

Supplementary Table 1. The clinical and demographic characteristics of the first cohort.

	Control	CAD	T2DM	CAD and T2DM	p value
	group	group	group	group	
	(n=6)	(n=6)	(n=6)	(n=6)	
Male gender	3 (50%)	3 (50%)	3 (50%)	3 (50%)	1
Age	60±2.3	61.7±7.9	62.3±6.2	63.2±2.6	0.766
Hypertension	1 (16.7%)	2 (33.3%)	2 (33.3%)	1 (16.7%)	0.828
Smoker	1 (16.7%)	1 (16.7%)	1 (16.7%)	2 (33.3%)	0.86
BMI(kg/m ²)	23.3±2.1	23.8±1.4	24.7±1.2	23.2±2.3	0.449
TC(mmol/L)	3.5±0.9	4.3±0.9	3.9±1.1	3.6±0.9	0.538
TG(mmol/L)	0.9±0.2	1.1±0.4	1.4±0.6	1.0±0.3	0.172
HDL(mmol/L)	1.3±0.3	0.9±0.2	1.1±0.2	1.0±0.2	0.071
LDL(mmol/L)	1.8±0.7	2.1±0.5	2.1±0.9	1.8±0.6	0.79
ALT(U/L)	36.3±17.8	30.0±11.8	33.7±17.9	31.8±11.5	0.9
AST(U/L)	23.5±3.8	28.3±10.0	19.8±7.3	24.7±7.0	0.282
Scr(μmol/L)	58.7±3.9	67.0±7.0	60.0±10.7	64.8±10.4	0.301
FT4I(pmol/L)	14.4±2.7	15.0±1.1	14.1±1.9	14.4±1.6	0.851
HbA1c(%)	5.4±0.1	5.4±0.2	6.9±0.7	7.0±0.4	0.001
GLU(mmol/L)	5.0±0.4	4.7±0.4	9.8±2.0	9.0±1.0	<0.001
OGTT 2h(mmol/L)	7.0±0.4	6.9±0.2	13.8±1.3	15.2±2.5	0.001

Supplementary Table 2. The clinical and demographic characteristics of the second cohort.

	Control group	CAD group	T2DM group	<i>p</i> value
	(n=20)	(n=20)	(n=20)	
Male gender	8 (40%)	11 (55%)	12 (60%)	0.42
Age	49.6±4.7	48.6±2.9	51.1±5.5	0.224
Hypertension	5 (25%)	8 (40%)	8 (40%)	0.517
Smoker	2 (10%)	4 (20%)	5 (25%)	0.459
BMI(kg/m ²)	23.6±2.1	24.4±3.3	23.7±2.0	0.827
TC(mmol/L)	3.6±0.8	3.6±0.9	4.2±0.9	0.083
TG(mmol/L)	1.5±0.4	1.7±0.3	1.7±0.7	0.485
HDL(mmol/L)	1.3±0.5	1.2±0.3	1.1±0.3	0.636
LDL(mmol/L)	2.5±0.6	2.6±0.5	2.8±0.6	0.099
ALT(U/L)	24.8±6.6	26.9±4.9	27.7±7.6	0.347
AST(U/L)	24.9±5.6	24.7±6.2	23.2±4.5	0.556
Scr(μmol/L)	59.2±6.5	59.9±4.5	61.2±4.9	0.517
FT4I(pmol/L)	14.2±1.6	14.3±2.9	13.9±1.9	0.764
HbA1c(%)	5.0±0.2	5.2±0.3	7.5±0.7	<0.001
GLU(mmol/L)	5.0±0.4	5.4±0.4	7.9±0.6	<0.001
OGTT 2h(mmol/L)	6.8±0.5	6.9±0.6	12.9±1.0	<0.001

Supplementary Table 3. The clinical and demographic characteristics of the third cohort.

	Control group	CAD group	T2DM group	<i>p</i> value
	(n=60)	(n=81)	(n=64)	
Male gender	29 (48.3%)	45(55.6%)	35(54.7%)	0.627
Age	49.0±5.5	50.8±6.0	50.6±5.7	0.138
Hypertension	21(35.0%)	38(46.9%)	31(48.4%)	0.251
Smoker	12(20.0%)	21(25.9%)	18(28.1%)	0.556
BMI(kg/m ²)	24.5±3.8	24.6±3.0	23.9±3.8	0.404
TC(mmol/L)	3.6±0.7	4.3±1.0	4.3±0.5	<0.001
TG(mmol/L)	1.4±0.4	1.5±0.3	1.5±0.4	0.297
HDL(mmol/L)	1.0±0.2	1.0±0.1	1.0±0.2	0.415
LDL(mmol/L)	2.5±0.8	2.7±0.5	2.5±0.4	0.199
ALT(U/L)	25.5±8.4	25.8±4.0	26.3±5.9	0.651
AST(U/L)	23.2±5.6	24.7±3.6	24.5±4.6	0.178
Scr(μmol/L)	58.0±8.1	58.4±7.7	59.6±6.0	0.442
FT4I(pmol/L)	14.4±1.6	15.6±2.3	14.9±2.2	0.006
HbA1c(%)	5.0±0.4	5.3±0.4	7.5±0.6	<0.001
GLU(mmol/L)	4.8±0.5	5.2±0.4	8.2±1.0	<0.001
OGTT 2h(mmol/L)	6.6±0.4	6.5±0.7	14.4±1.8	<0.001

BMI: body mass index; TC: total cholesterol; TG: triglyceride; HDL: high density lipoprotein;

LDL: low density lipoprotein; ALT: alanine transaminase; AST: aspartate transaminase; Scr:

serum creatinine, FT4I: free thyroxine index; GLU: glucose; OGTT: oral glucose tolerance test.

