

Lupus Nephritis Susceptibility Loci in Women with Systemic Lupus Erythematosus

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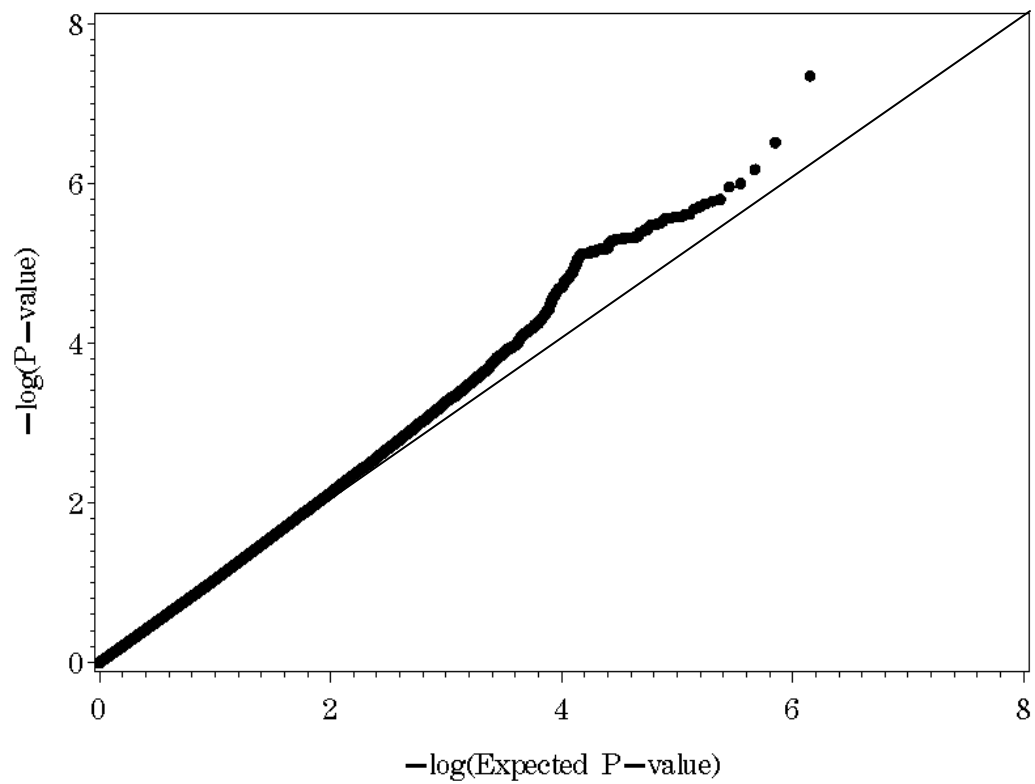
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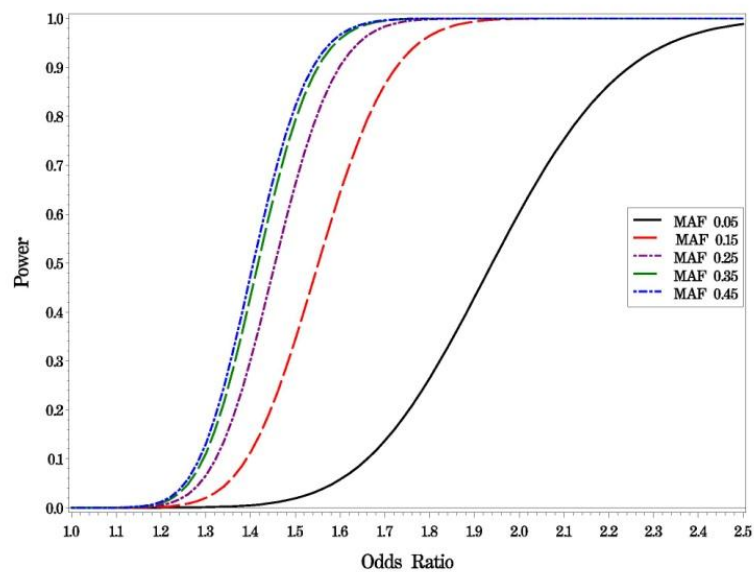
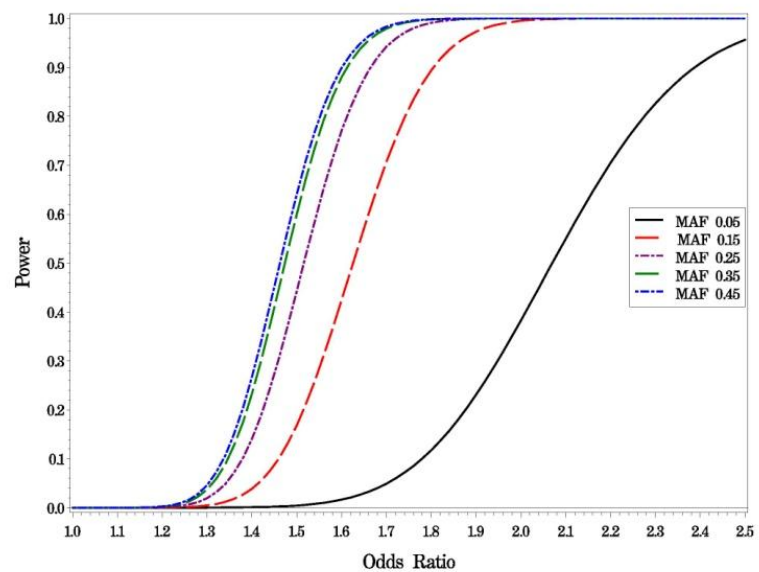
Running title: GWAS of Lupus Nephritis in SLE

Key words: lupus nephritis, systemic lupus erythematosus, glomerulonephritis, renal, genetics, GWAS

Supplemental Figure 1: PP-plot for the lupus nephritis genome-wide association study (best p-value before genomic control adjustment)



Supplemental Figure S2: Power analysis for the 588 LN cases versus 1,412 SLE cases without nephritis over a range of allele frequencies, additive model and at type 1 error rates of a) $\alpha=5 \times 10^{-8}$ and b) 5×10^{-8}



Supplemental Table S1. Top additive genetic model associations ($P < 10^{-5}$) for lupus nephritis (LN) contrasting LN cases with lupus cases without nephritis.

MARKER	CHR	POSITION	GENE	RA	N	Meta Add P-value	Meta OR (95% CI)	Set I P-value	Set I OR (95% CI)	Set II P-value	Set II OR (95% CI)	Set III P-value	Set III OR (95% CI)
rs8012283	14	50303910	NIN	G	1807	3.10E-07	1.64 (1.35,1.98)	3.31E-05	1.68 (1.31,2.14)	2.70E-03	1.59 (1.17,2.14)		
rs8015968	14	50308509	NIN	A	1799	1.11E-06	1.72 (1.38,2.15)	2.56E-05	1.85 (1.39,2.46)	1.18E-02	1.57 (1.11,2.23)		
rs9275596	6	32789609		C	1911	1.18E-06	1.48 (1.28,1.72)	2.37E-03	1.35 (1.11,1.64)	2.80E-03	1.45 (1.14,1.85)	3.55E-03	2.02 (1.26,3.25)
rs6910773	6	19928637		C	1826	1.59E-06	0.66 (0.56,0.78)	2.23E-03	0.72 (0.58,0.89)	9.82E-05	0.59 (0.46,0.77)		
rs967616	4	172262952		G	1920	1.68E-06	0.69 (0.59,0.81)	4.60E-05	0.66 (0.55,0.81)	2.97E-02	0.74 (0.57,0.97)	1.25E-01	0.67 (0.4,1.12)
rs6936204	6	32325070		T	1950	1.72E-06	1.46 (1.26,1.69)	1.68E-03	1.36 (1.12,1.65)	6.93E-03	1.38 (1.09,1.75)	3.46E-03	1.99 (1.26,3.16)
rs6538678	12	94764036	CCDC38	A	1832	1.96E-06	1.57 (1.3,1.88)	3.06E-04	1.52 (1.21,1.91)	1.87E-03	1.63 (1.2,2.21)		
rs9267972	6	32325210		A	1911	2.08E-06	1.46 (1.26,1.69)	2.09E-03	1.35 (1.12,1.64)	4.99E-03	1.41 (1.11,1.78)	5.67E-03	1.95 (1.22,3.14)
rs752010	1	41865602	HIVEP3	C	1932	2.62E-06	0.71 (0.61,0.82)	1.51E-04	0.7 (0.58,0.84)	2.79E-02	0.76 (0.6,0.97)	5.56E-02	0.61 (0.37,1.01)
rs6664724	1	41762914	HIVEP3	G	1892	2.74E-06	0.71 (0.61,0.82)	1.58E-04	0.7 (0.58,0.84)	2.77E-02	0.76 (0.6,0.97)	5.59E-02	0.61 (0.37,1.01)
rs2077172	1	41865927	HIVEP3	A	1932	3.01E-06	0.71 (0.61,0.82)	1.76E-04	0.7 (0.58,0.84)	2.79E-02	0.76 (0.6,0.97)	5.58E-02	0.61 (0.37,1.01)
rs7773456	6	19931217		G	1743	3.22E-06	0.68 (0.57,0.8)	1.06E-03	0.7 (0.57,0.87)	7.20E-04	0.64 (0.5,0.83)		
rs12206194	6	19927887		C	1845	3.80E-06	0.65 (0.54,0.78)	8.08E-04	0.67 (0.52,0.84)	1.26E-03	0.63 (0.48,0.83)		
rs2038978	1	41867306	HIVEP3	A	1950	3.80E-06	0.71 (0.61,0.82)	2.35E-04	0.71 (0.59,0.85)	2.72E-02	0.76 (0.6,0.97)	5.60E-02	0.61 (0.37,1.01)
rs9368127	6	19919970		A	1821	4.11E-06	0.65 (0.54,0.78)	7.85E-04	0.67 (0.53,0.84)	1.41E-03	0.63 (0.48,0.84)		
rs9350190	6	19919639		G	1820	4.17E-06	0.65 (0.54,0.78)	7.94E-04	0.67 (0.53,0.84)	1.42E-03	0.63 (0.48,0.84)		
rs13139444	4	172127251		A	1964	4.64E-06	0.7 (0.6,0.82)	1.29E-04	0.68 (0.56,0.83)	3.71E-02	0.75 (0.58,0.98)	1.07E-01	0.65 (0.39,1.1)
rs2567952	4	172129725		C	1964	4.74E-06	0.7 (0.6,0.82)	1.32E-04	0.68 (0.56,0.83)	3.71E-02	0.75 (0.58,0.98)	1.07E-01	0.65 (0.39,1.1)
rs2661917	4	172129968		C	1964	4.74E-06	0.7 (0.6,0.82)	1.32E-04	0.68 (0.56,0.83)	3.71E-02	0.75 (0.58,0.98)	1.07E-01	0.65 (0.39,1.1)
rs2661923	4	172127242		C	1981	4.78E-06	0.7 (0.6,0.82)	1.46E-04	0.68 (0.56,0.83)	2.91E-02	0.74 (0.57,0.97)	1.46E-01	0.68 (0.4,1.14)
rs2567956	4	172126317		C	1993	4.79E-06	0.7 (0.6,0.83)	1.33E-04	0.68 (0.56,0.83)	2.87E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs1236448	4	172118655		C	1993	4.79E-06	0.7 (0.6,0.83)	1.33E-04	0.68 (0.56,0.83)	2.87E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs17245674	4	172259440		A	1993	4.79E-06	0.7 (0.6,0.83)	1.33E-04	0.68 (0.56,0.83)	2.87E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs2567960	4	172122108		T	1992	4.80E-06	0.7 (0.6,0.83)	1.33E-04	0.68 (0.56,0.83)	2.87E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)

rs17186543	4	172126746		T	1993	4.80E-06	0.7 (0.6,0.83)	1.33E-04	0.68 (0.56,0.83)	2.88E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs9469220	6	32766288		A	1935	4.87E-06	0.7 (0.6,0.81)	4.30E-03	0.76 (0.62,0.92)	1.18E-03	0.66 (0.51,0.85)	6.71E-02	0.63 (0.39,1.03)
rs12331863	4	172133772		G	1981	4.90E-06	0.7 (0.6,0.82)	1.51E-04	0.68 (0.56,0.83)	2.91E-02	0.74 (0.57,0.97)	1.45E-01	0.68 (0.4,1.14)
rs13041255	20	21078707	PLK1S1	T	1999	4.95E-06	0.69 (0.59,0.8)	8.75E-04	0.72 (0.59,0.87)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs4813414	20	21081212	PLK1S1	A	1999	4.95E-06	0.69 (0.59,0.8)	8.75E-04	0.72 (0.59,0.87)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs4815022	20	21072872	PLK1S1	T	1999	4.95E-06	0.68 (0.59,0.8)	8.76E-04	0.72 (0.59,0.87)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs6047274	20	21083126	PLK1S1	T	1998	4.96E-06	0.69 (0.59,0.8)	8.77E-04	0.72 (0.59,0.87)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs1884763	20	21076127	PLK1S1	A	1999	4.96E-06	0.69 (0.59,0.8)	8.78E-04	0.72 (0.59,0.87)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs3762194	20	21074723	PLK1S1	A	1999	4.99E-06	0.69 (0.59,0.8)	8.82E-04	0.72 (0.59,0.87)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs4815024	20	21086367	PLK1S1	C	1997	5.11E-06	0.69 (0.59,0.8)	9.03E-04	0.72 (0.59,0.87)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs2093069	20	21088342	PLK1S1	C	1997	5.20E-06	0.69 (0.59,0.8)	9.19E-04	0.72 (0.59,0.87)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs6811337	4	172314454		T	1970	5.24E-06	0.7 (0.6,0.83)	1.40E-04	0.68 (0.56,0.83)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs6047279	20	21090353	PLK1S1	T	1997	5.30E-06	0.69 (0.59,0.8)	9.37E-04	0.72 (0.59,0.88)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs4140624	6	19926539		T	1803	5.50E-06	0.65 (0.54,0.78)	1.25E-03	0.67 (0.53,0.85)	1.17E-03	0.63 (0.47,0.83)		
rs17246620	4	172199835	LOC100506122	G	1981	5.59E-06	0.71 (0.6,0.83)	1.44E-04	0.68 (0.56,0.83)	3.09E-02	0.75 (0.57,0.97)	1.69E-01	0.69 (0.41,1.17)
rs3129943	6	32446673	C6orf10	G	1813	5.71E-06	1.44 (1.23,1.69)	4.19E-04	1.43 (1.17,1.75)	4.32E-03	1.45 (1.12,1.88)		
rs11157764	14	50320087	NIN	A	1773	6.32E-06	1.67 (1.34,2.1)	2.04E-04	1.74 (1.3,2.33)	9.96E-03	1.59 (1.12,2.27)		
rs1396323	4	172142182		A	1970	6.45E-06	0.71 (0.61,0.84)	9.56E-05	0.68 (0.55,0.82)	4.32E-02	0.76 (0.59,0.99)	2.06E-01	0.71 (0.42,1.2)
rs7681844	4	172142671		C	1970	6.53E-06	0.71 (0.61,0.84)	9.63E-05	0.68 (0.55,0.82)	4.34E-02	0.76 (0.59,0.99)	2.06E-01	0.71 (0.42,1.2)
rs13148831	4	172146081		T	1970	6.63E-06	0.71 (0.61,0.84)	9.78E-05	0.68 (0.56,0.82)	4.34E-02	0.76 (0.59,0.99)	2.06E-01	0.71 (0.42,1.2)
rs2332086	4	172147756		G	1970	6.65E-06	0.71 (0.61,0.84)	9.82E-05	0.68 (0.56,0.82)	4.34E-02	0.76 (0.59,0.99)	2.06E-01	0.71 (0.42,1.2)
rs6047293	20	21102487	PLK1S1	G	1997	6.67E-06	0.69 (0.59,0.8)	1.19E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs6082339	20	21100742	PLK1S1	G	1997	6.67E-06	0.69 (0.59,0.8)	1.19E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs910975	20	21104169	PLK1S1	A	1997	6.67E-06	0.69 (0.59,0.8)	1.19E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs2093070	20	21105510	PLK1S1	T	1997	6.67E-06	0.69 (0.59,0.8)	1.19E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs6515144	20	21105565	PLK1S1	T	1997	6.67E-06	0.69 (0.59,0.8)	1.19E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs6035795	20	21093885	PLK1S1	A	1997	6.69E-06	0.69 (0.59,0.8)	1.18E-03	0.73 (0.6,0.88)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs6047281	20	21094287	PLK1S1	A	1998	6.72E-06	0.69 (0.59,0.8)	1.18E-03	0.73 (0.6,0.88)	4.68E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs7682721	4	172151045		T	1970	6.73E-06	0.71 (0.61,0.84)	9.97E-05	0.68 (0.56,0.82)	4.34E-02	0.76 (0.59,0.99)	2.06E-01	0.71 (0.42,1.2)
rs6827582	4	172179792		A	1982	6.87E-06	0.71 (0.6,0.83)	1.81E-04	0.68 (0.56,0.83)	3.10E-02	0.75 (0.57,0.97)	1.69E-01	0.69 (0.41,1.17)

rs6811103	4	172176175		T	1984	6.90E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.49E-01	0.68 (0.4,1.15)
rs11735676	4	172177663		T	1983	7.11E-06	0.71 (0.6,0.83)	1.97E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs10012648	4	172177040		C	1983	7.12E-06	0.71 (0.6,0.83)	1.98E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs13151801	4	172176859		T	1983	7.12E-06	0.71 (0.6,0.83)	1.98E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs7673070	4	172176632		C	1983	7.14E-06	0.71 (0.6,0.83)	1.97E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs6812562	4	172177061		A	1983	7.14E-06	0.71 (0.6,0.83)	1.97E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs13138342	4	172177180		C	1983	7.14E-06	0.71 (0.6,0.83)	1.97E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs6553556	4	172176526		A	1983	7.14E-06	0.71 (0.6,0.83)	1.97E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs12648447	4	172175669		T	1985	7.45E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.67E-01	0.7 (0.42,1.16)
rs25511	4	172175559		T	1985	7.49E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs9968437	4	172173406		T	1985	7.49E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs1605651	4	172162912		A	1985	7.50E-06	0.71 (0.6,0.83)	2.08E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs11132865	4	172164946		C	1985	7.50E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs13115632	4	172164388		G	1985	7.50E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs1396325	4	172167776		G	1985	7.50E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs4692627	4	172165637		T	1985	7.50E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	2.99E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs1508507	4	172172780		A	1985	7.54E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs25510	4	172175579		A	1985	7.54E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs25512	4	172175532		G	1985	7.54E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs6849128	4	172176001		A	1985	7.54E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs6858075	4	172172043		A	1985	7.54E-06	0.71 (0.6,0.83)	2.09E-04	0.69 (0.56,0.84)	3.01E-02	0.74 (0.57,0.97)	1.68E-01	0.69 (0.41,1.17)
rs8120293	20	21116395	PLK1S1	T	1991	7.63E-06	0.69 (0.59,0.8)	1.36E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs8120377	20	21116361	PLK1S1	T	1991	7.63E-06	0.69 (0.59,0.8)	1.36E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs765585	20	21119172	PLK1S1	T	1991	7.63E-06	0.69 (0.59,0.8)	1.36E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	1.53E-03	0.45 (0.28,0.74)
rs17187123	4	172344509	LOC100506122	A	1935	8.00E-06	0.71 (0.61,0.84)	1.68E-04	0.68 (0.56,0.83)	3.35E-02	0.75 (0.57,0.98)	2.08E-01	0.72 (0.43,1.2)
rs17246878	4	172208800	LOC100506122	T	1935	8.19E-06	0.71 (0.61,0.84)	1.72E-04	0.68 (0.56,0.83)	3.35E-02	0.75 (0.57,0.98)	2.08E-01	0.72 (0.43,1.2)
rs879064	20	21123550	PLK1S1	C	1991	8.55E-06	0.69 (0.59,0.8)	1.36E-03	0.73 (0.6,0.88)	4.63E-02	0.78 (0.61,1)	2.05E-03	0.46 (0.28,0.75)
rs1508296	4	172208949	LOC100506122	C	1976	8.76E-06	0.71 (0.61,0.83)	1.91E-04	0.69 (0.56,0.84)	3.71E-02	0.75 (0.58,0.98)	1.67E-01	0.69 (0.41,1.17)
rs13110268	4	172211262	LOC100506122	G	1976	8.82E-06	0.71 (0.61,0.83)	1.93E-04	0.69 (0.56,0.84)	3.69E-02	0.75 (0.58,0.98)	1.68E-01	0.69 (0.41,1.17)
rs7340816	4	172179585		A	1944	8.87E-06	0.71 (0.6,0.83)	2.27E-04	0.69 (0.56,0.84)	3.30E-02	0.75 (0.57,0.98)	1.62E-01	0.69 (0.41,1.16)

Supplemental Table S2. Top HLA region associations (genomic control adjusted P-values, not adjusted for HLA-risk haplotype tagging SNPs) for $P < 10^{-4}$.

