Supplementary Table 1

Information on genetic variants in *PCSK9* (chromosome 1) and *HMGCR* (chromosome 5) used in the two sample Mendelian randomisation study on low LDL-cholesterol and risk of Alzheimer's dementia.

			Global Lipid Genetics Consortium (GLGC) Results for regression of LDL-cholesterol on genotype					**International Genomics of Alzheimer's Project (IGAP)** Risk of Alzheimer's dementia	
SNP ID	**Chr**	**Position**	**MAF 1000G CEU**	**Effect allele**	**β**	**SE**	**P-value**	**Odds ratio (95% CI)**	**P-value**
rs12563214	1	55042648	0.07	T	-0.0066	0.0104	0.5277	1.01 (0.95-1.08)	0.748
rs1755588	1	55044940	0.02	T	-0.0086	0.0195	0.671	0.91 (0.81-1.03)	0.137
rs1655527	1	55045039	0.05	A	-0.0032	0.0199	0.8175	0.92 (0.82-1.04)	0.174
rs300273	1	55045930	0.62	A	-0.0002	0.0055	0.9521	1.02 (0.99-1.05)	0.218
rs300272	1	55045983	0.38	A	-0.0059	0.0182	0.6222	1.02 (0.99-1.05)	0.274
rs300271	1	55046039	0.69	T	-0.0008	0.0057	0.7966	1.01 (0.98-1.05)	0.443
rs300269	1	55046392	0.54	A	-0.0025	0.0053	0.6988	1.01 (0.98-1.04)	0.428
rs300267	1	55046535	0.61	T	-0.001	0.0054	0.9154	1.02 (0.99-1.05)	0.269
rs7531575	1	55047724	0.11	A	-0.0089	0.0107	0.4364	1.01 (0.95-1.08)	0.685
rs12563368	1	55048098	0.98	C	-0.0027	0.0175	0.8902	1.03 (0.94-1.14)	0.521
rs17110749	1	55048190	0.11	A	-0.006	0.0113	0.6936	1.01 (0.95-1.08)	0.719
rs12408715	1	55048942	0.10	C	-0.0044	0.0109	0.7728	1.02 (0.95-1.08)	0.634
rs7519073	1	55050632	0.07	T	-0.0059	0.0111	0.641	1.01 (0.94-1.08)	0.745
rs2304309	1	55051899	0.98	A	-0.0142	0.0171	0.6562	0.94 (0.85-1.04)	0.250
rs573522	1	55052031	0.54	A	-0.0047	0.0056	0.4488	1.02 (0.99-1.05)	0.248
rs573411	1	55052071	0.53	A	-0.0029	0.0056	0.6538	1.02 (0.99-1.05)	0.252
rs2304308	1	55057958	0.13	A	-0.0096	0.0264	0.6852	1.03 (0.93-1.13)	0.609
rs1172779	1	55059295	0.20	A	-0.0077	0.0248	0.723	1.04 (0.94-1.14)	0.488
rs1702003	1	55060362	0.14	A	-0.0096	0.022	0.6135	1.04 (0.93-1.16)	0.476

rs1702002	1	55060548	0.03	T	-0.0103	0.0215	0.6056	1.03 (0.93-1.13)	0.593
rs2455419	5	75338896	0.55	C	-0.0068	0.0052	0.2952	1.02 (0.99-1.05)	0.272
rs10042012	5	75339699	0.17	T	-0.0008	0.0067	0.7657	1.01 (0.97-1.05)	0.700
rs10059544	5	75342023	0.19	C	-0.001	0.0067	0.7557	1.01 (0.97-1.05)	0.681
rs2652601	5	75342509	0.54	T	-0.0069	0.0052	0.2871	0.98 (0.95-1.01)	0.258
rs6453196	5	75343354	0.94	T	-0.0222	0.019	0.4092	1.00 (0.91-1.10)	0.976
rs6453197	5	75343373	0.97	A	-0.0214	0.019	0.4199	0.99 (0.90-1.09)	0.810

Chr=Chromosome, MAF 1000G CEU=minor allele frequency for the central European population (CEU) in the 1000 Genome database.
SE=Standard error.

Supplementary Table 2

Information on genetic variants used in the overall two sample Mendelian randomisation study on low LDL-cholesterol on risk of Alzheimer's dementia.

Genetic variants were not selected by pathway, but by p-value for effect on LDL-cholesterol. Genetic variants in APOE were excluded.

			Global Lipid Genetics Consortium (GLGC) Results for regression of LDL-cholesterol on genotype					**International Genomics of Alzheimer's Project (IGAP)** Risk of Alzheimer's dementia	
SNP ID	**Chr**	**Position**	**MAF 1000G CEU**	**Effect allele**	**β**	**SE**	**P-value**	**Odds ratio (95% CI)**	**P-value**
rs7541095	1	25761291	0.47	T	-0.0324	0.005	3.095E-10	0.99 (0.96-1.02)	0.518
rs2479394	1	55486064	0.71	A	-0.0343	0.006	8.498E-10	0.99 (0.95-1.02)	0.393
rs9436961	1	55488831	0.73	A	-0.0415	0.006	1.119E-12	1.02 (0.98-1.05)	0.354
rs2479415	1	55498745	0.57	T	-0.0460	0.006	2.082E-13	0.96 (0.93-1.00)	0.030
rs2149041	1	55502137	0.83	C	-0.0702	0.007	2.49E-24	1.01 (0.97-1.05)	0.618
rs17111503	1	55503448	0.79	A	-0.0725	0.007	3.259E-27	0.99 (0.95-1.02)	0.481
rs2479409	1	55504650	0.70	A	-0.0671	0.006	1.931E-28	0.98 (0.94-1.01)	0.221
rs11583680	1	55505668	0.14	T	-0.0521	0.010	8.976E-09	1.01 (0.96-1.05)	0.826
rs10888897	1	55513061	0.40	T	-0.0433	0.007	4.643E-11	1.02 (0.99-1.06)	0.209
rs557435	1	55520864	0.19	A	-0.0604	0.007	9.592E-16	1.04 (1.00-1.08)	0.070
rs602705	1	55525726	0.17	T	-0.0511	0.007	4.163E-13	1.05 (1.01-1.10)	0.010
rs505151	1	55529187	0.96	A	-0.0973	0.014	2.422E-12	0.95 (0.87-1.04)	0.254
rs1475701	1	55638546	0.92	T	-0.0992	0.014	1.855E-13	0.96 (0.88-1.04)	0.334
rs287227	1	55656075	0.12	T	-0.0753	0.008	2.067E-22	1.04 (1.00-1.09)	0.063
rs4926670	1	55662680	0.08	T	-0.0785	0.009	9.421E-18	1.05 (0.99-1.11)	0.102
rs2047422	1	55711967	0.39	A	-0.0418	0.005	4.474E-14	1.03 (1.00-1.06)	0.054
rs4927207	1	55713628	0.16	A	-0.0676	0.007	7.734E-20	1.02 (0.98-1.07)	0.308
rs2647286	1	55716497	0.20	A	-0.0515	0.007	2.053E-14	1.01 (0.97-1.05)	0.534

rs6662286	1	55730327	0.06	T	-0.0993	0.013	1.437E-14	1.04 (0.98-1.11)	0.223
rs1874775	1	55743330	0.25	A	-0.0396	0.006	8.926E-11	0.99 (0.96-1.03)	0.726
rs4927216	1	55744920	0.23	T	-0.0404	0.006	3.866E-11	0.99 (0.96-1.03)	0.671
rs10493322	1	62905893	0.34	T	-0.0489	0.006	2.97E-17	1.03 (1.00-1.07)	0.051
rs12092541	1	62917913	0.18	A	-0.0448	0.007	1.135E-09	1.03 (0.98-1.07)	0.235
rs7555577	1	63034363	0.32	A	-0.0490	0.006	1.939E-17	1.03 (1.00-1.07)	0.041
rs12042319	1	63049819	0.35	A	-0.0494	0.005	3.469E-18	1.04 (1.00-1.07)	0.035
rs11207997	1	63061906	0.33	T	-0.0486	0.006	1.428E-17	1.03 (0.99-1.06)	0.113
rs2031373	1	63083289	0.58	A	-0.0332	0.005	3.529E-08	1.02 (0.99-1.05)	0.282
rs1168085	1	63112320	0.31	C	-0.0488	0.006	5.17E-17	1.03 (1.00-1.07)	0.038
rs1168086	1	63112389	0.37	A	-0.0476	0.005	3.39E-17	1.03 (1.00-1.07)	0.039
rs1168089	1	63113719	0.36	T	-0.0481	0.005	2.742E-17	1.03 (0.99-1.06)	0.111
rs912540	1	63135127	0.22	A	-0.0415	0.007	2.225E-10	1.03 (0.99-1.07)	0.097
rs12130333	1	63191777	0.21	T	-0.0394	0.007	1.166E-09	1.03 (0.99-1.07)	0.206
rs1337247	1	109703023	0.13	A	-0.0676	0.010	1.421E-11	1.03 (0.97-1.08)	0.345
rs676385	1	109705022	0.26	A	-0.0373	0.007	3E-09	0.97 (0.94-1.01)	0.127
rs648673	1	109727284	0.15	C	-0.0584	0.008	1.239E-13	1.01 (0.96-1.06)	0.675
rs611060	1	109782190	0.42	T	-0.0524	0.005	5.905E-23	1.02 (0.99-1.06)	0.173
rs454107	1	109794252	0.03	T	-0.0974	0.014	1.7E-11	1.00 (0.92-1.09)	0.947
rs17035665	1	109813719	0.17	T	-0.0898	0.008	2.308E-29	1.01 (0.96-1.05)	0.740
rs4970834	1	109814880	0.18	T	-0.1618	0.007	0	0.99 (0.96-1.04)	0.787
rs660240	1	109817838	0.21	T	-0.1731	0.006	0	1.00 (0.96-1.03)	0.823
rs602633	1	109821511	0.22	T	-0.1709	0.006	0	1.00 (0.96-1.04)	0.854
rs655246	1	109832283	0.48	A	-0.0578	0.006	1.282E-26	1.01 (0.98-1.04)	0.672
rs17584208	1	109833187	0.11	A	-0.1098	0.010	7.727E-28	1.00 (0.95-1.06)	0.942
rs17645031	1	109834938	0.09	T	-0.1089	0.010	7.893E-28	0.99 (0.94-1.05)	0.855
rs10745352	1	109871787	0.29	T	-0.0440	0.006	1.452E-13	1.00 (0.96-1.03)	0.826
rs10745353	1	109877506	0.30	A	-0.0442	0.006	9.574E-14	1.00 (0.97-1.04)	0.869

