SG+TB(OATB,SASI) vs SG :A Randomized Clinical Trial One Year Outcome

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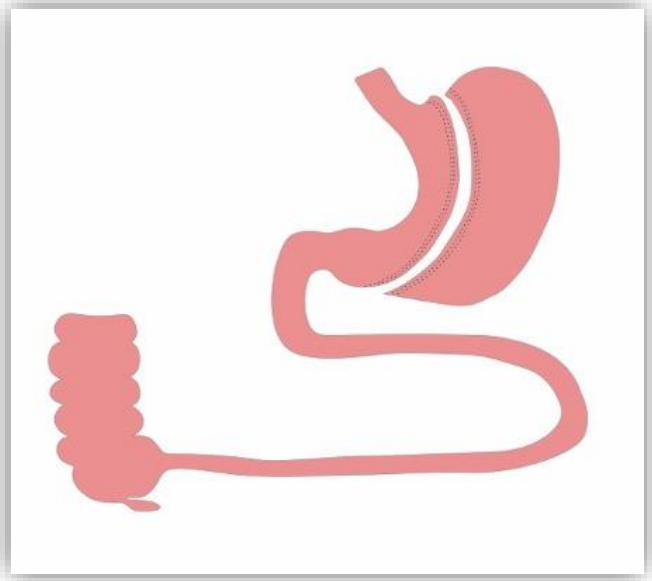
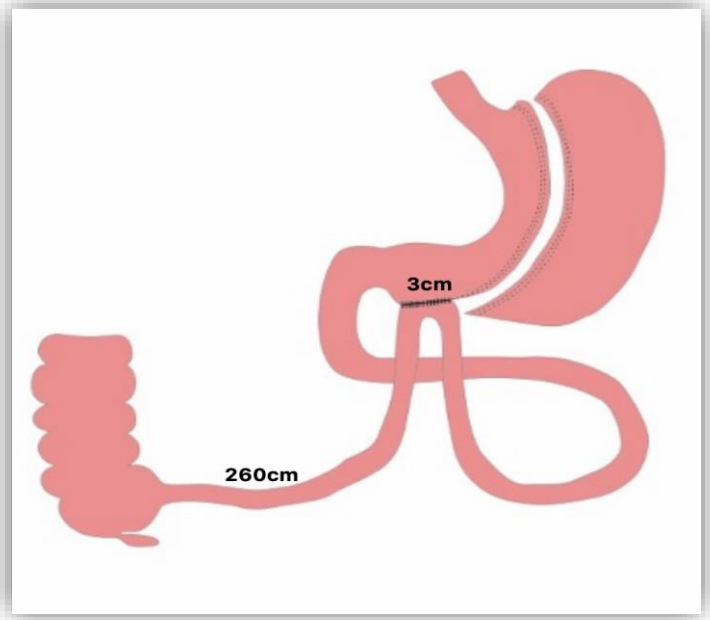
I have no potential conflict of interest to report

Surgical procedures



Sleeve gastrectomy (SG)
36 Fr

VS



SG+TB (OATB ,SASI)

