Supplementary Table 1 CT equipment and scanning parameters

Parameters	Revolution CT	Aquilion ONE CT	Somatom Definition Flash CT
Tube voltage (kVp)	120	120	120
Tube current	Automatic	Automatic	Automatic
Detector collimation (mm)	80×0.625	80×0.5	128×0.6
FOV（mm）	350-400	350-400	350-400
Scan slice thickness (mm)	5	5	5
Slice spacing (mm)	5	5	5
Reconstruction slice thickness (mm)	1.25	1.25	1.25
matrix	256×256	256×256	256×256
pitch	0.992	0.9	0.8

Supplementary Table 2 Comparison of CT values in the head, body, and tail of the pancreas

Group	Healthy group	Prediabetes group	DMa Group	DMb Group
Head of pancreas	42.33±7.31	37.86±9.06	36.64±10.18	35.13±10.30
Body of pancreas	42.65±7.44	38.79±9.03	37.20±9.51	36.00±7.94
Tail of pancreas	42.57±5.87	38.58±8.76	34.71±9.93	33.52±9.74
F value	0.445	0.214	3.594	3.473
P value	0.505	0.808	**0.028**	**0.032**

Supplementary Table 3 Comparison of CT values of bilateral renal parenchyma, CT values of bilateral psoas major muscles, and values of bilateral renal sinus fat areas

Group	Left renal parenchyma	Right renal parenchyma	t/P value	Left psoas major	Right psoas major	Z/P value	Left renal sinus	Right renal sinus	t/P value
Healthy group	29.47±4.32	29.79±4.27	-1.683/0.094	49.73±7.34	48.87±6.97	-0.702/0.484	1.50±0.44	1.49±0.65	-1.374/0.169
Prediabetes group	30.99±4.56	30.97±4.77	0.103/0.918	46.77±7.66	48.53±7.66	-0.918/0.361	1.66±0.59	1.63±0.75	-1.590/0.112
DMa Group	30.81±3.88	30.81±3.80	-0.011/0.992	46.55±6.43	45.60±6.71	-0.322/0.748	1.79±0.44	1.79±0.49	-1.479/0.139
DMb Group	31.20±4.42	31.19±4.34	0.007/0.994	48.76（43.49，52.43）	48.41（43.92，52.03）	-0.245/0.806	2.16±1.47	2.20±1.26	-0.346/0.729

Supplementary Table 4 Comparison of two types of clinical biochemical indicators in the prediabetes group

Type	**Type Ⅰ（n=55）**	**Type Ⅱ（n=75）**	*P-value*
liver（HU）	56.39±6.11	51.81±5.60	**0.001**
Head of pancreas（HU）	31.95±7.36	43.61±5.93	**0.000**
Body of pancreas（HU）	31.22±6.91	44.49±5.52	**0.000**
Tail of pancreas（HU）	30.55±7.69	43.34±5.33	**0.000**
Gender(Male/Famale)	27/28	50/25	**0.041**
Age(years)	53.48±8.22	57.75±8.77	0.087
Height(cm)	168.00±9.43	167.56±8.64	0.866
Weight(kg)	70.79±15.16	71.06±13.45	0.826
BMI(kg/m^2)	25.38±3.59	25.50±3.37	0.766
FPG(mmol/L)	5.04±1.00	6.10±1.30	**0.022**
2h OGTT(mmol/L)	8.51±1.19	9.88±2.97	**0.032**
HbA1c(%)	6.40±1.53	6.38±1.16	0.136
Scr(*u*mol/L)	69.82±13.23	68.40±17.52	0.453
BUN(mmol/L)	5.35±2.19	5.10±1.38	0.618
eGFRml/min/1.73m^2	90.64±11.04	92.30±14.24	0.629
TG(mmol/L)	1.34±0.79	2.01±0.97	**0.013**
TC(mmol/L)	4.10±1.35	4.19±1.51	0.756
HDL-C（mmol/L)	1.23±0.41	1.25±0.39	0.826
LDL-C(mmol/L)	2.60±0.94	2.71±0.91	0.558
ALT（U/L）	21.67±12.30	20.43±13.41	0.595
AST（U/L）	20.66±9.30	20.16±11.79	0.799