rs4970843	1	109887191	0.53	T	-0.0494	0.005	9.769E-23	1.00 (0.97-1.03)	0.990
rs17575427	1	110049127	0.10	C	-0.0636	0.011	3.336E-09	1.00 (0.94-1.06)	0.910
rs17008806	1	220976257	0.72	A	-0.0300	0.006	3.751E-08	1.00 (0.97-1.03)	0.988
rs12132819	1	220985350	0.76	T	-0.0380	0.007	1.114E-09	1.00 (0.96-1.04)	0.861
rs6695664	1	234846396	0.85	A	-0.0374	0.007	5.844E-08	0.96 (0.93-1.01)	0.086
rs514230	1	234858597	0.46	A	-0.0353	0.005	9.376E-12	0.98 (0.95-1.01)	0.138
rs13027175	2	20932743	0.03	T	-0.1005	0.018	2.093E-08	0.98 (0.89-1.07)	0.635
rs11679386	2	20985414	0.85	T	-0.0569	0.009	7.028E-11	1.05 (0.99-1.10)	0.107
rs13008369	2	21100438	0.12	T	-0.0458	0.008	2.296E-08	1.02 (0.97-1.07)	0.454
rs6722139	2	21101382	0.13	A	-0.0513	0.008	1.358E-11	1.02 (0.97-1.06)	0.469
rs12994068	2	21118983	0.75	A	-0.0381	0.006	6.555E-10	0.98 (0.95-1.02)	0.315
rs3903032	2	21119850	0.90	A	-0.0692	0.009	2.662E-13	1.04 (0.99-1.09)	0.119
rs4971538	2	21121130	0.87	T	-0.0689	0.008	2.534E-15	0.96 (0.91-1.01)	0.079
rs4468779	2	21125742	0.73	T	-0.0372	0.006	7E-10	0.98 (0.94-1.01)	0.203
rs10188514	2	21134064	0.65	T	-0.0519	0.006	3.049E-18	1.01 (0.98-1.04)	0.649
rs6734506	2	21134656	0.64	T	-0.0562	0.005	1.272E-25	1.01 (0.98-1.04)	0.646
rs3923672	2	21136225	0.78	C	-0.0499	0.006	1.807E-14	1.01 (0.98-1.05)	0.514
rs4502373	2	21139470	0.20	A	-0.0583	0.007	2.116E-18	1.03 (0.99-1.07)	0.167
rs11096689	2	21140540	0.70	T	-0.0794	0.006	0	1.01 (0.98-1.05)	0.553
rs6732011	2	21146521	0.37	T	-0.0411	0.005	1.876E-14	0.97 (0.94-1.00)	0.088
rs6547409	2	21190209	0.04	T	-0.1525	0.015	2.875E-25	0.95 (0.87-1.03)	0.219
rs11902417	2	21198900	0.26	A	-0.0705	0.006	4.079E-31	0.96 (0.93-1.00)	0.028
rs4564803	2	21205502	0.24	T	-0.0704	0.006	5.491E-31	0.96 (0.93-0.99)	0.024
rs10164442	2	21205563	0.69	A	-0.0436	0.005	3.159E-14	0.99 (0.95-1.02)	0.364
rs13014683	2	21213126	0.18	T	-0.0644	0.007	3.571E-23	1.03 (0.99-1.07)	0.112
rs6725189	2	21219001	0.19	T	-0.0713	0.006	4.83E-30	1.03 (0.99-1.07)	0.147
rs4371387	2	21221133	0.21	A	-0.0715	0.006	5.13E-30	1.04 (1.00-1.08)	0.054
rs952275	2	21221399	0.49	T	-0.1066	0.005	0	1.00 (0.97-1.03)	0.825

rs2678379	2	21226560	0.25	A	-0.0638	0.006	2.991E-24	0.95 (0.92-0.99)	0.008
rs6413458	2	21231592	0.08	A	-0.1123	0.020	3.766E-08	1.06 (0.94-1.19)	0.353
rs11126598	2	21240364	0.31	A	-0.0524	0.006	1.712E-17	0.97 (0.94-1.00)	0.056
rs12720828	2	21241744	0.17	T	-0.0735	0.007	6.874E-27	1.03 (0.99-1.07)	0.197
rs679899	2	21250914	0.47	A	-0.0816	0.009	3.132E-19	0.98 (0.95-1.01)	0.248
rs12720842	2	21257927	0.95	T	-0.1108	0.017	1.686E-11	0.99 (0.87-1.12)	0.834
rs1469513	2	21259562	0.56	T	-0.1122	0.005	0	1.00 (0.96-1.03)	0.759
rs579826	2	21261507	0.07	T	-0.0919	0.009	4.079E-23	1.05 (1.00-1.11)	0.066
rs531819	2	21263639	0.13	T	-0.1407	0.007	0	1.03 (0.99-1.07)	0.203
rs17398765	2	21270751	0.93	A	-0.1134	0.011	9.376E-24	1.00 (0.91-1.09)	0.931
rs7567653	2	21276962	0.02	A	-0.1899	0.022	5.181E-18	1.00 (0.91-1.09)	0.988
rs6548010	2	21277922	0.66	A	-0.1176	0.006	0	0.99 (0.96-1.03)	0.643
rs515135	2	21286057	0.16	T	-0.1458	0.007	0	1.01 (0.97-1.05)	0.603
rs562338	2	21288321	0.18	A	-0.1437	0.007	0	1.00 (0.96-1.05)	0.821
rs11693775	2	21296546	0.68	A	-0.1071	0.005	0	0.99 (0.96-1.03)	0.703
rs478588	2	21297149	0.20	A	-0.1249	0.007	0	1.02 (0.98-1.06)	0.412
rs4665176	2	21305853	0.67	T	-0.1047	0.005	0	1.00 (0.96-1.03)	0.786
rs754524	2	21311541	0.71	T	-0.1059	0.006	0	0.99 (0.96-1.03)	0.755
rs17395512	2	21346556	0.65	T	-0.1107	0.010	1.06E-30	0.99 (0.96-1.02)	0.553
rs1367119	2	21386375	0.21	A	-0.1203	0.006	0	1.02 (0.98-1.06)	0.391
rs522250	2	21387113	0.19	T	-0.1197	0.006	0	1.01 (0.97-1.05)	0.586
rs520861	2	21387239	0.25	A	-0.0928	0.006	0	1.03 (0.99-1.06)	0.142
rs479545	2	21389897	0.17	T	-0.1216	0.007	0	1.02 (0.98-1.06)	0.389
rs478148	2	21402981	0.24	T	-0.0904	0.006	0	1.02 (0.99-1.06)	0.186
rs503662	2	21414142	0.23	T	-0.0910	0.006	0	1.02 (0.98-1.06)	0.279
rs17042000	2	21422928	0.18	T	-0.1156	0.007	0	1.01 (0.98-1.05)	0.468
rs365946	2	21439329	0.16	T	-0.1064	0.007	0	1.01 (0.97-1.05)	0.745
rs13420469	2	21449034	0.74	T	-0.0790	0.006	1.697E-37	0.98 (0.95-1.02)	0.323

rs1079457	2	21449498	0.83	C	-0.0846	0.007	1.09E-33	1.01 (0.97-1.05)	0.594
rs11900894	2	21450264	0.77	A	-0.0793	0.006	8.053E-38	0.98 (0.95-1.02)	0.331
rs10198972	2	21453211	0.06	A	-0.1048	0.014	4.417E-15	1.00 (0.93-1.07)	0.959
rs7566040	2	21454424	0.61	T	-0.0497	0.005	3.509E-20	1.00 (0.97-1.04)	0.788
rs312042	2	21464498	0.71	A	-0.0521	0.006	4.577E-19	0.99 (0.95-1.02)	0.380
rs13387827	2	21469152	0.12	T	-0.1049	0.007	0	0.98 (0.94-1.03)	0.485
rs312049	2	21475944	0.60	T	-0.0500	0.005	1.696E-20	1.00 (0.97-1.04)	0.857
rs13396400	2	21502727	0.55	A	-0.0419	0.005	2.461E-14	1.01 (0.98-1.04)	0.637
rs6704721	2	21507500	0.70	A	-0.0430	0.006	8.832E-14	1.00 (0.97-1.04)	0.924
rs219535	2	21531099	0.67	T	-0.0414	0.005	2.304E-14	1.01 (0.98-1.04)	0.635
rs219540	2	21532767	0.68	A	-0.0419	0.005	1.639E-14	1.01 (0.98-1.04)	0.639
rs2337901	2	21537251	0.62	T	-0.0395	0.005	1.582E-13	1.02 (0.99-1.05)	0.282
rs1025447	2	44022970	0.80	T	-0.0396	0.007	2.76E-09	0.97 (0.93-1.01)	0.153
rs10439467	2	44048346	0.06	T	-0.0648	0.012	8.138E-08	0.98 (0.92-1.05)	0.518
rs6756629	2	44065090	0.10	A	-0.1394	0.018	7.985E-17	1.03 (0.97-1.09)	0.388
rs4953023	2	44074000	0.09	A	-0.1347	0.012	3.345E-33	1.03 (0.96-1.09)	0.439
rs6755809	2	44096336	0.75	A	-0.0806	0.006	0	1.00 (0.97-1.04)	0.900
rs1052639	2	118583100	0.11	A	-0.0484	0.009	6.569E-08	0.98 (0.93-1.03)	0.480
rs17508904	2	118594720	0.08	T	-0.0481	0.009	9.334E-08	0.98 (0.93-1.03)	0.419
rs4072296	5	74242002	0.45	T	-0.0337	0.005	1.819E-10	0.98 (0.95-1.01)	0.205
rs4703642	5	74262162	0.47	A	-0.0311	0.005	3.149E-10	0.98 (0.95-1.01)	0.178
rs7700719	5	74291869	0.52	A	-0.0281	0.005	3.296E-08	0.97 (0.94-1.00)	0.062
rs7714420	5	74340327	0.72	A	-0.0325	0.006	8.847E-09	0.98 (0.94-1.01)	0.155
rs4703645	5	74361140	0.79	T	-0.0573	0.007	1.783E-16	0.96 (0.92-1.00)	0.060
rs3923323	5	74372141	0.81	T	-0.0567	0.007	2.224E-16	0.96 (0.92-1.00)	0.071
rs10462511	5	74384115	0.62	A	-0.0450	0.005	1.939E-16	0.96 (0.93-0.99)	0.019
rs17671496	5	74499631	0.88	A	-0.0513	0.008	6.392E-10	0.95 (0.90-1.00)	0.033
rs918623	5	74596682	0.74	T	-0.0676	0.006	4.569E-28	0.97 (0.94-1.01)	0.137