36 Fr sleeve
GI anastomosis: 3 cm
Common limb: 260 cm

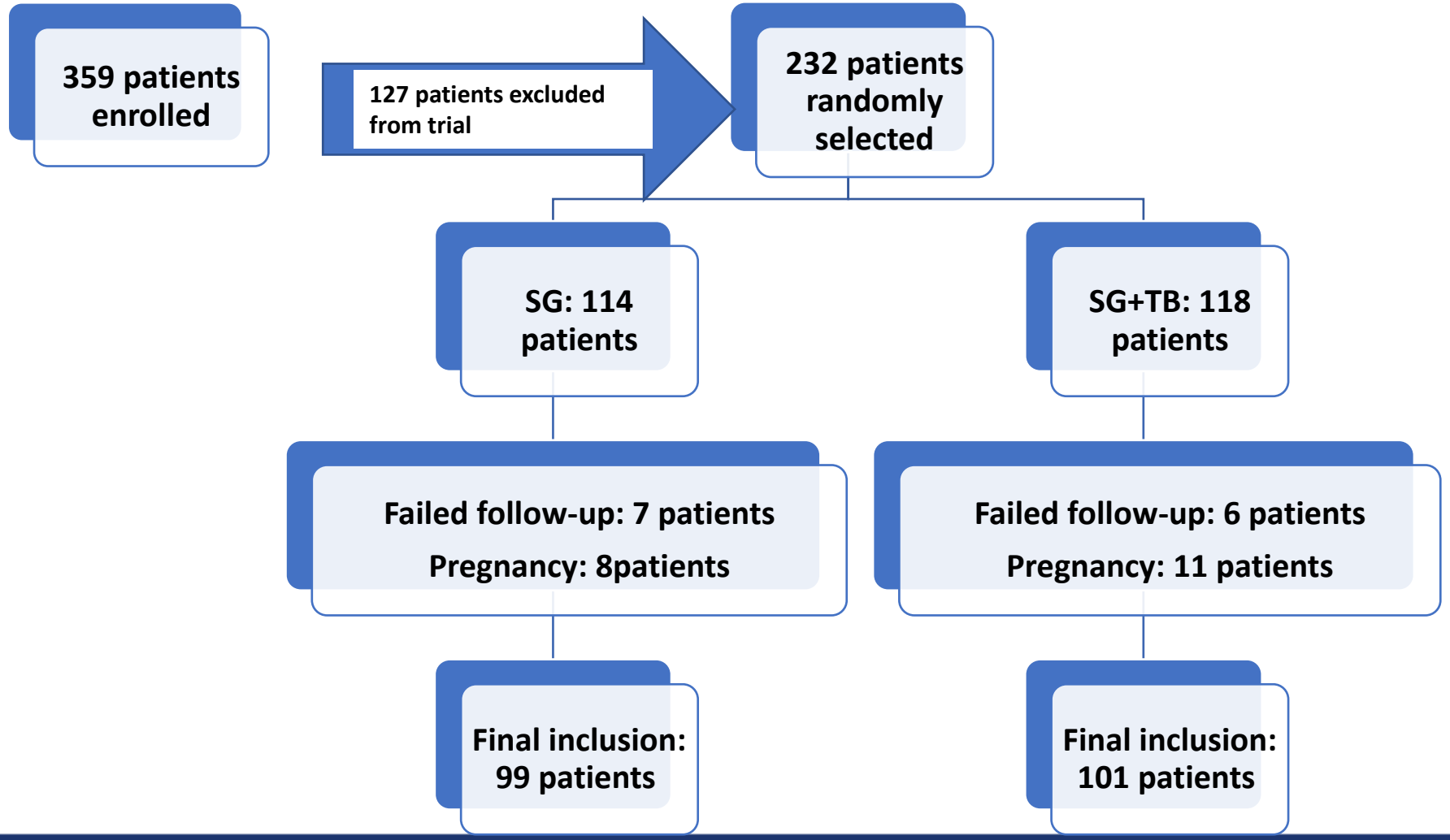
Inclusion criteria

1. Patients age: 18 - 65 year

2. BMI: obesity only >32.5 kg/m^2
   or BMI >27.5kg/m^2 with T2DM

3. Good compliance with postoperative follow-up.

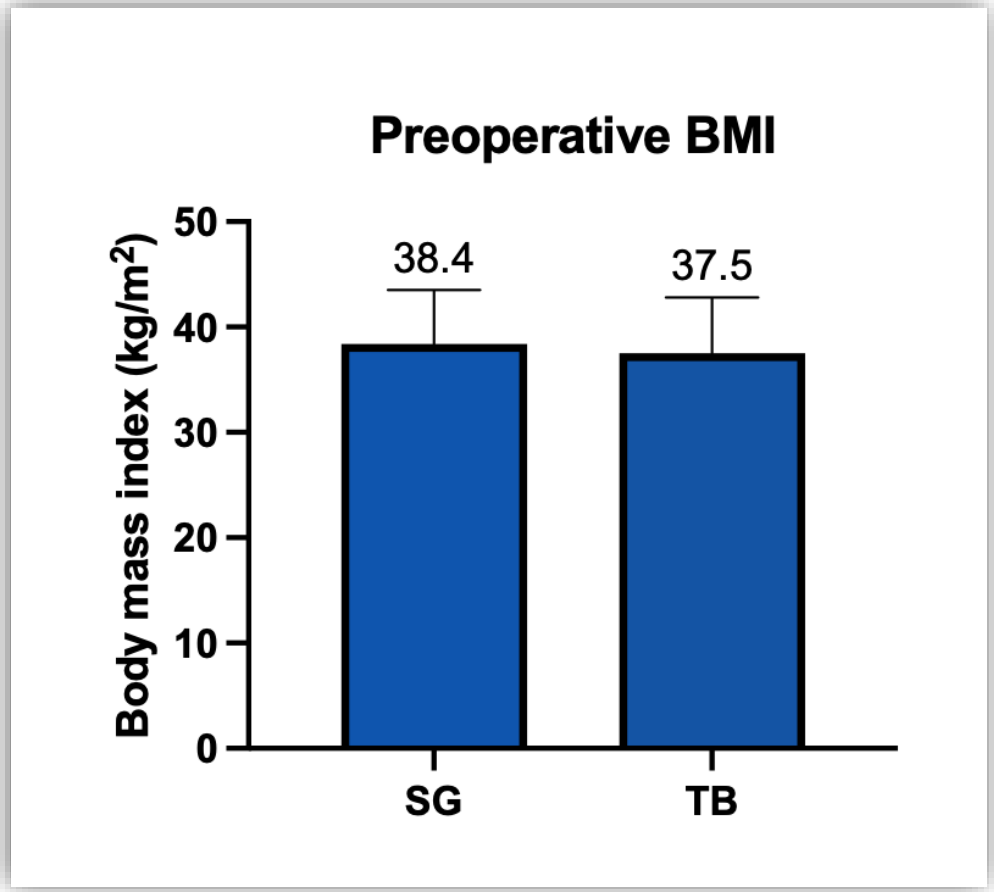
SG vs OATB enrolment status(May19-Nov21,2022)

