

SUPPLEMENTARY MATERIAL

Table S1 (Supplementary material). Genotype frequencies of the variables analyzed of the genes BAZ1B, GCKR, LPL and TRIB.

Gene	SNP	Non/mild	Moderate/Severe	X ²	p-value
		N	N		
BAZ1B	Rs7811265			NA	
	CC	5 (5.6)	3 (3.2)		
	CT	14 (15.7)	15 (15.8)		
	TT	70 (78.7)	77 (81.1)		
Dominant model	CT+TT	84 (94.4)	92 (96.8)	NA	0.486*
Recessive model	TT	70 (78.7)	77 (81.1)	0.165	0.685
GCKR	Rs1260326			1.568	0.457
	CC	12 (13.5)	17 (17.7)		
	CT	50 (56.2)	57 (59.4)		
	TT	27 (30.3)	22 (22.9)		
Dominant model	CT+TT	84 (94.4)	92 (96.8)	0.624	0.430
Recessive model	TT	27 (30.3)	22 (22.9)	1.306	0.253
LPL	Rs12678919			NA	
	GG	1 (1.1)	0 (0)		
	GA	9 (10.2)	12 (12.6)		
	AA	78 (88.6)	83 (87.4)		
Dominant model	GA+AA	87 (98.9)	95 (100)	NA	0.481*
Recessive model	AA	78 (88.6)	83 (87.4)	0.069	0.792
TRIB	Rs2954029			0.615	0.735
	TT	9 (10.1)	8 (8.3)		
	TA	45 (50.6)	45 (46.9)		
	AA	35 (39.3)	43 (44.8)		
Dominant model	TA+AA	80 (89.9)	88 (91.7)	0.175	0.676
Recessive model	AA	35 (39.3)	43 (44.8)	0.566	0.452

Data are expressed as absolute numbers and percentages by NAFLD severity group. * p-value of Fisher exact test. In the dominant model homozygotes and heterozygotes are compared with non-mutant (CT+TT vs. CC / GA+AA vs GG / TA+AA vs. TT), and in the recessive model homozygotes were compared with heterozygotes and non-mutant (TT vs. CT+CC / AA vs. GA+GG / AA vs. TA+TT). Abbreviations: SNP: single nucleotide polymorphism; NA: not applicable.

Table S2 (Supplementary material). Association of genetic variants with metabolic traits.

