

Table S1 Candidate single nucleotide polymorphism of HNF4 α -AS1 and HNF4 α

Gene	dbSNP	Allele	Position (GRCh38.p7)	MAF	MAF*	P ^{HWE}
<i>HNF4α-AS1</i>	rs6017335	C>A	chr20:44382185	0.47	0.47	0.347
	rs2425637	G>T	chr20:44395409	0.49	0.45	0.360
	rs1800963	C>A	chr20:44400645	0.30	0.44	0.351
<i>HNF4α</i>	rs2071197	G>A	chr20:44401795	0.49	0.49	0.706
	rs3212183	T>C	chr20:44406498	0.04	0.09	0.128
	rs11574730	G>A	chr20:44408373	0.10	0.21	0.332
	rs6093978	C>T	chr20:44412951	0.33	0.43	0.145
	rs3212198	C>T	chr20:44415722	0.42	0.43	0.136
	rs3212200	T>C	chr20:44418289	0.24	0.34	0.120
	rs6103731	A>G	chr20:44418653	0.32	0.42	0.093
	rs2273618	T>C	chr20:44423930	0.50	0.45	0.445
	rs3212208	T>C	chr20:44427922	0.06	0.08	0.503
	rs3818247	T>G	chr20:44428840	0.35	0.46	0.568
	rs3746574	T>C	chr20:44429378	0.40	0.45	0.216
	rs6130615	T>C	chr20:44430797	0.39	0.47	0.549

*, MAF calculated by Haploview software in our study. MAF: MAF in 1000 Genomes (East Asia) <https://www.ncbi.nlm.nih.gov/snp>; P^{HWE}: P value of HWE. HWE was assessed by the χ^2 goodness-of-fit test based on the genotype distributions in this study. HNF4 α -AS1, hepatocyte nuclear factor 4 alpha-antisense-1; HNF4 α , hepatocyte nuclear factor 4 α ; dbSNP, single nucleotide polymorphism database; MAF, minor allele frequency; HWE, Hardy-Weinberg Equilibrium.

Table S2 Analysis of haplotypes with the risk of ATDH

Gene	SNP	Haplotype*	Frequency	P value
<i>HNF4α</i>	rs3212200:rs6103731:rs2273618	TAT	0.632	0.173
		CGC	0.211	0.373
		TGC	0.094	0.765
		CGT	0.058	0.056
	rs3818247:rs3746574	TT	0.620	0.222
		GC	0.318	0.550
		GT	0.055	0.106

*, ratio is shown by CC frequencies. ATDH, anti-tuberculosis drug-induced hepatotoxicity; SNP, single nucleotide polymorphism; HNF4 α , hepatocyte nuclear factor 4 α .

Table S3 Analysis on the correlation between laboratory test indexes and genotype of rs3212183 locus

