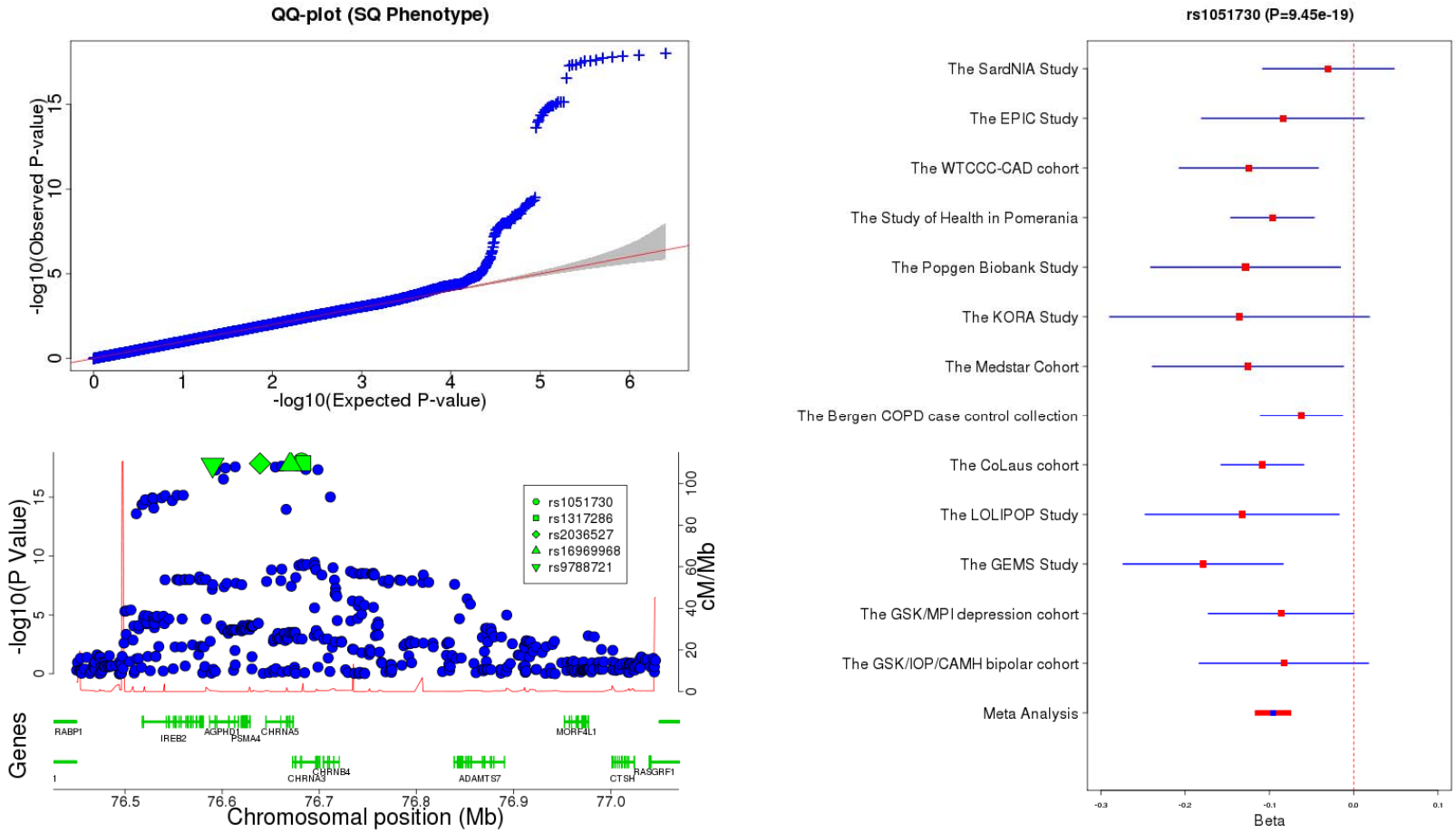
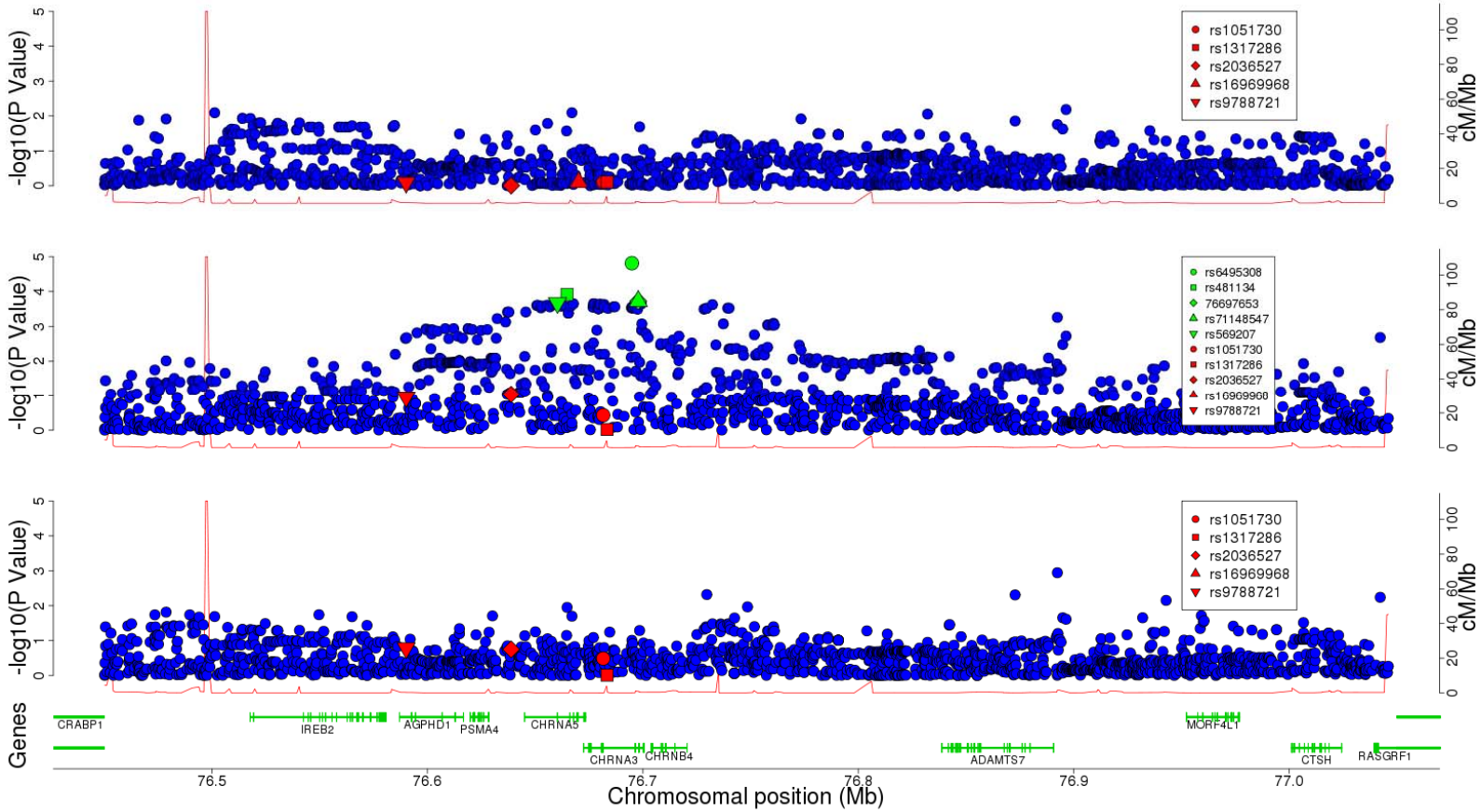
SUPPLEMENTARY ONLINE MATERIAL

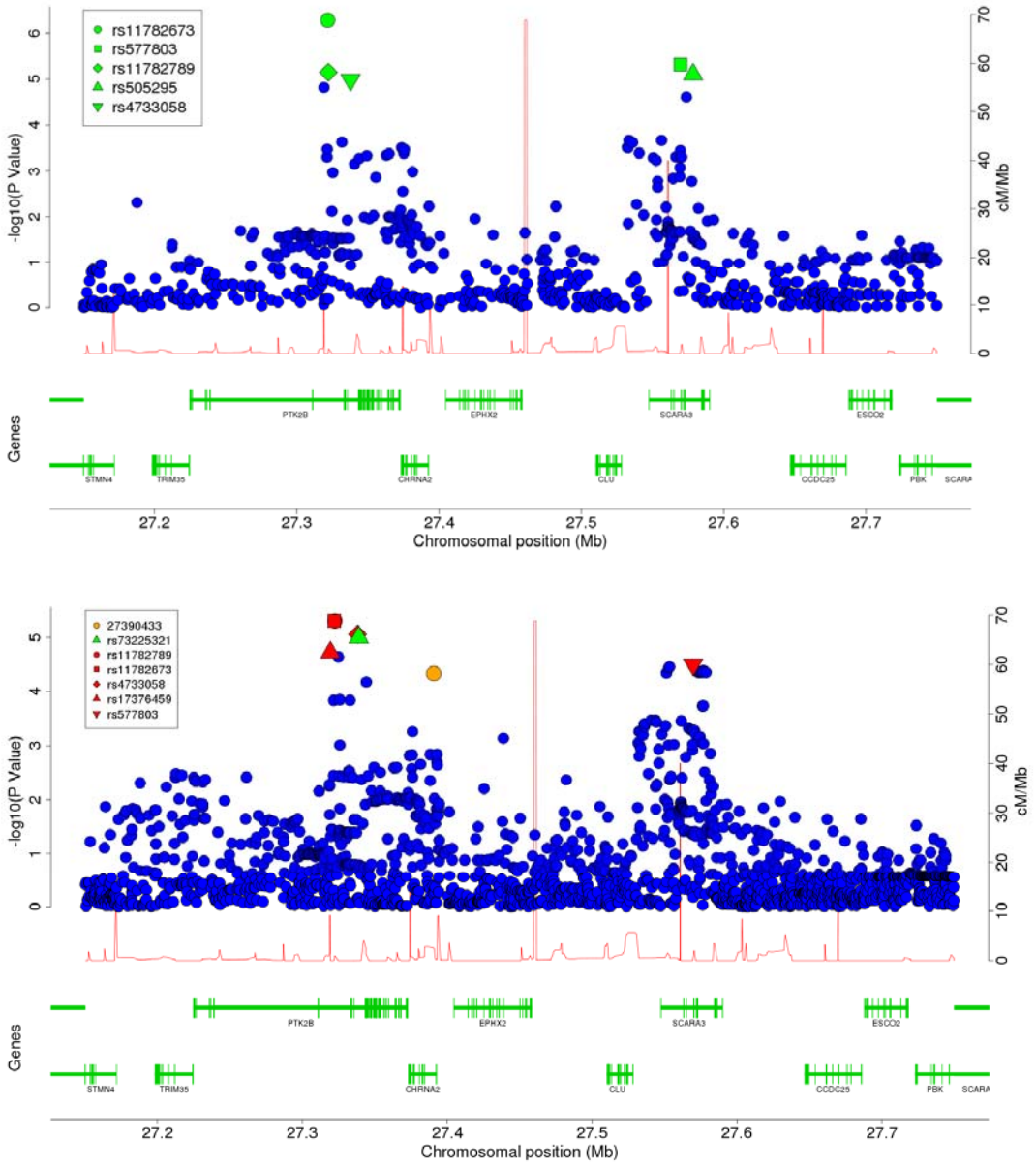
LIU *et al.*, Meta-analysis and imputation refines the association of 15q25 with smoking quantity



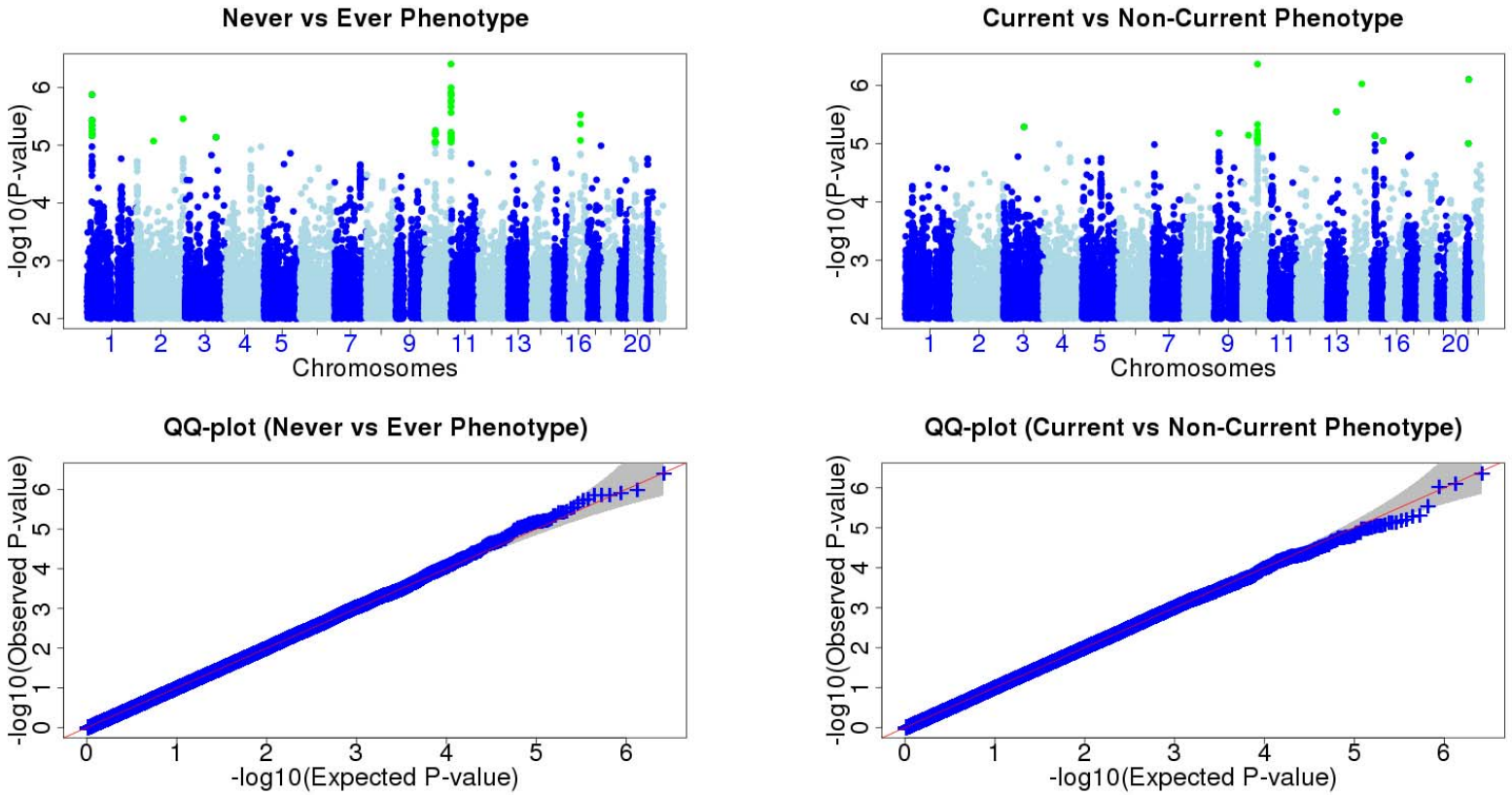
Supplementary Figure 1. Results from Smoking Quantity genome scan relating to 15q25. ***Top left****:* QQ plot showing significance of association of all SNPs in the genome-wide SQ meta-analysis versus that expected under the null hypothesis ***Bottom left:*** Chromosome 15q25 signal plot based on HapMap imputation and association meta-analysis of SQ. SNPs are plotted on the x-axis by their positions on the chromosome, against association (−log10 p-value) with SQ on the left y-axis. The five SNPs with the lowest p-values are highlighted in green and their rs identities are given in the box. Recombination rates across the region are shown by the red line plotted against the right y-axis. Genes and the position of exons are shown at the bottom (using data from the UCSC genome browser, genome.ucsc.edu). ***Right:*** Forest plot showing by-cohort evidence of association with SQ at SNP rs1051730. Point estimates of beta for the G allele together with the 95% confidence interval (CI) are shown for each cohort. The meta-analysis estimate with its 95% CI is shown at the bottom of the plot.



