

Circulating insulin-like growth factor-1 levels and migraine risk: A Mendelian randomization study

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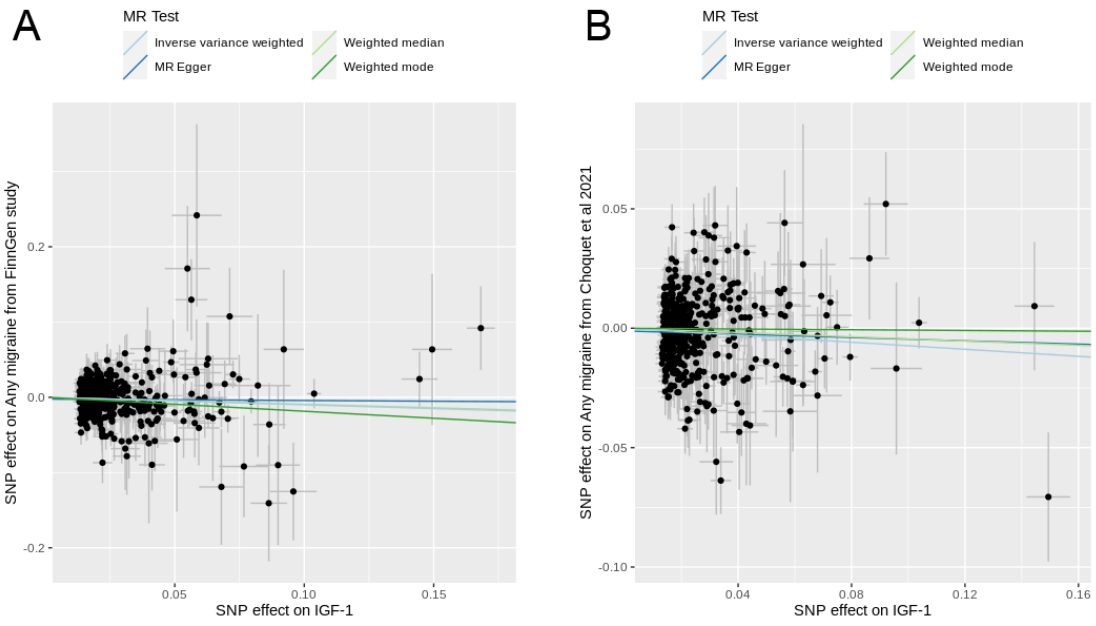
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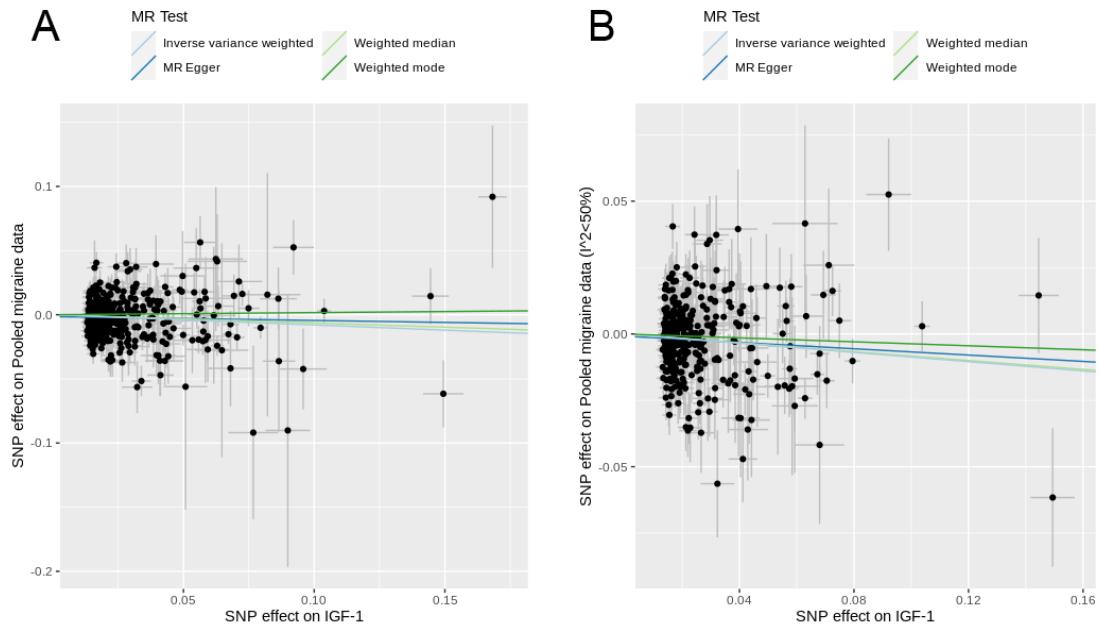
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Supplementary Figure 1 Scatter plots of SNP-exposure and SNP-outcome associations

A: The FinnGen study; B: Choquet et al 2021.

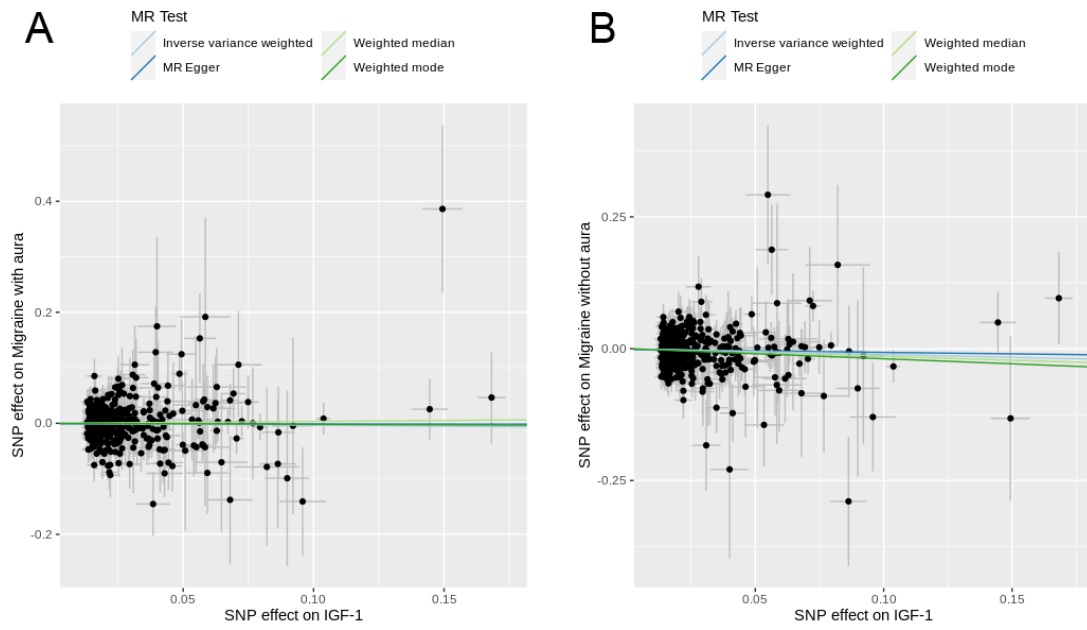
Abbreviations: IGF-1, Insulin-like growth factor-1; MR, Mendelian randomization; SNP, single nucleotide polymorphism.



Supplementary Figure 2 Scatter plots using pooled estimates of two migraine datasets

A: Pooled outcome data; B: Only SNPs with no evidence of heterogeneity were included ($I^2 < 50\%$).

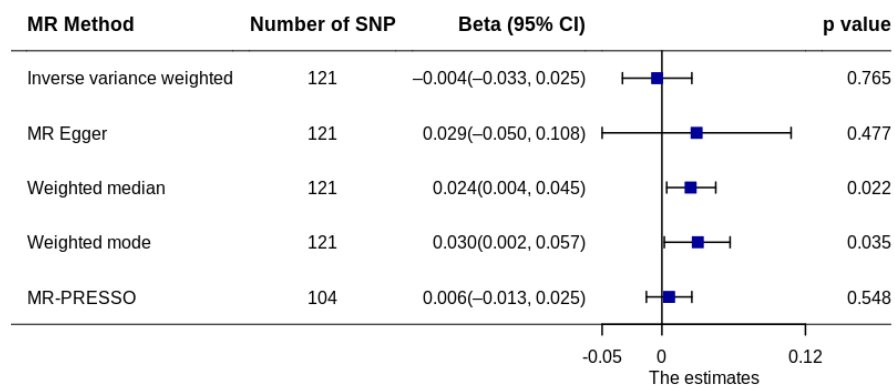
Abbreviations: IGF-1, Insulin-like growth factor-1; MR, Mendelian randomization; SNP, single nucleotide polymorphism.



Supplementary Figure 3 Scatter plots of migraine subtypes

A: migraine with aura; B: migraine without aura.

Abbreviations: IGF-1, Insulin-like growth factor-1; MR, Mendelian randomization; SNP, single nucleotide polymorphism.



Supplementary Figure 4 MR analysis of migraine on IGF-1

Abbreviations: CI, confidence interval; IGF-1, Insulin-like growth factor-1; MR, Mendelian randomization; MR-PRESSO, MR-Pleiotropy Residual Sum and Outlier; SNP, single nucleotide polymorphism.

Supplementary Table 1 Characteristics of candidate genetic instruments

SNP	CHR	POS	EA	OA	MAF	Beta	se	p value	VR	F statistic
rs2460002	1	2119833	G	A	0.3222	0.0158	0.0026	9.16E-10	0.000109	36.9
rs17393144	1	9210262	A	G	0.3137	0.0143	0.0026	3.56E-08	0.000088	30.3
rs12375	1	10596341	T	C	0.3322	0.0168	0.0026	5.42E-11	0.000125	41.8
rs17367504	1	11862778	G	A	0.1630	-0.0205	0.0032	2.34E-10	0.000115	41.0
rs76240114	1	16126026	C	A	0.1769	0.0197	0.0032	5.46E-10	0.000113	37.9
rs1497406	1	16505320	G	A	0.4196	-0.0188	0.0024	7.86E-15	0.000172	61.4
rs4654887	1	21234923	T	C	0.3956	0.0163	0.0024	2.83E-11	0.000127	46.1
rs3218211	1	23835794	G	A	0.4907	-0.0145	0.0024	1.17E-09	0.000105	36.5
rs17163588	1	26450009	T	C	0.1751	0.0306	0.0031	1.76E-22	0.000270	97.4
rs74465889	1	27209439	G	A	0.1611	-0.0343	0.0033	5.57E-26	0.000318	108.0
rs556408	1	29166323	A	C	0.1421	-0.0248	0.0034	3.43E-13	0.000150	53.2
rs2294814	1	40319587	C	A	0.4540	-0.0136	0.0024	1.65E-08	0.000092	32.1
rs1740610	1	41502680	A	C	0.2207	0.0207	0.0029	9.98E-13	0.000147	51.0
rs660899	1	44117006	T	G	0.3473	0.0271	0.0025	7.58E-27	0.000333	117.5
rs2108202	1	44395786	T	C	0.2076	0.0182	0.0029	5.26E-10	0.000109	39.4
rs11208557	1	65423071	C	T	0.1311	0.0248	0.0035	1.32E-12	0.000140	50.2
rs1171265	1	66003252	G	A	0.3557	-0.0169	0.0025	1.19E-11	0.000131	45.7
rs12031253	1	68676649	G	A	0.1883	0.0191	0.0030	3.20E-10	0.000112	40.5
rs12239520	1	91502560	C	T	0.1307	0.0245	0.0035	4.29E-12	0.000136	49.0
rs165316	1	91533297	G	A	0.1981	0.0725	0.0030	2.63E-128	0.001670	584.0
rs983040	1	91623097	T	C	0.2648	0.0210	0.0027	7.16E-15	0.000172	60.5
rs10874746	1	93323971	C	T	0.3447	-0.0176	0.0025	2.30E-12	0.000140	49.6
rs599839	1	109822166	A	G	0.2283	-0.0315	0.0028	1.04E-28	0.000350	126.6
rs78844054	1	153770361	A	G	0.0501	0.0309	0.0056	4.40E-08	0.000091	30.4
rs9427104	1	154589232	T	C	0.4788	-0.0224	0.0024	7.18E-21	0.000250	87.1
rs7535144	1	154965113	T	G	0.0289	-0.0404	0.0067	1.44E-09	0.000092	36.4
rs77369503	1	163027266	A	G	0.0332	-0.0462	0.0068	9.08E-12	0.000137	46.2
rs2072758	1	174525917	T	C	0.1097	0.0221	0.0038	6.74E-09	0.000095	33.8
rs10913189	1	176473979	C	T	0.0643	-0.0266	0.0048	2.28E-08	0.000085	30.7
rs77281709	1	176501831	T	C	0.0484	0.0444	0.0057	4.96E-15	0.000182	60.7
rs11806613	1	176535138	G	A	0.1593	0.0680	0.0033	1.32E-96	0.001239	424.6
rs6425558	1	179417347	T	C	0.2129	-0.0202	0.0029	3.54E-12	0.000137	48.5
rs2298083	1	183515428	A	G	0.1254	-0.0308	0.0036	8.46E-18	0.000208	73.2
rs708725	1	205744138	T	G	0.4301	-0.0157	0.0024	1.01E-10	0.000121	42.8
rs2488249	1	208000018	C	T	0.3512	-0.0180	0.0025	1.09E-12	0.000148	51.8
rs3958509	1	208301738	C	T	0.4588	0.0165	0.0024	5.17E-12	0.000135	47.3
rs1223801	1	214348141	A	G	0.1634	-0.0226	0.0033	4.01E-12	0.000140	46.9
rs78783655	1	220865963	C	T	0.0438	0.0404	0.0058	4.82E-12	0.000137	48.5
rs61830291	1	221001142	C	A	0.0971	0.0278	0.0042	2.14E-11	0.000135	43.8
rs12141189	1	221053545	C	T	0.2455	-0.0438	0.0028	5.17E-56	0.000711	244.7
rs6663896	1	221668517	C	T	0.3975	-0.0167	0.0024	7.71E-12	0.000134	48.4
rs708108	1	228189855	C	T	0.4032	-0.0143	0.0024	4.63E-09	0.000098	35.5
rs526936	1	234852204	A	G	0.4821	0.0233	0.0024	3.64E-22	0.000271	94.3
rs2802954	1	235015126	C	A	0.2835	-0.0170	0.0027	1.82E-10	0.000117	39.6
rs9782883	1	243892532	G	A	0.1810	-0.0327	0.0031	2.15E-26	0.000317	111.3
rs12623864	2	6421045	A	G	0.4631	0.0150	0.0024	3.42E-10	0.000112	39.1
rs13405775	2	26026986	T	C	0.3376	0.0364	0.0025	2.67E-47	0.000593	212.0
rs28489942	2	27368588	C	T	0.3498	0.0182	0.0025	4.12E-13	0.000151	53.0
rs1260326	2	27730940	C	T	0.3931	0.0629	0.0025	9.60E-145	0.001888	633.0
rs6745881	2	40616451	T	C	0.3407	-0.0139	0.0025	4.12E-08	0.000087	30.9
rs222471	2	42638057	C	T	0.1309	-0.0226	0.0035	1.33E-10	0.000116	41.7
rs3791679	2	56096892	G	A	0.2258	0.0165	0.0029	8.28E-09	0.000095	32.4
rs6756943	2	64926764	A	G	0.3005	0.0213	0.0026	2.19E-16	0.000191	67.1
rs11545482	2	70315987	T	C	0.0209	-0.0899	0.0085	5.52E-26	0.000331	111.9
rs72841131	2	70414741	C	T	0.0647	0.0314	0.0049	1.46E-10	0.000119	41.1
rs4852953	2	73869908	A	G	0.3636	0.0149	0.0025	4.60E-09	0.000103	35.5
rs17041868	2	111894720	C	T	0.0640	0.0279	0.0048	6.56E-09	0.000093	33.8
rs4849181	2	113991970	G	A	0.3616	0.0192	0.0025	1.36E-14	0.000170	59.0
rs17050272	2	121306440	A	G	0.4097	-0.0228	0.0024	1.21E-20	0.000251	90.3
rs17400325	2	178565913	C	T	0.0410	0.0564	0.0062	1.15E-19	0.000250	82.8
rs3731696	2	203431804	G	A	0.1216	-0.0220	0.0036	1.57E-09	0.000103	37.3