Marker	Position	Gene Name	RA	Mode	Meta best P-value	Meta OR	Set I P-value adj	Set I OR	Set II P-value adj	Set II OR (95%CI)	Set III P-value adj	Set III OR(95%CI)
rs2647012	32772436		C	A	2.64E-07	0.66(0.57,0.77)	1.23E-03	0.73(0.6,0.88)	7.22E-04	0.66(0.52,0.84)	5.84E-03	0.52(0.32,0.82)
rs2647003	32772859		G	A	3.62E-07	0.67(0.58,0.77)	1.24E-03	0.73(0.6,0.88)	1.03E-03	0.67(0.53,0.85)	5.83E-03	0.52(0.32,0.82)
rs2647040	32775259		G	A	6.09E-07	0.67(0.58,0.78)	1.62E-03	0.73(0.6,0.89)	1.38E-03	0.68(0.54,0.86)	5.24E-03	0.51(0.32,0.82)
rs2858310	32776302		A	A	7.67E-07	0.67(0.58,0.78)	1.95E-03	0.74(0.61,0.89)	1.42E-03	0.68(0.54,0.86)	5.24E-03	0.52(0.32,0.82)
rs2647046	32776315		C	A	8.04E-07	0.67(0.58,0.78)	1.95E-03	0.74(0.61,0.89)	1.44E-03	0.68(0.54,0.86)	5.57E-03	0.52(0.32,0.82)
rs9275521	32782931		C	A	1.28E-06	0.68(0.59,0.78)	2.19E-03	0.74(0.61,0.89)	1.96E-03	0.69(0.54,0.87)	5.95E-03	0.52(0.32,0.83)
rs9267972	32325210		A	D	1.49E-06	1.85(1.46,2.33)	4.25E-03	1.52(1.15,2.02)	7.31E-04	1.96(1.33,2.89)	1.03E-02	2.78(1.28,6.04)
rs9275517	32782628		G	A	1.92E-06	0.68(0.59,0.79)	2.05E-03	0.74(0.61,0.89)	3.41E-03	0.7(0.56,0.89)	5.93E-03	0.52(0.32,0.83)
rs9275596	32789610		C	A	2.01E-06	1.48(1.28,1.72)	2.75E-03	1.35(1.11,1.64)	3.05E-03	1.45(1.14,1.85)	3.66E-03	2.02(1.26,3.25)
rs9275524	32783087		C	A	2.09E-06	0.68(0.59,0.79)	2.20E-03	0.74(0.61,0.9)	3.40E-03	0.7(0.56,0.89)	6.08E-03	0.52(0.32,0.83)
rs3998157	32786456		A	A	2.09E-06	0.68(0.59,0.79)	2.20E-03	0.74(0.61,0.9)	3.40E-03	0.7(0.56,0.89)	6.10E-03	0.52(0.32,0.83)
rs9394114	32785917		C	A	2.09E-06	0.68(0.59,0.79)	2.20E-03	0.74(0.61,0.9)	3.40E-03	0.7(0.56,0.89)	6.10E-03	0.52(0.32,0.83)
rs9380318	32785648		T	A	2.11E-06	0.68(0.59,0.79)	2.20E-03	0.74(0.61,0.9)	3.41E-03	0.7(0.56,0.89)	6.10E-03	0.52(0.32,0.83)
rs9275572	32786977		G	A	2.45E-06	0.69(0.59,0.79)	2.42E-03	0.74(0.62,0.9)	3.41E-03	0.7(0.56,0.89)	6.83E-03	0.52(0.33,0.83)
rs6936204	32325070		T	A	2.92E-06	1.46(1.26,1.69)	1.95E-03	1.36(1.12,1.65)	7.55E-03	1.38(1.09,1.75)	3.56E-03	1.99(1.26,3.16)
rs3129943	32446673	C6orf10	G	D	3.60E-06	1.58(1.29,1.95)	7.80E-04	1.58(1.21,2.06)	7.26E-04	1.79(1.28,2.51)	6.17E-01	1.2(0.61,2.34)
rs3130316	32329206		T	A	3.93E-06	1.45(1.25,1.68)	3.14E-03	1.34(1.11,1.62)	4.99E-03	1.4(1.11,1.78)	4.55E-03	1.96(1.23,3.12)
rs3115571	32328896		A	A	3.93E-06	1.45(1.25,1.68)	3.13E-03	1.34(1.11,1.62)	4.99E-03	1.4(1.11,1.78)	4.55E-03	1.96(1.23,3.12)
rs3096700	32329760		A	A	4.01E-06	1.45(1.25,1.68)	3.20E-03	1.34(1.11,1.62)	4.99E-03	1.4(1.11,1.78)	4.57E-03	1.96(1.23,3.12)
rs521828	32399621	C6orf10	T	D	4.45E-06	1.59(1.29,1.95)	1.93E-03	1.52(1.17,1.98)	3.26E-04	1.87(1.33,2.63)	5.21E-01	1.25(0.65,2.43)
rs3130309	32323450		A	A	4.83E-06	1.45(1.25,1.67)	3.78E-03	1.33(1.1,1.61)	4.99E-03	1.4(1.11,1.78)	4.55E-03	1.96(1.23,3.12)
rs2647044	32775888		A	D	7.75E-06	1.61(1.29,2)	9.29E-04	1.62(1.22,2.15)	2.08E-03	1.75(1.23,2.5)	4.61E-01	1.31(0.65,2.64)
rs9275576	32787305		T	D	8.33E-06	1.62(1.3,2.02)	9.86E-04	1.63(1.22,2.17)	2.09E-03	1.76(1.23,2.52)	4.67E-01	1.31(0.65,2.66)
rs2856674	32767623		G	D	8.79E-06	1.6(1.29,1.99)	9.79E-04	1.61(1.22,2.14)	2.02E-03	1.75(1.23,2.49)	5.12E-01	1.27(0.63,2.57)
rs9268177	32382861	C6orf10	A	D	9.08E-06	1.64(1.31,2.04)	3.74E-04	1.7(1.27,2.26)	1.89E-02	1.53(1.08,2.18)	1.36E-01	1.71(0.85,3.46)
rs3130320	32331236		T	D	9.30E-06	1.71(1.36,2.15)	5.90E-03	1.49(1.13,1.96)	1.32E-03	1.89(1.28,2.77)	6.29E-02	2.06(0.97,4.37)
rs9268208	32388570	C6orf10	C	D	9.40E-06	1.64(1.31,2.04)	3.75E-04	1.7(1.27,2.26)	1.92E-02	1.53(1.08,2.18)	1.38E-01	1.71(0.85,3.44)
rs9268219	32392087	C6orf10	G	D	9.83E-06	1.63(1.31,2.03)	3.77E-04	1.69(1.27,2.26)	1.95E-02	1.53(1.08,2.18)	1.43E-01	1.7(0.84,3.41)
rs9268235	32398186	C6orf10	T	D	1.03E-05	1.63(1.31,2.03)	3.91E-04	1.69(1.27,2.26)	1.96E-02	1.53(1.08,2.17)	1.43E-01	1.69(0.84,3.4)

rs9268144	32365178		C	D	1.11E-05	1.63(1.31,2.03)	4.54E-04	1.68(1.26,2.24)	1.91E-02	1.53(1.08,2.18)	1.36E-01	1.71(0.85,3.46)
rs9296032	32526688		C	D	1.13E-05	1.78(1.42,2.23)	1.59E-02	1.42(1.07,1.87)	4.63E-03	1.75(1.19,2.56)	5.79E-04	3.52(1.72,7.2)
rs7775397	32369231	C6orf10	G	D	1.16E-05	1.63(1.31,2.03)	4.77E-04	1.67(1.26,2.23)	1.91E-02	1.53(1.08,2.18)	1.36E-01	1.71(0.85,3.46)
rs2395149	32433540	C6orf10	A	D	1.22E-05	1.62(1.3,2.02)	4.43E-04	1.68(1.26,2.24)	2.06E-02	1.52(1.07,2.16)	1.46E-01	1.69(0.84,3.38)
rs3129927	32441805	C6orf10	C	D	1.24E-05	1.62(1.3,2.02)	4.62E-04	1.68(1.26,2.23)	2.01E-02	1.53(1.07,2.17)	1.47E-01	1.68(0.84,3.38)
rs3129949	32406792	C6orf10	A	D	1.36E-05	1.55(1.26,1.91)	5.06E-03	1.47(1.13,1.91)	3.23E-04	1.86(1.33,2.6)	5.55E-01	1.23(0.64,2.37)
rs2040410	32710677		T	D	1.67E-05	1.57(1.26,1.94)	1.57E-03	1.57(1.19,2.08)	2.70E-03	1.7(1.21,2.4)	4.81E-01	1.29(0.65,2.57)
rs1003878	32407800	C6orf10	A	D	1.72E-05	1.54(1.26,1.9)	5.02E-03	1.47(1.13,1.91)	4.58E-04	1.83(1.31,2.56)	5.55E-01	1.23(0.64,2.37)
rs9368716	32414069	C6orf10	A	A	2.21E-05	0.72(0.62,0.83)	1.06E-03	0.73(0.6,0.88)	2.89E-02	0.76(0.59,0.97)	5.36E-02	0.62(0.39,1)
rs1150754	32158736	TNXB	T	D	2.30E-05	1.58(1.27,1.96)	3.91E-04	1.66(1.26,2.19)	3.73E-02	1.46(1.03,2.07)	1.76E-01	1.61(0.81,3.2)
rs1150755	32146528	TNXB	T	D	2.31E-05	1.58(1.27,1.96)	4.01E-04	1.66(1.26,2.19)	3.66E-02	1.46(1.03,2.07)	1.77E-01	1.61(0.81,3.2)
rs9268209	32388599	C6orf10	C	D	2.52E-05	1.58(1.28,1.95)	2.06E-03	1.53(1.17,2)	9.48E-03	1.58(1.12,2.23)	1.32E-01	1.71(0.86,3.38)
rs9276665	32855480		G	D	2.55E-05	1.61(1.29,2.02)	6.88E-04	1.68(1.25,2.26)	2.26E-02	1.53(1.07,2.19)	2.03E-01	1.61(0.78,3.3)
rs1794282	32774504		T	D	2.77E-05	1.6(1.28,2.01)	7.16E-04	1.68(1.25,2.25)	2.19E-02	1.53(1.07,2.19)	2.25E-01	1.57(0.77,3.2)
rs9276731	32873564		T	D	3.04E-05	1.6(1.28,2.01)	9.20E-04	1.66(1.23,2.22)	2.06E-02	1.54(1.07,2.2)	1.99E-01	1.61(0.78,3.32)
rs2894254	32453668		G	D	3.25E-05	1.58(1.27,1.97)	1.67E-03	1.59(1.2,2.12)	1.09E-02	1.59(1.12,2.25)	2.28E-01	1.55(0.77,3.14)
rs9268207	32388440	C6orf10	T	D	3.25E-05	1.54(1.26,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.03E-01	1.55(0.8,3.01)
rs7341328	32383172	C6orf10	A	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268181	32383987	C6orf10	C	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268182	32384005	C6orf10	G	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268197	32385912	C6orf10	A	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268201	32387262	C6orf10	A	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs3864302	32386770	C6orf10	T	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs6934429	32387600	C6orf10	T	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs7341300	32383005	C6orf10	T	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268200	32386648	C6orf10	T	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268202	32387318	C6orf10	T	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268204	32387478	C6orf10	T	D	3.32E-05	1.54(1.25,1.9)	1.77E-03	1.54(1.18,2)	1.11E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs3864300	32379785	C6orf10	T	D	3.40E-05	1.54(1.25,1.89)	1.77E-03	1.54(1.18,2)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs3864301	32379933	C6orf10	T	D	3.40E-05	1.54(1.25,1.89)	1.77E-03	1.54(1.18,2)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268170	32380689	C6orf10	G	D	3.40E-05	1.54(1.25,1.89)	1.77E-03	1.54(1.18,2)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs6935269	32368328		C	D	3.43E-05	1.54(1.25,1.89)	1.79E-03	1.54(1.18,2.01)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268402	32449332	C6orf10	A	A	3.47E-05	0.7(0.6,0.81)	3.26E-02	0.81(0.66,0.98)	2.08E-03	0.68(0.53,0.87)	6.10E-03	0.51(0.32,0.83)
rs9268163	32378853	C6orf10	T	D	3.57E-05	1.54(1.25,1.89)	1.87E-03	1.53(1.18,2)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs2858330	32766694		C	A	3.59E-05	0.71(0.61,0.82)	2.56E-03	0.74(0.61,0.9)	8.34E-02	0.8(0.63,1.02)	1.25E-03	0.46(0.29,0.74)
rs7762279	32863269		C	D	3.72E-05	1.6(1.28,2)	1.02E-03	1.65(1.23,2.23)	2.23E-02	1.53(1.07,2.18)	2.05E-01	1.6(0.78,3.3)

rs7775592	32378261	C6orf10	A	D	3.76E-05	1.54(1.25,1.89)	1.96E-03	1.53(1.17,2)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs6909427	32376679	C6orf10	G	D	3.77E-05	1.54(1.25,1.89)	1.97E-03	1.53(1.17,2)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs7750783	32376058	C6orf10	T	D	3.77E-05	1.54(1.25,1.89)	1.97E-03	1.53(1.17,2)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9267084	31517585		A	D	3.89E-05	0.55(0.42,0.7)	7.76E-03	0.64(0.47,0.89)	3.10E-02	0.62(0.4,0.95)	1.12E-03	0.26(0.11,0.58)
rs1018434	32389338	C6orf10	C	D	3.96E-05	1.54(1.25,1.89)	2.15E-03	1.53(1.17,1.99)	1.07E-02	1.56(1.11,2.18)	2.15E-01	1.53(0.79,2.97)
rs2069026	32389937	C6orf10	T	D	4.05E-05	1.54(1.25,1.89)	2.20E-03	1.53(1.17,1.99)	1.06E-02	1.56(1.11,2.19)	2.16E-01	1.53(0.79,2.97)
rs1018430	32389666	C6orf10	T	D	4.08E-05	1.54(1.25,1.89)	2.20E-03	1.53(1.17,1.99)	1.06E-02	1.56(1.11,2.18)	2.16E-01	1.53(0.79,2.97)
rs3864303	32389600	C6orf10	G	D	4.08E-05	1.54(1.25,1.89)	2.20E-03	1.53(1.17,1.99)	1.07E-02	1.56(1.11,2.18)	2.16E-01	1.53(0.79,2.97)
rs6903871	32389998	C6orf10	C	D	4.08E-05	1.54(1.25,1.89)	2.20E-03	1.53(1.17,1.99)	1.06E-02	1.56(1.11,2.19)	2.16E-01	1.53(0.79,2.97)
rs1018431	32389654	C6orf10	A	D	4.08E-05	1.54(1.25,1.89)	2.19E-03	1.53(1.17,1.99)	1.07E-02	1.56(1.11,2.18)	2.16E-01	1.53(0.79,2.97)
rs6909790	32390958	C6orf10	G	D	4.22E-05	1.54(1.25,1.89)	2.27E-03	1.52(1.17,1.99)	1.07E-02	1.56(1.11,2.19)	2.18E-01	1.53(0.79,2.97)
rs3749966	32369486	C6orf10	C	D	4.30E-05	1.53(1.25,1.89)	2.24E-03	1.52(1.17,1.99)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs3130322	32331903		C	D	4.39E-05	1.54(1.25,1.89)	2.70E-03	1.51(1.16,1.97)	9.04E-03	1.58(1.12,2.21)	2.20E-01	1.52(0.78,2.95)
rs3115569	32332117		A	D	4.40E-05	1.54(1.25,1.89)	2.70E-03	1.51(1.16,1.97)	9.10E-03	1.58(1.12,2.21)	2.20E-01	1.52(0.78,2.95)
rs6908927	32332468		A	D	4.40E-05	1.54(1.25,1.89)	2.70E-03	1.51(1.16,1.97)	9.10E-03	1.58(1.12,2.21)	2.20E-01	1.52(0.78,2.95)
rs6927098	32335484		T	D	4.42E-05	1.54(1.25,1.89)	2.70E-03	1.51(1.16,1.97)	9.13E-03	1.58(1.12,2.21)	2.20E-01	1.52(0.78,2.96)
rs3115568	32332297		T	D	4.42E-05	1.54(1.25,1.89)	2.70E-03	1.51(1.16,1.97)	9.13E-03	1.58(1.12,2.21)	2.20E-01	1.52(0.78,2.95)
rs9268218	32391678	C6orf10	G	D	4.51E-05	1.54(1.25,1.89)	2.42E-03	1.52(1.16,1.98)	1.07E-02	1.56(1.11,2.19)	2.18E-01	1.53(0.79,2.97)
rs3115553	32353805		T	D	4.91E-05	1.53(1.25,1.88)	2.69E-03	1.51(1.16,1.97)	1.08E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268176	32382058	C6orf10	T	D	4.95E-05	1.53(1.24,1.89)	1.76E-03	1.56(1.18,2.04)	1.32E-02	1.55(1.1,2.18)	2.98E-01	1.44(0.74,2.8)
rs3130340	32352605		C	D	5.15E-05	1.53(1.24,1.88)	2.69E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268143	32364452		G	D	5.19E-05	1.53(1.24,1.88)	2.70E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs9268142	32364397		C	D	5.19E-05	1.53(1.24,1.88)	2.70E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs1559874	32351133		A	D	5.22E-05	1.53(1.24,1.88)	2.76E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.06E-01	1.54(0.8,2.97)
rs3129856	32507316		C	D	5.27E-05	1.58(1.27,1.97)	1.64E-03	1.6(1.2,2.13)	3.04E-02	1.48(1.04,2.11)	1.09E-01	1.77(0.88,3.53)
rs1559873	32351107		C	D	5.29E-05	1.53(1.24,1.88)	2.76E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.10E-01	1.53(0.79,2.97)
rs3117099	32466248		A	D	5.44E-05	1.53(1.24,1.89)	4.56E-03	1.48(1.13,1.94)	5.86E-03	1.62(1.15,2.27)	2.42E-01	1.5(0.77,2.95)
rs3132931	32343873		G	D	5.73E-05	1.52(1.24,1.87)	2.75E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.36E-01	1.5(0.77,2.91)
rs3115560	32344120		A	D	5.75E-05	1.52(1.24,1.87)	2.75E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.36E-01	1.5(0.77,2.91)
rs3096673	32345991		C	D	5.76E-05	1.52(1.24,1.87)	2.76E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.36E-01	1.5(0.77,2.91)
rs3132945	32346658		G	D	5.76E-05	1.52(1.24,1.87)	2.76E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	2.36E-01	1.5(0.77,2.91)
rs9469220	32766288		A	R	6.02E-05	0.55(0.41,0.73)	1.96E-03	0.58(0.41,0.81)	7.41E-03	0.51(0.32,0.83)		
rs6901158	32313921		T	D	6.12E-05	1.55(1.25,1.93)	1.47E-04	1.71(1.3,2.24)	8.44E-02	1.37(0.97,1.94)		
rs9268473	32463662		G	A	6.24E-05	0.72(0.62,0.83)	2.39E-02	0.8(0.66,0.97)	2.49E-03	0.68(0.54,0.87)	3.75E-02	0.58(0.35,0.97)
rs2076533	32471506	BTNL2	T	A	6.60E-05	0.72(0.62,0.83)	2.48E-02	0.8(0.66,0.97)	2.53E-03	0.69(0.54,0.87)	3.75E-02	0.58(0.35,0.97)
rs6457536	32381744	C6orf10	G	D	6.68E-05	1.52(1.24,1.87)	3.20E-03	1.5(1.15,1.96)	1.25E-02	1.55(1.1,2.17)	2.10E-01	1.53(0.79,2.97)

