## **Analysis Summary: Parkinsons Disease (Population Controls)**

#### **Phenotype Description**

Cases answered "Yes" or reported a diagnosis of Parkinson's disease to at least one of the questions below or joined 23andMe as part of Parkinson's Disease Research Initiative and provided no survey responses (that is, if they didn't provide any information to the contrary, we assumed they truly have PD):

- (PD) Background Survey ("Has a doctor ever diagnosed you with Parkinson's disease?" Answer = Yes)
- Your Medical History ("Have you ever been diagnosed by a doctor with Parkinson's disease"? Answer = Yes)
- Research Snippets ("Has a doctor ever diagnosed you with Parkinson's disease?" Answer = Yes)
- Your Health Profile ("Have you ever been diagnosed or treated for any of the following conditions?" Answer = Parkinson's disease)
- Roots into the Future: Health History ("Has a doctor ever told you that you have any of these conditions?" Answer = Parkinson's disease)
- (PD) Baseline Survey ("Has a doctor ever diagnosed you with Parkinson's disease?" Answer = Yes)

Cases were further filtered by removing respondents 1) who were discordant between the first two questions above (that is, removing those who said "No" to the PD Background Survey question but said "Yes" to the Your Medical History question); 2) whose diagnosis changed because their symptoms disappeared or the cause of the symptoms is unknown (according to the questions below);

- (PD) Background Survey ("Is your diagnosis still Parkinson's disease or has your diagnosis changed?" Answer = My diagnosis changed)
- (PD) Background Survey ("Which of the following best describes how your diagnosis changed?" Answer = I no longer have the symptoms that led to the Parkinson's diagnosis, I still have the symptoms but the cause is unknown, My diagnosis changed)

or 3) whose diagnosis changed to another diagnosis that could be confounded with PD based on the following questions:

- (PD) Background Survey ("Which of the following have you been diagnosed with? Please check all that apply." Answers = Progressive Supranuclear Palsy (PSP); Multiple system atrophy (MSA), Shy-Drager syndrome, or striatonigral degeneration; Spinal cerebellar ataxia (SCA), cerebellar degeneration, olivopontocerebellar atrophy (OPCA); Cortical basal ganglionic degeneration, Parkinsonism due to medications, drug-induced parkinsonism)
- (PD) Background Survey ("Which of the following have you been diagnosed with? Please check all that apply." Answers = Frontotemporal dementia (FTD); Picks disease)
- (PD) Background Survey ("Which of the following have you been diagnosed with? Please check all that apply." Answers = Dystonic tremor; Rubral tremor; Primary writing tremor; Cerebellar tremor; Multiple sclerosis (MS))

Because PD is rare, we did not require controls to affirmatively deny a diagnosis of PD. Instead, population controls were used with the following groups excluded:

- Anyone defined as a case by the first set of criteria described above
- Anyone who was diagnosed with "Another form of parkinsonism (other than Parkinson's disease)", "Dementia, cognitive impairment, or senility", "A tremor disorder") according to this question:
  - (PD) Background Survey ("Has a doctor ever diagnosed you with any of the following? Please check all that apply.)
- Anyone reporting a diagnosis of Alzheimer's disease by answering "Yes" to the following question:
- Your Medical History ("Have you ever been diagnosed by a doctor with Alzheimer's disease?")
- Anyone reporting a diagnosis of memory loss by answering "Yes" to the following question:
- Your Medical History ("Have you ever been diagnosed by a doctor with memory loss?")
- Anyone with three or more early symptoms of Parkinson's as defined by the following questions below:
  - (PD) Background Survey ("Do you have trembling or shaking of any part of your body?" Yes is + 1)
  - (PD) Background Survey ("Have you noticed or have people told you that your speech or voice has become softer than before?" Yes is + 1)
  - (PD) Background Survey ("When walking, do you swing your arms less than you used to?" Yes is + 1)
  - (PD) Background Survey ("When standing or walking do you stoop or bend forward more than you used to?" Yes is + 1)
  - (PD) Background Survey ("Do you have trouble with your balance or fall sometimes?" Yes is + 1)
  - (PD) Background Survey ("Have you noticed any of the following changes in your handwriting? Please check all that apply." Answers =
     Handwriting became slower, Handwriting became smaller, Handwriting became shakier (each answer is + 1))

#### **Phenotype Statistics**

The following table shows demographics of unrelated, European individuals included in the GWAS.

