

Supplementary Table 15. Combined effect of two risk alleles on micro- and macrovascular complications in T2DM patients

Model no.	SNPs in model (effect allele)	No. of effect allele (GRS)	DM without complication (n=577)	DM with complications (n=383)	P value ^a	OR (95% CI)	P value
1	<i>KCNQ1</i> rs2237892 (C) <i>KCNQ1</i> rs2237897 (T)	0–1	70 (66.0)	36 (34.0)	0.027	1	
		2	481 (60.4)	315 (39.6)		1.33 (0.82–2.15)	0.245
		3–4	26 (44.8)	32 (55.2)		2.06 (0.97–4.39)	0.061
2	<i>TCF7L2</i> rs7903146 (C) <i>TCF7L2</i> rs290487 (T)	1–2	153 (60.5)	100 (39.5)	0.549	1	
		3	263 (61.6)	164 (38.4)		1.01 (0.70–1.45)	0.969
		4	161 (57.5)	119 (42.5)		1.18 (0.79–1.75)	0.414
3	<i>TCF7L2</i> rs7903146 (C) <i>KCNQ1</i> rs2237892 (C)	1–2	59 (59.6)	40 (40.4)	0.603	1	
		3	243 (62.0)	149 (38.0)		0.93 (0.56–1.56)	0.794
		4	275 (58.6)	194 (41.4)		1.06 (0.64–1.76)	0.819
4	<i>TCF7L2</i> rs7903146 (C) <i>KCNQ1</i> rs2237897 (T)	1	25 (67.6)	12 (32.4)	0.229	1	
		2	331 (62.2)	201 (37.8)		1.80 (0.70–4.64)	0.227
		3	198 (57.1)	149 (42.9)		2.25 (0.86–5.88)	0.097
		4	23 (52.3)	21 (47.7)		2.83 (0.91–8.83)	0.072
5	<i>TCF7L2</i> rs290487 (T) <i>KCNQ1</i> rs2237892 (C)	0–1	73 (57.5)	54 (42.5)	0.467	1	
		2	197 (60.8)	127 (39.2)		0.98 (0.61–1.56)	0.920
		3	225 (62.3)	136 (37.7)		0.85 (0.54–1.36)	0.496
		4	82 (55.4)	66 (44.6)		1.09 (0.63–1.88)	0.766
6	<i>TCF7L2</i> rs290487 (T) <i>KCNQ1</i> rs2237897 (T)	0	74 (58.3)	53 (41.7)	0.354	1	
		1	210 (63.6)	120 (36.4)		0.77 (0.48–1.23)	0.274
		2	201 (59.5)	137 (40.5)		0.92 (0.58–1.46)	0.716
		3–4	92 (55.8)	73 (44.2)		1.07 (0.63–1.80)	0.807

Values are presented as number (%). $P \leq 0.05$ indicated statistical significance. DM with complications: micro- and/or macrovascular complications; microvascular complications: retinopathy, nephropathy, and neuropathy; macrovascular complications: coronary artery disease and stroke. OR adjusted for age, sex, hypertension, dyslipidemia, glycosylated hemoglobin, and body mass index.

T2DM, type 2 diabetes mellitus; SNP, single nucleotide polymorphism; GRS, genetic risk score; DM, diabetes mellitus; 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 permutations.