

Table S3. Differences in changes in GLP-1 and secretin responses during a 360-min mixed-meal test between patients undergoing Roux-en-Y gastric bypass (RYGB) and one-anastomosis gastric bypass (OAGB) with complete mixed meal test data. Summary statistics are presented as geometric means (GM) with interquartile ranges (IQR). Results are derived from linear mixed-effects models with log-transformed outcomes and random intercepts for participants. Model estimates were exponentiated to yield ratios of geometric means and are expressed as percentage within-group changes, or between-group differences/differences in changes to facilitate interpretation.

Outcome	RYGB				OAGB				RYGB vs. OAGB	
	n	GM (IQR)	Change (95% CI)	p-value	n	GM (IQR)	Change (95% CI)	p-value	Difference* (95% CI)	p-value
Glucose										
Fasting (mmol/l)										
Baseline	21	5.7 (5.3–6.2)			20	6.2 (5.5–6.7)			-8% (-16 to 1)	0.083
6 months	21	5.3 (5.0–5.6)	-7% (-14 to -0)	0.043	19	5.2 (5.0–5.5)	-15% (-21 to -8)	<0.001	8% (-3 to 21)	0.140
12 months	21	5.2 (4.9–5.5)	-9% (-16 to -2)	0.013	18	5.4 (4.8–5.8)	-13% (-19 to -5)	0.001	4% (-7 to 16)	0.468
Peak (mmol/l)										
Baseline	19	8.4 (7.2–9.7)			19	9.1 (7.2–11.2)			-8% (-21 to 8)	0.307
6 months	18	11.6 (10.9–13.1)	38% (26 to 50)	<0.001	14	10.4 (9.1–12.2)	18% (7 to 30)	0.001	16% (2 to 33)	0.023
12 months	14	11.5 (10.7–12.9)	39% (26 to 54)	<0.001	16	9.7 (8.3–10.5)	7% (-3 to 17)	0.162	31% (15 to 49)	0.000
Total AUC 360 min (mmol/l × min)										
Baseline	19	2319 (2160–2510)			19	2489 (2064–2750)			-7% (-18 to 6)	0.257
6 months	18	2150 (2035–2252)	-8% (-13 to -2)	0.015	14	2259 (1958–2352)	-8% (-14 to -2)	0.017	1% (-8 to 10)	0.910
12 months	14	2099 (1970–2218)	-7% (-13 to -1)	0.036	16	2220 (1941–2150)	-13% (-18 to -7)	<0.001	6% (-3 to 17)	0.201
Early AUC 60 min (mmol/l × min)										
Baseline	20	425 (394–460)			19	446 (374–518)			-5% (-17 to 9)	0.466
6 months	19	580 (534–634)	37% (26 to 48)	<0.001	14	520 (461–608)	19% (9 to 31)	<0.001	15% (1 to 30)	0.032
12 months	16	582 (536–637)	37% (26 to 50)	<0.001	16	494 (428–522)	11% (2 to 21)	0.017	23% (9 to 39)	0.001
Insulin										
Fasting (pmol/l)										
Baseline	21	14.8 (8.0–33.1)			20	15.6 (11.7–21.4)			-5% (-39 to 47)	0.812
6 months	21	6.8 (4.9–10.3)	-54% (-64 to -41)	<0.001	19	5.4 (4.3–7.8)	-65% (-73 to -54)	<0.001	29% (-10 to 87)	0.165
12 months	21	5.1 (3.7–8.6)	-65% (-73 to -55)	<0.001	17	4.3 (3.2–7.0)	-69% (-77 to -60)	<0.001	12% (-23 to 64)	0.535
Peak (pmol/l)										
Baseline	18	100.1 (65.9–162.0)			19	86.4 (51.2–140.1)			14% (-28 to 81)	0.565
6 months	18	275.7 (219.9–398.1)	196% (133 to 276)	<0.001	13	195.2 (133.3–273.3)	130% (77 to 199)	<0.001	29% (-10 to 84)	0.162
12 months	15	288.6 (179.8–540.2)	182% (119 to 264)	<0.001	14	138.2 (66.3–229.6)	78% (37 to 129)	<0.001	59% (11 to 128)	0.012
Total AUC 360 min (pmol/l × min)										
Baseline	18	17023 (9650–30565)			19	15513 (10422–25257)			10% (-27 to 65)	0.637
6 months	18	20944 (15919–31168)	27% (2 to 57)	0.030	13	16027 (9221–31160)	-0% (-21 to 26)	0.974	27% (-7 to 75)	0.132
12 months	15	19384 (14011–32928)	12% (-10 to 40)	0.315	14	10779 (7635–18066)	-23% (-39 to -4)	0.023	46% (6 to 101)	0.021
Early AUC 60 min (pmol/l × min)										
Baseline	20	3669 (2371–6054)			19	3046 (1838–4609)			16% (-25 to 79)	0.492
6 months	19	11607 (8856–18177)	232% (168 to 311)	<0.001	14	8010 (4667–13599)	155% (99 to 227)	<0.001	30% (-6 to 80)	0.115
12 months	16	11424 (8226–19746)	201% (139 to 278)	<0.001	15	5576 (3265–7922)	105% (61 to 159)	<0.001	47% (6 to 104)	0.022
C-peptide										
Fasting (pmol/l)										
Baseline	21	1.0 (0.8–1.4)			20	0.9 (0.7–1.2)			11% (-16 to 45)	0.462
6 months	21	0.7 (0.5–0.9)	-31% (-42 to -17)	<0.001	19	0.5 (0.5–0.7)	-39% (-49 to -26)	<0.001	13% (-13 to 47)	0.356
12 months	21	0.5 (0.4–0.7)	-44% (-53 to -33)	<0.001	18	0.5 (0.4–0.6)	-41% (-52 to -29)	<0.001	-4% (-27 to 25)	0.736

Peak (pmol/l)										
Baseline	20	3.0 (2.1–3.5)			18	2.6 (1.8–3.9)			10% (-16 to 45)	0.476
6 months	19	5.4 (4.6–7.3)	84% (58 to 113)	<0.001	14	4.2 (3.2–6.1)	54% (30 to 83)	<0.001	19% (-5 to 49)	0.126
12 months	15	5.2 (4.1–6.8)	66% (42 to 95)	<0.001	16	3.4 (2.6–4.2)	33% (13 to 55)	0.001	25% (0 to 57)	0.050
Total AUC 360 min (pmol/l × min)										
Baseline	20	754 (555–943)			18	621 (480–902)			19% (-5 to 50)	0.133
6 months	19	744 (623–929)	0% (-14 to 16)	0.994	14	654 (501–857)	2% (-14 to 21)	0.824	-2% (-22 to 23)	0.870
12 months	15	625 (530–771)	-18% (-30 to -4)	0.013	16	490 (416–579)	-20% (-31 to -6)	0.009	1% (-19 to 27)	0.905
Early AUC 60 min (pmol/l × min)										
Baseline	20	112 (85–152)			19	92 (70–127)			20% (-11 to 62)	0.224
6 months	19	232 (176–298)	112% (81 to 148)	<0.001	14	178 (129–234)	91% (60 to 129)	<0.001	11% (-13 to 41)	0.395
12 months	16	221 (186–310)	93% (63 to 127)	<0.001	16	148 (111–190)	71% (45 to 102)	<0.001	13% (-11 to 42)	0.320

[§] At baseline, the percentage difference in baseline values. At 6 and 12 months, the percentage difference in change from baseline (ratio of fold-changes; group × time -interaction).