

SUPPLEMENTARY DATA

**Supplementary Table 1. The association between SNPs and diabetic retinopathy in stage 1 samples**

Chromosome	SNP	Position	Minor / Major allele	Diabetic retinopathy VS Controls		Diabetic retinopathy and nephropathy VS diabetic nephropathy		Meta-analysis		
				OR(95%CI)	P value	OR(95%CI)	P value	OR(95%CI)	P value	P value for heterogeneity
7	rs3812398	29237994	C,T	0.945(0.743-1.202)	0.646	0.997(0.778-1.277)	0.979	0.970(0.816-1.153)	0.728	0.763
7	rs3812389	29244759	A,G	0.939(0.703-1.253)	0.668	0.736(0.540-1.004)	0.053	0.839(0.679-1.036)	0.103	0.261
7	rs2269903	29247409	C,A	1.434(1.071-1.921)	0.015	1.001(0.743-1.348)	0.997	1.202(0.976-1.481)	0.084	0.092
7	rs3812388	29249198	G,C	1.440(1.076-1.927)	0.014	0.980(0.730-1.315)	0.891	1.190(0.967-1.464)	0.100	0.068
7	rs17756941	29250007	G,A	0.790(0.584-1.069)	0.126	0.698(0.502-0.971)	0.032	0.747(0.598-0.933)	<b>0.010</b>	0.586
7	rs11981737	29250335	A,G	0.884(0.705-1.109)	0.286	1.286(1.009-1.640)	0.042	1.064(0.736-1.536)	0.743	0.027
7	rs39059	29255470	G,A	0.796(0.635-0.997)	0.047	0.750(0.590-0.953)	0.018	0.774(0.657-0.912)	<b>0.002</b>	0.722
7	rs39065	29262601	A,G	0.831(0.530-1.305)	0.421	1.127(0.728-1.744)	0.591	0.973(0.711-1.331)	0.862	0.342
7	rs17157658	29274254	C,G	0.900(0.704-1.149)	0.397	0.816(0.632-1.052)	0.117	0.858(0.719-1.024)	0.090	0.587
7	rs245955	29276307	C,T	0.792(0.634-0.989)	0.039	0.776(0.615-0.978)	0.032	0.784(0.668-0.921)	<b>0.003</b>	0.900
7	rs245962	29290153	A,G	0.852(0.682-1.065)	0.160	0.748(0.594-0.943)	0.014	0.800(0.681-0.939)	<b>0.006</b>	0.428
7	rs39099	29293095	A,G	0.961(0.752-1.226)	0.746	0.857(0.664-1.106)	0.236	0.910(0.762-1.085)	0.293	0.528
7	rs39101	29294462	A,G	0.963(0.718-1.291)	0.799	1.160(0.845-1.593)	0.360	1.049(0.846-1.301)	0.664	0.397
9	rs11140139	86145409	A,G	1.102(0.855-1.419)	0.453	0.933(0.718-1.214)	0.607	1.018(0.848-1.221)	0.854	0.372
9	rs4877788	86146950	C,T	1.100(0.867-1.396)	0.430	0.956(0.746-1.225)	0.720	1.029(0.866-1.221)	0.750	0.422
9	rs7849075	86149610	C,T	0.985(0.737-1.317)	0.919	0.957(0.706-1.297)	0.776	0.972(0.787-1.199)	0.787	0.892
9	rs1888746	86155392	T,C	1.003(0.776-1.297)	0.980	0.657(0.496-0.869)	0.003	0.815(0.538-1.234)	0.334	0.029
9	rs11140156	86163694	G,C	0.807(0.572-1.138)	0.221	1.077(0.743-1.561)	0.696	0.922(0.717-1.186)	0.528	0.263
9	rs10868025	86164176	G,A	0.893(0.708-1.127)	0.341	0.770(0.602-0.985)	0.038	0.833(0.703-0.987)	<b>0.034</b>	0.391
9	rs11535575	86165034	T,C	0.734(0.427-1.261)	0.261	0.583(0.295-1.151)	0.116	0.671(0.439-1.025)	0.065	0.604