rs3129858	32508498		A	D	6.70E-05	1.57(1.28,1.94)	4.79E-03	1.47(1.13,1.91)	3.01E-02	1.47(1.04,2.06)	2.02E-02	2.22(1.14,4.32)
rs6457617	32771829		T	A	6.73E-05	0.72(0.62,0.84)	2.26E-02	0.8(0.66,0.96)	2.75E-03	0.69(0.54,0.88)	4.23E-02	0.61(0.38,0.98)
rs9275141	32759096		G	A	6.80E-05	0.71(0.61,0.83)	2.81E-03	0.74(0.61,0.9)	1.02E-01	0.81(0.64,1.04)	2.42E-03	0.47(0.28,0.76)
rs2395172	32507820		C	D	6.80E-05	1.57(1.28,1.94)	4.85E-03	1.47(1.13,1.91)	3.03E-02	1.47(1.04,2.06)	2.01E-02	2.22(1.14,4.33)
rs3135394	32516475	HLA-DRA	G	D	7.11E-05	1.57(1.26,1.96)	2.16E-03	1.58(1.18,2.1)	3.12E-02	1.48(1.04,2.11)	1.11E-01	1.76(0.88,3.52)
rs4988822	32506953		T	D	7.21E-05	1.57(1.28,1.94)	5.15E-03	1.47(1.13,1.91)	3.02E-02	1.47(1.04,2.06)	2.00E-02	2.22(1.14,4.33)
rs3135340	32506850		G	D	7.21E-05	1.57(1.28,1.94)	5.15E-03	1.47(1.13,1.91)	3.02E-02	1.47(1.04,2.06)	2.00E-02	2.22(1.14,4.33)
rs9275224	32767856		G	A	7.23E-05	0.73(0.63,0.84)	2.11E-02	0.8(0.66,0.96)	3.40E-03	0.7(0.55,0.89)	4.24E-02	0.61(0.38,0.98)
rs3135342	32504593		T	D	7.24E-05	1.57(1.28,1.94)	5.20E-03	1.47(1.13,1.91)	3.02E-02	1.47(1.04,2.06)	1.98E-02	2.22(1.14,4.33)
rs3129847	32504484		G	D	7.28E-05	1.57(1.28,1.94)	5.21E-03	1.47(1.13,1.91)	3.02E-02	1.47(1.04,2.06)	1.98E-02	2.22(1.14,4.33)
rs9275295	32771370		G	A	7.29E-05	0.72(0.63,0.84)	2.27E-02	0.8(0.66,0.96)	3.03E-03	0.69(0.55,0.88)	4.23E-02	0.61(0.38,0.98)
rs9275292	32771268		A	A	7.29E-05	0.72(0.63,0.84)	2.26E-02	0.8(0.66,0.96)	3.05E-03	0.69(0.55,0.88)	4.23E-02	0.61(0.38,0.98)
rs4424066	32462407		G	A	7.34E-05	0.72(0.62,0.83)	2.83E-02	0.8(0.66,0.97)	2.44E-03	0.68(0.53,0.87)	3.75E-02	0.58(0.35,0.97)
rs983561	32511633		G	D	7.62E-05	1.56(1.27,1.92)	4.76E-03	1.47(1.13,1.92)	3.15E-02	1.46(1.04,2.05)	2.46E-02	2.15(1.11,4.19)
rs9276689	32859941		T	D	7.89E-05	1.59(1.26,1.99)	1.42E-03	1.64(1.21,2.21)	4.64E-02	1.45(1.01,2.08)	1.29E-01	1.77(0.85,3.68)
rs4947349	32855769		T	D	7.91E-05	1.59(1.26,1.99)	1.43E-03	1.64(1.21,2.21)	4.63E-02	1.45(1.01,2.08)	1.29E-01	1.77(0.85,3.68)
rs5000563	32512113		G	D	7.94E-05	1.56(1.27,1.92)	4.79E-03	1.47(1.13,1.91)	3.19E-02	1.46(1.04,2.05)	2.59E-02	2.14(1.1,4.16)
rs4713583	32768132		G	A	7.97E-05	0.73(0.63,0.84)	2.27E-02	0.8(0.66,0.96)	3.39E-03	0.7(0.55,0.88)	4.24E-02	0.61(0.38,0.98)
rs4713582	32768029		C	A	7.99E-05	0.73(0.63,0.84)	2.27E-02	0.8(0.66,0.96)	3.40E-03	0.7(0.55,0.89)	4.24E-02	0.61(0.38,0.98)
rs3132928	32341993		A	D	7.99E-05	1.5(1.22,1.84)	2.74E-03	1.51(1.16,1.97)	1.14E-02	1.55(1.11,2.17)	3.71E-01	1.36(0.7,2.63)
rs5002702	32767137		A	A	8.16E-05	0.73(0.63,0.84)	2.29E-02	0.8(0.66,0.96)	3.44E-03	0.7(0.55,0.89)	4.24E-02	0.61(0.38,0.98)
rs6915455	32391473	C6orf10	A	D	8.16E-05	1.52(1.23,1.88)	2.82E-03	1.52(1.16,1.99)	1.72E-02	1.53(1.08,2.16)	2.22E-01	1.53(0.78,3)
rs1150752	32172704	TNXB	C	D	8.30E-05	1.54(1.23,1.92)	1.13E-03	1.63(1.22,2.18)	2.84E-02	1.5(1.05,2.14)	3.82E-01	1.38(0.68,2.79)
rs3793126	32479598	BTNL2	G	D	8.33E-05	0.63(0.51,0.78)	7.25E-03	0.69(0.53,0.9)	3.77E-02	0.69(0.49,0.97)	6.93E-03	0.4(0.2,0.77)
rs1150753	32167845	TNXB	G	D	8.42E-05	1.54(1.23,1.92)	1.14E-03	1.63(1.22,2.18)	2.89E-02	1.5(1.05,2.13)	3.81E-01	1.38(0.68,2.78)
rs2395174	32512856		G	D	8.65E-05	1.56(1.27,1.91)	4.90E-03	1.47(1.13,1.91)	3.32E-02	1.46(1.04,2.05)	2.75E-02	2.12(1.09,4.11)
rs433061	32122807	TNXB	A	D	9.08E-05	1.53(1.23,1.91)	1.02E-03	1.64(1.22,2.19)	3.41E-02	1.48(1.04,2.11)	3.87E-01	1.37(0.68,2.78)
rs9268493	32483309	BTNL2	A	D	9.20E-05	0.63(0.51,0.78)	8.70E-03	0.7(0.53,0.91)	3.43E-02	0.69(0.49,0.97)	7.02E-03	0.4(0.2,0.77)
rs9268494	32483331	BTNL2	C	D	9.25E-05	0.63(0.51,0.78)	8.72E-03	0.7(0.53,0.91)	3.43E-02	0.69(0.49,0.97)	7.02E-03	0.4(0.2,0.77)
rs9268499	32483674	BTNL2	A	D	9.49E-05	0.63(0.51,0.78)	8.97E-03	0.7(0.53,0.91)	3.42E-02	0.69(0.49,0.97)	7.02E-03	0.39(0.2,0.77)
rs3132956	32287416	NOTCH4	A	D	9.62E-05	1.49(1.21,1.85)	1.57E-04	1.72(1.3,2.28)	1.41E-01	1.3(0.93,1.83)	4.21E-01	1.34(0.67,2.7)
rs389884	32048877	DOM3Z,STK19	G	D	9.98E-05	1.53(1.22,1.9)	8.98E-04	1.64(1.23,2.2)	4.17E-02	1.46(1.02,2.08)	3.97E-01	1.37(0.68,2.77)

Supplemental Table S3: Top HLA region associations after adjusting for HLA-DRB1*1501 and HLA-DRB1*0301 tag SNPs via logistic regression (P-value genomic control adjusted, associations with $P < 10^{-2}$).

Marker	Position	Gene Name	Mode	N	RA	Meta Best P-value	Meta Best OR (95%CI)	Set I adjusted P-value	Set I OR (95%CI)	Set II adjusted P-value	Set II OR (95%CI)	Set III adjusted P-value	Set III OR (95%CI)
rs9263871	31278508	HCG27	D	1999	G	8.53E-06	1.7(1.35,2.13)	7.56E-03	1.47(1.11,1.94)	5.62E-04	1.96(1.34,2.87)	1.10E-01	1.85(0.88,3.89)
rs4713447	31270942		D	1994	G	1.44E-04	1.55(1.22,1.96)	6.76E-03	1.5(1.12,1.99)	6.44E-03	1.73(1.17,2.55)	4.62E-01	1.36(0.61,3)
rs2523589	31435313		D	1723	T	1.77E-04	1.69(1.31,2.19)	3.11E-02	1.44(1.04,1.98)	6.15E-04	2.08(1.37,3.16)		
rs9404982	31274518	HCG27	D	2021	G	1.90E-04	1.54(1.22,1.95)	9.00E-03	1.47(1.11,1.95)	6.42E-03	1.73(1.17,2.55)	4.50E-01	1.37(0.62,3.04)
rs3868075	31275794	HCG27	D	2021	G	2.23E-04	1.54(1.22,1.95)	1.06E-02	1.46(1.1,1.94)	6.47E-03	1.73(1.17,2.54)	4.39E-01	1.38(0.62,3.07)
rs9263873	31278692	HCG27	D	2012	T	2.47E-04	1.54(1.21,1.95)	1.03E-02	1.46(1.1,1.94)	8.35E-03	1.7(1.15,2.51)	3.98E-01	1.42(0.64,3.17)
rs2074488	31348410		D	2018	T	2.58E-04	1.61(1.21,2.13)	8.50E-03	1.58(1.13,2.22)	4.11E-03	1.98(1.25,3.14)	9.28E-01	1.06(0.4,2.84)
rs11966332	31337680		D	2017	T	2.77E-04	1.6(1.21,2.12)	7.24E-03	1.6(1.14,2.23)	5.53E-03	1.93(1.22,3.04)	9.32E-01	1.06(0.4,2.83)
rs11966319	31337657		D	2017	T	2.79E-04	1.6(1.21,2.12)	7.25E-03	1.6(1.14,2.23)	5.53E-03	1.93(1.22,3.04)	9.32E-01	1.06(0.4,2.83)
rs2074489	31348107		D	2026	T	4.40E-04	1.54(1.22,1.95)	2.51E-02	1.38(1.05,1.83)	9.17E-03	1.7(1.15,2.53)	2.06E-01	1.67(0.76,3.69)
rs2394963	31359441		D	2020	T	5.63E-04	1.54(1.22,1.95)	6.43E-02	1.31(0.99,1.72)	3.36E-03	1.81(1.22,2.67)	1.65E-01	1.73(0.8,3.74)
rs3819294	31430466	HLA-B	D	1827	G	5.90E-04	2(1.4,2.87)	8.71E-02	1.49(0.96,2.31)	5.13E-04	2.89(1.59,5.24)		
rs9378249	31435680		D	1833	T	6.19E-04	1.98(1.39,2.84)	8.49E-02	1.49(0.96,2.29)	5.66E-04	2.85(1.58,5.16)		
rs4628144	31365083		D	2034	T	6.19E-04	1.53(1.22,1.93)	6.11E-02	1.31(1,1.73)	4.01E-03	1.78(1.21,2.62)	1.77E-01	1.71(0.79,3.7)
rs3906269	31366947		D	2034	G	6.21E-04	1.53(1.22,1.93)	6.07E-02	1.31(1,1.73)	4.01E-03	1.78(1.21,2.62)	1.81E-01	1.7(0.79,3.68)
rs3873379	31370148		D	2033	T	6.21E-04	1.53(1.22,1.93)	5.96E-02	1.31(1,1.73)	4.02E-03	1.78(1.21,2.62)	1.88E-01	1.69(0.78,3.65)
rs9468920	31362915		D	2032	G	6.26E-04	1.53(1.22,1.93)	6.25E-02	1.31(1,1.73)	4.02E-03	1.78(1.21,2.62)	1.72E-01	1.72(0.8,3.71)
rs7754443	31362242		D	2032	G	6.34E-04	1.53(1.22,1.93)	6.36E-02	1.31(0.99,1.73)	4.02E-03	1.78(1.21,2.62)	1.71E-01	1.72(0.8,3.72)
rs6921663	31262599		D	2003	T	9.83E-04	1.52(1.21,1.91)	1.48E-01	1.25(0.94,1.65)	1.20E-03	1.88(1.29,2.76)	2.13E-01	1.63(0.76,3.49)
rs16899207	31374366		D	2014	G	1.01E-03	1.51(1.2,1.9)	7.26E-02	1.3(0.99,1.71)	4.96E-03	1.76(1.19,2.59)	2.21E-01	1.63(0.75,3.53)
rs16899205	31374340		D	2014	G	1.02E-03	1.51(1.2,1.9)	7.30E-02	1.3(0.99,1.71)	4.95E-03	1.76(1.19,2.59)	2.21E-01	1.63(0.75,3.53)
rs16899213	31376121		D	2014	T	1.06E-03	1.51(1.2,1.9)	7.51E-02	1.3(0.98,1.71)	5.14E-03	1.75(1.19,2.59)	2.15E-01	1.64(0.76,3.56)
rs9267084	31517585		D	1938	G	1.09E-03	0.58(0.44,0.76)	2.61E-02	0.68(0.49,0.95)	2.10E-01	0.74(0.46,1.17)	6.77E-04	0.2(0.08,0.51)
rs4713964	36437397		A	1739	C	1.15E-03	1.43(1.17,1.74)	7.28E-02	1.26(0.99,1.61)	2.06E-03	1.67(1.21,2.3)		
rs9461681	31359019		D	2024	G	1.21E-03	1.51(1.19,1.9)	8.20E-02	1.29(0.98,1.7)	5.59E-03	1.74(1.18,2.57)	2.01E-01	1.69(0.76,3.73)
rs3873375	31359339		D	2024	T	1.22E-03	1.51(1.19,1.9)	8.21E-02	1.29(0.98,1.7)	5.61E-03	1.74(1.18,2.57)	2.02E-01	1.69(0.76,3.73)
rs744848	36444066	ETV7	A	1764	G	1.28E-03	1.44(1.17,1.76)	6.23E-02	1.28(1,1.65)	3.38E-03	1.65(1.18,2.3)		
rs1052989	31254382		D	2024	T	1.39E-03	1.51(1.18,1.94)	4.06E-02	1.38(1.02,1.87)	1.20E-02	1.71(1.13,2.58)	3.91E-01	1.46(0.63,3.43)