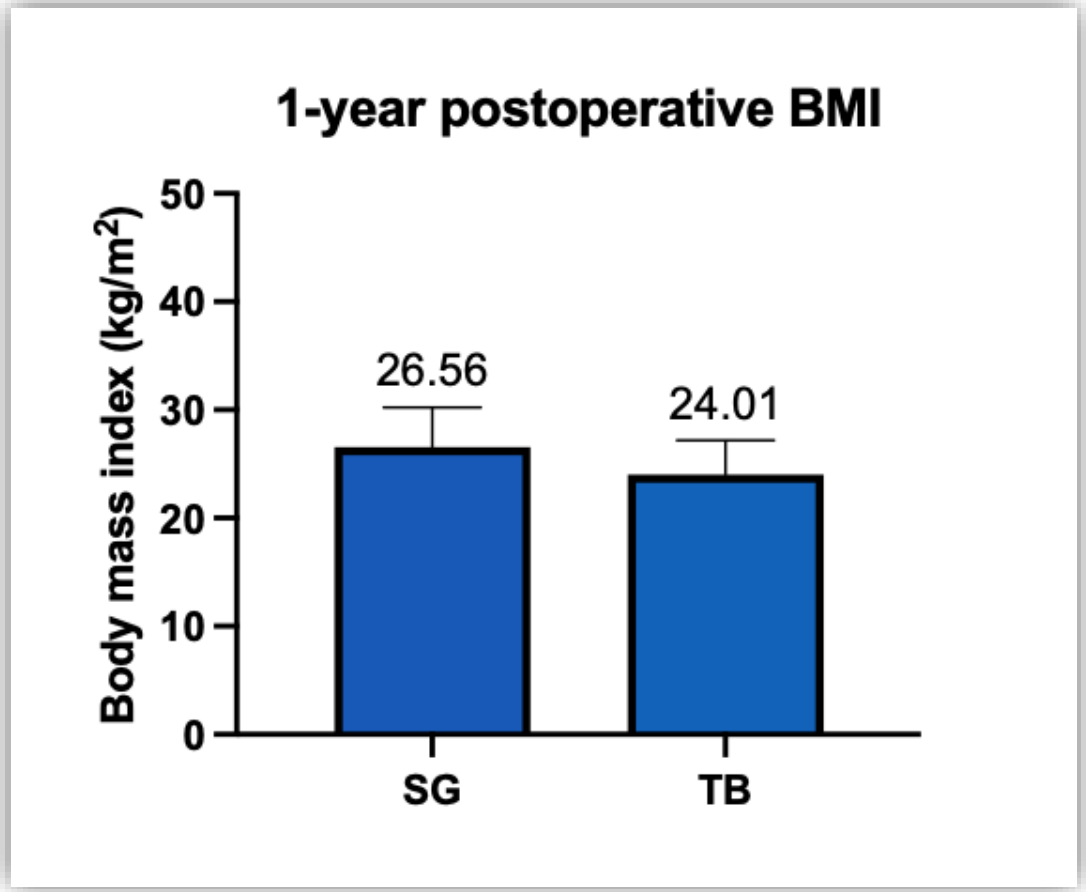


Baseline characteristics SG vs OATB

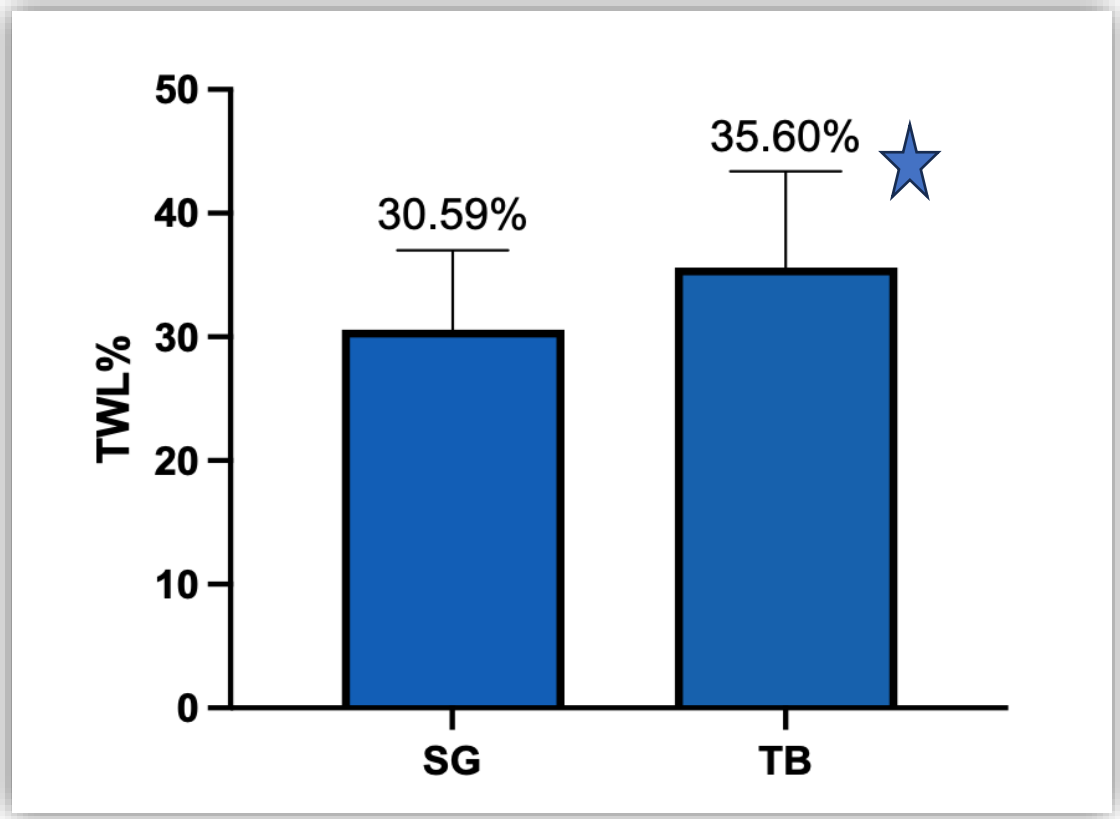
Characteristics	Sleeve Gastrectomy (SG=99)	Sleeve Gastrectomy with Transit Bipartition (SG-TB=101)
Age, (mean±SD, y)	32.13±7.51	33.51±7.50
Sex （Female/male）	72/28	71/30
Weight, (mean±SD, kg)	108.99±20.57	106.19±20.79
BMI, (mean±SD, kg/㎡)	38.40±5.10	37.50±5.30
Type 2 diabetes(n,%)	27 （27.27%）	47(46.53%)
Hypertension(n,%)	29 （29.29%）	30 （29.70%）
Dyslipidemia(n,%)	50 （50.50%）	63 （62.37%）
OSAHS(n,%)	73 （73.73%）	77 （76.23%）
Pcos(n,%)	13 （13.13%）	14 （13.86%）
Hyperuricemia(n,%)	67 （67.67%）	65 （64.35%）
GERD(n,%)	10 （10.17%）	20 （19.80%）