rs7607369	2	219279097	G	A	0.4336	0.0189	0.0024	5.81E-15	0.000175	62.0
rs3738951	2	225368321	G	A	0.4471	0.0148	0.0024	7.21E-10	0.000108	38.0
rs17323117	2	230162971	G	A	0.0764	0.0302	0.0045	2.78E-11	0.000129	45.0
rs7590861	2	231034785	C	A	0.3006	-0.0180	0.0026	4.54E-12	0.000136	47.9
rs3771576	2	242388550	C	T	0.2229	0.0166	0.0028	5.88E-09	0.000095	35.1
rs7625680	3	11378069	A	G	0.3637	0.0153	0.0025	6.63E-10	0.000108	37.5
rs4684859	3	12498401	A	G	0.4244	0.0138	0.0024	1.14E-08	0.000093	33.1
rs9854148	3	23331350	A	G	0.3512	-0.0148	0.0025	5.92E-09	0.000100	35.0
rs4678732	3	33212485	A	G	0.3741	0.0167	0.0025	1.16E-11	0.000131	44.6
rs11928797	3	33457493	A	C	0.1171	0.0288	0.0037	1.08E-14	0.000172	60.6
rs13067987	3	42651209	T	C	0.1127	0.0206	0.0037	3.61E-08	0.000085	31.0
rs4082155	3	47125385	A	G	0.4246	0.0190	0.0024	4.41E-15	0.000176	62.7
rs9825535	3	50772664	T	C	0.1473	-0.0210	0.0034	7.34E-10	0.000111	38.1
rs4681968	3	57328867	T	G	0.2076	-0.0167	0.0030	1.73E-08	0.000092	31.0
rs9310077	3	88196644	G	A	0.1553	0.0288	0.0033	1.90E-18	0.000218	76.2
rs3772102	3	98502628	G	T	0.4499	0.0210	0.0024	1.81E-18	0.000218	76.6
rs13088318	3	101242751	G	A	0.3376	0.0286	0.0025	3.07E-29	0.000366	130.9
rs75592719	3	101667708	A	G	0.0525	-0.0315	0.0054	5.51E-09	0.000099	34.0
rs9288851	3	107316938	G	A	0.1773	-0.0233	0.0032	1.72E-13	0.000158	53.0
rs4678144	3	124404399	G	A	0.2002	0.0181	0.0030	1.57E-09	0.000105	36.4
rs645040	3	135926622	T	G	0.2266	0.0380	0.0028	7.51E-41	0.000506	184.2
rs1199333	3	138091701	T	G	0.1829	0.0178	0.0031	8.11E-09	0.000095	33.0
rs55752389	3	138848513	T	C	0.3025	-0.0312	0.0026	4.86E-33	0.000411	144.0
rs6763931	3	141102833	A	G	0.4467	-0.0327	0.0024	4.46E-42	0.000529	185.6
rs6799078	3	141630722	G	A	0.3643	-0.0149	0.0025	1.60E-09	0.000103	35.5
rs73238159	3	142078759	T	C	0.1305	-0.0239	0.0036	2.21E-11	0.000130	44.1
rs5398	3	170715830	A	G	0.2855	0.0197	0.0026	6.60E-14	0.000158	57.4
rs572169	3	172165727	T	C	0.3180	0.0565	0.0026	2.59E-106	0.001385	472.2
rs7614305	3	178912661	A	G	0.1866	-0.0169	0.0030	2.65E-08	0.000087	31.7
rs2193587	3	185990096	T	C	0.2141	-0.0189	0.0029	9.51E-11	0.000120	42.5
rs4452320	3	186381717	G	A	0.2493	0.0184	0.0028	2.49E-11	0.000127	43.2
rs3748034	4	3446091	T	G	0.1412	-0.0220	0.0034	1.45E-10	0.000117	41.9
rs4234798	4	7219933	G	T	0.3841	0.0368	0.0025	4.24E-51	0.000641	216.7
rs9991733	4	39420994	G	A	0.2862	-0.0161	0.0026	1.16E-09	0.000106	38.3
rs3912391	4	39698824	A	G	0.4932	-0.0257	0.0024	9.47E-27	0.000330	114.7
rs28551714	4	45131089	A	G	0.2812	0.0318	0.0027	4.37E-33	0.000409	138.7
rs3775288	4	46391821	G	A	0.1258	-0.0281	0.0036	1.13E-14	0.000174	60.9
rs976002	4	69343287	G	A	0.2477	-0.0349	0.0028	1.80E-36	0.000454	155.4
rs1902023	4	69536084	C	A	0.4753	-0.0259	0.0024	2.15E-27	0.000335	116.5
rs897945	4	83838262	T	G	0.4405	0.0140	0.0024	6.14E-09	0.000097	34.0
rs2280099	4	90035549	G	A	0.1791	0.0256	0.0031	2.78E-16	0.000193	68.2
rs1444922	4	95912221	G	A	0.3755	-0.0138	0.0025	2.00E-08	0.000089	30.5
rs4306959	4	97584985	G	A	0.4624	-0.0143	0.0024	2.51E-09	0.000102	35.5
rs1126673	4	100045616	T	C	0.3025	0.0371	0.0026	9.18E-46	0.000581	203.6
rs1229984	4	100239319	C	T	0.0223	-0.0921	0.0078	3.31E-32	0.000369	139.4
rs28590233	4	106011086	T	C	0.1980	0.0190	0.0030	3.18E-10	0.000115	40.1
rs2667172	4	121749030	C	T	0.3137	0.0187	0.0027	6.79E-12	0.000151	48.0
rs58148580	4	124758773	T	C	0.1091	0.0260	0.0039	1.72E-11	0.000131	44.4
rs6534673	4	129142166	T	C	0.2810	0.0155	0.0027	5.21E-09	0.000097	33.0
rs1492820	4	145650021	A	G	0.4643	-0.0136	0.0024	1.17E-08	0.000092	32.1
rs7697204	4	148980174	T	C	0.2574	0.0234	0.0027	6.54E-18	0.000209	75.1
rs17540470	4	169349568	T	C	0.1829	0.0176	0.0031	1.56E-08	0.000093	32.2
rs13184788	5	39075388	T	C	0.4448	-0.0234	0.0024	2.03E-22	0.000270	95.1
rs62372052	5	42724294	G	A	0.1110	0.0581	0.0039	9.44E-50	0.000666	221.9
rs7723160	5	42860681	G	A	0.2587	0.0198	0.0027	5.72E-13	0.000150	53.8
rs13174925	5	44124113	C	A	0.2766	0.0166	0.0027	4.30E-10	0.000110	37.8
rs271234	5	53075037	A	G	0.1507	0.0182	0.0033	4.62E-08	0.000085	30.4
rs76026733	5	53263963	C	T	0.0536	0.0389	0.0054	4.39E-13	0.000154	51.9
rs7736186	5	58270494	T	C	0.0282	-0.0400	0.0073	4.63E-08	0.000088	30.0
rs11738977	5	59018442	G	A	0.3255	-0.0367	0.0025	2.98E-47	0.000591	215.5
rs13162864	5	59207614	C	A	0.1280	-0.0201	0.0036	1.65E-08	0.000090	31.2
rs185077	5	78331823	C	T	0.4893	0.0147	0.0024	6.92E-10	0.000108	37.5
rs1350437	5	87192117	T	G	0.2475	-0.0159	0.0028	7.43E-09	0.000094	32.2

rs9293511	5	88416354	T	C	0.3851	-0.0237	0.0024	4.19E-22	0.000266	97.5
rs10515337	5	102301368	C	T	0.3163	0.0162	0.0026	5.88E-10	0.000114	38.8
rs4705873	5	132267167	A	G	0.1654	-0.0430	0.0032	2.17E-40	0.000510	180.6
rs35096828	5	133897439	C	T	0.2773	0.0173	0.0027	7.98E-11	0.000120	41.1
rs609385	5	134597267	T	C	0.4308	-0.0206	0.0024	1.25E-17	0.000208	73.7
rs757647	5	137707315	A	G	0.2015	0.0384	0.0029	4.71E-39	0.000474	175.3
rs258775	5	142564823	C	A	0.1727	-0.0254	0.0032	1.17E-15	0.000184	63.0
rs17413389	5	143078627	G	T	0.2475	-0.0177	0.0027	1.13E-10	0.000117	43.0
rs4282339	5	168256240	A	G	0.2068	-0.0562	0.0030	2.06E-80	0.001036	350.9
rs17714046	5	180661980	C	T	0.0466	0.0410	0.0057	5.38E-13	0.000149	51.7
rs9502597	6	7307699	C	T	0.2033	0.0171	0.0030	6.80E-09	0.000095	32.5
rs2296198	6	18399750	C	T	0.2482	0.0161	0.0028	5.06E-09	0.000097	33.1
rs12210951	6	21936868	G	A	0.2794	0.0168	0.0027	4.37E-10	0.000114	38.7
rs7742369	6	34165721	G	A	0.1750	-0.0252	0.0031	6.16E-16	0.000183	66.1
rs1929849	6	35205541	C	T	0.1550	-0.0212	0.0033	8.38E-11	0.000118	41.3
rs2235711	6	38148770	T	C	0.2475	0.0224	0.0027	2.93E-16	0.000187	68.8
rs9471969	6	42906384	T	G	0.2547	-0.0168	0.0027	8.80E-10	0.000107	38.7
rs6905288	6	43758873	A	G	0.4325	0.0176	0.0024	3.28E-13	0.000152	53.8
rs4715332	6	52669185	A	C	0.4277	0.0173	0.0024	1.22E-12	0.000147	52.0
rs9352613	6	79424433	G	A	0.3699	-0.0156	0.0025	3.44E-10	0.000113	38.9
rs6934603	6	87994015	G	A	0.4875	-0.0284	0.0024	9.42E-33	0.000403	140.0
rs499624	6	100087783	T	G	0.3301	-0.0186	0.0026	3.32E-13	0.000153	51.2
rs7759938	6	105378954	T	C	0.3234	0.0140	0.0026	4.97E-08	0.000086	29.0
rs2153960	6	108988184	A	G	0.2877	0.0499	0.0026	8.73E-80	0.001021	368.3
rs1361108	6	126767600	T	C	0.4543	0.0672	0.0024	3.75E-173	0.002239	784.0
rs72961013	6	127529780	A	G	0.0670	0.0307	0.0049	3.11E-10	0.000118	39.3
rs4421216	6	128365434	G	A	0.1820	0.0170	0.0031	4.59E-08	0.000086	30.1
rs4895842	6	129349539	C	T	0.3154	-0.0166	0.0026	1.00E-10	0.000119	40.8
rs9388768	6	130374102	A	C	0.3269	-0.0188	0.0025	1.60E-13	0.000156	56.6
rs9390459	6	147680359	G	A	0.4252	0.0184	0.0024	2.36E-14	0.000165	58.8
rs2234693	6	152163335	C	T	0.4575	0.0254	0.0024	2.10E-26	0.000320	112.0
rs674882	6	153407553	C	T	0.4151	0.0213	0.0024	1.11E-18	0.000220	78.8
rs677830	6	154428666	T	C	0.2537	-0.0238	0.0027	4.23E-18	0.000215	77.7
rs927450	6	160182096	G	A	0.4248	0.0132	0.0024	4.59E-08	0.000085	30.3
rs7750288	6	160400147	G	A	0.2858	0.0245	0.0027	2.30E-20	0.000245	82.3
rs555754	6	160769423	A	G	0.4670	-0.0349	0.0024	1.65E-47	0.000606	211.5
rs504371	6	165724052	A	C	0.3319	0.0139	0.0025	3.80E-08	0.000086	30.9
rs3008049	6	166063617	G	A	0.3186	-0.0152	0.0027	1.10E-08	0.000100	31.7
rs9295315	6	166254991	A	G	0.2428	-0.0174	0.0028	3.56E-10	0.000111	38.6
rs2323034	6	166306809	A	G	0.4325	0.0371	0.0024	1.20E-53	0.000676	239.0
rs7802508	7	1191689	A	G	0.4115	0.0214	0.0024	1.22E-18	0.000222	79.5
rs3889797	7	1877924	C	A	0.4239	-0.0169	0.0024	2.26E-12	0.000139	49.6
rs2533879	7	2859847	A	G	0.3014	0.0205	0.0026	5.23E-15	0.000177	62.2
rs62439737	7	6779810	G	A	0.1536	-0.0402	0.0033	8.26E-35	0.000420	148.4
rs6969690	7	14214561	G	T	0.2167	-0.0253	0.0029	2.04E-18	0.000217	76.1
rs11761979	7	31018138	A	C	0.2352	-0.0200	0.0028	1.92E-12	0.000144	51.0
rs2228078	7	31018852	C	T	0.0150	0.0584	0.0097	1.58E-09	0.000101	36.2
rs62467370	7	32929628	A	C	0.0545	0.0290	0.0053	3.84E-08	0.000087	29.9
rs62460537	7	44936916	G	A	0.0715	-0.0296	0.0047	2.89E-10	0.000116	39.7
rs6958337	7	45764528	C	T	0.0829	0.0345	0.0044	2.70E-15	0.000181	61.5
rs74516857	7	45907939	A	G	0.0543	0.0304	0.0053	8.88E-09	0.000095	32.9
rs11977526	7	46008110	A	G	0.4004	-0.0448	0.0024	6.08E-76	0.000964	348.4
rs116945878	7	46276386	T	C	0.0209	0.0497	0.0085	5.27E-09	0.000101	34.2
rs78546112	7	46329630	T	C	0.0606	-0.0412	0.0050	3.06E-16	0.000193	67.9
rs11979093	7	46501098	A	G	0.1585	0.0574	0.0032	7.14E-71	0.000879	321.8
rs71545944	7	46659170	G	A	0.0195	-0.0549	0.0087	2.64E-10	0.000115	39.8
rs117890478	7	46713054	G	T	0.0150	0.0647	0.0101	1.61E-10	0.000124	41.0
rs35640690	7	46719105	C	T	0.2723	-0.1038	0.0027	1.00E-200	0.004270	1478.0
rs11762356	7	46956047	G	A	0.0248	-0.0534	0.0078	8.52E-12	0.000138	46.9
rs7790734	7	46970040	A	G	0.3138	0.0314	0.0026	5.66E-34	0.000425	145.9
rs2174460	7	55991292	A	G	0.2475	-0.0169	0.0028	1.37E-09	0.000106	36.4
rs13233571	7	72971231	T	C	0.1237	0.0339	0.0036	1.22E-20	0.000249	88.7
rs799157	7	73020301	C	T	0.0434	0.0323	0.0059	4.12E-08	0.000087	30.0