rs7745906	31311988		D	2029	G	1.45E-03	1.51(1.16,1.96)	5.99E-02	1.37(1,1.88)	3.48E-03	1.9(1.24,2.92)	7.19E-01	1.19(0.49,2.87)
rs9366778	31377152		D	2020	G	1.45E-03	1.46(1.15,1.85)	3.31E-02	1.37(1.03,1.82)	1.24E-02	1.66(1.12,2.45)	5.40E-01	1.3(0.58,2.88)
rs4543367	31374746		D	1942	G	1.57E-03	1.49(1.18,1.88)	8.40E-02	1.29(0.98,1.71)	5.71E-03	1.76(1.18,2.61)	2.85E-01	1.55(0.7,3.4)
rs11967472	31379264		D	2002	G	1.70E-03	1.5(1.18,1.89)	7.25E-02	1.3(0.99,1.71)	1.21E-02	1.67(1.12,2.47)	1.68E-01	1.77(0.79,3.95)
rs6899874	31270308		D	2034	C	1.77E-03	1.49(1.18,1.87)	2.01E-01	1.22(0.92,1.61)	1.31E-03	1.87(1.28,2.74)	2.45E-01	1.57(0.74,3.34)
rs12111032	31350170		A	1832	G	1.80E-03	1.41(1.14,1.74)	6.86E-03	1.41(1.1,1.8)	7.88E-02	1.4(0.97,2.03)		
rs4394275	31426157		D	1764	G	1.85E-03	1.51(1.19,1.92)	4.66E-02	1.35(1.01,1.81)	8.12E-03	1.73(1.16,2.59)		
rs4122189	31275907	HCG27	D	2034	T	1.89E-03	1.49(1.18,1.87)	2.04E-01	1.21(0.92,1.61)	1.65E-03	1.85(1.26,2.69)	2.07E-01	1.64(0.77,3.52)
rs6908994	31306689		D	2033	T	1.94E-03	1.5(1.15,1.94)	7.41E-02	1.35(0.98,1.85)	3.67E-03	1.9(1.24,2.91)	7.19E-01	1.19(0.49,2.87)
rs9295957	31265573		D	2002	G	1.96E-03	1.5(1.17,1.93)	5.32E-02	1.37(1.01,1.86)	1.28E-02	1.71(1.13,2.6)	3.92E-01	1.46(0.62,3.4)
rs3905495	31373518		D	2021	G	2.07E-03	1.44(1.14,1.81)	5.94E-02	1.31(1,1.73)	8.68E-03	1.69(1.15,2.5)	5.16E-01	1.3(0.6,2.82)
rs7768431	31310644		D	2035	G	2.07E-03	1.49(1.15,1.94)	7.73E-02	1.34(0.98,1.84)	3.77E-03	1.89(1.23,2.91)	7.19E-01	1.19(0.49,2.87)
rs6921948	31279236	HCG27	D	2016	C	2.11E-03	1.45(1.14,1.85)	1.03E-01	1.29(0.96,1.74)	1.66E-03	1.91(1.28,2.85)	8.76E-01	1.08(0.48,2.46)
rs3130216	33185249		D	1717	G	2.16E-03	0.67(0.52,0.85)	2.48E-02	0.71(0.52,0.95)	2.43E-02	0.62(0.41,0.94)		
rs7451190	31282506		D	2017	G	2.19E-03	1.45(1.14,1.85)	1.05E-01	1.29(0.96,1.74)	1.69E-03	1.91(1.28,2.85)	8.73E-01	1.08(0.48,2.47)
rs3131621	31533478		A	2002	G	2.94E-03	0.72(0.6,0.87)	1.21E-01	0.83(0.66,1.04)	3.13E-02	0.71(0.52,0.96)	2.77E-02	0.52(0.29,0.93)
rs3873380	31370417		D	2030	T	3.09E-03	1.41(1.12,1.77)	5.96E-02	1.31(1,1.73)	1.18E-02	1.65(1.12,2.44)	6.67E-01	1.2(0.56,2.57)
rs9266336	31439114		A	1877	G	3.47E-03	1.39(1.13,1.72)	3.32E-02	1.31(1.03,1.67)	2.99E-02	1.51(1.05,2.17)		
rs2180106	38668193	BTBD9	D	2021	T	3.57E-03	1.46(1.18,1.82)	1.14E-01	1.25(0.96,1.63)	4.25E-02	1.45(1.02,2.08)	2.61E-02	2.33(1.11,4.89)
rs9266359	31440718		A	1884	T	3.89E-03	1.38(1.12,1.71)	3.32E-02	1.31(1.03,1.67)	3.46E-02	1.48(1.04,2.12)		
rs9461688	31379695		D	2013	G	3.93E-03	1.45(1.15,1.84)	1.09E-01	1.27(0.96,1.67)	1.61E-02	1.63(1.1,2.41)	2.25E-01	1.67(0.74,3.75)
rs9266375	31441854		A	1884	G	3.96E-03	1.38(1.12,1.7)	3.34E-02	1.31(1.03,1.67)	3.49E-02	1.48(1.03,2.12)		
rs9266379	31442160		A	1884	T	4.00E-03	1.38(1.12,1.7)	3.38E-02	1.31(1.03,1.67)	3.49E-02	1.48(1.03,2.12)		
rs3129943	32446673	C6orf10	D	1986	G	4.01E-03	1.56(1.16,2.09)	3.20E-02	1.49(1.04,2.12)	7.50E-02	1.58(0.97,2.6)	2.89E-01	1.7(0.65,4.43)
rs9266381	31442771		A	1884	T	4.03E-03	1.38(1.12,1.7)	3.40E-02	1.31(1.03,1.67)	3.49E-02	1.48(1.03,2.12)		
rs9266382	31442856		A	1884	C	4.03E-03	1.38(1.12,1.7)	3.40E-02	1.31(1.03,1.67)	3.50E-02	1.48(1.03,2.12)		
rs9266386	31443061		A	1884	T	4.05E-03	1.38(1.12,1.7)	3.40E-02	1.31(1.03,1.67)	3.50E-02	1.48(1.03,2.12)		
rs9266387	31443195		A	1884	T	4.05E-03	1.38(1.12,1.7)	3.41E-02	1.31(1.03,1.67)	3.50E-02	1.48(1.03,2.12)		
rs9266392	31443382		A	1884	G	4.08E-03	1.38(1.12,1.7)	3.43E-02	1.31(1.03,1.67)	3.50E-02	1.48(1.03,2.12)		
rs9266404	31444202		A	1886	T	4.15E-03	1.38(1.12,1.7)	3.48E-02	1.31(1.03,1.66)	3.51E-02	1.48(1.03,2.12)		
rs9266406	31444398		A	1886	G	4.15E-03	1.38(1.12,1.7)	3.48E-02	1.31(1.03,1.66)	3.51E-02	1.48(1.03,2.12)		
rs9266429	31445235		A	1886	T	4.20E-03	1.38(1.12,1.7)	3.49E-02	1.31(1.03,1.66)	3.54E-02	1.48(1.03,2.12)		
rs9266409	31444548		A	1884	T	4.32E-03	1.38(1.12,1.7)	3.62E-02	1.3(1.02,1.66)	3.51E-02	1.48(1.03,2.12)		
rs9368687	31448137		A	1879	G	4.56E-03	1.38(1.12,1.7)	3.53E-02	1.31(1.03,1.66)	3.86E-02	1.47(1.03,2.11)		
rs7755619	38642912	BTBD9	D	1932	T	4.68E-03	0.69(0.55,0.86)	1.66E-01	0.82(0.62,1.07)	2.25E-02	0.65(0.45,0.94)	5.79E-02	0.48(0.23,1.02)
rs6933050	31451612		A	1877	T	4.74E-03	1.38(1.12,1.7)	3.65E-02	1.3(1.02,1.66)	3.87E-02	1.47(1.03,2.11)		

rs6910516	31451807		A	1877	G	4.83E-03	1.38(1.12,1.7)	3.68E-02	1.3(1.02,1.66)	3.92E-02	1.47(1.03,2.11)		
rs4076112	21228748	CDKAL1	D	1983	G	4.95E-03	1.44(1.15,1.8)	1.16E-01	1.26(0.96,1.66)	3.99E-02	1.48(1.02,2.14)	7.33E-02	2(0.94,4.23)
rs849870	22391865		D	1864	T	5.02E-03	0.69(0.54,0.88)	2.88E-02	0.71(0.53,0.96)	5.52E-02	0.66(0.44,1)		
rs521828	32399621	C6orf10	D	2013	T	5.15E-03	1.54(1.15,2.05)	6.79E-02	1.4(0.99,1.98)	3.68E-02	1.7(1.04,2.76)	3.23E-01	1.63(0.63,4.18)
rs9466619	23207198		D	1950	G	5.20E-03	1.52(1.21,1.9)	3.75E-01	1.15(0.87,1.5)	2.05E-02	1.56(1.08,2.25)	2.96E-03	3.13(1.48,6.63)
rs4713113	27663105		R	1873	G	5.20E-03	2.17(1.3,3.6)	5.09E-02	2(1.02,3.93)	2.86E-02	2.39(1.11,5.17)		
rs7774939	27655771		R	1883	C	5.37E-03	2.15(1.3,3.54)	5.22E-02	1.97(1.02,3.81)	2.86E-02	2.39(1.11,5.17)		
rs9295856	30488718		R	1832	T	5.37E-03	1.64(1.15,2.35)	2.92E-03	1.94(1.26,2.98)	3.92E-01	1.32(0.72,2.42)		
rs4713324	30488252		R	1832	T	5.44E-03	1.64(1.15,2.35)	2.92E-03	1.94(1.26,2.98)	3.96E-01	1.32(0.72,2.42)		
rs9461583	not found		R	1834	T	5.47E-03	1.64(1.15,2.34)	2.92E-03	1.94(1.26,2.98)	3.97E-01	1.32(0.72,2.41)		
rs13208193	23185431		D	2034	T	5.64E-03	1.51(1.21,1.88)	4.22E-01	1.13(0.87,1.48)	1.79E-02	1.55(1.08,2.23)	2.50E-03	3.17(1.5,6.7)
rs13213112	38653970	BTBD9	D	2024	G	5.68E-03	1.44(1.16,1.79)	1.40E-01	1.23(0.95,1.61)	5.54E-02	1.42(1,2.03)	2.61E-02	2.33(1.11,4.89)
rs4713327	30491747		R	1862	G	5.70E-03	1.66(1.14,2.4)	3.18E-03	1.94(1.26,2.99)	3.87E-01	1.35(0.71,2.57)		
rs4345386	23185103		D	2034	T	5.80E-03	1.51(1.21,1.88)	4.27E-01	1.13(0.86,1.48)	1.80E-02	1.55(1.08,2.22)	2.50E-03	3.17(1.5,6.7)
rs9369022	37869542		D	1717	T	5.92E-03	1.4(1.12,1.76)	3.31E-02	1.37(1.03,1.81)	5.70E-02	1.45(1,2.11)		
rs6903004	38644425	BTBD9	D	2008	G	5.95E-03	0.69(0.56,0.86)	1.74E-01	0.82(0.63,1.07)	3.42E-02	0.67(0.47,0.97)	4.24E-02	0.46(0.22,0.97)
rs2523663	31547720		R	1866	T	6.00E-03	0.54(0.36,0.81)	4.94E-02	0.61(0.38,0.98)	3.50E-02	0.46(0.23,0.94)		
rs9261763	30481463		R	1852	G	6.02E-03	1.63(1.14,2.32)	3.47E-03	1.91(1.25,2.94)	3.75E-01	1.33(0.74,2.39)		
rs2523715	30279263	TRIM26	D	2019	T	6.10E-03	0.7(0.54,0.9)	1.50E-02	0.68(0.5,0.92)	2.37E-01	0.76(0.49,1.17)	2.77E-01	0.62(0.27,1.45)
rs2517612	30277071	TRIM26	D	2019	G	6.12E-03	0.7(0.54,0.9)	1.50E-02	0.68(0.5,0.92)	2.37E-01	0.76(0.49,1.17)	2.77E-01	0.62(0.27,1.45)
rs2523719	30276298	TRIM26	D	2019	T	6.12E-03	0.7(0.54,0.9)	1.50E-02	0.68(0.5,0.92)	2.37E-01	0.76(0.49,1.17)	2.77E-01	0.62(0.27,1.45)
rs12523660	23197478		D	1984	T	6.22E-03	1.51(1.21,1.89)	4.04E-01	1.14(0.87,1.49)	2.05E-02	1.56(1.08,2.25)	3.02E-03	3.12(1.47,6.61)
rs12524966	23196557		D	1987	T	6.26E-03	1.51(1.21,1.89)	4.06E-01	1.14(0.87,1.49)	2.04E-02	1.56(1.08,2.25)	3.00E-03	3.12(1.47,6.61)
rs10806982	24188385		R	1884	G	6.39E-03	1.65(1.17,2.34)	1.90E-02	1.66(1.1,2.52)	1.11E-01	1.64(0.91,2.95)		
rs9266604	31453048		D	1745	T	6.53E-03	1.39(1.1,1.77)	8.34E-03	1.48(1.11,1.96)	2.23E-01	1.3(0.87,1.94)		
rs9461680	31351327		A	1821	T	6.66E-03	1.39(1.11,1.74)	5.38E-02	1.3(1,1.68)	3.59E-02	1.53(1.03,2.25)		
rs543532	24029596		D	1866	T	6.75E-03	1.5(1.13,1.99)	1.91E-02	1.51(1.08,2.1)	1.17E-01	1.49(0.92,2.43)		
rs3873386	31381725		D	1826	T	6.80E-03	1.4(1.1,1.77)	1.30E-02	1.44(1.09,1.92)	1.66E-01	1.34(0.9,1.99)		
rs12182794	31377863		D	2006	T	6.89E-03	1.4(1.11,1.77)	2.78E-02	1.38(1.04,1.82)	1.83E-01	1.32(0.89,1.97)	2.09E-01	1.65(0.76,3.58)
rs545967	24032285		D	1863	T	6.90E-03	1.5(1.13,1.99)	1.94E-02	1.5(1.08,2.1)	1.19E-01	1.49(0.91,2.43)		
rs482180	24033759		D	1863	T	6.95E-03	1.5(1.13,1.99)	1.95E-02	1.51(1.08,2.1)	1.19E-01	1.49(0.91,2.43)		
rs556835	24035362		D	1863	G	6.97E-03	1.5(1.13,2)	1.95E-02	1.51(1.08,2.1)	1.19E-01	1.5(0.92,2.44)		
rs2523720	30274865	TRIM26	D	2003	T	6.97E-03	0.7(0.54,0.9)	1.74E-02	0.68(0.5,0.93)	2.37E-01	0.76(0.49,1.17)	2.77E-01	0.62(0.27,1.45)
rs2517613	30273641	TRIM26	D	2003	G	7.00E-03	0.7(0.54,0.9)	1.75E-02	0.68(0.5,0.93)	2.37E-01	0.76(0.49,1.17)	2.77E-01	0.62(0.27,1.45)
rs481372	24033805		D	1863	G	7.00E-03	1.5(1.13,1.99)	1.94E-02	1.51(1.08,2.1)	1.20E-01	1.49(0.91,2.43)		
rs7775817	27656071		R	1873	G	7.02E-03	2.11(1.27,3.48)	6.68E-02	1.9(0.98,3.7)	2.86E-02	2.39(1.11,5.17)		

rs488037	24034055		D	1863	T	7.04E-03	1.5(1.13,1.99)	1.95E-02	1.5(1.08,2.1)	1.20E-01	1.49(0.91,2.43)		
rs17543429	38664619	BTBD9	D	2021	T	7.06E-03	0.7(0.56,0.87)	1.86E-01	0.82(0.63,1.08)	4.03E-02	0.69(0.48,0.98)	3.84E-02	0.46(0.22,0.95)
rs12206218	38666469	BTBD9	D	2019	T	7.12E-03	0.7(0.56,0.87)	1.87E-01	0.82(0.63,1.08)	4.03E-02	0.69(0.48,0.98)	3.84E-02	0.46(0.22,0.95)
rs6457422	31524135		A	1962	G	7.14E-03	1.26(1.07,1.48)	1.93E-02	1.27(1.04,1.55)	2.15E-01	1.2(0.91,1.6)	3.10E-01	1.33(0.77,2.3)
rs12208087	38667467	BTBD9	D	2019	T	7.17E-03	0.7(0.56,0.87)	1.88E-01	0.83(0.63,1.08)	4.03E-02	0.69(0.48,0.98)	3.84E-02	0.46(0.22,0.95)
rs10484856	38667641	BTBD9	D	2019	T	7.17E-03	0.7(0.56,0.87)	1.88E-01	0.83(0.63,1.08)	4.03E-02	0.69(0.48,0.98)	3.84E-02	0.46(0.22,0.95)
rs3131622	31528479		A	1966	T	7.28E-03	0.78(0.66,0.93)	3.02E-02	0.79(0.64,0.97)	1.92E-01	0.82(0.62,1.09)	1.83E-01	0.68(0.39,1.19)
rs10946938	27658775		R	1856	C	7.38E-03	1.97(1.24,3.14)	5.46E-02	1.86(1.01,3.42)	4.00E-02	2.13(1.05,4.33)		
rs1406841	38684695	BTBD9	D	1962	C	7.48E-03	0.7(0.56,0.87)	1.83E-01	0.82(0.62,1.08)	4.39E-02	0.69(0.48,0.98)	4.01E-02	0.46(0.22,0.96)
rs2523713	30281309	TRIM26	D	1992	G	7.57E-03	0.72(0.57,0.92)	3.51E-02	0.73(0.55,0.97)	1.09E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs1117490	30278489	TRIM26	D	1992	T	7.58E-03	0.72(0.57,0.92)	3.51E-02	0.73(0.55,0.97)	1.09E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs2021722	30282110	TRIM26	D	1992	T	7.58E-03	0.72(0.57,0.92)	3.51E-02	0.73(0.55,0.97)	1.09E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs2517611	30277306	TRIM26	D	1992	G	7.58E-03	0.72(0.57,0.92)	3.51E-02	0.73(0.55,0.97)	1.09E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs2523716	30278504	TRIM26	D	1992	T	7.58E-03	0.72(0.57,0.92)	3.51E-02	0.73(0.55,0.97)	1.09E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs971570	30280492	TRIM26	D	1992	C	7.58E-03	0.72(0.57,0.92)	3.51E-02	0.73(0.55,0.97)	1.09E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs9468926	31368197		D	1875	T	7.96E-03	1.44(1.13,1.83)	1.98E-01	1.22(0.92,1.62)	1.66E-02	1.65(1.1,2.47)	2.07E-01	1.68(0.76,3.74)
rs13206291	23176183		D	2029	G	8.02E-03	1.48(1.19,1.85)	4.48E-01	1.13(0.86,1.47)	2.05E-02	1.54(1.07,2.2)	4.57E-03	2.96(1.4,6.24)
rs474923	24023879		D	1771	T	8.08E-03	1.53(1.15,2.05)	7.38E-02	1.39(0.98,1.97)	2.90E-02	1.74(1.07,2.84)		
rs1277137	24182956		R	1884	G	8.18E-03	1.63(1.15,2.31)	2.48E-02	1.63(1.07,2.46)	1.11E-01	1.64(0.91,2.95)		
rs1290088	24184654		R	1884	T	8.18E-03	1.63(1.15,2.31)	2.48E-02	1.63(1.07,2.46)	1.11E-01	1.64(0.91,2.95)		
rs2683639	24186258		R	1884	G	8.18E-03	1.63(1.15,2.31)	2.48E-02	1.63(1.07,2.46)	1.11E-01	1.63(0.91,2.95)		
rs2064364	23165852		D	2029	G	8.19E-03	1.48(1.19,1.85)	4.54E-01	1.13(0.86,1.47)	2.05E-02	1.54(1.07,2.2)	4.57E-03	2.96(1.4,6.24)
rs1277136	24182859		R	1884	G	8.25E-03	1.63(1.15,2.31)	2.51E-02	1.63(1.07,2.46)	1.11E-01	1.63(0.91,2.95)		
rs885912	30282612	TRIM26	D	1984	C	8.25E-03	0.72(0.57,0.92)	3.74E-02	0.73(0.55,0.97)	1.12E-01	0.71(0.47,1.07)	4.16E-01	0.72(0.33,1.57)
rs2523721	30274245	TRIM26	D	1974	T	8.26E-03	0.72(0.57,0.92)	3.85E-02	0.73(0.55,0.98)	1.09E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs2517614	30271934	TRIM26	D	1974	G	8.26E-03	0.72(0.57,0.92)	3.86E-02	0.73(0.55,0.98)	1.08E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs2523722	30273252	TRIM26	D	1974	T	8.28E-03	0.72(0.57,0.92)	3.86E-02	0.73(0.55,0.98)	1.09E-01	0.71(0.48,1.07)	4.18E-01	0.72(0.33,1.56)
rs9295576	23163490		D	2028	T	8.62E-03	1.48(1.19,1.84)	4.54E-01	1.13(0.86,1.47)	2.05E-02	1.54(1.07,2.2)	5.39E-03	2.91(1.37,6.15)
rs3129881	32517462	HLA-DRA	R	1876	T	8.67E-03	0.56(0.38,0.81)	3.25E-01	0.77(0.48,1.24)	1.75E-03	0.37(0.2,0.69)		
rs11967684	31307745		D	1944	G	8.69E-03	1.35(1.07,1.71)	6.36E-02	1.32(0.99,1.75)	3.17E-02	1.56(1.05,2.32)	8.91E-01	1.07(0.49,2.33)
rs9689955	24188350		R	1874	T	8.72E-03	1.63(1.15,2.3)	2.68E-02	1.62(1.07,2.45)	1.10E-01	1.64(0.91,2.95)		
rs2596450	31546222		R	1871	G	9.38E-03	0.54(0.35,0.84)	5.58E-02	0.61(0.38,1)	5.23E-02	0.47(0.22,0.99)		
rs9393831	27696706		R	1864	C	9.38E-03	2.12(1.26,3.59)	7.70E-02	1.88(0.96,3.69)	3.41E-02	2.48(1.08,5.66)		
rs2517618	30266106	TRIM26	D	2000	G	9.42E-03	0.71(0.55,0.91)	2.46E-02	0.7(0.51,0.95)	2.37E-01	0.76(0.49,1.17)	2.77E-01	0.62(0.27,1.45)
rs9460965	24186238		R	1874	T	9.47E-03	1.62(1.14,2.29)	2.91E-02	1.61(1.06,2.43)	1.11E-01	1.63(0.91,2.95)		
rs2395171	32502515		R	1872	T	9.47E-03	0.5(0.3,0.82)	3.14E-02	0.48(0.25,0.92)	1.02E-01	0.52(0.24,1.12)		

rs6457577	32499494		R	1872	G	9.47E-03	0.5(0.3,0.82)	3.16E-02	0.48(0.25,0.92)	1.02E-01	0.52(0.24,1.12)		
rs2064193	22502049		D	2021	T	9.69E-03	0.66(0.5,0.86)	1.28E-02	0.64(0.46,0.9)	7.91E-01	0.92(0.6,1.43)	1.90E-02	0.33(0.13,0.83)
rs3135353	32500855		R	1852	T	9.71E-03	0.48(0.28,0.81)	3.10E-02	0.46(0.23,0.91)	1.07E-01	0.5(0.22,1.14)		
rs12110752	22501454		D	2034	T	9.96E-03	0.67(0.51,0.87)	1.14E-02	0.64(0.45,0.9)	7.91E-01	0.92(0.6,1.43)	2.83E-02	0.36(0.15,0.89)

Supplemental Table S4. Association results for non-HLA associations using best genetic model for lupus nephritis(LN) contrasting LN cases with lupus cases without nephritis ($P < 10^{-4}$).

