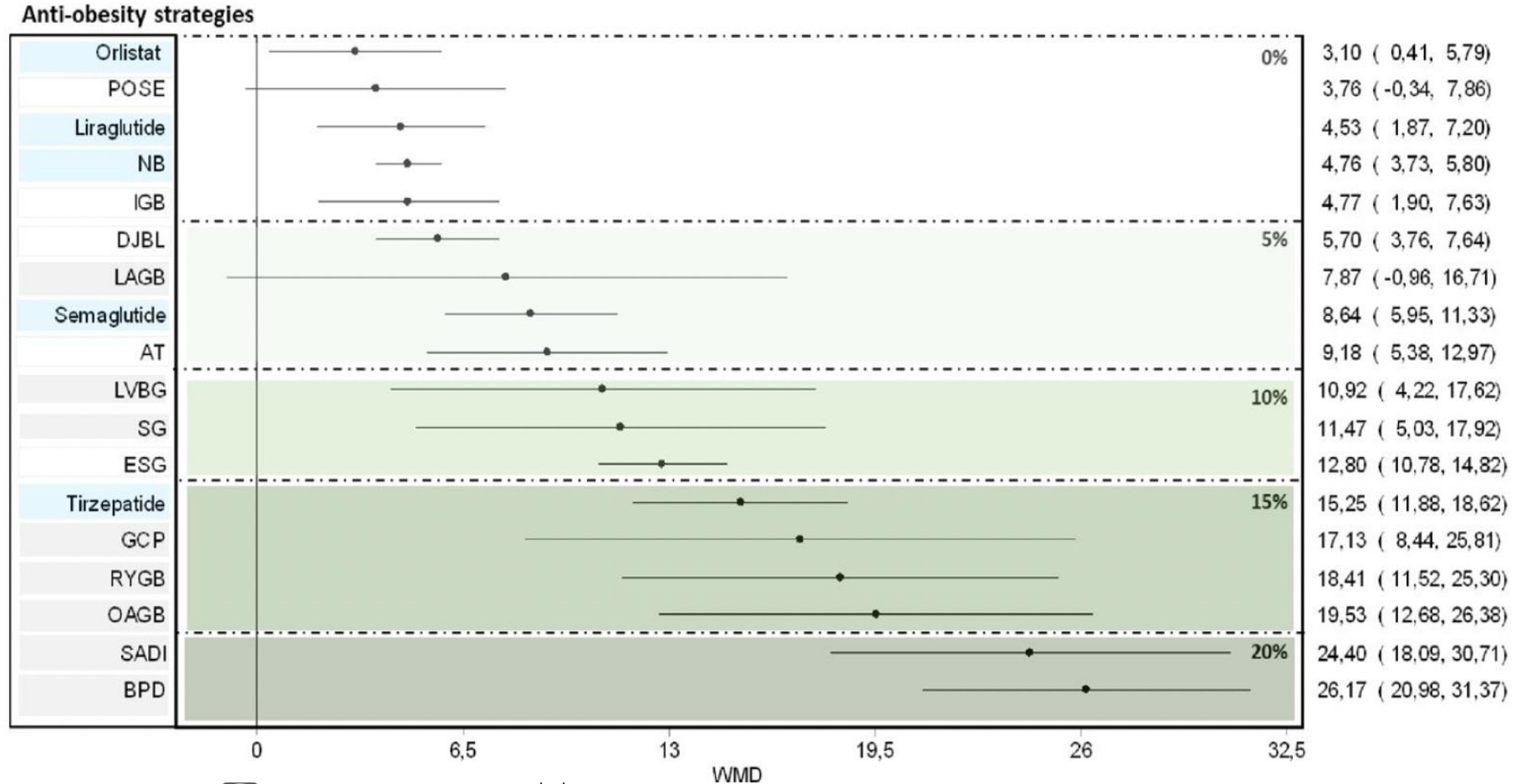
Clinical Trials and Investigations

Efficacy and Safety of Pharmacological, Endoscopic, and Surgical Treatments for Obesity: A GRADE-Based Network Meta-Analysis

Maurizio De Luca¹ | Ricardo V. Cohen² | Amanda Belluzzi¹ | Giuseppe Navarra³ | Nicola Di Lorenzo⁴ | Tarissa B. Z. Petry² | Paolo Sbraccia⁵ | Luca Busetto⁶ | Silvio Buscemi⁷ | Rocco Barazzoni⁸ | Benedetta Ragghianti⁹ | Edoardo Mannucci⁹ | Matteo Monami⁹

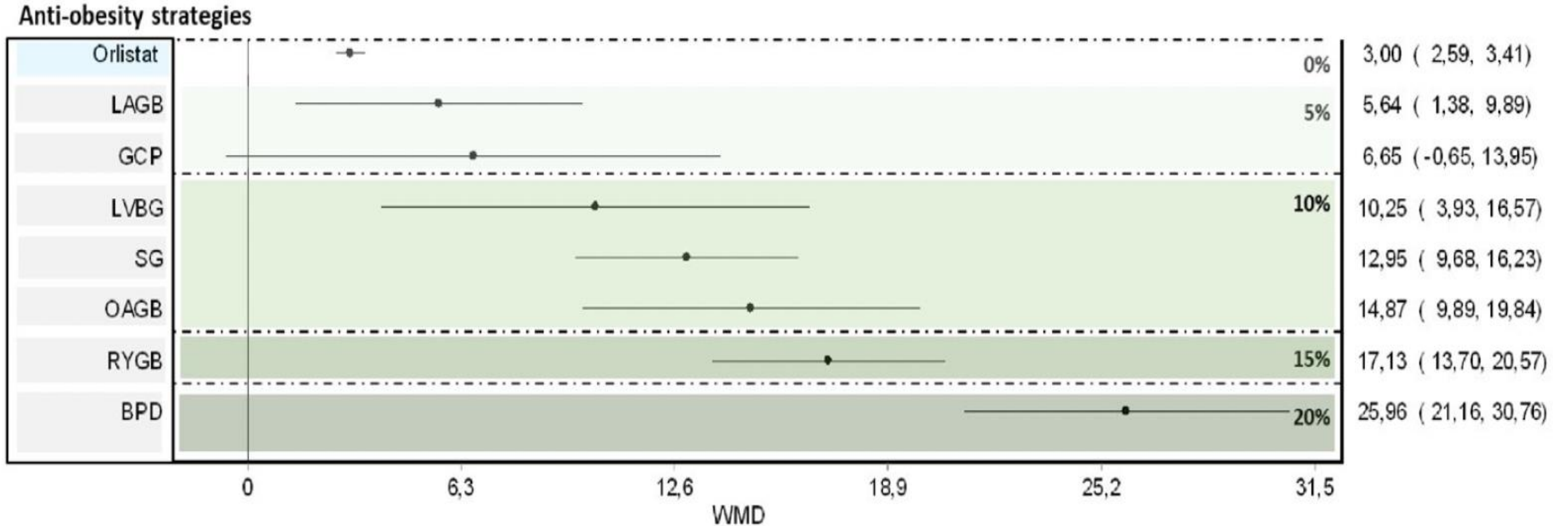
1. Comparison of Different Modalities with one Another