Phenotype	Group	Total	М	F	(0,30]	(30,45]	(45,60]	(60,Inf]
PD_all_pop_con	case	9619	5875	3744	33	330	1959	7297
	control	324522	174938	149584	44241	93985	87425	98871

The following table shows the phenotypic distribution across 23andMe genotyping platforms for individuals included in the GWAS.

Phenotype	Group	Total	v1/v2	v3	v4
PD_all_pop_con	case	9619	2947	6300	372
	control	324522	21205	233307	70010

#### **Null Model with Covariates**

The following table shows results of fitting a model for the trait based on just the covariates. Principal coordinates have been standardized, so these effect sizes are in units of standard deviations.

	<b>Estimate</b>	Std. Error	z value	Pr(> z )	LRT	Pr(>Chi)
age	0.0673	0.000731	92.1	0.0	10129.9	0.0
sexF	-0.3477	0.021686	-16.0	$7.4 \times 10^{-58}$	261.9	$6.6 \times 10^{-59}$
pc.0	-0.0111	0.009583	-1.2	0.25	1.3	0.25
pc.1	-0.1161	0.012860	-9.0	$1.8 \times 10^{-19}$	88.4	$5.5 \times 10^{-21}$
pc.2	-0.0647	0.011090	-5.8	$5.5 \times 10^{-9}$	35.2	$3.0 \times 10^{-9}$
pc.3	0.0442	0.010795	4.1	$4.3 \times 10^{-5}$	16.7	$4.4 \times 10^{-5}$
pc.4	0.0609	0.012376	4.9	$8.6 \times 10^{-7}$	26.2	$3.1 \times 10^{-7}$

#### **SNP-level QC information**

The following table shows results for QC filters on the genotyped data:

	failed	passed
no filters	0	1030430
not V1/V2-only, chrM, chrY	33033	997397
parent-offspring test	2129	995294
MAF > 0%	3203	992310
HWE > 1e-20	48225	945039
gt.rate > 90%	30775	925423
batch effects	71627	889734

The following table shows results for QC filters on the imputed dosage data:

	failed	passed
no filters	0	13733809
MAF > 0%	0	13733809
imputation quality	0	13733809
batch effects	1123116	12610693

The following table shows results for QC filters on the merged association test results:

	passed	total
imputed only	11813480	11813480
both passed	797198	12610678
genotyped only	92536	12703214
no test result	-1446	12701768
failed to converge	-263549	12438219

#### **Genetic Association Tests**

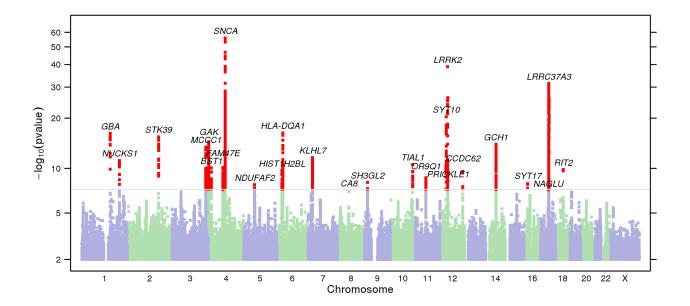
We performed logistic regression assuming an additive model for allelic effects, using the model:

 $PD_all_pop_con \sim age + sex + pc.0 + pc.1 + pc.2 + pc.3 + pc.4 + genotype$ 

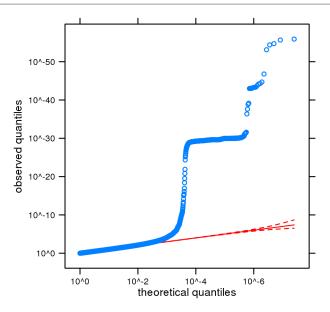
This genome-wide association analysis includes data from 9619 cases and 324522 controls of European ancestry, filtered to remove close relatives.