rs2527886	7	99552168	C	T	0.4239	-0.0145	0.0024	2.30E-09	0.000103	36.5
rs13246732	7	113775765	T	C	0.3170	0.0164	0.0026	2.45E-10	0.000116	39.8
rs11556924	7	129663496	T	C	0.3898	-0.0142	0.0025	8.67E-09	0.000096	32.3
rs157934	7	130585492	C	T	0.3054	0.0576	0.0026	2.32E-109	0.001408	490.8
rs2048672	7	130653851	A	C	0.2906	-0.0170	0.0026	8.77E-11	0.000119	42.8
rs273957	7	137600690	T	C	0.3846	-0.0205	0.0025	1.31E-16	0.000199	67.2
rs7811152	7	138238844	A	G	0.4784	0.0163	0.0024	9.16E-12	0.000133	46.1
rs3857873	7	138721901	T	C	0.4950	0.0149	0.0024	7.53E-10	0.000111	38.5
rs7789908	7	150530196	G	T	0.2096	0.0203	0.0030	6.16E-12	0.000137	45.8
rs6982207	8	5551845	A	G	0.2360	0.0163	0.0028	6.39E-09	0.000096	33.9
rs9657541	8	10643164	T	C	0.2048	-0.0203	0.0030	1.66E-11	0.000134	45.8
rs76393968	8	16282937	A	G	0.0161	-0.0585	0.0096	1.13E-09	0.000108	37.1
rs1495741	8	18272881	A	G	0.2210	-0.0268	0.0029	7.56E-21	0.000247	85.4
rs2081687	8	59388565	C	T	0.3365	-0.0250	0.0025	3.76E-23	0.000279	100.0
rs1583164	8	77105970	G	A	0.4041	0.0183	0.0024	6.13E-14	0.000161	58.1
rs6473015	8	78178485	C	A	0.2856	0.0198	0.0026	8.04E-14	0.000160	58.0
rs445036	8	81408409	C	T	0.2884	-0.0204	0.0026	1.39E-14	0.000171	61.6
rs1693551	8	101675584	C	T	0.4611	-0.0155	0.0024	1.17E-10	0.000119	41.7
rs2514843	8	109063434	T	C	0.4590	-0.0136	0.0024	1.36E-08	0.000092	32.1
rs2293889	8	116599199	G	T	0.4335	-0.0220	0.0024	2.15E-19	0.000238	84.0
rs6471133	8	134611160	C	A	0.1984	0.0258	0.0030	4.38E-18	0.000212	74.0
rs68013747	8	135656665	A	G	0.3068	0.0209	0.0026	6.60E-16	0.000186	64.6
rs11136336	8	145007187	A	G	0.3973	0.0166	0.0025	5.35E-11	0.000132	44.1
rs1270231	9	4840877	A	G	0.1131	0.0459	0.0038	5.29E-34	0.000423	145.9
rs75565599	9	4851008	C	A	0.0363	-0.0593	0.0064	1.58E-20	0.000246	85.9
rs9969735	9	4888585	A	C	0.4975	-0.0141	0.0024	3.58E-09	0.000099	34.5
rs72701684	9	5211191	T	G	0.0482	0.0494	0.0057	2.58E-18	0.000224	75.1
rs6475614	9	22153265	C	T	0.3144	-0.0189	0.0026	1.65E-13	0.000154	52.8
rs56324928	9	33933136	C	A	0.2163	0.0206	0.0029	1.30E-12	0.000144	50.5
rs1367628	9	74069700	T	G	0.1803	0.0192	0.0031	5.05E-10	0.000109	38.4
rs4471123	9	86700737	A	G	0.4997	-0.0140	0.0024	4.55E-09	0.000098	34.0
rs6559365	9	92209279	A	G	0.4962	-0.0153	0.0024	3.71E-10	0.000117	40.6
rs9695734	9	96407983	T	C	0.1821	0.0249	0.0031	1.12E-15	0.000185	64.5
rs10512236	9	97630451	T	G	0.0591	-0.0364	0.0050	5.61E-13	0.000147	53.0
rs4743034	9	109632353	A	G	0.2250	0.0220	0.0028	8.81E-15	0.000169	61.7
rs1981268	9	111637331	A	C	0.1148	0.0212	0.0037	1.37E-08	0.000091	32.8
rs28410315	9	119338898	G	A	0.1466	0.0243	0.0033	3.72E-13	0.000148	54.2
rs1129	9	128199873	T	C	0.3677	-0.0220	0.0025	9.66E-19	0.000225	77.4
rs2810490	9	136923118	A	G	0.2838	-0.0152	0.0026	8.98E-09	0.000094	34.2
rs1832007	10	5254847	G	A	0.1551	0.0558	0.0033	1.58E-62	0.000816	285.9
rs2277222	10	13494594	C	T	0.3003	0.0143	0.0026	4.15E-08	0.000086	30.3
rs12769257	10	21736100	C	T	0.1837	-0.0220	0.0031	1.08E-12	0.000145	50.4
rs7899156	10	22822524	A	C	0.3528	0.0154	0.0025	9.46E-10	0.000108	37.9
rs2754369	10	38655478	T	C	0.2330	0.0157	0.0028	3.19E-08	0.000088	31.4
rs7072243	10	50319387	A	G	0.3916	0.0141	0.0024	7.95E-09	0.000095	34.5
rs293281	10	53217522	A	G	0.3313	0.0142	0.0025	1.91E-08	0.000089	32.3
rs1471246	10	62074139	A	G	0.3978	0.0171	0.0024	2.71E-12	0.000140	50.8
rs16926292	10	71149389	C	T	0.0996	-0.0221	0.0040	2.90E-08	0.000088	30.5
rs7079868	10	72020703	A	C	0.0630	0.0299	0.0049	1.14E-09	0.000106	37.2
rs6480781	10	77140707	T	G	0.3917	-0.0143	0.0024	4.49E-09	0.000097	35.5
rs2068888	10	94839642	A	G	0.4489	-0.0240	0.0024	1.39E-23	0.000285	100.0
rs9630085	10	95333063	G	A	0.2006	0.0214	0.0030	4.29E-13	0.000147	50.9
rs116454156	10	95347041	A	G	0.0157	0.0767	0.0095	6.34E-16	0.000182	65.2
rs2274223	10	96066341	G	A	0.2960	-0.0167	0.0026	1.44E-10	0.000116	41.3
rs10509746	10	102656897	C	T	0.4479	0.0258	0.0024	5.23E-27	0.000329	115.6
rs11191424	10	104625886	A	G	0.3269	-0.0153	0.0025	1.92E-09	0.000103	37.5
rs11197593	10	117982741	C	T	0.4628	0.0184	0.0024	2.44E-14	0.000168	58.8
rs6421044	11	1588110	T	C	0.4543	-0.0163	0.0024	9.86E-12	0.000132	46.1
rs7115466	11	2044150	A	G	0.2892	0.0166	0.0026	3.52E-10	0.000113	40.8
rs11042751	11	2149864	C	T	0.2447	0.0705	0.0028	1.64E-138	0.001837	634.0
rs1124699	11	2164990	A	G	0.0765	0.0693	0.0044	2.56E-55	0.000679	248.1
rs10834966	11	3749585	C	A	0.2168	-0.0219	0.0029	6.34E-14	0.000163	57.0
rs12277932	11	8631669	C	T	0.4741	0.0139	0.0025	3.06E-08	0.000096	30.9