Laboratory indicators	rs3212183			P value
	CC	CT	TT	
RBC (10 ¹² /L)	4.30±0.70	4.13±0.64	4.29±0.39	0.126
Hb (g/L)	122.86±20.98	125.82±18.65	126.00±12.22	0.446
Hct (%)	0.36±0.07	0.37±0.06	0.36±0.03	0.461
PLT (10 ⁹ /L)	240.91±20.98	254.00 (178.00–342.00)	145.55 (129.00–162.00)	0.070
WBC (10 ⁹ /L)	6.56 (4.77–7.78)	6.97 (5.25–8.83)	6.80 (5.46–8.14)	0.730
Neutrophil (%)	70.03±11.54	72.02±11.13	66.96±13.36	0.300
Lymphocyte (%)	18.20 (12.37–26.47)	16.30 (13.80–23.20)	25.00 (15.00–35.00)	0.120
Monocyte (%)	7.34±2.42	7.52±2.39	7.17±1.64	0.819
Neutrophils (10 ⁹ /L)	4.37 (3.27–6.11)	4.83 (3.30–6.54)	7.14 (5.89–8.39)	0.421
Lymphocyte (10 ⁹ /L)	1.20±0.57	1.34±0.77	3.73±3.69	0.261
Monocyte (10 ⁹ /L)	0.51±0.24	0.59±0.25	1.25±1.23	0.406
CRP (mmg/L)	11.00 (2.33–45.70)	11.20 (3.70–32.60)	64.05 (10.10–118.00)	0.157
ESR (mm/h)	35.00 (21.00–58.75)	46.00 (15.00–81.00)	98.00 (50.00–120.00)	0.037*
TBIL (μmol/L)	9.75 (7.50–13.85)	11.10 (7.40–15)	11.50 (9.80–20.70)	0.051
DBIL (μmol/L)	3.80 (2.52–6.95)	3.60 (2.30–5.60)	6.50 (3.30–7.70)	0.665
IBIL (μmol/L)	9.75 (7.50–13.85)	11.10 (7.40–15.00)	11.50 (9.80–20.70)	0.078
ALT (IU/L)	26.00 (15.25–38.00)	27.00 (12.00–38.00)	45.00 (27.00–47.00)	0.500
AST (IU/L)	26.40±8.99	27.00±8.34	28.00±7.81	0.483
TP (g/L)	69.02±8.99	67.94±9.15	66.17±9.59	0.494
ALB (g/L)	37.82±6.86	37.40±7.63	41.50±5.27	0.435
GLB (g/L)	31.18±7.00	30.52±6.37	24.66±3.62	0.086
Glucose (mmol/L)	5.71±2.16	5.78±2.01	5.17±0.50	0.823
Urea (mmol/L)	4.03 (3.09–5.20)	3.38 (2.70–4.90)	6.05 (5.31–11.05)	0.260
Crea (μmol/L)	57.40 (47.00–69.00)	62.00 (53.00–67.00)	80.10 (79.00–255)	0.620
Cystatin C (mg/L)	1.05±0.72	1.03±0.44	0.83±0.23	0.787
Uric acid (μmol/L)	327.00±157.08	324.85±147.58	314.70±117.56	0.979
TG (mmol/L)	1.01 (0.82–1.38)	0.95 (0.78–1.12)	1.57 (1.17–1.61)	0.626
CHOL (mmol/L)	3.96±1.05	4.10±1.40	3.84±1.02	0.647
HDL (mmol/L)	1.14±0.46	1.23±0.51	1.17±0.50	0.355
LDL (mmol/L)	2.28±0.79	2.36±1.02	2.32±0.62	0.788
ALP (IU/L)	100.00±79.30	91.90±26.20	96.60±14.60	0.458
GGT (IU/L)	46.00 (26.25–78.75)	36.00 (26.00–72.00)	68.00 (26.00–149.00)	0.572

*, P<0.05. RBC, red blood cell; Hb, hemoglobin; Hct, hematocrit; PLT, platelet; WBC, white blood cell; CRP, C-reactive protein; ESR, erythrocyte sedimentation rate; TBIL, total bilirubin; DBIL, direct bilirubin; IBIL, indirect bilirubin; ALT, alanine aminotransferase; AST, aspartate aminotransferase; TP, total protein; ALB, albumin; GLB, globulin; crea, creatinine; TG, triglycerides; CHOL, cholesterol; HDL, high-density lipoprotein; LDL, low-density lipoprotein; ALP, alkaline phosphatase; GGT, gamma glutamyl-transferase.

Table S4 Analysis on the correlation between laboratory test indexes and genotype of rs6130615 locus

