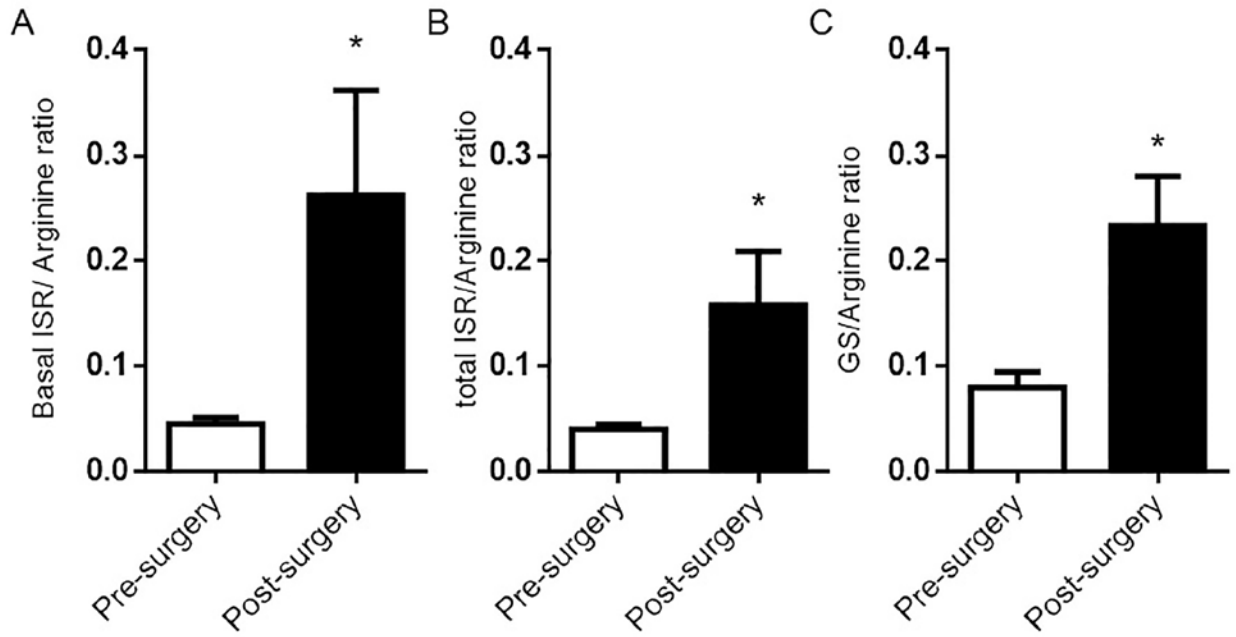
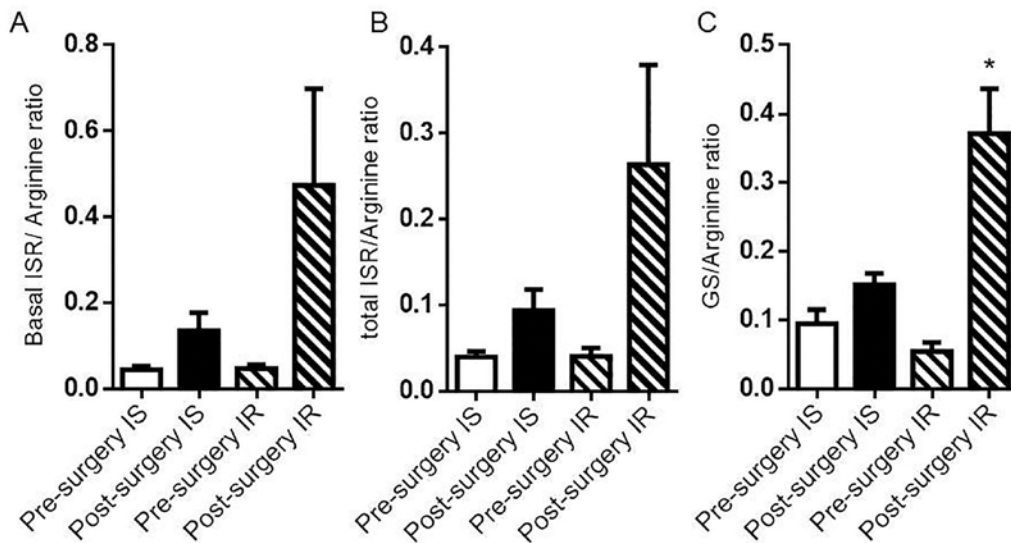


