

A predictive model for NAFLD

Supplementary Table 1. All the clinical characteristics of subjects with and without NAFLD in the training cohort

Characters	NAFLD N=53	No NAFLD N=45	P value
Gender (male/female, n)	32/21	25/20	0.02
ALT (U/L)	31.21±21.54	19.30±12.93	<0.001
AST (U/L)	22.24±4.61	20.73±12.83	0.27
ALT to AST	1.33±0.64	0.90±0.29	<0.001
GGT (U/L)	35.88±29.93	21.95±13.96	0.02
AFU (U/L)	26.45±7.91	23.32±7.12	0.046
WBC (× 10 ⁹ /L)	6.40±1.70	5.30±1.31	<0.001
TG (mmol/L)	1.83±1.26	1.25±0.53	<0.001
Hb (g/L)	144.98±11.69	138.22±15.76	0.03
NEUT (10 ⁹ /L)	3.40±1.11	2.90±0.94	0.02
NEUT%	52.55±8.96	53.13±7.82	0.74
LYM (10 ⁹ /L)	2.78±2.52	2.00±0.62	0.03
LYM%	37.13±9.28	37.17±8.60	0.98
MON (10 ⁹ /L)	0.40±0.12	0.34±0.12	0.02
MON%	6.37±1.62	6.46±1.65	0.78
EOS (10 ⁹ /L)	0.16±0.10	0.15±0.11	0.78
EOS%	2.49±1.59	2.77±1.59	0.39
BASO (10 ⁹ /L)	0.04±0.02	0.03±0.02	0.04
BASO%	0.57±0.26	0.55±0.30	0.75
RBC (10 ¹² /L)	4.63±0.46	4.47±0.43	0.09
HCT (%)	43.12±3.60	41.56±4.08	0.05
MCV (fL)	92.55±4.07	93.16±5.07	0.52
MCH (pg)	31.07±1.53	31.09±2.00	0.96
MCHC (g/L)	333.40±17.47	333.73±11.43	0.91
RDW (fL)	42.71±5.39	44.18±3.56	0.12
RDW (%)	12.56±0.53	12.79±1.23	0.24
PLT (fL)	229.98±51.26	224.73±50.05	0.62
PCT (%)	0.22±0.05	0.23±0.09	0.74
MPV (fL)	9.58±1.13	9.62±1.13	0.89
P-LCR%	27.46±6.16	27.81±7.04	0.80
PDW (%)	13.99±2.13	14.10±2.37	0.81
TP (g/L)	71.75±6.31	71.14±10.90	0.74
ALB (g/L)	43.50±3.50	43.43±3.42	0.93
GLOB (g/L)	28.43±4.77	29.27±4.88	0.41
A/G	1.58±0.29	1.54±0.27	0.48
TB (μmol/L)	13.31±3.85	13.20±4.36	0.90
DB (μmol/L)	2.23±0.78	2.16±0.69	0.67
IB (μmol/L)	11.08±3.25	11.10±3.86	0.97
ALP (U/L)	78.94±19.56	73.03±21.74	0.18
TBA (μmol/L)	4.89±3.08	5.23±4.17	0.66
GLU (mmol/L)	5.00±0.80	4.80±0.86	0.27
BUN (mmol/L)	5.45±1.53	5.10±1.02	0.20
CRE (μmol/L)	68.38±13.98	74.01±49.60	0.47
BUN/CRE	0.08±0.02	0.08±0.02	0.82
UA (μmol/L)	360.34±86.08	312.26±70.99	0.00
CK (U/L)	118.83±116.29	96.49±83.32	0.31

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CK-MB (U/L)	15.30±12.95	14.63±7.09	0.77
LDH (mmol/L)	178.06±27.60	170.05±34.31	0.24
HBDH (U/L)	121.39±18.69	119.26±25.10	0.66
TC (mmol/L)	5.32±1.01	5.11±1.08	0.35
HDL (mmol/L)	1.24±0.28	1.39±0.31	0.02
LDL (mmol/L)	3.19±0.72	3.05±0.80	0.39
APO A1 (g/L)	1.53±0.52	1.45±0.30	0.41
APO B (g/L)	1.01±0.46	0.98±0.26	0.26
APO A1/APO B	1.35±0.39	1.62±0.70	0.04
LP (a) (mg/dL)	18.80±17.30	23.60±22.82	0.29