rs10474433	5	74616843	0.66	T	-0.0707	0.005	1.882E-37	0.97 (0.94-1.00)	0.054
rs3843480	5	74624482	0.61	T	-0.0758	0.005	0	0.99 (0.96-1.02)	0.410
rs12654264	5	74648603	0.63	A	-0.0744	0.005	0	1.02 (0.99-1.05)	0.211
rs3846662	5	74651084	0.59	A	-0.0686	0.005	2.44E-35	0.99 (0.96-1.02)	0.579
rs12916	5	74656539	0.62	T	-0.0755	0.005	0	1.00 (0.96-1.03)	0.773
rs4703670	5	74660356	0.76	T	-0.0592	0.006	1.213E-20	0.95 (0.92-0.99)	0.011
rs6453133	5	74692776	0.73	A	-0.0492	0.006	2.429E-18	0.97 (0.94-1.00)	0.087
rs17648288	5	74696638	0.91	C	-0.0600	0.009	2.067E-12	0.97 (0.93-1.03)	0.316
rs12173076	5	74697050	0.85	T	-0.0608	0.008	2.698E-13	0.94 (0.89-0.98)	0.006
rs6872314	5	74736065	0.77	A	-0.0479	0.006	3.454E-15	0.95 (0.92-0.99)	0.006
rs5744636	5	74867581	0.84	T	-0.0602	0.008	3.541E-14	0.93 (0.89-0.98)	0.004
rs5744667	5	74876613	0.83	T	-0.0528	0.008	9.841E-11	0.93 (0.89-0.98)	0.004
rs5744707	5	74890618	0.90	A	-0.0596	0.009	3.893E-12	1.03 (0.98-1.08)	0.272
rs2287711	5	74898752	0.78	T	-0.0604	0.006	6.069E-21	0.95 (0.91-0.98)	0.005
rs10078671	5	74902848	0.87	C	-0.0593	0.008	5.252E-14	1.07 (1.02-1.12)	0.004
rs904743	5	74917862	0.86	A	-0.0628	0.007	4.164E-16	0.93 (0.89-0.97)	0.002
rs1427924	5	74924890	0.80	A	-0.0605	0.006	5.216E-21	0.95 (0.91-0.99)	0.006
rs253393	5	74929647	0.75	A	-0.0443	0.006	1.242E-13	0.96 (0.93-1.00)	0.043
rs253412	5	74955841	0.68	A	-0.0559	0.005	1.407E-24	0.99 (0.95-1.02)	0.402
rs253414	5	74956517	0.67	T	-0.0546	0.005	2.352E-23	0.98 (0.95-1.02)	0.369
rs17563395	5	74962242	0.93	A	-0.0575	0.010	3.113E-08	0.99 (0.93-1.05)	0.723
rs16872768	5	74982207	0.64	T	-0.0513	0.005	3.951E-21	0.99 (0.96-1.02)	0.451
rs17563686	5	74984818	0.71	A	-0.0458	0.006	6.278E-15	1.01 (0.98-1.05)	0.530
rs888789	5	74988369	0.56	A	-0.0411	0.005	4.345E-14	0.99 (0.96-1.02)	0.511
rs1817869	5	74989037	0.70	T	-0.0455	0.006	2.234E-14	0.99 (0.95-1.02)	0.463
rs3797580	5	75003056	0.65	A	-0.0505	0.006	1.227E-18	0.99 (0.96-1.02)	0.370
rs2307111	5	75003678	0.61	T	-0.0451	0.005	2.631E-17	0.98 (0.95-1.01)	0.247
rs2047059	5	75008193	0.69	T	-0.0458	0.006	6.802E-15	0.98 (0.94-1.01)	0.199

rs6873053	5	156376703	0.11	A	-0.0534	0.010	2.406E-08	0.96 (0.91-1.02)	0.180
rs4704727	5	156380067	0.33	T	-0.0500	0.005	4.007E-19	0.99 (0.96-1.02)	0.530
rs6882076	5	156390297	0.34	T	-0.0536	0.005	1.888E-22	0.99 (0.96-1.03)	0.619
rs6896499	5	156431325	0.15	T	-0.0423	0.007	3.712E-09	0.96 (0.92-1.00)	0.072
rs7721033	5	156432523	0.20	T	-0.0370	0.007	1.047E-08	1.02 (0.98-1.06)	0.357
rs10036890	5	156433651	0.22	A	-0.0369	0.007	2.34E-08	1.02 (0.98-1.06)	0.350
rs2277025	5	156460095	0.60	T	-0.0318	0.005	8.216E-10	0.99 (0.96-1.02)	0.508
rs2270926	5	156469783	0.21	A	-0.0368	0.007	3.299E-08	1.01 (0.97-1.05)	0.640
rs10038271	5	156470401	0.16	T	-0.0398	0.007	1.996E-08	1.01 (0.97-1.05)	0.783
rs6555822	5	156473185	0.18	A	-0.0433	0.007	1.794E-09	0.96 (0.92-1.00)	0.034
rs3757354	6	16127407	0.24	T	-0.0441	0.007	1.162E-11	1.01 (0.97-1.05)	0.521
rs6939056	6	16160569	0.25	T	-0.0327	0.006	7.24E-08	1.01 (0.97-1.04)	0.657
rs1800562	6	26093141	0.09	A	-0.0714	0.012	6.069E-10	0.98 (0.92-1.05)	0.602
rs868943	6	116337503	0.41	A	-0.0315	0.005	3.346E-09	1.02 (0.99-1.05)	0.206
rs12196579	6	116351724	0.40	T	-0.0314	0.005	3.338E-09	1.02 (0.99-1.05)	0.231
rs11153594	6	116354591		T	-0.0312	0.005	2.946E-09	1.02 (0.99-1.05)	0.240
rs662138	6	160564476	0.82	C	-0.0532	0.007	5.785E-13	0.99 (0.95-1.03)	0.578
rs650284	6	160574535	0.62	A	-0.0301	0.005	6.176E-08	0.98 (0.95-1.01)	0.204
rs1564348	6	160578860	0.81	T	-0.0599	0.007	1.702E-17	0.99 (0.95-1.04)	0.737
rs11751605	6	160963230	0.84	T	-0.0442	0.007	8.366E-09	1.05 (1.01-1.10)	0.019
rs3798221	6	160998148	0.20	T	-0.0457	0.006	1.126E-12	1.02 (0.99-1.07)	0.219
rs7765803	6	161007538	0.37	C	-0.0313	0.005	6.475E-09	1.02 (0.99-1.06)	0.133
rs10455872	6	161010118	0.94	A	-0.1155	0.014	1.356E-15	1.05 (0.98-1.13)	0.166
rs9457946	6	161012749	0.36	T	-0.0308	0.005	1.242E-08	1.03 (0.99-1.06)	0.121
rs9456552	6	161017120	0.38	T	-0.0285	0.005	9.507E-08	1.02 (0.99-1.05)	0.170
rs1321195	6	161084156	0.19	A	-0.0461	0.007	2.155E-10	1.04 (1.00-1.09)	0.050
rs4374884	7	21600902	0.78	A	-0.0373	0.006	2.596E-09	1.00 (0.96-1.03)	0.875
rs11772101	7	21601444	0.59	T	-0.0309	0.005	1.884E-08	1.01 (0.98-1.04)	0.429

rs12670798	7	21607352	0.76	T	-0.0379	0.006	6.878E-10	0.99 (0.96-1.03)	0.653
rs12673820	7	21612705	0.57	T	-0.0291	0.005	9.434E-08	1.00 (0.97-1.03)	0.890
rs217406	7	44573761	0.79	C	-0.0554	0.009	4.925E-11	0.98 (0.94-1.03)	0.497
rs2073547	7	44582331	0.74	A	-0.0484	0.008	2.597E-10	1.03 (0.98-1.07)	0.243
rs217386	7	44600695	0.45	A	-0.0366	0.005	4.245E-11	1.00 (0.97-1.04)	0.771
rs217385	7	44602187	0.43	T	-0.0353	0.005	7.079E-11	1.01 (0.97-1.04)	0.746
rs710887	7	44709372	0.33	T	-0.0334	0.006	3.287E-08	0.99 (0.96-1.03)	0.683
rs983309	8	9177732	0.10	T	-0.0596	0.008	1.807E-13	1.02 (0.97-1.08)	0.354
rs10099512	8	9178821	0.08	C	-0.0579	0.011	9.499E-08	1.02 (0.95-1.09)	0.632
rs4841132	8	9183596	0.11	A	-0.0669	0.009	1.483E-12	1.01 (0.96-1.07)	0.615
rs2126260	8	9185081	0.20	T	-0.0336	0.006	6.394E-08	0.98 (0.94-1.01)	0.207
rs2126259	8	9185146	0.09	T	-0.0674	0.008	7.434E-15	1.01 (0.95-1.06)	0.845
rs1461729	8	9187242	0.12	A	-0.0633	0.009	1.263E-12	1.01 (0.95-1.06)	0.796
rs7004769	8	9187595	0.23	A	-0.0344	0.006	3.833E-08	0.97 (0.94-1.01)	0.170
rs13265179	8	9194694	0.14	A	-0.0561	0.008	5.096E-11	0.98 (0.94-1.03)	0.537
rs6982486	8	59332694	0.67	A	-0.0317	0.005	8.919E-09	1.00 (0.97-1.03)	0.863
rs13277801	8	59353534	0.66	T	-0.0318	0.005	6.707E-09	1.00 (0.97-1.03)	0.841
rs13273254	8	126457553	0.81	A	-0.0420	0.007	1.591E-10	0.96 (0.93-1.00)	0.052
rs4518686	8	126470817	0.62	A	-0.0460	0.005	1.545E-17	0.96 (0.93-0.99)	0.004
rs12679189	8	126473565	0.80	T	-0.0447	0.007	2.325E-11	0.96 (0.92-0.99)	0.024
rs2954018	8	126477153	0.68	T	-0.0375	0.006	2.046E-11	1.01 (0.97-1.04)	0.753
rs6982502	8	126479362	0.53	T	-0.0547	0.005	2.957E-26	0.98 (0.95-1.01)	0.179
rs4871603	8	126480367	0.63	T	-0.0333	0.005	3.096E-10	1.01 (0.98-1.04)	0.567
rs2954022	8	126482621	0.48	A	-0.0579	0.005	2.591E-29	0.98 (0.95-1.01)	0.250
rs2980862	8	126484638	0.69	C	-0.0378	0.006	1.047E-11	1.00 (0.97-1.03)	0.877
rs4592055	8	126486145	0.82	T	-0.0446	0.007	7.316E-11	0.96 (0.92-0.99)	0.027
rs4567057	8	126486906	0.84	A	-0.0430	0.007	3.957E-10	0.96 (0.92-1.00)	0.030
rs2954031	8	126491733	0.46	T	-0.0563	0.005	2.697E-27	0.98 (0.95-1.01)	0.152

rs12164213	8	126492448	0.78	T	-0.0362	0.006	5.506E-09	0.97 (0.93-1.00)	0.085
rs8180991	8	126500350	0.79	C	-0.0409	0.007	7.976E-10	1.02 (0.98-1.06)	0.403
rs6987702	8	126504726	0.72	T	-0.0362	0.006	4.084E-09	1.00 (0.96-1.03)	0.831
rs2954038	8	126507389	0.71	A	-0.0431	0.006	3.441E-12	1.00 (0.97-1.03)	0.973
rs6558405	8	144991176	0.58	T	-0.0337	0.006	3.867E-09	0.98 (0.95-1.01)	0.135
rs7002152	8	145000056	0.59	T	-0.0357	0.005	2.04E-10	0.98 (0.95-1.02)	0.301
rs7006770	8	145000602	0.60	T	-0.0352	0.005	5.483E-10	0.98 (0.95-1.02)	0.328
rs11136341	8	145043543	0.65	A	-0.0453	0.006	4.442E-13	0.98 (0.95-1.02)	0.293
rs3935755	8	145047187	0.61	A	-0.0380	0.005	1.195E-11	0.98 (0.95-1.02)	0.283
rs11136343	8	145058986	0.64	A	-0.0385	0.006	1.185E-10	0.97 (0.94-1.01)	0.137
rs644234	9	136142217	0.66	T	-0.0385	0.005	3.254E-13	1.00 (0.96-1.03)	0.842
rs612169	9	136143442	0.69	A	-0.0443	0.005	1.365E-16	1.00 (0.97-1.03)	0.890
rs505922	9	136149229	0.68	T	-0.0431	0.005	5.593E-16	1.00 (0.96-1.03)	0.855
rs630014	9	136149722	0.50	A	-0.0315	0.005	8.426E-10	1.01 (0.98-1.04)	0.726
rs579459	9	136154168	0.79	T	-0.0603	0.007	2.361E-21	1.00 (0.96-1.04)	0.982
rs2792744	10	113902418	0.76	A	-0.0340	0.006	2.221E-08	1.00 (0.96-1.03)	0.800
rs2487294	10	113937941	0.72	T	-0.0338	0.006	2.44E-09	0.99 (0.96-1.02)	0.467
rs2803621	10	113939584	0.73	A	-0.0338	0.006	2.729E-09	0.99 (0.96-1.02)	0.442
rs108499	11	61547237	0.35	T	-0.0474	0.005	4.319E-18	0.98 (0.94-1.01)	0.153
rs174538	11	61560081	0.34	A	-0.0506	0.006	9.617E-20	0.99 (0.96-1.02)	0.503
rs174549	11	61571382	0.33	A	-0.0494	0.006	5.27E-20	0.99 (0.96-1.02)	0.543
rs174556	11	61580635	0.32	T	-0.0493	0.006	6.748E-20	0.99 (0.96-1.03)	0.607
rs174570	11	61597212	0.15	T	-0.0554	0.007	2.945E-13	1.02 (0.97-1.06)	0.510
rs2727270	11	61603237	0.14	T	-0.0442	0.008	9.358E-09	0.99 (0.94-1.04)	0.667
rs174577	11	61604814	0.37	A	-0.0509	0.005	1.749E-21	0.99 (0.96-1.02)	0.557
rs174579	11	61605613	0.22	T	-0.0395	0.007	4.456E-10	0.99 (0.95-1.03)	0.533
rs174583	11	61609750	0.36	T	-0.0511	0.005	1.171E-21	0.99 (0.96-1.03)	0.656
rs174585	11	61611694	0.24	A	-0.0417	0.007	2.437E-10	0.99 (0.95-1.03)	0.657