- Results 26-52 weeks: %WL



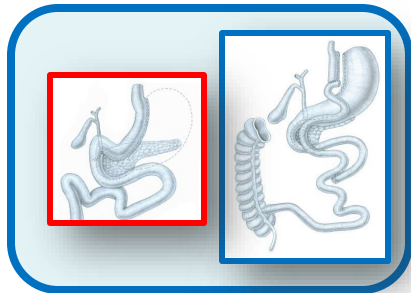
1. Comparison of Different Modalities with one Another

- Results 3 – 10 y: %WL



1. Comparison of Different Modalities with one Another

- Efficacy and safety



Intervention	TBWL (%)				Any SAE (OR)			
	26-52	53-104	105-156	≥ 156	26-52	53-104	105-156	≥ 156
Obesity management medications								
Orlistat	3.1	3.2	3.0	3.0	1.16	1.27	*	0.00
Liraglutide	4.5	5.1	4.2	—	1.01	1.29	*	—
Naltr./Bupr.	4.8	4.8	—	—	1.12	1.12	—	—
Phen./Topir.	—	8.8	—	—	—	1.28	—	—
Semaglutide	8.6	10.5	8.7	—	0.51	0.91	*	—
Tirzepatide	15.2	16.5	—	—	1.00	0.91	—	—
Endoscopic bariatric procedures								
POSE	3.8	—	—	—	3.12	—	—	—
IGB	4.8	—	—	—	3.40	—	—	—
AT	9.2	—	—	—	2.52	—	—	—
ESG	12.8	—	—	—	4.42	—	—	—
Metabolic bariatric surgery								
LAGB	7.9	9.6	7.4	5.6	*	1.84	*	8.06
GCP	17.1	8.1	—	6.6	1.68	—	*	10.75
LVBG	10.9	11.6	19.4	10.2	*	—	*	5.84
SG	11.5	12.1	19.4	13.0	1.68	—	*	1.87
OAGB	19.5	13.9	22.5	14.9	3.54	—	*	1.39
RYGB	18.4	17.2	17.3	17.1	2.24	5.0	*	5.84
SADI	24.4	—	—	—	*	—	—	—
BPD	26.2	24.3	25.4	26.0	*	*	*	22.78

1. Comparison of Different Modalities with one Another

nature medicine

Corresponding author(s): Steven Nissen, Ali Aminian

Article

Published online: 16 September 2025

Macrovascular and microvascular outcomes of metabolic surgery versus GLP-1 receptor agonists in patients with diabetes and obesity

MBS vs OMM: in pts with obesity and T2DM

- N = 3'932
- “paired” with doubly robust estimation method

Risk reduction with MBS of

- 32% für death
- 35% für MACE
- 47% für kidney failure
- 54% Retinopathy

JAMA Surgery | Original Investigation

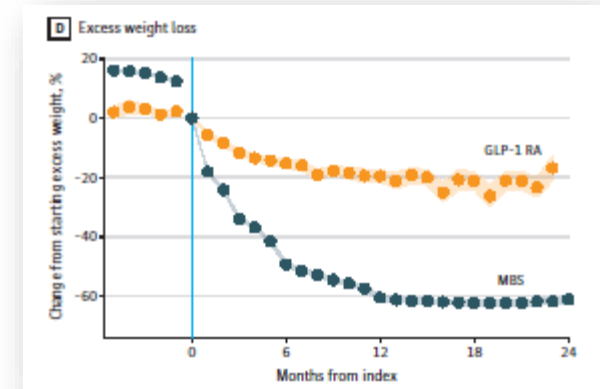
Obesity Treatment With Bariatric Surgery vs GLP-1 Receptor Agonists

Tyson S. Barrett, PhD; Juliane O. Hafermann, PhD; Shannon Richards, MSN; Keith LeJeune, PhD; George M. Eid, MD

JAMA Surg. doi:10.1001/jamasurg.2025.3590
Published online September 17, 2025.