Supplementary Table 4. Nucleotide sequences of primers used for Q-RCR.

	Forward	Reverse	Product
			length
hsa_circ_0009036	GCTGCTCTACTCATCGACTGG	TGCTTGCTCATTACTTCGCCCT	86
hsa_circ_0054129	CTGATCTTGAGGAAAACCAGAATGC	CCCTGTAGAGGTGGAACAGGT	134
hsa-circRNA11806-28	TCTGTCAGATGTCAGAGGAGGA	GTGCACCAAGATTCCCTGTTCG	105
hsa-circRNA6510-1	ACATCAGGAGTGGTTCTCTGTGA	TGTAGCCTGAGTTAGCAAGGAGA	104
hsa-circRNA11783-2	GGCTTCTGGGACGTCTAAACA	TGCAGCTGTAAAGCACTCTTC	129
β-actin	GGGACCTGACTGACTACCTC	TCATACTCCTGCTTGCTGAT	541

CAD		T2DM		CAD combined with T2DM		
	group		group		group	
Upregulated	P value	Fold change	P value	Fold change	P value	Fold change
hsa_circ_0128506	<0.001	3.8	0.006	2.0	<0.001	2.3
hsa_circ_0054129	0.002	2.4	0.001	2.2	0.001	2.5
hsa_circ_0077770	0.006	2.4	0.003	2.3	0.013	2.0
hsa_circ_0124636	0.003	3.6	0.002	2.8	0.022	2.5
hsa_circ_0054633	0.024	2.4	0.005	2.9	0.024	2.4
hsa_circ_0106442	0.041	2.3	0.032	2.0	0.024	2.0
hsa_circ_0111612	0.015	3.0	0.047	2.3	0.044	2.2
hsa_circ_0105688	0.025	2.3	0.022	2.5	0.041	2.3
hsa_circ_0139110	0.028	2.1	0.009	2.6	0.038	2.2
hsa_circ_0092576	0.049	2.5	0.048	2.0	0.038	2.4
hsa_circ_0133936	0.007	2.5	0.016	2.4	0.004	2.4
hsa_circ_0062596	0.001	3.8	0.018	2.5	0.018	3.1
hsa-circRNA13247-1	0.045	2.4	0.028	2.6	0.049	2.3
Downregulated						
hsa_circ_0099580	<0.001	3.8	<0.001	3.0	0.011	2.4
hsa_circ_0134682	0.002	2.6	0.017	2.0	0.013	2.1
hsa_circ_0089925	0.002	2.6	0.005	2.3	0.022	2.2
hsa_circ_0056990	0.002	3.3	0.014	2.3	0.031	2.2
hsa_circ_0126894	<0.001	3.0	0.003	2.2	0.019	2.0

hsa_circ_0040028	0.004	2.3	0.001	2.5	0.014	2.3
hsa_circ_0069228	<0.001	3.6	<0.001	2.4	0.043	2.1
hsa_circ_0117499	<0.001	2.7	0.001	2.1	0.001	2.4
hsa_circ_0009036	<0.001	2.8	<0.001	2.2	<0.001	2.3
hsa_circ_0105010	<0.001	3.1	<0.001	2.5	0.034	2.1
hsa_circ_0129104	0.006	3.3	0.022	2.6	0.015	2.7
hsa_circ_0136904	<0.001	3.3	<0.001	2.4	0.003	2.2
hsa-circRNA6510-1	<0.001	3.2	<0.001	2.4	0.002	2.3
hsa_circ_0126693	0.002	2.8	0.004	2.2	0.019	2.2
hsa-circRNA14588-10	<0.001	3.0	0.001	2.2	0.010	2.1
hsa_circ_0025977	<0.001	2.7	0.001	2.2	0.004	2.0
hsa_circ_0093710	<0.001	2.9	0.005	2.4	0.016	2.0
hsa_circ_0106175	0.001	2.6	0.004	2.0	0.018	2.0
hsa_circ_0099711	<0.001	4.1	<0.001	3.1	0.029	2.2
hsa-circRNA11806-28	<0.001	3.1	<0.001	2.7	0.001	2.1
hsa_circ_0030732	<0.001	3.3	<0.001	2.6	0.003	2.1
hsa-circRNA4388-10	<0.001	3.0	0.003	2.3	0.013	2.1
hsa_circ_0087212	<0.001	2.8	0.001	2.3	0.004	2.1
hsa_circ_0140081	<0.001	3.3	<0.001	2.5	0.027	2.0
hsa_circ_0071250	<0.001	3.7	0.002	3.1	0.023	2.3
hsa_circ_0038424	0.004	2.1	0.002	2.1	0.002	2.5
hsa-circRNA11783-2	<0.001	2.9	<0.001	2.4	0.002	2.6

Supplementary Table 8. Differentially expressed circRNAs between control group and the three experimental groups.

The highlighted circRNAs are shown in bold text.