rs7947951	11	13356030	G	A	0.3088	0.0189	0.0026	2.53E-13	0.000152	52.8
rs72858774	11	15772442	T	G	0.0787	-0.0290	0.0044	4.66E-11	0.000122	43.4
rs10832918	11	18335684	A	G	0.3710	-0.0211	0.0025	1.31E-17	0.000208	71.2
rs34452566	11	27793470	T	G	0.1986	0.0169	0.0030	2.55E-08	0.000091	31.7
rs12294104	11	30382899	T	C	0.1739	0.0215	0.0032	1.34E-11	0.000133	45.1
rs7120548	11	47662932	C	T	0.3005	-0.0188	0.0026	5.52E-13	0.000149	52.3
rs2047812	11	48162042	G	A	0.1945	-0.0398	0.0030	3.74E-39	0.000496	176.0
rs78089241	11	48214064	G	A	0.0329	0.0423	0.0070	1.75E-09	0.000114	36.5
rs538169	11	59503589	C	T	0.0558	0.0287	0.0051	1.72E-08	0.000087	31.7
rs174550	11	61571478	C	T	0.3454	-0.0201	0.0025	2.07E-15	0.000183	64.6
rs4636677	11	65458994	T	G	0.0627	0.0314	0.0050	2.69E-10	0.000116	39.4
rs56088284	11	66899619	G	A	0.0839	0.0319	0.0044	3.57E-13	0.000156	52.6
rs4980661	11	69306579	A	G	0.4721	0.0142	0.0024	3.14E-09	0.000101	35.0
rs2450136	11	77925273	G	T	0.1635	-0.0223	0.0032	2.52E-12	0.000136	48.6
rs61904289	11	85994731	T	C	0.3084	0.0167	0.0026	1.43E-10	0.000119	41.3
rs11020842	11	94317202	A	G	0.0362	-0.0385	0.0065	3.52E-09	0.000103	35.1
rs11604671	11	113268059	A	G	0.4914	0.0147	0.0024	7.97E-10	0.000108	37.5
rs10892562	11	120221618	G	A	0.3831	0.0164	0.0024	1.90E-11	0.000127	46.7
rs10892919	11	122736571	T	C	0.4332	0.0150	0.0024	5.38E-10	0.000110	39.1
rs11220462	11	126243952	A	G	0.1331	-0.0205	0.0035	6.90E-09	0.000097	34.3
rs2856321	12	11855773	A	G	0.3607	-0.0262	0.0025	5.64E-26	0.000317	109.8
rs56234529	12	31638712	T	C	0.1890	-0.0168	0.0031	4.45E-08	0.000087	29.4
rs6488006	12	31908357	C	T	0.1089	-0.0245	0.0037	4.70E-11	0.000116	43.8
rs118047082	12	31946325	T	C	0.0142	0.0624	0.0104	2.03E-09	0.000109	36.0
rs66550728	12	31948210	G	A	0.1475	0.0551	0.0034	2.74E-59	0.000763	262.6
rs1621686	12	32084875	G	A	0.2935	0.0194	0.0026	9.76E-14	0.000156	55.7
rs11519432	12	34675949	T	C	0.3967	0.0164	0.0025	2.65E-11	0.000129	43.0
rs6582708	12	38851355	C	T	0.0095	0.0629	0.0114	3.41E-08	0.000074	30.4
rs7306229	12	46334832	T	C	0.4959	-0.0150	0.0024	4.23E-10	0.000112	39.1
rs705708	12	56488913	A	G	0.4724	-0.0140	0.0024	5.31E-09	0.000098	34.0
rs2657879	12	56865338	G	A	0.1823	-0.0196	0.0031	2.54E-10	0.000115	40.0
rs78607331	12	57648644	T	C	0.0452	-0.0361	0.0058	5.85E-10	0.000113	38.7
rs812315	12	57993490	A	G	0.2385	0.0165	0.0028	3.78E-09	0.000099	34.7
rs1351394	12	66351826	C	T	0.4914	0.0232	0.0024	3.12E-22	0.000269	93.4
rs7306772	12	89914142	G	T	0.2872	-0.0148	0.0026	2.14E-08	0.000090	32.4
rs2072593	12	93970026	C	T	0.2069	-0.0190	0.0030	1.62E-10	0.000118	40.1
rs4144501	12	94156587	A	G	0.4863	0.0158	0.0024	3.66E-11	0.000125	43.3
rs10777858	12	97792745	T	G	0.4714	-0.0132	0.0024	3.59E-08	0.000087	30.3
rs249624	12	98191847	T	C	0.1671	0.0216	0.0032	1.41E-11	0.000130	45.6
rs78597439	12	102716172	T	C	0.0200	-0.0680	0.0086	3.16E-15	0.000182	62.5
rs11111274	12	102838128	A	G	0.2635	-0.0795	0.0027	7.94E-195	0.002453	867.0
rs79218426	12	102889497	T	C	0.0393	0.0633	0.0059	4.02E-27	0.000303	115.1
rs10860878	12	102963550	T	C	0.4394	-0.0202	0.0024	5.50E-17	0.000201	70.8
rs10745954	12	103483094	G	A	0.4806	0.0159	0.0024	3.25E-11	0.000126	43.9
rs7314285	12	111522026	G	T	0.0679	0.0541	0.0046	1.29E-31	0.000371	138.3
rs11067228	12	115094260	G	A	0.4497	0.0185	0.0024	1.48E-14	0.000169	59.4
rs2460488	12	116187660	A	G	0.1723	-0.0210	0.0032	3.33E-11	0.000126	43.1
rs75938105	12	116261411	T	C	0.0353	0.0442	0.0065	1.50E-11	0.000133	46.2
rs7305618	12	121402932	T	C	0.2291	-0.0237	0.0028	4.35E-17	0.000198	71.6
rs1800574	12	121416864	T	C	0.0291	0.1445	0.0070	5.13E-94	0.001180	426.1
rs11060762	12	123403710	A	C	0.0839	-0.0252	0.0043	4.78E-09	0.000098	34.3
rs9578326	13	21487599	T	G	0.2265	-0.0178	0.0028	3.36E-10	0.000111	40.4
rs76750172	13	28395297	T	C	0.0240	0.0577	0.0079	2.94E-13	0.000156	53.3
rs9549092	13	40754324	C	T	0.1801	0.0399	0.0031	6.87E-38	0.000470	165.7
rs4142110	13	42754522	C	T	0.3847	-0.0143	0.0025	6.34E-09	0.000097	32.7
rs75276039	13	45495991	G	A	0.0316	0.0395	0.0068	5.07E-09	0.000096	33.7
rs9534448	13	47212961	A	G	0.2407	0.0213	0.0028	2.98E-14	0.000166	57.9
rs45604939	13	49775997	G	A	0.0698	-0.0266	0.0047	2.08E-08	0.000092	32.0
rs61957204	13	74084684	A	G	0.0792	0.0295	0.0045	4.44E-11	0.000127	43.0
rs1539182	13	74840527	T	C	0.4576	0.0137	0.0024	1.15E-08	0.000093	32.6
rs9521492	13	110381691	G	A	0.3814	0.0144	0.0025	1.22E-08	0.000098	33.2
rs9577924	13	114545317	G	A	0.2599	0.0193	0.0027	7.55E-13	0.000143	51.1
rs8017377	14	24883887	A	G	0.4756	-0.0160	0.0024	2.22E-11	0.000128	44.4

rs8015400	14	25930988	A	C	0.3207	0.0156	0.0026	2.25E-09	0.000106	36.0
rs33912345	14	60976537	A	C	0.3878	-0.0234	0.0025	2.32E-21	0.000260	87.6
rs36215895	14	64676751	T	C	0.0095	-0.0821	0.0126	6.16E-11	0.000127	42.5
rs4902647	14	69254191	T	C	0.4639	-0.0160	0.0024	1.89E-11	0.000127	44.4
rs8007859	14	69704553	T	G	0.3849	-0.0155	0.0025	3.34E-10	0.000114	38.4
rs887506	14	74219367	G	A	0.3929	-0.0137	0.0024	1.76E-08	0.000090	32.6
rs13379042	14	74250100	C	T	0.2757	-0.0245	0.0028	2.05E-18	0.000240	76.6
rs175012	14	75455810	C	A	0.4659	-0.0173	0.0024	5.45E-13	0.000149	52.0
rs11625365	14	77908588	G	A	0.4695	0.0141	0.0024	4.09E-09	0.000099	34.5
rs10146997	14	79945162	G	A	0.2234	0.0190	0.0029	3.46E-11	0.000125	42.9
rs77004437	14	92793206	T	C	0.0889	0.0266	0.0042	3.11E-10	0.000115	40.1
rs61992606	14	93943998	A	G	0.3111	-0.0214	0.0026	9.77E-17	0.000196	67.7
rs112635299	14	94838142	T	G	0.0211	-0.0616	0.0085	5.31E-13	0.000157	52.5
rs1802710	14	101200645	C	T	0.4836	0.0227	0.0024	2.85E-21	0.000257	89.5
rs17747633	15	40916237	G	A	0.4551	0.0148	0.0024	9.36E-10	0.000109	38.0
rs7165861	15	43423327	A	G	0.3562	-0.0148	0.0025	5.26E-09	0.000100	35.0
rs55707100	15	43820717	T	C	0.0248	-0.1494	0.0077	5.17E-83	0.001080	376.5
rs10459592	15	51536141	G	T	0.4304	-0.0149	0.0025	4.05E-09	0.000109	35.5
rs7178424	15	62380259	T	C	0.4500	-0.0384	0.0024	1.13E-57	0.000730	256.0
rs633275	15	64895319	G	T	0.1119	-0.0229	0.0037	4.62E-10	0.000104	38.3
rs266335	15	67344732	A	G	0.3316	0.0145	0.0025	9.99E-09	0.000093	33.6
rs2033784	15	67449660	G	A	0.2969	-0.0180	0.0026	4.63E-12	0.000135	47.9
rs78049372	15	68429836	T	C	0.0508	-0.0434	0.0056	9.51E-15	0.000182	60.1
rs5742915	15	74336633	C	T	0.4616	0.0255	0.0024	2.86E-26	0.000323	112.9
rs2930313	15	74609378	G	A	0.0774	0.0257	0.0044	4.86E-09	0.000094	34.1
rs2307449	15	89863928	G	T	0.3889	0.0135	0.0024	3.30E-08	0.000087	31.6
rs12900461	15	93552656	T	C	0.1659	0.0194	0.0032	1.31E-09	0.000104	36.8
rs12912439	15	95828705	T	C	0.2981	0.0201	0.0026	1.38E-14	0.000169	59.8
rs8027457	15	99204101	C	T	0.4877	0.0190	0.0024	2.08E-15	0.000180	62.7
rs2684789	15	99492045	A	G	0.4521	-0.0173	0.0024	5.18E-13	0.000148	52.0
rs143076454	16	921179	A	G	0.0187	-0.0712	0.0089	1.50E-15	0.000186	64.0
rs742036	16	960725	A	G	0.3749	0.0205	0.0025	9.04E-17	0.000197	67.2
rs4988483	16	1129010	A	C	0.0573	-0.1682	0.0054	1.00E-200	0.003057	970.2
rs60095937	16	1782964	A	C	0.0160	-0.0958	0.0090	2.10E-26	0.000289	113.3
rs72761177	16	1833508	A	G	0.0905	0.0749	0.0041	2.43E-74	0.000924	333.7
rs344359	16	1838640	C	T	0.1787	0.0420	0.0031	1.05E-40	0.000518	183.6
rs111845910	16	1991014	A	G	0.0727	-0.0373	0.0049	2.25E-14	0.000188	57.9
rs1369924	16	5924291	C	A	0.1864	-0.0294	0.0031	3.28E-21	0.000262	89.9
rs9924441	16	9047198	T	C	0.2521	0.0158	0.0027	7.86E-09	0.000094	34.2
rs11646268	16	10498892	C	T	0.2551	-0.0167	0.0028	1.40E-09	0.000106	35.6
rs6498697	16	17479794	G	A	0.4943	-0.0160	0.0024	2.22E-11	0.000128	44.4
rs7197580	16	19278625	A	G	0.4828	-0.0145	0.0024	1.30E-09	0.000105	36.5
rs12443881	16	28841777	T	C	0.4017	0.0179	0.0025	3.19E-13	0.000154	51.3
rs12447915	16	30089908	T	C	0.4698	0.0175	0.0024	2.20E-13	0.000153	53.2
rs11865038	16	31095171	T	C	0.3842	-0.0322	0.0025	2.24E-39	0.000491	165.9
rs10521222	16	51158710	T	C	0.0481	-0.0315	0.0056	2.24E-08	0.000091	31.6
rs9929277	16	56158718	G	A	0.4425	0.0145	0.0024	1.49E-09	0.000104	36.5
rs60762594	16	69098998	C	T	0.1037	-0.0266	0.0039	9.06E-12	0.000132	46.5
rs62052820	16	69575238	A	G	0.2291	-0.0264	0.0029	2.32E-20	0.000246	82.9
rs11859878	16	81515956	T	C	0.0716	-0.0320	0.0047	8.77E-12	0.000136	46.4
rs4888156	16	81604256	C	T	0.3392	0.0247	0.0025	8.68E-23	0.000274	97.6
rs4889364	16	81719115	A	G	0.2517	-0.0241	0.0028	3.08E-18	0.000219	74.1
rs66720010	16	83979322	G	A	0.3735	-0.0258	0.0025	1.85E-25	0.000312	106.5
rs12453909	17	185338	A	C	0.2104	0.0161	0.0029	3.17E-08	0.000086	30.8
rs4790814	17	1622177	A	G	0.4813	-0.0155	0.0024	8.49E-11	0.000120	41.7
rs35386490	17	7310006	C	T	0.2408	0.0160	0.0029	1.91E-08	0.000094	30.4
rs727428	17	7537792	C	T	0.4434	0.0166	0.0024	4.53E-12	0.000136	47.8
rs2301652	17	15928584	G	T	0.4575	-0.0168	0.0024	2.20E-12	0.000140	49.0
rs4925138	17	17992793	G	T	0.3825	-0.0208	0.0026	1.25E-15	0.000204	64.0
rs1877031	17	37814080	A	G	0.3322	0.0174	0.0025	7.52E-12	0.000134	48.4
rs8070454	17	38160754	T	C	0.3889	-0.0236	0.0025	5.42E-22	0.000265	89.1
rs8068844	17	40571284	C	T	0.3406	-0.0155	0.0025	6.59E-10	0.000108	38.4
rs199448	17	44809001	G	A	0.2146	0.0209	0.0031	1.74E-11	0.000147	45.5