rs174591	11	61617676	0.29	A	-0.0383	0.006	2.168E-10	0.98 (0.95-1.02)	0.371
rs174597	11	61621040	0.20	C	-0.0408	0.007	1.555E-08	0.99 (0.96-1.03)	0.788
rs174601	11	61623140	0.38	T	-0.0523	0.006	2.115E-20	1.00 (0.96-1.03)	0.786
rs2526678	11	61623793	0.12	A	-0.0626	0.009	6.207E-11	1.00 (0.94-1.07)	0.882
rs174605	11	61626921	0.31	T	-0.0369	0.006	3.803E-10	0.99 (0.96-1.03)	0.732
rs174616	11	61629122	0.46	A	-0.0363	0.005	7.919E-12	0.99 (0.95-1.02)	0.381
rs12279373	11	116600400	0.93	A	-0.0586	0.010	5.245E-10	0.99 (0.93-1.05)	0.767
rs1558861	11	116607437		T	-0.1073	0.016	2.32E-10	0.95 (0.90-1.01)	0.130
rs12292921	11	116621963	0.90	T	-0.0632	0.010	3.233E-11	1.01 (0.95-1.07)	0.765
rs2160669	11	116647607	0.90	T	-0.0853	0.010	1.527E-16	0.95 (0.90-1.01)	0.092
rs964184	11	116648917	0.87	C	-0.0807	0.008	1.473E-26	1.02 (0.98-1.07)	0.362
rs4417316	11	116652301	0.11	T	-0.0535	0.009	8.999E-10	1.04 (0.99-1.10)	0.133
rs12285095	11	116658031	0.91	T	-0.0666	0.011	1.113E-11	1.01 (0.95-1.08)	0.698
rs2266788	11	116660686	0.93	A	-0.0802	0.010	2.999E-14	0.96 (0.91-1.02)	0.196
rs662799	11	116663707	0.94	A	-0.0893	0.012	2.399E-13	0.95 (0.89-1.01)	0.092
rs9804646	11	116665079	0.07	T	-0.0618	0.012	1.343E-08	1.06 (1.00-1.13)	0.062
rs11216137	11	116669828	0.10	A	-0.0605	0.012	3.448E-08	1.05 (0.99-1.12)	0.098
rs10047462	11	116722041	0.89	T	-0.0630	0.010	1.184E-09	0.95 (0.90-1.00)	0.041
rs17135399	11	126218541	0.96	A	-0.0898	0.014	4.204E-11	1.00 (0.94-1.07)	0.983
rs4937122	11	126228659	0.92	T	-0.0792	0.012	5.462E-12	0.98 (0.92-1.05)	0.551
rs7940893	11	126246076	0.85	T	-0.0568	0.007	1.7E-14	0.98 (0.93-1.02)	0.301
rs11220463	11	126248211	0.92	A	-0.0696	0.009	1.325E-15	1.02 (0.97-1.06)	0.426
rs10774625	12	111910219	0.44	A	-0.0309	0.005	1.781E-09	0.97 (0.94-1.00)	0.055
rs593226	12	111993886	0.72	A	-0.0329	0.006	2.803E-08	0.98 (0.94-1.01)	0.220
rs11066028	12	112245170	0.71	A	-0.0343	0.006	5.422E-09	1.02 (0.98-1.05)	0.278
rs17630235	12	112591686	0.40	A	-0.0324	0.005	2.336E-09	0.99 (0.95-1.02)	0.350
rs2285810	12	112699540	0.67	T	-0.0305	0.006	8.316E-08	1.02 (0.98-1.05)	0.362
rs11066320	12	112906415	0.41	A	-0.0292	0.005	1.52E-08	0.99 (0.96-1.02)	0.556

rs2251468	12	121405126	0.66	A	-0.0413	0.005	9.454E-15	1.02 (0.99-1.05)	0.297
rs1169288	12	121416650	0.68	A	-0.0439	0.006	1.125E-15	1.02 (0.98-1.05)	0.321
rs1169286	12	121419056	0.59	T	-0.0350	0.005	2.943E-11	1.00 (0.97-1.03)	0.994
rs2393791	12	121423956	0.61	T	-0.0342	0.005	8.457E-11	1.02 (0.99-1.06)	0.201
rs2393775	12	121424574	0.62	A	-0.0349	0.005	3.662E-11	1.02 (0.99-1.06)	0.149
rs1169302	12	121432302	0.56	T	-0.0300	0.005	2.214E-09	1.00 (0.97-1.03)	0.898
rs1169313	12	121442670	0.65	T	-0.0377	0.005	2.476E-13	1.02 (0.99-1.06)	0.152
rs2257764	12	121446446	0.70	A	-0.0405	0.006	4.442E-14	0.98 (0.95-1.02)	0.328
rs4942505	13	32963707	0.53	T	-0.0275	0.005	9.812E-08	0.99 (0.96-1.02)	0.611
rs247616	16	56989590	0.32	T	-0.0415	0.006	9.248E-13	1.00 (0.97-1.04)	0.927
rs1800775	16	56995236	0.53	A	-0.0304	0.006	1.025E-08	1.01 (0.98-1.04)	0.656
rs11508026	16	56999328	0.44	T	-0.0337	0.006	1.583E-10	1.01 (0.98-1.04)	0.604
rs7205804	16	57004889	0.45	A	-0.0335	0.006	1.081E-10	1.01 (0.98-1.04)	0.509
rs11076175	16	57006378	0.82	A	-0.0443	0.008	4.358E-08	1.01 (0.97-1.05)	0.708
rs16973520	16	71996291	0.76	T	-0.0372	0.006	3.088E-09	1.00 (0.96-1.04)	1.000
rs8053891	16	71997789	0.77	A	-0.0385	0.006	7.432E-10	1.01 (0.97-1.04)	0.759
rs9925462	16	72000195	0.78	C	-0.0424	0.006	1.324E-11	1.00 (0.96-1.03)	0.899
rs10492825	16	72018417	0.73	T	-0.0466	0.006	1.237E-14	1.00 (0.97-1.04)	0.827
rs11645540	16	72028930	0.74	T	-0.0483	0.006	2.639E-15	1.00 (0.97-1.04)	0.880
rs4788597	16	72043039	0.36	T	-0.0345	0.005	7.436E-09	1.04 (1.01-1.08)	0.021
rs4788598	16	72044238	0.37	C	-0.0344	0.005	8.415E-09	1.05 (1.01-1.08)	0.006
rs6499557	16	72082654	0.48	A	-0.0305	0.005	4.514E-08	1.03 (1.00-1.06)	0.046
rs217181	16	72114002	0.19	T	-0.0464	0.007	6.352E-11	1.04 (1.00-1.08)	0.058
rs8060878	16	72243624	0.56	A	-0.0338	0.005	1.209E-09	1.03 (1.00-1.07)	0.033
rs9931011	16	72245185	0.57	A	-0.0332	0.005	2.163E-09	0.97 (0.94-1.00)	0.025
rs11655943	17	45385640	0.47	T	-0.0277	0.005	7.795E-08	1.06 (1.02-1.09)	0.001
rs7225700	17	45391804	0.32	T	-0.0322	0.005	3.921E-09	1.04 (1.01-1.08)	0.007
rs7218813	17	45394752	0.29	T	-0.0306	0.006	4.075E-08	1.06 (1.02-1.09)	0.002

rs6504833	17	45396087	0.34	A	-0.0316	0.005	5.651E-09	1.04 (1.01-1.08)	0.007
rs7216112	17	45406345	0.31	T	-0.0310	0.005	3.109E-08	1.04 (1.01-1.08)	0.011
rs7214410	17	45422628	0.42	A	-0.0281	0.005	7.42E-08	1.04 (1.01-1.07)	0.010
rs12452315	17	45479446	0.48	A	-0.0280	0.005	4.366E-08	1.06 (1.02-1.09)	0.001
rs2043305	19	10728320	0.21	A	-0.0452	0.007	1.856E-12	0.99 (0.95-1.03)	0.686
rs11085745	19	10824915	0.02	A	-0.1365	0.020	2.218E-11	0.86 (0.73-1.01)	0.069
rs11880613	19	10903972	0.19	A	-0.0720	0.007	4.388E-26	1.01 (0.97-1.05)	0.703
rs1610095	19	10904689	0.34	C	-0.0571	0.006	7.695E-25	0.99 (0.96-1.03)	0.668
rs11881315	19	10909953	0.17	T	-0.0734	0.007	1.118E-27	1.01 (0.97-1.05)	0.701
rs2287029	19	10916684	0.16	T	-0.0786	0.007	3.718E-31	1.01 (0.97-1.05)	0.683
rs3786719	19	10927100	0.31	C	-0.0453	0.005	1.142E-16	0.99 (0.96-1.03)	0.680
rs11881156	19	10950125	0.15	T	-0.0794	0.007	3.115E-30	1.00 (0.96-1.04)	0.840
rs12611017	19	11065021	0.25	A	-0.0584	0.006	3.086E-22	0.99 (0.95-1.02)	0.432
rs11879293	19	11072610	0.36	A	-0.0443	0.005	8.603E-17	0.98 (0.95-1.01)	0.242
rs12983316	19	11114352	0.77	A	-0.0696	0.008	1.787E-18	0.97 (0.91-1.02)	0.244
rs12610693	19	11139636	0.32	T	-0.0537	0.006	2.182E-19	0.98 (0.95-1.02)	0.286
rs4804562	19	11147615	0.30	A	-0.0577	0.006	1.029E-23	0.98 (0.95-1.02)	0.315
rs12052201	19	11159096	0.24	T	-0.0752	0.006	1.399E-34	0.98 (0.95-1.02)	0.381
rs12052058	19	11159525	0.24	T	-0.0737	0.006	3.143E-33	0.98 (0.94-1.02)	0.338
rs3786722	19	11161537	0.25	A	-0.0750	0.006	1.266E-34	0.98 (0.95-1.02)	0.363
rs1122608	19	11163601	0.23	T	-0.0738	0.006	1.237E-33	0.98 (0.95-1.02)	0.383
rs3786725	19	11166827	0.29	A	-0.0581	0.006	1.088E-22	0.98 (0.94-1.01)	0.182
rs6511720	19	11202306	0.10	T	-0.2108	0.009	0	0.99 (0.94-1.04)	0.714
rs8110695	19	11206530	0.17	A	-0.1118	0.008	0	0.97 (0.93-1.01)	0.197
rs2228671	19	11210912	0.10	T	-0.1733	0.009	0	0.98 (0.93-1.03)	0.500
rs12983082	19	11216561	0.55	A	-0.0476	0.005	9.575E-19	1.01 (0.98-1.04)	0.540
rs5930	19	11224265	0.41	A	-0.0649	0.005	2.615E-33	1.01 (0.98-1.04)	0.606
rs2738452	19	11229218	0.56	A	-0.0589	0.005	1.649E-29	1.00 (0.96-1.03)	0.778