Laboratory indicators	rs6130615			P value
	CC	CT	TT	
RBC (10 ¹² /L)	4.30±0.65	4.32±0.71	4.18±0.68	0.129
Hb (g/L)	122.10±20.07	123.76±20.19	119.16±22.73	0.083
Hct (%)	0.36±0.06	0.36±0.07	0.37±0.06	0.082
PLT (10 ⁹ /L)	236.00 (168.00–302.00)	232.00 (175.75–299.00)	235.00 (186.00–298.00)	0.625
WBC (10 ⁹ /L)	6.56 (4.77–7.78)	6.97 (5.25–8.83)	6.80 (5.46–8.14)	0.878
Neutrophil (%)	73.00 (66.00–79.00)	68.00 (59.20–77.70)	69.00 (63.05–69.70)	0.075
Lymphocyte (%)	18.20 (12.37–26.47)	16.30 (13.80–23.20)	25.00 (15.00–35.00)	0.157
Monocyte (%)	7.55±2.51	7.97±2.77	8.64±2.90	0.569
Neutrophils (10 ⁹ /L)	4.83 (3.31–6.54)	4.43 (3.27–6.31)	3.07 (2.48–3.67)	0.056
Lymphocyte (10 ⁹ /L)	1.20±0.58	1.42±1.03	1.11±0.37	0.301
Monocyte (10 ⁹ /L)	0.53±0.27	0.58±0.32	0.41±0.17	0.448
CRP (mmg/L)	11.80 (4.32–36.45)	13.40 (2.02–43.20)	10.79 (1.27–10.10)	0.188
ESR (mm/h)	45.50 (19.50–79.00)	35.00 (18.00–61.00)	54.00 (15.00–84.00)	0.496
TBIL (μmol/L)	10.50 (7.05–13.90)	10.30 (7.52–15.20)	11.95 (5.00–20.4)	0.821
DBIL (μmol/L)	3.60 (2.30–6.80)	3.70 (2.80–7.90)	2.20 (2.10–5.60)	0.195
IBIL (μmol/L)	6.20 (4.40–8.20)	4.65 (3.30–6.85)	8.40 (2.90–14.80)	0.301
ALT (IU/L)	26.00 (15.25–38.00)	27.00 (12.00–38.00)	45.00 (27.00–47.00)	0.115
AST (IU/L)	27.00 (17.00–31.00)	23.00 (17.00–29.00)	21.00 (15.00–27.00)	0.125
TP (g/L)	68.11±9.51	69.00±8.05	70.13±10.16	0.102
ALB (g/L)	37.49±7.25	37.95±7.80	38.80±6.69	0.678
GLB (g/L)	30.60±6.75	31.03±6.59	31.09±6.95	0.120
Glucose (mmol/L)	5.66±1.99	5.76±2.12	5.94±2.45	0.422
Urea (mmol/L)	4.03 (3.09–5.20)	3.38 (2.70–4.90)	6.05 (5.31–11.05)	0.605
Crea (μmol/L)	57.40 (47.00–69.00)	62.00 (53.00–67.00)	80.10 (79.00–255)	0.264
Cystatin C (mg/L)	1.05±0.72	1.03±0.44	0.83±0.23	0.213
Uric acid (μmol/L)	292.00±139.00	286.00±108.00	346.00±77.70	0.664
TG (mmol/L)	0.93 (0.76–1.30)	1.09 (0.85–1.45)	1.05 (0.82–1.52)	0.052
CHOL (mmol/L)	3.95±1.10	4.01±1.09	3.95±1.06	0.736
HDL (mmol/L)	1.15±0.47	1.15±0.46	1.12±0.48	0.840
LDL (mmol/L)	2.28±0.83	2.31±0.80	2.28±0.80	0.846
ALP (IU/L)	82.00 (62.00–102.75)	80.00 (67.00–99.00)	84.00 (64.75–102.25)	0.496
GGT (IU/L)	39.00 (25.00–72.00)	47.50 (28.00–82.75)	37.00 (30.75–53.75)	0.724

RBC, red blood cell; Hb, hemoglobin; Hct, hematocrit; PLT, platelet; WBC, white blood cell; CRP, C-reactive protein; ESR, erythrocyte sedimentation rate; TBIL, total bilirubin; DBIL, direct bilirubin; IBIL, indirect bilirubin; ALT, alanine aminotransferase; AST, aspartate aminotransferase; TP, total protein; ALB, albumin; GLB, globulin; crea, creatinine; TG, triglycerides; CHOL, cholesterol; HDL, high-density lipoprotein; LDL, low-density lipoprotein; ALP, alkaline phosphatase; GGT, gamma glutamyl-transferase.