9	rs6559732	86168692	C,T	1.149(0.874-1.510)	0.319	1.155(0.876-1.522)	0.308	1.152(0.948-1.399)	0.154	0.979
9	rs7470287	86172665	C,G	0.9120(0.692-1.202)	0.513	0.765(0.570-1.027)	0.074	0.840(0.687-1.027)	0.090	0.394
9	rs3934902	86177401	A,G	0.9939(0.793-1.246)	0.958	1.233(0.976-1.558)	0.079	1.103(0.938-1.298)	0.237	0.194
9	rs4451390	86179563	T,C	1.077(0.857-1.354)	0.525	0.923(0.727-1.172)	0.510	1.000(0.848-1.180)	0.998	0.360
9	rs11793821	86184504	G,A	1.389(0.977-1.976)	0.066	0.861(0.587-1.264)	0.445	1.116(0.861-1.447)	0.407	0.072

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11	rs3764895	2945945	T,C	0.947(0.707-1.268)	0.715	1.051(0.7667-1.44)	0.757	0.994(0.802-1.231)	0.954	0.635
11	rs2583442	2956166	A,G	1.038(0.818-1.316)	0.761	1.003(0.784-1.282)	0.983	1.021(0.860-1.211)	0.812	0.844
11	rs4758576	2973880	G,A	1.099(0.757-1.594)	0.620	0.809(0.538-1.217)	0.309	0.956(0.726-1.259)	0.751	0.278
11	rs11024758	2981782	T,C	0.680(0.261-1.774)	0.428	1.721(0.778-3.805)	0.175	1.180(0.640-2.174)	0.596	0.144
11	rs4758504	3000179	A,G	1.087(0.740-1.595)	0.671	0.831(0.544-1.269)	0.390	0.963(0.724-1.279)	0.794	0.356
11	rs4758621	3009640	A,G	1.013(0.801-1.281)	0.917	1.003(0.785-1.282)	0.980	1.008(0.851-1.194)	0.925	0.954
11	rs12363575	3030104	G,A	0.798(0.560-1.137)	0.211	1.272(0.891-1.815)	0.185	1.007(0.783-1.294)	0.958	0.069
11	rs12421922	3035070	T,C	0.968(0.770-1.218)	0.783	1.088(0.857-1.382)	0.486	1.024(0.868-1.209)	0.778	0.490
11	rs2071101	3050137	A,G	1.118(0.892-1.400)	0.333	0.964(0.762-1.219)	0.759	1.042(0.885-1.225)	0.624	0.372
11	rs572373	3055361	C,T	1.001(0.769-1.302)	0.997	1.128(0.860-1.480)	0.384	1.061(0.878-1.281)	0.541	0.536
11	rs451041	3060725	A,G	0.995(0.784-1.263)	0.970	1.100(0.862-1.417)	0.430	1.046(0.881-1.243)	0.605	0.552
11	rs7111857	3068106	A,G	0.951(0.719-1.256)	0.721	1.211(0.909-1.612)	0.190	1.069(0.876-1.306)	0.511	0.235
11	rs6578318	3072442	T,C	0.983(0.704-1.373)	0.922	1.037(0.731-1.471)	0.839	1.009(0.792-1.284)	0.945	0.830
11	rs2290000	3073838	T,A	1.001(0.718-1.395)	0.995	1.039(0.733-1.471)	0.831	1.019(0.801-1.296)	0.878	0.879
11	rs406598	3076285	C,T	0.934(0.739-1.180)	0.567	1.113(0.874-1.418)	0.385	1.016(0.859-1.203)	0.850	0.307
11	rs10833173	3094505	A,T	1.022(0.765-1.365)	0.884	1.046(0.770-1.420)	0.775	1.033(0.837-1.275)	0.760	0.914
11	rs2084239	3106659	G,A	0.975(0.773-1.230)	0.833	0.992(0.777-1.266)	0.950	0.983(0.831-1.163)	0.845	0.921
13	rs914270	110243017	C,G	1.067(0.853-1.333)	0.571	0.922(0.730-1.165)	0.497	0.995(0.847-1.169)	0.954	0.377