MBS vs OMM

- N = 30'458
- Health Insurance data
- Matched pair
- % WL



• Treatment costs at 2 y:

- OMMs 63'480 \$
- MBS 51'790 \$

1. Comparison of Different Modalities with one Another

Conclusion



- Older OMM small weight loss
- Only one RCT comparing two newer OMM
- Safety of OMM acceptable (SAE < 1.30)
- Sema cardiovascular effects

Obesity 2026; 34:279–293

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Clinical Trials and Investigations

Efficacy and Safety of Pharmacological, Endoscopic, and Surgical Treatments for Obesity: A GRADE-Based Network Meta-Analysis

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1. Comparison of Different Modalities with one Another

Conclusion



- Older **OMM** small weight loss
- Only one RCT comparing two newer **OMM**
- Safety of **OMM** acceptable (SAE < 1.30)
- **Sema** cardiovascular effects



- **EBP** only short term results (some cohorts with >3y)
- **ESG** inferior to **Tirze**
- **ESG** more effective than **POSE**
- Number of SAE of **EBP** (>4.4), higher than **OMM**

Obesity 2026; 34:279–293

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1. Comparison of Different Modalities with one Another

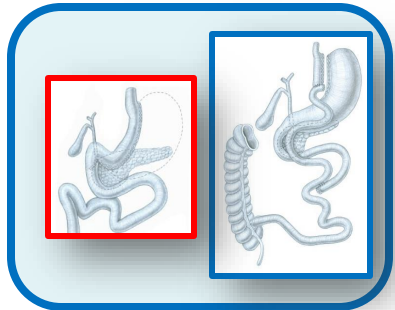
Conclusion



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- Safety of **OMM** acceptable (SAE < 1.30)
- **Sema** cardiovascular effects



- **EBP** only short term results (some cohorts with >3y)
- **ESG** inferior to **Tirze**
- **ESG** more effective than **POSE**
- Number of SAE of **EBP** (>4.4), higher than **OMM**



- Weight loss of **MBS** better than any other modality (higher initial BMI!)
- Cardiovascular & other effects proven for **MBS** in large epidemiological analyses
- **RYGB** durable long-term effect
- **BPD** and **SADI** best weight loss
- higher rate of SAE (**RYGB** 5.84, **BPD** 22.78)

Obesity 2026; 34:279–293

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2. Neo-adjuvant Modalities

- OMM before surgery

International consensus position statement on the role of obesity management medications in the context of metabolic bariatric surgery: expert guideline by the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO)

Ricardo V. Cohen^{1,*} , Luca Busetto² , Randy Levinson³, Carel W. Le Roux⁴, Paulina Salminen^{5,6}  and Gerhard Prager⁷ on behalf of the experts of the International Consensus on the Role of Obesity Management Medications in the Context of Metabolic Bariatric Surgery

	Grade	Percentage consensus	Number of total voting rounds	Number of total votes
4 There is <u>insufficient high-level evidence</u> to recommend <u>the routine use of OMMs</u> for weight loss before MBS	A+	100	2	37
5 The decision to <u>use OMMs before MBS</u> should be <u>personalized</u> to determine the most appropriate strategy for each patient's circumstances	A+	100	2	38
6 <u>Future research is needed</u> to explore the value of using OMMs before MBS to assess their benefits, risks, and clinical outcomes	A+	100	2	37
7 <u>Healthy nutrition, including adequate protein consumption</u> , as well as <u>resistance exercise</u> , is recommended for those treated with OMMs before MBS	A	97	2	36
8 In general, preoperative treatment with <u>OMMs should be discontinued before MBS</u> to minimize perioperative risk	A	94	3	35

3. Adjuvant Modalities

- OMM routinely after surgery

International consensus position statement on the role of obesity management medications in the context of metabolic bariatric surgery: expert guideline by the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO)

Ricardo V. Cohen^{1,*} , Luca Busetto² , Randy Levinson³, Carel W. Le Roux⁴, Paulina Salminen^{5,6}  and Gerhard Prager⁷ on behalf of the experts of the International Consensus on the Role of Obesity Management Medications in the Context of Metabolic Bariatric Surgery

	Grade	Percentage consensus	Number of total voting rounds	Number of total votes
9 <u>Treatments with OMMs after MBS should generally be withheld until the achievement of a weight plateau</u> unless there is a compelling clinical need for earlier initiation	A+	100	3	33
10 <u>Future research is needed</u> to identify predictors of which patients are likely to derive substantial benefit from combined pharmaco-surgical therapy for obesity and its complications	A+	100	3	35
11 MBS is strongly associated with reduced <u>adverse cardiovascular events</u> and GLP1RA agonists have been shown to reduce such events; <u>future research is required</u> to determine the benefits of combination treatment for these outcomes	A+	100	3	34
12 Both MBS and GLP1RA agonists reduce <u>chronic kidney disease</u> ; future research is required to determine the benefits of combination treatment for these outcomes	A+	100	3	36

3. Adjuvant Modalities

- OMM vs routine care after Sleeve
- N = 246
- In pts “suspected” for suboptimal result (n=149)
 - %EWL <19.5 at 1m or <37.7% at 3m
 - Various OMM: Lira, Sema, other