Supplementary Figure 2. Conditional analysis of 15q25.***Top:*** Chromosome 15q25 signal plot based on 1000 Genomes imputation and meta-analysis of SQ, conditional on SNPs rs55853698 and rs6495308. SNPs are plotted on the x-axis by their positions on the chromosome, against association with SQ on the left y-axis (−log10 p-value). The five SNPs with the lowest p-values from the unconditional HapMap-imputation analysis are highlighted in red. The rs identities of highlighted SNPs are given in the box. Recombination rates across the region are shown by the red line plotted against the right y-axis. Genes and the position of exons are shown at the bottom (using data from the UCSC genome browser). ***Middle:*** Chromosome 15q25 signal plot based on 1000 Genomes imputation and meta-analysis of SQ association, conditional on SNP rs16969968. The five SNPs with the lowest p-values from the conditional analysis are highlighted in green. The five SNPs with the lowest p-values from the unconditional HapMap-imputation analysis are highlighted in red. ***Bottom:*** Chromosome 15q25 signal plot based on 1000 Genomes imputation and meta-analysis of association with SQ, conditional on rs16969968 and rs588765. The five SNPs with the lowest p-values from the unconditional HapMap-imputation analysis are highlighted in red.



Supplementary Figure 3. Association signal on 8q21.***Top*:** Chromosome 8q21 signal plot based on HapMap imputation and meta-analysis of association with SQ. SNPs are plotted on the x-axis by their positions on the chromosome, against association with SQ on the left y-axis (−log10 p-value). The five SNPs with the lowest p-values are highlighted in green and their rs identities are given in the box. Recombination rates across the region are shown by the red line plotted against the right y-axis. Genes and the position of exons are shown below (using data from the UCSC genome browser, genome.ucsc.edu). ***Bottom:*** Chromosome 8q21 signal plot based on 1000 Genomes imputation and meta-analysis of SQ association. The five SNPs with the lowest p-values from the HapMap imputation are highlighted in red. The five SNPs with the lowest p-values from 1000 Genomes imputation are highlighted in green (unless already colored red). A novel CHRNA2 SNP at position 27390433 is highlighted in yellow.



Supplementary Figure 4. Analysis of Ever/Never and Current/Non-current. ***Top left:*** Manhattan plot showing significance of association of all SNPs in the EVER/NEVER genome-wide meta-analysis. SNPs are plotted on the x-axis according to their positions on each chromosome, against association with EVER/NEVER status on the y-axis (−log10 P-value). SNPs with p-values less than 1.0E-05 are highlighted in green. ***Bottom left:*** QQ plot showing significance of association of all SNPs in the Ever/Never genome-wide meta-analysis versus that expected under the null hypothesis. ***Top right:*** Manhattan plot showing significance of association of all SNPs in the Current/Non-Current genome-wide meta-analysis. ***Bottom right:*** QQ plot showing significance of association of all SNPs in the Current/Non-Current genome-wide meta-analysis versus that expected under the null hypothesis.

Supplementary Table 1. Information on study cohorts used in meta-analysis (Table covers 2 pages).

Study Name	Other Name	Description	Platform	Genotype calling algorithm	SNP QC exclusions	Sample QC exclusions	Post QC #SNPs	Post QC #samples
The arc Epidemiology Unit Rheumatoid Arthritis cohort	WTCCC-RA	Rheumatoid Arthritis cases	Affymetrix 500K	CHIAMO	HWE pval <= 5.7e-7, Call Rate <= 95%, MAF < 5%	Call rate: <97%, Heterozygosity >.3 and <.23, Samples with non-Eurpean ancestry, duplicated or closely related removed.	488756	1860
The EPIC Obesity study	EPIC	Obesity case-control	Affymetrix 500K	BRLMM	HWE pval <= 1e-6, Call Rate <= 90%, MAF < 1%	Call rate: <94%, Heterozygosity >.3 and <.23, Samples with non-Eurpean ancestry, duplicated or closely related removed. Samples with >5% discordance at SNP pairs with R^2=1 in HapMap.	377149	3516
The BRIGHT study	WTCCC-HT	Hypertension cases	Affymetrix 500K	CHIAMO	HWE pval <= 5.7e-7, Call Rate <= 95%, MAF < 5%	Call rate: <97%, Heterozygosity >.3 and <.23, Samples with non-Eurpean ancestry, duplicated or closely related removed.	488756	1952
The GEMS Study	GEMS	Dyslipidemia case-control	Affymetrix 500K	BRLMM	HWE pval <= 1e-4, Call Rate <= 95%, MAF = 0%	Call rate: <95%, Sex inconsistencies removed	475348	1847
The Bergen COPD case control collection	GSK-COPD	COPD case-control	Illumina HumanHap 550	BeadStudio	Call Rate <= 95%, MAF <0.15%	male X-chromosome homozygosity >0.8, female X-chromosome homozygosity <0.2, relatedness filter, EIGENSTRAT outliers removed	543945	1633
The GSK/IOP/CAMH bipolar cohort	GSK-BIPOLAR	Bipolar depression case-control	Illumina HumanHap 550	BeadStudio	Call Rate <= 95%, MAF <0.15%	male X-chromosome homozygosity >0.8, female X-chromosome homozygosity <0.2, relatedness filter, EIGENSTRAT outliers removed	510886	1805
The GSK/MPI depression cohort	GSK-UNIPOLAR	Unipolar depression case-control	Illumina HumanHap 550	BeadStudio	Call Rate <= 95%, MAF <0.15%	male X-chromosome homozygosity >0.8, female X-chromosome homozygosity <0.2, relatedness filter, EIGENSTRAT outliers removed	511590	1792
The UK IBD Genetics Consortium	WTCCC-IBD	Crohn's disease cases	Affymetrix 500K	CHIAMO	HWE pval <= 5.7e-7, Call Rate <= 95%, MAF < 5%	Call rate: <97%, Heterozygosity >.3 and <.23, Samples with non-Eurpean ancestry, duplicated or closely related removed.	488756	1748
The KORA Study	KORA	Population-based	Affymetrix 500K	BRLMM		Call rate: <93%	471430	1644
The KORCULA Study	KORCULA	Population-based	Illumina HumanHap 300	BeadStudio	HWE pval <= 1e-10, Call Rate <= 98%, MAF <=2%	Call rate: <98%	307728	827
The LOLIPOP Study	LOLIPOP	Population-based	Affymetrix 500K	BRLMM	HWE pval <= 1e-4, Call Rate <= 95%, MAF = 0%	Call rate: <95%, Sex inconsistencies removed	459497	1288
The Medstar Cohort	MEDSTAR	Coronary Artery Disease case-control	Affymetrix 6.0	BRLMM	HWE pval <= 1e-6, Call Rate <= 95%, MAF <=2%, Differential missingness p<1e-3, Plate based association p<1e-10	Call rate: <95%, Heterozygocity filter, relatedness filters, non-European samples removed	869222	1322
The Orkney Complex Disease Study	ORCADES	Population-based	Illumina HumanHap 300	BeadStudio	HWE pval <= 1e-10, Call Rate <= 98%, MAF <=2%	Call rate: <98%	306207	692
The PennCATH cohort	PENNCATH	Coronary Artery Disease case-control	Affymetrix 6.0	BRLMM	HWE pval <= 1e-6, Call Rate <= 95%, MAF <=2%, Differential missingness p<1e-3, Plate based association p<1e-10	Call rate: <95%, Heterozygocity filter, relatedness filters, non-European samples removed	906110	1401
The Popgen Biobank Study	POPGEN	Population-based	Affymetrix 6.0	BRLMM	HWE pval <= 1e-4, Call Rate <= 95%	Call rate: <95%, non-European samples removed	849506	1107
Cohorte Lausannoise	CoLaus	Population-based	Affymetrix 500K	BRLMM	HWE pval <= 1e-4, Call Rate <= 95%, MAF = 0%	Call rate: <95%, Sex inconsistencies removed	460404	5636
The SardNIA study	SardiNIA	Population-based	Affymetrix 500K + 10K	BRLMM	HWE pval <= 1e-6, Call Rate <= 95%, MAF <=5%	Call rate: <95%	356,359	4,305
The Study of Health in Pomerania	SHIP	Population-based	Affymetrix 6.0	Birdseed 2	-	Call rate: <92%	893579	4080
The VIS Study	VIS	Population-based	Illumina HumanHap 300	BeadStudio	HWE pval <= 1e-10, Call Rate <= 98%, MAF <=2%	Call rate: <98%	305068	769
The WTCCC-CAD cohort	WTCCC-CAD	Coronary Artery Disease cases	Affymetrix 500K	CHIAMO	HWE pval <= 5.7e-7, Call Rate <= 95%, MAF < 5%	Call rate: <97%, Heterozygosity >.3 and <.23, Samples with non-Eurpean ancestry, duplicated or closely related removed.	488756	1926
TOTAL								41150

				Total sample size		CPD phenotype (maximal, average, n/a)	Sample Size for CPD > 0	CPD Mean (SD) for CPD>0 samples	Sample Size		Sample Size		
Imputation Software	Post-imputation #SNPs	Association Analysis Software	Covariates used in analysis	Male	Female		All	All	Ever	Never	Current	Non-current	Other Name
IMPUTE	2614446	SNPTEST	Sex, Age	470	1390	n/a	n/a	n/a	n/a	n/a	262	558	WTCCC-RA
IMPUTE	2549220	SNPTEST	Sex, Age, Case-control status	1608	1908	n/a	n/a	n/a	1927	1589	353	1574	EPIC
IMPUTE	2614446	SNPTEST	Sex, Age	775	1177	maximal	830	17.2(11.9)	n/a	n/a	1274	672	WTCCC-HT
IMPUTE	2600508	SNPTEST	Sex, Age, Case-control status, Country	1094	753	maximal	862	19.1(12.8)	910	793	268	642	GSK-GEMS
IMPUTE	2565431	SNPTEST	Sex, Age, Case-control status	901	732	average	1632	14.6(7.8)	n/a	n/a	725	905	GSK-COPD
IMPUTE	2547468	SNPTEST	Sex, Age, Case-control status	697	1108	maximal	944	15.5(11.7)	1008	790	498	510	GSK-BIPOLAR
IMPUTE	2549858	SNPTEST	Sex, Age, Case-control status	589	1203	maximal	899	17.9(11.9)	935	856	503	432	GSK-UNIPOLAR
IMPUTE	2614446	SNPTEST	Sex, Age	680	1068	n/a	n/a	n/a	713	540	713	420	WTCCC-IBD
IMPUTE	2597224	SNPTEST	Sex, Age	813	831	maximal	253	16.7(9.4)	811	831	217	1425	KORA
MACH	2543888	ProbABEL	Sex, Age, 3 PCA-derived covariates	300	527	n/a	n/a	n/a	376	451	179	654	KORCULA
IMPUTE	2711866	SNPTEST	Sex, Age, Race	969	319	maximal	650	17.1(13.5)	653	635	258	395	GSK-LOLIPOP
IMPUTE	2739753	SNPTEST	Sex, Age, Case-control status	857	465	maximal	820	25.1(16.6)	853	469	300	553	GSK-MEDSTAR
MACH	2543888	ProbABEL	Sex, Age, 3 PCA-derived covariates	322	370	n/a	n/a	n/a	288	404	60	632	ORCADES
IMPUTE	2745959	SNPTEST	Sex, Age, Case-control status	932	469	n/a	n/a	n/a	n/a	n/a	464	612	PENNCATH
	2726564	SNPTEST		620	487	average	573	16.3(11.5)	495	608	n/a	n/a	POPGEN
IMPUTE	2606530	SNPTEST	Sex, Age	2659	2977	maximal	3132	18.2(12.8)	3357	2275	1485	1872	GSK-LAUSANNE
MACH	2252250	MERLIN	Sex, Age, Age^2	1886	2419	average	1731	16.2(11.6)	1743	2562	873	3432	SardiNIA
IMPUTE	2823150	SNPTEST	Sex, Age	2009	2071	average	2011	15.9(9.163)	2631	1449	1240	2840	SHIP
MACH	2543888	ProbABEL	Sex, Age, 3 PCA-derived covariates	323	446	n/a	n/a	n/a	441	328	212	557	VIS
IMPUTE	2614446	SNPTEST	Sex, Age	1527	399	average	1237	21.3(13.6)	1457	461	239	1218	WTCCC-CAD
				20031	21119		15574		18598	15041	10123	19903	TOTAL

Supplementary Table 2. Summary information for the top 15 loci of interest arising from analysis of each of the three traits (SQ, EVER/NEVER, Current/Non-current). Our study is referred to as OX-GSK. (Table covers six pages).

