

Table S1: Baseline characteristics of subjects participated in the study

variable	The First Set			The Second Set		
	T2DM with AMI	T2DM	ctrl	T2DM with AMI	T2DM	ctrl
N(male/female)	20/20	20/20	20/20	50/50	50/50	50/50
age(years)	63.30±9.22	63.00±7.93	62.25±11.64	64.96±10.72 ^a	62.28±6.97	63.16±8.75
BMI (kg/m ²)	26.56±3.78 ^{a,bb}	24.88±3.47	24.27±3.61	25.96±3.24 ^{aa,bbb}	24.68±2.96	23.86±3.61
SBP (mmHg)	161.30±31.59 ^{aa,bbb}	145.13±22.41 ^{ccc}	123.03±6.90	162.42±30.10 ^{aaa,bbb}	147.77±24.19 ^{ccc}	126.60±13.52
DBP (mmHg)	90.53±17.47 ^{aa,bbb}	80.73±12.85 ^c	76.30±5.07	90.32±17.94 ^{aaa,bbb}	81.65±13.67 ^{cc}	76.32±9.31
FPG (mmol/L)	9.81±3.39 ^{aaa,bbb}	6.84±1.84 ^{ccc}	4.71±0.61	8.98±5.15 ^{bbb}	7.96±3.44 ^{ccc}	4.80±0.62
TG (mmol/L)	1.77±1.48 ^b	1.32±0.61	1.12±0.59	1.56±1.23 ^{bb}	1.47±0.92 ^c	1.19±0.65
HDL-C (mmol/L)	1.10±0.20 ^{aa,bbb}	1.32±0.34 ^c	1.53±0.37	1.12±0.26 ^{a,bbb}	1.23±0.36 ^{cc}	1.39±0.35
TC (mmol/L)	4.10±1.18	4.37±0.73	4.53±0.68	3.86±1.04 ^{aaa,bbb}	4.57±0.90 ^c	4.31±0.76
LDL-C (mmol/L)	2.29±0.89	2.49±0.52	2.42±0.50	2.09±0.83 ^{aaa,bb}	2.74±0.70 ^{ccc}	2.38±0.59
UA (μmol/L)	278.87±88.42	289.84±63.94	285.44±67.51	327.62±95.23 ^{bbb}	312.99±70.89 ^{cc}	284.65±65.35

Values are presented as mean±standard deviation. The superscript letter(a, b and c) indicates significant difference between groups at P<0.05, respectively, according to ANOVA analysis. a, T2DM with AMI comparison with T2DM. b, T2DM with AMI comparison with health control group. c, T2DM comparison with health

control group. If $P < 0.01$, the letter doubled. If $P < 0.001$, the letter tripled. Abbreviations: BMI, body mass index; SBP, systolic blood pressure; DBP, diastolic blood pressure; FPG, fasting plasma glucose; TG, triglyceride; HDL-C, high density lipoprotein; TC, total cholesterol; LDL-C, low density lipoprotein; UA, uric acid.

Table S2: The identified compounds were distributed in 8 metabolic pathways.

	Total	Expected	Hits	Raw p	-LOG(p)	Holm adjust	FDR	Impact
Glycerophospholipid metabolism	39	0.097216	2	0.0036837	5.6038	0.2947	0.23125	0.1037
Fatty acid biosynthesis	49	0.12214	2	0.0057812	5.1531	0.45672	0.23125	0
Arachidonic acid metabolism	62	0.15455	2	0.0091619	4.6927	0.71463	0.24432	0.21669
Linoleic acid metabolism	15	0.037391	1	0.036851	3.3009	1	0.73702	0
Sphingolipid metabolism	25	0.062318	1	0.060784	2.8004	1	0.80248	0.00954
Fatty acid elongation in mitochondria	27	0.067304	1	0.06551	2.7255	1	0.80248	0
alpha-Linolenic acid metabolism	29	0.072289	1	0.070217	2.6562	1	0.80248	0
Fatty acid metabolism	50	0.12464	1	0.11846	2.1332	1	1	0.02959

The potential biomarker, lysoPC(18:0/0:0), was distributed in the pathway of glycerophospholipid metabolism.