13	rs2391776	110243425	C,T	1.020(0.731-1.424)	0.908	0.853(0.600-1.213)	0.375	0.937(0.735-1.194)	0.599	0.469
13	rs1041466	110244322	C,T	1.435(0.973-2.118)	0.068	1.076(0.694-1.668)	0.743	1.264(0.945-1.691)	0.115	0.336
13	rs11069790	110244401	A,G	0.974(0.759-1.251)	0.838	0.900(0.697-1.162)	0.419	0.937(0.784-1.121)	0.477	0.664
13	rs4462453	110251328	G,A	1.589(1.017-2.484)	0.041	0.956(0.600-1.523)	0.850	1.246(0.902-1.719)	0.182	0.123
13	rs1411766	110252160	T,C	1.216(0.826-1.791)	0.321	0.975(0.652-1.457)	0.903	1.094(0.828-1.445)	0.530	0.438
13	rs12184748	110253930	C,T	1.137(0.899-1.438)	0.283	0.872(0.683-1.114)	0.272	1.001(0.845-1.186)	0.990	0.125
13	rs2150481	110256550	G,C	1.241(0.991-1.554)	0.060	0.925(0.732-1.171)	0.518	1.079(0.917-1.269)	0.362	0.077
13	rs2391778	110258553	T,A	1.158(0.921-1.457)	0.209	0.940(0.741-1.193)	0.613	1.048(0.888-1.236)	0.582	0.217
13	rs1547241	110273605	G,C	1.138(0.763-1.698)	0.525	1.073(0.690-1.668)	0.755	1.108(0.824-1.490)	0.497	0.847
13	rs10161791	110281789	G,A	0.996(0.777-1.278)	0.977	0.882(0.685-1.136)	0.332	0.938(0.786-1.121)	0.483	0.502
13	rs9587939	110284951	A,C	1.007(0.789-1.286)	0.955	0.923(0.718-1.187)	0.532	0.965(0.810-1.150)	0.693	0.627
13	rs4773068	110288967	A,G	0.916(0.710-1.181)	0.498	0.932(0.721-1.205)	0.592	0.924(0.771-1.107)	0.390	0.923

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**Supplementary Table 2. The association between SNPs and diabetic nephropathy in stage 1 samples**

Chromosome	SNP	Position	Minor / Major allele	Diabetic nephropathy VS Controls		Diabetic retinopathy and nephropathy VS diabetic retinopathy		Meta-analysis		
				OR(95%CI)	<i>P</i> value	OR(95%CI)	<i>P</i> value	OR(95%CI)	<i>P</i> value	<i>P</i> value for heterogeneity
7	rs3812398	29237994	C,T	1.060(0.835-1.346)	0.632	1.118(0.871-1.435)	0.382	1.087(0.915-1.292)	0.341	0.762
7	rs3812389	29244759	A,G	1.070(0.806-1.421)	0.639	0.839(0.612-1.150)	0.275	0.960(0.778-1.185)	0.704	0.261
7	rs2269903	29247409	C,A	1.232(0.915-1.661)	0.169	0.860(0.642-1.152)	0.311	1.026(0.832-1.264)	0.813	0.091
7	rs3812388	29249198	G,C	1.283(0.955-1.724)	0.097	0.873(0.653-1.168)	0.359	1.055(0.858-1.298)	0.611	0.069
7	rs17756941	29250007	G,A	0.992(0.742-1.327)	0.958	0.876(0.624-1.231)	0.446	0.941(0.755-1.174)	0.593	0.586
7	rs11981737	29250335	A,G	0.693(0.550-0.872)	0.002	1.008(0.793-1.280)	0.951	0.834(0.578-1.204)	0.334	0.027
7	rs39059	29255470	G,A	0.986(0.788-1.234)	0.904	0.929(0.730-1.183)	0.550	0.959(0.814-1.131)	0.621	0.722
7	rs39065	29262601	A,G	1.022(0.663-1.574)	0.923	1.385(0.878-2.184)	0.160	1.180(0.862-1.614)	0.300	0.343
