

Table 2. Comparison of Demographic Factors and Baseline, Post-operative, Change Levels of Glucose Homeostasis, Interleukin-1 β , Gut Hormones, and Adipokines between T2DM Patients With Complete Remission and Partial Remission undergoing Laparoscopic GB

	Complete remission (n = 9)	Partial remission (n = 7)	P value ^a
Age (years)	48.6 \pm 7.8	38.9 \pm 6.4	0.019
Sex (M/F)	3/6	2/5	1.000
Smoking (Yes/No)	3/6	3/4	1.000
T2DM duration (years)	5.4 \pm 6.6	6.9 \pm 4.0	0.174
Weight (kg)			
Baseline	77.0 \pm 8.5	77.3 \pm 12.5	0.956
Post-operative	58.5 \pm 10.7***	62.0 \pm 8.0*	0.470
Change	-18.5 \pm 3.4	-15.3 \pm 6.4	0.223
BMI (kg/m ²)			
Baseline	29.5 \pm 2.3	28.7 \pm 4.2	0.645
Post-operative	22.3 \pm 2.5***	23.0 \pm 2.6**	0.606
Change	-7.1 \pm 2.2	-5.7 \pm 2.3	0.222
Waist (cm)			
Baseline	96.8 \pm 7.8	98.4 \pm 12.2	0.746
Post-operative	78.0 \pm 7.9***	80.8 \pm 7.4***	0.477
Change	-18.8 \pm 7.1	-17.6 \pm 6.1	0.732
Systolic blood pressure (mmHg)			
Baseline	129.3 \pm 9.4	131.6 \pm 9.9	0.651
Post-operative	114.8 \pm 12.6**	124.7 \pm 22.5	0.280
Change	-14.6 \pm 12.8	-6.9 \pm 23.8	0.418
Total cholesterol (mg/dL)			
Baseline	195.2 \pm 42.0	215.3 \pm 40.9	0.354
Post-operative	157.2 \pm 23.4**	164.6 \pm 36.4**	0.631
Change	-38.0 \pm 27.9	-50.7 \pm 29.8	0.395
HDL cholesterol (mg/dL)			
Baseline	50.1 \pm 9.4	43.4 \pm 9.4	0.180
Post-operative	51.0 \pm 7.0	47.0 \pm 9.2	0.339
Change	0.9 \pm 10.3	3.6 \pm 7.8	0.578
Fasting blood glucose (mg/dL)			
Baseline	210.4 \pm 88.1	167.4 \pm 56.2	0.281
Post-operative	88.8 \pm 15.2**	112.9 \pm 16.7	0.009
Change	-121.7 \pm 86.8	-54.6 \pm 65.7	0.112
HbA1c (%)			

Baseline	10.3 ± 1.8	9.3 ± 1.7	0.272
Post-operative	5.4 ± 0.5***	6.3 ± 0.2**	< 0.001
Change	-4.9 ± 2.0	-3.0 ± 1.7	0.042
Insulin (μU/mL)			
Baseline	23.9 ± 48.3	7.7 ± 5.9	0.681
Post-operative	3.6 ± 3.5	5.9 ± 4.3	0.299
Change	-20.3 ± 49.2	-1.8 ± 3.3	0.408
C-peptide (ng/mL)			
Baseline	2.6 ± 1.0	2.3 ± 1.3	0.408
Post-operative	1.6 ± 1.4	1.7 ± 0.6	0.174
Change	-1.0 ± 1.6	-0.6 ± 0.9	0.568
HOMA-IR			
Baseline	14.0 ± 30.7	3.3 ± 2.3	0.536
Post-operative	0.8 ± 1.0**	1.7 ± 1.4*	0.042
Change	-13.2 ± 30.9	-1.6 ± 1.7	0.351
Insulinogenic index			
Baseline	0.10 ± 0.09	0.16 ± 0.14	0.470
Post-operative	0.27 ± 0.21*	0.21 ± 0.20	0.526
Change	0.17 ± 0.21	0.05 ± 0.16	0.231
Interleukin-1β (pg/mL)			
Baseline	1.09 ± 0.66	1.48 ± 1.15	0.606
Post-operative	0.34 ± 0.24*	0.48 ± 0.33	0.360
Change	-0.75 ± 0.72	-1.0 ± 1.4	0.663
hsCRP (mg/dL)			
Baseline	0.52 ± 0.36	0.29 ± 0.20	0.140
Post-operative	0.07 ± 0.07**	0.11 ± 0.13*	0.536
Change	-0.45 ± 0.37	-0.17 ± 0.17	0.089
Leukocyte (/mm ³)			
Baseline	6599 ± 638	7827 ± 2675	0.276
Post-operative	5532 ± 1665	7103 ± 1922	0.102
Change	-1067 ± 1548	-724 ± 2591	0.746
Acyl ghrelin (pg/mL)			
Baseline	19.3 ± 7.3	23.7 ± 8.2	0.289
Post-operative	19.0 ± 9.6	31.5 ± 13.9	0.055
Change	-0.4 ± 14.4	7.8 ± 14.7	0.283
Des-acyl ghrelin (pg/mL)			
Baseline	54.6 ± 47.9	71.3 ± 51.3	0.512
Post-operative	39.5 ± 21.5	42.7 ± 32.4	0.815

Change	-15.1 ± 55.4	-28.6 ± 64.9	0.659
CCK (ng/mL)			
Baseline	1.19 ± 0.44	1.18 ± 0.42	0.947
Post-operative	0.89 ± 0.43	0.80 ± 0.25	1.000
Change	-0.30 ± 0.67	-0.38 ± 0.62	0.821
GIP (ng/mL)			
Baseline	0.15 ± 0.06	0.14 ± 0.08	0.730
Post-operative	0.27 ± 0.26	0.72 ± 1.15	0.536
Change	0.11 ± 0.25	0.58 ± 1.20	0.837
GLP-1 (ng/mL)			
Baseline	5.0 ± 4.2	6.0 ± 5.6	0.682
Post-operative	7.4 ± 1.6	6.5 ± 2.5	0.412
Change	2.4 ± 3.8	0.5 ± 5.7	0.433
PYY (ng/mL)			
Baseline	1.5 ± 0.5	1.7 ± 0.9	0.700
Post-operative	3.9 ± 1.1**	6.7 ± 2.7**	0.038
Change	2.4 ± 1.5	5.0 ± 2.9	0.060
Leptin (ng/mL)			
Baseline	6145 ± 7507	4501 ± 2143	0.536
Post-operative	4401 ± 2287	6812 ± 3680	0.129
Change	-1744 ± 7631	2311 ± 3232	0.178
Adiponectin (µg/mL)			
Baseline	4.0 ± 1.4	3.3 ± 1.7	0.071
Post-operative	11.8 ± 4.9**	11.7 ± 7.3	0.984
Change	7.7 ± 4.1	8.3 ± 6.7	0.827

AUC, the area under the curve; BMI, body mass index; CCK, cholecystokinin; GB, gastric bypass; GIP, gastric inhibitory peptide; GLP-1, glucagon-like peptide-1; HbA1c, glycated hemoglobin; HDL, high-density lipoprotein; HOMR-IR, homeostatic model assessment-insulin resistance; hsCRP, high-sensitivity C-reactive protein; T2DM, type 2 diabetes mellitus; PYY, peptide YY.

^a Between the GB and SG group.

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, compared to baseline.