

**Supplemental Table S3.** Subgroup Analysis of Odds Ratio for APRI-Based Fibrosis Progression and Regression According to Changes in HOMA-IR Value

Subgroup	HOMA-IR change	Progression		Regression	
		Case (%)	OR* (95% CI)	Case (%)	OR* (95% CI)
<b>Sex</b>					
Male	G1 (<0)	164 (3.2)	1 (reference)	183 (3.56)	1 (reference)
	G2 (0–0.50)	95 (3.1)	1.20 (0.90–1.60)	87 (2.82)	1.06 (0.79–1.41)
	G3 (0.51–1.00)	87 (3.9)	1.39 (1.03–1.88)	54 (2.41)	0.92 (0.66–1.29)
	G4 (>1.00)	225 (7.3)	2.32 (1.83–2.95)	150 (4.89)	1.4 (1.09–1.81)
Female	G1 (<0)	30 (3.5)	1 (reference)	18 (2.1)	1 (reference)
	G2 (0–0.50)	8 (1.9)	0.38 (0.13–1.14)	8 (1.87)	0.80 (0.30–2.14)
	G3 (0.51–1.00)	16 (4.6)	1.92 (0.97–3.83)	5 (1.4)	0.65 (0.21–2.00)
	G4 (>1.00)	44 (8.0)	2.74 (1.55–4.83)	10 (1.8)	0.51 (0.18–1.40)
<i>P</i> -interaction	0.140				
<b>BMI, kg/m<sup>2</sup></b>					
<25	G1 (<0)	74 (3.1)	1 (reference)	37 (1.6)	1 (reference)
	G2 (0–0.50)	41 (2.4)	0.96 (0.62–1.49)	26 (1.5)	1.11 (0.62–1.99)
	G3 (0.51–1.00)	38 (3.3)	1.22 (0.77–1.93)	16 (1.4)	1.16 (0.60–2.22)
	G4 (>1.00)	59 (4.8)	1.64 (1.09–2.46)	41 (3.3)	2.33 (1.38–3.94)
≥25	G1 (<0)	120 (3.3)	1 (reference)	164 (4.5)	1 (reference)
	G2 (0–0.50)	62 (3.4)	1.24 (0.87–1.76)	69 (3.8)	1.05 (0.76–1.44)
	G3 (0.51–1.00)	65 (4.5)	1.69 (1.19–2.39)	43 (3.0)	0.87 (0.6–1.25)
	G4 (>1.00)	210 (8.8)	2.95 (2.25–3.86)	119 (5.0)	1.17 (0.89–1.54)
<i>P</i> -interaction	0.067				
<b>Exercise</b>					
<3 times/week	G1 (<0)	175 (3.4)	1 (reference)	176 (3.4)	1 (reference)
	G2 (0–0.50)	84 (2.8)	1.07 (0.80–1.44)	78 (2.6)	0.99 (0.73–1.34)
	G3 (0.51–1.00)	88 (4.0)	1.47 (1.09–1.97)	49 (2.2)	0.91 (0.64–1.29)
	G4 (>1.00)	228 (7.3)	2.29 (1.80–2.91)	141 (4.5)	1.40 (1.08–1.81)
≥3 times/week	G1 (<0)	13 (2.0)	1 (reference)	19 (2.9)	1 (reference)
	G2 (0–0.50)	17 (3.9)	2.24 (0.99–5.04)	14 (3.2)	1.38 (0.65–2.94)
	G3 (0.51–1.00)	12 (3.9)	2.15 (0.89–5.19)	9 (2.9)	0.87 (0.35–2.15)
	G4 (>1.00)	34 (9.0)	5.27 (2.56–10.83)	17 (4.5)	1.14 (0.52–2.47)
<i>P</i> -interaction	0.266				
<b>Alcohol<sup>b</sup></b>					
Current consumption (+)	G1 (<0)	182 (3.2)	1 (reference)	187 (3.33)	1 (reference)
	G2 (0–0.50)	99 (3.0)	1.18 (0.89–1.55)	90 (2.7)	1.05 (0.79–1.39)
	G3 (0.51–1.00)	96 (4.0)	1.48 (1.11–1.97)	57 (2.4)	0.94 (0.68–1.30)
	G4 (>1.00)	252 (7.5)	2.50 (1.99–3.15)	153 (4.5)	1.36 (1.06–1.74)
Current consumption (–)	G1 (<0)	12 (3.0)	1 (reference)	14 (3.5)	1 (reference)
	G2 (0–0.50)	4 (1.8)	0.51 (0.13–1.96)	5 (2.2)	1.02 (0.32–3.27)
	G3 (0.51–1.00)	7 (4.2)	1.54 (0.55–4.37)	2 (1.2)	0.27 (0.03–2.26)
	G4 (>1.00)	17 (6.9)	1.76 (0.72–4.31)	7 (2.8)	0.69 (0.22–2.18)
<i>P</i> -interaction	0.538				
<b>Lipid<sup>c</sup></b>					
Dyslipidemia (+)	G1 (<0)	162 (3.4)	1 (reference)	170 (3.5)	1 (reference)
	G2 (0–0.50)	78 (2.9)	1.01 (0.74–1.37)	77 (2.9)	1.02 (0.75–1.39)
	G3 (0.51–1.00)	81 (4.00)	1.40 (1.03–1.90)	49 (2.4)	0.94 (0.66–1.32)
	G4 (>1.00)	221 (7.7)	2.26 (1.77–2.88)	130 (4.5)	1.24 (0.95–1.62)
Dyslipidemia (–)	G1 (<0)	32 (2.6)	1 (reference)	31 (2.6)	1 (reference)
	G2 (0–0.50)	25 (3.1)	1.79 (0.96–3.34)	18 (2.2)	1.04 (0.54–2.01)
	G3 (0.51–1.00)	22 (4.0)	1.90 (0.97–3.74)	10 (1.8)	0.69 (0.30–1.59)
	G4 (>1.00)	48 (6.6)	3.62 (2.08–6.30)	30 (4.1)	1.78 (1.00–3.15)
<i>P</i> -interaction	0.535				

APRI, aspartate aminotransferase to platelet ratio index; HOMA-IR, homeostatic model assessment of insulin resistance; OR, odds ratio; CI, confidence interval; BMI, body mass index.

<sup>a</sup>Adjusted for age, sex, center (Seoul or Suwon), systolic blood pressure, regular exercise, current alcohol consumption, smoking status, BMI, waist circumference, hemoglobin A1c, high-sensitivity C-reactive protein, low-density lipoprotein cholesterol (LDL-C), triglycerides, new-onset diabetes, and baseline HOMA-IR; <sup>b</sup>Current alcohol consumption was defined as daily alcohol consumption above the median value (12 g/day for men and 2 g/day for women); <sup>c</sup>Dyslipidemia was defined as an LDL-C level >3.4 mmol/L, total cholesterol level >5.2 mmol/L, triglyceride >1.7 mmol/L, high-density lipoprotein cholesterol <0.9 mmol/L, or the current use of anti-dyslipidemia medication.