Marker	Chr	Position	Gene Name	RA	N	Mode	Meta Best P-value	Meta Best OR(95%CI)	Set I P-value	Set I OR(95% CI)	Set II P-value	Set II OR(95% CI)	Set III P-value	Set III OR(95 % CI)
rs1364989	4	54706526		T	1827	R	4.52E-07	3.41(2.1,5.54)	1.30E-06	4.57(2.48,8.42)	3.91E-02	2.32(1.06,5.08)		
rs274068	16	24806473	SLC5A11	C	1838	R	5.08E-07	2.85(1.93,4.22)	1.40E-03	2.26(1.38,3.7)	2.91E-05	3.87(2.06,7.29)		
rs8012283	14	50303911	NIN	G	1807	A	5.27E-07	1.64(1.35,1.98)	3.84E-05	1.68(1.31,2.14)	2.94E-03	1.59(1.17,2.14)		
rs7773456	6	19931217		G	1743	D	7.36E-07	0.57(0.46,0.7)	1.02E-03	0.63(0.48,0.83)	7.98E-05	0.49(0.35,0.7)		
rs274069	16	24806651	SLC5A11	T	1841	R	8.50E-07	2.78(1.88,4.11)	1.40E-03	2.26(1.38,3.7)	5.88E-05	3.64(1.95,6.82)		
rs7834765	8	122345087		T	1769	R	1.06E-06	3.15(1.97,5.03)	7.39E-06	3.79(2.13,6.76)	2.29E-02	2.48(1.15,5.35)		
rs7834648	8	122345164		T	1768	R	1.07E-06	3.15(1.97,5.03)	7.42E-06	3.79(2.13,6.77)	2.30E-02	2.47(1.15,5.35)		
rs1017280	4	54705880		T	1828	R	1.24E-06	3.23(1.99,5.22)	4.40E-06	4.14(2.27,7.55)	3.88E-02	2.32(1.06,5.1)		
rs6910773	6	19928637		C	1826	D	1.42E-06	0.58(0.47,0.72)	2.95E-03	0.66(0.51,0.87)	3.55E-05	0.49(0.35,0.69)		
rs601162	9	29622142		A	1824	R	1.42E-06	3.11(1.99,4.88)	5.94E-04	2.85(1.58,5.16)	4.02E-04	3.49(1.75,6.94)		
rs12507253	4	54711576		T	1821	R	1.63E-06	3.13(1.95,5.03)	4.69E-06	4.06(2.24,7.36)	4.45E-02	2.23(1.03,4.82)		
rs602469	9	29622433		C	1834	R	1.69E-06	3.08(1.97,4.82)	6.51E-04	2.82(1.57,5.09)	4.35E-04	3.45(1.74,6.85)		
rs8015968	14	50308509	NIN	A	1799	A	1.89E-06	1.72(1.38,2.15)	2.97E-05	1.85(1.39,2.46)	1.29E-02	1.57(1.11,2.23)		
rs4140624	6	19926539		T	1803	D	2.18E-06	0.58(0.47,0.72)	7.96E-04	0.61(0.46,0.81)	4.77E-04	0.54(0.38,0.76)		
rs752010	1	41865602	HIVEP3	C	1932	D	2.31E-06	0.57(0.45,0.71)	4.14E-04	0.59(0.44,0.79)	1.02E-02	0.61(0.42,0.89)	3.31E-02	0.43(0.2,0.93)
rs2077172	1	41865927	HIVEP3	A	1932	D	2.31E-06	0.57(0.45,0.71)	4.16E-04	0.59(0.44,0.79)	1.01E-02	0.61(0.42,0.89)	3.31E-02	0.43(0.2,0.93)
rs9368127	6	19919970		A	1821	D	2.41E-06	0.58(0.47,0.73)	7.82E-04	0.62(0.47,0.82)	5.19E-04	0.54(0.38,0.76)		
rs9350190	6	19919639		G	1820	D	2.47E-06	0.58(0.47,0.73)	7.84E-04	0.62(0.47,0.82)	5.29E-04	0.54(0.38,0.76)		
rs12500475	4	54665968		G	1743	R	2.64E-06	2.94(1.86,4.66)	1.26E-05	3.54(2.01,6.21)	3.39E-02	2.31(1.08,4.96)		
rs2038978	1	41867306	HIVEP3	A	1950	D	2.65E-06	0.57(0.45,0.72)	4.81E-04	0.59(0.44,0.79)	1.00E-02	0.61(0.42,0.89)	3.30E-02	0.43(0.2,0.93)
rs967616	4	172124797		G	1920	A	2.86E-06	0.69(0.59,0.81)	5.34E-05	0.66(0.55,0.81)	3.24E-02	0.74(0.57,0.97)	1.29E-01	0.67(0.4,1.12)
rs12206194	6	19927887		C	1845	D	3.15E-06	0.59(0.47,0.73)	9.91E-04	0.62(0.47,0.82)	5.35E-04	0.54(0.39,0.77)		
rs6538678	12	94785700	CCDC38	A	1832	A	3.33E-06	1.57(1.3,1.88)	3.55E-04	1.52(1.21,1.91)	2.04E-03	1.63(1.2,2.21)		
rs10041935	5	57250574		C	1849	R	3.47E-06	2.5(1.71,3.66)	3.86E-04	2.4(1.49,3.88)	1.94E-03	2.64(1.44,4.85)		
rs4337811	5	57249936		G	1851	R	3.71E-06	2.48(1.7,3.6)	4.20E-04	2.35(1.47,3.77)	1.90E-03	2.65(1.44,4.86)		
rs10027676	4	54740473		C	1736	R	3.91E-06	3.08(1.9,5)	1.11E-06	4.89(2.59,9.21)	1.71E-01	1.72(0.81,3.63)		
rs6664724	1	41866408	HIVEP3	G	1892	D	4.27E-06	0.57(0.45,0.72)	7.69E-04	0.6(0.45,0.81)	1.01E-02	0.61(0.42,0.89)	3.31E-02	0.43(0.2,0.93)
rs2236178	20	21090813	PLK1S1	T	1985	A	4.69E-06	0.68(0.58,0.79)	4.87E-04	0.7(0.58,0.85)	5.64E-02	0.78(0.61,1)	1.67E-03	0.45(0.28,0.74)
rs583110	9	29627044		A	1811	R	4.93E-06	2.96(1.89,4.64)	1.51E-03	2.66(1.47,4.83)	5.34E-04	3.39(1.71,6.75)		

rs2786111	1	195572722	CRB1	C	1824	R	5.32E-06	2.26(1.6,3.19)	1.10E-04	2.44(1.56,3.82)	1.10E-02	2.04(1.19,3.52)		
rs2478118	10	13690038	PRPF18	T	1959	D	5.44E-06	1.61(1.3,1.99)	1.43E-03	1.57(1.19,2.06)	1.00E-03	1.79(1.27,2.52)	3.82E-01	1.37(0.69,2.72)
rs10141242	14	50297072	NIN	C	1849	A	6.12E-06	1.6(1.3,1.97)	9.40E-06	1.82(1.4,2.37)	7.80E-02	1.36(0.97,1.89)		
rs4083593	1	41872170	HIVEP3	A	1894	D	6.77E-06	0.58(0.46,0.73)	1.40E-03	0.62(0.47,0.83)	8.23E-03	0.61(0.42,0.88)	3.53E-02	0.44(0.2,0.94)
rs2786115	1	195569313	CRB1	A	1702	R	7.07E-06	2.25(1.59,3.18)	3.74E-04	2.19(1.43,3.37)	4.43E-03	2.31(1.3,4.11)		
rs13139444	4	172127251		A	1964	A	7.89E-06	0.7(0.6,0.82)	1.50E-04	0.68(0.56,0.83)	4.04E-02	0.75(0.58,0.98)	1.10E-01	0.65(0.39,1.1)
rs2567952	4	172129725		C	1964	A	8.06E-06	0.7(0.6,0.82)	1.53E-04	0.68(0.56,0.83)	4.04E-02	0.75(0.58,0.98)	1.10E-01	0.65(0.39,1.1)
rs2661917	4	172129968		C	1964	A	8.06E-06	0.7(0.6,0.82)	1.53E-04	0.68(0.56,0.83)	4.04E-02	0.75(0.58,0.98)	1.10E-01	0.65(0.39,1.1)
rs2661923	4	172127242		C	1981	A	8.13E-06	0.7(0.6,0.82)	1.69E-04	0.68(0.56,0.83)	3.17E-02	0.74(0.57,0.97)	1.50E-01	0.68(0.4,1.14)
rs2567956	4	172126317		C	1993	A	8.14E-06	0.7(0.6,0.83)	1.54E-04	0.68(0.56,0.83)	3.13E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs1236448	4	172118655		C	1993	A	8.14E-06	0.7(0.6,0.83)	1.54E-04	0.68(0.56,0.83)	3.13E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs17245674	4	172121285		A	1993	A	8.14E-06	0.7(0.6,0.83)	1.54E-04	0.68(0.56,0.83)	3.13E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs2567960	4	172122108		T	1992	A	8.16E-06	0.7(0.6,0.83)	1.54E-04	0.68(0.56,0.83)	3.13E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs17186543	4	172126746		T	1993	A	8.16E-06	0.7(0.6,0.83)	1.54E-04	0.68(0.56,0.83)	3.14E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs12331863	4	172133772		G	1981	A	8.33E-06	0.7(0.6,0.82)	1.75E-04	0.68(0.56,0.83)	3.17E-02	0.74(0.57,0.97)	1.49E-01	0.68(0.4,1.14)
rs13041255	20	21078707	PLK1S1	T	1999	A	8.42E-06	0.69(0.59,0.8)	1.02E-03	0.72(0.59,0.87)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs4813414	20	21081212	PLK1S1	A	1999	A	8.42E-06	0.69(0.59,0.8)	1.02E-03	0.72(0.59,0.87)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs4815022	20	21072872	PLK1S1	T	1999	A	8.42E-06	0.68(0.59,0.8)	1.02E-03	0.72(0.59,0.87)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs6047274	20	21083126	PLK1S1	T	1998	A	8.43E-06	0.69(0.59,0.8)	1.02E-03	0.72(0.59,0.87)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs1884763	20	21076127	PLK1S1	A	1999	A	8.43E-06	0.69(0.59,0.8)	1.02E-03	0.72(0.59,0.87)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs3762194	20	21074723	PLK1S1	A	1999	A	8.48E-06	0.69(0.59,0.8)	1.02E-03	0.72(0.59,0.87)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs4815024	20	21086367	PLK1S1	C	1997	A	8.69E-06	0.69(0.59,0.8)	1.05E-03	0.72(0.59,0.87)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs2093069	20	21088342	PLK1S1	C	1997	A	8.84E-06	0.69(0.59,0.8)	1.07E-03	0.72(0.59,0.87)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs6811337	4	172176299		T	1970	A	8.91E-06	0.7(0.6,0.83)	1.62E-04	0.68(0.56,0.83)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs6047279	20	21090353	PLK1S1	T	1997	A	9.01E-06	0.69(0.59,0.8)	1.09E-03	0.72(0.59,0.88)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs17246620	4	172199835	LOC100506122	G	1981	A	9.50E-06	0.71(0.6,0.83)	1.67E-04	0.68(0.56,0.83)	3.37E-02	0.75(0.57,0.97)	1.74E-01	0.69(0.41,1.17)
rs11157764	14	50320087	NIN	A	1773	A	1.07E-05	1.67(1.34,2.1)	2.37E-04	1.74(1.3,2.33)	1.09E-02	1.59(1.12,2.27)		
rs648705	13	109654154	COL4A1	A	1810	R	1.09E-05	0.48(0.34,0.66)	5.87E-05	0.42(0.28,0.64)	3.49E-02	0.57(0.34,0.95)		
rs1396323	4	172142182		A	1970	A	1.10E-05	0.71(0.61,0.84)	1.11E-04	0.68(0.55,0.82)	4.71E-02	0.76(0.59,0.99)	2.12E-01	0.71(0.42,1.2)
rs7681844	4	172142671		C	1970	A	1.11E-05	0.71(0.61,0.84)	1.12E-04	0.68(0.55,0.82)	4.73E-02	0.76(0.59,0.99)	2.12E-01	0.71(0.42,1.2)
rs4815021	20	21068543	PLK1S1	C	1895	A	1.12E-05	0.69(0.59,0.8)	1.12E-03	0.72(0.59,0.88)	6.04E-02	0.78(0.61,1.01)	1.67E-03	0.45(0.28,0.74)
rs13148831	4	172146081		T	1970	A	1.13E-05	0.71(0.61,0.84)	1.13E-04	0.68(0.56,0.82)	4.73E-02	0.76(0.59,0.99)	2.12E-01	0.71(0.42,1.2)
rs2332086	4	172147756		G	1970	A	1.13E-05	0.71(0.61,0.84)	1.14E-04	0.68(0.56,0.82)	4.73E-02	0.76(0.59,0.99)	2.12E-01	0.71(0.42,1.2)
rs6047293	20	21102487	PLK1S1	G	1997	A	1.13E-05	0.69(0.59,0.8)	1.38E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs6082339	20	21100742	PLK1S1	G	1997	A	1.13E-05	0.69(0.59,0.8)	1.38E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs910975	20	21104169	PLK1S1	A	1997	A	1.13E-05	0.69(0.59,0.8)	1.38E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)

rs2093070	20	21105510	PLK1S1	T	1997	A	1.13E-05	0.69(0.59,0.8)	1.38E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs6515144	20	21105565	PLK1S1	T	1997	A	1.13E-05	0.69(0.59,0.8)	1.38E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs7834813	8	122345329		C	1736	R	1.14E-05	2.69(1.72,4.23)	2.74E-05	3.33(1.91,5.81)	6.42E-02	2.04(0.97,4.29)		
rs6035795	20	21093885	PLK1S1	A	1997	A	1.14E-05	0.69(0.59,0.8)	1.37E-03	0.73(0.6,0.88)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs6047281	20	21094287	PLK1S1	A	1998	A	1.14E-05	0.69(0.59,0.8)	1.37E-03	0.73(0.6,0.88)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs7682721	4	172151045		T	1970	A	1.14E-05	0.71(0.61,0.84)	1.16E-04	0.68(0.56,0.82)	4.73E-02	0.76(0.59,0.99)	2.12E-01	0.71(0.42,1.2)
rs2399985	10	13685216	PRPF18	T	1785	D	1.16E-05	1.65(1.33,2.06)	1.64E-03	1.58(1.19,2.08)	1.42E-03	1.76(1.25,2.48)		
rs6827582	4	172179792		A	1982	A	1.17E-05	0.71(0.6,0.83)	2.10E-04	0.68(0.56,0.83)	3.38E-02	0.75(0.57,0.97)	1.74E-01	0.69(0.41,1.17)
rs6811103	4	172176175		T	1984	A	1.17E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.53E-01	0.68(0.4,1.15)
rs4901055	14	50296750	NIN	G	1834	A	1.17E-05	1.58(1.29,1.95)	1.72E-05	1.79(1.38,2.34)	8.67E-02	1.35(0.97,1.87)		
rs402031	1	165217082		G	1722	R	1.18E-05	0.54(0.4,0.71)	3.07E-05	0.47(0.33,0.67)	6.09E-02	0.64(0.41,1.01)		
rs11735676	4	172177663		T	1983	A	1.21E-05	0.71(0.6,0.83)	2.29E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs10012648	4	172177040		C	1983	A	1.21E-05	0.71(0.6,0.83)	2.30E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs13151801	4	172176859		T	1983	A	1.21E-05	0.71(0.6,0.83)	2.30E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs7673070	4	172176632		C	1983	A	1.21E-05	0.71(0.6,0.83)	2.29E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs6812562	4	172177061		A	1983	A	1.21E-05	0.71(0.6,0.83)	2.29E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs13138342	4	172177180		C	1983	A	1.21E-05	0.71(0.6,0.83)	2.29E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs6553556	4	172176526		A	1983	A	1.21E-05	0.71(0.6,0.83)	2.29E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs12648447	4	172175669		T	1985	A	1.27E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.72E-01	0.7(0.42,1.16)
rs25511	4	172175559		T	1985	A	1.27E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs9968437	4	172173406		T	1985	A	1.27E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs1605651	4	172162912		A	1985	A	1.28E-05	0.71(0.6,0.83)	2.41E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs11132865	4	172164946		C	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs13115632	4	172164388		G	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs1396325	4	172167776		G	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs4692627	4	172165637		T	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.26E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs1508507	4	172172780		A	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs25510	4	172175579		A	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs25512	4	172175532		G	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs6849128	4	172176001		A	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs6858075	4	172172043		A	1985	A	1.28E-05	0.71(0.6,0.83)	2.42E-04	0.69(0.56,0.84)	3.28E-02	0.74(0.57,0.97)	1.73E-01	0.69(0.41,1.17)
rs8120293	20	21116395	PLK1S1	T	1991	A	1.30E-05	0.69(0.59,0.8)	1.58E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs8120377	20	21116361	PLK1S1	T	1991	A	1.30E-05	0.69(0.59,0.8)	1.58E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs765585	20	21119172	PLK1S1	T	1991	A	1.30E-05	0.69(0.59,0.8)	1.58E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs393025	1	165211552		A	1745	R	1.32E-05	0.54(0.41,0.71)	3.56E-05	0.47(0.33,0.67)	6.05E-02	0.64(0.41,1.01)		
rs17187123	4	172206354	LOC100506122	A	1935	A	1.36E-05	0.71(0.61,0.84)	1.95E-04	0.68(0.56,0.83)	3.65E-02	0.75(0.57,0.98)	2.14E-01	0.72(0.43,1.2)