The results in this report have been adjusted for a genomic control inflation factor  $\lambda$ =1.131. The equivalent inflation factor for 1000 cases and 1000 controls  $\lambda_{1000}$ = 1.007 , and for 10000,  $\lambda_{10000}$ = 1.070 .

#### **Manhattan Plot**



## **Q-Q Plot of GWAS Results**



# **Index SNPs for Strongest Associations**

cytoband	assay.name	scaffold	position	alleles	src	pvalue	OR	95% CI	gene.context
4q22.1	rs356182	chr4	90626111	A/G	I	1.2×10 <sup>-56</sup>	1.318	[1.274,1.363]	GPRIN3[]SNCA
12q12	rs28903073	chr12	40653510	A/G	I	1.3×10 <sup>-39</sup>	0.321	[0.276,0.373]	[LRRK2]
17q21.31	rs365825	chr17	43705601	A/G	I	$4.2 \times 10^{-32}$	0.786	[0.754,0.819]	LRRC37A3[]CRHR1
12p11.1	rs144847051	chr12	33301805	A/G	I	$4.1 \times 10^{-21}$	0.447	[0.383,0.521]	PKP2[]SYT10
6p21.32	rs17425622	chr6	32571961	C/T	I	$3.8 \times 10^{-17}$	1.235	[1.174,1.298]	HLA-DRB5[]HLA-DQA1
1q22	rs2230288	chr1	155206167	C/T	I	$4.7 \times 10^{-17}$	1.674	[1.495,1.873]	[GBA]
2q24.3	rs13016703	chr2	169155595	G/T	I	$2.7 \times 10^{-16}$	0.827	[0.791,0.865]	STK39[]CERS6
4p16.3	rs35541465	chr4	873286	D/I	I	$2.8 \times 10^{-15}$	0.865	[0.834,0.896]	[GAK]
14q22.2	rs11158026	chr14	55348869	C/T	I	$8.8 \times 10^{-15}$	0.873	[0.844,0.904]	[GCH1]
3q27.1	rs9858038	chr3	182730291	A/G	I	$3.0 \times 10^{-14}$	1.172	[1.124,1.221]	DCUN1D1[]-MCCC1
7p15.3	rs10256359	chr7	23123877	C/T	I	$2.1 \times 10^{-12}$	0.887	[0.858,0.917]	FAM126A[]KLHL7
1q32.1	rs823118	chr1	205723572	C/T	I	$6.3 \times 10^{-12}$	1.117	[1.082,1.153]	NUCKS1-[]RAB7L1
10q26.11	rs188789342	chr10	121372328	C/T	I	$2.6 \times 10^{-11}$	1.488	[1.331,1.663]	TIAL1[]BAG3
4q21.1	rs6812193	chr4	77198986	C/T	I	$7.3 \times 10^{-11}$	0.897	[0.868,0.927]	[FAM47E]
4p15.32	rs4266290	chr4	15737118	C/G	I	$8.4 \times 10^{-11}$	1.128	[1.088,1.171]	BST1-[]CD38
18q12.3	rs4130047	chr18	40678235	C/T	I	$1.5 \times 10^{-10}$	0.897	[0.868,0.927]	[RIT2]
6p22.1	rs4713118	chr6	27676794	A/G	I	$2.0 \times 10^{-10}$	1.121	[1.083,1.162]	ZNF184[]HIST1H2BL
12q24.31	rs11060180	chr12	123303586	A/G	I	$2.6 \times 10^{-10}$	0.903	[0.875,0.932]	[CCDC62]
11q12.1	rs687432	chr11	57694260	A/C	I	$2.0 \times 10^{-9}$	1.113	[1.075,1.153]	CTNND1[]OR9Q1
12q12	rs148294058	chr12	43049382	A/G	I	$5.2 \times 10^{-9}$	0.637	[0.551,0.736]	PRICKLE1[]ADAMTS20
9p22.2	rs2209440	chr9	17736342	G/T	I	$7.5 \times 10^{-9}$	0.912	[0.884,0.941]	[SH3GL2]
16p12.3	rs11343	chr16	19279464	G/T	I	$1.0 \times 10^{-8}$	1.096	[1.062,1.131]	SYT17[]CLEC19A
5q12.1	rs162227	chr5	60260543	C/T	I	$1.4 \times 10^{-8}$	0.860	[0.817,0.905]	[NDUFAF2]
8q12.1	rs144074972	chr8	61163895	C/T	I	$6.1 \times 10^{-8}$	Inf	[0.022, Inf]	[CA8]
17q21.2	rs601999	chr17	40698158	C/T	I	6.7×10 <sup>-8</sup>	1.095	[1.060,1.132]	GLU-[]-HSD17B1