Obesity Surgery (2025) 35:4370–4382
<https://doi.org/10.1007/s11695-025-08256-y>



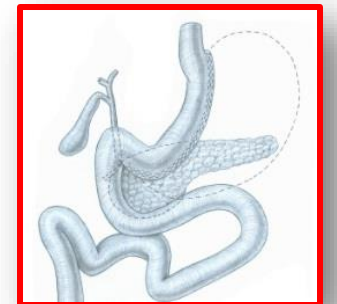
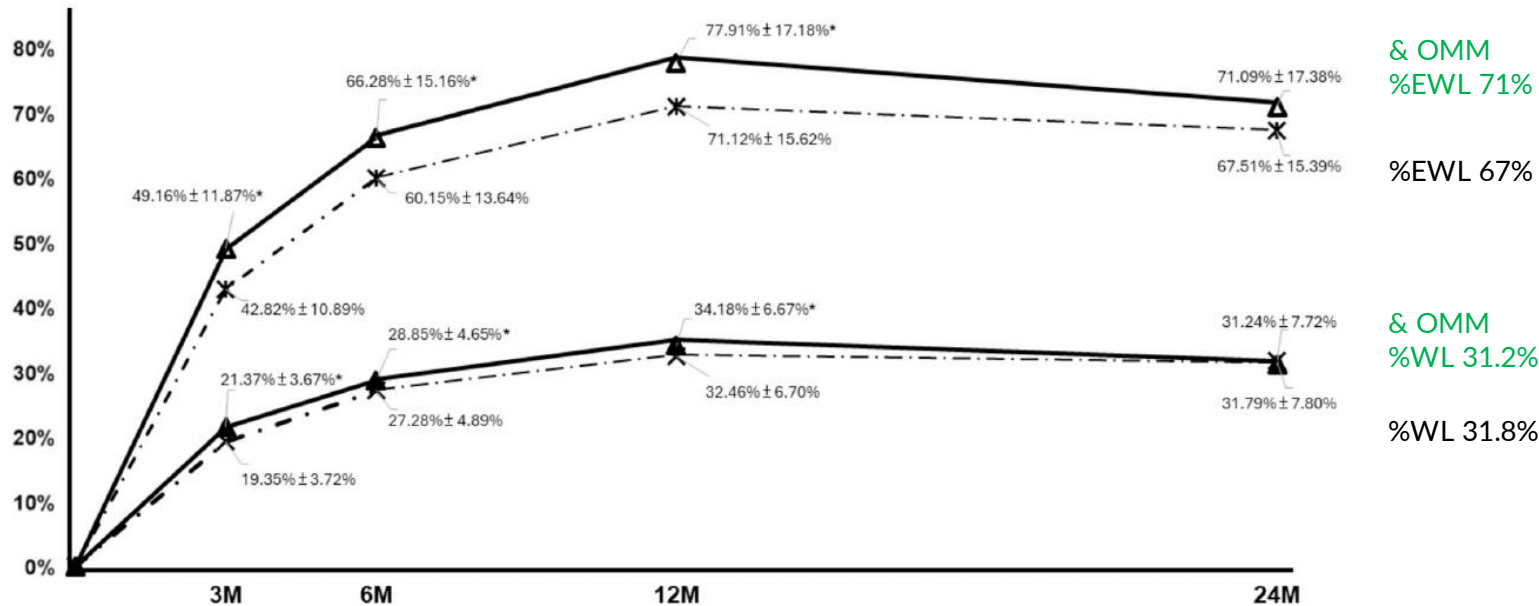
RESEARCH



Using obesity management medications within the first year after laparoscopic sleeve gastrectomy may enhance weight-loss outcomes

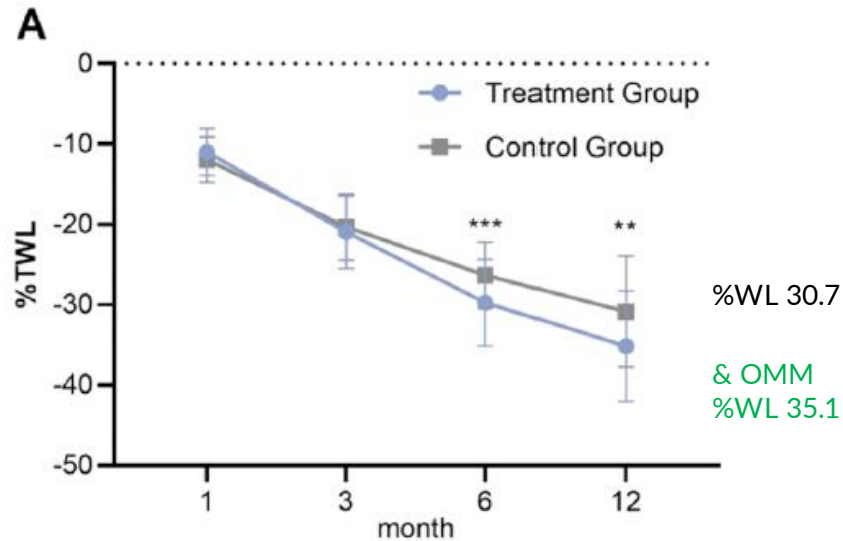
Chung-Yen Chen^{1,2} · Po-Jui Chi^{1,2} · Wan-ling Tu¹ · Ching-Chung Tsai^{1,2} · Jian-Han Chen^{1,2}

- ¹ E-Da Hospital, Kaohsiung City, Taiwan
- ² I-Shou University, Kaohsiung City, Taiwan



3. Adjuvant Modalities

- OMM vs routine care after Sleeve
- Non randomized, prospective controlled
 - 48 pts Lira was funded or self paid
 - 55 with standard care



- SAE: no difference

Obesity Surgery (2026) 36:3646–3659
<https://doi.org/10.1007/s11695-026-08748-5>



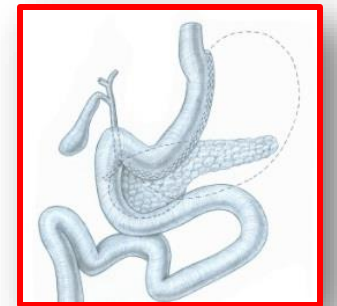
RESEARCH



Early Adjuvant Treatment with Semaglutide After Sleeve Gastrectomy in Patients with Class II-III Obesity: A Prospective Non-Randomized Controlled Study

Yi Shan Huang¹ · Jingyuan Wen^{1,2} · Siqi Wang¹ · Yujia Song^{1,3} · Biao Zhou¹ · Nianrong Zhang¹ · Hua Meng¹