Supplementary Table 2. All the clinical characteristics of subjects with and without NAFLD in the validation cohort

Characters	NAFLD group N=81	Control group N=87	P value
ALT (U/L)	31.45±19.24	23.27±15.86	<0.001
AST (U/L)	21.82±8.52	19.22±6.69	0.03
ALT to AST	1.41±0.44	1.16±0.52	<0.001
GGT (U/L)	33.78±14.53	18.20±6.47	0.02
AFU (U/L)	29.35±7.88	26.31±7.05	0.022
WBC (× 10 ⁹ /L)	6.46±1.69	5.80±1.25	0.012
TG (mmol/L)	2.03±1.89	1.39±1.14	0.022
Hb (g/L)	143.54±14.10	138.80±17.20	0.08
LYM (10 ⁹ /L)	2.19±0.75	1.91±0.59	0.01
MON (10 ⁹ /L)	0.46±0.15	0.37±0.13	<0.001
MON%	7.32±2.02	6.42±2.02	<0.001
BASO%	0.53±0.25	0.44±0.28	0.04
RDW (%)	12.37±0.55	22.65±13.79	<0.001
MPV (fL)	9.88±0.94	10.06±0.95	0.23
P-LCR%	24.42±6.47	25.82±7.39	0.20
PDW (%)	12.78±2.31	13.14±2.58	0.30
TP (g/L)	69.34±5.47	69.85±5.15	0.55
ALB (g/L)	43.14±3.83	42.96±3.59	0.77
GLOB (g/L)	26.29±4.26	26.83±3.65	0.39
A/G	1.68±0.31	1.64±0.28	0.30
TB (μmol/L)	15.80±7.74	14.20±5.96	0.14
DB (μmol/L)	4.27±2.04	4.07±1.84	0.51
IB (μmol/L)	11.40±6.02	10.12±4.55	0.13
ALP (U/L)	63.82±17.39	62.49±27.33	0.71
TBA (μmol/L)	4.09±3.09	4.22±3.71	0.82
GLU (mmol/L)	5.49±1.27	5.00±1.27	0.40
BUN (mmol/L)	5.35±1.20	5.13±1.24	0.40
CRE (μmol/L)	76.34±18.13	77.37±16.35	0.71
BUN/CRE	14.58±8.35	14.61±7.52	0.98
UA (μmol/L)	366.70±78.65	306.36±80.34	0.00
CK (U/L)	113.28±83.31	90.27±35.60	0.05
CK-MB (U/L)	12.19±4.57	13.25±5.26	0.23
LDH (mmol/L)	162.86±33.33	159.17±37.33	0.53
HBDH (U/L)	128.30±22.32	124.18±27.89	0.59
TC (mmol/L)	4.54±0.54	4.15±1.60	<0.001

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HDL (mmol/L)	1.33±0.30	1.46±0.36	0.04
LDL (mmol/L)	3.21±0.75	2.92±0.87	0.07
APO A1 (g/L)	1.38±0.24	1.52±0.22	0.01
APO B (g/L)	1.00±0.24	0.85±0.19	0.01
APO A1/APO B	1.48±0.51	1.88±0.53	<0.001
LP (a) (mg/dL)	18.55±16.30	20.64±21.22	0.37

Supplementary Table 3. Logical regression coefficients of the candidate Biomarkers in the training cohort

Name	Coefficients
(Intercept)	-8.77
WBC	0.29
ALT to AST	2.23
AFU	0.07
Hb	0.01
TG	0.72
GGT	0.01

Supplementary Table 4. The best cutoff value for the predicted model in the training cohort

	Threshold	AUROC	Specificity	Sensitivity
Best	0.53	0.821	0.733	0.765

Supplementary Table 5. Characteristics of mice fed with HFD or CD

Characters	HFD group N=32	CD group N=28	P value
ALT (U/L)	48.14±15.57	45.48±11.02	0.58
AST (U/L)	193.77±63.35	182.32±50.56	0.59
ALT to AST	0.27±0.10	0.26±0.06	0.78
GGT (IU/L)	6.29±0.90	6.14±0.60	0.58
AFU (U/L)	6.14±0.71	6.02±0.47	0.58
WBC (× 10 ⁹ /L)	9.38±1.08	8.98±1.05	0.33
TG (mmol/L)	0.90±0.12	0.85±0.11	0.24
Hb (g/L)	140.07±15.99	129.03±20.32	0.11