### **Quality Statistics for Index SNPs**

assay.name	is.v2	is.v3	is.v4	gt.rate	hw.p.value	p.date	freq.b	avg.rsqr	min.rsqr	p.batch	dose.b	qc.mask
rs356182	FALSE	FALSE	FALSE					0.8767	0.8611	0.20	0.3572	v2v3v4
rs28903073	TRUE	TRUE	TRUE	0.9998	$5.4 \times 10^{-5}$	$2.3 \times 10^{-10}$	0.9956	0.9748	0.9575	0.00053	0.9956	v2v3v4
rs365825	FALSE	FALSE	FALSE					0.9407	0.8998	$1.5 \times 10^{-6}$	0.2265	v2v3v4
rs144847051	FALSE	FALSE	FALSE					0.7436	0.6980	0.0047	0.9926	v2v3v4
rs17425622	FALSE	FALSE	FALSE					0.8535	0.7666	0.22	0.8528	v2v3v4
rs2230288	FALSE	TRUE	TRUE	0.9823	0.012	0.0	0.0036	0.9545	0.8988	0.027	0.0128	v2v3v4
rs13016703	FALSE	FALSE	TRUE	0.9999	0.28	0.19	0.8747	0.9958	0.9751	0.037	0.8733	v2v3v4
rs35541465	FALSE	FALSE	FALSE					0.9445	0.8958	$7.1 \times 10^{-6}$	0.7323	v2v3v4
rs11158026	FALSE	FALSE	TRUE	1.0000	0.92	0.64	0.3317	0.9714	0.9591	0.20	0.3303	v2v3v4
rs9858038	FALSE		FALSE					0.9839	0.9695	0.87	0.8029	v2v3v4
rs10256359	FALSE	FALSE	FALSE					0.9648	0.8961	0.35	0.3695	v2v3v4
rs823118 rs188789342	FALSE FALSE	FALSE FALSE	FALSE FALSE					0.9979 0.8154	0.9954 0.7608	0.61 0.17	0.5585 0.0176	v2v3v4 v2v3v4
rs6812193	TRUE	TRUE	TRUE	1.0000	0.018	0.014	0.3677	1.0000	0.7608	0.17	0.0176	v2v3v4 v2v3v4
rs4266290	FALSE	FALSE	FALSE	1.0000	0.016	0.014	0.30//	0.9966	0.9999	0.69	0.3677	
rs4130047	TRUE	TRUE	TRUE	1.0000	0.54	0.15	0.6854	0.9999	0.9995	0.30	0.6854	v2v3v4 v2v3v4
rs4713118	FALSE	TRUE	FALSE	0.9995	4.3×10 <sup>-29</sup>	0.85	0.2517	0.9960	0.9857	0.00011	0.2527	v2v3v4
rs11060180	TRUE	TRUE	TRUE	0.9997	0.47	0.38	0.4498	0.9990	0.9971	0.69	0.4489	v2v3v4
rs687432	FALSE	FALSE	FALSE	0.5557	0	0.50	011150	0.9756	0.9138	0.056	0.7042	v2v3v4
rs148294058	FALSE	FALSE	FALSE					0.5194	0.4686	0.094	0.9830	v2v3v4
rs2209440	TRUE	TRUE	TRUE	0.9990	0.29	0.22	0.5236	0.9979	0.9927	0.33	0.5244	v2v3v4
rs11343	TRUE	TRUE	TRUE	0.9999	0.29	$2.4 \times 10^{-5}$	0.4432	0.9982	0.9938	0.00024	0.4435	v2v3v4
rs162227	FALSE	FALSE	FALSE					0.9206	0.8771	$4.2 \times 10^{-5}$	0.8965	v2v3v4
rs144074972	FALSE	FALSE	FALSE					0.9007	0.7877	0.81	0.9993	v2v3v4
rs601999	FALSE	FALSE	FALSE					0.9862	0.9781	0.11	0.3272	v2v3v4