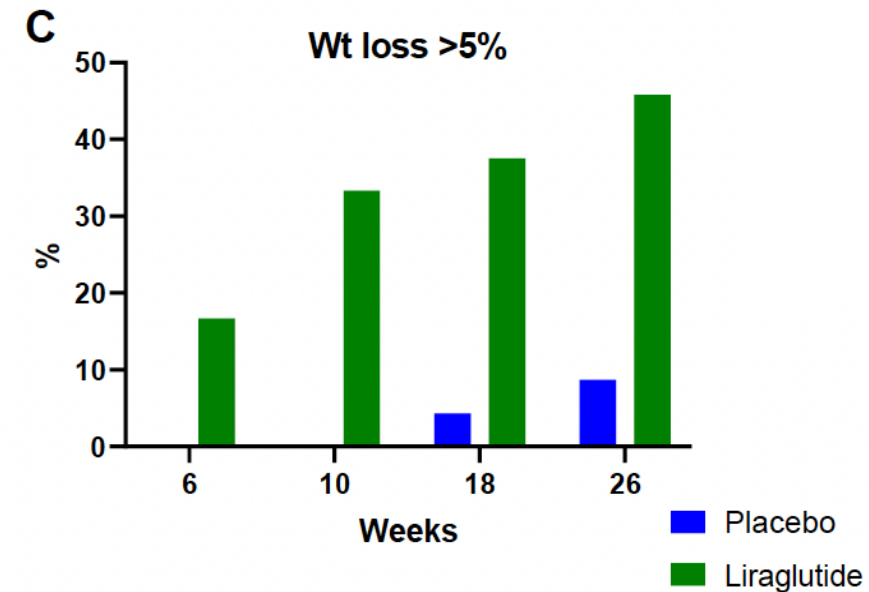
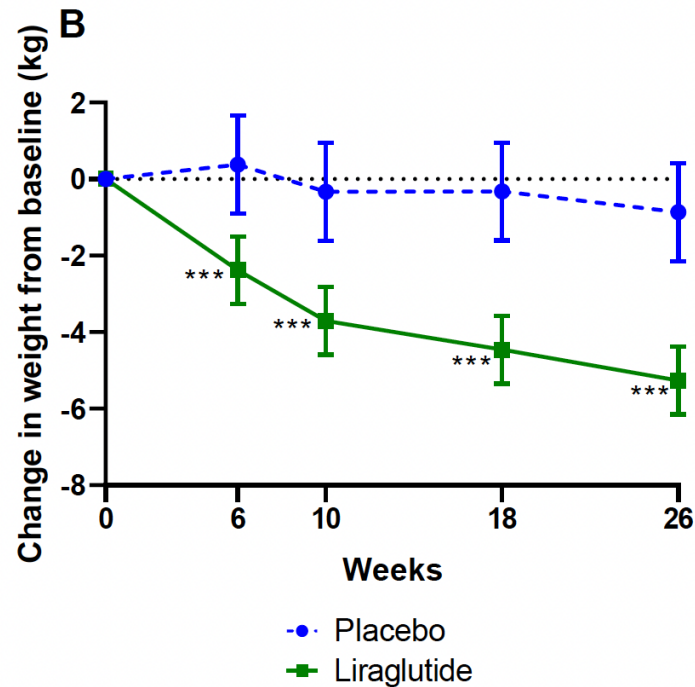
- ¹ Department of General Surgery & Obesity and Metabolic Disease Center, China-Japan Friendship Hospital, Beijing, China
- ² Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, China
- ³ Capital Medical University, Beijing, China



4. Concepts *in Pts with Suboptimal Clinical Response or Recurrent Weight Gain*

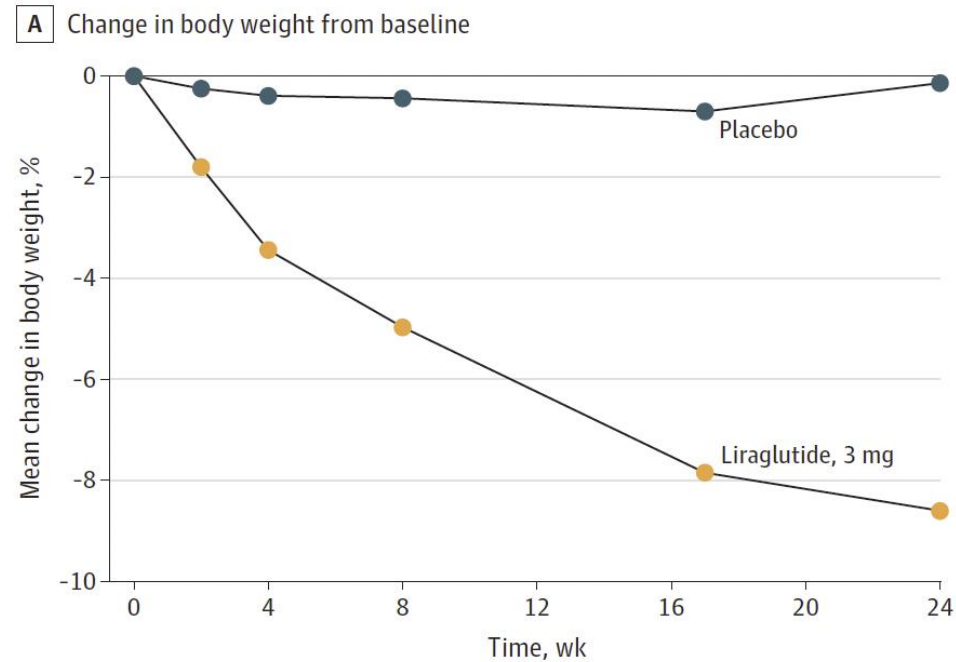
Gravitas

- RCT, N=80 (71): 48 Lira / 23 Placebo in pts < 20% WL, > 1y postop
- Weight loss (RYGB = Sleeve)



4. Concepts in Pts with Suboptimal Clinical Response or Recurrent Weight Gain Bari-Optimize

- RCT, N=70 (35 Lira / 35 Placebo) in pts < 20% WL, > 1y postop
- Sleeve (65), RYGB (5)