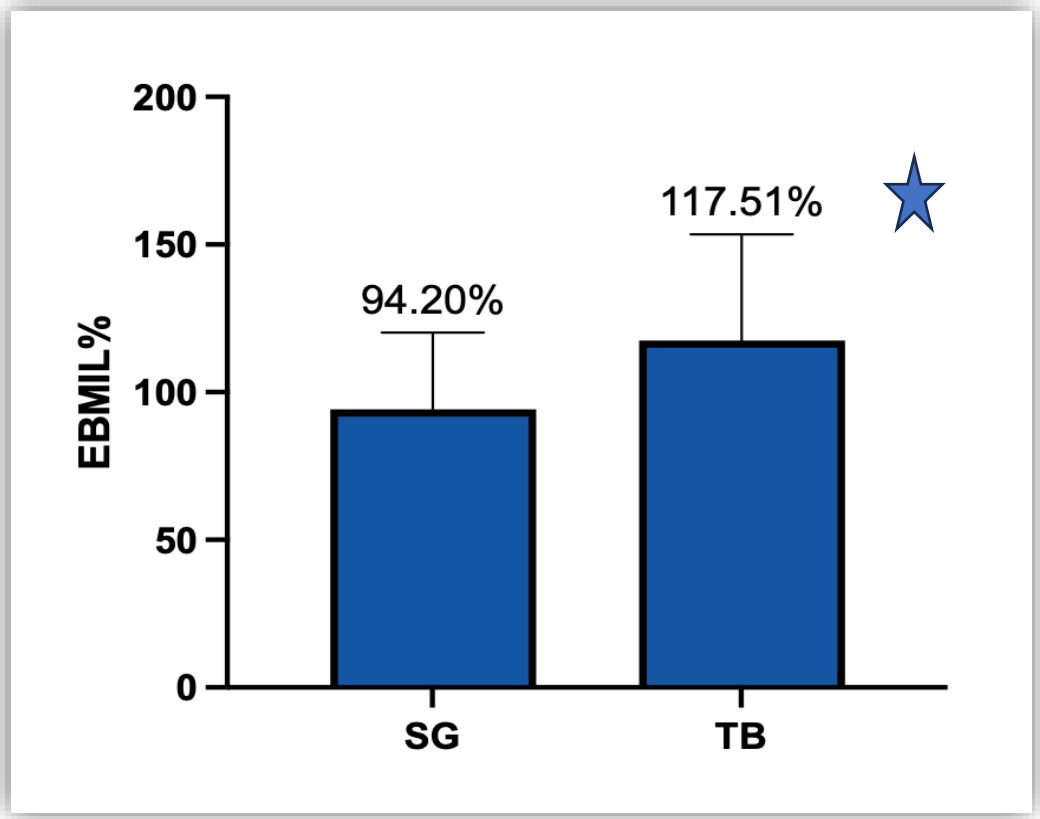
BMI changes SG vs OATB



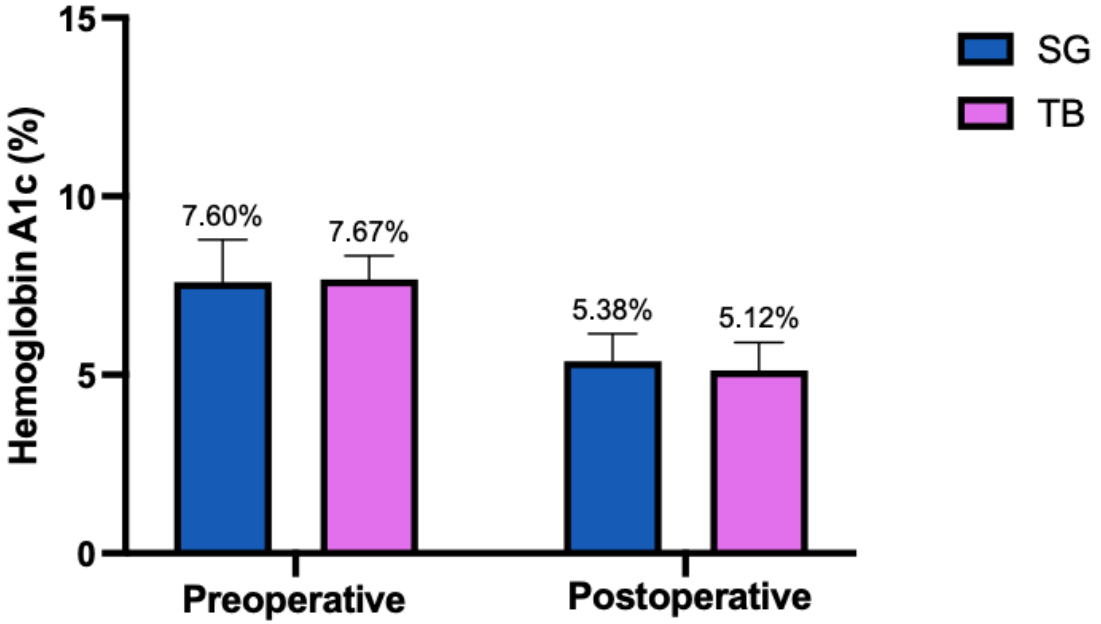