### **SNP Statistics in the GWAS Sample**

assay.name	AA.0	AB.0	BB.0	im.num.0	dose.b.0	AA.1	AB.1	BB.1	im.num.1	dose.b.1
rs356182				324522	0.3570				9619	0.4127
rs28903073	7	2616	321831	324522	0.9960	4	237	9374	9619	0.9872
rs365825				324522	0.2271				9619	0.1925
rs144847051				324522	0.9928				9619	0.9862
rs17425622				324522	0.8521				9619	0.8678
rs2230288	295942	2056	0	324522	0.0128	6407	22	0	9619	0.0210
rs13016703	1087	15357	53557	324522	0.8743	9	93	270	9619	0.8541
rs35541465				324522	0.7355				9619	0.7084
rs11158026	31249	31042	7718	324522	0.3313	166	175	31	9619	0.3036
rs9858038				324522	0.8032				9619	0.8271
rs10256359				324522	0.3700				9619	0.3422
rs823118				324522	0.5569				9619	0.5836
rs188789342				324522	0.0176				9619	0.0244
rs6812193	129661	150504	44346	324522	0.3686	4130	4351	1136	9619	0.3445
rs4266290				324522	0.7471				9619	0.7660
rs4130047	31948	140038	152532	324522	0.6858	1103	4276	4240	9619	0.6630
rs4713118	131746	85842	15592	324522	0.2528	3349	2441	505	9619	0.2738
rs11060180	97845	160924	65659	324522	0.4504	3124	4797	1695	9619	0.4258
rs687432				324522	0.7042				9619	0.7239
rs148294058				324522	0.9833				9619	0.9785
rs2209440	73044	162130	88997	324522	0.5252	2397	4767	2450	9619	0.5030
rs11343	101021	159837	63634	324522	0.4426	2791	4703	2125	9619	0.4655
rs162227				324522	0.8978				9619	0.8855
rs144074972				324522	0.9994				9619	1.0000
rs601999				324522	0.3280				9619	0.3466

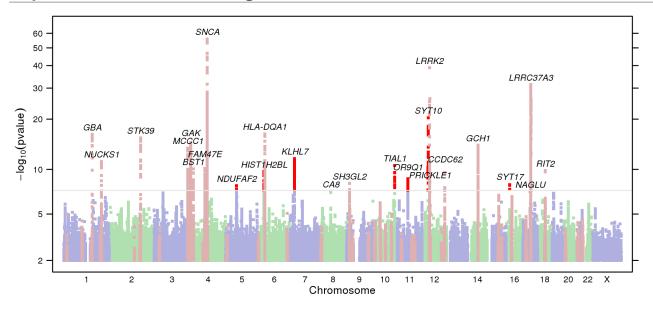
## **Annotations from NHGRI GWAS Catalog**

The following table shows, for each index SNP, all entries in the NHGRI GWAS Catalog that are within 500kb and in at least moderate linkage disequilibrium ( $r^2 > 0.5$ ).

