SUPPLEMENTARY INFORMATION

Pancreatic functional damage and reversion to normoglycaemia after STZ-induced diabetes in minipigs: evidence of preserved coupling between [^{18}F]FDOPA PET and glucose regulation

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Table S1. Body weight and pancreatic regional uptake index (SUVr) parameters across study time points.

Variable	BASAL			INTERME-DIATE			FINAL		
Group	**Reversion**	**Non Reversion**	**p-value**	**Reversion**	**Non Reversion**	**p-value**	**Reversion**	**Non Reversion**	**p-value**
	n = 3	n = 9		n = 3	n = 9		n = 3	n = 9	
Weight (kg)	14.8 (13.8-16.8)	21.6 (17.0-26.2)	0.12	16.8 (16.0-18.4)	22.0 (17.2-27.6)	0.23	20.6 (20.0-22.4)	21.4 (17.6-27.8)	0.93
SUVr PEAK									
Head	1.4 (1.3-1.6)	1.2 (0.9-1.6)	0.52	1.3 (1.1-1.3)	1.1 (0.9-1.3)	0.31	1.3 (1.1-1.5)	1.1 (0.8-1.3)	0.52
Body	2.0 (1.7-2.1)	1.4 (1.2-1.7)	0.12	1.7 (1.2-2.3)	1.3 (1.1-1.3)	0.23	1.5 (1.4-1.5)	1.3 (1.2-1.7)	0.40
Tail	1.8 (1.7-2.9)	1.4 (1.4-2.1)	0.41	1.8 (1.4-2.0)	1.4 (1.1-1.5)	0.09	1.7 (1.1-1.8)	1.3 (1.1-1.3)	0.52
SUVr MEAN									
Head	1.5 (1.4-1.8)	1.5 (1.1-1.7)	0.78	1.4 (1.2-1.5)	1.1 (0.8-1.4)	0.31	1.3 (1.2-1.7)	1.2 (1.0-1.3)	0.40
Body	2.1 (1.7-2.3)	1.6 (1.4-1.8)	0.17	2.0 (1.3-2.2)	1.4 (1.1-1.4)	0.17	1.5 (1.4-1.6)	1.4 (1.3-1.7)	0.78
Tail	1.9 (1.7-2.3)	1.5 (1.3-2.3)	0.41	1.9 (1.4-1.9)	1.3 (1.2-1.4)	0.03*	1.5 (1.1-1.8)	1.2 (1.1-1.4)	0.40
SUVr MAX									
Head	1.7 (1.6-2.1)	1.6 (1.3-1.9)	0.41	1.4 (1.3-1.5)	1.0 (0.9-1.5)	0.27	1.5 (1.3-1.9)	1.2 (1.1-1.5)	0.27
Body	2.3 (1.8-2.6)	1.7 (1.5-2.0)	0.17	2.0 (1.4-2.6)	1.5 (1.3-1.5)	0.23	1.6 (1.5-1.7)	1.5 (1.5-1.9)	0.40
Tail	2.0 (1.9-2.9)	1.6 (1.6-2.3)	0.40	2.0 (1.5-2.0)	1.4 (1.2-1.6)	0.07	1.7 (1.1-1.9)	1.3 (1.2-1.4)	0.64

Supplementary Table S1. Body weight and pancreatic regional uptake index (SUVr) parameters across study time points. Data are presented as median (interquartile range) for body weight and PET-derived regional uptake index parameters (SUVrpeak, SUVrmean, and SUVrmax) measured in the pancreatic head, body, and tail. SUVr values were calculated as the ratio between pancreatic SUV and splenic SUV. Comparisons between the reversion (n = 3) and non-reversion (n = 9) groups were performed at baseline (day 0), intermediate (day 15), and final (day 30) time points

using the Mann–Whitney U test. Groups were defined by the presence or absence of diabetes reversion on day 30. Asterisks (*) indicate statistical significance.

Table S2. Individual baseline-to-final pancreatic functional damage (%) calculated from SUVr max, SUVr mean, and SUVr peak in pancreatic head, body, and tail regions.

Variable	PIGS	1	2	3	4	5	6	7	8	9	10	11	12
SUVr max(Final/Baseline)													
Head		5.26	59.06	0	4.99	0	0	2.85	35.75	26.94	8.41	0	42.48
Body		22.6	22.05	20.52	23.97	0	0	19.24	28.96	24.77	13.64	0	11.33
Tail		23.71	60.31	22.69	1.17	0	7.19	0	50.91	30.32	28.6	0	20.25
SUVr mean (Final/Baseline)													
Head		0	59.06	0	1.84	0	0	3.15	32.4	21.83	10.14	0	40.78
Body		22.15	27.85	17.81	22.71	0	0	13.42	33.41	18.35	11.86	0	8.18
Tail		23.06	62.83	13.72	2.1	0	0	0	47.31	22.42	29.73	0	18.84
SUVr peak (Final/Baseline)													
Head		6.28	54.39	0	0	0	0	7.47	36.39	22.11	21.55	0	34.75
Body		14.96	5.02	12.07	21.65	0	0	24.25	23.76	21.39	16.65	0	10.94
Tail		28.08	61.77	26.37	0	0	0	11.09	48.7	28.73	20.98	0	17.02

Supplementary Table S2. Individual baseline-to-final pancreatic functional damage (%) calculated from regional uptake index (SUVr) parameters in the pancreatic head, body, and tail. Functional damage was calculated as the percentage reduction in SUVr between baseline (day 0) and the final time point (day 30). Values are presented for SUVrmax, SUVrmean, and SUVrpeak in each animal. A value of 0 indicates no measurable reduction in normalized [^{18}F]FDOPA uptake relative to baseline. Negative values, corresponding to increased uptake at day 30 compared with baseline, were assigned a value of 0. Values are expressed as the ratio between final and baseline measurements (Final/Baseline)

Table S3. Individual late functional change (%) in pancreatic [^{18}F]FDOPA uptake between day 15 and day 30.

Variable	PIGS	1	2	3	4	5	6	7	8	9	10	11	12
SUVr max (D30/D15)													
Head		0	48.89	1.22	0	0	0	0	32	34.39	0	0	50.66
Body		0	16.44	41.69	0	0	17.08	1.73	30.48	21.17	0	0	16.8
Tail		0	50.55	18.02	0	0	42.28	8.62	52.51	13.44	13.22	0	36.84
SUVr mean (D30/D15)													
Head		0	48.89	8.52	0	0	0	0	35.63	34.27	0	0	50.83
Body		0	22.67	36.61	1.93	0	9.76	0.78	33.62	20.6	0	0	14.1
Tail		0	50.8	25.01	0	0	30.81	15.56	51.77	7.47	16.08	0	30.81
SUVr peak (D30/D15)													
Head		0	4 5	0.58	0	0	17.39	0	37.47	25.03	10.46	0	48.94
Body		0	15.5	42.01	0	0	9.69	0	16.54	17.24	0	0	29.51
Tail		0	55.64	19.23	0	0	42.14	14.34	51.88	7.37	15.79	0	33.14

Supplementary Table S3. Late functional change (%) was calculated as the percentage reduction in SUVr between the intermediate (day 15) and final (day 30) time points. Values are shown for SUVrmax, SUVrmean, and SUVrpeak in the pancreatic head, body, and tail. A value of 0 indicates no measurable reduction in normalized tracer uptake during the interval. Values are expressed as the ratio between day 30 and day 15 measurements (D30/D15).