Supplementary Table 5 Comparison of three types of clinical biochemical indicators in the DMa group

type	Type Ⅰ（n=95）	Type Ⅱ（n=90）	Type Ⅲ（n=22）	*P-value*
liver（HU）	47.69±6.86 [g]	43.81±5.77	47.44±9.65 [g]	**0.000**
Head of pancreas（HU）	40.17±5.62 [h]	38.02±5.90 [h]	15.72±14.30	**0.000**
Body of pancreas（HU）	40.59±4.91 [h]	38.32±5.31 [h]	17.89±14.69	**0.000**
Tail of pancreas（HU）	37.91±5.87 [h]	36.19±5.78 [h]	14.86±14.27	**0.000**
Psoas major（HU）	47.22±6.91	43.76±6.90 [f]	46.08±6.12	**0.018**
VAT（mm^2）	148.49±40.45	150.99±42.69 [f]	82.32±36.75 [e]	**0.000**
SAT（mm^2）	191.14±93.93	174.33±73.29 [e]	110.44±56.78 [f]	**0.000**
Gender(Male/Famale)	53/42	45/45	8/14 [f]	**0.035**
Age(years)	52.18±9.41	55.61±12.74	55.01±10.77	0.712
duration（year）	1.98±1.08	2.68±2.49	2.44±2.73	0.072
Height(cm)	169.63±8.59	168.96±8.67	164.90±7.45	0.066
Weight(kg)	73.62±17.17	76.03±15.88	71.56±13.04	0.417
BMI(kg/m^2)	27.74±4.89	26.77±4.62	26.23±3.48	0.320
FPG(mmol/L)	7.76±3.03	8.45±3.35 [f]	8.57±4.49 [f]	**0.026**
2h OGTT(mmol/L)	14.39±6.82	15.15±5.76 [f]	15.51±5.23 [f]	**0.020**
HbA1c(%)	7.75±2.20	8.26±2.17 [f]	8.54±2.27 [f]	**0.017**
Scr(*u*mol/L)	71.31±21.76	73.19±28.62	68.61±25.97	0.722
BUN(mmol/L)	5.89±2.56	6.23±2.90	5.00±1.22	0.140
eGFRml/min/$1.73m^2$	93.43±19.83	90.12±23.50	99.64±15.15	0.178
TG(mmol/L)	2.03±1.71 [g]	2.80±1.12	1.18±0.08 [g]	**0.034**
TC(mmol/L)	4.80±1.68	4.48±1.46	4.23±0.12	0.180
HDL-C（mmol/L)	1.19±0.58	1.11±0.38	1.09±0.37	0.463
LDL-C(mmol/L)	2.91±1.10	3.02±1.08	2.52±0.77	0.148

ALT（U/L）	25.90±6.31 g	32.64±6.72	27.74±3.14 g	**0.012**
AST（U/L）	20.58±1.73 g	25.07±2.86	22.55±1.61 g	**0.002**

f represents comparison with Type I ($P < 0.05$); g represents comparison with Type II ($P < 0.05$); h represents comparison with Type III ($P < 0.05$).