region	position	our.name	our.pval	dist	rsqr	assay.name	pvalue	pubmed.id	trait	genes
4q22.1	90626111	rs356182	1.2×10 <sup>-56</sup>	11490	0.758	rs356219	$6.0 \times 10^{-65}$	22438815	Parkinson's disease	SNCA
4q22.1	90626111	rs356182	1.2×10 <sup>-56</sup>	11490	0.758	rs356219	$2.0 \times 10^{-47}$	21292315	Parkinson's disease	SNCA
4q22.1	90626111	rs356182	1.2×10 <sup>-56</sup>	15229	0.520	rs356220	$3.0 \times 10^{-11}$	24511991	Parkinson's disease	SNCA
4q22.1	90626111	rs356182	1.2×10 <sup>-56</sup>	15229	0.520	rs356220	$8.0 \times 10^{-35}$	22451204	Parkinson's disease	SNCA
4q22.1	90626111	rs356182	1.2×10 <sup>-56</sup>	15229	0.520	rs356220	$2.0 \times 10^{-19}$	21738487	Parkinson's disease	SNCA
4q22.1	90626111	rs356182	1.2×10 <sup>-56</sup>	15229	0.520	rs356220	$3.0 \times 10^{-8}$	21084426	Parkinson's disease	SNCA
4q22.1	90626111	rs356182	1.2×10 <sup>-56</sup>	15229	0.520	rs356220	$9.0 \times 10^{-16}$	21044948	Parkinson's disease	SNCA
4q22.1	90626111	rs356182	1.2×10 <sup>-56</sup>	15229	0.520	rs356220	$3.0 \times 10^{-11}$	20711177	Parkinson's disease	SNCA
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	-192160	0.707	rs11012	$6.0 \times 10^{-8}$	20070850	Parkinson's disease	PLEKHM1, MAPT, IMP5
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	-189199	0.707	rs17631303	$1.0 \times 10^{-8}$	23544013	Ovarian cancer in BRCA1 mutation carriers	
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	9249	0.993	rs2942168	$1.0 \times 10^{-28}$	21292315	Parkinson's disease	MAPT
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	13542	1.000	rs393152	$2.0 \times 10^{-16}$	19915575	Parkinson's disease	MAPT, C17orf69,
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	218082	0.993	rs12185268	$3.0 \times 10^{-14}$	21738487	Parkinson's disease	MAPT
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	218618	0.985	rs12373124	$5.0 \times 10^{-10}$	22693459	Male-pattern baldness	Intergenic
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	219696	0.803	rs17690703	6.0×10 <sup>-9</sup>	24429156	Idiopathic pulmonary fibrosis	SPPL2C, CRHR1,
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	272226	0.993	rs1864325	$5.0 \times 10^{-11}$	22504420	Bone mineral density	MAPT
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	351166	0.993	rs1981997	$9.0 \times 10^{-14}$	23583980	Interstitial lung disease	MAPT
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	375463	0.985	rs8070723	2.0×10 <sup>-118</sup>	21685912	Progressive supranuclear palsy	MAPT
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>	375463	0.985	rs8070723	$7.0 \times 10^{-12}$	21044948	Parkinson's disease	MAPT
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	481656	0.964	rs9303525	$8.0 \times 10^{-15}$	22504418	Intracranial volume	MAPT, GRN,
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	481891	0.993	rs17577094	$8.0 \times 10^{-9}$	24842889	Parkinson's disease	MAPT
1q22	155206167	rs2230288	$4.7 \times 10^{-17}$	-98000	0.889	rs12726330	5.0×10 <sup>-8</sup>	22451204	Parkinson's disease	GBA
2q24.3	169155595	rs13016703	2.7×10 <sup>-16</sup>	-38570	0.697	rs2102808	$4.0 \times 10^{-10}$	21292315	Parkinson's disease	STK39
2q24.3	169155595	rs13016703	$2.7 \times 10^{-16}$	-12560	1.000	rs9917256	$3.0 \times 10^{-6}$	22451204	Parkinson's disease	Intergenic
4p16.3	873286	rs35541465	$2.8 \times 10^{-15}$	65801	0.677	rs6599388	$4.0 \times 10^{-12}$	21292315	Parkinson's disease	GAK
3q27.1	182730291	rs9858038	$3.0 \times 10^{-14}$	24918	0.708	rs2270968	$1.0 \times 10^{-16}$	24816252	Blood metabolite levels	MCCC1
3q27.1	182730291	rs9858038	$3.0 \times 10^{-14}$	29782	1.000	rs10513789	$3.0 \times 10^{-10}$	21738487	Parkinson's disease	MCCC1, LAMP3
3q27.1	182730291	rs9858038	$3.0 \times 10^{-14}$	90984	0.594	rs11711441	$8.0 \times 10^{-12}$	21292315	Parkinson's disease	MCCC1, LAMP3
1q32.1	205723572	rs823118	6.3×10 <sup>-12</sup>	-33765	0.570	rs823094	$2.0 \times 10^{-7}$	23449627	Pubertal anthropometrics	NUCKS1,RAB7L1