rs6047280	20	21091935	PLK1S1	G	1988	A	1.37E-05	0.69(0.59,0.8)	1.47E-03	0.73(0.6,0.88)	6.42E-02	0.79(0.62,1.01)	9.84E-04	0.43(0.26,0.71)
rs7973213	12	24067564	SOX5	C	1988	D	1.37E-05	0.59(0.46,0.76)	1.06E-03	0.56(0.4,0.79)	1.20E-03	0.51(0.34,0.76)	9.99E-01	0.98(0.46,2.12)
rs12823336	12	24068461	SOX5	C	1989	D	1.38E-05	0.59(0.46,0.76)	1.06E-03	0.57(0.4,0.79)	1.20E-03	0.51(0.34,0.76)	9.99E-01	0.98(0.46,2.12)
rs17246878	4	172208800	LOC100506122	T	1935	A	1.39E-05	0.71(0.61,0.84)	2.00E-04	0.68(0.56,0.83)	3.65E-02	0.75(0.57,0.98)	2.14E-01	0.72(0.43,1.2)
rs7307316	12	24072675	SOX5	G	1992	D	1.40E-05	0.59(0.46,0.76)	1.07E-03	0.56(0.4,0.79)	1.25E-03	0.51(0.34,0.76)	9.77E-01	0.98(0.45,2.09)
rs17403340	12	24069147	SOX5	C	1989	D	1.41E-05	0.6(0.46,0.77)	1.07E-03	0.57(0.4,0.79)	1.22E-03	0.51(0.34,0.76)	9.98E-01	0.99(0.46,2.12)
rs2478106	10	13668534		C	1760	D	1.42E-05	1.66(1.33,2.06)	2.42E-03	1.55(1.17,2.06)	1.07E-03	1.8(1.27,2.55)		
rs17481181	12	24063813	SOX5	G	1983	D	1.43E-05	0.59(0.46,0.76)	1.10E-03	0.56(0.4,0.79)	1.20E-03	0.51(0.34,0.76)		0.98(0.46,2.12)
rs4963737	12	24063482	SOX5	C	1983	D	1.43E-05	0.59(0.46,0.76)	1.11E-03	0.56(0.4,0.79)	1.20E-03	0.51(0.34,0.76)	9.99E-01	0.98(0.46,2.12)
rs879064	20	21123550	PLK1S1	C	1991	A	1.45E-05	0.69(0.59,0.8)	1.58E-03	0.73(0.6,0.88)	5.05E-02	0.78(0.61,1)	2.11E-03	0.46(0.28,0.75)
rs1508296	4	172208949	LOC100506122	C	1976	A	1.49E-05	0.71(0.61,0.83)	2.22E-04	0.69(0.56,0.84)	4.04E-02	0.75(0.58,0.98)	1.72E-01	0.69(0.41,1.17)
rs13110268	4	172211262	LOC100506122	G	1976	A	1.50E-05	0.71(0.61,0.83)	2.24E-04	0.69(0.56,0.84)	4.02E-02	0.75(0.58,0.98)	1.73E-01	0.69(0.41,1.17)
rs7340816	4	172179585		A	1944	A	1.51E-05	0.71(0.6,0.83)	2.63E-04	0.69(0.56,0.84)	3.60E-02	0.75(0.57,0.98)	1.67E-01	0.69(0.41,1.16)
rs9559744	13	109659445	COL4A1	T	1824	R	1.52E-05	0.49(0.35,0.67)	9.29E-05	0.43(0.29,0.66)	3.37E-02	0.56(0.33,0.95)		
rs2593753	11	45719573		G	1738	D	1.67E-05	0.61(0.49,0.76)	2.55E-03	0.65(0.5,0.86)	1.18E-03	0.56(0.39,0.79)		
rs10505927	12	24070940	SOX5	A	1976	D	1.67E-05	0.59(0.46,0.77)	1.24E-03	0.56(0.4,0.79)	1.28E-03	0.51(0.34,0.76)	9.95E-01	0.98(0.46,2.12)
rs6047273	20	21082799	PLK1S1	T	1991	A	1.73E-05	0.69(0.59,0.8)	2.05E-03	0.73(0.61,0.89)	5.10E-02	0.78(0.61,1)	1.58E-03	0.45(0.28,0.74)
rs2155099	11	93961634	PIWIL4	C	1943	A	1.73E-05	0.71(0.61,0.83)	1.96E-03	0.74(0.61,0.89)	1.14E-02	0.73(0.57,0.93)	5.95E-02	0.62(0.38,1.02)
rs598893	13	109657744	COL4A1	C	1834	R	1.75E-05	0.49(0.35,0.68)	1.02E-04	0.44(0.29,0.66)	3.52E-02	0.57(0.34,0.95)		
rs10831246	11	93962343	PIWIL4	C	1943	A	1.77E-05	0.71(0.61,0.83)	1.95E-03	0.74(0.61,0.89)	1.17E-02	0.73(0.57,0.93)	6.02E-02	0.62(0.38,1.02)
rs7110167	11	93959885	PIWIL4	C	1943	A	1.77E-05	0.71(0.61,0.83)	2.01E-03	0.74(0.61,0.89)	1.14E-02	0.73(0.57,0.93)	5.95E-02	0.62(0.38,1.02)
rs2155100	11	93961046	PIWIL4	T	1943	A	1.77E-05	0.71(0.61,0.83)	1.98E-03	0.74(0.61,0.89)	1.16E-02	0.73(0.57,0.93)	5.99E-02	0.62(0.38,1.02)
rs482757	13	109655824	COL4A1	C	1835	R	1.80E-05	0.49(0.35,0.68)	1.05E-04	0.44(0.29,0.66)	3.53E-02	0.57(0.34,0.95)		
rs677877	13	109655896	COL4A1	A	1835	R	1.80E-05	0.49(0.35,0.68)	1.06E-04	0.44(0.29,0.66)	3.53E-02	0.57(0.34,0.95)		
rs645098	13	109654272	COL4A1	C	1808	R	1.80E-05	0.48(0.34,0.67)	8.98E-05	0.42(0.27,0.65)	4.13E-02	0.56(0.33,0.97)		
rs10831244	11	93954955	PIWIL4	A	1948	A	1.84E-05	0.71(0.61,0.83)	2.05E-03	0.74(0.61,0.89)	1.14E-02	0.73(0.57,0.93)	5.97E-02	0.62(0.38,1.02)
rs538390	13	109653678	COL4A1	G	1806	R	1.84E-05	0.48(0.34,0.67)	9.14E-05	0.42(0.27,0.65)	4.13E-02	0.56(0.33,0.97)		
rs2786113	1	195570704	CRB1	T	1835	R	1.87E-05	2.09(1.5,2.91)	4.26E-04	2.12(1.4,3.21)	1.08E-02	2.04(1.19,3.52)		
rs6681441	1	41870908	HIVEP3	G	1937	D	1.90E-05	0.59(0.47,0.74)	3.24E-03	0.64(0.48,0.86)	9.68E-03	0.61(0.43,0.88)	3.43E-02	0.44(0.2,0.94)
rs2567957	4	172126198		G	1926	A	1.94E-05	0.73(0.63,0.84)	7.53E-05	0.69(0.57,0.83)	1.97E-01	0.85(0.66,1.08)	4.05E-02	0.61(0.38,0.98)
rs2821131	1	195569025	CRB1	T	1822	R	1.99E-05	2.09(1.5,2.91)	4.55E-04	2.12(1.4,3.21)	1.07E-02	2.04(1.19,3.52)		
rs7153562	14	50301048	NIN	C	1816	A	2.02E-05	1.46(1.23,1.74)	6.72E-05	1.58(1.26,1.97)	5.36E-02	1.32(1,1.75)		
rs12832769	12	124576288	TMEM132B	T	1757	R	2.06E-05	2.66(1.74,4.07)	1.60E-02	1.97(1.15,3.38)	7.09E-05	3.97(2.02,7.8)		
rs11058220	12	124574011	TMEM132B	A	1844	R	2.13E-05	2.55(1.7,3.84)	1.32E-02	1.97(1.16,3.32)	1.16E-04	3.58(1.88,6.81)		
rs10789405	1	41874549	HIVEP3	C	1954	D	2.13E-05	0.59(0.47,0.75)	3.87E-03	0.65(0.49,0.87)	8.29E-03	0.61(0.42,0.88)	3.74E-02	0.44(0.2,0.95)
rs6892303	5	11211453	CTNND2	C	1794	R	2.23E-05	0.54(0.41,0.7)	8.38E-03	0.63(0.45,0.88)	2.56E-04	0.43(0.28,0.68)		

rs13126363	4	172155964		A	1902	A	2.24E-05	0.72(0.61,0.84)	2.38E-04	0.68(0.56,0.84)	4.67E-02	0.76(0.58,0.99)	2.27E-01	0.72(0.42,1.22)
rs2023916	5	11214237	CTNND2	C	1778	R	2.24E-05	0.49(0.36,0.68)	1.84E-03	0.52(0.35,0.78)	2.44E-03	0.46(0.28,0.76)		
rs11210503	1	41873721	HIVEP3	A	1985	D	2.26E-05	0.59(0.47,0.75)	3.94E-03	0.65(0.49,0.87)	8.65E-03	0.61(0.42,0.88)	3.65E-02	0.44(0.2,0.95)
rs498619	9	29622345		G	1764	R	2.28E-05	2.74(1.75,4.3)	7.20E-03	2.34(1.27,4.31)	4.25E-04	3.34(1.72,6.51)		
rs1978156	5	11214625	CTNND2	T	1778	R	2.33E-05	0.49(0.36,0.68)	1.82E-03	0.52(0.35,0.78)	2.62E-03	0.46(0.28,0.76)		
rs12358982	10	105844319		G	1834	A	2.38E-05	0.67(0.56,0.8)	3.27E-04	0.65(0.51,0.82)	1.77E-02	0.7(0.52,0.94)		
rs17407659	12	24129277	SOX5	T	1764	D	2.50E-05	0.55(0.41,0.72)	1.40E-03	0.55(0.38,0.79)	4.16E-03	0.54(0.35,0.82)		
rs1267216	11	93973522	PIWIL4	A	1964	A	2.55E-05	0.72(0.62,0.83)	3.46E-03	0.75(0.62,0.91)	1.01E-02	0.73(0.57,0.92)	4.58E-02	0.6(0.36,0.99)
rs569057	18	64224850		A	1966	A	2.57E-05	1.43(1.23,1.67)	8.64E-03	1.31(1.08,1.6)	6.93E-03	1.41(1.1,1.8)	1.23E-02	1.9(1.15,3.12)
rs12814129	12	124576151	TMEM132B	C	1740	R	2.64E-05	2.73(1.76,4.22)	2.51E-02	1.91(1.1,3.32)	4.15E-05	4.37(2.16,8.81)		
rs1764786	1	195567119	CRB1	A	1811	R	2.65E-05	2.07(1.48,2.89)	6.02E-04	2.09(1.38,3.18)	1.09E-02	2.04(1.19,3.52)		
rs13121066	4	172109073		A	1941	A	2.67E-05	0.72(0.62,0.84)	1.97E-04	0.7(0.58,0.84)	1.55E-01	0.83(0.64,1.07)	3.82E-02	0.61(0.38,0.97)
rs13128132	4	172115877		A	1941	A	2.67E-05	0.72(0.62,0.84)	1.97E-04	0.7(0.58,0.84)	1.55E-01	0.83(0.64,1.07)	3.82E-02	0.61(0.38,0.97)
rs1560560	4	172117155		C	1945	A	2.67E-05	0.72(0.62,0.84)	1.96E-04	0.7(0.58,0.84)	1.56E-01	0.83(0.64,1.07)	3.82E-02	0.61(0.38,0.97)
rs6715141	2	188331398		C	1836	A	2.70E-05	0.66(0.55,0.79)	8.55E-03	0.73(0.58,0.92)	3.49E-04	0.57(0.42,0.78)		
rs6572695	14	50302085	NIN	C	1823	A	2.70E-05	1.45(1.22,1.73)	1.26E-04	1.55(1.24,1.93)	4.41E-02	1.34(1.01,1.78)		
rs1615444	1	195565938	CRB1	C	1807	R	2.72E-05	2.07(1.48,2.89)	6.28E-04	2.09(1.38,3.17)	1.08E-02	2.05(1.19,3.52)		
rs580067	1	195564996	CRB1	T	1804	R	2.77E-05	2.07(1.48,2.88)	6.54E-04	2.08(1.37,3.16)	1.06E-02	2.05(1.19,3.52)		
rs512195	18	64226458		T	1956	A	2.82E-05	1.43(1.23,1.67)	9.45E-03	1.31(1.07,1.59)	6.94E-03	1.41(1.1,1.8)	1.24E-02	1.9(1.15,3.12)
rs10460550	2	53641781		C	1762	A	2.86E-05	0.64(0.52,0.78)	7.66E-03	0.71(0.55,0.91)	5.22E-04	0.56(0.41,0.78)		
rs550098	1	195564031	CRB1	A	1803	R	2.87E-05	2.07(1.48,2.88)	6.61E-04	2.08(1.37,3.16)	1.08E-02	2.05(1.19,3.52)		
rs7566120	2	53649671		A	1789	A	2.92E-05	0.67(0.57,0.8)	7.46E-03	0.73(0.58,0.91)	5.37E-04	0.61(0.47,0.81)		
rs2349872	2	188308550		G	1848	D	3.06E-05	0.62(0.51,0.77)	5.45E-03	0.68(0.52,0.89)	8.58E-04	0.56(0.4,0.79)		
rs10137294	14	50331422	NIN	C	1760	A	3.08E-05	1.59(1.28,1.97)	3.17E-04	1.67(1.27,2.21)	2.26E-02	1.49(1.06,2.09)		
rs6748449	2	188328927		T	1838	A	3.13E-05	0.66(0.55,0.79)	8.75E-03	0.73(0.58,0.92)	4.15E-04	0.58(0.43,0.78)		
rs718349	2	53644591		T	1752	A	3.33E-05	0.67(0.56,0.8)	9.42E-03	0.73(0.58,0.92)	4.09E-04	0.6(0.45,0.79)		
rs13032640	2	188326395		G	1843	D	3.33E-05	0.63(0.51,0.77)	6.01E-03	0.68(0.52,0.89)	8.34E-04	0.56(0.4,0.78)		
rs2567959	4	172122862		A	1987	A	3.40E-05	0.74(0.64,0.85)	1.11E-04	0.69(0.58,0.83)	2.05E-01	0.85(0.66,1.08)	6.11E-02	0.64(0.4,1.02)
rs970431	4	172118367		C	1987	A	3.40E-05	0.74(0.64,0.85)	1.11E-04	0.69(0.58,0.83)	2.05E-01	0.85(0.66,1.08)	6.11E-02	0.64(0.4,1.02)
rs2567965	4	172119896		T	1987	A	3.42E-05	0.74(0.64,0.85)	1.11E-04	0.69(0.58,0.83)	2.06E-01	0.85(0.66,1.08)	6.11E-02	0.64(0.4,1.02)
rs970432	4	172118096		C	1987	A	3.42E-05	0.74(0.64,0.85)	1.11E-04	0.69(0.58,0.83)	2.06E-01	0.85(0.66,1.08)	6.11E-02	0.64(0.4,1.02)
rs970430	4	172118447		C	1987	A	3.42E-05	0.74(0.64,0.85)	1.11E-04	0.69(0.58,0.83)	2.06E-01	0.85(0.66,1.08)	6.11E-02	0.64(0.4,1.02)
rs2719791	20	8215739	PLCB1	T	1819	R	3.43E-05	2.35(1.61,3.43)	1.06E-02	1.84(1.16,2.91)	3.34E-04	3.23(1.71,6.11)		
rs4667192	2	188325223		T	1843	D	3.43E-05	0.63(0.51,0.77)	6.12E-03	0.68(0.52,0.89)	8.45E-04	0.56(0.4,0.78)		
rs2860282	8	70772643	SLCO5A1	C	1850	D	3.45E-05	1.98(1.45,2.71)	1.44E-03	1.93(1.29,2.88)	5.73E-03	2.05(1.24,3.4)		
rs2933054	8	70779354	SLCO5A1	G	1850	D	3.45E-05	1.98(1.45,2.71)	1.44E-03	1.93(1.29,2.87)	5.74E-03	2.05(1.24,3.4)		