rs8070132	17	57790206	C	T	0.1509	-0.0217	0.0033	6.64E-11	0.000121	43.2
rs2070776	17	62007498	G	A	0.3504	0.0372	0.0025	3.64E-50	0.000630	221.4
rs76708468	17	62206299	C	T	0.0388	0.0865	0.0062	9.53E-44	0.000558	194.6
rs1801689	17	64210580	C	A	0.0299	0.0863	0.0070	1.66E-34	0.000432	152.0
rs77542162	17	67081278	G	A	0.0230	0.0508	0.0083	9.96E-10	0.000116	37.5
rs6501601	17	71124903	A	G	0.3817	-0.0142	0.0025	9.38E-09	0.000095	32.3
rs1135688	17	73827205	C	T	0.3122	-0.0164	0.0026	2.41E-10	0.000116	39.8
rs2040176	18	892467	T	C	0.1424	-0.0214	0.0034	3.63E-10	0.000112	39.6
rs2198557	18	1620210	G	T	0.3030	0.0195	0.0026	9.73E-14	0.000161	56.3
rs4468717	18	3457606	T	C	0.0777	-0.0263	0.0045	5.57E-09	0.000099	34.2
rs34233878	18	42594280	C	T	0.0981	0.0228	0.0041	2.16E-08	0.000092	30.9
rs17487484	18	50723283	G	T	0.4926	-0.0156	0.0024	8.59E-11	0.000122	42.3
rs8099014	18	56109859	A	C	0.2605	0.0180	0.0027	3.05E-11	0.000125	44.4
rs585187	18	58177124	T	G	0.4917	0.0157	0.0024	4.34E-11	0.000123	42.8
rs12454712	18	60845884	C	T	0.3765	-0.0187	0.0025	3.78E-14	0.000164	56.0
rs2717128	18	74987632	G	A	0.1378	-0.0213	0.0035	8.48E-10	0.000108	37.0
rs7227840	18	75164995	T	C	0.3462	-0.0172	0.0025	9.25E-12	0.000134	47.3
rs632616	19	4976335	T	C	0.3140	-0.0384	0.0026	5.54E-51	0.000635	218.1
rs7248104	19	7224431	A	G	0.4148	-0.0133	0.0024	3.84E-08	0.000086	30.7
rs8105174	19	10347032	T	C	0.1878	-0.0486	0.0031	2.64E-56	0.000721	245.8
rs281437	19	10397238	T	C	0.3070	-0.0169	0.0026	5.89E-11	0.000122	42.3
rs12983573	19	10701833	C	T	0.3049	0.0142	0.0026	4.94E-08	0.000085	29.8
rs4804528	19	10886206	T	G	0.4480	-0.0252	0.0024	1.56E-25	0.000314	110.3
rs737337	19	11347493	C	T	0.0761	0.0261	0.0044	2.06E-09	0.000096	35.2
rs7258465	19	18533642	C	T	0.3487	-0.0145	0.0025	6.53E-09	0.000095	33.6
rs6510033	19	30710785	G	A	0.2734	-0.0197	0.0027	1.50E-13	0.000154	53.2
rs7599	19	36038390	G	A	0.3659	-0.0138	0.0025	2.48E-08	0.000088	30.5
rs3810291	19	47569003	A	G	0.3231	-0.0164	0.0026	1.14E-10	0.000118	39.8
rs10426201	19	48384749	A	G	0.1655	-0.0229	0.0032	1.24E-12	0.000145	51.2
rs2287922	19	49232226	A	G	0.4619	-0.0286	0.0024	2.28E-32	0.000407	142.0
rs12975366	19	54759361	C	T	0.3964	-0.0208	0.0024	1.49E-17	0.000207	75.1
rs16988490	20	3335431	C	T	0.2306	0.0190	0.0028	2.08E-11	0.000128	46.0
rs34950733	20	20080775	G	A	0.2600	-0.0432	0.0028	1.22E-52	0.000718	238.0
rs6035613	20	20356386	T	C	0.2548	-0.0212	0.0027	8.78E-15	0.000171	61.7
rs6082354	20	21217976	C	A	0.3333	-0.0425	0.0025	5.30E-63	0.000803	289.0
rs6060043	20	33364584	T	C	0.1838	0.0273	0.0031	9.67E-19	0.000224	77.6
rs1744769	20	35769592	C	T	0.1900	0.0178	0.0031	7.95E-09	0.000098	33.0
rs2207132	20	39142516	A	G	0.0329	-0.0440	0.0068	7.09E-11	0.000123	41.9
rs1997833	20	39690342	C	T	0.2997	0.0166	0.0027	1.40E-09	0.000116	37.8
rs17265513	20	39832628	C	T	0.1993	-0.0211	0.0030	3.45E-12	0.000142	49.5
rs56344540	20	49194444	T	C	0.0821	-0.0397	0.0044	2.46E-19	0.000238	81.4
rs61652170	20	54813718	A	C	0.1953	0.0169	0.0030	1.92E-08	0.000090	31.7
rs34340379	20	54850686	G	T	0.2224	0.0204	0.0029	1.01E-12	0.000144	49.5
rs76602912	20	57459868	C	T	0.0236	-0.0593	0.0080	9.11E-14	0.000162	54.9
rs2738787	20	62328375	G	A	0.0822	-0.0349	0.0044	1.94E-15	0.000184	62.9
rs8121509	20	62712053	C	T	0.4523	0.0252	0.0024	7.42E-26	0.000315	110.3
rs2254446	21	37378153	C	T	0.2723	0.0412	0.0027	7.54E-53	0.000673	232.8
rs11088472	21	40699376	C	A	0.4299	0.0186	0.0024	1.26E-14	0.000170	60.1
rs469390	21	42817930	A	G	0.3897	0.0134	0.0024	4.53E-08	0.000085	31.2
rs1006771	22	24314006	T	G	0.3561	-0.0180	0.0025	5.59E-13	0.000149	51.8
rs3178915	22	29453027	G	A	0.4808	-0.0149	0.0024	3.65E-10	0.000111	38.5
rs16989528	22	32217539	T	C	0.0315	0.0429	0.0071	1.37E-09	0.000112	36.5
rs6000004	22	36180535	G	A	0.1371	0.0264	0.0034	1.84E-14	0.000165	60.3
rs138703	22	39132748	A	G	0.3469	-0.0275	0.0025	4.39E-28	0.000343	121.0
rs202659	22	41811620	C	T	0.2209	0.0295	0.0029	1.01E-24	0.000300	103.5

Abbreviations: EA, effect allele; MAF, minor allele frequency; OA other allele; SNP, single nucleotide polymorphism; VR, variance explained.

Supplementary Table 2 Genetic instruments and their associations with migraine

SNP	CHR	POS	EA	OA	The FinnGen study			Choquet et al 2021		
					Beta	se	p value	Beta	se	p value
rs2460002	1	2119833	G	A	-0.0287	0.0159	0.0703	-0.0114	0.0114	0.3204
rs17393144	1	9210262	A	G	-0.0168	0.0166	0.3120	-0.0265	0.0098	0.0070
rs12375	1	10596341	T	C	0.0136	0.0159	0.3920	-0.0082	0.0095	0.3856
rs17367504	1	11862778	G	A	-0.0304	0.0213	0.1530	-0.0023	0.0122	0.8505
rs76240114	1	16126026	C	A	0.0140	0.0198	0.4800	-0.0149	0.0125	0.2319
rs1497406	1	16505320	G	A	0.0158	0.0161	0.3260	0.0052	0.0093	0.5763
rs4654887	1	21234923	T	C	-0.0123	0.0152	0.4170	-0.0142	0.0092	0.1236
rs3218211	1	23835794	G	A	0.0276	0.0152	0.0690	0.0178	0.0088	0.0423
rs17163588	1	26450009	T	C	-0.0154	0.0208	0.4580	0.0050	0.0116	0.6661
rs74465889	1	27209439	G	A	0.0094	0.0207	0.6510	0.0201	0.0122	0.0999
rs556408	1	29166323	A	C	0.0059	0.0224	0.7940	-0.0023	0.0127	0.8565
rs2294814	1	40319587	C	A	-0.0031	0.0150	0.8370	0.0093	0.0088	0.2911
rs1740610	1	41502680	A	C	-0.0209	0.0181	0.2490	0.0122	0.0109	0.2620
rs660899	1	44117006	T	G	0.0147	0.0156	0.3470	0.0194	0.0093	0.0376
rs2108202	1	44395786	T	C	-0.0118	0.0176	0.5010	0.0084	0.0107	0.4322
rs11208557	1	65423071	C	T	0.0167	0.0171	0.3290	-0.0108	0.0130	0.4079
rs1171265	1	66003252	G	A	-0.0343	0.0150	0.0223	-0.0142	0.0092	0.1242
rs12031253	1	68676649	G	A	-0.0325	0.0206	0.1140	-0.0190	0.0113	0.0937
rs12239520	1	91502560	C	T	0.0141	0.0233	0.5440	-0.0093	0.0131	0.4748
rs165316	1	91533297	G	A	0.0304	0.0183	0.0964	0.0108	0.0112	0.3328
rs983040	1	91623097	T	C	-0.0111	0.0165	0.4990	-0.0011	0.0096	0.9086
rs10874746	1	93323971	C	T	0.0111	0.0156	0.4790	-0.0093	0.0094	0.3182
rs599839	1	109822166	A	G	0.0202	0.0182	0.2660	0.0205	0.0108	0.0581
rs78844054	1	153770361	A	G	-0.0682	0.0549	0.2140	0.0120	0.0213	0.5717
rs9427104	1	154589232	T	C	0.0069	0.0150	0.6480	0.0031	0.0089	0.7273
rs7535144	1	154965113	T	G	-0.0322	0.0564	0.5680	0.0434	0.0242	0.0726
rs77369503	1	163027266	A	G	-0.0019	0.0613	0.9750	0.0130	0.0266	0.6252
rs2072758	1	174525917	T	C	-0.0869	0.0273	0.0015	-0.0225	0.0140	0.1098
rs10913189	1	176473979	C	T	0.0083	0.0448	0.8530	0.0103	0.0176	0.5573
rs77281709	1	176501831	T	C	-0.0117	0.0329	0.7230	-0.0024	0.0220	0.9130
rs11806613	1	176535138	G	A	-0.0192	0.0205	0.3470	-0.0032	0.0121	0.7914
rs6425558	1	179417347	T	C	0.0296	0.0181	0.1030	0.0033	0.0110	0.7639
rs2298083	1	183515428	A	G	-0.0583	0.0240	0.0153	-0.0094	0.0135	0.4849
rs708725	1	205744138	T	G	0.0033	0.0151	0.8250	0.0069	0.0090	0.4460
rs2488249	1	208000018	C	T	0.0001	0.0164	0.9950	-0.0102	0.0096	0.2882
rs3958509	1	208301738	C	T	NA	NA	NA	0.0184	0.0089	0.0380
rs1223801	1	214348141	A	G	-0.0211	0.0200	0.2900	-0.0210	0.0120	0.0795
rs78783655	1	220865963	C	T	-0.0088	0.0413	0.8320	0.0126	0.0222	0.5689
rs61830291	1	221001142	C	A	-0.0037	0.0235	0.8770	-0.0075	0.0156	0.6286
rs12141189	1	221053545	C	T	0.0154	0.0163	0.3440	0.0009	0.0109	0.9341
rs6663896	1	221668517	C	T	0.0019	0.0163	0.9080	-0.0018	0.0089	0.8399
rs708108	1	228189855	C	T	0.0004	0.0165	0.9790	0.0085	0.0092	0.3560
rs526936	1	234852204	A	G	0.0084	0.0150	0.5790	-0.0043	0.0089	0.6275
rs2802954	1	235015126	C	A	-0.0056	0.0155	0.7210	-0.0104	0.0100	0.3004
rs9782883	1	243892532	G	A	0.0069	0.0179	0.7000	0.0109	0.0113	0.3310
rs12623864	2	6421045	A	G	-0.0050	0.0150	0.7410	-0.0048	0.0087	0.5812
rs13405775	2	26026986	T	C	0.0009	0.0179	0.9600	0.0151	0.0094	0.1098
rs28489942	2	27368588	C	T	-0.0134	0.0174	0.4390	-0.0056	0.0095	0.5539
rs1260326	2	27730940	C	T	-0.0254	0.0157	0.1060	-0.0238	0.0090	0.0083
rs6745881	2	40616451	T	C	0.0283	0.0154	0.0661	-0.0110	0.0094	0.2424
rs222471	2	42638057	C	T	-0.0008	0.0220	0.9700	-0.0032	0.0139	0.8173
rs3791679	2	56096892	G	A	-0.0042	0.0180	0.8140	-0.0111	0.0106	0.2949
rs6756943	2	64926764	A	G	-0.0307	0.0176	0.0815	-0.0058	0.0097	0.5478
rs11545482	2	70315987	T	C	0.0902	0.1063	0.3960	NA	NA	NA
rs72841131	2	70414741	C	T	-0.0232	0.0249	0.3530	-0.0026	0.0180	0.8853
rs4852953	2	73869908	A	G	NA	NA	NA	-0.0079	0.0093	0.3918
rs17041868	2	111894720	C	T	0.0199	0.0376	0.5960	-0.0183	0.0179	0.3065
rs4849181	2	113991970	G	A	-0.0301	0.0152	0.0472	-0.0086	0.0092	0.3492
rs17050272	2	121306440	A	G	-0.0159	0.0151	0.2930	0.0015	0.0091	0.8691
rs17400325	2	178565913	C	T	0.1296	0.0540	0.0163	0.0441	0.0221	0.0463
rs3731696	2	203431804	G	A	0.0522	0.0228	0.0221	-0.0102	0.0136	0.4546