1q32.:	1 205723572 rs823118	$6.3 \times 10^{-12}$	-4040	0.995	rs823114	$3.0 \times 10^{-6}$	24842889	Parkinson's disease	PARK16	
4q21.:	77198986 rs6812193	$7.3 \times 10^{-11}$	0	1.000	rs6812193	$8.0 \times 10^{-10}$	21738487	Parkinson's disease	SCARB2	
4q21.:	77198986 rs6812193	$7.3 \times 10^{-11}$	0	1.000	rs6812193	$4.0 \times 10^{-7}$	19915575	Parkinson's disease	STBD1	
4p15.3	32 15737118 rs4266290	$8.4 \times 10^{-11}$	819	0.583	rs4538475	$3.0 \times 10^{-9}$	19915576	Parkinson's disease	BST1	
18q12	.3 40678235 rs4130047	$1.5 \times 10^{-10}$	-4855	1.000	rs12456492	$2.0 \times 10^{-10}$	22451204	Parkinson's disease	RIT2	
18q12	.3 40678235 rs4130047	$1.5 \times 10^{-10}$	0	1.000	rs4130047	$2.0 \times 10^{-7}$	21738487	Parkinson's disease	RIT2, SYT4	
6n22 '	1 27676794 rc4713118	$2.0 \times 10^{-10}$	3//026	0.502	rc172166	5 0 > 10 - 6	23247143	Cardiac Troponin-T Javale	OP2B7D	

# **Replication of GWAS Catalog Results**



The following table shows, for each GWAS Catalog result for similar traits, our association test result for our best available proxy (distance < 100kb,  $r^2 > 0.8$ ).