rs2959579	8	70779187	SLCO5A1	A	1850	D	3.45E-05	1.98(1.45,2.71)	1.44E-03	1.93(1.29,2.87)	5.74E-03	2.05(1.24,3.4)		
rs1223314	4	172116697		A	1947	A	3.47E-05	0.73(0.63,0.85)	1.12E-04	0.69(0.58,0.83)	2.18E-01	0.85(0.66,1.09)	6.27E-02	0.64(0.4,1.02)
rs1402145	2	188309956		C	1845	A	3.49E-05	0.66(0.55,0.8)	8.55E-03	0.73(0.58,0.92)	5.00E-04	0.58(0.43,0.79)		
rs13122956	4	172109229		T	1933	A	3.50E-05	0.74(0.63,0.85)	1.11E-04	0.69(0.58,0.83)	2.18E-01	0.85(0.66,1.09)	6.27E-02	0.64(0.4,1.02)
rs6856523	4	172106310		C	1945	A	3.52E-05	0.73(0.63,0.85)	1.13E-04	0.69(0.58,0.83)	2.18E-01	0.85(0.66,1.09)	6.27E-02	0.64(0.4,1.02)
rs13250976	8	73942706	KCNB2	A	1996	D	3.52E-05	1.58(1.28,1.95)	6.30E-03	1.45(1.12,1.89)	4.72E-03	1.64(1.17,2.29)	9.02E-02	1.83(0.91,3.67)
rs6831331	4	172106220		T	1945	A	3.52E-05	0.73(0.63,0.85)	1.13E-04	0.69(0.58,0.83)	2.18E-01	0.85(0.66,1.09)	6.27E-02	0.64(0.4,1.02)
rs559131	18	64228794		T	1978	A	3.54E-05	1.43(1.22,1.66)	1.02E-02	1.3(1.07,1.59)	7.98E-03	1.4(1.1,1.8)	1.23E-02	1.9(1.15,3.12)
rs930466	9	118565661	ASTN2	T	1847	R	3.57E-05	1.96(1.41,2.71)	1.94E-05	2.46(1.63,3.71)	1.81E-01	1.45(0.86,2.45)		
rs17186473	4	172126040		T	1988	A	3.60E-05	0.74(0.64,0.85)	1.11E-04	0.69(0.58,0.83)	2.13E-01	0.85(0.67,1.09)	6.12E-02	0.64(0.4,1.02)
rs1402144	2	188315648		A	1849	D	3.64E-05	0.63(0.51,0.77)	6.33E-03	0.69(0.52,0.89)	8.58E-04	0.56(0.4,0.79)		
rs11591291	10	105819482	COL17A1	A	1824	A	3.71E-05	0.68(0.56,0.81)	4.76E-04	0.66(0.52,0.83)	1.94E-02	0.7(0.53,0.94)		
rs1546445	4	172158105		A	1968	A	3.74E-05	0.73(0.63,0.85)	1.55E-04	0.7(0.58,0.84)	1.97E-01	0.85(0.66,1.08)	4.94E-02	0.62(0.39,1)
rs10759854	9	118562266	ASTN2	C	1836	R	3.76E-05	1.95(1.41,2.69)	1.93E-05	2.45(1.63,3.69)	1.91E-01	1.44(0.85,2.43)		
rs2274107	10	105828693	COL17A1	A	1835	A	3.77E-05	0.68(0.56,0.81)	5.32E-04	0.66(0.52,0.83)	1.78E-02	0.7(0.52,0.94)		
rs2056117	4	12619190		T	1892	A	3.79E-05	0.74(0.63,0.86)	3.55E-05	0.66(0.54,0.8)	2.07E-01	0.84(0.64,1.09)	3.24E-01	0.79(0.49,1.26)
rs13145748	4	179340295		A	1948	D	3.84E-05	0.63(0.5,0.78)	6.74E-04	0.61(0.46,0.81)	4.65E-02	0.68(0.47,0.99)	1.27E-01	0.57(0.28,1.16)
rs1520477	2	188319285		C	1846	A	3.94E-05	0.66(0.55,0.8)	9.52E-03	0.73(0.58,0.92)	4.93E-04	0.58(0.43,0.79)		
rs8097533	18	64215820		G	1981	A	3.94E-05	1.42(1.22,1.65)	1.22E-02	1.29(1.06,1.57)	7.25E-03	1.4(1.1,1.78)	1.23E-02	1.9(1.15,3.13)
rs9288147	2	188317982		G	1836	D	4.00E-05	0.62(0.5,0.77)	1.14E-02	0.7(0.53,0.92)	3.78E-04	0.53(0.38,0.75)		
rs1368005	4	172102070		T	1879	A	4.10E-05	0.73(0.62,0.85)	3.56E-04	0.69(0.57,0.85)	5.24E-02	0.76(0.58,1)	2.74E-01	0.74(0.44,1.25)
rs1508508	4	172172919		C	1971	A	4.18E-05	0.74(0.64,0.85)	1.71E-04	0.7(0.58,0.84)	1.91E-01	0.84(0.66,1.08)	5.73E-02	0.63(0.4,1.01)
rs2219449	4	179341091		G	1952	D	4.30E-05	0.63(0.5,0.79)	5.87E-04	0.6(0.46,0.8)	5.76E-02	0.69(0.48,1)	1.28E-01	0.58(0.28,1.16)
rs7241738	18	64236778		T	1978	A	4.35E-05	1.42(1.22,1.66)	1.21E-02	1.3(1.06,1.58)	8.01E-03	1.4(1.1,1.8)	1.23E-02	1.9(1.15,3.12)
rs13110811	4	172220343		T	1773	A	4.35E-05	0.71(0.61,0.84)	3.26E-04	0.69(0.57,0.84)	3.15E-02	0.74(0.56,0.97)		
rs2933060	8	70770795	SLCO5A1	A	1849	D	4.40E-05	1.97(1.44,2.7)	1.82E-03	1.91(1.28,2.85)	5.74E-03	2.05(1.24,3.39)		
rs10969287	9	29604435		G	1851	R	4.44E-05	3.12(1.86,5.25)	1.18E-02	2.46(1.24,4.88)	4.09E-04	4.26(1.92,9.48)		
rs10885193	10	113219570		T	1939	A	4.45E-05	1.36(1.17,1.59)	3.64E-04	1.42(1.17,1.72)	8.60E-02	1.25(0.97,1.59)	1.17E-01	1.48(0.91,2.42)
rs17485232	12	24106293	SOX5	C	1974	D	4.47E-05	0.6(0.47,0.78)	1.88E-03	0.57(0.41,0.81)	3.44E-03	0.53(0.35,0.81)	8.33E-01	0.91(0.42,1.98)
rs4963565	12	24105525	SOX5	G	1975	D	4.51E-05	0.6(0.47,0.78)	1.87E-03	0.57(0.4,0.81)	3.50E-03	0.53(0.35,0.81)	8.32E-01	0.91(0.42,1.98)
rs12810574	12	24105932	SOX5	T	1975	D	4.52E-05	0.6(0.47,0.78)	1.88E-03	0.57(0.41,0.81)	3.49E-03	0.53(0.35,0.81)	8.30E-01	0.91(0.42,1.98)
rs4963564	12	24105317	SOX5	T	1975	D	4.56E-05	0.6(0.47,0.78)	1.88E-03	0.57(0.41,0.81)	3.49E-03	0.53(0.35,0.81)	8.38E-01	0.91(0.42,1.98)
rs1878241	10	113217538		T	1899	A	4.59E-05	1.38(1.18,1.61)	4.70E-04	1.42(1.17,1.72)	9.82E-02	1.24(0.97,1.59)	6.38E-02	1.6(0.98,2.62)
rs1764623	1	195554931	CRB1	G	1851	R	4.64E-05	1.99(1.44,2.74)	1.51E-03	1.96(1.3,2.95)	7.58E-03	2.03(1.21,3.39)		
rs10759855	9	118568299	ASTN2	A	1846	R	4.64E-05	1.94(1.4,2.68)	2.06E-05	2.46(1.63,3.72)	2.08E-01	1.42(0.84,2.39)		
rs1878244	10	113216808		G	1902	A	4.66E-05	1.38(1.18,1.6)	4.69E-04	1.42(1.17,1.72)	9.97E-02	1.24(0.97,1.59)	6.33E-02	1.6(0.98,2.62)

rs13264816	8	73940417	KCNB2	T	1971	D	4.68E-05	1.57(1.27,1.94)	5.57E-03	1.46(1.12,1.91)	7.46E-03	1.61(1.14,2.27)	9.54E-02	1.82(0.91,3.65)
rs7816119	8	73942565	KCNB2	G	1968	D	4.69E-05	1.57(1.27,1.94)	8.19E-03	1.45(1.11,1.89)	4.77E-03	1.63(1.17,2.29)	9.15E-02	1.83(0.91,3.67)
rs11058222	12	124574307	TMEM132B	G	1784	R	4.76E-05	2.52(1.65,3.83)	2.85E-02	1.88(1.08,3.27)	9.70E-05	3.64(1.91,6.94)		
rs943374	1	41828781	HIVEP3	A	1973	A	4.78E-05	0.73(0.63,0.85)	3.22E-04	0.7(0.58,0.85)	1.52E-01	0.83(0.65,1.06)	4.42E-02	0.59(0.36,0.98)
rs11675507	2	188303243		A	1836	D	4.81E-05	0.63(0.51,0.78)	7.64E-03	0.69(0.53,0.9)	9.35E-04	0.56(0.4,0.79)		
rs482526	1	195535386	CRB1	A	1852	R	5.07E-05	1.98(1.44,2.73)	1.65E-03	1.95(1.29,2.93)	7.58E-03	2.03(1.21,3.39)		
rs664767	1	195546918	CRB1	A	1852	R	5.07E-05	1.98(1.44,2.73)	1.65E-03	1.95(1.29,2.93)	7.58E-03	2.03(1.21,3.39)		
rs17324385	8	131888626	ADCY8	C	1823	A	5.15E-05	0.7(0.59,0.82)	2.03E-03	0.71(0.57,0.88)	6.09E-03	0.68(0.51,0.89)		
rs7966098	12	94962773		G	1966	A	5.25E-05	1.33(1.15,1.54)	3.61E-04	1.41(1.17,1.7)	4.43E-02	1.28(1.01,1.63)	4.35E-01	1.22(0.75,1.98)
rs6137286	20	21127752	PLK1S1	T	1987	A	5.36E-05	0.7(0.61,0.82)	4.43E-03	0.75(0.62,0.91)	6.93E-02	0.79(0.62,1.01)	1.51E-03	0.45(0.28,0.74)
rs7080157	10	6552566	PRKCQ	A	1779	D	5.56E-05	1.61(1.28,2.01)	1.57E-03	1.58(1.2,2.1)	8.79E-03	1.64(1.14,2.36)		
rs930465	9	118565286	ASTN2	T	1846	R	5.61E-05	1.92(1.39,2.65)	2.63E-05	2.42(1.61,3.64)	2.08E-01	1.42(0.84,2.39)		
rs1010444	18	64208012		C	2000	A	5.70E-05	1.41(1.21,1.64)	1.72E-02	1.28(1.05,1.56)	6.80E-03	1.4(1.1,1.78)	1.22E-02	1.9(1.15,3.12)
rs17202895	6	1388800		C	1888	D	5.71E-05	1.57(1.27,1.93)	3.99E-03	1.49(1.14,1.96)	2.19E-02	1.49(1.06,2.09)	4.67E-02	1.97(1.01,3.82)
rs10132785	14	50291422	NIN	C	1805	A	5.73E-05	1.53(1.24,1.9)	4.37E-05	1.76(1.35,2.3)	1.60E-01	1.28(0.92,1.8)		
rs1415214	1	195549808	CRB1	C	1832	R	5.92E-05	1.97(1.43,2.72)	1.25E-03	1.99(1.32,3)	1.21E-02	1.95(1.17,3.27)		
rs2835358	21	36739523		A	1788	D	5.98E-05	0.63(0.51,0.78)	3.56E-03	0.65(0.49,0.87)	3.74E-03	0.6(0.42,0.84)		
rs1502251	4	27135045		G	1819	R	6.10E-05	2.81(1.68,4.68)	5.85E-05	3.82(2,7.3)	1.46E-01	1.87(0.82,4.28)		
rs10762795	10	80075943		A	1956	D	6.15E-05	0.58(0.45,0.75)	4.67E-02	0.7(0.49,0.98)	1.12E-04	0.43(0.28,0.66)	3.29E-01	0.66(0.3,1.49)
rs10472030	5	57347315		T	1761	R	6.24E-05	2.17(1.5,3.14)	1.51E-03	2.15(1.35,3.43)	1.05E-02	2.2(1.21,4)		
rs1815826	11	93946933	PIWIL4	T	1940	A	6.27E-05	0.73(0.63,0.85)	5.15E-03	0.76(0.63,0.92)	1.02E-02	0.72(0.57,0.92)	1.13E-01	0.66(0.4,1.1)
rs1476801	18	64212708		T	1984	A	6.29E-05	1.41(1.21,1.64)	1.74E-02	1.28(1.05,1.55)	7.58E-03	1.4(1.1,1.78)	1.23E-02	1.9(1.15,3.13)
rs441577	6	90648944		C	1819	D	6.32E-05	0.53(0.41,0.7)	3.97E-02	0.69(0.49,0.97)	4.35E-03	0.51(0.32,0.81)	3.20E-03	0.29(0.12,0.66)
rs7971150	12	94958877		A	1989	A	6.46E-05	1.36(1.18,1.58)	2.45E-03	1.34(1.11,1.62)	3.85E-02	1.29(1.02,1.64)	4.76E-02	1.6(1.01,2.55)
rs2913774	5	177672235	COL23A1	C	1789	A	6.48E-05	1.52(1.25,1.85)	7.55E-03	1.42(1.1,1.84)	1.48E-03	1.66(1.22,2.25)		
rs8095325	18	64211971		C	1994	A	6.49E-05	1.41(1.21,1.64)	1.79E-02	1.28(1.05,1.55)	7.54E-03	1.4(1.1,1.78)	1.23E-02	1.9(1.15,3.13)
rs16879459	4	27137622		G	1821	R	6.60E-05	2.8(1.68,4.67)	6.15E-05	3.81(1.99,7.29)	1.48E-01	1.87(0.82,4.25)		
rs9974322	21	36740175		G	1820	D	6.61E-05	0.63(0.51,0.79)	3.56E-03	0.66(0.5,0.87)	4.12E-03	0.6(0.42,0.85)		
rs9971100	10	105816409	COL17A1	C	1823	A	6.63E-05	0.68(0.57,0.82)	8.44E-04	0.67(0.53,0.84)	2.03E-02	0.71(0.53,0.94)		
rs7519983	1	41855956	HIVEP3	G	1957	D	6.75E-05	0.61(0.48,0.77)	5.25E-03	0.64(0.47,0.87)	9.93E-03	0.6(0.41,0.88)	1.28E-01	0.53(0.24,1.19)
rs6817733	4	172177077		T	1895	A	6.75E-05	0.73(0.62,0.85)	3.75E-04	0.69(0.57,0.85)	1.11E-01	0.8(0.61,1.05)	1.47E-01	0.68(0.4,1.14)
rs6137292	20	21143803	PLK1S1	A	1970	A	6.78E-05	0.7(0.6,0.82)	6.45E-03	0.76(0.63,0.92)	6.93E-02	0.79(0.62,1.01)	8.97E-04	0.43(0.26,0.71)
rs1338657	6	102956029		T	1818	R	6.82E-05	0.56(0.42,0.73)	7.84E-03	0.62(0.44,0.88)	1.48E-03	0.49(0.32,0.76)		
rs9953072	18	64211988		C	1995	A	6.85E-05	1.41(1.21,1.64)	1.86E-02	1.27(1.05,1.55)	7.54E-03	1.4(1.1,1.78)	1.23E-02	1.9(1.15,3.13)
rs10890151	1	41874430	HIVEP3	C	1882	D	6.92E-05	0.6(0.47,0.76)	6.80E-03	0.66(0.49,0.89)	1.50E-02	0.62(0.42,0.91)	4.00E-02	0.43(0.19,0.96)
rs1022337	2	183615031		T	1786	A	6.94E-05	1.45(1.2,1.74)	7.03E-05	1.61(1.28,2.04)	1.40E-01	1.26(0.94,1.69)		

rs1993402	4	27139792		C	1819	R	7.00E-05	2.79(1.67,4.65)	6.80E-05	3.79(1.98,7.26)	1.46E-01	1.87(0.82,4.25)		
rs2933069	8	70765480	SLCO5A1	C	1842	D	7.04E-05	1.96(1.42,2.69)	2.89E-03	1.88(1.25,2.83)	5.72E-03	2.06(1.24,3.42)		
rs2933068	8	70765498	SLCO5A1	G	1842	D	7.07E-05	1.95(1.42,2.69)	2.90E-03	1.88(1.25,2.83)	5.72E-03	2.06(1.24,3.42)		
rs10939164	4	27142444		G	1819	R	7.23E-05	2.78(1.67,4.64)	7.09E-05	3.78(1.97,7.25)	1.46E-01	1.87(0.82,4.23)		
rs10985423	9	123663014	TTLL11,MIR548D 1,MIR548AA1	A	1795	R	7.23E-05	0.47(0.33,0.68)	1.08E-03	0.45(0.28,0.72)	1.72E-02	0.5(0.29,0.88)		
rs11210501	1	41864221	HIVEP3	T	1964	A	7.28E-05	0.74(0.64,0.86)	1.06E-03	0.73(0.61,0.88)	6.40E-02	0.8(0.63,1.01)	9.37E-02	0.65(0.39,1.07)
rs944981	9	118909914	ASTN2	G	1922	D	7.34E-05	0.59(0.46,0.77)	1.17E-03	0.58(0.41,0.8)	4.19E-02	0.63(0.41,0.98)	1.82E-01	0.56(0.25,1.3)
rs10513066	5	11129061	CTNND2	C	1837	A	7.40E-05	0.71(0.6,0.84)	3.53E-03	0.73(0.6,0.9)	4.77E-03	0.68(0.53,0.89)		
rs809220	20	21362037		C	1973	D	7.41E-05	0.63(0.51,0.77)	1.68E-02	0.72(0.55,0.94)	7.94E-03	0.62(0.44,0.88)	1.53E-02	0.43(0.22,0.85)
rs2380563	8	70767626	SLCO5A1	T	1845	D	7.43E-05	1.95(1.42,2.67)	3.03E-03	1.87(1.24,2.81)	5.77E-03	2.05(1.24,3.39)		
rs2887104	12	94959574		A	1977	A	7.57E-05	1.36(1.18,1.57)	2.92E-03	1.34(1.11,1.62)	3.77E-02	1.29(1.02,1.64)	4.82E-02	1.6(1.01,2.54)
rs11210498	1	41850545	HIVEP3	T	1961	D	7.58E-05	0.61(0.48,0.77)	5.87E-03	0.65(0.48,0.88)	9.93E-03	0.6(0.41,0.88)	1.27E-01	0.53(0.24,1.19)
rs3895387	9	139693629	EHMT1	T	1941	D	7.65E-05	0.64(0.51,0.81)	9.76E-04	0.6(0.44,0.81)	2.67E-02	0.65(0.44,0.95)	4.51E-01	0.75(0.37,1.54)
rs11624766	14	50284680	NIN	C	1817	A	7.68E-05	1.5(1.22,1.85)	2.04E-05	1.78(1.37,2.31)	2.87E-01	1.21(0.87,1.69)		
rs4692059	4	25681849		T	1936	A	7.79E-05	0.72(0.63,0.84)	2.02E-02	0.79(0.66,0.96)	5.43E-03	0.71(0.55,0.9)	2.20E-02	0.59(0.38,0.92)
rs2205960	1	171458098		T	1770	R	7.82E-05	2.41(1.59,3.64)	1.17E-02	1.98(1.18,3.32)	1.02E-03	3.08(1.58,5.99)		
rs1984207	1	237792870		G	1971	D	7.85E-05	0.66(0.52,0.83)	2.12E-05	0.54(0.41,0.72)	4.05E-01	0.84(0.58,1.22)	3.18E-01	0.67(0.31,1.45)
rs12406060	1	237787081		C	1979	D	7.87E-05	0.66(0.53,0.83)	2.00E-05	0.54(0.41,0.72)	4.08E-01	0.85(0.59,1.22)	3.24E-01	0.67(0.31,1.45)
rs292263	6	90606211	CASP8AP2	C	1954	D	7.89E-05	0.55(0.42,0.71)	3.39E-02	0.68(0.48,0.96)	4.04E-03	0.51(0.33,0.8)	9.36E-03	0.34(0.15,0.76)
rs2933061	8	70769644	SLCO5A1	A	1848	D	7.91E-05	1.94(1.41,2.66)	3.21E-03	1.86(1.24,2.79)	5.74E-03	2.05(1.24,3.39)		
rs1018967	5	11159572	CTNND2	A	1764	A	7.91E-05	0.71(0.6,0.84)	3.46E-03	0.73(0.59,0.9)	5.29E-03	0.68(0.52,0.89)		
rs4836869	9	123679741	TTLL11,MIR548A A1,MIR548D1	G	1841	R	7.99E-05	0.47(0.33,0.68)	1.19E-03	0.45(0.28,0.73)	1.73E-02	0.5(0.29,0.88)		
rs10121618	9	123679608	TTLL11,MIR548D 1,MIR548AA1	C	1841	R	8.01E-05	0.47(0.33,0.68)	1.21E-03	0.45(0.28,0.73)	1.73E-02	0.5(0.29,0.88)		
rs7316268	12	31358297	FAM60A	C	1760	A	8.06E-05	1.5(1.23,1.82)	1.23E-03	1.51(1.18,1.93)	1.70E-02	1.48(1.08,2.04)		
rs3748438	20	21144089	PLK1S1	G	1972	A	8.09E-05	0.71(0.61,0.82)	6.57E-03	0.76(0.63,0.92)	6.95E-02	0.79(0.62,1.01)	1.50E-03	0.45(0.28,0.74)
rs12591953	15	69787332	THSD4	A	1756	R	8.16E-05	1.85(1.38,2.49)	1.16E-02	1.68(1.13,2.5)	1.10E-03	2.09(1.35,3.24)		
rs7485624	12	20508680	PDE3A	G	1833	D	8.18E-05	0.63(0.51,0.79)	9.12E-03	0.69(0.52,0.91)	1.47E-03	0.57(0.4,0.8)		
rs6819553	4	172177986		T	1900	A	8.30E-05	0.73(0.62,0.86)	3.46E-04	0.69(0.57,0.85)	1.13E-01	0.8(0.61,1.05)	2.10E-01	0.71(0.42,1.2)
rs1863005	7	134704002	CNOT4	A	1994	D	8.31E-05	1.66(1.31,2.11)	2.34E-03	1.63(1.2,2.22)	6.35E-02	1.44(0.99,2.11)	2.97E-02	2.37(1.09,5.12)
rs1321919	9	118287396	ASTN2	A	1922	D	8.43E-05	0.61(0.47,0.78)	9.96E-04	0.59(0.43,0.8)	7.79E-02	0.7(0.47,1.03)	1.03E-01	0.5(0.22,1.14)
rs7863807	9	123665707	TTLL11,MIR548A A1,MIR548D1	G	1833	R	8.47E-05	0.48(0.33,0.68)	1.26E-03	0.46(0.28,0.73)	1.75E-02	0.5(0.29,0.88)		
rs13077992	3	68669012	FAM19A1	A	1848	D	8.50E-05	1.54(1.25,1.9)	3.22E-03	1.5(1.15,1.96)	6.26E-03	1.6(1.15,2.23)		