- More SAE in the placebo group

4. Concepts *in Pts with Suboptimal Clinical Response or Recurrent Weight Gain*

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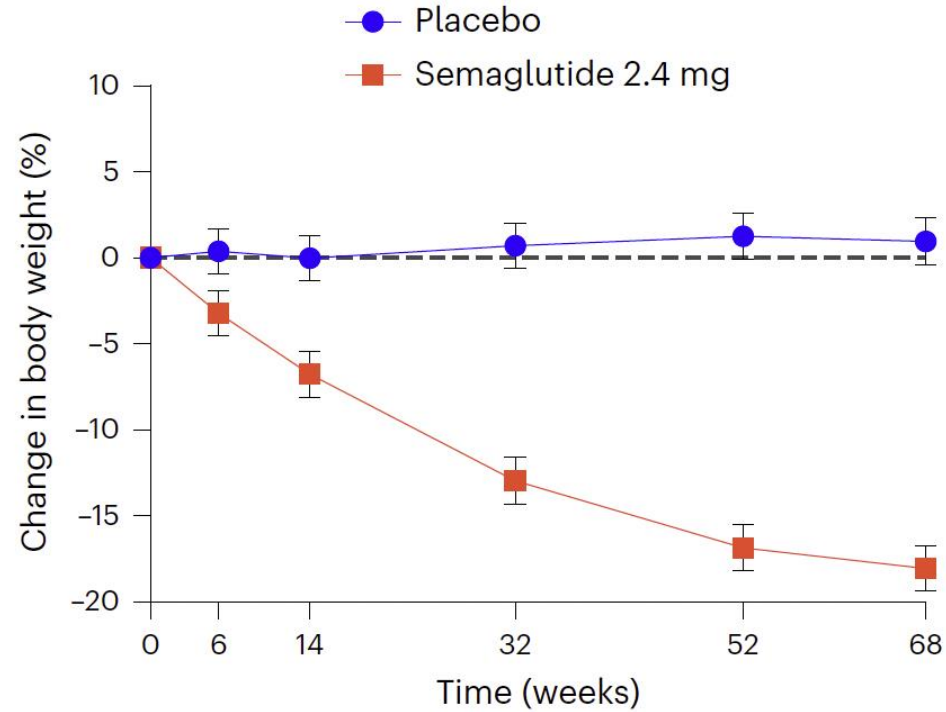
Ricardo V. Cohen^{1*}, Luca Busetto², Randy Levinson³, Carel W. Le Roux⁴, Paulina Salminen^{5,6} and Gerhard Prager⁷ on behalf of the experts of the International Consensus on the Role of Obesity Management Medications in the Context of Metabolic Bariatric Surgery

	Grade	Percentage consensus	Number of total voting rounds	Number of total votes
13 In patients with a <u>suboptimal initial clinical response after MBS</u> , the <u>addition of OMMs can improve metabolic outcomes</u>	A+	100	1	34
14 For patients requiring OMMs to maintain a healthy weight after MBS, the <u>ongoing use of the medications is likely needed</u>	A	94	2	36
15 Research on the intermittent use of OMMs and/or their dose adjustment after MBS with a suboptimal initial clinical response is needed	A	94	3	36
16 The <u>benefit of endoscopic therapies</u> for obesity can be <u>enhanced</u> by combination with <u>OMMs</u>	C	74	2	35
17 Patients with a suboptimal initial clinical response or recurrent weight gain after MBS <u>should be informed of all available evidence-based treatments, including their benefits and risks</u>	A	100	1	34
18 In patients with a suboptimal initial clinical response or recurrent weight gain after MBS, different options, including OMMs, endoscopic therapies, and revisional and conversion surgery, can be considered	A	94	2	35
19 Emerging evidence indicates that the <u>weight loss induced by OMMs is similar among people who have or have not undergone MBS</u>	A+	100	2	36
20 When used after MBS, there appears to be <u>no increased incidence of side effects of OMMs compared with non-surgical cohorts</u>	A	97	3	34

4. Concepts *in Pts with Suboptimal Clinical Response or Recurrent Weight Gain*

Bari-Step

- RCT, N=70 (35 **Sema** / 35 Placebo) in pts < 20% WL, > 1y postop
- **Sleeve** (55), **RYGB** (15)



%WL +18% !

- SAE similar to **Sema** allone

4. Concepts *in Pts with Suboptimal Clinical Response or Recurrent Weight Gain*

- 1:5 propensity score matching
- 624 patients (initial BMI 33!)
 - 104 GLP-1 RA
 - 520 standard care
- BMI > 28 up to 3y postop
- Sleeve & RYGB

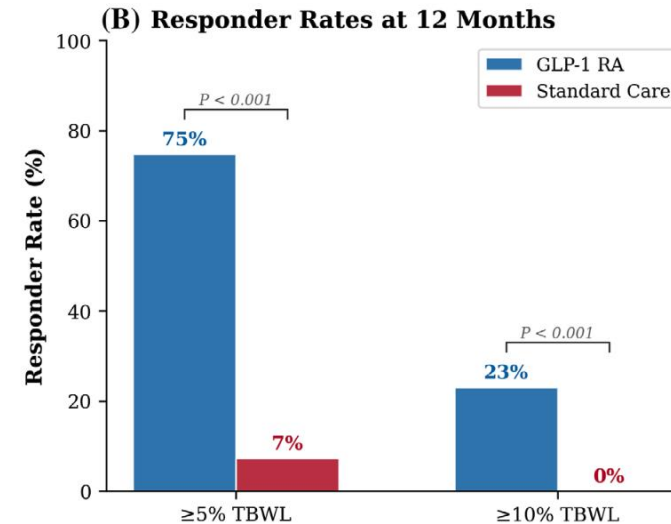
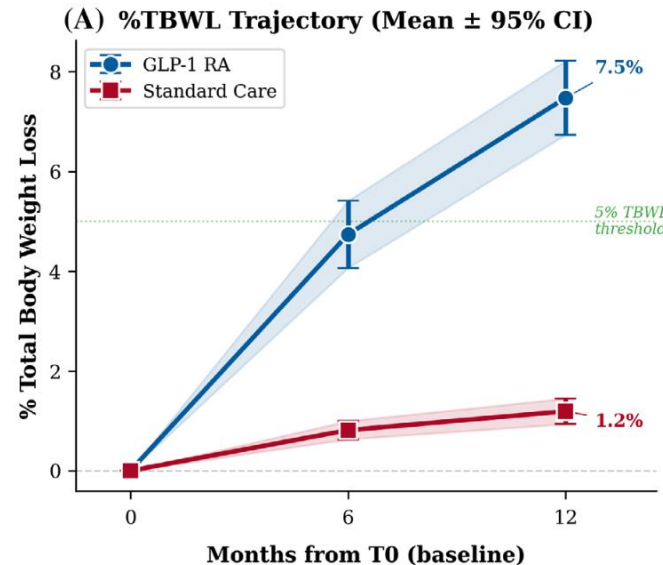
- SAE no difference

