

**Supplementary Table 20.** Combined effect of risk alleles on the parameters related to the severity of type 2 diabetes mellitus in patients

Variable	No. of effect allele (GRS)			P value	P for trend
Combined two risk alleles	0–1	2	3–4		
Number	106	796	58		
HbA1c, %	7.54±1.41	7.65±1.80	7.73±1.93	0.812	0.521
FPG, mmol/L	8.24±2.60	8.39±3.38	8.73±3.13	0.672	0.403
eGFR, mL/s/m <sup>2</sup>	1.21±0.42	1.13±0.46	1.03±0.59	0.131	0.044
BUN, mmol/L	5.98±2.32	6.39±3.73	7.54±5.52	0.046	0.024
Creatinine, µmol/L	93.66±40.76	113.02±120.23	179.30±273.98	<0.001	<0.001
Combined three risk alleles	2–3	4	5–6		
Number	171	736	53		
HbA1c, %	7.57±1.55	7.65±1.80	7.78±2.01	0.792	0.511
FPG, mmol/L	8.42±3.25	8.37±3.30	8.64±3.23	0.854	0.843
eGFR, mL/s/m <sup>2</sup>	1.19±0.43	1.13±0.47	1.09±0.57	0.356	0.163
BUN, mmol/L	6.11±2.51	6.43±3.87	7.14±5.11	0.243	0.113
Creatinine, µmol/L	96.01±44.50	116.22±130.90	157.42±246.26	0.010	0.004

Values are presented as mean±standard deviation. Two combined risk alleles, potassium voltage-gated channel subfamily Q member 1 (*KCNQ1*) rs2237892 (C) and *KCNQ1* rs2237897 (T); Three combined risk alleles, transcription factor 7-like 2 (*TCF7L2*) rs7903146 (C), *KCNQ1* rs2237892 (C) and *KCNQ1* rs2237897 (T). *P*<0.05 indicated statistical significance.

GRS, genetic risk score; HbA1c, glycated hemoglobin; FPG, fasting plasma glucose; eGFR, estimated glomerular filtration rate; BUN, blood urea nitrogen.