rs7607369	2	219279097	G	A	-0.0054	0.0152	0.7220	0.0057	0.0090	0.5266
rs3738951	2	225368321	G	A	0.0038	0.0150	0.8020	-0.0200	0.0088	0.0238
rs17323117	2	230162971	G	A	-0.0049	0.0262	0.8510	0.0061	0.0168	0.7172
rs7590861	2	231034785	C	A	-0.0059	0.0165	0.7210	0.0013	0.0096	0.8923
rs3771576	2	242388550	C	T	-0.0008	0.0176	0.9630	-0.0145	0.0106	0.1715
rs7625680	3	11378069	A	G	0.0141	0.0152	0.3510	0.0173	0.0092	0.0597
rs4684859	3	12498401	A	G	0.0242	0.0150	0.1070	-0.0088	0.0090	0.3281
rs9854148	3	23331350	A	G	0.0156	0.0169	0.3550	0.0019	0.0092	0.8369
rs4678732	3	33212485	A	G	-0.0118	0.0155	0.4450	0.0093	0.0091	0.3116
rs11928797	3	33457493	A	C	0.0068	0.0231	0.7700	0.0019	0.0144	0.8952
rs13067987	3	42651209	T	C	-0.0143	0.0247	0.5620	-0.0197	0.0143	0.1686
rs4082155	3	47125385	A	G	-0.0067	0.0153	0.6640	-0.0121	0.0089	0.1734
rs9825535	3	50772664	T	C	-0.0040	0.0211	0.8490	0.0055	0.0120	0.6464
rs4681968	3	57328867	T	G	-0.0068	0.0194	0.7280	-0.0035	0.0113	0.7571
rs9310077	3	88196644	G	A	0.0087	0.0196	0.6580	-0.0242	0.0121	0.0452
rs3772102	3	98502628	G	T	-0.0006	0.0151	0.9680	-0.0156	0.0089	0.0802
rs13088318	3	101242751	G	A	0.0085	0.0155	0.5810	0.0051	0.0096	0.5962
rs75592719	3	101667708	A	G	0.0782	0.0512	0.1270	-0.0379	0.0210	0.0714
rs9288851	3	107316938	G	A	-0.0061	0.0215	0.7770	0.0221	0.0119	0.0628
rs4678144	3	124404399	G	A	0.0160	0.0203	0.4290	0.0277	0.0109	0.0110
rs645040	3	135926622	T	G	-0.0051	0.0212	0.8090	-0.0017	0.0105	0.8710
rs1199333	3	138091701	T	G	0.0085	0.0183	0.6400	0.0244	0.0115	0.0342
rs55752389	3	138848513	T	C	0.0044	0.0164	0.7880	-0.0071	0.0099	0.4736
rs6763931	3	141102833	A	G	0.0185	0.0150	0.2190	-0.0078	0.0089	0.3799
rs6799078	3	141630722	G	A	0.0213	0.0152	0.1620	0.0043	0.0091	0.6379
rs73238159	3	142078759	T	C	-0.0492	0.0216	0.0228	-0.0102	0.0134	0.4503
rs5398	3	170715830	A	G	0.0223	0.0170	0.1900	-0.0084	0.0097	0.3865
rs572169	3	172165727	T	C	0.0045	0.0159	0.7770	0.0051	0.0095	0.5906
rs7614305	3	178912661	A	G	-0.0308	0.0199	0.1220	-0.0060	0.0112	0.5902
rs2193587	3	185990096	T	C	-0.0073	0.0190	0.7030	0.0063	0.0107	0.5562
rs4452320	3	186381717	G	A	NA	NA	NA	-0.0180	0.0101	0.0751
rs3748034	4	3446091	T	G	0.0485	0.0226	0.0321	0.0076	0.0152	0.6173
rs4234798	4	7219933	G	T	-0.0324	0.0154	0.0357	-0.0117	0.0096	0.2254
rs9991733	4	39420994	G	A	0.0211	0.0165	0.2010	0.0021	0.0100	0.8331
rs3912391	4	39698824	A	G	-0.0055	0.0152	0.7170	0.0034	0.0086	0.6937
rs28551714	4	45131089	A	G	0.0090	0.0170	0.5970	0.0055	0.0108	0.6121
rs3775288	4	46391821	G	A	NA	NA	NA	-0.0402	0.0146	0.0059
rs976002	4	69343287	G	A	-0.0277	0.0176	0.1150	-0.0126	0.0103	0.2222
rs1902023	4	69536084	C	A	0.0105	0.0150	0.4870	0.0073	0.0091	0.4246
rs897945	4	83838262	T	G	0.0008	0.0153	0.9590	0.0034	0.0089	0.7045
rs2280099	4	90035549	G	A	-0.0133	0.0202	0.5110	-0.0349	0.0117	0.0029
rs1444922	4	95912221	G	A	-0.0063	0.0150	0.6760	-0.0103	0.0090	0.2557
rs4306959	4	97584985	G	A	0.0042	0.0155	0.7840	0.0173	0.0088	0.0497
rs1126673	4	100045616	T	C	0.0056	0.0163	0.7300	0.0117	0.0097	0.2281
rs1229984	4	100239319	C	T	-0.0637	0.1056	0.5470	-0.0520	0.0217	0.0164
rs28590233	4	106011086	T	C	0.0040	0.0197	0.8380	-0.0269	0.0114	0.0185
rs2667172	4	121749030	C	T	-0.0136	0.0169	0.4220	0.0013	0.0091	0.8862
rs58148580	4	124758773	T	C	-0.0031	0.0237	0.8950	-0.0043	0.0144	0.7641
rs6534673	4	129142166	T	C	0.0044	0.0155	0.7740	-0.0012	0.0096	0.9005
rs1492820	4	145650021	A	G	0.0158	0.0153	0.3020	-0.0002	0.0071	0.9774
rs7697204	4	148980174	T	C	-0.0519	0.0173	0.0027	0.0095	0.0101	0.3493
rs17540470	4	169349568	T	C	0.0117	0.0170	0.4910	-0.0087	0.0117	0.4562
rs13184788	5	39075388	T	C	-0.0091	0.0150	0.5450	-0.0065	0.0086	0.4460
rs62372052	5	42724294	G	A	0.0368	0.0227	0.1040	0.0099	0.0146	0.4998
rs7723160	5	42860681	G	A	-0.0255	0.0169	0.1300	-0.0104	0.0102	0.3099
rs13174925	5	44124113	C	A	0.0033	0.0167	0.8460	0.0212	0.0097	0.0297
rs271234	5	53075037	A	G	0.0048	0.0206	0.8170	-0.0021	0.0124	0.8657
rs76026733	5	53263963	C	T	0.0488	0.0411	0.2350	-0.0073	0.0208	0.7252
rs7736186	5	58270494	T	C	0.0612	0.1062	0.5650	-0.0078	0.0279	0.7790
rs11738977	5	59018442	G	A	0.0185	0.0175	0.2910	0.0052	0.0095	0.5843
rs13162864	5	59207614	C	A	-0.0363	0.0240	0.1300	0.0013	0.0135	0.9232
rs185077	5	78331823	C	T	0.0180	0.0150	0.2310	0.0070	0.0088	0.4294
rs1350437	5	87192117	T	G	0.0378	0.0199	0.0575	-0.0038	0.0104	0.7138
rs9293511	5	88416354	T	C	-0.0022	0.0161	0.8930	0.0053	0.0090	0.5562

rs10515337	5	102301368	C	T	-0.0410	0.0159	0.0098	-0.0169	0.0096	0.0773
rs4705873	5	132267167	A	G	0.0103	0.0218	0.6350	-0.0317	0.0122	0.0093
rs35096828	5	133897439	C	T	-0.0115	0.0171	0.4990	-0.0171	0.0100	0.0878
rs609385	5	134597267	T	C	0.0012	0.0152	0.9350	-0.0007	0.0091	0.9385
rs757647	5	137707315	A	G	-0.0113	0.0176	0.5230	0.0188	0.0106	0.0749
rs258775	5	142564823	C	A	-0.0140	0.0198	0.4790	0.0007	0.0116	0.9517
rs17413389	5	143078627	G	T	0.0146	0.0195	0.4530	0.0124	0.0100	0.2150
rs4282339	5	168256240	A	G	0.0077	0.0191	0.6870	-0.0164	0.0109	0.1329
rs17714046	5	180661980	C	T	-0.0358	0.0278	0.1990	NA	NA	NA
rs9502597	6	7307699	C	T	-0.0059	0.0189	0.7530	0.0078	0.0110	0.4812
rs2296198	6	18399750	C	T	0.0228	0.0199	0.2530	0.0206	0.0101	0.0419
rs12210951	6	21936868	G	A	-0.0198	0.0167	0.2380	-0.0072	0.0100	0.4719
rs7742369	6	34165721	G	A	0.0190	0.0212	0.3710	0.0104	0.0115	0.3622
rs1929849	6	35205541	C	T	0.0110	0.0223	0.6220	-0.0154	0.0119	0.1939
rs2235711	6	38148770	T	C	0.0070	0.0157	0.6560	0.0004	0.0105	0.9695
rs9471969	6	42906384	T	G	-0.0024	0.0195	0.9020	0.0084	0.0103	0.4162
rs6905288	6	43758873	A	G	-0.0246	0.0152	0.1060	-0.0046	0.0106	0.6641
rs4715332	6	52669185	A	C	0.0056	0.0151	0.7100	0.0168	0.0090	0.0632
rs9352613	6	79424433	G	A	0.0094	0.0157	0.5500	0.0116	0.0092	0.2075
rs6934603	6	87994015	G	A	-0.0061	0.0150	0.6860	0.0313	0.0088	0.0004
rs499624	6	100087783	T	G	-0.0074	0.0163	0.6510	-0.0084	0.0095	0.3752
rs7759938	6	105378954	T	C	0.0147	0.0162	0.3630	0.0129	0.0094	0.1716
rs2153960	6	108988184	A	G	-0.0203	0.0155	0.1920	-0.0140	0.0097	0.1489
rs1361108	6	126767600	T	C	-0.0069	0.0150	0.6460	-0.0182	0.0089	0.0416
rs72961013	6	127529780	A	G	0.0182	0.0304	0.5500	0.0175	0.0186	0.3443
rs4421216	6	128365434	G	A	0.0246	0.0191	0.1980	-0.0187	0.0116	0.1070
rs4895842	6	129349539	C	T	0.0208	0.0167	0.2120	0.0042	0.0095	0.6579
rs9388768	6	130374102	A	C	0.0047	0.0159	0.7680	-0.0173	0.0094	0.0653
rs9390459	6	147680359	G	A	0.0228	0.0150	0.1280	0.0035	0.0123	0.7758
rs2234693	6	152163335	C	T	-0.0068	0.0152	0.6540	-0.0012	0.0088	0.8916
rs674882	6	153407553	C	T	0.0266	0.0150	0.0766	0.0210	0.0089	0.0189
rs677830	6	154428666	T	C	-0.0117	0.0187	0.5320	0.0198	0.0103	0.0542
rs927450	6	160182096	G	A	0.0078	0.0152	0.6050	-0.0108	0.0090	0.2296
rs7750288	6	160400147	G	A	-0.0098	0.0168	0.5620	-0.0012	0.0099	0.9036
rs555754	6	160769423	A	G	-0.0062	0.0150	0.6780	0.0227	0.0088	0.0101
rs504371	6	165724052	A	C	0.0159	0.0151	0.2910	0.0131	0.0093	0.1598
rs3008049	6	166063617	G	A	0.0221	0.0172	0.2000	0.0063	0.0096	0.5150
rs9295315	6	166254991	A	G	0.0259	0.0158	0.1020	0.0089	0.0104	0.3937
rs2323034	6	166306809	A	G	-0.0378	0.0151	0.0125	0.0085	0.0088	0.3373
rs7802508	7	1191689	A	G	-0.0123	0.0151	0.4150	0.0054	0.0107	0.6137
rs3889797	7	1877924	C	A	-0.0047	0.0151	0.7530	0.0078	0.0095	0.4122
rs2533879	7	2859847	A	G	-0.0299	0.0156	0.0558	-0.0013	0.0094	0.8903
rs62439737	7	6779810	G	A	-0.0083	0.0208	0.6920	-0.0085	0.0127	0.5012
rs6969690	7	14214561	G	T	0.0486	0.0164	0.0030	0.0023	0.0110	0.8339
rs11761979	7	31018138	A	C	0.0056	0.0172	0.7440	-0.0084	0.0106	0.4279
rs2228078	7	31018852	C	T	0.0327	0.0709	0.6450	-0.0348	0.0381	0.3605
rs62467370	7	32929628	A	C	-0.0064	0.0284	0.8200	-0.0326	0.0193	0.0917
rs62460537	7	44936916	G	A	-0.0120	0.0454	0.7910	-0.0388	0.0178	0.0291
rs6958337	7	45764528	C	T	-0.0095	0.0247	0.7010	0.0134	0.0164	0.4132
rs74516857	7	45907939	A	G	0.0133	0.0280	0.6340	-0.0011	0.0182	0.9517
rs11977526	7	46008110	A	G	0.0193	0.0161	0.2290	0.0166	0.0090	0.0666
rs116945878	7	46276386	T	C	0.0302	0.0351	0.3900	NA	NA	NA
rs78546112	7	46329630	T	C	0.0897	0.0346	0.0096	0.0353	0.0183	0.0535
rs11979093	7	46501098	A	G	-0.0190	0.0231	0.4110	-0.0210	0.0120	0.0808
rs71545944	7	46659170	G	A	-0.1710	0.0835	0.0404	-0.0147	0.0335	0.6608
rs117890478	7	46713054	G	T	-0.0277	0.0834	0.7400	NA	NA	NA
rs35640690	7	46719105	C	T	-0.0048	0.0194	0.8040	-0.0023	0.0108	0.8307
rs11762356	7	46956047	G	A	0.0314	0.0493	0.5230	0.0156	0.0300	0.6030
rs7790734	7	46970040	A	G	0.0088	0.0159	0.5800	0.0138	0.0097	0.1556
rs2174460	7	55991292	A	G	-0.0026	0.0182	0.8860	0.0016	0.0107	0.8807
rs13233571	7	72971231	T	C	-0.0202	0.0226	0.3720	-0.0638	0.0140	0.0000
rs799157	7	73020301	C	T	-0.0585	0.0494	0.2360	-0.0559	0.0221	0.0115
rs2527886	7	99552168	C	T	-0.0113	0.0153	0.4580	-0.0002	0.0084	0.9810
rs13246732	7	113775765	T	C	-0.0103	0.0160	0.5170	-0.0141	0.0098	0.1491