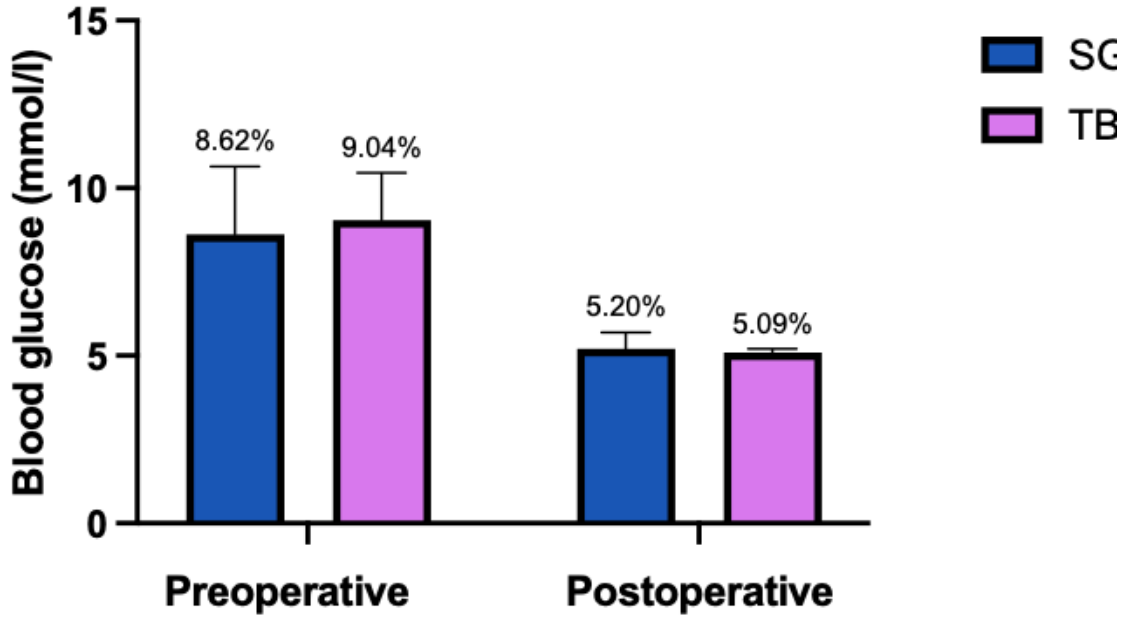
1-year Postoperative TWL%, EBMIL% SG vs OATB