Trait	Region	SNP (rs ID)	Chr	Position	Coded Allele	Non-coded Allele	Coded Allele MAF	OX-GSK		TAG	ENGAGE	Combined	
								P-value	heterozygosity P-value	P-value	P-value	P-value	Beta (SE)
SQ	1	rs1992810	2	29120881	T	C	0.91	6.34E-06	0.43	6.83E-01	4.17E-01	5.13E-02	-0.014(0.0070)
SQ		rs2276551	2	29121879	C	A	0.15	1.58E-05	0.25	7.85E-01	4.94E-01	1.53E-01	0.006(0.0041)
SQ		rs7600186	2	150272350	G	A	0.84	1.51E-05	0.04	2.10E-01	9.63E-01	1.29E-02	-0.020(0.0067)
SQ		rs16827371	2	150272421	T	A	0.18	1.75E-05	0.13	9.51E-01	7.73E-01	8.58E-02	0.002(0.0025)
SQ		rs17801127	2	150272730	T	C	0.18	1.82E-05	0.13	9.71E-01	7.51E-01	1.01E-01	0.002(0.0022)
SQ		rs16827376	2	150273093	G	A	0.88	1.57E-05	0.13	9.71E-01	7.92E-01	1.01E-01	-0.001(0.0014)
SQ	2	rs17744655	2	150274565	T	G	0.88	1.50E-05	0.13	9.65E-01	6.90E-01	6.32E-02	-0.006(0.0042)
SQ		rs10195910	2	150352201	T	C	0.19	7.92E-05	0.10	7.40E-01	8.72E-01	1.11E-01	0.013(0.0077)
SQ		rs13000594	2	150375293	C	A	0.19	6.60E-05	0.09	8.02E-01	8.64E-01	9.97E-02	0.013(0.0077)
SQ		rs12990176	2	150385322	T	G	0.88	6.23E-05	0.08	7.81E-01	6.81E-01	9.86E-01	0.000(0.0005)
SQ		rs3934719	3	185889310	T	C	0.22	1.00E-06	0.09	2.76E-01	2.58E-01	2.19E-02	-0.015(0.0065)
SQ	3	rs3934720	3	185889376	C	A	0.22	4.34E-06	0.07	2.76E-01	1.43E-01	5.48E-02	-0.012(0.0061)
SQ		rs3936001	3	185891226	G	A	0.84	4.87E-06	0.06	2.33E-01	1.43E-01	4.71E-02	0.012(0.0062)
SQ		rs7653781	3	185891395	G	A	0.84	5.02E-06	0.05	2.40E-01	1.86E-01	3.32E-02	0.014(0.0064)
SQ		rs4699369	4	100028445	G	A	0.74	1.03E-04	0.06	2.22E-01	2.93E-01	7.29E-01	-0.002(0.0057)
SQ		rs4699689	4	100028612	T	C	0.29	1.12E-04	0.06	2.23E-01	2.73E-01	7.69E-01	0.002(0.0057)
SQ		rs13110878	4	100038622	C	A	0.29	1.04E-04	0.06	2.35E-01	4.11E-01	7.00E-01	0.002(0.0055)
SQ		rs11735758	4	100039279	T	A	0.74	8.46E-05	0.06	4.36E-01	3.18E-01	5.13E-01	-0.004(0.0055)
SQ		rs11736580	4	100039383	T	C	0.71	1.00E-04	0.06	3.65E-01	1.22E-01	8.06E-01	-0.001(0.0050)
SQ	4	rs17570252	4	100041928	T	C	0.71	1.03E-04	0.06	4.07E-01	1.27E-01	7.72E-01	-0.002(0.0050)
SQ		rs17583053	4	100045380	T	C	0.31	1.02E-04	0.08	3.81E-01	1.58E-01	7.37E-01	0.002(0.0050)
SQ		rs11727086	4	100047391	G	A	0.32	1.36E-04	0.06	3.96E-01	1.68E-01	7.17E-01	0.002(0.0051)
SQ		rs13107892	4	100071418	T	C	0.69	1.43E-05	0.05	2.73E-01	1.57E-01	7.04E-01	-0.002(0.0050)
SQ		rs17511498	4	100074264	G	A	0.31	8.63E-05	0.07	3.43E-01	1.33E-01	7.89E-01	0.001(0.0051)
SQ		rs13124855	4	100076131	G	A	0.71	8.10E-05	0.06	3.31E-01	1.07E-01	7.43E-01	-0.002(0.0053)
SQ		rs7688221	4	100094880	T	G	0.69	1.19E-05	0.05	2.49E-01	1.24E-01	7.40E-01	-0.002(0.0050)
SQ		rs7688298	4	165343709	T	G	0.13	8.05E-05	0.93	4.82E-01	8.62E-02	1.45E-03	-0.029(0.0092)
SQ		rs7691336	4	165347194	T	A	0.86	1.26E-05	0.73	2.37E-01	4.91E-01	1.53E-03	0.021(0.0069)
SQ		rs10001526	4	165352417	T	G	0.13	7.54E-05	0.92	4.59E-01	3.82E-02	9.56E-04	-0.033(0.0100)
SQ		rs13141215	4	165389441	T	A	0.13	6.20E-05	0.91	5.76E-01	7.63E-02	1.79E-03	-0.028(0.0090)
SQ		rs17044785	4	165390408	T	A	0.13	6.21E-05	0.91	5.68E-01	7.54E-02	1.72E-03	-0.028(0.0090)
SQ		rs7682877	4	165390554	T	A	0.13	6.21E-05	0.91	5.65E-01	8.03E-02	1.84E-03	-0.029(0.0093)
SQ		rs17044794	4	165391095	T	C	0.93	5.62E-05	0.91	5.66E-01	7.53E-02	1.64E-03	0.028(0.0090)
SQ		rs17044801	4	165392213	G	A	0.93	5.63E-05	0.91	5.65E-01	8.06E-02	1.78E-03	0.029(0.0093)
SQ		rs12711364	4	165392765	T	C	0.13	5.63E-05	0.91	5.62E-01	6.30E-02	1.71E-03	-0.030(0.0097)
SQ		rs17044809	4	165393567	G	A	0.93	5.63E-05	0.91	5.51E-01	1.40E-01	2.66E-03	0.026(0.0087)
SQ	5	rs2321381	4	165395793	G	A	0.93	6.22E-05	0.91	5.33E-01	1.77E-01	3.26E-03	0.025(0.0086)
SQ		rs4362777	4	165396088	G	A	0.93	5.64E-05	0.91	5.51E-01	1.22E-01	2.35E-03	0.026(0.0088)
SQ		rs13109568	4	165397507	G	A	0.13	5.63E-05	0.91	5.27E-01	1.40E-01	2.44E-03	-0.026(0.0087)
SQ		rs7688153	4	165398055	T	C	0.13	5.16E-05	0.92	5.24E-01	1.20E-01	2.00E-03	-0.027(0.0088)
SQ		rs17044823	4	165399131	T	A	0.93	5.81E-05	0.71	5.07E-01	1.40E-01	2.19E-03	0.026(0.0087)
SQ		rs6853526	4	165399149	G	A	0.93	4.75E-05	0.93	4.95E-01	1.19E-01	1.72E-03	0.027(0.0088)
SQ		rs9308071	4	165401355	T	G	0.13	6.18E-05	0.91	4.99E-01	1.57E-01	2.55E-03	-0.026(0.0087)
SQ		rs17044842	4	165402196	C	A	0.13	6.21E-05	0.91	5.00E-01	1.57E-01	2.56E-03	-0.026(0.0087)
SQ		rs9284674	4	165403008	T	A	0.93	6.23E-05	0.91	4.69E-01	8.46E-02	1.28E-03	0.029(0.0091)
SQ		rs9308076	4	165403267	C	A	0.14	1.13E-04	0.98	4.79E-01	9.93E-02	1.71E-03	-0.027(0.0086)
SQ		rs9308077	4	165403384	T	C	0.93	7.03E-05	0.89	4.75E-01	8.41E-02	1.33E-03	0.029(0.0091)
SQ		rs13151481	4	184522011	T	C	0.46	1.25E-06	0.11	6.02E-01	6.01E-01	7.91E-02	0.010(0.0055)
SQ		rs6552663	4	184524289	T	C	0.45	1.93E-05	0.30	6.98E-01	1.12E-01	4.16E-01	-0.004(0.0051)
SQ	6	rs867658	4	184524338	T	C	0.45	1.38E-05	0.31	6.85E-01	1.06E-01	4.19E-01	-0.004(0.0050)
SQ		rs6854131	4	184530704	T	A	0.47	3.83E-05	0.43	7.30E-01	1.49E-01	4.00E-01	-0.004(0.0050)
SQ		rs1983245	4	184535664	T	A	0.45	1.79E-05	0.05	4.34E-01	3.66E-01	3.37E-01	0.007(0.0050)
SQ		rs7686728	4	184541581	T	G	0.87	9.46E-05	0.52	6.74E-03	7.11E-01	7.39E-01	-0.002(0.0067)
SQ		rs400405	6	4495717	T	C	0.86	1.36E-04	0.80	5.36E-01	5.12E-01	1.15E-02	-0.021(0.0076)
SQ		rs420580	6	4498560	T	C	0.20	7.34E-05	0.71	4.67E-01	3.54E-01	3.88E-03	0.020(0.0069)
SQ		rs378901	6	4503581	G	A	0.84	5.80E-05	0.71	4.24E-01	2.43E-01	2.16E-03	-0.022(0.0071)
SQ		rs84996	6	4504209	T	C	0.84	1.97E-05	0.75	4.21E-01	4.26E-01	2.96E-03	-0.020(0.0066)
SQ		rs424137	6	4514762	T	G	0.85	5.18E-05	0.71	4.62E-01	5.34E-01	9.70E-03	-0.017(0.0063)
SQ		rs601192	6	4515738	C	A	0.19	4.91E-05	0.72	4.60E-01	5.70E-01	1.21E-02	0.016(0.0062)
SQ		rs385236	6	4516490	T	A	0.85	5.19E-05	0.71	4.58E-01	5.72E-01	1.29E-02	-0.016(0.0062)
SQ		rs385884	6	4516658	T	C	0.85	5.19E-05	0.71	4.61E-01	6.20E-01	2.33E-02	-0.014(0.0058)
SQ		rs377207	6	4517013	T	C	0.19	4.90E-05	0.72	4.62E-01	5.93E-01	1.56E-02	0.015(0.0061)
SQ		rs418563	6	4519538	G	C	0.19	4.90E-05	0.72	4.65E-01	5.93E-01	1.58E-02	0.015(0.0060)
SQ	7	rs6913171	6	4522403	G	A	0.85	4.87E-05	0.69	4.68E-01	5.73E-01	1.36E-02	-0.016(0.0061)
SQ		rs9504151	6	4522908	T	A	0.85	4.78E-05	0.70	4.78E-01	4.97E-01	7.54E-03	-0.018(0.0065)
SQ		rs9502199	6	4523438	T	C	0.85	4.94E-05	0.70	4.79E-01	4.97E-01	7.66E-03	-0.018(0.0065)
SQ		rs4960004	6	4524697	T	C	0.18	1.18E-04	0.59	6.31E-01	4.66E-01	1.21E-02	0.019(0.0075)
SQ		rs9502200	6	4525147	T	C	0.19	4.64E-05	0.71	5.09E-01	5.08E-01	8.47E-03	0.018(0.0065)
SQ		rs9504152	6	4526321	T	C	0.85	3.97E-05	0.74	5.18E-01	6.14E-01	2.08E-02	-0.015(0.0059)
SQ		rs9504154	6	4530548	G	A	0.85	8.83E-05	0.85	4.93E-01	5.13E-01	9.24E-03	-0.017(0.0065)
SQ		rs9504156	6	4533125	G	A	0.85	5.32E-05	0.84	5.78E-01	5.14E-01	1.15E-02	-0.017(0.0065)
SQ		rs9504159	6	4538084	T	C	0.86	1.16E-04	0.92	8.64E-01	9.29E-01	3.38E-02	-0.017(0.0077)
SQ		rs6911463	6	4547820	T	G	0.85	9.51E-05	0.88	6.70E-01	7.29E-01	1.97E-02	-0.017(0.0070)
SQ		rs11964426	6	4551153	G	A	0.86	1.15E-04	0.91	5.96E-01	8.25E-01	1.70E-01	-0.011(0.0057)
SQ		rs11756102	6	4559057	T	G	0.19	2.69E-05	0.63	9.82E-01	9.98E-01	1.63E-02	0.017(0.0077)
SQ		rs3734887	6	168136625	T	C	0.26	1.15E-05	0.15	8.59E-01	1.23E-01	7.69E-03	0.014(0.0052)
SQ	8	rs2285250	6	168147545	T	C	0.87	1.24E-04	0.36	9.55E-01	4.92E-01	3.80E-02	-0.015(0.0072)
SQ		rs1873333	6	168151682	T	C	0.25	7.00E-05	0.46	9.87E-01	3.09E-01	2.32E-02	0.012(0.0053)
SQ		rs899366	8	11467894	G	A	0.68	1.50E-06	0.76	7.18E-01	7.98E-01	4.02E-01	-0.002(0.0023)
SQ		rs12679960	8	11468399	T	C	0.33	1.64E-05	0.71	7.93E-01	8.80E-01	3.47E-01	0.009(0.0050)
SQ		rs4841566	8	11469847	G	C	0.68	1.57E-06	0.75	7.42E-01	8.29E-01	5.45E-01	-0.004(0.0035)
SQ		rs2898290	8	11471318	T	C	0.47	6.69E-05	0.68	6.80E-01	1.77E-01	3.10E-02	0.009(0.0041)
SQ		rs7464263	8	11471585	T	A	0.53	6.87E-05	0.69	6.79E-01	1.46E-01	2.64E-02	-0.009(0.0041)
SQ		rs2127127	8	11472201	G	C	0.53	5.71E-05	0.73	6.79E-01	1.62E-01	2.79E-02	-0.009(0.0041)
SQ	9	rs2127128	8	11472338	T	C	0.68	6.59E-06	0.69	8.60E-01	8.19E-01	6.16E-01	-0.004(0.0036)
SQ		rs2409798	8	11472973	T	C	0.53	6.46E-05	0.70	6.81E-01	1.43E-01	2.56E-02	-0.009(0.0041)
SQ		rs968179	8	11475473	T	G	0.33	1.16E-05	0.60	9.75E-01	7.26E-01	1.24E-01	0.002(0.0017)
SQ		rs2409800	8	11476422	G	C	0.33	5.76E-05	0.44	9.73E-01	7.44E-01	1.19E-01	0.003(0.0024)