Diabetes, Obesity and Metabolism

GLP-1 Receptor Agonists and Weight Loss Among Suboptimal Responders to Metabolic Bariatric Surgery: A Target Trial Emulation

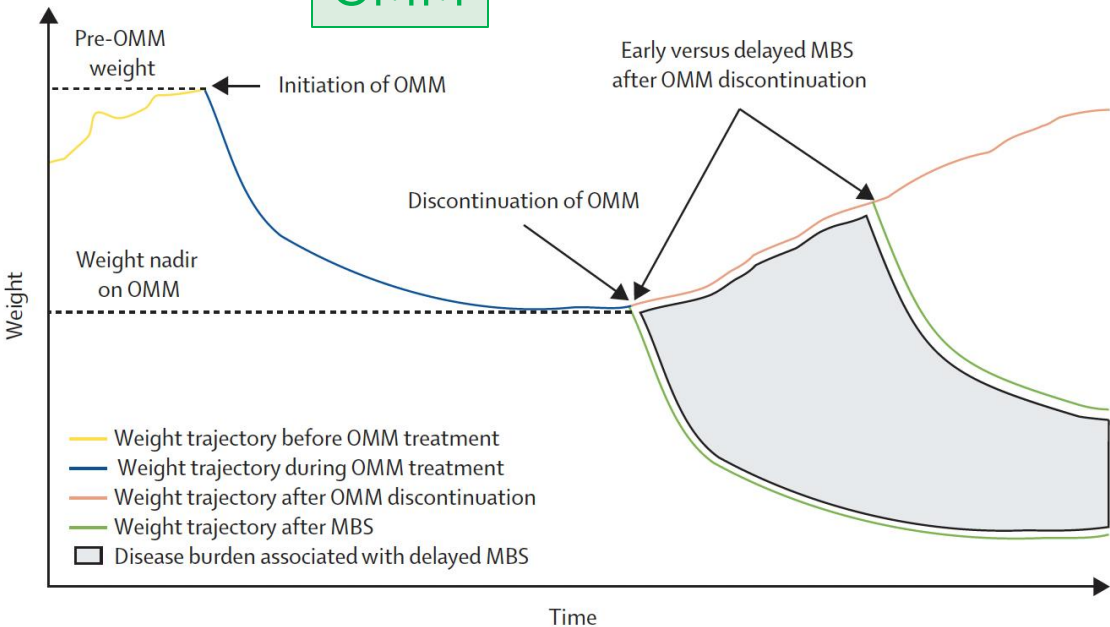
Haisheng Wu¹ | Yiling Yan² | Manrong Xu³ | Ruixin Wang⁴ | Gang Hu⁵ | Yun Shen⁵ | Shengdi Lu⁵

Shanghai / Baton Rouge, LA

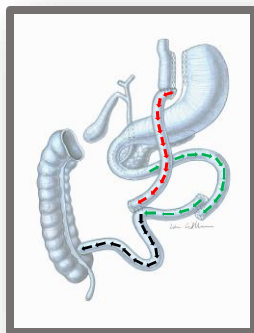
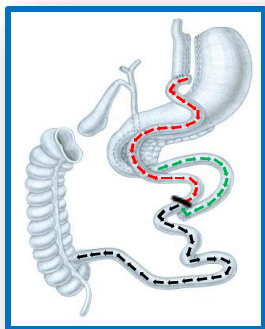
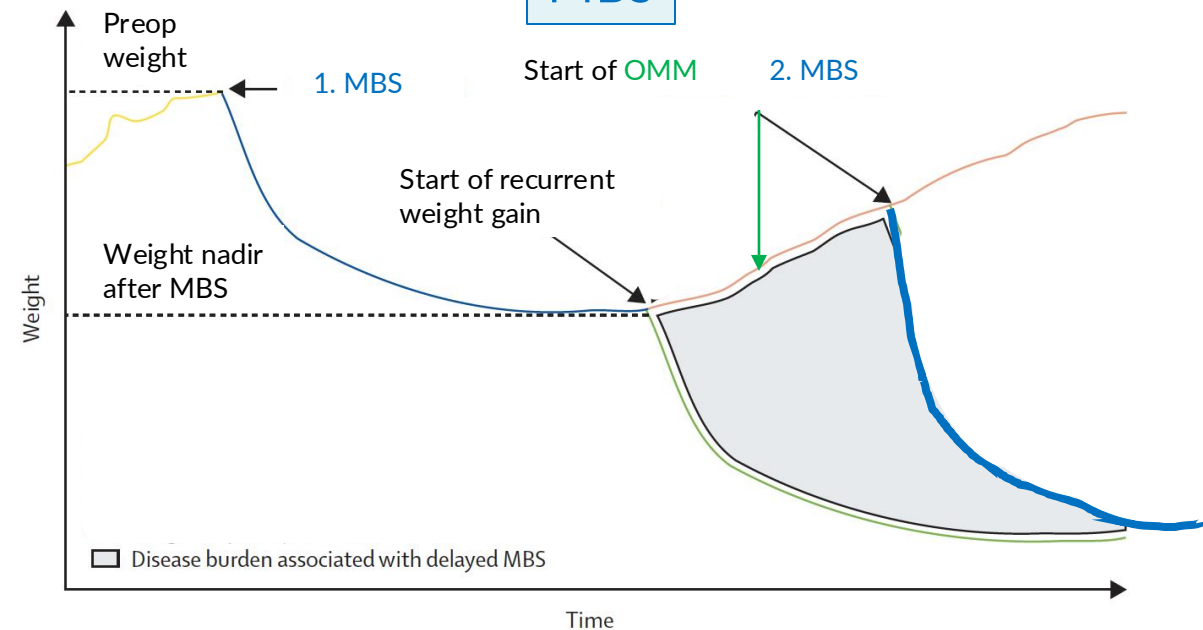