rs10912694	1	169502847	FMO1	G	1761	D	8.60E-05	0.65(0.53,0.8)	9.56E-04	0.64(0.49,0.83)	2.37E-02	0.67(0.48,0.94)		
rs13253030	8	73976133	KCNB2	T	1848	D	8.70E-05	1.56(1.26,1.93)	6.01E-03	1.46(1.12,1.91)	2.86E-03	1.69(1.2,2.38)		
rs2526401	7	25054861		C	1808	A	8.74E-05	0.73(0.63,0.85)	8.13E-04	0.72(0.59,0.87)	2.77E-02	0.76(0.6,0.97)		
rs6047404	20	21300236	XRN2	A	2000	A	8.77E-05	0.69(0.59,0.81)	9.38E-03	0.76(0.62,0.93)	5.81E-02	0.78(0.6,1)	1.04E-03	0.42(0.25,0.71)
rs4815041	20	21301409	XRN2	A	2000	A	8.79E-05	0.69(0.59,0.81)	9.38E-03	0.76(0.62,0.93)	5.81E-02	0.78(0.6,1)	1.04E-03	0.42(0.25,0.71)
rs17363834	1	41849194	HIVEP3	C	1960	D	8.81E-05	0.61(0.48,0.78)	6.76E-03	0.65(0.48,0.88)	9.96E-03	0.6(0.41,0.88)	1.26E-01	0.53(0.24,1.19)
rs2526404	7	25056222		G	1810	A	8.82E-05	0.74(0.63,0.86)	8.24E-04	0.72(0.59,0.87)	2.76E-02	0.76(0.6,0.97)		
rs4497932	20	21290378	XRN2	T	2000	A	8.84E-05	0.69(0.59,0.81)	9.43E-03	0.76(0.62,0.93)	5.81E-02	0.78(0.6,1)	1.04E-03	0.42(0.25,0.71)
rs6047407	20	21303846	XRN2	A	1999	A	8.87E-05	0.69(0.59,0.81)	9.49E-03	0.76(0.62,0.93)	5.80E-02	0.78(0.6,1)	1.05E-03	0.42(0.25,0.71)
rs3812274	7	134711869	CNOT4	C	1994	D	8.98E-05	1.65(1.3,2.09)	2.47E-03	1.62(1.19,2.21)	6.34E-02	1.44(0.99,2.1)	3.13E-02	2.32(1.08,4.98)
rs6892747	5	177648059	COL23A1	T	1820	D	8.98E-05	1.59(1.27,1.99)	1.93E-03	1.58(1.19,2.1)	1.20E-02	1.6(1.11,2.31)		
rs9322644	6	102855022		C	1814	R	9.23E-05	0.57(0.43,0.74)	5.54E-03	0.61(0.43,0.86)	3.52E-03	0.52(0.33,0.8)		
rs6047414	20	21308528	XRN2	A	1999	A	9.23E-05	0.69(0.59,0.81)	9.65E-03	0.76(0.62,0.93)	5.82E-02	0.77(0.6,1)	1.10E-03	0.43(0.26,0.71)
rs13259257	8	73973407	KCNB2	T	1847	D	9.33E-05	1.56(1.26,1.93)	6.46E-03	1.46(1.12,1.91)	2.82E-03	1.69(1.2,2.39)		
rs7839758	8	73973908	KCNB2	G	1847	D	9.37E-05	1.56(1.26,1.92)	6.46E-03	1.46(1.12,1.91)	2.83E-03	1.69(1.2,2.39)		
rs13255723	8	73976395	KCNB2	C	1849	D	9.42E-05	1.56(1.26,1.92)	6.46E-03	1.46(1.12,1.91)	2.87E-03	1.69(1.2,2.38)		
rs1288692	3	71487960	FOXP1	T	1748	R	9.50E-05	2.19(1.49,3.24)	1.23E-03	2.24(1.38,3.62)	2.02E-02	2.14(1.14,4.04)		
rs9320924	6	123665894	TRDN	T	1800	A	9.57E-05	0.67(0.54,0.81)	1.09E-03	0.66(0.52,0.84)	2.33E-02	0.67(0.48,0.94)		
rs1982036	6	123664286	TRDN	G	1800	A	9.59E-05	0.67(0.54,0.81)	1.09E-03	0.66(0.52,0.84)	2.33E-02	0.67(0.48,0.94)		
rs9283099	6	123669820	TRDN	T	1800	A	9.61E-05	0.67(0.54,0.81)	1.09E-03	0.66(0.52,0.84)	2.33E-02	0.67(0.48,0.94)		
rs9320926	6	123669987	TRDN	C	1801	A	9.62E-05	0.67(0.55,0.81)	1.09E-03	0.66(0.52,0.84)	2.34E-02	0.68(0.48,0.94)		
rs1982035	6	123662950	TRDN	C	1800	A	9.66E-05	0.67(0.54,0.81)	1.10E-03	0.66(0.52,0.84)	2.33E-02	0.67(0.48,0.94)		
rs7860920	9	123673643	TTL11,MIR548A A1,MIR548D1	T	1852	R	9.66E-05	0.48(0.34,0.69)	1.46E-03	0.46(0.29,0.74)	1.73E-02	0.5(0.29,0.88)		
rs1555946	20	21319371		A	1995	A	9.67E-05	0.7(0.59,0.82)	9.65E-03	0.76(0.62,0.93)	5.72E-02	0.77(0.6,1)	1.21E-03	0.43(0.26,0.71)
rs1955926	14	49769618		A	1948	A	9.71E-05	1.39(1.19,1.61)	6.45E-04	1.4(1.16,1.7)	3.42E-01	1.14(0.89,1.46)	3.66E-03	2.05(1.26,3.32)
rs4390017	9	123673532	TTL11,MIR548A A1,MIR548D1	C	1852	R	9.71E-05	0.48(0.34,0.69)	1.47E-03	0.46(0.29,0.74)	1.73E-02	0.5(0.29,0.88)		
rs4370602	9	123672917	TTL11,MIR548A A1,MIR548D1	G	1852	R	9.74E-05	0.48(0.34,0.69)	1.47E-03	0.46(0.29,0.74)	1.73E-02	0.5(0.29,0.88)		
rs10883966	10	105859905		G	1770	A	9.78E-05	0.69(0.57,0.83)	1.65E-03	0.69(0.55,0.87)	1.55E-02	0.69(0.52,0.93)		
rs7343261	20	21246731	XRN2	T	2000	A	9.79E-05	0.7(0.59,0.82)	9.35E-03	0.76(0.62,0.93)	6.44E-02	0.78(0.6,1.01)	1.04E-03	0.42(0.25,0.71)
rs7345973	20	21246732	XRN2	G	2000	A	9.79E-05	0.7(0.59,0.82)	9.35E-03	0.76(0.62,0.93)	6.44E-02	0.78(0.6,1.01)	1.04E-03	0.42(0.25,0.71)
rs4384052	9	123672556	TTL11,MIR548A A1,MIR548D1	C	1852	R	9.79E-05	0.48(0.34,0.69)	1.48E-03	0.46(0.29,0.74)	1.73E-02	0.5(0.29,0.88)		
rs211978	21	17848756	CXADR	A	1995	D	9.83E-05	1.51(1.22,1.86)	2.06E-03	1.53(1.17,2)	2.91E-02	1.47(1.05,2.06)	2.20E-01	1.54(0.78,3.02)

rs4837907	9	123670419	TTL11,MIR548A A1,MIR548D1	C	1852	R	9.84E-05	0.48(0.34,0.69)	1.50E-03	0.46(0.29,0.74)	1.73E-02	0.5(0.29,0.88)		
rs6047377	20	21249477	XRN2	C	2000	A	9.86E-05	0.7(0.59,0.82)	9.35E-03	0.76(0.62,0.93)	6.49E-02	0.78(0.6,1.01)	1.04E-03	0.42(0.25,0.71)
rs4240471	9	123668078	TTL11,MIR548A A1,MIR548D1	T	1852	R	9.89E-05	0.48(0.34,0.69)	1.50E-03	0.46(0.29,0.74)	1.73E-02	0.5(0.29,0.88)		
rs10798304	1	169525266		T	1847	D	9.93E-05	0.66(0.53,0.81)	1.17E-03	0.64(0.49,0.84)	2.22E-02	0.67(0.48,0.94)		
rs12516452	5	55692389		C	1851	A	9.93E-05	1.48(1.22,1.8)	4.08E-04	1.57(1.23,2.01)	5.62E-02	1.36(1,1.87)		
rs9792544	9	123665526	TTL11,MIR548A A1,MIR548D1	A	1852	R	9.93E-05	0.48(0.34,0.69)	1.51E-03	0.46(0.29,0.74)	1.73E-02	0.5(0.29,0.88)		
rs6047396	20	21279541	XRN2	T	1998	A	9.96E-05	0.7(0.59,0.82)	9.35E-03	0.76(0.62,0.93)	6.56E-02	0.78(0.6,1.01)	1.04E-03	0.42(0.25,0.71)
rs7105524	11	93966090	PIWIL4	G	1974	A	9.98E-05	0.73(0.63,0.85)	4.33E-03	0.75(0.62,0.91)	2.78E-02	0.76(0.6,0.97)	7.18E-02	0.63(0.38,1.04)

Supplemental Table S5. Clinical characteristics at time of biopsy of the lupus nephritis and control populations from the European Renal cDNA Cell Band (ERCB) included in the renal HG-U133A mRNA analysis.

SLE Characteristic	Lupus Nephritis N=32	Control N=15	P-value
Gender (number of females:males)	25:7	6:9	
Median age, years (min-max)	33.4 (17-72)	55.3 (27-70)	<0.0001
World Health Organization classification (number in class II, III, IV, V)	8, 10, 12, 2	N/A	
American College of Rheumatology			
Renal disorder (proteinuria), n (%)	32 (100)	0	
Immunologic (anti-dsDNA, antibodies), n (%)	20 (90)*	N/A	
Anti-nuclear antibody, n (%)	29 (93)*	N/A	

N/A: not applicable; *Data were not available for some patients.

Supplemental Table S6. Significant enrichment of genes

From the whole human SNPs database (dbSNP Build 131, containing over 26 million SNPs), 10 sets of 22 random SNPs (same number of SNPs than the number of SNPs listed in the Table 4) were generated. For each SNP in each set, we look if the genes located at +/- 500kb were assessed for their regulation in Glomerular and Tubulo-interstitial compartments of LN patients vs controls (see the Table below). The LN SNPs provided in Table 4 of our manuscript show a higher percentage of significance than the transcripts in proximity to the random SNP sets, consistent with higher degree of transcriptional regulation in these loci.

List #	# of SNPs	# of chr targeted	# of genes in +/- 500 kb (ref. Fig 2)	# of genes having an official gene ID	% of genes regulated in Glom_LN v LD	% of genes regulated in Tub_LN v LD
Table 4	22	-	26	26	53.8%	76.9%
1	22	16	197	86	18.6%	32.6%
2	22	12	354	174	33.9%	41.4%
3	22	14	308	160	26.3%	34.4%
4	22	14	335	156	26.3%	37.2%
5	22	14	296	142	30.3%	38.0%
6	22	12	281	135	36.3%	35.6%
7	22	12	306	135	23.0%	27.4%
8	22	14	409	205	33.7%	42.0%
9	22	13	354	187	25.1%	33.7%
10	22	13	290	135	34.1%	31.1%

Supplemental Table S7. Enrichment of PDGF pathway for regulated transcripts.

The PDGF signaling pathway was significantly enriched for regulated transcripts, ranking in the software algorithm used (Ingenuity) as number 53 based on the p-value assigned by the algorithm (there were 81 pathways with a p-value<0.05). The enrichment P-value is based on the following parameters: 1) the number of genes that participate in that process, and 2) the total number of genes that are known to be associated with that process in the selected reference set (Affymetrix Human HG133A chip). From the LN regulated genes (961) used as input (corresponding to the genes with a q-value<0.05 and a fold-change ≥ 1.5 and ≤ 0.7 for the up-regulated and down-regulated genes respectively), there were 81 pathways giving a p-value<0.05. PDGFRA was ranked as pathway #53 with a p-value of 0.013 and a ratio of 0.152 (12 of 79 molecules). The pathway having the smallest p-value does not necessarily reflect the pathway with the highest number of genes regulated in this pathway. Indeed the ratios of regulated genes to genes in pathway were 0.053 and 0.556 respectively, corresponding to a p-value of 0.024 and 3.8×10^{-4} , respectively. Below is the list of the pathways significantly regulated in human LN glomeruli compared to controls.

Ingenuity Canonical Pathways	p-value	Ratio	Ingenuity Canonical Pathways	p-value	Ratio
1 Cytotoxic T Lymphocyte-mediated Apoptosis of Target Cells	1.0E-07	0.198	42 Macropinocytosis Signaling	7.8E-03	0.158
2 Role of Pattern Recognition Receptors in Recognition of Bacteria and Viruses	4.9E-07	0.230	43 One Carbon Pool by Folate	8.1E-03	0.139
3 B Cell Development	4.9E-06	0.297	44 Crosstalk between Dendritic Cells and Natural Killer Cells	8.3E-03	0.144
4 Allograft Rejection Signaling	6.6E-06	0.143	45 Communication between Innate and Adaptive Immune Cells	8.9E-03	0.110
5 Calcium-induced T Lymphocyte Apoptosis	1.1E-05	0.214	46 ILK Signaling	9.5E-03	0.119
6 CTLA4 Signaling in Cytotoxic T Lymphocytes	1.6E-05	0.194	47 Chemokine Signaling	1.0E-02	0.162
7 Cdc42 Signaling	1.9E-05	0.138	48 Toll-like Receptor Signaling	1.1E-02	0.164
8 Phospholipase C Signaling	2.0E-05	0.135	49 Role of Tissue Factor in Cancer	1.1E-02	0.140
9 Complement System	2.3E-05	0.314	50 Thyroid Cancer Signaling	1.2E-02	0.174
10 Antigen Presentation Pathway	3.2E-05	0.256	51 Fc Epsilon RI Signaling	1.2E-02	0.135
11 Hepatic Fibrosis / Hepatic Stellate Cell Activation	5.0E-05	0.177	52 VDR/RXR Activation	1.2E-02	0.160
12 Nur77 Signaling in T Lymphocytes	5.1E-05	0.206	53 PDGF Signaling	1.3E-02	0.152
13 Role of NFAT in Regulation of the Immune Response	6.6E-05	0.140	54 Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	1.4E-02	0.130
14 Autoimmune Thyroid Disease Signaling	8.3E-05	0.180	55 Prolactin Signaling	1.4E-02	0.150
15 OX40 Signaling Pathway	8.5E-05	0.144	56 FcγRIIB Signaling in B Lymphocytes	1.6E-02	0.136
16 CCR5 Signaling in Macrophages	1.3E-04	0.160	57 Polyamine Regulation in Colon Cancer	1.7E-02	0.172
17 Systemic Lupus Erythematosus Signaling	1.6E-04	0.133	58 Glioma Signaling	1.8E-02	0.125
18 Interferon Signaling	1.9E-04	0.278	59 p70S6K Signaling	1.9E-02	0.123
19 Graft-versus-Host Disease Signaling	1.9E-04	0.220	60 Corticotropin Releasing Hormone Signaling	2.2E-02	0.112
20 Leukocyte Extravasation Signaling	2.2E-04	0.146	61 iCOS-iCOSL Signaling in T Helper Cells	2.2E-02	0.115
21 PKCθ Signaling in T Lymphocytes	2.5E-04	0.141	62 fMLP Signaling in Neutrophils	2.2E-02	0.117
22 Natural Killer Cell Signaling	2.8E-04	0.173	63 NF-κB Signaling	2.3E-02	0.114
23 CD28 Signaling in T Helper Cells	3.3E-04	0.152	64 Starch and Sucrose Metabolism	2.4E-02	0.053
24 Dendritic Cell Maturation	3.8E-04	0.128	65 G Beta Gamma Signaling	2.6E-02	0.111
25 Pathogenesis of Multiple Sclerosis	3.8E-04	0.556	66 Renin-Angiotensin Signaling	2.6E-02	0.121
26 Coagulation System	4.2E-04	0.263	67 Activation of IRF by Cytosolic Pattern Recognition Receptors	2.6E-02	0.139
27 Fcγ Receptor-mediated Phagocytosis in Macrophages and Monocytes	9.8E-04	0.167	68 B Cell Receptor Signaling	2.8E-02	0.115
28 Endothelin-1 Signaling	1.1E-03	0.131	69 IL-4 Signaling	3.2E-02	0.137
29 Intrinsic Prothrombin Activation Pathway	1.2E-03	0.235	70 Tight Junction Signaling	3.4E-02	0.110
30 T Helper Cell Differentiation	1.3E-03	0.181	71 Ceramide Signaling	3.5E-02	0.126
31 IL-8 Signaling	1.8E-03	0.130	72 Aldosterone Signaling in Epithelial Cells	3.7E-02	0.100
32 Tumoricidal Function of Hepatic Natural Killer Cells	2.7E-03	0.292	73 C21-Steroid Hormone Metabolism	3.9E-02	0.059
33 Growth Hormone Signaling	2.8E-03	0.173	74 Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis	4.2E-02	0.090
34 PI3K Signaling in B Lymphocytes	3.0E-03	0.133	75 LPS/L-1 Mediated Inhibition of RXR Function	4.5E-02	0.096
35 Eicosanoid Signaling	3.2E-03	0.145	76 Glycine, Serine and Threonine Metabolism	4.6E-02	0.062
36 Acute Phase Response Signaling	3.5E-03	0.135	77 IL-10 Signaling	4.6E-02	0.128
37 Production of Nitric Oxide and Reactive Oxygen Species in Macrophages	4.0E-03	0.118	78 Erythropoietin Signaling	4.6E-02	0.128
38 Type I Diabetes Mellitus Signaling	4.0E-03	0.140	79 Cell Cycle Regulation by BTG Family Proteins	4.7E-02	0.167
39 Thrombopoietin Signaling	4.5E-03	0.175	80 Virus Entry via Endocytic Pathways	4.9E-02	0.120
40 Primary Immunodeficiency Signaling	4.9E-03	0.143	81 Apoptosis Signaling	4.9E-02	0.125
41 TREM1 Signaling	6.5E-03	0.152			