SQ		rs12677326	8	11476634	G	A	0.70	1.42E-05	0.49	7.10E-01	4.38E-01	1.94E-02	-0.009(0.0038)
SQ		rs11250149	8	11477370	G	C	0.32	1.79E-05	0.51	7.52E-01	7.28E-01	6.11E-02	0.004(0.0029)
SQ		rs4840572	8	11480613	G	A	0.70	1.37E-05	0.48	7.37E-01	6.78E-01	5.33E-02	-0.005(0.0030)
SQ		rs1478894	8	11486163	T	C	0.36	9.13E-05	0.49	3.49E-01	4.55E-01	1.86E-01	0.005(0.0042)
SQ		rs17376459	8	27319091	G	A	0.22	1.54E-05	0.03	4.93E-02	2.55E-01	1.20E-04	0.023(0.0059)
SQ		rs11782673	8	27321804	G	A	0.21	5.26E-07	0.10	5.89E-02	2.16E-01	3.38E-05	-0.001(0.0059)
SQ		rs11782789	8	27322204	T	A	0.21	7.12E-06	0.02	5.87E-02	2.23E-01	9.15E-05	0.024(0.0059)
SQ	10	rs4733058	8	27337813	T	C	0.84	1.04E-05	0.02	5.77E-02	2.76E-01	1.51E-04	-0.023(0.0059)
SQ		rs577803	8	27569602	T	G	0.58	4.82E-06	0.64	6.35E-01	2.31E-02	2.86E-04	0.017(0.0047)
SQ		rs2640732	8	27573740	T	G	0.57	2.47E-05	0.76	7.49E-01	1.17E-02	8.27E-05	0.022(0.0054)
SQ		rs505295	8	27578495	C	A	0.58	7.89E-06	0.88	5.64E-01	6.33E-03	8.66E-05	0.019(0.0047)
SQ		rs1032087	8	77907350	G	A	0.35	5.06E-05	0.34	6.89E-02	4.57E-02	7.71E-02	-0.009(0.0048)
SQ		rs12549946	8	77986587	G	A	0.40	9.27E-05	0.04	7.72E-02	3.36E-01	4.00E-02	-0.009(0.0043)
SQ		rs12550004	8	77986939	C	A	0.40	7.27E-05	0.04	7.92E-02	2.39E-01	4.42E-02	-0.009(0.0044)
SQ		rs10090601	8	78159960	T	C	0.64	1.21E-04	0.70	9.69E-02	3.30E-01	5.20E-02	-0.009(0.0043)
SQ	11	rs16939415	8	78160624	T	C	0.65	1.07E-04	0.68	9.30E-02	3.37E-01	4.27E-02	-0.009(0.0044)
SQ		rs10504644	8	78174926	G	A	0.40	5.87E-05	0.63	1.01E-01	2.56E-01	5.17E-02	0.009(0.0045)
SQ		rs4344050	8	78177587	T	C	0.64	2.64E-05	0.63	1.20E-01	2.39E-01	4.48E-02	-0.010(0.0047)
SQ		rs4338075	8	78177760	T	C	0.39	4.31E-05	0.56	1.30E-01	2.33E-01	3.95E-02	0.010(0.0048)
SQ		rs11988590	8	78730078	T	C	0.97	9.56E-05	0.29	1.39E-02	1.50E-01	3.81E-01	0.012(0.0139)
SQ	12	rs7916988	10	10649525	T	C	0.89	3.80E-06	0.82	1.27E-01	8.43E-01	1.89E-03	0.027(0.0081)
SQ		rs7896493	10	10649584	G	A	0.89	3.88E-06	0.81	1.27E-01	9.10E-01	7.08E-03	0.017(0.0064)
SQ		rs10841588	12	20709466	G	A	0.62	5.90E-05	0.43	3.63E-01	9.88E-01	1.52E-01	-0.008(0.0054)
SQ		rs7138018	12	20726446	G	C	0.35	8.21E-05	0.65	9.79E-01	8.21E-01	5.10E-02	0.011(0.0053)
SQ		rs7978643	12	20731490	T	C	0.69	8.18E-05	0.66	9.93E-01	8.74E-01	6.30E-02	-0.010(0.0051)
SQ	13	rs11045388	12	20731988	C	A	0.69	7.96E-05	0.66	9.88E-01	8.23E-01	5.00E-02	-0.011(0.0052)
SQ		rs6487133	12	20736419	G	A	0.69	8.13E-05	0.72	9.54E-01	8.40E-01	5.42E-02	-0.010(0.0053)
SQ		rs959346	12	20743353	G	A	0.41	2.46E-06	0.71	5.41E-01	9.65E-01	1.34E-01	0.008(0.0051)
SQ		rs10770705	12	20748734	C	A	0.69	3.71E-05	0.82	9.77E-01	9.48E-01	5.10E-02	-0.011(0.0055)
SQ		rs2869032	15	76501616	T	C	0.79	4.42E-06	0.45	2.22E-18	1.81E-08	1.29E-29	0.060(0.0053)
SQ		rs2869045	15	76505954	T	C	0.25	3.82E-06	0.47	2.47E-18	2.41E-09	1.10E-30	-0.062(0.0054)
SQ		rs2568498	15	76508987	T	A	0.45	8.62E-05	0.91	1.81E-01	2.12E-03	1.06E-05	-0.020(0.0045)
SQ		rs1394371	15	76511524	T	C	0.33	2.56E-14	0.37	1.19E-12	1.89E-11	2.19E-33	0.058(0.0048)
SQ		rs2568500	15	76513983	T	C	0.44	7.98E-05	0.87	2.64E-02	3.50E-03	2.90E-07	-0.027(0.0053)
SQ		rs17483548	15	76517368	G	A	0.66	4.23E-15	0.37	8.49E-19	1.27E-18	4.93E-48	-0.036(0.0046)
SQ		rs17405217	15	76518204	T	C	0.36	4.19E-15	0.37	7.34E-19	6.02E-19	2.09E-48	0.068(0.0046)
SQ		rs924840	15	76518863	T	A	0.26	1.91E-05	0.68	3.22E-17	8.49E-10	4.62E-29	-0.059(0.0052)
SQ		rs2938671	15	76519809	G	A	0.79	1.12E-05	0.71	3.33E-17	5.89E-10	1.84E-29	0.059(0.0052)
SQ		rs17483721	15	76520786	T	C	0.65	1.65E-15	0.36	4.95E-19	6.30E-19	7.01E-49	-0.068(0.0046)
SQ		rs1847529	15	76522125	C	A	0.45	5.74E-05	0.78	1.18E-01	1.70E-03	3.72E-06	-0.021(0.0044)
SQ		rs8041628	15	76522410	G	C	0.45	4.39E-05	0.77	1.14E-01	1.97E-03	3.47E-06	-0.021(0.0045)
SQ		rs2568488	15	76523648	T	A	0.26	1.24E-05	0.74	2.32E-17	9.19E-09	1.15E-28	-0.058(0.0052)
SQ		rs2656052	15	76527987	C	A	0.37	3.05E-15	0.22	2.30E-19	6.53E-19	5.57E-49	0.036(0.0046)
SQ		rs2568494	15	76528019	G	A	0.65	1.14E-15	0.34	2.00E-19	4.52E-19	1.61E-49	-0.068(0.0046)
SQ		rs7181486	15	76528673	T	C	0.65	1.31E-15	0.37	1.69E-19	4.26E-19	1.48E-49	-0.068(0.0046)
SQ		rs2656073	15	76529331	T	G	0.26	1.64E-05	0.72	2.54E-17	1.78E-09	2.74E-29	-0.059(0.0052)
SQ		rs17483929	15	76529431	G	A	0.65	8.48E-15	0.39	1.43E-19	6.32E-19	2.73E-49	-0.068(0.0046)
SQ		rs10519198	15	76529809	C	A	0.56	3.25E-05	0.80	9.05E-02	1.69E-03	1.87E-06	0.021(0.0044)
SQ		rs12909921	15	76530315	G	A	0.45	5.65E-05	0.78	8.18E-02	1.81E-03	2.16E-06	-0.021(0.0044)
SQ		rs12910090	15	76530355	C	A	0.45	5.65E-05	0.78	7.95E-02	1.88E-03	2.13E-06	-0.021(0.0045)
SQ		rs2656071	15	76532398	T	A	0.26	1.67E-05	0.76	2.55E-17	8.02E-10	1.25E-29	-0.059(0.0052)
SQ		rs2656069	15	76532762	T	C	0.78	1.28E-05	0.74	1.58E-16	6.44E-10	4.19E-29	0.058(0.0052)
SQ		rs2656065	15	76537604	G	A	0.65	1.15E-15	0.34	2.79E-20	3.75E-19	1.04E-50	-0.069(0.0046)
SQ		rs2568483	15	76539398	G	A	0.26	1.29E-05	0.75	1.82E-17	1.47E-09	1.32E-29	-0.059(0.0052)
SQ		rs11639224	15	76540426	G	A	0.45	5.53E-05	0.78	6.50E-02	1.54E-03	1.25E-06	-0.022(0.0044)
SQ		rs1964678	15	76541055	G	A	0.61	1.04E-08	0.35	8.57E-15	3.57E-09	3.17E-29	0.028(0.0044)
SQ		rs2009746	15	76541157	G	A	0.37	7.38E-16	0.33	9.60E-21	3.76E-19	1.67E-51	0.070(0.0046)
SQ		rs2938674	15	76544968	C	A	0.78	2.21E-05	0.74	1.59E-17	1.25E-09	1.76E-29	0.058(0.0052)
SQ		rs17484235	15	76548469	G	C	0.37	1.99E-15	0.21	7.28E-21	6.57E-19	4.38E-51	0.038(0.0046)
SQ		rs4299116	15	76553249	T	A	0.40	1.00E-08	0.36	8.81E-15	2.11E-09	1.80E-29	-0.050(0.0045)
SQ		rs1504550	15	76553305	G	A	0.37	6.97E-16	0.33	3.64E-21	2.55E-19	3.28E-52	0.070(0.0046)
SQ		rs12910910	15	76554905	T	C	0.61	1.00E-08	0.36	9.10E-15	2.96E-09	3.03E-29	0.050(0.0044)
SQ		rs8043227	15	76555926	G	C	0.62	1.18E-08	0.35	9.83E-15	2.87E-09	3.89E-29	0.050(0.0044)
SQ		rs11072766	15	76558601	T	C	0.26	2.21E-05	0.74	1.18E-17	4.15E-10	4.90E-30	-0.059(0.0052)
SQ		rs17484524	15	76559731	G	A	0.37	6.90E-16	0.33	1.67E-21	2.61E-19	1.44E-52	0.071(0.0046)
SQ		rs8042238	15	76561326	T	C	0.61	1.00E-08	0.36	8.76E-15	1.64E-09	1.61E-29	0.050(0.0045)
SQ		rs8042260	15	76561429	G	A	0.61	1.00E-08	0.36	8.74E-15	2.35E-09	2.64E-29	0.050(0.0044)
SQ		rs12903295	15	76566027	G	A	0.61	9.99E-09	0.36	9.30E-15	4.17E-09	4.44E-29	0.051(0.0045)
SQ		rs12904234	15	76566439	T	C	0.61	9.99E-09	0.36	1.42E-14	3.54E-09	6.24E-29	0.050(0.0045)
SQ		rs965604	15	76576278	G	A	0.40	9.91E-09	0.36	1.00E-14	2.61E-09	1.59E-29	-0.050(0.0044)
SQ		rs13180	15	76576543	T	C	0.61	5.82E-09	0.27	2.07E-14	2.83E-09	2.49E-29	0.050(0.0044)
SQ		rs1062980	15	76579582	T	C	0.61	1.02E-08	0.36	7.84E-15	1.57E-09	1.32E-29	0.028(0.0044)
SQ		rs4362358	15	76583159	T	C	0.61	9.92E-09	0.36	8.48E-16	2.57E-09	1.38E-30	0.051(0.0045)
SQ		rs5019044	15	76583337	T	A	0.78	2.26E-05	0.74	2.56E-19	1.03E-08	5.62E-30	0.059(0.0052)
SQ		rs9788682	15	76589641	G	A	0.79	6.75E-08	0.55	5.34E-22	9.61E-13	2.40E-39	0.070(0.0054)
SQ		rs9788721	15	76589924	T	C	0.64	1.79E-18	0.55	6.64E-26	4.12E-24	2.97E-64	-0.077(0.0046)
SQ		rs7164594	15	76590112	T	C	0.26	2.68E-08	0.29	1.25E-22	2.01E-10	1.39E-37	-0.067(0.0053)
SQ		rs8034191	15	76593078	T	C	0.64	4.99E-18	0.54	3.33E-26	3.82E-24	1.04E-63	-0.077(0.0046)
SQ		rs12591557	15	76598787	G	A	0.42	8.47E-05	0.48	2.36E-02	1.18E-03	8.31E-08	-0.029(0.0053)
SQ		rs10519203	15	76601101	G	A	0.38	2.96E-17	0.55	4.30E-26	2.66E-24	3.12E-63	0.077(0.0046)
SQ		rs7163730	15	76601736	G	A	0.26	4.12E-08	0.43	7.45E-23	1.03E-12	4.39E-40	-0.070(0.0053)
SQ		rs8031948	15	76603112	T	G	0.38	3.33E-18	0.56	1.97E-26	2.59E-24	1.62E-64	0.077(0.0046)
SQ		rs4461039	15	76604502	T	A	0.26	2.08E-08	0.36	8.27E-23	2.49E-13	5.81E-41	-0.070(0.0052)
SQ		rs931794	15	76613235	G	A	0.38	2.67E-18	0.57	6.80E-27	9.45E-25	7.75E-66	0.078(0.0046)
SQ		rs2036534	15	76614003	T	C	0.78	2.05E-08	0.29	5.46E-22	3.25E-13	3.99E-40	0.069(0.0052)
SQ		rs3813570	15	76619887	T	C	0.78	2.73E-08	0.22	1.39E-22	5.63E-12	3.06E-39	0.069(0.0053)
SQ		rs4243083	15	76620885	G	C	0.58	8.08E-05	0.48	1.29E-02	6.93E-04	2.27E-08	0.030(0.0053)
SQ		rs4887063	15	76626770	T	C	0.58	7.24E-05	0.45	1.82E-02	3.99E-04	6.97E-08	0.024(0.0045)
SQ		rs1979907	15	76629294	T	C	0.44	8.29E-05	0.40	5.99E-03	6.67E-05	3.19E-09	-0.027(0.0045)
SQ		rs1979905	15	76629429	C	A	0.57	8.58E-05	0.33	6.04E-03	6.45E-05	3.37E-09	0.027(0.0045)
SQ		rs4887064	15	76629902	G	C	0.44	8.59E-05	0.40	5.91E-03	8.14E-05	3.79E-09	-0.027(0.0045)
SQ		rs12907966	15	76630106	T	C	0.44	8.22E-05	0.40	6.05E-03	7.62E-05	3.60E-09	-0.027(0.0045)
SQ		rs880395	15	76631411	G	A	0.57	8.54E-05	0.40	6.16E-03	8.70E-05	4.23E-09	0.027(0.0045)
SQ		rs905740	15	76631441	T	C	0.44	8.56E-05	0.40	5.95E-03	8.76E-05	4.07E-09	-0.027(0.0045)
SQ		rs7164030	15	76631716	G	A	0.44	8.54E-05	0.40	6.07E-03	9.49E-05	4.50E-09	-0.027(0.0045)
SQ		rs4275821	15	76636596	T	C	0.61	5.23E-05	0.85	2.60E-04	3.89E-04	2.27E-10	0.030(0.0046)