7	rs17157658	29274254	C,G	1.100(0.865-1.398)	0.437	0.997(0.769-1.293)	0.983	1.051(0.881-1.254)	0.577	0.586
7	rs245955	29276307	C,T	0.980(0.785-1.223)	0.856	1.000(0.793-1.261)	0.999	0.989(0.843-1.161)	0.896	0.900
7	rs245962	29290153	A,G	0.929(0.744-1.161)	0.517	0.945(0.750-1.191)	0.632	0.989(0.842-1.161)	0.893	0.427
7	rs39099	29293095	A,G	1.099(0.863-1.399)	0.444	0.981(0.758-1.269)	0.884	1.042(0.874-1.243)	0.646	0.528
7	rs39101	29294462	A,G	0.807(0.597-1.091)	0.162	0.972(0.714-1.325)	0.858	0.884(0.712-1.096)	0.261	0.398
9	rs11140139	86145409	A,G	1.093(0.849-1.407)	0.490	0.926(0.712-1.205)	0.568	1.010(0.841-1.211)	0.918	0.373
9	rs4877788	86146950	C,T	1.117(0.881-1.416)	0.361	0.970(0.756-1.244)	0.809	1.044(0.880-1.240)	0.620	0.421
9	rs7849075	86149610	C,T	0.985(0.737-1.315)	0.916	0.956(0.705-1.297)	0.773	0.971(0.787-1.198)	0.783	0.892
9	rs1888746	86155392	T,C	1.121(0.870-1.444)	0.377	0.734(0.553-0.974)	0.032	0.928(0.602-1.380)	0.661	0.029
9	rs11140156	86163694	G,C	0.805(0.571-1.134)	0.214	1.073(0.741-1.556)	0.708	0.919(0.714-1.183)	0.511	0.264
9	rs10868025	86164176	G,A	0.969(0.770-1.220)	0.791	0.836(0.651-1.072)	0.157	0.905(0.764-1.072)	0.249	0.391
9	rs11535575	86165034	T,C	0.830(0.489-1.408)	0.489	0.659(0.330-1.316)	0.234	0.762(0.501-1.160)	0.205	0.604
9	rs6559732	86168692	C,T	1.077(0.818-1.418)	0.597	1.082(0.823-1.423)	0.573	1.080(0.889-1.311)	0.440	0.981
9	rs7470287	86172665	C,G	1.042(0.795-1.366)	0.764	0.875(0.649-1.179)	0.379	0.963(0.788-1.177)	0.712	0.395
9	rs3934902	86177401	A,G	0.917(0.731-1.150)	0.452	1.137(0.901-1.437)	0.280	1.018(0.865-1.197)	0.835	0.194
9	rs4451390	86179563	T,C	1.121(0.893-1.408)	0.326	0.961(0.756-1.221)	0.743	1.042(0.883-1.229)	0.628	0.360
9	rs11793821	86184504	G,A	1.153(0.803-1.657)	0.440	0.715(0.492-1.039)	0.078	0.915(0.706-1.187)	0.503	0.072
11	rs3764895	2945945	T,C	0.854(0.635-1.148)	0.295	0.948(0.694-1.294)	0.735	0.897(0.724-1.112)	0.321	0.634

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11	rs2583442	2956166	A,G	1.010(0.796-1.281)	0.935	0.976(0.763-1.248)	0.847	0.993(0.837-1.179)	0.940	0.845
11	rs4758576	2973880	G,A	1.050(0.722-1.528)	0.799	0.774(0.516-1.160)	0.213	0.912(0.692-1.201)	0.512	0.278
11	rs11024758	2981782	T,C	1.008(0.422-2.411)	0.985	2.552(1.049-6.206)	0.032	1.590(0.853-2.962)	0.144	0.144
11	rs4758504	3000179	A,G	1.019(0.692-1.501)	0.923	0.779(0.512-1.186)	0.244	0.901(0.678-1.198)	0.473	0.357
11	rs4758621	3009640	A,G	0.995(0.787-1.257)	0.965	0.986(0.771-1.260)	0.907	0.990(0.836-1.173)	0.911	0.957