4. Concepts in Pts with Suboptimal Clinical Response or Recurrent Weight Gain

OMM



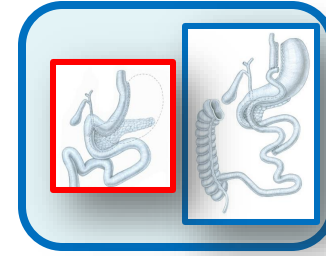
MBS



Author	Year	N	FU years	Type of redo-surgery	%EWL (since revision)	Malnutrition
Ghiassi & Higa	2017	96	3 (FU 50%)	Higa	66	
Shin & Shikora	2019	22	?	Higa	78 (62%)	14%
Shah & Gislason	2023	48 42	1-8 (>90%)	Higa TAL 250 Higa TAL 300	3y 74% 8y 62%	35% 14%
Linke & Peterli	2020	20	2 (100%)	Higa & Hess TAL >300	69 (48%)	10% <2%

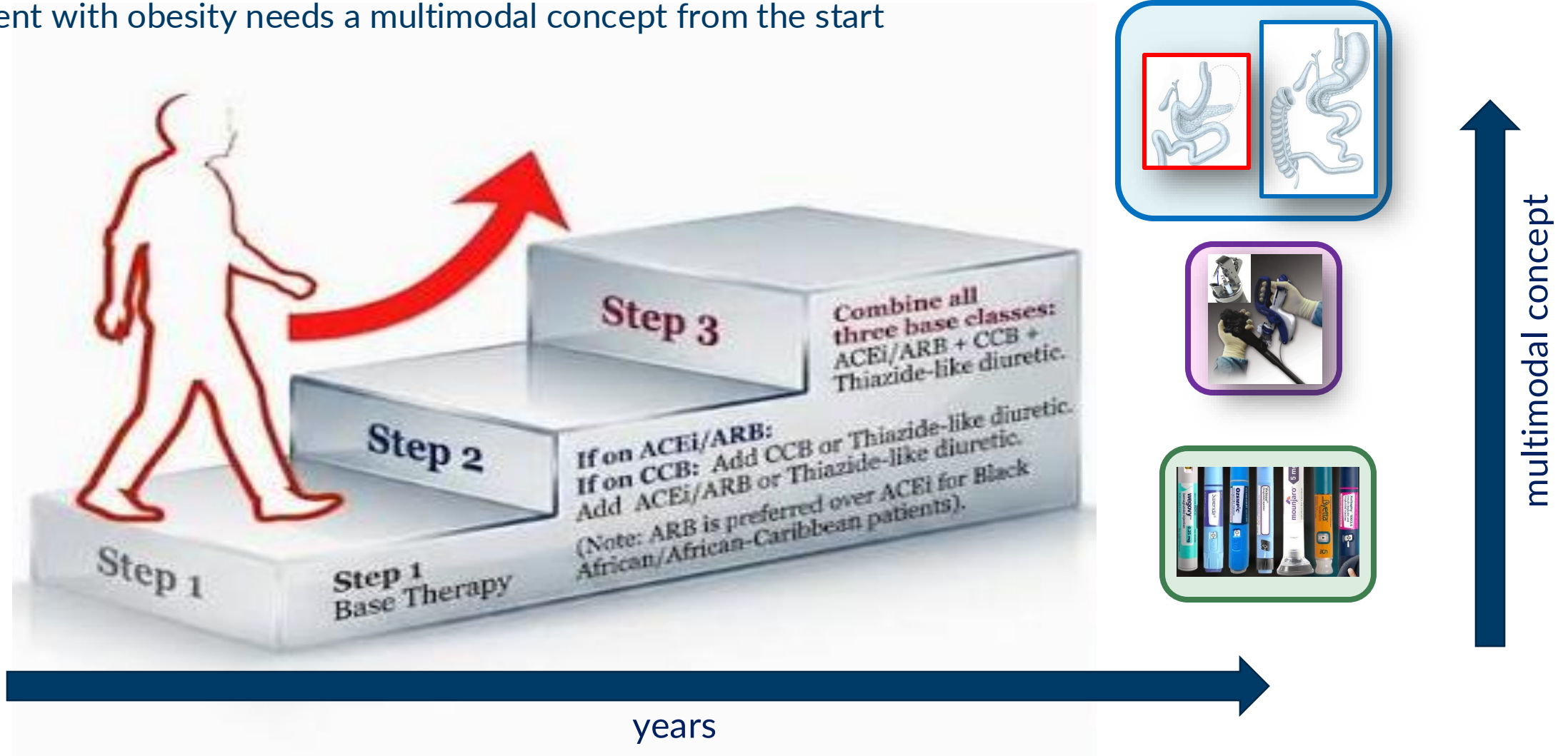
SUMMARY

- Effectivity/Safety: MBS > OMM > EBP
- Initial evaluation of pt with obesity
 - Pts must be given chance to hear about alternative methods
 - Internists should offer MBS in clear indication
 - Surgeons should offer option of OMM in patients with lower BMI
 - Endoscopists should offer alternative methods: OMM & MBS
- More research needed but:
 - Pharma does not support research for head to head comparison or combination therapy
 - Public donors do not support
- Some internists now have the impression of the “Magic bullet”, no more need for surgeons
- Surgeons that prescribe OMM or work at eye level with internists have enough operations



CONCLUSION

- A patient with obesity needs a multimodal concept from the start





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