SQ		rs7173512	15	76636969	T	C	0.61	5.23E-05	0.85	2.52E-04	3.36E-04	1.90E-10	0.030(0.0046)
SQ		rs2036527	15	76638670	G	A	0.65	1.39E-18	0.60	3.63E-27	2.33E-23	6.62E-65	-0.080(0.0047)
SQ		rs684513	15	76645455	G	C	0.27	1.45E-08	0.10	1.39E-23	2.21E-10	5.75E-39	-0.071(0.0054)
SQ		rs667282	15	76650527	T	C	0.77	1.50E-09	0.06	2.72E-23	2.60E-12	1.07E-41	0.044(0.0053)
SQ		rs17486278	15	76654537	C	A	0.36	2.79E-18	0.86	1.67E-27	7.55E-23	3.71E-64	0.080(0.0047)
SQ		rs569207	15	76660174	T	C	0.23	1.25E-08	0.03	2.96E-06	4.67E-13	1.52E-24	-0.063(0.0061)
SQ		rs637137	15	76661031	T	A	0.77	1.30E-09	0.06	4.89E-23	1.14E-12	1.07E-41	0.071(0.0053)
SQ		rs7180002	15	76661048	T	A	0.36	2.31E-18	0.88	1.59E-27	1.31E-22	5.83E-64	0.080(0.0047)
SQ		rs951266	15	76665596	G	A	0.64	1.09E-14	0.89	1.35E-27	3.52E-23	3.19E-61	-0.079(0.0048)
SQ	14	rs16969968	15	76669980	G	A	0.65	1.64E-18	0.86	1.85E-27	1.53E-23	4.29E-65	-0.078(0.0046)
SQ		rs518425	15	76670868	G	A	0.32	3.66E-08	0.59	3.42E-18	6.52E-13	2.73E-36	-0.061(0.0049)
SQ		rs578776	15	76675455	G	A	0.73	6.69E-09	0.51	9.75E-19	1.38E-12	6.93E-37	0.062(0.0049)
SQ		rs12910984	15	76678682	G	A	0.27	6.37E-10	0.09	5.07E-23	6.21E-13	2.96E-42	-0.071(0.0052)
SQ		rs1051730	15	76681394	G	A	0.66	9.45E-19	0.68	3.62E-27	9.98E-25	1.71E-66	-0.079(0.0046)
SQ		rs3743078	15	76681814	G	C	0.78	4.83E-10	0.10	5.21E-24	1.20E-13	4.62E-44	0.073(0.0052)
SQ		rs1317286	15	76683184	G	A	0.37	1.31E-18	0.87	2.61E-27	8.98E-24	3.56E-65	0.078(0.0046)
SQ		rs938682	15	76683602	G	A	0.27	6.75E-10	0.12	5.48E-23	6.73E-14	3.29E-43	-0.072(0.0052)
SQ		rs12914385	15	76685778	T	C	0.41	4.48E-18	0.54	5.49E-29	1.23E-22	7.83E-66	0.076(0.0044)
SQ		rs11637630	15	76686774	G	A	0.27	5.19E-10	0.09	5.80E-24	9.06E-14	3.76E-44	-0.073(0.0052)
SQ		rs7177514	15	76694461	G	C	0.27	5.55E-10	0.09	6.46E-24	5.06E-12	2.92E-42	-0.072(0.0053)
SQ		rs6495308	15	76694711	T	C	0.77	3.30E-10	0.10	7.99E-24	1.60E-13	5.82E-44	0.073(0.0052)
SQ		rs12443170	15	76694791	G	A	0.87	2.53E-06	0.44	3.29E-16	1.80E-06	1.46E-25	0.076(0.0072)
SQ		rs8042059	15	76694914	C	A	0.28	8.00E-10	0.08	9.18E-24	5.38E-14	5.06E-44	-0.072(0.0052)
SQ		rs8042374	15	76695087	G	A	0.27	6.42E-10	0.09	1.55E-22	1.33E-13	1.52E-42	-0.071(0.0052)
SQ		rs4887069	15	76696125	G	A	0.27	1.47E-09	0.14	3.05E-21	3.38E-11	9.99E-39	-0.070(0.0054)
SQ		rs8040868	15	76698236	T	C	0.60	4.67E-18	0.64	5.87E-09	4.86E-22	5.90E-44	-0.073(0.0052)
SQ		rs6495309	15	76702300	T	C	0.27	4.10E-09	0.08	2.75E-21	6.38E-13	4.61E-40	-0.070(0.0053)
SQ		rs17487223	15	76711042	T	C	0.39	9.81E-16	0.76	9.89E-25	1.43E-21	3.18E-58	0.075(0.0046)
SQ		rs12440014	15	76713781	G	C	0.30	9.80E-10	0.09	4.45E-22	3.38E-13	1.80E-41	-0.071(0.0053)
SQ		rs12441088	15	76715319	T	G	0.71	1.09E-08	0.03	8.91E-21	1.82E-08	2.40E-34	0.068(0.0055)
SQ		rs11636605	15	76715933	G	A	0.80	1.66E-07	0.21	7.44E-16	1.11E-06	9.08E-27	0.062(0.0057)
SQ		rs12441998	15	76716427	G	A	0.26	5.47E-08	0.27	1.44E-15	8.19E-07	7.02E-27	-0.062(0.0057)
SQ		rs11072768	15	76716533	T	G	0.25	1.39E-07	0.22	1.30E-15	7.03E-07	1.15E-26	-0.061(0.0058)
SQ		rs1316971	15	76717565	G	A	0.80	2.67E-07	0.19	1.62E-15	6.66E-07	1.22E-26	0.062(0.0058)
SQ		rs9920506	15	76718112	G	A	0.84	3.02E-05	0.14	3.06E-12	9.19E-05	4.98E-19	0.059(0.0067)
SQ		rs11634351	15	76731773	G	A	0.59	2.01E-09	0.15	5.67E-23	1.71E-14	1.21E-43	-0.062(0.0045)
SQ		rs8023822	15	76732095	G	C	0.79	3.24E-05	0.23	1.78E-09	1.11E-02	8.27E-14	0.041(0.0054)
SQ		rs12594247	15	76733688	T	C	0.22	6.64E-07	0.33	3.88E-11	5.10E-04	3.70E-18	-0.053(0.0061)
SQ		rs11638830	15	76735374	G	C	0.59	2.91E-09	0.25	1.76E-21	4.45E-14	2.13E-41	-0.060(0.0044)
SQ		rs4887074	15	76739165	G	C	0.28	2.05E-05	0.28	1.24E-09	1.37E-03	4.17E-15	-0.040(0.0051)
SQ		rs11072774	15	76739752	T	C	0.23	1.69E-06	0.40	6.50E-12	1.71E-05	6.71E-21	-0.058(0.0062)
SQ		rs17487514	15	76740840	T	C	0.33	6.78E-07	0.21	5.91E-15	1.17E-09	1.52E-28	0.059(0.0053)
SQ		rs12899135	15	76741434	G	A	0.43	3.28E-09	0.24	1.14E-20	4.06E-14	8.67E-41	0.059(0.0044)
SQ		rs12148319	15	76743247	G	A	0.20	8.86E-06	0.30	1.50E-08	7.90E-04	7.25E-15	-0.047(0.0063)
SQ		rs1996371	15	76743861	T	C	0.59	3.00E-09	0.23	1.45E-20	2.18E-14	8.10E-41	-0.059(0.0044)
SQ		rs12594550	15	76746092	G	C	0.22	1.50E-06	0.46	3.67E-08	2.06E-04	1.28E-15	-0.050(0.0063)
SQ		rs6495314	15	76747584	C	A	0.43	3.12E-09	0.23	8.75E-21	1.86E-13	5.02E-40	0.058(0.0044)
SQ		rs11639372	15	76753710	T	C	0.43	3.30E-09	0.30	2.75E-20	2.98E-14	1.96E-40	0.059(0.0044)
SQ		rs12902602	15	76754456	G	A	0.43	3.30E-09	0.30	2.25E-20	2.58E-14	1.34E-40	0.059(0.0044)
SQ		rs1021071	15	76755234	G	C	0.59	2.91E-09	0.31	2.43E-20	2.01E-14	9.76E-41	-0.059(0.0044)
SQ		rs11072785	15	76755284	T	C	0.43	4.24E-09	0.27	2.81E-20	9.48E-14	7.73E-40	0.058(0.0044)
SQ		rs11857532	15	76755323	T	G	0.56	2.25E-06	0.28	3.19E-16	8.26E-12	2.11E-31	-0.051(0.0044)
SQ		rs4886580	15	76756440	T	G	0.59	4.09E-09	0.28	3.76E-20	2.29E-14	2.25E-40	-0.059(0.0044)
SQ		rs11072787	15	76760032	T	C	0.76	4.02E-05	0.07	2.83E-07	8.50E-04	5.75E-13	0.036(0.0050)
SQ		rs8043123	15	76760448	T	C	0.29	6.88E-05	0.21	3.95E-07	1.15E-03	1.38E-12	-0.036(0.0051)
SQ		rs4887077	15	76765419	T	C	0.43	1.37E-08	0.30	3.23E-19	2.43E-14	9.46E-39	0.057(0.0044)
SQ		rs11638372	15	76770614	T	C	0.43	1.98E-08	0.27	2.71E-19	5.59E-14	2.55E-38	0.057(0.0044)
SQ		rs922692	15	76771269	C	A	0.59	1.08E-08	0.26	2.29E-19	3.49E-14	6.60E-39	-0.057(0.0044)
SQ		rs12910627	15	76781988	G	C	0.59	1.09E-08	0.27	1.75E-19	2.76E-14	2.38E-39	-0.058(0.0044)
SQ		rs11072791	15	76784131	C	A	0.59	1.20E-08	0.25	2.42E-19	1.94E-14	2.26E-39	-0.058(0.0044)
SQ		rs11638490	15	76795005	T	C	0.43	1.24E-08	0.28	2.75E-19	1.84E-14	7.11E-39	0.058(0.0045)
SQ		rs11629637	15	76806079	T	C	0.43	1.76E-08	0.22	4.13E-19	1.52E-14	8.09E-39	0.058(0.0045)
SQ		rs3813565	15	76806665	T	G	0.42	4.04E-09	0.15	3.36E-20	2.68E-14	3.41E-40	0.062(0.0047)
SQ		rs4887082	15	76812122	T	C	0.59	1.70E-08	0.26	4.36E-18	2.16E-13	7.27E-37	-0.035(0.0046)
SQ		rs12286	15	76838814	G	A	0.59	2.53E-08	0.34	1.04E-17	8.18E-13	1.18E-35	-0.058(0.0046)
SQ		rs1809420	15	76843824	T	C	0.58	2.11E-05	0.37	3.28E-17	1.74E-11	9.54E-31	-0.055(0.0048)
SQ		rs7174367	15	76851722	G	A	0.44	4.27E-07	0.34	5.67E-17	4.99E-13	1.05E-33	0.056(0.0046)
SQ		rs7171916	15	76855006	G	C	0.44	1.23E-06	0.27	1.92E-13	2.77E-11	3.44E-28	0.052(0.0047)
SQ		rs11634042	15	76892405	T	C	0.42	1.03E-05	0.45	5.19E-03	1.17E-11	1.76E-16	0.045(0.0054)
SQ		rs312058	19	3178102	T	C	0.39	6.92E-05	0.51	3.77E-02	4.04E-01	4.27E-01	0.003(0.0042)
SQ	15	rs4807426	19	3186188	G	A	0.25	4.11E-05	0.88	9.30E-01	1.55E-01	1.16E-02	0.014(0.0055)
SQ		rs312055	19	3186824	G	A	0.30	1.46E-05	0.85	8.12E-01	4.97E-01	4.98E-02	0.003(0.0025)
EVER/NEVER		rs1043879	1	25442668	T	C	0.31	2.69E-05	0.22	2.02E-01	2.49E-01	7.48E-04	-0.035(0.0104)
EVER/NEVER		rs590787	1	25502530	G	A	0.41	1.88E-05	0.63	8.78E-01	2.37E-01	1.04E-03	-0.045(0.0137)
EVER/NEVER		rs592372	1	25508784	G	A	0.45	3.36E-05	0.63	5.62E-01	1.93E-01	2.05E-03	-0.032(0.0103)
EVER/NEVER		rs2765572	1	25529815	T	G	0.56	2.14E-05	0.63	4.06E-01	2.05E-01	3.72E-03	0.020(0.0069)
EVER/NEVER		rs603958	1	25532274	T	C	0.45	2.06E-05	0.64	3.95E-01	2.06E-01	3.02E-03	-0.021(0.0072)
EVER/NEVER		rs3091242	1	25547372	T	C	0.55	1.06E-05	0.67	1.06E-01	2.54E-01	1.04E-04	-0.034(0.0087)
EVER/NEVER		rs630931	1	25569602	G	A	0.45	2.36E-05	0.70	3.62E-01	3.05E-01	1.64E-03	-0.029(0.0092)
EVER/NEVER		rs2986161	1	25583768	T	A	0.56	2.20E-05	0.67	4.93E-01	7.00E-01	4.21E-03	0.030(0.0105)
EVER/NEVER		rs2889044	1	25622351	T	G	0.55	1.56E-05	0.76	4.08E-01	2.14E-01	9.13E-04	0.032(0.0098)
EVER/NEVER	1	rs926438	1	25626225	T	C	0.55	3.80E-06	0.70	1.13E-01	3.27E-01	8.77E-05	-0.034(0.0086)
EVER/NEVER		rs909832	1	25626612	G	C	0.44	5.41E-06	0.69	3.44E-01	3.68E-01	7.42E-04	-0.032(0.0095)
EVER/NEVER		rs932372	1	25627601	G	A	0.46	1.33E-06	0.80	5.15E-01	4.31E-01	3.20E-04	0.037(0.0102)
EVER/NEVER		rs873308	1	25631242	G	A	0.48	6.30E-06	0.78	9.94E-02	3.61E-01	1.27E-04	0.032(0.0084)
EVER/NEVER		rs11802413	1	25633507	T	C	0.55	3.71E-06	0.85	7.12E-02	2.94E-01	4.11E-05	-0.035(0.0085)
EVER/NEVER		rs7541095	1	25633878	T	C	0.47	6.88E-06	0.81	6.19E-02	3.48E-01	4.73E-05	0.036(0.0089)
EVER/NEVER		rs10903129	1	25641524	G	A	0.55	3.72E-06	0.84	7.45E-02	2.55E-01	3.87E-05	-0.035(0.0084)
EVER/NEVER		rs12027135	1	25648320	T	A	0.55	4.55E-06	0.83	7.23E-02	3.28E-01	3.98E-05	-0.036(0.0088)
EVER/NEVER		rs17361886	1	170403642	G	A	0.65	8.19E-05	0.06	4.66E-01	8.39E-02	7.53E-04	0.031(0.0092)
EVER/NEVER		rs2209096	1	170405627	T	C	0.65	8.57E-05	0.15	5.95E-01	5.35E-02	8.72E-04	0.028(0.0084)
EVER/NEVER		rs17361920	1	170407142	G	C	0.65	8.77E-05	0.15	5.97E-01	2.61E-02	4.69E-04	0.030(0.0085)

