Supplementary Table 1 A full list of the analyzed SNPs

SNP	Gene	Reference	Effect allele*	OR (95% CI)*	*P**	Cases*	Controls*
rs1617640	*EPO*	A	T	1.47 (1.31-1.65)	$<1 \times 10^{-5}$	1618	954
rs9521445	*MYO16/IRS2*	B	A	1.32 (1.19-1.45)	7.2×10^{-8}	1563	1531
rs1800783	*eNOS*	C	A	1.26 (1.08-1.47)	2×10^{-3}	718[#]	749[#]
rs1531343	*HMGA2*	D	C	1.45 (1.20-1.75)	1×10^{-4}	1233	2125
rs1800470	*TGFB1*	E	C	1.25 (1.05-1.48)	0.01	1776	1740
rs759853	*AKR1B1*	F	T	1.40 (1.13-1.74)	0.002	1243	1933
rs1801282	*PPARG*	G	G	0.77 (0.68-0,87)	-	10,920	16,203
rs13293564	*UNC13B*	F	T	1.23 (1.11-1.35)	$<1 \times 10^{-4}$	1572	1710
rs2268388	*ACACB*	G	T	1.35 (1.12-1.65)	-	10,920	16,203
rs1801133	*MTHFR*	H	T	1.57 (1.31-1.88)	$<1 \times 10^{-5}$	7676	7512
rs841853	*GLUT1*	I	A	1.28 (1.09-1.50)	2×10^{-3}	2239	3579
rs2241766	*ADIPOQ*	J	G	1.50 (1.07-2.10)[§]	0.02[§]	576	4746
rs5186	*AGTR1*	K	C	2.11 (1.06-4.23)▲	-	2706	2956
rs4880	*SOD2*	L	C	0.80 (0.66-0.97)▲	-	1583	1058

CI- confidence interval; OR- odds ratio; *data from the literature. [#]Results replicated in a large independent cohort (1105 nephropathic patients and 862 controls). [§]Association limited to Caucasians. ▲Under the dominant model. **A** – Nazir N, Siddiqui K, Al-Qasim S, Al-Naqeb D. Meta-analysis of diabetic nephropathy associated genetic variants in inflammation and angiogenesis involved in different biochemical pathways. BMC Med Genet. 2014;15:103. doi: 10.1186/s12881-014-0103-8. **B** – Pezzolesi MG, Poznik GD, Skupien J, Smiles AM, Mychaleckyj JC, Rich SS, Warram JH, Krolewski AS. An intergenic region on chromosome 13q33.3 is associated with the susceptibility to kidney disease in type 1 and 2

diabetes. Kidney Int. 2011; 80:105-111. doi: 10.1038/ki.2011.64. **C** – McKnight AJ, Patterson CC, Sandholm N, Kilner J, Buckham TA, Parkkonen M, Forsblom C, Sadlier DM, Groop PH, Maxwell AP; Warren 3/UK GoKinD Study Group. Genetic polymorphisms in nitric oxide synthase 3 gene and implications for kidney disease: a meta-analysis. Am J Nephrol. 2010;32:476-481. doi: 10.1159/000321340. **D** – Alkayyali S, Lajer M, Deshmukh H, Ahlqvist E, Colhoun H, Isomaa B, Rossing P, Groop L, Lyssenko V. Common variant in the HMGA2 gene increases susceptibility to nephropathy in patients with type 2 diabetes. Diabetologia. 2013;56:323-329. doi: 10.1007/s00125-012-2760-5. **E** – Jia H, Yu L, Gao B, Ji Q. Association between the T869C polymorphism of transforming growth factor-beta 1 and diabetic nephropathy: a meta-analysis. Endocrine. 2011;40:372-378. doi: 10.1007/s12020-011-9503-0. **F** – Mooyaart AL, Valk EJ, van Es LA, Bruijn JA, de Heer E, Freedman BI, Dekkers OM, Baelde HJ. Genetic associations in diabetic nephropathy: a meta-analysis. Diabetologia. 2011;54:544-553. doi: 10.1007/s00125-010-1996-1. **G** – Li T, Shi Y, Yin J, Qin Q, Wei S, Nie S, Liu L. The association between lipid metabolism gene polymorphisms and nephropathy in type 2 diabetes: a meta-analysis. Int Urol Nephrol. 2015;47:117-130. doi: 10.1007/s11255-014-0843-6. **H** – Zhou TB, Drummen GP, Jiang ZP, Li HY. Methylenetetrahydrofolate reductase (MTHFR) C677T gene polymorphism and diabetic nephropathy susceptibility in patients with type 2 diabetes mellitus. Ren Fail. 2015;37:1247-1259. doi: 10.3109/0886022X.2015.1064743. **I** – Cui W, Du B, Zhou W, Jia Y, Sun G, Sun J, Zhang D, Yuan H, Xu F, Lu X, Luo P, Miao L. Relationship between five GLUT1 gene single nucleotide polymorphisms and diabetic nephropathy: a systematic review and meta-analysis. Mol Biol Rep. 2012;39:8551-8558. doi: 10.1007/s11033-012-1711-z. **J** – Cai Y, Zeng T, Chen L. Association of adiponectin polymorphisms with the risk of diabetic nephropathy in type 2 diabetes: a meta-analysis. J Diabetes. 2015;7:31-40. doi: 10.1111/1753-0407.12166. **K** – Ding W, Wang F, Fang Q, Zhang M, Chen J, Gu Y. Association between two genetic polymorphisms of the renin-angiotensin-aldosterone system and diabetic nephropathy: a meta-analysis. Mol Biol Rep. 2012;39:1293-1303. doi: 10.1007/s11033-011-0862-7. **L** – Tian C, Fang S, Du X, Jia C. Association of the C47T polymorphism in SOD2 with diabetes mellitus and diabetic microvascular complications: a meta-analysis. Diabetologia. 2011;54:803-811. doi: 10.1007/s00125-010-2004-5.

Supplementary Table 2 Associations between GRS and different parameters in patients with glomerular diseases (GD group)

Parameter	GRS, mean (SD)	*P*
Rapid progression (TTD ≤3 months vs >3 months)	0.523 (0.250) vs 0.633 (0.256)	0.27
Fast progression (TTD ≤1 year vs >1 year)	0.582 (0.236) vs 0.641 (0.261)	0.75
Slow progression (TTD >5 years vs ≤5 years)	0.637 (0.266) vs 0.622 (0.256)	0.77
Diuresis (preserved diuresis vs no diuresis)	0.639 (0.257) vs 0.575 (0.252)	0.25
24h diuresis >500 mL (>500 mL vs ≤500 mL)	0.638 (0.252) vs 0.520 (0.260)	0.67
Male sex (males vs females)	0.642 (0.257) vs 0.611 (0.256)	0.47

*Cases with complex pathogenesis (CP) excluded from analysis. GRS – genetic risk score; TTD – time-to-dialysis. Significant differences are highlighted in bold.