Supplementary Table 6 Comparison of four types of clinical biochemical indicators in the DMb group

type	Type Ⅰ（n=39）	Type Ⅱ（n=36）	Type Ⅲ（n=71）	Type Ⅳ（n=45）	*P-value*
liver（HU）	54.49±6.59	48.85±6.80[i]	50.22±7.42[i]	48.05±7.57[i]	**0.000**
Head of pancreas（HU）	32.87±5.89[j]	19.25±9.46	39.92±4.19[j]	42.22±5.09[j]	**0.000**
Body of pancreas（HU）	34.17±6.05[j]	24.97±5.76	38.71±4.79[j]	42.14±4.72[j]	**0.000**
Tail of pancreas（HU）	33.71±7.05[j]	19.40±8.28	37.65±4.78[j]	40.73±4.60[j]	**0.000**
Renal parenchyma（HU）	31.50±3.43[l]	31.06±4.66[l]	32.05±3.84[l]	28.63±6.12	**0.003**
Psoas major（HU）	45.93±8.11[k]	42.03±10.97[k]	38.96±8.06	43.90±7.97[k]	**0.001**
L3 vertebral body	119.46±40.20	111.25±41.25	112.79±21.86	118.85±42.54	**0.010**
VAT（mm^2）	157.91±55.28	167.25±43.36	146.97±40.37	142.01±25.75	0.057
SAT（mm^2）	130.94±96.62	131.17±55.97	138.81±46.40	134.23±51.48	**0.140**
Renal sinus fat area（mm^2）	2.61±0.83[l]	2.38±1.24[l]	2.08±0.79[l]	1.90±0.98	**0.045**
Gender(Male/Famale)	22/17[l]	13/23[l]	30/41[l]	35/10	**0.013**
Age(years)	50.08±2.49[l]	53.75±4.12[l]	56.78±3.88[l]	63.13±3.47	**0.023**
duration（year）	14.75±3.2	13.65±3.7	14.28±4.2	20.58±5.4	**0.044**

	2[l]	8[l]	5[l]	2	
Height(cm)	169.71±8.57	167.60±9.07	168.35±8.83	170.35±7.25	0.426
Weight(kg)	69.44±13.34	70.30±11.30	72.82±13.31	76.06±16.24	0.121
BMI(kg/m^2)	26.73±5.07	24.99±3.60[i]	26.06±4.12	23.95±3.64[i]	**0.014**
FPG(mmol/L)	8.85±3.17[j]	9.75±5.49	8.90±3.82[j]	8.25±3.47[j]	**0.025**
2h OGTT(mmol/L)	16.20±4.74[j]	18.24±5.18	17.09±4.94[j]	16.80±4.17[j]	**0.012**
HbA1c(%)	8.17±2.20[j]	9.90±2.54	8.04±2.42[j]	8.36±2.31[j]	0.274
Scr(*u*mol/L)	74.54±27.54[l]	74.69±22.66[l]	73.42±22.41[l]	79.47±22.75	**0.039**
BUN(mmol/L)	6.26±2.97[l]	6.04±3.64[l]	6.04±2.53[l]	7.07±3.53	**0.046**
eGFR(ml/min/1.73m^2)	90.47±27.38[l]	85.87±27.31[l]	88.06±27.40[l]	76.57±32.37	**0.010**
TG(mmol/L)	2.93±1.22	1.99±1.38[i]	2.25±2.13[i]	2.28±1.98[i]	**0.033**
TC(mmol/L)	4.55±1.55	4.38±1.47	4.39±1.39	4.43±1.43	0.141
HDL-C（mmol/L)	0.79±0.21	1.10±0.44[i]	1.20±0.32[i]	1.02±0.56[i]	**0.039**
LDL-C(mmol/L)	3.30±1.35	2.97±1.33[i]	2.85±0.99[i]	2.97±1.08[i]	**0.022**
ALT（U/L）	27.85±1.12	20.20±1.23[i]	23.78±2.41[i]	20.49±1.25[i]	**0.048**
AST（U/L）	27.39±2.90	22.28±1.67[i]	21.92±1.14[i]	20.80±1.06[i]	**0.046**

i represents comparison with type Ⅰ ($P < 0.05$); j represents comparison with type Ⅱ ($P < 0.05$); k represents comparison with typeⅢ ($P < 0.05$); l represents comparison with typeⅣ ($P < 0.05$).