rs11556924	7	129663496	T	C	0.0052	0.0160	0.7470	-0.0070	0.0092	0.4475
rs157934	7	130585492	C	T	-0.0220	0.0153	0.1510	-0.0096	0.0096	0.3165
rs2048672	7	130653851	A	C	0.0022	0.0153	0.8870	-0.0056	0.0097	0.5627
rs273957	7	137600690	T	C	-0.0326	0.0152	0.0322	-0.0080	0.0091	0.3789
rs7811152	7	138238844	A	G	0.0000	0.0154	0.9990	-0.0003	0.0086	0.9721
rs3857873	7	138721901	T	C	-0.0066	0.0150	0.6620	0.0055	0.0088	0.5331
rs7789908	7	150530196	G	T	0.0256	0.0177	0.1500	-0.0148	0.0111	0.1810
rs6982207	8	5551845	A	G	0.0260	0.0210	0.2160	-0.0062	0.0105	0.5541
rs9657541	8	10643164	T	C	-0.0077	0.0207	0.7090	-0.0093	0.0111	0.4015
rs76393968	8	16282937	A	G	-0.2418	0.1210	0.0457	0.0049	0.0336	0.8842
rs1495741	8	18272881	A	G	-0.0065	0.0173	0.7060	0.0012	0.0100	0.9041
rs2081687	8	59388565	C	T	0.0219	0.0154	0.1550	0.0023	0.0093	0.8041
rs1583164	8	77105970	G	A	-0.0279	0.0152	0.0656	0.0097	0.0090	0.2848
rs6473015	8	78178485	C	A	-0.0078	0.0183	0.6690	0.0004	0.0108	0.9704
rs445036	8	81408409	C	T	-0.0077	0.0175	0.6600	-0.0033	0.0096	0.7311
rs1693551	8	101675584	C	T	0.0356	0.0152	0.0187	0.0287	0.0089	0.0012
rs2514843	8	109063434	T	C	-0.0005	0.0151	0.9720	-0.0050	0.0088	0.5673
rs2293889	8	116599199	G	T	NA	NA	NA	0.0117	0.0090	0.1911
rs6471133	8	134611160	C	A	-0.0208	0.0190	0.2740	0.0127	0.0110	0.2475
rs68013747	8	135656665	A	G	0.0157	0.0160	0.3240	-0.0207	0.0096	0.0303
rs11136336	8	145007187	A	G	0.0095	0.0153	0.5340	0.0053	0.0109	0.6290
rs1270231	9	4840877	A	G	-0.0110	0.0308	0.7220	0.0095	0.0140	0.4984
rs75565599	9	4851008	C	A	0.0027	0.0381	0.9430	0.0221	0.0234	0.3463
rs9969735	9	4888585	A	C	-0.0132	0.0151	0.3820	0.0029	0.0090	0.7465
rs72701684	9	5211191	T	G	0.0612	0.0421	0.1460	0.0060	0.0222	0.7876
rs6475614	9	22153265	C	T	0.0118	0.0158	0.4540	-0.0010	0.0100	0.9203
rs56324928	9	33933136	C	A	-0.0247	0.0194	0.2050	-0.0048	0.0105	0.6472
rs1367628	9	74069700	T	G	0.0022	0.0197	0.9130	-0.0136	0.0111	0.2223
rs4471123	9	86700737	A	G	-0.0015	0.0150	0.9200	0.0066	0.0089	0.4599
rs6559365	9	92209279	A	G	0.0262	0.0149	0.0791	0.0093	0.0087	0.2857
rs9695734	9	96407983	T	C	0.0358	0.0229	0.1180	0.0145	0.0119	0.2219
rs10512236	9	97630451	T	G	0.0094	0.0246	0.7010	-0.0325	0.0189	0.0858
rs4743034	9	109632353	A	G	0.0078	0.0182	0.6690	0.0193	0.0105	0.0651
rs1981268	9	111637331	A	C	-0.0087	0.0252	0.7310	-0.0074	0.0136	0.5853
rs28410315	9	119338898	G	A	0.0294	0.0215	0.1710	0.0400	0.0122	0.0011
rs1129	9	128199873	T	C	-0.0026	0.0155	0.8690	0.0103	0.0093	0.2660
rs2810490	9	136923118	A	G	0.0118	0.0151	0.4330	-0.0014	0.0116	0.9038
rs1832007	10	5254847	G	A	-0.0167	0.0216	0.4390	-0.0203	0.0125	0.1046
rs2277222	10	13494594	C	T	0.0212	0.0151	0.1590	0.0173	0.0095	0.0681
rs12769257	10	21736100	C	T	0.0437	0.0196	0.0259	0.0338	0.0115	0.0032
rs7899156	10	22822524	A	C	-0.0229	0.0158	0.1460	-0.0152	0.0093	0.1010
rs2754369	10	38655478	T	C	-0.0084	0.0192	0.6640	0.0111	0.0106	0.2923
rs7072243	10	50319387	A	G	-0.0211	0.0154	0.1710	0.0140	0.0090	0.1184
rs293281	10	53217522	A	G	-0.0159	0.0160	0.3190	-0.0052	0.0097	0.5898
rs1471246	10	62074139	A	G	0.0001	0.0151	0.9940	0.0041	0.0091	0.6531
rs16926292	10	71149389	C	T	-0.0091	0.0304	0.7650	-0.0170	0.0144	0.2373
rs7079868	10	72020703	A	C	0.0039	0.0307	0.8980	0.0164	0.0178	0.3587
rs6480781	10	77140707	T	G	-0.0191	0.0154	0.2150	-0.0047	0.0090	0.6008
rs2068888	10	94839642	A	G	-0.0215	0.0150	0.1510	0.0085	0.0090	0.3445
rs9630085	10	95333063	G	A	0.0001	0.0180	0.9980	0.0034	0.0110	0.7570
rs116454156	10	95347041	A	G	-0.0919	0.0677	0.1740	NA	NA	NA
rs2274223	10	96066341	G	A	-0.0344	0.0180	0.0552	-0.0423	0.0096	0.0000
rs10509746	10	102656897	C	T	-0.0322	0.0151	0.0329	-0.0188	0.0090	0.0366
rs11191424	10	104625886	A	G	0.0202	0.0160	0.2070	0.0289	0.0093	0.0018
rs11197593	10	117982741	C	T	0.0204	0.0150	0.1730	-0.0036	0.0090	0.6875
rs6421044	11	1588110	T	C	0.0112	0.0155	0.4670	0.0239	0.0089	0.0072
rs11042751	11	2149864	C	T	-0.0285	0.0187	0.1270	-0.0127	0.0126	0.3131
rs1124699	11	2164990	A	G	0.0176	0.0312	0.5720	0.0135	0.0196	0.4915
rs10834966	11	3749585	C	A	0.0112	0.0191	0.5590	-0.0099	0.0112	0.3740
rs12277932	11	8631669	C	T	0.0005	0.0150	0.9760	0.0002	0.0072	0.9779
rs7947951	11	13356030	G	A	0.0069	0.0150	0.6470	0.0072	0.0095	0.4498
rs72858774	11	15772442	T	G	0.0192	0.0281	0.4950	NA	NA	NA
rs10832918	11	18335684	A	G	-0.0314	0.0151	0.0376	0.0088	0.0092	0.3393
rs34452566	11	27793470	T	G	-0.0113	0.0195	0.5620	-0.0025	0.0111	0.8219

rs12294104	11	30382899	T	C	-0.0006	0.0196	0.9760	-0.0007	0.0122	0.9541
rs7120548	11	47662932	C	T	-0.0080	0.0179	0.6540	0.0215	0.0096	0.0251
rs2047812	11	48162042	G	A	0.0125	0.0190	0.5090	-0.0082	0.0111	0.4596
rs78089241	11	48214064	G	A	-0.0580	0.0398	0.1450	0.0150	0.0260	0.5650
rs538169	11	59503589	C	T	0.0438	0.0256	0.0873	0.0288	0.0184	0.1184
rs174550	11	61571478	C	T	-0.0141	0.0152	0.3540	-0.0042	0.0093	0.6514
rs4636677	11	65458994	T	G	-0.0120	0.0225	0.5930	-0.0345	0.0196	0.0781
rs56088284	11	66899619	G	A	0.0133	0.0338	0.6950	0.0431	0.0166	0.0093
rs4980661	11	69306579	A	G	-0.0048	0.0153	0.7550	0.0094	0.0091	0.3041
rs2450136	11	77925273	G	T	0.0130	0.0189	0.4900	0.0386	0.0115	0.0007
rs61904289	11	85994731	T	C	-0.0197	0.0154	0.1990	0.0012	0.0097	0.9013
rs11020842	11	94317202	A	G	0.0532	0.0389	0.1710	0.0038	0.0263	0.8852
rs11604671	11	113268059	A	G	-0.0292	0.0150	0.0521	-0.0019	0.0091	0.8336
rs10892562	11	120221618	G	A	-0.0019	0.0151	0.9020	0.0110	0.0090	0.2194
rs10892919	11	122736571	T	C	-0.0008	0.0151	0.9580	-0.0034	0.0089	0.7006
rs11220462	11	126243952	A	G	-0.0142	0.0191	0.4570	-0.0012	0.0133	0.9281
rs2856321	12	11855773	A	G	0.0222	0.0154	0.1490	0.0275	0.0093	0.0029
rs56234529	12	31638712	T	C	0.0073	0.0214	0.7320	0.0152	0.0115	0.1879
rs6488006	12	31908357	C	T	-0.0088	0.0218	0.6860	-0.0323	0.0141	0.0221
rs118047082	12	31946325	T	C	0.0434	0.0561	0.4400	NA	NA	NA
rs66550728	12	31948210	G	A	-0.0180	0.0226	0.4280	0.0059	0.0128	0.6453
rs1621686	12	32084875	G	A	0.0122	0.0162	0.4530	0.0037	0.0098	0.7054
rs11519432	12	34675949	T	C	-0.0145	0.0151	0.3380	0.0151	0.0091	0.0992
rs6582708	12	38851355	C	T	0.0513	0.0474	0.2800	0.0267	0.0587	0.6486
rs7306229	12	46334832	T	C	-0.0007	0.0150	0.9650	0.0035	0.0088	0.6898
rs705708	12	56488913	A	G	-0.0168	0.0151	0.2680	-0.0169	0.0089	0.0571
rs2657879	12	56865338	G	A	0.0082	0.0194	0.6730	-0.0141	0.0115	0.2199
rs78607331	12	57648644	T	C	0.0143	0.0318	0.6530	0.0209	0.0232	0.3674
rs812315	12	57993490	A	G	-0.0198	0.0169	0.2400	-0.0006	0.0097	0.9509
rs1351394	12	66351826	C	T	-0.0153	0.0150	0.3060	0.0061	0.0088	0.4892
rs7306772	12	89914142	G	T	0.0276	0.0163	0.0900	-0.0080	0.0098	0.4108
rs2072593	12	93970026	C	T	0.0200	0.0162	0.2180	-0.0124	0.0109	0.2576
rs4144501	12	94156587	A	G	-0.0279	0.0150	0.0624	-0.0130	0.0089	0.1431
rs10777858	12	97792745	T	G	0.0060	0.0151	0.6910	0.0148	0.0089	0.0953
rs249624	12	98191847	T	C	0.0269	0.0238	0.2580	-0.0184	0.0117	0.1153
rs78597439	12	102716172	T	C	0.1191	0.0770	0.1220	0.0282	0.0322	0.3818
rs11111274	12	102838128	A	G	0.0055	0.0161	0.7330	0.0120	0.0099	0.2248
rs79218426	12	102889497	T	C	0.0156	0.0230	0.4980	-0.0013	0.0218	0.9525
rs10860878	12	102963550	T	C	0.0066	0.0151	0.6630	0.0207	0.0091	0.0228
rs10745954	12	103483094	G	A	0.0073	0.0154	0.6360	0.0012	0.0085	0.8884
rs7314285	12	111522026	G	T	0.0267	0.0373	0.4740	0.0156	0.0166	0.3471
rs11067228	12	115094260	G	A	0.0076	0.0156	0.6260	-0.0002	0.0084	0.9811
rs2460488	12	116187660	A	G	0.0044	0.0199	0.8270	0.0059	0.0116	0.6128
rs75938105	12	116261411	T	C	-0.0096	0.0415	0.8180	-0.0407	0.0251	0.1047
rs7305618	12	121402932	T	C	-0.0309	0.0182	0.0886	-0.0017	0.0102	0.8680
rs1800574	12	121416864	T	C	0.0242	0.0366	0.5080	0.0093	0.0269	0.7309
rs11060762	12	123403710	A	C	-0.0360	0.0280	0.2000	0.0207	0.0160	0.1964
rs9578326	13	21487599	T	G	-0.0177	0.0159	0.2670	-0.0078	0.0105	0.4552
rs76750172	13	28395297	T	C	-0.0342	0.0455	0.4520	0.0093	0.0310	0.7656
rs9549092	13	40754324	C	T	-0.0153	0.0200	0.4450	0.0190	0.0114	0.0957
rs4142110	13	42754522	C	T	-0.0130	0.0151	0.3920	0.0222	0.0090	0.0142
rs75276039	13	45495991	G	A	0.0645	0.0550	0.2410	0.0344	0.0247	0.1638
rs9534448	13	47212961	A	G	-0.0154	0.0176	0.3830	-0.0421	0.0104	0.0001
rs45604939	13	49775997	G	A	0.0549	0.0294	0.0622	0.0308	0.0176	0.0801
rs61957204	13	74084684	A	G	-0.0585	0.0295	0.0476	0.0226	0.0172	0.1885
rs1539182	13	74840527	T	C	-0.0348	0.0150	0.0203	0.0027	0.0086	0.7525
rs9521492	13	110381691	G	A	0.0129	0.0161	0.4220	-0.0180	0.0092	0.0508
rs9577924	13	114545317	G	A	0.0421	0.0175	0.0158	0.0057	0.0118	0.6306
rs8017377	14	24883887	A	G	0.0011	0.0154	0.9430	-0.0059	0.0091	0.5164
rs8015400	14	25930988	A	C	0.0176	0.0155	0.2580	-0.0255	0.0094	0.0068
rs33912345	14	60976537	A	C	-0.0202	0.0165	0.2210	0.0100	0.0091	0.2748
rs36215895	14	64676751	T	C	-0.0156	0.0948	0.8690	NA	NA	NA
rs4902647	14	69254191	T	C	0.0042	0.0150	0.7790	0.0163	0.0089	0.0661
rs8007859	14	69704553	T	G	0.0165	0.0154	0.2840	0.0055	0.0091	0.5472