EVER/NEVER	2	rs12129264	1	170407935	G	A	0.65	8.89E-05	0.15	6.13E-01	2.79E-02	5.36E-04	0.029(0.0085)
EVER/NEVER		rs12139001	1	170508443	G	C	0.96	5.56E-05	1.00	1.19E-01	8.79E-02	1.14E-05	-0.321(0.0732)
EVER/NEVER		rs4619005	1	170523884	C	A	0.96	5.99E-05	1.00	1.29E-01	9.12E-02	1.38E-05	-0.319(0.0734)
EVER/NEVER		rs1894635	1	170706782	G	A	0.95	1.71E-05	0.81	3.04E-01	1.59E-01	2.22E-04	-0.135(0.0366)
EVER/NEVER		rs10179431	2	3291418	T	C	0.82	5.46E-05	0.82	1.53E-01	6.94E-01	3.70E-03	0.032(0.0112)
EVER/NEVER		rs7601196	2	3301291	G	A	0.83	2.38E-05	0.72	1.09E-01	9.35E-01	2.12E-04	0.051(0.0136)
EVER/NEVER		rs6548153	2	3305052	C	A	0.83	1.91E-05	0.69	1.09E-01	9.22E-01	1.89E-04	0.051(0.0137)
EVER/NEVER	3	rs11127408	2	3308806	C	A	0.23	1.99E-05	0.70	9.59E-02	9.42E-01	1.65E-04	-0.051(0.0136)
EVER/NEVER		rs12623700	2	3312882	C	A	0.83	2.82E-05	0.68	8.12E-02	9.35E-01	1.79E-04	0.051(0.0137)
EVER/NEVER		rs12623730	2	3313010	T	C	0.23	1.95E-05	0.70	9.18E-02	9.44E-01	1.36E-04	-0.053(0.0138)
EVER/NEVER		rs11127410	2	3315541	T	G	0.83	1.93E-05	0.70	9.18E-02	9.92E-01	1.25E-04	0.053(0.0139)
EVER/NEVER	4	rs17388785	2	84258191	G	A	0.74	8.49E-06	1.00	5.28E-01	7.60E-01	1.31E-03	0.041(0.0127)
EVER/NEVER		rs7590884	2	231290542	C	A	0.30	7.85E-05	0.76	9.14E-01	6.74E-01	5.08E-02	0.015(0.0079)
EVER/NEVER		rs13410153	2	231304316	T	G	0.73	4.08E-05	0.75	7.46E-01	5.66E-01	2.91E-02	-0.016(0.0075)
EVER/NEVER		rs7604147	2	231306107	G	A	0.73	4.06E-05	0.75	7.30E-01	6.10E-01	2.31E-02	-0.019(0.0082)
EVER/NEVER		rs11900671	2	231312908	T	G	0.73	4.04E-05	0.75	7.24E-01	5.20E-01	1.02E-02	-0.024(0.0094)
EVER/NEVER		rs6751037	2	231317657	G	A	0.30	3.65E-05	0.74	7.71E-01	6.73E-01	1.82E-02	0.021(0.0091)
EVER/NEVER		rs10498255	2	231320474	G	A	0.30	3.70E-05	0.69	8.22E-01	7.40E-01	2.65E-02	0.020(0.0089)
EVER/NEVER		rs13423530	2	231322572	C	A	0.74	3.91E-05	0.71	6.96E-01	6.90E-01	1.30E-02	-0.024(0.0096)
EVER/NEVER		rs6733332	2	231346384	T	C	0.73	3.42E-05	0.74	6.72E-01	7.01E-01	1.22E-02	-0.024(0.0095)
EVER/NEVER	5	rs6436972	2	231346873	G	A	0.31	3.49E-06	0.72	7.11E-01	6.13E-01	5.12E-03	0.026(0.0095)
EVER/NEVER		rs6750664	2	231350715	G	A	0.73	3.41E-05	0.74	6.46E-01	6.63E-01	1.02E-02	-0.024(0.0095)
EVER/NEVER		rs3792076	2	231365282	T	C	0.30	3.64E-05	0.74	7.09E-01	6.89E-01	1.86E-02	0.021(0.0088)
EVER/NEVER		rs3792074	2	231374190	T	C	0.73	3.84E-05	0.62	5.93E-01	6.18E-01	1.86E-02	-0.019(0.0080)
EVER/NEVER		rs10933358	2	231399225	T	G	0.74	2.55E-05	0.75	4.52E-01	6.15E-01	7.90E-03	-0.026(0.0099)
EVER/NEVER		rs881109	2	231400929	G	A	0.29	1.95E-05	0.77	4.91E-01	5.94E-01	1.22E-02	0.023(0.0090)
EVER/NEVER		rs881110	2	231401056	G	C	0.29	1.72E-05	0.78	7.27E-01	3.70E-01	1.68E-02	0.019(0.0080)
EVER/NEVER		rs7603732	2	231406757	G	A	0.74	2.10E-05	0.78	6.50E-01	5.36E-01	1.33E-02	-0.024(0.0095)
EVER/NEVER	6	rs17204376	3	152518651	T	G	0.18	7.28E-06	0.56	7.48E-01	9.59E-01	3.07E-03	-0.058(0.0195)
EVER/NEVER		rs6534452	4	125999314	T	G	0.79	4.95E-05	0.28	1.00E-01	9.18E-01	2.33E-03	0.031(0.0101)
EVER/NEVER		rs1483597	4	126001987	G	A	0.79	5.10E-05	0.30	1.05E-01	9.76E-01	2.92E-04	0.044(0.0123)
EVER/NEVER		rs10222899	4	126003070	T	C	0.24	5.70E-05	0.26	7.07E-02	9.16E-01	5.14E-02	-0.013(0.0066)
EVER/NEVER		rs10010676	4	126009711	G	A	0.26	4.61E-05	0.27	9.95E-02	8.85E-01	4.91E-04	-0.040(0.0115)
EVER/NEVER		rs1395327	4	126023787	T	C	0.26	4.31E-05	0.21	6.27E-02	7.75E-01	2.18E-04	-0.042(0.0115)
EVER/NEVER		rs1395326	4	126023929	T	C	0.21	8.91E-05	0.20	3.44E-02	2.70E-01	5.56E-02	-0.019(0.0100)
EVER/NEVER	7	rs1395325	4	126023973	G	A	0.79	4.65E-05	0.21	6.11E-02	8.20E-01	2.06E-04	0.043(0.0117)
EVER/NEVER		rs6857392	4	126028739	T	C	0.78	3.54E-05	0.32	7.94E-02	6.57E-01	3.81E-04	0.038(0.0107)
EVER/NEVER		rs1995626	4	126032025	T	C	0.77	1.20E-05	0.49	8.88E-02	9.43E-01	3.07E-02	0.015(0.0068)
EVER/NEVER		rs9990572	4	126034588	T	C	0.23	2.63E-05	0.37	5.81E-02	9.01E-01	9.80E-03	-0.024(0.0094)
EVER/NEVER		rs1506547	4	126047002	T	C	0.78	3.88E-05	0.26	6.61E-02	6.59E-01	1.53E-03	0.034(0.0108)
EVER/NEVER		rs7679784	4	126063212	G	C	0.27	2.22E-05	0.28	6.00E-02	5.89E-01	2.10E-03	-0.032(0.0105)
EVER/NEVER		rs1979788	4	126073832	G	A	0.32	8.38E-05	0.09	2.18E-01	9.71E-01	1.40E-03	-0.036(0.0113)
EVER/NEVER		rs4417946	4	176464972	G	A	0.14	6.35E-05	0.84	2.24E-01	5.79E-02	7.03E-05	-0.117(0.0293)
EVER/NEVER		rs646077	4	176467652	G	A	0.14	6.40E-05	0.84	2.20E-01	5.76E-02	6.69E-05	-0.117(0.0292)
EVER/NEVER		rs479488	4	176474518	T	A	0.14	7.03E-05	0.84	2.17E-01	2.78E-01	2.57E-04	-0.109(0.0299)
EVER/NEVER		rs13133504	4	176489960	T	C	0.93	5.42E-05	0.88	2.82E-01	4.82E-02	5.61E-05	0.103(0.0256)
EVER/NEVER		rs13129016	4	176494030	G	A	0.93	5.77E-05	0.88	3.91E-01	4.61E-02	9.84E-05	0.100(0.0256)
EVER/NEVER		rs13135411	4	176494555	G	A	0.90	1.06E-05	0.92	3.42E-01	1.22E-01	6.31E-05	0.100(0.0251)
EVER/NEVER	8	rs13353684	4	176495124	G	A	0.93	6.08E-05	0.88	3.85E-01	3.79E-02	8.45E-05	0.100(0.0255)
EVER/NEVER		rs13353541	4	176495512	T	C	0.14	5.99E-05	0.88	3.57E-01	4.06E-02	7.71E-05	-0.101(0.0256)
EVER/NEVER		rs13144292	4	176496417	T	C	0.93	9.96E-05	0.86	3.67E-01	6.09E-02	1.09E-04	0.096(0.0249)
EVER/NEVER		rs6553864	4	176497053	C	A	0.14	6.36E-05	0.88	3.48E-01	4.38E-02	7.91E-05	-0.101(0.0255)
EVER/NEVER		rs7673648	4	176497537	T	C	0.93	6.39E-05	0.88	3.69E-01	4.08E-02	8.44E-05	0.101(0.0256)
EVER/NEVER		rs6820003	4	176505896	T	C	0.14	5.45E-05	0.88	3.38E-01	6.00E-02	9.28E-05	-0.100(0.0255)
EVER/NEVER		rs17716738	7	127062685	T	C	0.83	7.60E-05	0.03	6.78E-01	8.19E-01	5.80E-02	-0.023(0.0121)
EVER/NEVER		rs717944	7	127200791	T	C	0.83	3.54E-05	0.16	8.62E-01	9.51E-01	1.43E-02	-0.037(0.0150)
EVER/NEVER		rs1468700	7	127245407	T	C	0.93	2.80E-05	0.36	1.78E-01	6.72E-01	1.25E-03	-0.075(0.0232)
EVER/NEVER		rs10269552	7	127284820	T	C	0.81	2.74E-05	0.13	7.04E-01	7.81E-01	1.37E-01	-0.010(0.0066)
EVER/NEVER		rs3824000	7	127290197	G	A	0.83	3.82E-05	0.12	6.41E-01	8.63E-01	7.67E-02	-0.019(0.0105)
EVER/NEVER		rs10215276	7	127296679	T	C	0.83	3.87E-05	0.12	6.35E-01	8.63E-01	2.11E-02	-0.030(0.0132)
EVER/NEVER		rs1419969	7	127301686	T	A	0.18	2.88E-05	0.13	6.33E-01	8.24E-01	2.72E-02	0.027(0.0120)
EVER/NEVER		rs10255861	7	127312594	T	C	0.17	7.09E-05	0.15	5.59E-01	8.79E-01	1.55E-02	0.033(0.0136)
EVER/NEVER		rs3808084	7	127340261	G	A	0.81	4.83E-05	0.16	5.12E-01	9.75E-01	4.79E-03	-0.040(0.0141)
EVER/NEVER		rs3757767	7	127341343	G	C	0.81	5.16E-05	0.15	5.01E-01	7.73E-01	1.35E-02	-0.032(0.0129)
EVER/NEVER		rs4480052	7	127343949	C	T	0.89	1.24E-01	-1.00	1.01E-01	NA	1.87E-01	0.030(0.0228)
EVER/NEVER		rs759056	7	127349701	G	A	0.17	5.30E-05	0.10	4.68E-01	9.11E-01	8.95E-03	0.036(0.0137)
EVER/NEVER	9	rs917831	7	127371844	T	A	0.18	4.48E-05	0.12	4.83E-01	6.56E-01	4.20E-02	0.023(0.0113)
EVER/NEVER		rs6948493	7	127373322	G	A	0.83	4.77E-05	0.11	4.55E-01	9.50E-01	4.67E-03	-0.041(0.0146)
EVER/NEVER		rs887745	7	127376989	T	A	0.18	4.55E-05	0.12	4.85E-01	6.79E-01	3.47E-02	0.024(0.0116)
EVER/NEVER		rs3808073	7	127381304	T	A	0.18	4.58E-05	0.12	4.85E-01	7.97E-01	1.27E-02	0.032(0.0128)
EVER/NEVER		rs6963614	7	127381540	T	C	0.82	5.82E-05	0.10	4.60E-01	8.04E-01	7.73E-02	-0.018(0.0101)
EVER/NEVER		rs1362267	7	127388490	T	C	0.81	3.54E-05	0.16	4.92E-01	8.05E-01	1.03E-02	-0.033(0.0130)
EVER/NEVER		rs720300	7	127394710	G	A	0.17	4.29E-05	0.12	3.62E-01	9.25E-01	2.91E-03	0.043(0.0145)
EVER/NEVER		rs1193337	7	127406738	C	A	0.82	4.04E-05	0.12	5.02E-01	6.99E-01	7.17E-02	-0.019(0.0107)
EVER/NEVER		rs17676908	7	127408974	T	G	0.82	4.02E-05	0.12	5.00E-01	9.57E-01	4.13E-03	-0.043(0.0149)
EVER/NEVER		rs17676986	7	127424194	T	C	0.18	3.15E-05	0.16	4.18E-01	8.75E-01	4.05E-03	0.040(0.0138)
EVER/NEVER		rs1362897	7	127425939	G	A	0.82	7.98E-05	0.20	4.31E-01	9.19E-01	4.76E-03	-0.042(0.0148)
EVER/NEVER		rs17733988	7	127445029	G	A	0.82	4.78E-05	0.13	3.64E-01	8.32E-01	7.99E-01	0.000(0.0002)
EVER/NEVER		rs3808058	7	127455307	T	C	0.20	2.17E-05	0.21	4.78E-01	9.57E-01	3.64E-03	0.043(0.0149)
EVER/NEVER		rs3757757	7	127483093	G	A	0.86	2.34E-05	0.20	5.72E-01	8.52E-01	2.27E-02	-0.026(0.0114)
EVER/NEVER		rs11598849	10	55440935	G	A	0.74	7.20E-05	0.03	8.17E-01	9.05E-01	1.61E-02	-0.027(0.0113)