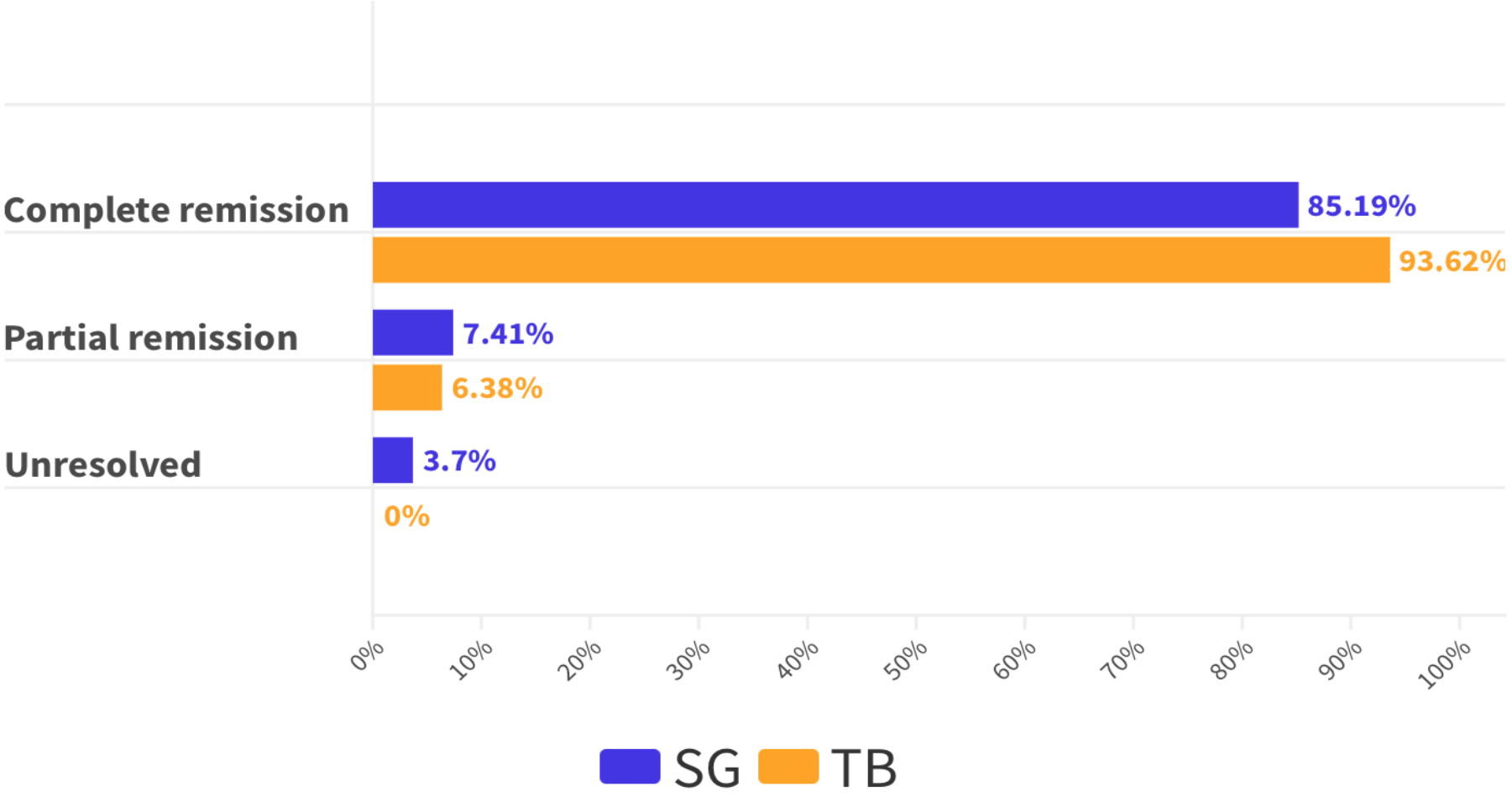


Changes in fasting blood glucose, HbA1C





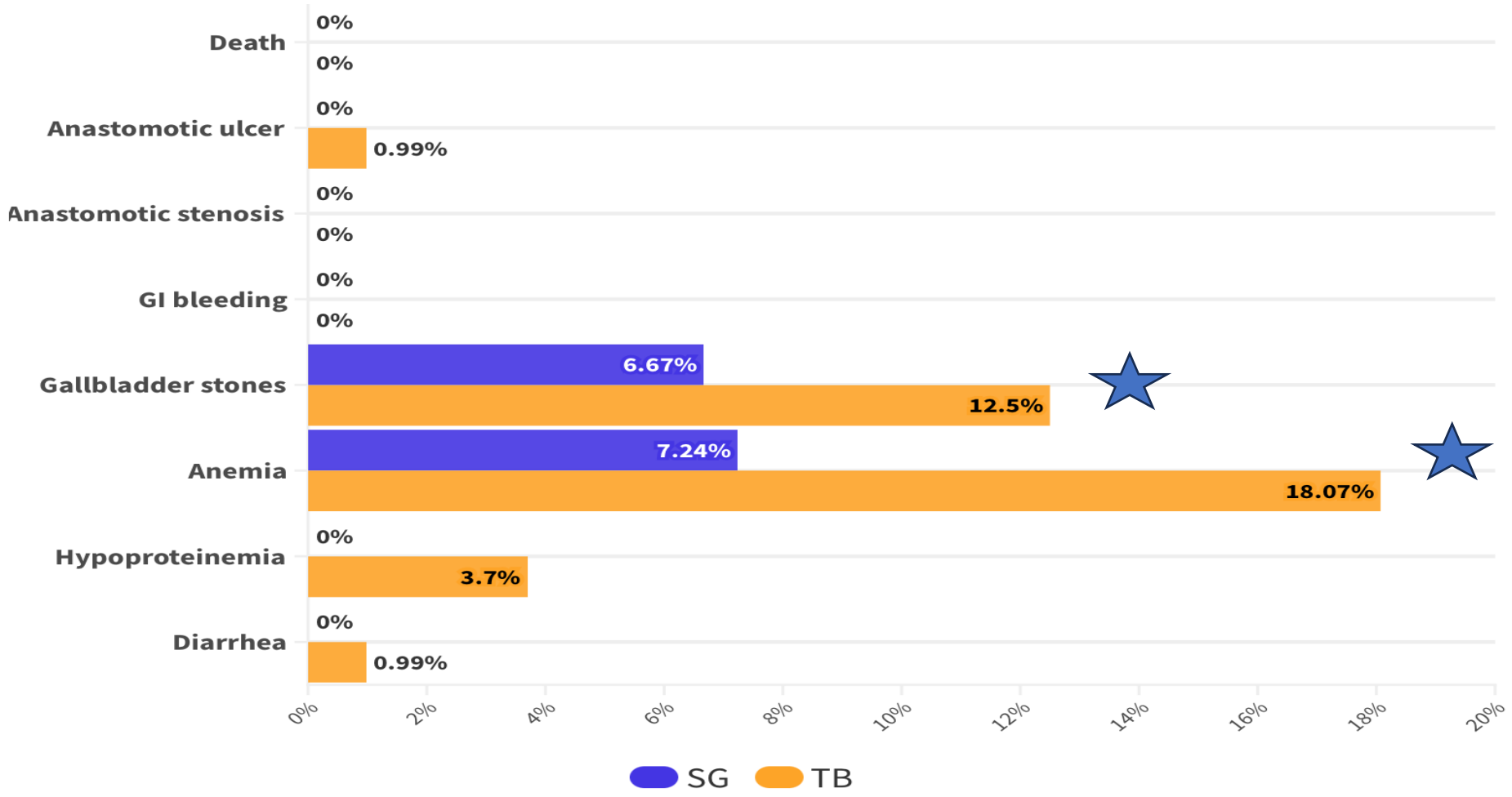
Diabetes remission



30-day readmission SG vs OATB

SG（n=99）	TB（n=101）
1（1.01%） (1) Abdominal pain and distension. Second readmission, fluid replacement therapy.	