11	rs12363575	3030104	G,A	0.881(0.621-1.250)	0.477	1.404(0.979-2.013)	0.064	1.104(0.859-1.420)	0.438	0.069
11	rs12421922	3035070	T,C	0.941(0.748-1.185)	0.607	1.058(0.834-1.343)	0.641	0.996(0.844-1.175)	0.961	0.490
11	rs2071101	3050137	A,G	1.009(0.805-1.264)	0.941	0.870(0.688-1.100)	0.243	0.939(0.798-1.105)	0.451	0.371
11	rs572373	3055361	C,T	0.973(0.747-1.268)	0.840	1.097(0.837-1.438)	0.501	1.032(0.854-1.247)	0.745	0.535
11	rs451041	3060725	A,G	0.961(0.757-1.220)	0.744	1.067(0.832-1.368)	0.608	1.010(0.851-1.200)	0.906	0.552
11	rs7111857	3068106	A,G	0.927(0.701-1.226)	0.596	1.181(0.888-1.572)	0.253	1.044(0.855-1.274)	0.676	0.235
11	rs6578318	3072442	T,C	0.956(0.684-1.336)	0.792	1.008(0.711-1.429)	0.965	0.981(0.770-1.248)	0.873	0.830
11	rs2290000	3073838	T,A	0.952(0.681-1.331)	0.774	0.988(0.699-1.395)	0.944	0.969(0.762-1.233)	0.799	0.881
11	rs406598	3076285	C,T	0.921(0.729-1.163)	0.489	1.098(0.861-1.399)	0.451	1.002(0.847-1.185)	0.980	0.306
11	rs10833173	3094505	A,T	0.940(0.703-1.258)	0.677	0.962(0.710-1.303)	0.801	0.950(0.770-1.173)	0.635	0.914
11	rs2084239	3106659	G,A	0.950(0.754-1.198)	0.667	0.967(0.757-1.234)	0.786	0.958(0.810-1.133)	0.617	0.921
13	rs914270	110243017	C,G	1.023(0.819-1.279)	0.840	0.885(0.701-1.118)	0.305	0.955(0.812-1.122)	0.573	0.379
13	rs2391776	110243425	C,T	1.092(0.786-1.518)	0.599	0.913(0.640-1.304)	0.618	1.006(0.790-1.281)	0.963	0.470
13	rs1041466	110244322	C,T	0.907(0.596-1.380)	0.649	0.680(0.452-1.023)	0.063	0.782(0.584-1.048)	0.100	0.335
13	rs11069790	110244401	A,G	1.144(0.894-1.464)	0.285	1.057(0.815-1.370)	0.676	1.102(0.921-1.317)	0.288	0.665
13	rs4462453	110251328	G,A	1.125(0.710-1.783)	0.615	0.677(0.431-1.064)	0.089	0.869(0.629-1.199)	0.392	0.123
13	rs1411766	110252160	T,C	1.106(0.747-1.638)	0.615	0.887(0.597-1.318)	0.552	0.991(0.750-1.310)	0.951	0.438
13	rs12184748	110253930	C,T	1.166(0.923-1.474)	0.198	0.894(0.700-1.143)	0.371	1.028(0.868-1.217)	0.754	0.125
13	rs2150481	110256550	G,C	1.188(0.947-1.489)	0.136	0.886(0.701-1.119)	0.308	1.030(0.876-1.212)	0.717	0.077
13	rs2391778	110258553	T,A	1.146(0.912-1.441)	0.243	0.930(0.733-1.181)	0.553	1.037(0.879-1.223)	0.666	0.217
13	rs1547241	110273605	G,C	0.883(0.582-1.340)	0.559	0.832(0.544-1.272)	0.395	0.858(0.637-1.155)	0.311	0.845
13	rs10161791	110281789	G,A	1.172(0.918-1.497)	0.203	1.038(0.802-1.342)	0.778	1.106(0.926-1.321)	0.264	0.503
13	rs9587939	110284951	A,C	1.100(0.863-1.401)	0.443	1.008(0.782-1.299)	0.952	1.055(0.885-1.257)	0.549	0.626
13	rs4773068	110288967	A,G	1.150(0.897-1.475)	0.270	1.171(0.900-1.523)	0.239	1.160(0.968-1.390)	0.108	0.922