EVER/NEVER		rs11597275	10	55441007	T	A	0.74	8.59E-05	0.03	7.90E-01	8.23E-01	3.62E-02	-0.019(0.0093)
EVER/NEVER		rs1911401	10	55471414	T	C	0.26	8.47E-05	0.14	9.16E-01	4.11E-01	3.13E-01	0.010(0.0097)
EVER/NEVER		rs1911402	10	55471560	T	C	0.77	1.36E-05	0.10	7.90E-01	8.69E-01	9.42E-03	-0.029(0.0111)
EVER/NEVER		rs7898152	10	55473725	T	C	0.77	1.38E-05	0.13	9.50E-01	8.68E-01	2.07E-02	-0.025(0.0110)
EVER/NEVER		rs2610873	10	55483294	G	A	0.76	5.54E-06	0.09	9.88E-01	9.64E-01	1.18E-02	-0.029(0.0116)
EVER/NEVER		rs2660154	10	55484024	G	A	0.29	1.04E-05	0.08	9.49E-01	9.26E-01	1.86E-02	0.026(0.0112)
EVER/NEVER		rs2660152	10	55484968	T	G	0.77	1.02E-05	0.10	9.50E-01	9.34E-01	1.67E-02	-0.027(0.0114)
EVER/NEVER		rs2660151	10	55485051	G	A	0.29	8.95E-06	0.08	9.48E-01	9.37E-01	1.56E-02	0.028(0.0115)
EVER/NEVER		rs2660150	10	55485077	G	C	0.77	8.92E-06	0.08	9.50E-01	9.37E-01	1.55E-02	-0.028(0.0115)
EVER/NEVER		rs12242499	10	55485858	T	C	0.29	8.80E-06	0.08	9.54E-01	9.66E-01	1.38E-02	0.029(0.0117)
EVER/NEVER		rs12250681	10	55486796	G	A	0.29	8.83E-06	0.08	9.39E-01	9.46E-01	1.59E-02	0.028(0.0115)
EVER/NEVER		rs12244555	10	55486903	T	C	0.29	8.76E-06	0.08	9.33E-01	9.06E-01	2.11E-02	0.025(0.0108)
EVER/NEVER		rs11599859	10	55490206	T	C	0.29	6.60E-06	0.06	8.22E-01	9.75E-01	1.80E-02	0.028(0.0117)
EVER/NEVER		rs11593843	10	55490462	T	C	0.77	6.57E-06	0.06	8.16E-01	9.81E-01	1.74E-02	-0.028(0.0118)
EVER/NEVER		rs17643506	10	55491619	G	C	0.29	6.23E-06	0.05	7.72E-01	9.91E-01	1.87E-02	0.028(0.0119)
EVER/NEVER	10	rs1911379	10	55492592	T	A	0.29	6.12E-06	0.05	7.60E-01	6.50E-01	2.23E-02	0.024(0.0105)
EVER/NEVER		rs11594638	10	55492768	C	A	0.29	6.11E-06	0.05	7.43E-01	9.93E-01	1.98E-02	0.028(0.0119)
EVER/NEVER		rs12257494	10	55494182	T	C	0.75	5.96E-05	0.13	5.38E-01	7.49E-01	2.06E-01	-0.012(0.0094)
EVER/NEVER		rs17711275	10	55495003	G	A	0.30	7.40E-05	0.15	5.24E-01	7.39E-01	2.35E-01	0.011(0.0092)
EVER/NEVER		rs2135715	10	55495416	G	A	0.75	7.48E-05	0.15	5.27E-01	7.26E-01	2.52E-01	-0.010(0.0090)
EVER/NEVER		rs3812657	10	55496476	G	A	0.30	7.74E-05	0.15	5.18E-01	7.58E-01	2.35E-01	0.011(0.0092)
EVER/NEVER		rs11004028	10	55496819	G	A	0.75	7.64E-05	0.15	5.33E-01	7.96E-01	2.76E-01	-0.009(0.0084)
EVER/NEVER		rs11004031	10	55497901	T	C	0.75	7.61E-05	0.15	5.37E-01	8.02E-01	2.46E-01	-0.010(0.0087)
EVER/NEVER		rs11004032	10	55497998	G	A	0.75	7.64E-05	0.15	5.41E-01	7.47E-01	2.40E-01	-0.011(0.0090)
EVER/NEVER		rs11004034	10	55498247	T	C	0.75	4.75E-05	0.15	5.95E-01	6.90E-01	2.31E-01	-0.011(0.0089)
EVER/NEVER		rs11004035	10	55498304	G	A	0.75	7.71E-05	0.15	5.41E-01	8.00E-01	2.92E-01	-0.009(0.0081)
EVER/NEVER		rs11004036	10	55498447	G	C	0.75	7.75E-05	0.15	5.46E-01	7.54E-01	2.38E-01	-0.011(0.0090)
EVER/NEVER		rs17711455	10	55498752	G	A	0.75	7.83E-05	0.15	5.50E-01	8.06E-01	2.07E-01	-0.012(0.0092)
EVER/NEVER		rs12256879	10	55499168	T	C	0.75	7.93E-05	0.15	5.56E-01	7.53E-01	2.44E-01	-0.010(0.0089)
EVER/NEVER		rs12256947	10	55499300	T	A	0.75	7.96E-05	0.15	5.60E-01	7.36E-01	3.92E-01	-0.006(0.0073)
EVER/NEVER		rs12257012	10	55499412	T	G	0.75	7.99E-05	0.15	5.55E-01	7.89E-01	1.68E-01	-0.014(0.0099)
EVER/NEVER		rs11594564	10	55501158	T	C	0.30	4.69E-05	0.19	6.14E-01	7.81E-01	1.29E-01	0.015(0.0101)
EVER/NEVER		rs17644196	10	55515239	C	A	0.30	7.49E-05	0.16	7.66E-01	6.65E-01	2.32E-01	0.010(0.0085)
EVER/NEVER		rs3934925	10	133445678	G	A	0.56	6.51E-06	0.69	8.21E-01	1.17E-01	4.18E-03	0.024(0.0085)
EVER/NEVER		rs4243519	10	133445953	T	C	0.55	1.28E-05	0.56	8.28E-01	2.00E-01	8.07E-03	0.022(0.0085)
EVER/NEVER		rs4897737	10	133446221	G	A	0.45	5.99E-06	0.70	8.15E-01	1.37E-01	4.87E-03	-0.024(0.0085)
EVER/NEVER		rs9419657	10	133446938	T	G	0.55	7.29E-06	0.60	9.76E-01	7.96E-02	2.03E-03	0.025(0.0083)
EVER/NEVER		rs9419659	10	133448102	C	A	0.46	6.30E-06	0.63	8.40E-01	1.00E-01	3.55E-03	-0.025(0.0087)
EVER/NEVER		rs4611133	10	133449692	T	C	0.40	1.58E-05	0.20	2.31E-01	2.86E-01	1.23E-03	0.027(0.0084)
EVER/NEVER		rs4897777	10	133453004	G	A	0.43	4.10E-05	0.66	5.06E-01	1.18E-01	1.66E-02	-0.020(0.0085)
EVER/NEVER		rs10782372	10	133453921	G	C	0.45	7.06E-06	0.71	8.81E-01	1.37E-01	4.17E-03	-0.024(0.0084)
EVER/NEVER		rs9419597	10	133455875	G	A	0.45	8.00E-06	0.72	8.66E-01	1.93E-01	6.02E-03	-0.024(0.0087)
EVER/NEVER		rs9419598	10	133455938	G	A	0.56	8.02E-06	0.72	8.47E-01	1.31E-01	4.58E-03	0.024(0.0086)
EVER/NEVER		rs4897779	10	133456135	T	C	0.56	7.52E-06	0.75	8.01E-01	1.25E-01	4.88E-03	0.024(0.0086)
EVER/NEVER	11	rs4897780	10	133456569	G	A	0.45	8.90E-06	0.70	8.12E-01	1.17E-01	4.72E-03	-0.024(0.0085)
EVER/NEVER		rs4897781	10	133457894	G	A	0.45	2.14E-06	0.60	5.88E-01	2.05E-01	1.03E-02	-0.022(0.0085)
EVER/NEVER		rs4897740	10	133457937	T	G	0.46	3.94E-07	0.40	8.43E-01	2.40E-01	3.50E-03	-0.026(0.0087)
EVER/NEVER		rs4897741	10	133458200	G	A	0.56	2.73E-06	0.58	5.59E-01	3.06E-01	1.72E-02	0.020(0.0084)
EVER/NEVER		rs4897783	10	133458227	G	A	0.51	9.08E-05	0.63	3.97E-01	2.47E-01	5.45E-02	-0.017(0.0088)
EVER/NEVER		rs4897787	10	133462630	T	G	0.56	1.01E-06	0.64	6.02E-01	2.30E-01	8.04E-03	0.022(0.0084)
EVER/NEVER		rs4897788	10	133463721	T	C	0.46	1.68E-06	0.65	6.12E-01	2.98E-01	1.10E-02	-0.022(0.0087)
EVER/NEVER		rs4897748	10	133464425	T	C	0.45	1.23E-06	0.63	6.11E-01	2.87E-01	1.00E-02	-0.022(0.0085)
EVER/NEVER		rs9419603	10	133470399	G	A	0.56	1.37E-06	0.62	5.47E-01	2.22E-01	9.99E-03	0.022(0.0085)
EVER/NEVER		rs9419662	10	133481621	T	C	0.49	8.61E-05	0.79	3.10E-01	1.89E-01	6.11E-02	0.016(0.0085)
EVER/NEVER		rs9419604	10	133482769	T	C	0.56	1.79E-06	0.58	3.44E-01	2.53E-01	2.38E-02	0.019(0.0085)
EVER/NEVER		rs7095118	10	133484512	T	C	0.45	1.37E-06	0.60	3.68E-01	3.43E-01	2.60E-02	-0.018(0.0083)
EVER/NEVER	12	rs11601812	11	98114603	T	C	0.18	7.77E-05	0.86	8.67E-02	1.35E-01	1.30E-02	-0.043(0.0173)
EVER/NEVER		rs11217132	11	98208304	G	C	0.88	2.10E-05	0.87	5.56E-01	8.54E-02	5.29E-02	0.036(0.0188)
EVER/NEVER		rs17301608	16	54076111	T	C	0.40	6.72E-05	0.90	4.63E-01	1.65E-01	1.35E-03	-0.029(0.0091)
EVER/NEVER		rs2241145	16	54079701	G	C	0.55	1.42E-05	0.74	5.18E-01	3.52E-02	2.48E-04	0.031(0.0086)
EVER/NEVER		rs9928731	16	54080512	T	C	0.55	1.48E-05	0.74	5.35E-01	1.20E-02	1.14E-04	0.033(0.0085)
EVER/NEVER	13	rs243847	16	54081499	T	C	0.57	8.43E-05	0.89	4.73E-01	5.30E-01	8.68E-02	-0.014(0.0084)
EVER/NEVER		rs243845	16	54083988	G	A	0.59	8.27E-06	0.54	9.13E-01	2.97E-01	7.65E-03	-0.024(0.0089)
EVER/NEVER		rs243844	16	54084377	G	A	0.60	4.32E-06	0.52	7.42E-01	1.36E-01	5.30E-03	-0.024(0.0087)
EVER/NEVER		rs243842	16	54084923	T	C	0.60	2.98E-06	0.52	8.56E-01	2.43E-01	5.65E-03	-0.024(0.0088)
EVER/NEVER		rs11906241	20	18542013	T	C	0.12	2.31E-05	0.49	7.17E-01	1.66E-01	1.06E-01	-0.059(0.0365)
EVER/NEVER		rs11905596	20	18544188	T	G	0.96	2.27E-05	0.45	6.65E-01	1.88E-01	1.03E-01	0.060(0.0370)
EVER/NEVER	14	rs11905496	20	18558666	C	A	0.96	2.24E-05	0.42	6.66E-01	2.19E-01	9.04E-02	0.063(0.0373)
EVER/NEVER		rs4381841	20	18571118	T	G	0.12	2.18E-05	0.37	6.52E-01	3.15E-01	7.30E-02	-0.067(0.0374)
EVER/NEVER		rs16979446	20	18573054	G	A	0.95	2.67E-05	0.57	6.65E-01	3.22E-01	5.82E-02	0.070(0.0367)
EVER/NEVER		rs10485583	20	18598214	G	A	0.96	7.30E-05	0.47	5.85E-08	3.82E-01	3.19E-04	-0.104(0.0288)
EVER/NEVER		rs2824775	21	18661002	T	G	0.32	8.89E-05	0.73	4.25E-01	5.31E-01	3.47E-01	0.002(0.0026)
EVER/NEVER		rs2824776	21	18661665	G	C	0.32	9.03E-05	0.75	1.00E-01	2.66E-01	7.24E-01	0.004(0.0103)
EVER/NEVER		rs2824780	21	18663988	G	A	0.32	9.73E-05	0.75	3.86E-01	5.18E-01	5.23E-01	0.000(0.0001)
EVER/NEVER	15	rs2824781	21	18665777	G	A	0.33	1.77E-05	0.73	2.52E-01	6.95E-01	5.74E-01	0.001(0.0013)
EVER/NEVER		rs1888409	21	18676291	G	A	0.70	2.16E-05	0.71	2.45E-01	5.42E-01	8.07E-01	0.001(0.0027)
EVER/NEVER		rs1888410	21	18676377	T	C	0.70	2.16E-05	0.71	2.46E-01	5.49E-01	8.22E-01	0.001(0.0028)
EVER/NEVER		rs2824794	21	18681764	T	G	0.70	1.71E-05	0.69	2.63E-01	7.16E-01	2.68E-01	-0.007(0.0060)
Curr/Non-curr	1	rs6688471	1	20158901	C	T	0.18	2.73E-05	0.76	9.02E-01	NA	1.14E-03	0.154(0.0472)
Curr/Non-curr	2	rs12125644	1	196310793	A	C	0.25	5.87E-05	0.13	4.79E-01	NA	1.02E-03	-0.079(0.0239)
Curr/Non-curr	3	rs17008389	3	71366206	A	T	0.38	1.68E-05	0.66	2.33E-01	NA	2.47E-04	-0.053(0.0146)
Curr/Non-curr	4	rs7677847	4	77583150	A	G	0.35	1.02E-05	0.78	4.70E-01	NA	8.61E-04	0.049(0.0148)

