

Supplemental Table 1: Characteristics of the individual from whom the enteroids were derived and their experimental applications

Phenotype	Individuals	Gender	Age of surgery (years)	BMI (kg/m ²)	Glycemia (mmol/L)	HbA1c (%)	Diabetes duration (years)	Anti-diabetic treatment	RNA expression (passage 1)	Protein expression (passage 1)	GLP-1 cells quantification (passage 1)	GLP-1 secretion glucose (passage 2)
Ob	1	F	38	38.4	5.3	5.5				X		
	2	F	29	45.7	5.1	5.2				X		X
	3	F	20	43.8	4.6	5.4			X	X		
	4	M	41	53.5	4.2	5.0			X	X		X
	5	F	34	53.7	5.5	5.3			X	X	X	X
	6	F	44	44.6	5.4	5.6			X	X		X
	7	F	36	39.3	4.2	5.0			X	X	X	X
	8	F	40	38.2	4.2	5.0			X			
	9	F	35	41.8	4.9	5.1				X	X	X
	10	F	33	41.5	5.0	5.5				X	X	X
	11	F	33	42.2	4.2	5.1				X	X	
	12	M	24	51.5	5.1	5.5				X	X	
ObPreD	13	F	59	39.3	4.6	5.7				X	X	
	14	F	46	51.7	4.9	5.9				X		
	15	F	43	46.1	5.7	4.0				X	X	X
	16	F	45	41.5	6.6	6.4				X	X	X
	17	F	39	49.8	5.8	5.6				X	X	X
	18	F	31	43.9	5.6	5.6			X	X		
	19	M	38	46.8	5.3	5.8			X	X	X	X
	20	F	41	38.5	4.8	5.8			X	X	X	
	21	F	51	58.0	5.7	6.2			X	X	X	X
	22	M	53	43.3	5.0	6.0			X		X	X
	23	F	42	44.7	5.0	6.0						X
	24	F	61	51.6	6.2	6.2				X	X	
ObD	25	F	57	39.7	6.9	6.5	40	CT		X		X
	26	F	56	44.8	7.4	6.9	11	MT	X	X	X	X
	27	F	45	40.6	7.2	5.7	0 (new)	WT		X		
	28	F	59	42.2	4.9	4.8	0.5	CT		X		
	29	F	38	36.2	7.1	5.8	1	CT	X	X	X	X
	30	F	56	54.3	8.3	8.8	25	CT	X	X	X	X
	31	M	47	40.4	6.2	6.4	0.6	MT	X	X	X	X
	32	F	62	39.9	7.3	7.4	14	CT	X	X		X
	33	F	45	40.5	7.6	6.2	0 (new)	WT	X	X	X	X
	34	M	47	42.1	4.3	5.3	5	CT	X	X	X	X

This table summarizes the HJEs derived from each individual used in all experiments (12 individuals with Ob, 12 with ObPreD and 10 with ObD). CT: combination of treatments; MT: mono treatment; WT: without treatment.

Supplemental Table 2: Characteristics of the individual for the Supplemental Figure 1

Phenotype	Individuals	Gender	Age of surgery (years)	BMI (kg/m ²)	Glycemia (mmol/L)	HbA1c (%)	Diabetes duration (years)	Anti-diabetic treatment	RNA DAPT kinetic (passage 1)	Protein DAPT kinetic (passage 1)
Ob	2	F	29	45.7	5.1	5.2				X
	35	F	18	52.9	4.9	5.9			X	
ObPreD	15	F	43	46.1	5.7	4.0				X
	16	F	45	41.5	6.6	6.4				X
ObD	25	F	57	39.7	6.9	6.5	40	CT		X
	36	F	31	59.1	7.0	6.5	1.5	CT	X	

For the additional figure experiments, the different HJEs used are listed in this table (2 individuals with Ob, 2 with ObPreD and 2 with ObD). CT: combination of treatments.

Supplemental Table 3: Oligonucleotide primer sequences used for q-PCR

Target gene	Reverse	Forward
<i>CHGA</i>	5'-CTC AAA ACA TTC CTG GCT GAC-3'	5'-AAT AAA GGG GAT ACC GAG GTG-3'
<i>GCG</i>	5'-AGC TGC CTT GTA CCA GCA TT-3'	5'-TCT GTT CTA CAG CAC ACT ACC AGA-3'
<i>PCSK1</i>	5'-CCT CAA TAG CAT CCG TCA CA-3'	5'-CGG GGT TGG AGT TGC ATA-3'
<i>RPLP0</i>	5'-GGA TCT GCT GCA TCT GTC T-3'	5'-ACA GGG CGA CCT GGA AGT-3'