rs5927	19	11233941	0.22	A	-0.0411	0.007	1.585E-10	0.96 (0.93-1.00)	0.050
rs6413504	19	11241915	0.52	A	-0.0608	0.005	1.997E-28	1.00 (0.97-1.03)	0.923
rs4804147	19	11256285	0.54	A	-0.0542	0.006	2.76E-21	0.99 (0.96-1.03)	0.685
rs892115	19	11263650	0.69	T	-0.0340	0.007	3.4E-08	0.97 (0.93-1.00)	0.065
rs7188	19	11275139	0.72	A	-0.0551	0.007	4.461E-16	0.99 (0.95-1.02)	0.457
rs11668104	19	19426181	0.15	A	-0.0629	0.008	4.177E-15	1.02 (0.97-1.07)	0.470
rs10415849	19	19505087	0.12	T	-0.0613	0.008	1.781E-15	1.02 (0.97-1.07)	0.356
rs16996148	19	19658472	0.08	T	-0.0877	0.010	5.987E-21	1.02 (0.96-1.08)	0.629
rs12610185	19	19721722	0.11	A	-0.0742	0.009	1.815E-16	1.01 (0.95-1.07)	0.739
rs17347726	19	44934842	0.16	C	-0.0464	0.008	3.913E-08	0.99 (0.93-1.05)	0.697
rs17800760	19	45013959	0.18	A	-0.0491	0.008	1.744E-11	0.96 (0.92-1.00)	0.083
rs17800819	19	45017064	0.14	T	-0.0522	0.008	4.203E-11	0.95 (0.91-0.99)	0.024
rs2272020	19	45150433	0.07	A	-0.1278	0.014	1.414E-21	0.90 (0.84-0.97)	0.008
rs1058402	19	45150614	0.07	A	-0.1242	0.014	1.443E-22	0.88 (0.82-0.95)	0.001
rs2965109	19	45225345	0.37	T	-0.0575	0.006	2.463E-26	0.84 (0.81-0.87)	0.000
rs1531517	19	45242173	0.06	A	-0.2482	0.012	0	0.79 (0.74-0.84)	0.000
rs4803759	19	45327459	0.27	T	-0.0676	0.006	1.933E-32	0.82 (0.79-0.85)	0.000
rs4803760	19	45333834	0.19	T	-0.1263	0.007	0	0.91 (0.87-0.95)	0.000
rs7359852	19	45336035	0.64	T	-0.0944	0.006	0	0.74 (0.72-0.77)	0.000
rs4605275	19	45338493	0.26	T	-0.0718	0.006	3.357E-33	0.81 (0.78-0.84)	0.000
rs2972564	19	45344458	0.88	A	-0.0771	0.011	1.263E-13	1.13 (1.08-1.19)	0.000
rs1985096	19	45346551	0.15	A	-0.1553	0.009	0	0.91 (0.86-0.95)	0.000
rs4803766	19	45371168	0.43	A	-0.0294	0.005	2.074E-08	0.97 (0.94-1.00)	0.029
rs8104483	19	45372354	0.71	T	-0.0532	0.006	1.935E-20	1.05 (1.01-1.09)	0.006
rs395908	19	45373565	0.16	A	-0.1512	0.007	0	1.00 (0.96-1.05)	0.970
rs283813	19	45389174	0.04	A	-0.2464	0.017	0	1.36 (1.27-1.46)	0.000
rs7254892	19	45389596	0.03	A	-0.4181	0.021	0	0.78 (0.70-0.87)	0.000
rs2075650	19	45395619	0.83	A	-0.1883	0.009	0	0.35 (0.34-0.37)	0.000

rs8106922	19	45401666	0.60	A	-0.0571	0.007	3.644E-17	1.46 (1.42-1.51)	0.000
rs445925	19	45415640	0.09	A	-0.3603	0.024	0	1.02 (0.96-1.08)	0.511
rs4803770	19	45427353		C	-0.1007	0.008	3.272E-29	0.63 (0.61-0.66)	0.000
rs5158	19	45447178	0.13	T	-0.0651	0.010	2.564E-10	0.98 (0.93-1.03)	0.463
rs11672002	19	45624987	0.33	T	-0.0442	0.005	5.981E-15	1.01 (0.97-1.04)	0.661
rs12975698	19	45676294	0.35	C	-0.0489	0.006	1.437E-15	1.00 (0.96-1.04)	0.976
rs679574	19	49206108	0.44	C	-0.0285	0.006	8.696E-08	1.02 (0.99-1.06)	0.128
rs492602	19	49206417	0.45	A	-0.0282	0.006	7.573E-08	0.98 (0.94-1.01)	0.123
rs1000410	20	39634366	0.56	C	-0.0287	0.005	2.946E-08	1.00 (0.97-1.03)	0.994
rs12625035	20	39664665	0.80	T	-0.0371	0.007	1.007E-08	1.03 (0.99-1.07)	0.164
rs6016511	20	39709255	0.68	T	-0.0463	0.005	7.871E-18	1.00 (0.97-1.04)	0.900
rs2076576	20	39713352	0.82	A	-0.0387	0.007	2.935E-09	1.02 (0.98-1.06)	0.288
rs6129760	20	39746403	0.69	A	-0.0467	0.005	3.909E-18	1.00 (0.97-1.03)	0.990
rs3795131	20	39769975	0.70	T	-0.0441	0.006	5.5E-16	1.00 (0.97-1.03)	0.949
rs12624863	20	39782899	0.81	A	-0.0324	0.006	5.792E-08	1.01 (0.97-1.05)	0.522
rs753381	20	39797465	0.46	T	-0.0394	0.005	5.988E-15	0.99 (0.96-1.02)	0.652
rs6102309	20	39856080	0.71	A	-0.0437	0.006	7.508E-16	1.00 (0.97-1.03)	0.951
rs6129784	20	39885529	0.79	T	-0.0338	0.006	1.933E-08	1.01 (0.98-1.05)	0.473
rs6029609	20	39911385	0.53	A	-0.0453	0.005	3.36E-19	0.99 (0.96-1.02)	0.680
rs2179372	20	39913632	0.47	C	-0.0421	0.005	2.23E-16	0.99 (0.96-1.02)	0.386
rs4812488	20	39916160	0.60	T	-0.0348	0.005	1.087E-11	1.00 (0.97-1.03)	0.984
rs6513714	20	39916401	0.61	A	-0.0346	0.005	1.418E-11	1.00 (0.97-1.03)	0.993
rs4812492	20	39938122	0.45	T	-0.0372	0.005	1.759E-13	0.99 (0.96-1.02)	0.600
rs4810312	20	39968707	0.59	C	-0.0385	0.005	3.88E-14	1.00 (0.97-1.03)	0.889
rs6029638	20	39970307	0.73	T	-0.0395	0.006	2.663E-12	1.01 (0.97-1.04)	0.750
rs6129820	20	39974316	0.75	A	-0.0393	0.006	7.487E-12	1.00 (0.97-1.04)	0.874

Chr=Chromosome, MAF 1000G CEU=minor allele frequency for the central European population (CEU) in the 1000 Genome database. SE=Standard error.

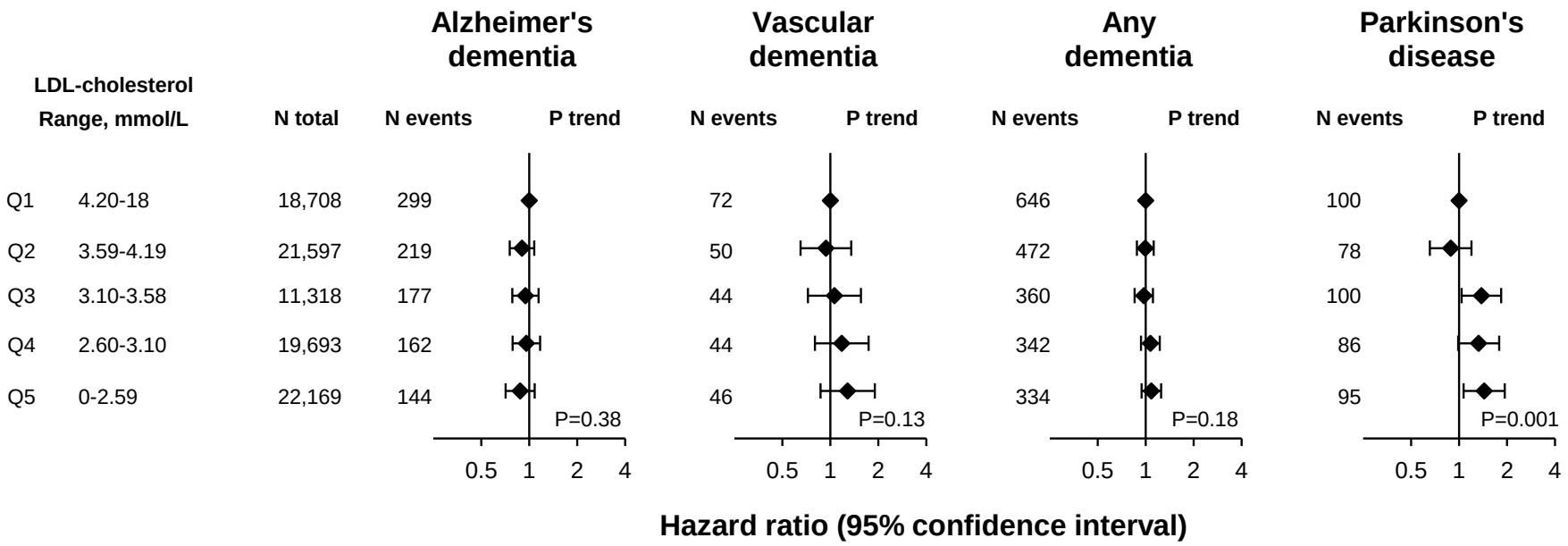
Supplementary Table 3

Prospective risk of Alzheimer's dementia, vascular dementia, any dementia, and Parkinson's disease as a function of *PCSK9, HMGCR* and combined alleles adjusted for age, sex and birth year.

