Free fatty acids, NAFLD and diabetes

Supplementary Table 4. Univariate and multivariate logistic regression analysis for factors associated with IR, prediabetes, and T2DM in subgroup NAFLD defined by MRI-PDFF

Factor	IR				Prediabetes				T2DM			
	Univariate		Multivariate		Univariate		Multivariate		Univariate		Multivariate	
	OR (95% CI)	P value	OR (95% CI)	P value	OR (95% CI)	P value	OR (95% CI)	P value	OR (95% CI)	P value	OR (95% CI)	P value
FFA, μmol/L	1.01 (1.01–1.02)	<0.01	1.01 (1.01–1.02)	<0.01	1.01 (1.01–1.03)	<0.01	1.01 (1.01–1.02)	<0.01	1.01 (1.01–1.02)	<0.01	1.01 (1.01–1.02)	<0.01
Male sex	1.2 (0.91–1.58)	0.2	-	-	0.76 (0.50–1.14)	0.19	-	-	2.14 (1.58–2.89)	<0.01	2.38 (1.54–3.67)	<0.01
Age, yr	1.01 (1.00–1.02)	0.16	-	-	1.01 (0.98–1.02)	0.61	-	-	1.02 (1.01–1.03)	<0.01	1.02 (1.00–1.03)	0.06
Smoking	1.03 (0.77–1.11)	0.32	-	-	1.06 (0.87–1.19)	0.35	-	-	1.1 (0.92–1.20)	0.32	-	-
BMI ≥25 kg/m²	2.3 (1.72–3.07)	<0.01	1.41 (0.93–2.15)	0.11	1.04 (0.70–1.55)	0.85	-	-	3.07 (2.16–4.37)	<0.01	3.01 (1.73–5.23)	<0.01
Abdominal obesity[a]	1.82 (1.38–2.39)	<0.01	1.27 (0.84–1.91)	0.26	1.96 (1.30–2.97)	<0.01	1.67 (1.09–2.56)	0.02	1.97 (1.44–2.69)	<0.01	0.91 (0.55–1.52)	0.73
TG >1.8 mmol/L	1.35 (1.03–1.77)	0.03	1.07 (0.75–1.53)	0.72	1.16 (0.79–1.70)	0.46	-	-	1.17 (0.87–1.59)	0.3	-	-
CHOL >5.2 mmol/L	1.09 (0.83–1.42)	0.55	-	-	0.92 (0.63–1.36)	0.69	-	-	0.92 (0.68–1.25)	0.6	-	-
HDL-C <1.0 mmol/L	1.53 (1.13–2.07)	<0.01	1.66 (1.12–2.47)	0.01	1.13 (0.74–1.75)	0.57	-	-	1.23 (0.88–1.73)	0.23	-	-
LDL-C >3.4 mmol/L	1.36 (1.04–1.77)	0.03	1.46 (1.02–2.09)	0.04	0.84 (0.57–1.24)	0.38	-	-	1.06 (0.78–1.43)	0.73	-	-
Hyperuricemia[b]	1.58 (1.21–2.07)	<0.01	1.17 (0.83–1.66)	0.37	0.88 (0.61–1.28)	0.51	-	-	2 (1.47–2.71)	<0.01	1.53 (1.00–2.35)	0.05
HOMA-IR ≥2.69	-	-	-	-	1.72 (1.17–2.52)	<0.01	1.59 (1.03–2.44)	0.04	6.13 (4.41–8.53)	<0.01	4.4 (2.91–6.67)	<0.01
LFC >25%	1.2 (0.97–1.47)	0.09	-	-	1.45 (1.08–1.93)	0.01	1.47 (1.08–2.01)	0.02	1.2 (0.95–1.51)	0.13	-	-
PFC >5%	2.54 (1.56–4.16)	<0.01	1.68 (0.98–2.88)	0.06	1.26 (0.64–2.50)	0.5	-	-	1.88 (1.13–3.11)	0.01	1 (0.55–1.83)	0.99

IR, insulin resistance; T2DM, type 2 diabetes mellitus; NAFLD, nonalcoholic fatty liver disease; MRI-PDFF, magnetic resonance imaging proton density fat fraction; OR, odds ratio; CI, confidence interval; FFA, free fatty acid; BMI, body mass index; TG, triglyceride; CHOL, cholesterol; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; HOMA-IR, homeostasis model assessment of insulin resistance; LFC, liver fat content; PFC, pancreatic fat content.
[a]Abdominal obesity was defined as having a WC >90 cm for men and WC >80 cm for women, [b]Hyperuricemia was defined as uric acid >420 μmol/L for men and >360 μmol/L for women.

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