**3（2.97%）** (1) Dehydration, fluid replacement therapy. (2) Incomplete intestinal obstruction, fluid replacement therapy. (3) Black stool, hematemesis, anastomotic(ieal) ulcer, Strong PPI , and fluid replacement therapy.

Late Postoperative complications



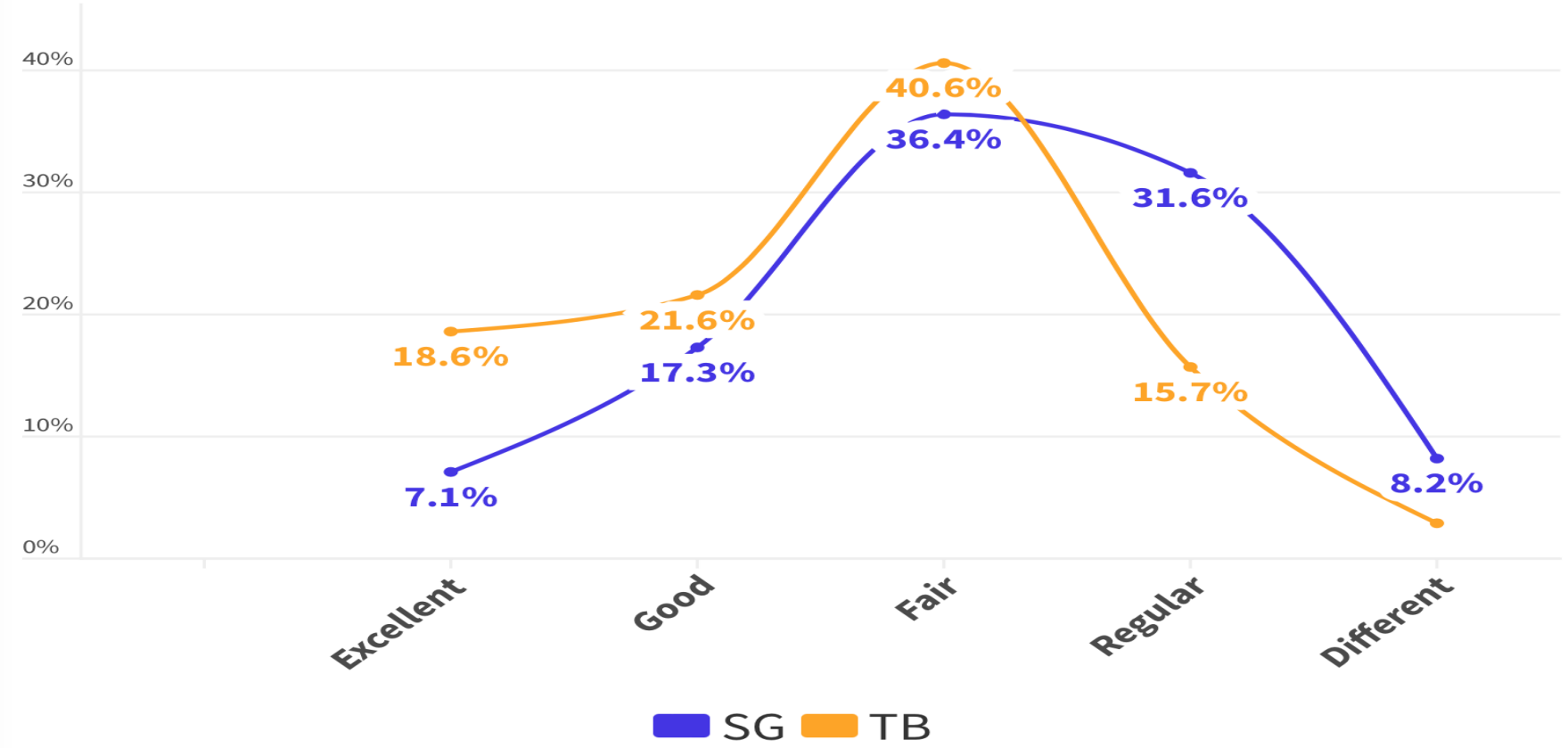
Anemia following surgery (1-year)