Curr/Non-curr	5	rs6836368	4	130970736	A	G	0.95	1.74E-05	0.10	1.51E-01	NA	1.11E-04	0.184(0.0476)
Curr/Non-curr		rs9986009	4	130972303	C	T	0.95	2.09E-05	0.06	1.46E-01	NA	2.13E-04	0.184(0.0498)
Curr/Non-curr		rs13361876	5	93849707	A	C	0.27	3.95E-05	0.64	7.46E-01	NA	4.77E-03	0.045(0.0161)
Curr/Non-curr		rs10075161	5	93892792	C	T	0.27	2.10E-05	0.68	7.95E-01	NA	4.40E-03	0.045(0.0157)
Curr/Non-curr		rs1376713	5	93938613	C	G	0.83	3.34E-05	0.13	5.56E-01	NA	2.29E-03	-0.066(0.0216)
Curr/Non-curr		rs2122985	5	93998652	C	G	0.26	4.36E-05	0.55	9.58E-01	NA	9.00E-03	0.041(0.0155)
Curr/Non-curr		rs2122984	5	93998673	C	T	0.26	4.37E-05	0.55	9.58E-01	NA	9.02E-03	0.041(0.0155)
Curr/Non-curr		rs1390642	5	93998790	A	C	0.74	4.29E-05	0.55	9.59E-01	NA	8.93E-03	-0.041(0.0155)
Curr/Non-curr	6	rs7446179	5	93998933	A	G	0.26	4.41E-05	0.55	9.60E-01	NA	9.04E-03	0.041(0.0155)
Curr/Non-curr		rs12656300	5	93999343	A	G	0.26	4.72E-05	0.55	9.60E-01	NA	9.32E-03	0.040(0.0155)
Curr/Non-curr		rs12659597	5	94017075	A	G	0.73	1.80E-05	0.42	9.64E-01	NA	6.33E-03	-0.042(0.0155)
Curr/Non-curr		rs12655665	5	94017825	C	T	0.26	4.85E-05	0.56	9.66E-01	NA	9.65E-03	0.040(0.0155)
Curr/Non-curr		rs1124668	5	94038997	G	T	0.74	4.54E-05	0.60	9.36E-01	NA	9.05E-03	-0.041(0.0155)
Curr/Non-curr		rs2270626	5	94049772	C	G	0.74	4.53E-05	0.60	9.45E-01	NA	9.36E-03	-0.040(0.0155)
Curr/Non-curr		rs7718956	5	94069364	A	C	0.27	4.50E-05	0.58	8.24E-01	NA	6.57E-03	0.041(0.0151)
Curr/Non-curr		rs12515845	5	94094796	G	T	0.73	6.07E-05	0.32	7.87E-01	NA	6.95E-03	-0.042(0.0157)
Curr/Non-curr		rs2042545	7	7841970	C	T	0.52	3.66E-05	0.51	2.82E-01	NA	7.09E-02	0.024(0.0131)
Curr/Non-curr	7	rs6957269	7	7844302	A	G	0.50	1.04E-05	0.50	2.89E-01	NA	4.97E-02	-0.026(0.0132)
Curr/Non-curr		rs6961771	7	7844626	C	T	0.51	3.28E-05	0.46	4.01E-01	NA	5.05E-02	0.025(0.0129)
Curr/Non-curr		rs17550617	9	23795555	C	T	0.81	1.40E-05	0.85	4.92E-01	NA	2.78E-02	0.037(0.0166)
Curr/Non-curr		rs17484841	9	23796012	C	G	0.80	6.63E-06	0.78	5.04E-01	NA	1.94E-02	0.039(0.0165)
Curr/Non-curr		rs16907788	9	23798910	A	G	0.80	1.63E-05	0.86	4.87E-01	NA	2.85E-02	0.036(0.0166)
Curr/Non-curr	8	rs3793594	9	23800167	A	C	0.81	1.78E-05	0.83	4.80E-01	NA	3.34E-02	0.035(0.0165)
Curr/Non-curr		rs3793599	9	23801669	A	G	0.26	2.03E-05	0.83	5.04E-01	NA	3.23E-02	-0.035(0.0165)
Curr/Non-curr		rs3793601	9	23801903	G	T	0.26	2.08E-05	0.83	5.51E-01	NA	2.93E-02	-0.036(0.0165)
Curr/Non-curr		rs3793603	9	23803100	A	G	0.27	1.77E-05	0.85	5.14E-01	NA	2.81E-02	-0.036(0.0165)
Curr/Non-curr		rs6475757	9	23805155	C	G	0.81	2.87E-05	0.90	5.26E-01	NA	3.49E-02	0.035(0.0165)
Curr/Non-curr		rs4746143	10	75147304	A	G	0.73	7.08E-06	0.65	4.28E-01	NA	2.49E-02	0.033(0.0148)
Curr/Non-curr		rs7923045	10	75157504	A	T	0.60	2.63E-05	0.52	6.16E-01	NA	2.48E-02	0.029(0.0131)
Curr/Non-curr		rs10733894	10	75168673	G	T	0.73	8.09E-06	0.64	3.97E-01	NA	3.15E-02	0.031(0.0146)
Curr/Non-curr		rs11000765	10	75182458	C	G	0.36	8.43E-06	0.65	3.80E-01	NA	3.20E-02	-0.031(0.0145)
Curr/Non-curr		rs10740418	10	75189328	C	T	0.36	8.43E-06	0.65	3.73E-01	NA	3.26E-02	-0.031(0.0145)
Curr/Non-curr		rs12413039	10	75194765	C	G	0.36	4.33E-07	0.68	3.22E-01	NA	1.60E-02	-0.036(0.0149)
Curr/Non-curr		rs10762563	10	75194808	A	C	0.46	4.09E-05	0.46	6.56E-01	NA	2.62E-02	-0.029(0.0130)
Curr/Non-curr		rs3849969	10	75196005	A	G	0.70	4.71E-06	0.73	3.70E-01	NA	2.95E-02	0.032(0.0146)
Curr/Non-curr		rs4746148	10	75204494	C	T	0.71	8.84E-06	0.66	3.76E-01	NA	3.26E-02	0.031(0.0145)
Curr/Non-curr		rs2271271	10	75228873	A	G	0.36	1.31E-05	0.63	4.56E-01	NA	2.94E-02	-0.031(0.0144)
Curr/Non-curr		rs4691	10	75231922	C	T	0.72	1.33E-05	0.64	3.43E-01	NA	4.19E-02	0.030(0.0147)
Curr/Non-curr		rs13013	10	75232167	A	C	0.46	4.34E-05	0.48	7.09E-01	NA	2.31E-02	-0.030(0.0130)
Curr/Non-curr		rs3812637	10	75238852	C	T	0.71	1.58E-05	0.64	4.28E-01	NA	3.32E-02	0.031(0.0145)
Curr/Non-curr	9	rs7098573	10	75250020	A	G	0.34	2.26E-05	0.57	3.89E-01	NA	1.50E-04	-0.067(0.0178)
Curr/Non-curr		rs11000787	10	75254389	C	T	0.36	1.69E-05	0.64	4.20E-01	NA	3.41E-02	-0.031(0.0145)
Curr/Non-curr		rs2688617	10	75316153	A	T	0.75	4.17E-05	0.23	2.36E-01	NA	9.43E-02	0.025(0.0151)
Curr/Non-curr		rs2675677	10	75318255	A	C	0.33	1.76E-05	0.16	3.36E-01	NA	5.18E-02	-0.029(0.0148)
Curr/Non-curr		rs2688615	10	75321505	C	G	0.73	6.09E-06	0.34	2.27E-01	NA	5.76E-02	0.029(0.0151)
Curr/Non-curr		rs2633306	10	75322453	A	C	0.72	1.70E-05	0.27	2.12E-01	NA	8.11E-02	0.026(0.0150)
Curr/Non-curr		rs2688612	10	75323211	G	T	0.74	2.25E-05	0.23	2.26E-01	NA	8.48E-02	0.026(0.0148)
Curr/Non-curr		rs2688611	10	75323378	G	T	0.75	3.39E-05	0.25	1.80E-01	NA	1.16E-01	0.024(0.0150)
Curr/Non-curr		rs2633309	10	75324092	A	G	0.33	9.62E-06	0.25	1.96E-01	NA	7.71E-02	-0.026(0.0148)
Curr/Non-curr		rs2688607	10	75333742	A	G	0.72	2.85E-05	0.12	1.19E-01	NA	1.61E-01	0.021(0.0149)
Curr/Non-curr		rs2633298	10	75336345	C	G	0.73	1.06E-05	0.26	1.61E-01	NA	9.86E-02	0.024(0.0148)
Curr/Non-curr		rs2459449	10	75339019	C	T	0.33	2.04E-05	0.29	1.43E-01	NA	1.31E-01	-0.023(0.0150)
Curr/Non-curr		rs2227551	10	75339196	G	T	0.74	3.17E-05	0.36	2.39E-01	NA	9.91E-02	0.025(0.0149)
Curr/Non-curr		rs12281511	11	12633871	A	C	0.48	1.61E-05	0.38	3.54E-01	NA	6.42E-04	-0.046(0.0134)
Curr/Non-curr	10	rs7926971	11	12654616	A	G	0.46	3.71E-05	0.42	4.64E-01	NA	1.71E-03	-0.040(0.0126)
Curr/Non-curr		rs10765987	11	12662319	C	T	0.44	1.76E-05	0.22	7.11E-01	NA	2.78E-03	-0.038(0.0128)
Curr/Non-curr		rs7168832	15	36987749	C	G	0.56	3.79E-05	0.78	5.95E-01	NA	2.93E-02	-0.028(0.0128)
Curr/Non-curr		rs12439991	15	36988358	A	G	0.45	3.27E-05	0.78	5.79E-01	NA	2.84E-02	0.028(0.0128)
Curr/Non-curr		rs724234	15	36992739	A	G	0.46	7.38E-06	0.85	3.41E-01	NA	4.03E-02	0.027(0.0129)
Curr/Non-curr	11	rs7162298	15	36993927	A	G	0.55	3.04E-05	0.85	4.40E-01	NA	4.41E-02	-0.026(0.0128)
Curr/Non-curr		rs7181150	15	37000183	C	T	0.46	2.77E-05	0.62	3.33E-01	NA	5.54E-02	0.025(0.0129)
Curr/Non-curr		rs11070160	15	37000434	A	G	0.53	1.34E-05	0.75	3.41E-01	NA	4.62E-02	-0.025(0.0127)
Curr/Non-curr		rs10851370	15	37000464	G	T	0.47	1.04E-05	0.74	3.29E-01	NA	4.61E-02	0.025(0.0128)
Curr/Non-curr	12	rs16948215	17	13491726	G	T	0.18	1.68E-05	0.74	3.66E-01	NA	7.66E-04	-0.096(0.0284)
Curr/Non-curr	13	rs12326022	17	24405383	G	T	0.93	1.57E-05	0.57	8.25E-01	NA	4.37E-03	-0.100(0.0351)
Curr/Non-curr		rs6005312	22	25878374	C	T	0.80	4.93E-05	0.41	9.83E-01	NA	1.17E-02	-0.042(0.0168)
Curr/Non-curr	14	rs9625159	22	25882564	C	T	0.80	2.99E-05	0.49	3.99E-01	NA	8.18E-04	-0.058(0.0173)
Curr/Non-curr		rs10427939	22	25883126	C	T	0.19	5.39E-05	0.14	1.44E-01	NA	1.57E-04	0.112(0.0297)
Curr/Non-curr	15	rs1474745	22	42680569	C	T	0.75	2.34E-05	0.94	9.08E-01	NA	6.61E-03	-0.046(0.0169)
Curr/Non-curr		rs3761472	22	42699455	A	G	0.22	3.52E-05	0.97	9.15E-01	NA	8.32E-03	0.044(0.0168)

Supplementary Table 3. Genomic control lambda inflation factors

		GC lambda inflation factor		
Study Name	**Other Name**	**Ever vs Never**	**Current vs Non-current**	**CPD**
The arc Epidemiology Unit Rheumatoid Arthritis cohort	WTCCC-RA	n/a	0.993213	n/a
The EPIC Obesity study	EPIC	1.012	0.9948708	n/a
The BRIGHT Study	WTCCC-HT	n/a	1.00569	1.000426
The GEMS Study	GEMS	1.013301	0.9955785	1.019739
The Bergen COPD case control collection	GSK-COPD	n/a	0.9855785	0.9960527
The GSK/IOP/CAMH bipolar cohort	GSK-BIPOLAR	0.9961354	0.9997034	1.003575
The GSK/MPI depression cohort	GSK-UNIPOLAR	1.010012	1.010608	1.012388
The UK IBD Genetics Consortium	WTCCC-IBD	1.004875	1.008234	n/a
The KORA Study	KORA	1.027964	0.9975758	1.030356
The KORCULA Study	KORCULA	1.072233	1.037129	n/a
The LOLIPOP Study	LOLIPOP	1.026318	1.008084	1.008873
The Medstar Cohort	MEDSTAR	0.9924291	0.9961729	1.009704
The Orkney Complex Disease Study	ORCADES	1.128765	1.079304	n/a
The PennCATH cohort	PENNCATH	n/a	0.951226	n/a
The Popgen Biobank Study	POPGEN	1.018822	n/a	1.035871
The PsyCoLaus cohort	CoLaus	1.019417	1.012127	1.0131102
The SardNIA study	SardiNIA	1.135018	1.097244	1.088316
The Study of Health in Pomerania	SHIP	1.000568	1.022989	1.006505
The VIS Study	VIS	1.055634	1.03443	n/a
The WTCCC-CAD cohort	WTCCC-CAD	1.009498	0.9964745	1.010912
COMBINED		1.002404	0.9982071	1.014531

SUPPLEMENTARY NOTE

Comparison of SQ and CPD phenotype

We also carried out the meta-analysis of our cohort using CPD as the phenotype as this was used by the ENGAGE study. The manhattan plot for the genome-wide screen is shown in Figure S13. This clearly highlights the chromosome 15 region but the p-values are not as significant as those obtained when using SQ as the phenotype (rs1051730 has a p-value of 4.65E-16 for the CPD phenotype but 9.45E-19 for the SQ phenotype). Figure S14 shows the chromosome 15 region in more detail and shows that the top 5 SNPs are the same for both phenotypes but that there is a slight change in the order of the SNPs. This effect can be explained by the discrete nature of the SQ phenotype i.e the SQ level 3 is defined as all values of CPD of 31 or more so that the upper tail of the CPD distribution is effectively truncated. When using CPD as the phenotype individuals with high values of CPD, such as outlying observations, may elevate the residual variance of the phenotype which will tend to reduce the significance of associations. The use of the SQ phenotype will be more robust to this effect.

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