			Alzheimer's dementia		Vascular dementia		Any dementia		Parkinson's disease	
Alleles		**N total**	**N events**	**HR**	**N events**	**HR**	**N events**	**HR**	**N events**	**HR**
PCSK9	-1	6,557	66	1	18	1	138	1	33	1
	0	71,931	665	0.89 (0.69-1.15)	174	0.89 (0.54-1.46)	1,467	0.96 (0.80-1.15)	383	0.99 (0.68-1.43)
	1	27,396	266	0.93 (0.71-1.22)	62	0.81 (0.47-1.39)	583	0.98 (0.81-1.19)	144	0.97 (0.65-1.43)
	2-4	4,041	32	0.80 (0.52-1.22)	6	0.60 (0.24-1.52)	69	0.85 (0.63-1.14)	17	0.76 (0.41-1.42)
				P for trend=0.72		P for trend=0.22		P for trend=0.68		P for trend=0.47
HMGCR	0	5,725	55	1	19	1	116	1	33	1
	1	38,750	349	0.94 (0.70-1.26)	99	0.70 (0.42-1.14)	796	0.98 (0.80-1.19)	212	0.94 (0.64-1.38)
	2	63,749	612	1.02 (0.77-1.36)	140	0.63 (0.39-1.02)	1,323	1.00 (0.83-1.22)	322	0.88 (0.61-1.29)
				P for trend=0.36		P for trend=0.10		P for trend=0.69		P for trend=0.40
Combined	-1 to	6,383	57	1	21	1	123	1	31	1
	1	30,518	288	1.11 (0.83-1.49)	77	0.76 (0.47-1.25)	641	1.15 (0.94-1.41)	183	1.20 (0.81-1.77)
	2	51,790	485	1.11 (0.84-1.48)	124	0.74 (0.46-1.18)	1,067	1.11 (0.91-1.35)	253	0.96 (0.65-1.42)
	3	17,187	165	1.13 (0.83-1.54)	33	0.59 (0.34-1.03)	364	1.15 (0.93-1.42)	88	1.03 (0.67-1.57)
	4	2,346	21	1.07 (0.64-1.79)	3	0.41 (0.12-1.39)	40	0.94 (0.65-1.36)	12	1.03 (0.51-2.06)
				P for trend=0.69		P for trend=0.05		P for trend=0.97		P for trend=0.29

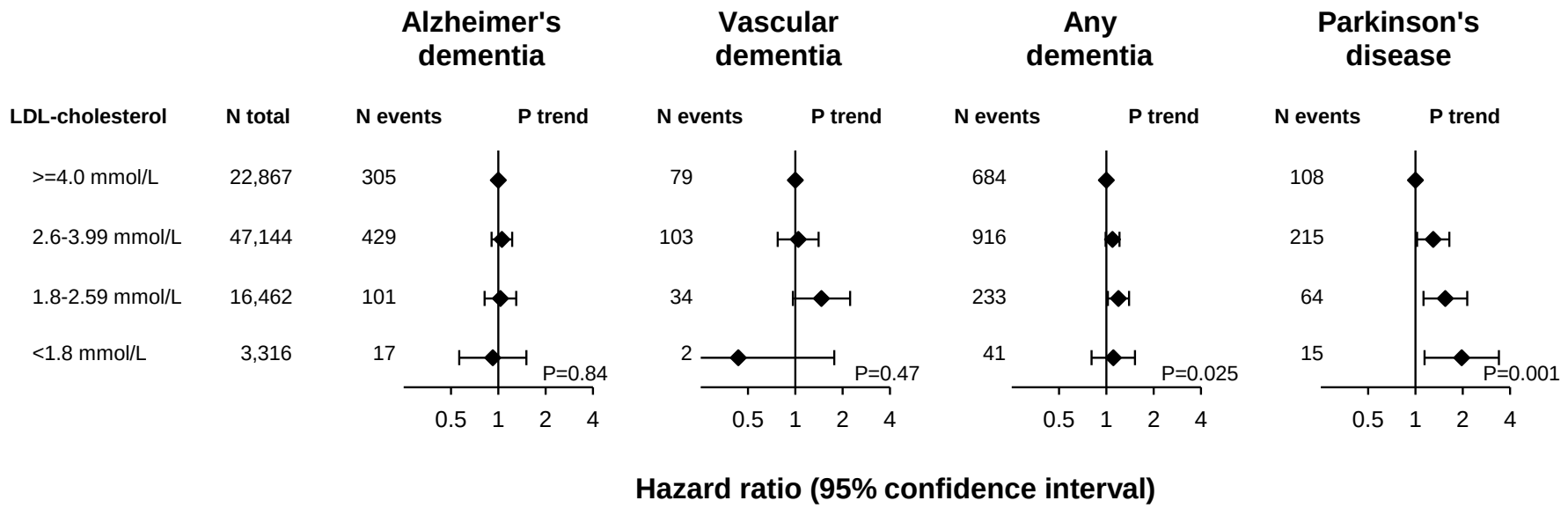
Number of individuals may vary due to availability of genotypes. P-values are from tests for trend of hazard ratios across ordered alleles.
N=number of individuals.

Supplementary Figure 1



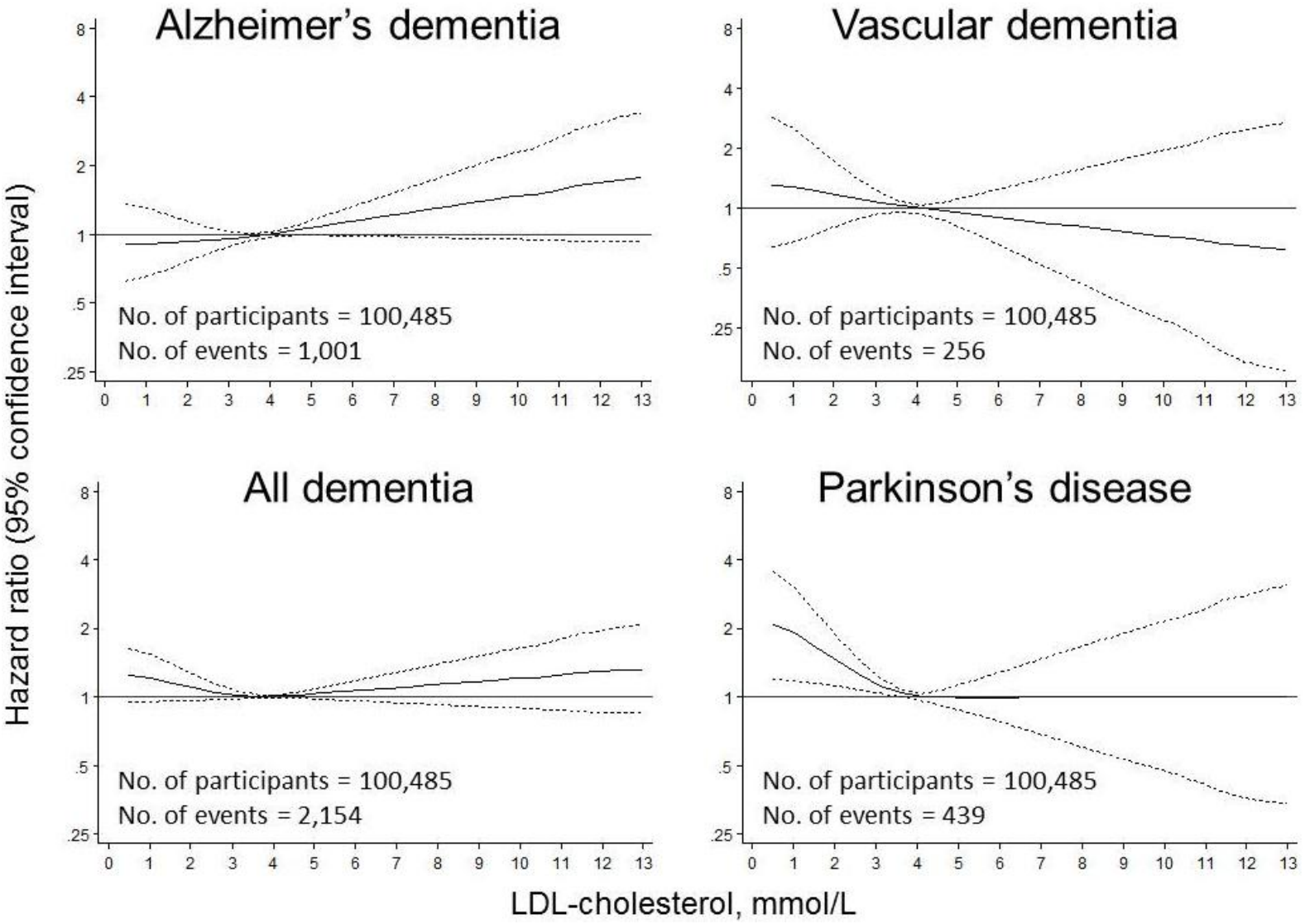
Prospective risk of Alzheimer's dementia, vascular dementia, any dementia, and Parkinson's disease as a function of baseline low-density-lipoprotein (LDL)-cholesterol in quintiles (Q1 through Q5). Multifactorially adjusted for age, sex, birth year, smoking as pack years, alcohol as units per week, physical inactivity, income, education, and menopause for women. Individuals with an event before baseline were excluded. P values are for test for trend of hazard ratios across ordered groups. N=number of individuals at risk.

Supplementary Figure 2



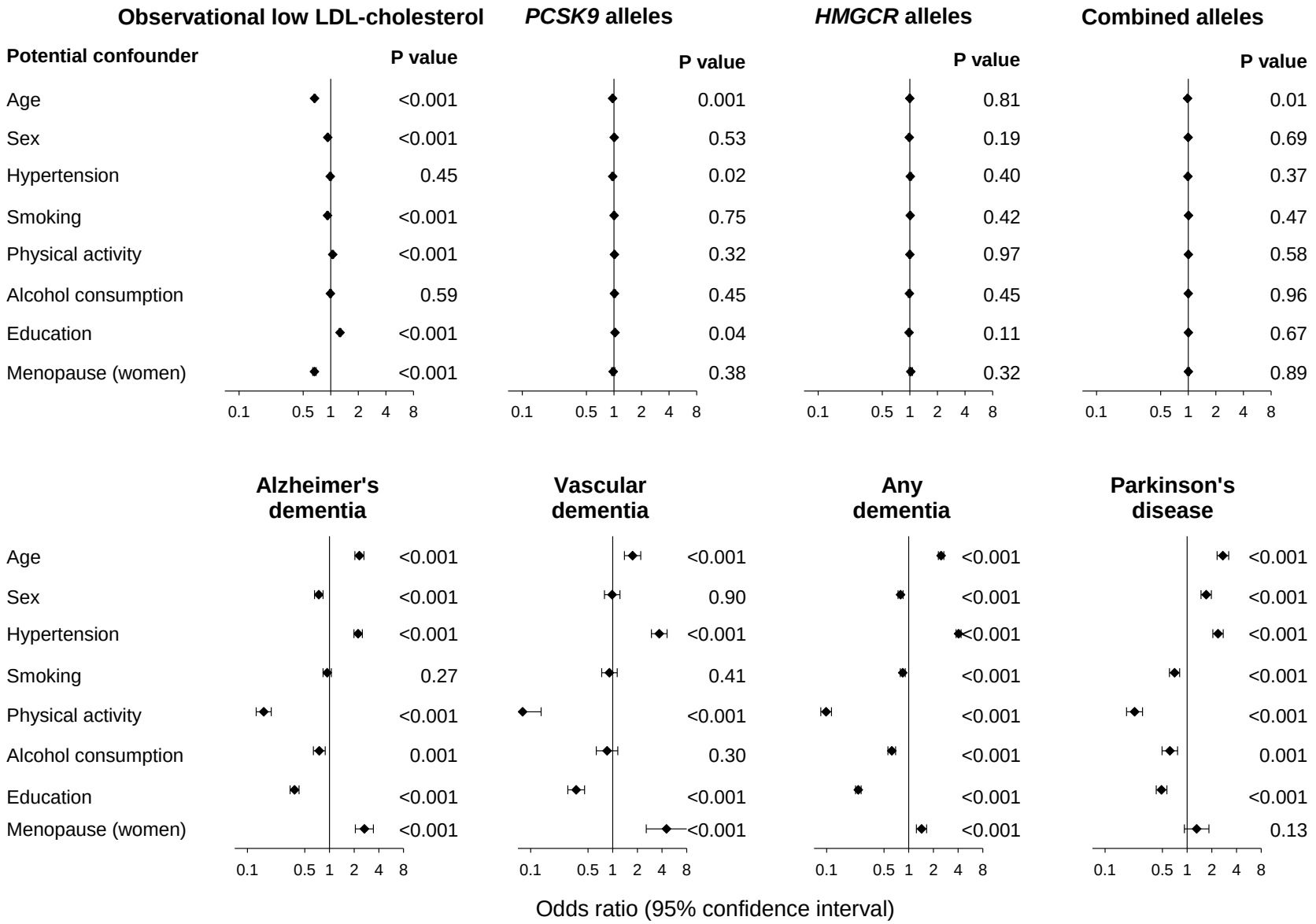
Prospective risk of Alzheimer's dementia, vascular dementia, any dementia, and Parkinson's disease as a function of baseline low-density-lipoprotein (LDL)-cholesterol in categories of LDL-cholesterol in individuals not on lipid lowering medication. Multifactorially adjusted for age, sex, birth year, smoking as pack years, alcohol as units per week, physical inactivity, income, education, and menopause for women. Individuals with an event before baseline were excluded. P values are for test for trend of hazard ratios across ordered groups. N=number of individuals at risk.