Ranges	SG（n=69）	TB（n=83）
90≤Hb＜110	4（5.80%）	10（12.05%）
60≤Hb＜90	1（1.45%）	4（4.82%）
Hb＜60	0（0.00%）	1（1.20%）
Total	5 (7.24%)	15 (18.07%)

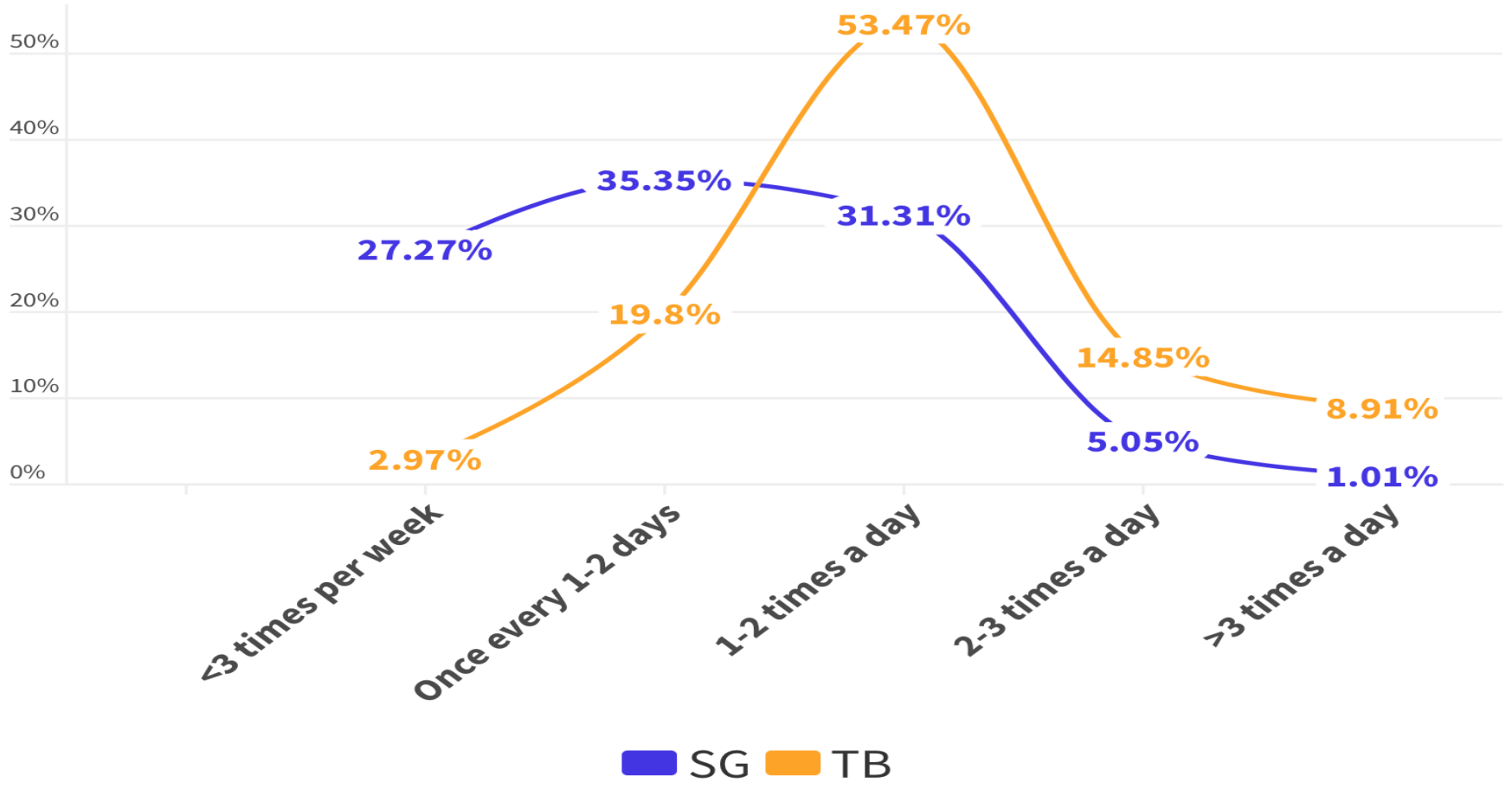
Hypoalbuminemia Following surgery (1-year)

Ranges	SG（n=67）	TB（n=81）
30≤ALB＜35	0（0.00%）	2（2.47%）
25≤ALB＜30	0（0.00%）	1（1.23%）
ALB＜25	0（0.00%）	0（0.00%）
Total	0 (0.00%)	3 (3.7%)

Self-assessment for health status



Bowel movement status after surgery



SG VS OATB 1 year GERD

	SG(99)	SG-TB(101)
GERD at baseline	10(10.1%)	20(19.8%)
Postoperative	20 (20.2%)	11(10.8%)
Remission or improved	5(50.0%)	18(90.0%)
Unchanged	3(30.0%)	1(5.0%)
Worsened	2(20.0%)	1(5.0%)
De novo development of GERD	13/(12.5%)	9 (9.47%)

Conclusion

I. SG+TB (OATB , SASI) results in significant weight loss, less GERD, and higher patient satisfaction compared to SG alone one year after surgery.

II. However, despite its effectiveness in treating obesity and related comorbidities, malnutrition and anemia remains a concern in the short-term follow-up.

III. Therefore, long-term follow-up is necessary.

Thank !