SUPPLEMENTARY DATA

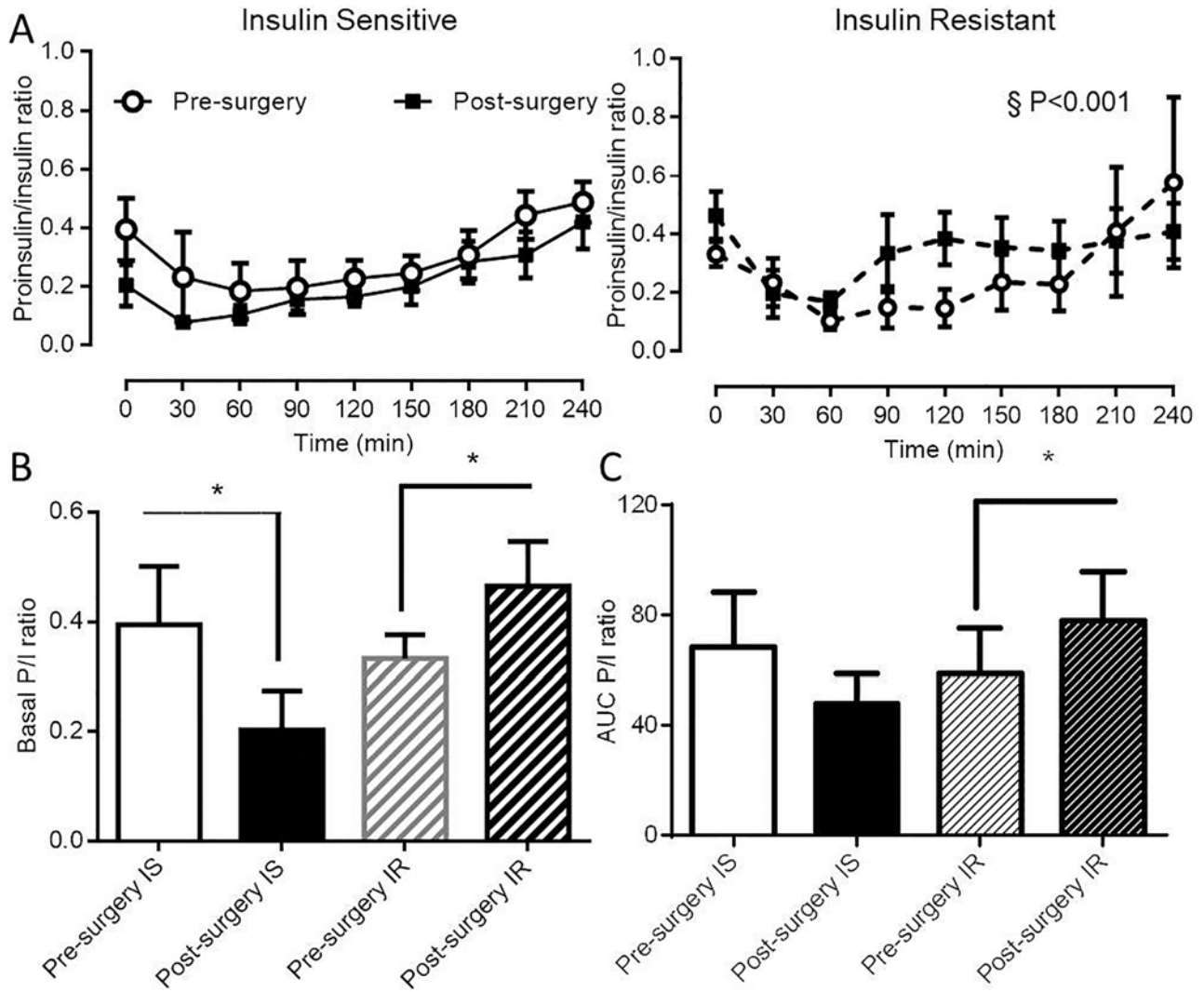


Supplementary Figure 1. Ratio between clamp-derived arginine-stimulated insulin secretion and MMT-derived basal insulin secretion rate (A), total insulin secretion rate (B), and glucose sensitivity (C) before (white bars) and after (dark bars) partial pancreatectomy.