rs887506	14	74219367	G	A	0.0044	0.0160	0.7830	0.0059	0.0092	0.5241
rs13379042	14	74250100	C	T	0.0021	0.0188	0.9120	0.0047	0.0100	0.6406
rs175012	14	75455810	C	A	-0.0251	0.0150	0.0940	-0.0077	0.0089	0.3858
rs11625365	14	77908588	G	A	0.0108	0.0150	0.4700	-0.0070	0.0090	0.4349
rs10146997	14	79945162	G	A	0.0069	0.0175	0.6940	0.0041	0.0108	0.7050
rs77004437	14	92793206	T	C	0.0064	0.0305	0.8340	0.0157	0.0155	0.3128
rs61992606	14	93943998	A	G	0.0019	0.0156	0.9020	-0.0077	0.0094	0.4110
rs112635299	14	94838142	T	G	0.0005	0.0534	0.9930	NA	NA	NA
rs1802710	14	101200645	C	T	-0.0083	0.0160	0.6040	0.0013	0.0090	0.8858
rs17747633	15	40916237	G	A	-0.0122	0.0154	0.4310	0.0139	0.0090	0.1229
rs7165861	15	43423327	A	G	-0.0103	0.0161	0.5250	-0.0073	0.0092	0.4241
rs55707100	15	43820717	T	C	-0.0636	0.1004	0.5260	0.0706	0.0270	0.0089
rs10459592	15	51536141	G	T	0.0072	0.0152	0.6350	0.0165	0.0089	0.0650
rs7178424	15	62380259	T	C	0.0030	0.0160	0.8510	0.0195	0.0089	0.0286
rs633275	15	64895319	G	T	-0.0064	0.0234	0.7840	-0.0048	0.0135	0.7219
rs266335	15	67344732	A	G	-0.0097	0.0155	0.5310	-0.0202	0.0094	0.0307
rs2033784	15	67449660	G	A	-0.0108	0.0164	0.5110	-0.0002	0.0089	0.9821
rs78049372	15	68429836	T	C	0.0283	0.0392	0.4700	0.0210	0.0213	0.3249
rs5742915	15	74336633	C	T	-0.0198	0.0152	0.1920	0.0092	0.0093	0.3227
rs2930313	15	74609378	G	A	-0.0295	0.0286	0.3030	0.0206	0.0158	0.1933
rs2307449	15	89863928	G	T	0.0010	0.0150	0.9470	-0.0012	0.0088	0.8918
rs12900461	15	93552656	T	C	-0.0167	0.0174	0.3390	-0.0215	0.0120	0.0722
rs12912439	15	95828705	T	C	0.0018	0.0178	0.9210	-0.0063	0.0096	0.5085
rs8027457	15	99204101	C	T	0.0028	0.0150	0.8540	0.0090	0.0088	0.3105
rs2684789	15	99492045	A	G	0.0042	0.0150	0.7770	-0.0074	0.0090	0.4069
rs143076454	16	921179	A	G	-0.1075	0.0646	0.0962	-0.0054	0.0324	0.8671
rs742036	16	960725	A	G	0.0189	0.0159	0.2350	-0.0041	0.0095	0.6651
rs4988483	16	1129010	A	C	-0.0919	0.0556	0.0982	NA	NA	NA
rs60095937	16	1782964	A	C	0.1252	0.0650	0.0541	0.0169	0.0360	0.6399
rs72761177	16	1833508	A	G	0.0242	0.0322	0.4510	0.0004	0.0157	0.9797
rs344359	16	1838640	C	T	-0.0190	0.0168	0.2570	-0.0218	0.0120	0.0691
rs111845910	16	1991014	A	G	-0.0198	0.0260	0.4460	-0.0182	0.0224	0.4172
rs1369924	16	5924291	C	A	-0.0211	0.0181	0.2430	0.0040	0.0116	0.7306
rs9924441	16	9047198	T	C	-0.0146	0.0189	0.4400	0.0093	0.0102	0.3660
rs11646268	16	10498892	C	T	0.0024	0.0163	0.8830	-0.0189	0.0101	0.0612
rs6498697	16	17479794	G	A	-0.0293	0.0156	0.0605	-0.0016	0.0089	0.8576
rs7197580	16	19278625	A	G	-0.0019	0.0150	0.8970	-0.0094	0.0090	0.2927
rs12443881	16	28841777	T	C	-0.0137	0.0152	0.3680	-0.0190	0.0091	0.0373
rs12447915	16	30089908	T	C	-0.0081	0.0153	0.5960	-0.0242	0.0092	0.0085
rs11865038	16	31095171	T	C	0.0029	0.0153	0.8470	0.0112	0.0091	0.2172
rs10521222	16	51158710	T	C	-0.0370	0.0473	0.4350	-0.0071	0.0211	0.7351
rs9929277	16	56158718	G	A	-0.0043	0.0150	0.7770	-0.0127	0.0088	0.1501
rs60762594	16	69098998	C	T	0.0123	0.0258	0.6330	0.0019	0.0150	0.8995
rs62052820	16	69575238	A	G	-0.0007	0.0183	0.9700	0.0178	0.0107	0.0949
rs11859878	16	81515956	T	C	0.0018	0.0470	0.9700	-0.0278	0.0179	0.1214
rs4888156	16	81604256	C	T	-0.0092	0.0170	0.5880	-0.0064	0.0093	0.4903
rs4889364	16	81719115	A	G	0.0127	0.0175	0.4680	0.0004	0.0096	0.9669
rs66720010	16	83979322	G	A	-0.0300	0.0151	0.0471	0.0056	0.0092	0.5425
rs12453909	17	185338	A	C	0.0011	0.0200	0.9570	-0.0256	0.0128	0.0456
rs4790814	17	1622177	A	G	0.0119	0.0151	0.4300	-0.0015	0.0109	0.8900
rs35386490	17	7310006	C	T	0.0366	0.0213	0.0862	NA	NA	NA
rs727428	17	7537792	C	T	-0.0260	0.0154	0.0908	0.0031	0.0090	0.7302
rs2301652	17	15928584	G	T	0.0078	0.0151	0.6080	-0.0127	0.0090	0.1584
rs4925138	17	17992793	G	T	-0.0110	0.0150	0.4650	-0.0015	0.0087	0.8635
rs1877031	17	37814080	A	G	-0.0014	0.0161	0.9300	-0.0097	0.0094	0.3019
rs8070454	17	38160754	T	C	0.0261	0.0153	0.0874	-0.0098	0.0089	0.2660
rs8068844	17	40571284	C	T	-0.0112	0.0159	0.4820	-0.0246	0.0094	0.0090
rs199448	17	44809001	G	A	0.0224	0.0270	0.4060	0.0002	0.0104	0.9847
rs8070132	17	57790206	C	T	0.0422	0.0208	0.0421	0.0039	0.0122	0.7496
rs2070776	17	62007498	G	A	-0.0109	0.0152	0.4730	0.0158	0.0097	0.1044
rs76708468	17	62206299	C	T	-0.0362	0.0551	0.5110	NA	NA	NA
rs1801689	17	64210580	C	A	-0.1408	0.0774	0.0688	0.0293	0.0256	0.2528
rs77542162	17	67081278	G	A	-0.0561	0.0959	0.5590	NA	NA	NA
rs6501601	17	71124903	A	G	-0.0240	0.0154	0.1210	0.0117	0.0091	0.1962

rs1135688	17	73827205	C	T	-0.0346	0.0177	0.0506	0.0106	0.0099	0.2822
rs2040176	18	892467	T	C	0.0104	0.0245	0.6700	-0.0159	0.0128	0.2118
rs2198557	18	1620210	G	T	0.0020	0.0171	0.9060	-0.0118	0.0097	0.2204
rs4468717	18	3457606	T	C	0.0228	0.0219	0.2970	-0.0057	0.0170	0.7361
rs34233878	18	42594280	C	T	-0.0268	0.0252	0.2870	-0.0383	0.0151	0.0112
rs17487484	18	50723283	G	T	0.0172	0.0151	0.2540	0.0082	0.0090	0.3630
rs8099014	18	56109859	A	C	-0.0170	0.0168	0.3110	0.0220	0.0100	0.0281
rs585187	18	58177124	T	G	-0.0069	0.0150	0.6470	0.0115	0.0088	0.1922
rs12454712	18	60845884	C	T	-0.0131	0.0151	0.3830	0.0020	0.0095	0.8338
rs2717128	18	74987632	G	A	-0.0045	0.0224	0.8390	-0.0182	0.0130	0.1635
rs7227840	18	75164995	T	C	0.0014	0.0157	0.9310	0.0013	0.0094	0.8899
rs632616	19	4976335	T	C	0.0179	0.0151	0.2350	-0.0031	0.0095	0.7445
rs7248104	19	7224431	A	G	-0.0188	0.0151	0.2130	0.0079	0.0090	0.3801
rs8105174	19	10347032	T	C	-0.0466	0.0214	0.0293	-0.0082	0.0137	0.5475
rs281437	19	10397238	T	C	-0.0185	0.0174	0.2880	-0.0004	0.0109	0.9707
rs12983573	19	10701833	C	T	0.0128	0.0164	0.4370	0.0006	0.0095	0.9496
rs4804528	19	10886206	T	G	-0.0239	0.0156	0.1250	0.0063	0.0092	0.4930
rs737337	19	11347493	C	T	0.0166	0.0262	0.5280	-0.0204	0.0159	0.1988
rs7258465	19	18533642	C	T	0.0237	0.0154	0.1240	0.0008	0.0117	0.9453
rs6510033	19	30710785	G	A	-0.0302	0.0182	0.0963	0.0198	0.0098	0.0428
rs7599	19	36038390	G	A	0.0468	0.0161	0.0035	-0.0044	0.0099	0.6546
rs3810291	19	47569003	A	G	0.0160	0.0155	0.3020	-0.0181	0.0099	0.0685
rs10426201	19	48384749	A	G	-0.0031	0.0195	0.8750	-0.0086	0.0120	0.4722
rs2287922	19	49232226	A	G	-0.0053	0.0152	0.7280	-0.0106	0.0090	0.2383
rs12975366	19	54759361	C	T	-0.0095	0.0156	0.5410	0.0093	0.0109	0.3974
rs16988490	20	3335431	C	T	0.0199	0.0223	0.3720	-0.0094	0.0106	0.3737
rs34950733	20	20080775	G	A	-0.0019	0.0156	0.9030	0.0209	0.0101	0.0394
rs6035613	20	20356386	T	C	0.0360	0.0168	0.0319	-0.0056	0.0118	0.6329
rs6082354	20	21217976	C	A	0.0016	0.0166	0.9240	-0.0045	0.0095	0.6357
rs6060043	20	33364584	T	C	0.0290	0.0236	0.2190	0.0062	0.0115	0.5923
rs1744769	20	35769592	C	T	0.0312	0.0163	0.0550	-0.0149	0.0113	0.1851
rs2207132	20	39142516	A	G	-0.0351	0.0307	0.2520	-0.0045	0.0252	0.8579
rs1997833	20	39690342	C	T	0.0013	0.0175	0.9420	0.0291	0.0096	0.0024
rs17265513	20	39832628	C	T	0.0136	0.0166	0.4150	0.0237	0.0113	0.0359
rs56344540	20	49194444	T	C	0.0316	0.0290	0.2760	0.0316	0.0167	0.0582
rs61652170	20	54813718	A	C	-0.0114	0.0189	0.5480	-0.0157	0.0112	0.1610
rs34340379	20	54850686	G	T	-0.0262	0.0181	0.1480	0.0055	0.0106	0.6037
rs76602912	20	57459868	C	T	0.0407	0.0498	0.4130	0.0223	0.0293	0.4452
rs2738787	20	62328375	G	A	0.0541	0.0305	0.0758	-0.0207	0.0169	0.2195
rs8121509	20	62712053	C	T	-0.0128	0.0151	0.3940	-0.0145	0.0106	0.1732
rs2254446	21	37378153	C	T	0.0265	0.0167	0.1130	0.0045	0.0102	0.6585
rs11088472	21	40699376	C	A	-0.0237	0.0160	0.1380	-0.0269	0.0089	0.0026
rs469390	21	42817930	A	G	-0.0282	0.0150	0.0602	-0.0125	0.0090	0.1661
rs1006771	22	24314006	T	G	0.0027	0.0164	0.8710	0.0049	0.0095	0.6077
rs3178915	22	29453027	G	A	0.0182	0.0151	0.2270	0.0024	0.0087	0.7830
rs16989528	22	32217539	T	C	-0.0311	0.0288	0.2810	-0.0400	0.0258	0.1205
rs6000004	22	36180535	G	A	-0.0139	0.0246	0.5710	-0.0181	0.0128	0.1596
rs138703	22	39132748	A	G	-0.0070	0.0157	0.6530	0.0063	0.0092	0.4960
rs202659	22	41811620	C	T	-0.0220	0.0175	0.2090	-0.0319	0.0106	0.0026

For the FinnGen study, estimates of proxy SNPs ($r^2 > 0.8$) were used for two SNPs (rs13184788 and rs2450136). For the study of Choquet et al 2021, estimates of proxy SNPs ($r^2 > 0.8$) were used for three SNPs (rs143076454, rs111845910 and rs76602912).

Abbreviations: EA, effect allele; MAF, minor allele frequency; OA other allele; SNP, single nucleotide polymorphism; VR, variance explained.