

Figure legend

Figure S 1. Screening and grouping of AP patient. (Supplementary data)

Table S 1. Logistic regression analysis of organ failure in AP patients.**(Supplementary data)**

Variables	OR	Odds Ratios (95% CI)	P value
Univariate analysis			
Male sex	1.31	0.80, 2.14	0.280
Weight	1.0	0.98, 1.02	0.734
Smoking	0.93	0.55, 1.58	0.791
Drinking	0.76	0.42, 1.38	0.359
Diagnosed Diabetes	4.53	2.74, 7.49	<0.001 ^{***}
NAFLD	0.90	0.56, 1.45	0.661
Hypertriglyceridemia	1.068	0.64, 1.79	0.802
Previous AP	0.61	0.33, 1.13	0.115
WBC	1.14	1.08, 1.20	<0.001 ^{***}
AST	1.00	1.00, 1.00	0.001 ^{**}
ALT	1.00	1.00, 1.00	0.125
γ-GGT	1.00	1.00, 1.00	0.434
LDH	1.01	1.00, 1.01	<0.001 ^{***}
TG	1.01	0.99, 1.03	0.379
HDL	0.98	0.90, 1.07	0.640
GLU	1.31	1.23, 1.39	<0.001 ^{***}
Cr	1.01	1.00, 1.01	0.040 [*]
BUN	1.08	1.01, 1.16	0.033 [*]
H-HbA1c	5.76	1.62, 20.44	0.007 ^{**}
Multivariable analysis			
Diagnosed Diabetes	1.10	0.53, 2.30	0.800
WBC	1.08	1.01, 1.16	0.027 [*]
AST	1.00	1.00, 1.00	0.245
LDH	1.01	1.00, 1.01	0.002 ^{**}
GLU	1.24	1.14, 1.35	<0.001 ^{***}
Cr	1.00	1.00, 1.01	0.703
BUN	1.03	0.94, 1.13	0.495
H-HbA1c	3.20	1.29, 7.91	0.012 [*]

*P<0.05, **P<0.01, ***P<0.001. **AP** acute pancreatitis; **NAFLD** nonalcoholic fatty liver disease; **WBC** white blood cell; **ALT** alanine aminotransferase ; **AST** aspartate aminotransferase; **GGT** glutamyl transferase; **LDH** lactate dehydrogenase; **TG** triglyceride; **HDL** high-density lipoprotein; **GLU** glucose; **Cr** creatinine; **BUN** blood urea nitrogen.

Table S 2. Logistic regression analysis of organ failure in AP patients with different groups. (Supplementary data)

Variables	OR	Odds Ratios (95% CI)	P value
All	6.82	3.83, 12.13	<0.001***
Hypertriglyceridemia	9.50	4.20, 21.50	<0.001***
Non- Hypertriglyceridemia	7.47	2.98, 18.74	<0.001***
NAFLD	6.55	2.61, 16.45	<0.001***
Non-NAFLD	7.98	3.75, 16.99	<0.001***

HbA1c was selected as independent variable and organ failure as dependent variable. Univariate logistic regression analysis was conducted in different groups of confounding factors. ***P<0.001. **NAFLD** nonalcoholic fatty liver disease.

Table S 3. Correlation between HbA1c and other clinical indicators. (Supplementary data)

Characteristic	R	Odds Ratios (95% CI)	P value
WBC	0.190	0.105, 0.279	<0.001***
ALT	-0.157	-0.220, -0.084	0.001**
AST	-0.137	-0.217, -0.050	0.004**
GLU	0.745	0.691, 0.793	<0.001***
TG	0.260	0.167, 0.357	<0.001***
CHO	0.321	0.232, 0.425	<0.001***
HDL	-0.057	-0.118, -0.014	0.229
LDL	0.019	-0.096, 0.145	0.689

*P<0.05, **P<0.01, ***P<0.001. **WBC** white blood cell; **ALT** alanine aminotransferase ; **AST** aspartate aminotransferase; **GLU** glucose; **TG** triglyceride; **CHO** cholesterol; **HDL** high-density lipoprotein; **LDL** low-density lipoprotein.

Table S 4. Comparison of baseline clinical characteristics for patients with vs. without serum HbA1c levels. (Supplementary data)

Variables	HbA1c available (N=441)	HbA1c not available (N=755)	P value
Male sex, N (%)	281(63.7%)	479(65.8%)	0.924
Age, years (mean ± SD)	49.5±14.5	52.3±17.0	0.002**
Weight, kg (mean ± SD)	73.0±13.1	71.9±14.1	0.228
Smoking, N (%)	133(30.2%)	193(25.6%)	0.107
Drinking, N (%)	102(23.1%)	141(18.7%)	0.088
Underlying diseases, N			
NAFLD	214(48.5%)	329(43.6%)	0.106
Hypertension	107(24.3%)	115(15.2%)	0.181
Coronary heart disease	21(4.8%)	25(3.3%)	0.371
Dyslipidemia	154(34.9%)	158(20.9%)	0.247
Previous AP	105(23.8%)	98(13.0%)	0.911
Etiology, N (%)			
Biliary	104(23.5%)	241(31.9%)	
Alcohol	56(12.7%)	71(9.4%)	
Hypertriglyceridemia	214(48.5%)	287(38.0%)	
Others	67(15.2%)	156(20.7%)	

Results are expressed as n (%) or mean ± SD. *P<0.05, **P<0.01, ***P<0.001. SD standard deviation; NAFLD nonalcoholic fatty liver disease; AP acute pancreatitis.