Supplementary Figure 3



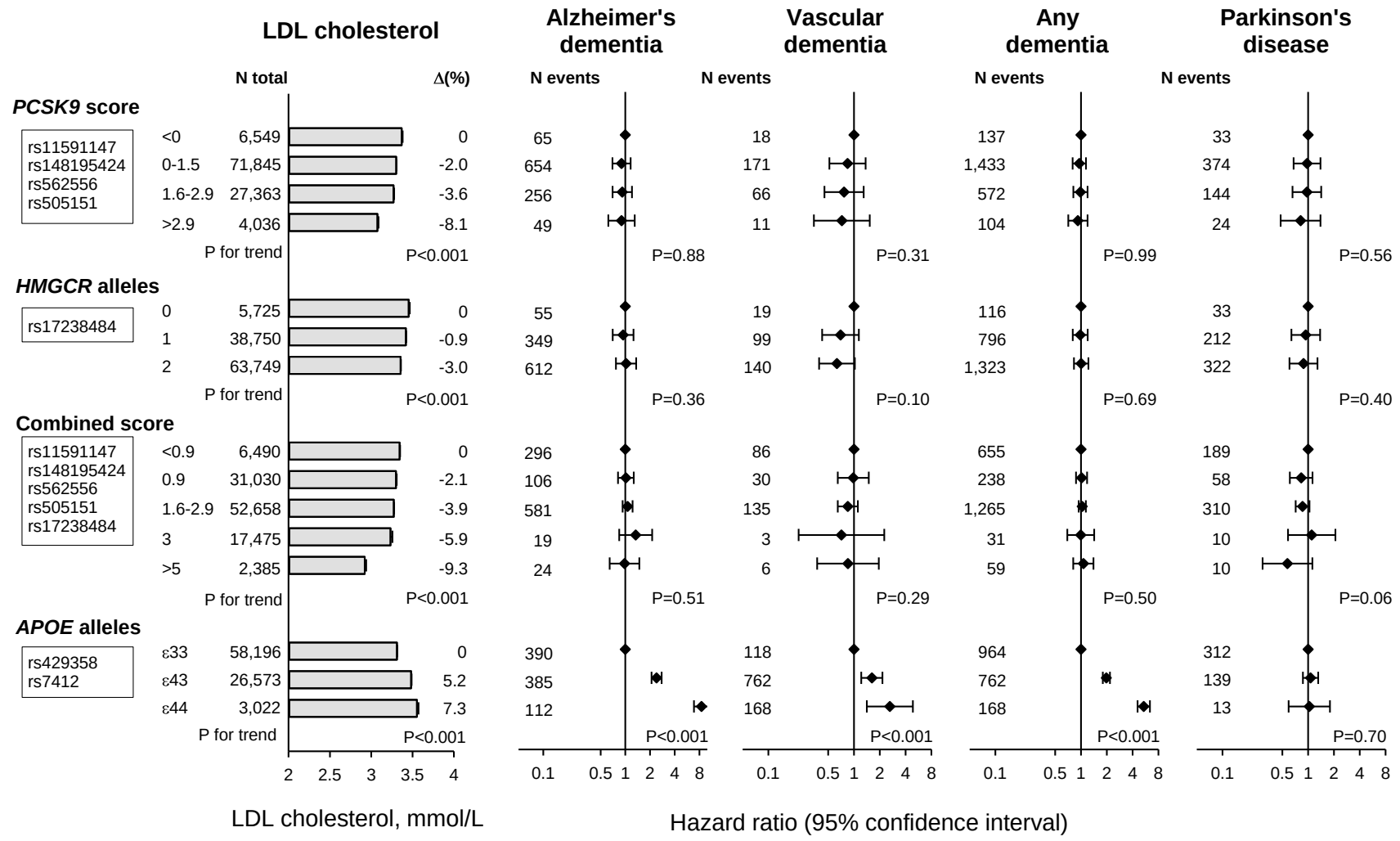
Multivariable adjusted hazard ratios for Alzheimer's dementia, vascular dementia, all dementia, and Parkinson's disease in the general population, the Copenhagen General Population Study and the Copenhagen City Heart Study. Solid lines are multivariable adjusted hazard ratios, and dashed lines indicate 95% confidence intervals derived from restricted cubic spline regression with knots chosen by Akaike information criterion. The number of knots, between 3 and 7, was chosen according to two criteria to balance best fit and overfitting: 1) best fit; lowest value of Akaike information criteria (Akaike H. Information theory and an extension of the maximum likelihood principle. In: Parzen E, Tanabe K, Kitagawa G, eds. Selected papers of Hirotugu Akaike. New York, NY: Springer; 1998_199-213) and 2) parsimony; if Akaike information criteria were within two of each other for different knots, the lowest number was chosen.

Supplementary Figure 4



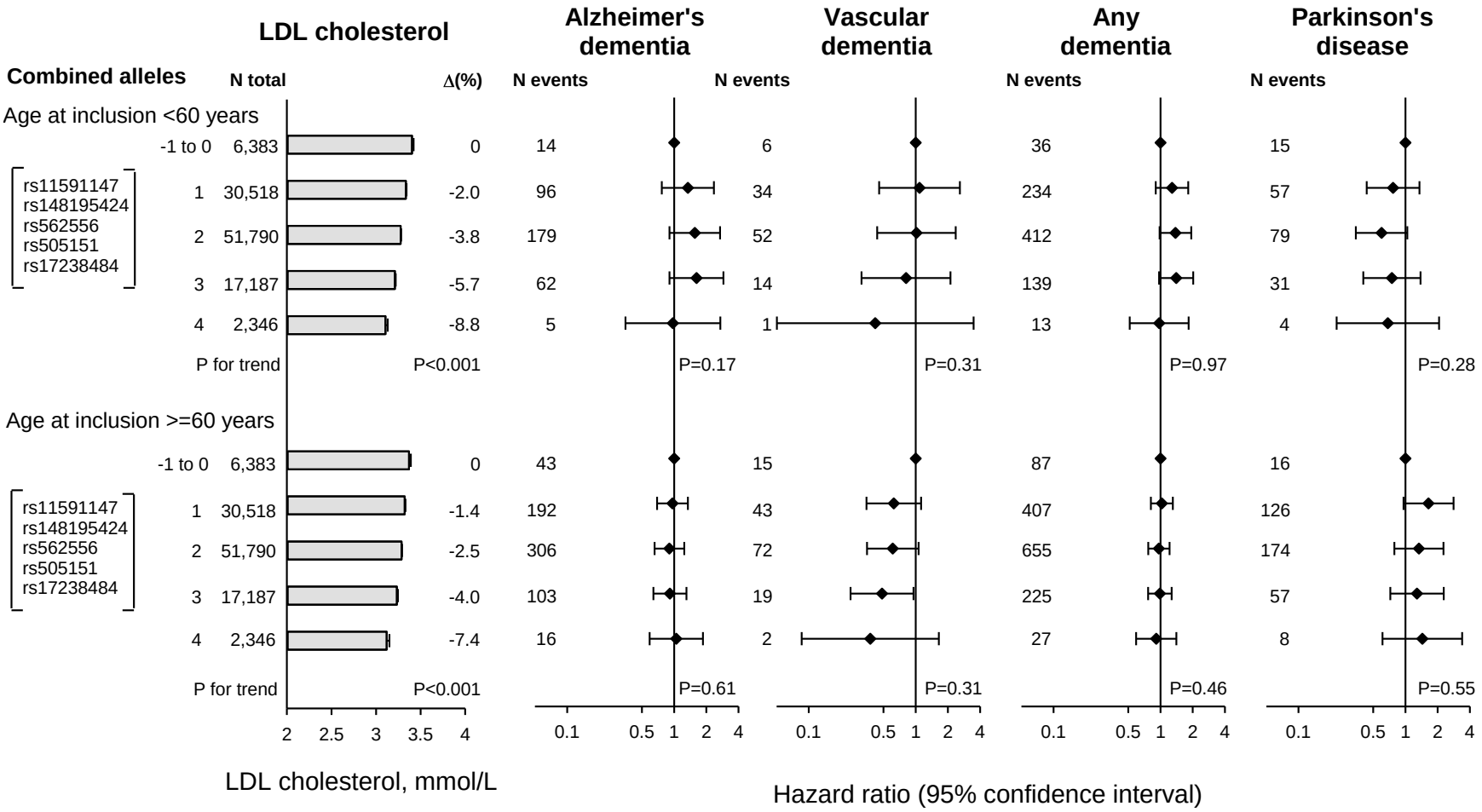
Associations of potential confounders with low low-density-lipoprotein (LDL)-cholesterol, alleles, Alzheimer's disease, vascular dementia, any dementia, and Parkinson's disease. Potential confounders were dichotomized: age (≥55 years versus <55 years), sex (men versus women), hypertension (yes versus no), smoking (smoking versus non-smoking), physical activity (intermediate and high versus low), alcohol consumption (>14/21 versus ≤14/21 units per week for women/men), education (≥10 years versus <10 years education), and for women menopausal status (postmenopausal versus premenopausal). For each potential confounder, logistic regression analysis was used to calculate age and sex-adjusted odds ratios and p-values for, respectively, a 1 mmol/L lower LDL-cholesterol, a 1 unit increase in allele score, and for presence versus absence of disease. Correcting for multiple testing using the Bonferroni method, would change the level of statistical significance to 0.05/8=0.006.

