

Supplementary Table 13. Combined effect of two risk alleles on nephropathy and/or CAD in T2DM patients

Model no.	SNPs in model (effect allele)	No. of effect allele (GRS)	Control (n=577)	DN+CAD (n=283)	P value ^a	OR (95% CI)	P value	
1	<i>KCNQ1</i> rs2237892 (C)	0-1	70 (76.1)	22 (23.9)	0.006	1		
		2	481 (67.2)	235 (32.8)		1.78 (0.99–3.21)	0.056	
		3–4	26 (50.0)	26 (50.0)		3.49 (1.49–8.15)	0.004	
2	<i>TCF7L2</i> rs7903146 (C)	1–2	153 (66.5)	77 (33.5)	0.588	1		
		3	263 (68.8)	119 (31.2)		0.95 (0.63–1.42)	0.800	
		4	161 (64.9)	87 (35.1)		1.08 (0.70–1.69)	0.721	
3	<i>TCF7L2</i> rs7903146 (C)	1–2	59 (67.8)	28 (32.2)	0.271	1		
		3	243 (70.0)	104 (30.0)		0.94 (0.51–1.70)	0.825	
			4	275 (64.6)		151 (35.4)	1.32 (0.74–2.35)	0.350
4	<i>TCF7L2</i> rs7903146 (C)	1	25 (75.8)	8 (24.2)	0.290	1		
		2	331 (68.5)	152 (31.5)		2.63 (0.75–9.23)	0.132	
			3	198 (65.1)		106 (34.9)	3.04 (0.86–10.80)	0.086
			4	23 (57.5)		17 (42.5)	4.18 (1.01–17.34)	0.049
5	<i>TCF7L2</i> rs290487 (T)	0–1	73 (64.0)	41 (36.0)	0.248	1		
		2	197 (68.4)	91 (31.6)		0.98 (0.57–1.66)	0.931	
			3	225 (69.7)		98 (30.3)	0.85 (0.50–1.44)	0.546
			4	82 (60.7)		53 (39.3)	1.25 (0.68–2.29)	0.474
6	<i>KCNQ1</i> rs2237897 (T)	0	74 (65.5)	39 (34.5)	0.614	1		
		1	210 (69.8)	91 (30.2)		0.76 (0.45–1.28)	0.297	
			2	201 (66.6)		101 (33.4)	0.87 (0.51–1.46)	0.592
			3–4	92 (63.9)		52 (36.1)	0.96 (0.53–1.72)	0.886

Values are presented as number (%). $P \leq 0.05$ indicated statistical significance. Control, T2DM without complication. OR adjusted for age, sex, hypertension, dyslipidemia, glycated hemoglobin, and body mass index.

CAD, coronary artery disease; T2DM, type 2 diabetes mellitus; SNP, single nucleotide polymorphism; GRS, genetic risk score; DN, diabetic nephropathy; OR, odds ratio; CI, confidence interval; *KCNQ1*, potassium voltage-gated channel subfamily Q member 1; *TCF7L2*, transcription factor 7-like 2.

^aP value after 100,000 permutation.