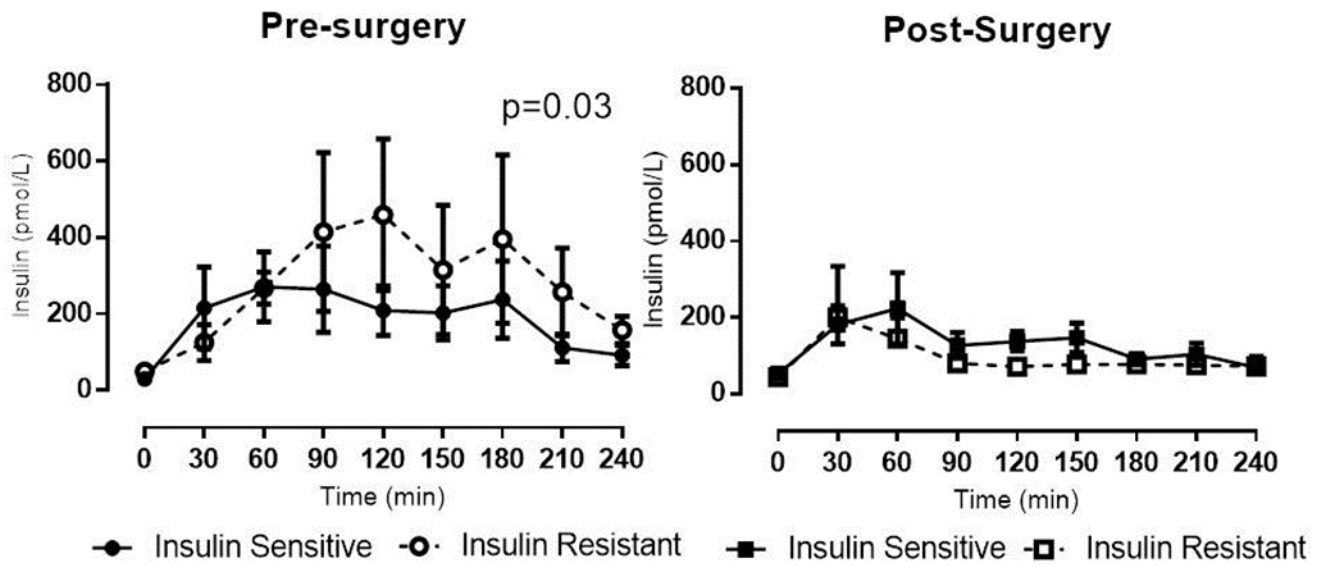
Supplementary Figure 2. Ratio between clamp-derived arginine-stimulated insulin secretion and MMT-derived basal insulin secretion rate (A), total insulin secretion rate (B), and glucose sensitivity (C) before (white bars) and after (dark bars) partial pancreatectomy in insulin sensitive (full bar) and insulin resistant (striped bar).

SUPPLEMENTARY DATA



Supplementary Figure 3 (A) Proinsulin to insulin ratio during MMT before (white circles) and after (dark squares) partial pancreatectomy in insulin sensitive (solid lines, left panel) and insulin resistant subjects (dotted lines, right panel). § P<0.001 for the interaction between pancreatectomy, time and insulin sensitivity. (B) Basal proinsulin to insulin ratio before (white bar) and after (dark bar) partial pancreatectomy in insulin sensitive (full bar) and insulin resistant (striped bar). (C) Changes in area under the curve (AUC) of proinsulin to insulin ratio before (white bar) and after (dark bar) partial pancreatectomy in insulin sensitive (full bar) and insulin resistant subjects (striped bar).

SUPPLEMENTARY DATA



Supplementary Figure 4 (A) Insulin levels during MMT in insulin sensitive (solid lines) and insulin resistant subjects (dotted lines) before partial pancreatectomy (B) Insulin levels during MMT in insulin sensitive (solid lines) and insulin resistant subjects (dotted lines) after partial pancreatectomy. $p=0.03$ for the interaction between time and insulin sensitivity.

SUPPLEMENTARY DATA

Supplementary Table 1.

Subject characteristics	Insulin sensitive		Insulin resistant	
	(n.5)		(n.4)	
	Before Surgery	After Surgery	Before Surgery	After Surgery
Glucose Uptake (mg·Kg ⁻¹ ·min ⁻¹)	6.29±0.44	5.97±0.31	3.56±0.46*	3.88±0.26
BMI (kg/m ²)	27.6±1.68	26.2±0.96	26.1±2.38	25.4±2.13
Fasting glucose (mg/dl)	79.4±6.20	99.6±7.71 [#]	95.7±3.49	139±18.0 [§]
Fasting Insulin (μUI/ml)	4.32±0.54	4.38±0.60	7.12±1.18*	6.30±3.41
Fasting C-peptide (ng/ml)	1.50±0.18	1.78±0.14	3.77±1.18	2.35±0.95
Total Cholesterol (mg/dl)	182±26.1	144±25.7	229±41.9	132±16.6
Triglycerides (mg/dl)	135±28.6	102±15.8	150±21.4	102±13.2
HbA1c (%)	5.58±0.22	5.94±0.24	5.65±0.23	7.60±0.34 [§]
HbA1c (mmol/mol)	37.4±2.50	38.2±2.54	41.4±2.64	59.5±3.81 [§]

Clinical and metabolic characteristics of insulin sensitive and insulin resistant patients before and after surgery. Data are means ± SE, * P- value <0.05 is considered statistically significant insulin sensitive vs insulin resistant before surgery. [#] P- value <0.05 is considered statistically significant before vs after surgery in insulin sensitive. [§] P- value <0.05 is considered statistically significant before vs after surgery in insulin resistant.