Supplementary Figure 5



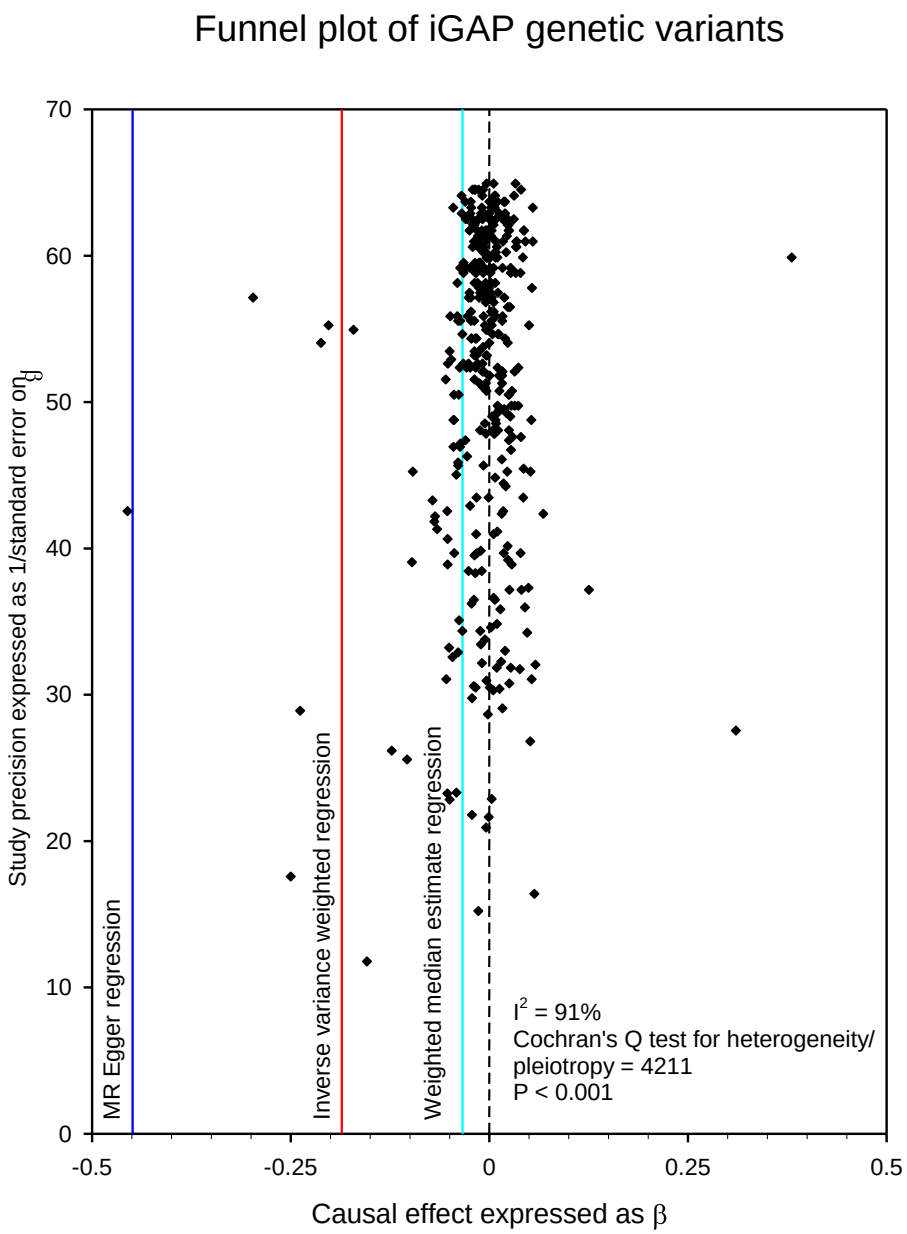
Prospective risk of Alzheimer's dementia, vascular dementia, any dementia, and Parkinson's disease as a function of weighted *PCSK9* and combined allele scores and simple *HMGCR* and *APOE* genotypes adjusted for age, sex and birth year. Number of individuals may vary due to availability of genotypes. P-values are from tests for trend of hazard ratios across ordered alleles. N=number of individuals.

Supplementary Figure 6



Prospective risk of Alzheimer's dementia, vascular dementia, any dementia, and Parkinson's disease as a function of combined LDL-cholesterol lowering alleles adjusted for age, sex and birth year and in strata by age below 60 years and above. Number of individuals may vary due to availability of genotypes. P-values are from tests for trend of hazard ratios across ordered alleles. N=number of individuals.

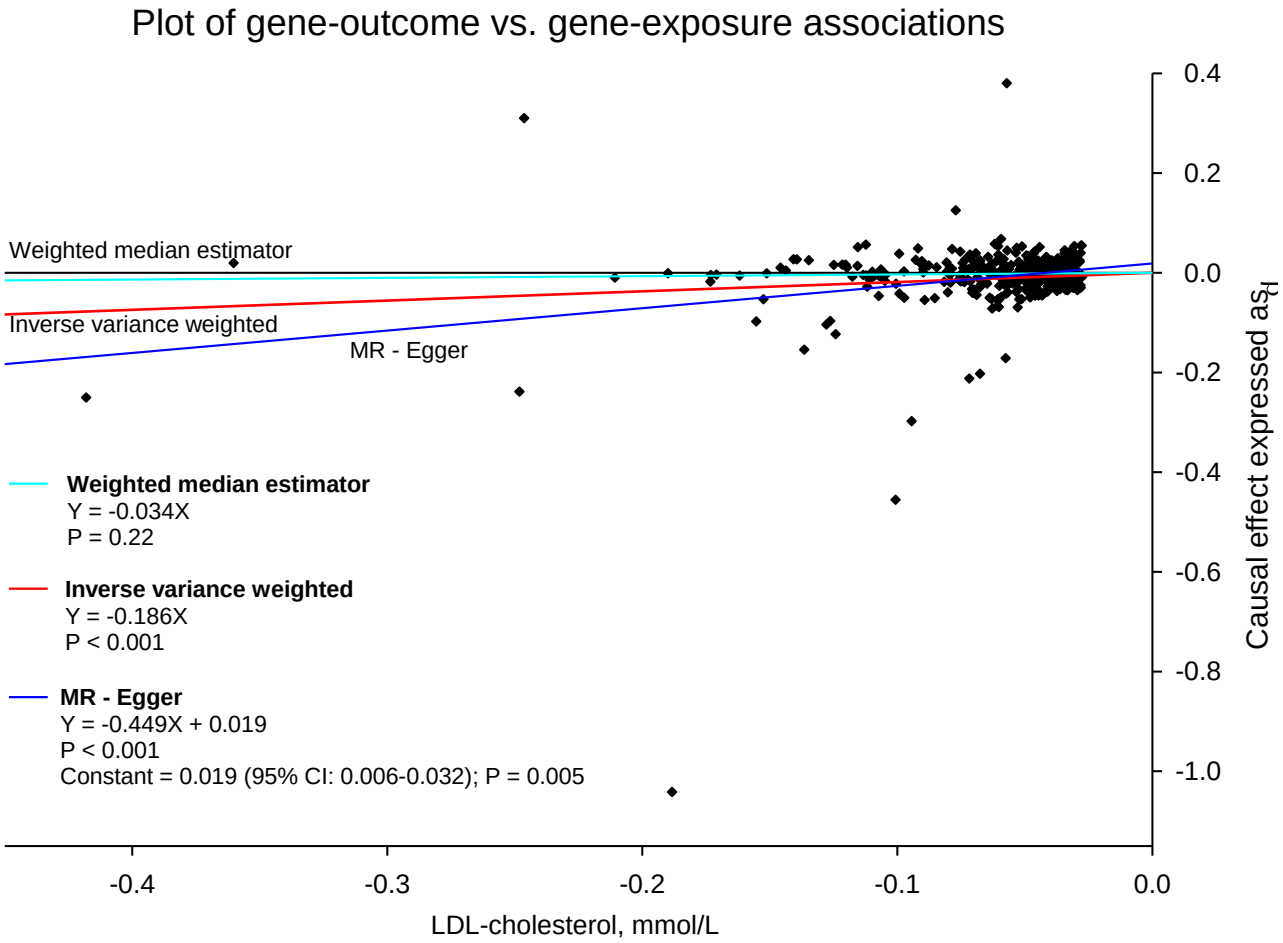
Supplementary Figure 7



Funnel plot of study precision expressed as 1 divided by the standard error on the estimate (β) and plotted against causal estimates based on each genetic variant individually. Cochrane's Q statistics tested for directional pleiotropy by summing the squared deviations of each genetic variants estimate from the overall estimate[1]. Colored vertical lines denote the causal effect estimate from MR-Egger regression (dark blue), inverse variance weighted (red), and weighted median estimate regression (light blue).

On visual inspection data points are largely symmetrically distributed around the broken reference line, but with some variants with a low precision (low Y, corresponding to a high standard error on β) with an effect on the causal estimate, indicative of presence of a slight directional pleiotropy.

Supplementary Figure 8



Scatterplot of the causal effect of each genetic variant against the effect on LDL-cholesterol. Colored regression lines denote the causal effect estimate from MR-Egger regression (dark blue), inverse variance weighted (red), and weighted median estimate regression (light blue). The estimated value of the intercept in MR-Egger regression is 0.019 (95% confidence interval (CI): 0.006-0.032; P=0.005), indicative of a modest overall directional pleiotropy. MR=Mendelian randomization.

Appendix A

Global Lipid Genetics Consortium[2]

Global Lipid Genetics Consortium is a consortium combining 25 genome wide association studies on lipid phenotypes. The consortium comprises approximately 2.6 mio SNPs genotyped on the Illumina "Metabochip" on 95,454 individuals. For the present study, data on genetic variants associated with LDL-cholesterol was used. Detailed information on Global Lipid Genetics Consortium is found on the study Web site
http://www.nature.com/ng/journal/v45/n11/extref/ng.2797-S1.pdf

International Genomics of Alzheimer's Project (IGAP)[3]

The International Genomics of Alzheimer's Project (IGAP) includes results from the 2013 meta-analysis of genome-wide association data on Alzheimer's disease with p-values and direction of effect at 7,055,881 directly genotyped or imputed genetic variants (1000G phase 1 alpha imputation, Build 37, Assembly Hg19) of 17,008 Alzheimer's disease cases and 37,154 controls.

Material and methods

International Genomics of Alzheimer's Project (IGAP) is a large two-stage study based upon genome-wide association studies (GWAS) on individuals of European ancestry. In stage 1, IGAP used genotyped and imputed data on 7,055,881 single nucleotide polymorphisms (SNPs) to meta-analyse four previously-published GWAS datasets consisting of 17,008 Alzheimer's disease cases and 37,154 controls (The European Alzheimer's disease Initiative – EADI the Alzheimer Disease Genetics Consortium – ADGC The Cohorts for Heart and Aging Research in Genomic Epidemiology consortium – CHARGE The Genetic and Environmental Risk in AD consortium – GERAD). In stage 2, 11,632 SNPs were genotyped and tested for association in an independent set of 8,572 Alzheimer's disease cases and 11,312 controls. Finally, a meta-analysis was performed combining results from stages 1 & 2.
For further information on IGAP, please refer to http://web.pasteur-lille.fr/en/recherche/u744/igap/igap_download.php

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