BAZ1B (rs 7811265)	Wild type CC	Heterozygous CT	Homozygous TT	P
TC mmol/L	7.20 (1.73)	6.67 (1.94)	6.70 (1.77)	0.660
TG mmol/L*	14.1 (3.6-19.2)	4.3 (2.6-8.7)	5.8 (4-11.1)	0.025
Non-HDL mmol/L	6.45 (1.73)	5.58 (1.95)	5.73 (1.78)	0.353
HDL-c mmol/L	0.74 (0.26)	1.03 (0.32)	0.97 (0.31)	0.021
Glucose mmol/L*	6.5 (5.2-7.7)	5.3 (5-6)	5.6 (5.1-6.4)	0.124
Insulin pmol/L*	142 (109.6-309)	95.6 (84.9-134)	116.5 (75.6-163.5)	0.196
HOMA-IR*	6.3 (4.4-14)	3.6 (2.99-4.9)	4.2 (2.6-6.3)	0.105
AST μ kat/L*	0.32 (0.26-065)	0.46 (0.41-0.51)	0.41 (0.33-0.52)	0.054
ALT μ kat/L*	0.33 (0.23-0.79)	0.58 (0.45-0.77)	0.47 (0.35-0.78)	0.120
CRP—hs mg/L*	1.1 (0.9-5.5)	0.8 (0.6-2.3)	1 (0.6-3.3)	0.492
Lp(a) nmol/L*	36.4(7-88.4)	28.2(7-182.6)	42.7(8-115)	0.800
GCKR (rs 1260326)	Wild type CC	Heterozygous CT	Homozygous TT	P
TC mmol/L	6.50 (1.85)	6.71 (1.83)	6.87 (1.65)	0.063
TG mmol/L*	4.8 (3.1-8.1)	5.6 (3.7-9.8)	7.3 (4-12)	0.110
Non-HDL mmol/L	5.57 (1.82)	5.70 (1.85)	5.93 (1.68)	0.512
HDL-c mmol/L	0.94 (0.25)	0.99 (0.34)	0.95 (0.30)	0.423
Glucose mmol/L*	6.1 (5.2-6.8)	5.7 (5.2-6.4)	5.3 (4.9-5.9)	0.019
Insulin pmol/L*	109 (78.9-143)	124.5 (76.9-170.3)	96.5 (74.7-134.5)	0.334
HOMA-IR*	4.4 (2.9-5.9)	4.5 (2.9-6.5)	3.2 (2.6-5.2)	0.140
AST μ kat/L*	0.39 (0.33-0.59)	0.42 (0.35-0.50)	0.44- (0.32-0.5)	0.992
ALT μ kat/L*	0.46 (0.36-0.84)	0.5 (0.35-0.77)	0.51 (0.35-0.77)	0.968
CRP—hs mg/L*	1.1 (0.7-3.1)	0.9 (0.6-2.4)	1.3 (0.7-3.5)	0.200
Lp(a) nmol/L*	21.3(7-84)	35.8(7-101)	59.5(9.6-190)	0.142
LPL (rs 12678919)	Wild type GG	Heterozygous AG	Homozygous AA	P
TC mmol/L		6.85 (2.18)	6.69 (1.74)	0.894
TG mmol/L*		5.3 (3.3-16.4)	5.8 (3.8-10.3)	0.537
Non-HDL mmol/L		5.85 (2.23)	5.73 (1.75)	0.918
HDL-c mmol/L		0.99 (0.44)	0.97 (0.30)	0.733
Glucose mmol/L*		5.8 (5.1-6.6)	5.5 (5.1-6.3)	0.428
Insulin pmol/L*		94.1 (51.5-142)	114 (77-158)	0.553
HOMA-IR*		3.9 (2.1-6.1)	4.2 (2.7-6.3)	0.642
AST μ kat/L*		0.41 (0.33-49)	0.42 (0.33-0.53)	0.303
ALT μ kat/L*		0.40 (0.33-0.65)	0.5 (0.36-0.77)	0.180
CRP—hs mg/L*		1.1 (0.8-3.8)	1 (0.6-2.6)	0.353
Lp(a) nmol/L*		14(7-90)	39.2(7.2-154)	0.375
TRIB (rs 2954029)	Wild type TT	Heterozygous TA	Homozygous AA	P
TC mmol/L	6.27 (1.65)	6.56 (1.74)	6.98 (1.84)	0.062
TG mmol/L*	7.36 (3.87-13.19)	5.41 (3.23-9)	6.02 (4.03-13.12)	0.168
Non-HDL mmol/L	5.27 (1.57)	5.59 (1.78)	6.00 (1.86)	0.068
HDL-c mmol/L	0.99 (0.39)	0.97 (0.30)	0.97 (0.31)	0.903
Glucose mmol/L*	5.6 (5.2-6.8)	5.5 (5.1-6.4)	5.6 (4.9-6.2)	0.536
Insulin pmol/L*	94.8 (79.8-124)	115 (78.5-156.5)	124 (75.4-165)	0.628
HOMA-IR*	3.3 (2.69-4.98)	4.11 (2.88-5.86)	4.41 (2.62-6.41)	0.675
AST μ kat/L*	0.37 (0.33-0.5)	0.4 (0.33-0.48)	0.45 (0.33-0.6)	0.121
ALT μ kat/L*	0.48 (0.34-0.63)	0.47 (0.35-0.68)	0.56 (0.37-0.99)	0.205

CRP—hs mg/L*	1.3 (0.8-5.3)	1 (0.6-2.6)	0.9 (0.5-2.8)	0.315
Lp(a) nmol/L*	41.6(7.8-94.4)	47(7-150.7)	31.9(8.-152.5)	0.862

Data are expressed as percentage (analysed by Chi-square) or mean (+/-SD) for normal quantitative variables (analysed by ANOVA test) or median and interquartile interval for non-normal quantitative variables (analysed by Kruskal-Wallis test). Abbreviations: TC (total cholesterol concentration), Tg (triglycerides concentration), non-HDL (total cholesterol except HDL), HOMA-IR (Homeostasis Model Assessment), AST (aspartate amino transferase), ALT (alanine amino transferase), CRP-hs (C-reactive protein high sensitivity), Lp(a): lipoprotein a. *Non-normal quantitative variables.