4-16.3   18.2313   15.64.282   1.3   1.0   0   1.0   1.0   1.15.64.282   7.0   1.	region	position	our.name	our.pval	dist	rsqr	assay.name	pvalue	pubmed.id	trait	genes
1961-101   1985-17   1750-514   19.00   1.									•		
1.01   1.01											
1422   156030037 r33472695   31.310											
1922   155108167   12776239   14776239   1477639   1 100   147276339   15.08   1											
1622   16503037 s   1631378   1631318   7 × 10 <sup>-6</sup>   0   0.00   784372695   0.100											
1921.   20573378   823128   7.71-6   0   0.00   823128   7.0x1-6   9915575   Parkinson's disease   Parkit 6   1921   19											
1.03.1.   20579532   8823114   6.8 × 10^-6   0   1.000   r8323114   2.0 × 10^-7   2.0 × 1000   2.0 × 10^-7   2.0											
1921.1   20572666   58972716   6.8 k 10 6   0   1.000   78972711   2.0 k 10 - 10   1991576   Parkinson's disease   PARKI6, SLC453, NUCKS1, RAB71, SLC41A1, PM2010   1.0 k 10											
1-11   1-11											
2q.4.3         169117025         rs2102808         6.5×10 <sup>-16</sup> 0         1.00         rs2102808         4.0×10 <sup>-10</sup> 2129215         Parkinson's disease         TR199         Therepric           3q24.1         18910305         rs917256         8.0×10 <sup>-16</sup> 0         1.000         rs7617877         3.0×10 <sup>-16</sup> 21241849         Parkinson's disease         MCCC1, LAMP3           3q27.1         182760073         rs10513799         1.1×10 <sup>-13</sup> 3.0×10 <sup>-16</sup> 21738487         Parkinson's disease         MCCC1, LAMP3           4016.3         958332         rs1124805         2.4×10 <sup>-9</sup> 0         1.000         rs1124805         3.0×10 <sup>-19</sup> 2071117         Parkinson's disease         GMCC1, LAMP3           4016.3         939917         rs659388         8.7×10 <sup>-9</sup> 0         1.000         rs6599389         4.0×10 <sup>-12</sup> 2129215         Parkinson's disease         GAK           4016.3         956359         rs1124800         2.3×10 <sup>-11</sup> 0         1.000         rs1124800         3.0×10 <sup>-9</sup> 22451204         Parkinson's disease         GAK           4015.3         957379         rs1124800         2.3×10 <sup>-11</sup> 0         1.000         rs1124800         2.0×10 <sup>-16</sup> 2000											
2424.3         169143035         re9917256         8.0×10 <sup>-15</sup> 0         1.00         re9917256         3.0×10 <sup>-6</sup> 2445120         Parkinson's disease         Intergenic           3p24.1         2876076         re7617877         0.0095         0         1.00         re7616787         3.0×10 <sup>-10</sup> 2144948         Parkinson's disease         MCCC1, LAMP3           3q27.1         18276073         re101314805         2.4×10 <sup>-9</sup> 0         1.000         re10151498         3.0×10 <sup>-10</sup> 21738487         Parkinson's disease         MCCC1, LAMP3           4p16.3         939307         re5599388         0         1.000         re1124800         3.0×10 <sup>-10</sup> 21292315         Parkinson's disease         GAK           4p16.3         964359         rs1124800         2.3×10 <sup>-11</sup> 0         1.000         res124800         3.0×10 <sup>-12</sup> 224310.9         Parkinson's disease         GAK           4p15.3         964359         rs1124800         2.3×10 <sup>-11</sup> 0         1.000         re1124800         3.0×10 <sup>-12</sup> 2243815         Parkinson's disease         GAK           4p15.3         1573791         rs1469841         2.5×10 <sup>-7</sup> 0         1.000         re1124800         3.0×10 <sup>-12</sup> <t< td=""><td></td><td></td><td></td><td>6.5×10<sup>-16</sup></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5</td></t<>				6.5×10 <sup>-16</sup>							5
3g24.1   28705764   rs7617877   0.0095   0   0.000   rs7617877   3.0×10 <sup>-6</sup>   2144948   Parkinson's disease   MCCCL, LAMP3											
3q27.1         18276070         rs10513798         1.1×10 <sup>-13</sup> 0         1.000         rs10513789         3.0×10 <sup>-10</sup> 21738487         Parkinson's disease         MCCC1, LAMP3           4q16.3         858332         rs11248061         2.4×10 <sup>-9</sup> 0         1.000         rs11248051         3.0×10 <sup>-9</sup> 20711177         Parkinson's disease         GAK           4p16.3         939807         rs5599388         8.7×10 <sup>-9</sup> 0         1.000         rs599388         4.0×10 <sup>-12</sup> 21292315         Parkinson's disease         GAK           4p16.3         996359         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         3.0×10 <sup>-19</sup> 22451204         Parkinson's disease         GAK, DGKQ           4p16.3         964359         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         3.0×10 <sup>-9</sup> 2.0×10 <sup>-6</sup> 20078059         Parkinson's disease         GAK, DGKQ           4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4698412         3.0×10 <sup>-9</sup> 2.241204         Parkinson's disease         BST1           4p15.32         15737348         rs4699412         2.5×10 <sup>-7</sup> 0         1.000											
3-Q7.1         18282127         rs117114tl         3.3×10 <sup>-9</sup> 0         1.000         rs117114tl         8.0×10 <sup>-12</sup> 2129215         Parkinson's disease         MCCCI, LAMP3           4p16.3         858332         rs11248051         2.4×10 <sup>-9</sup> 0         1.000         rs6599388         4.0×10 <sup>-12</sup> 2129215         Parkinson's disease         GAK           4p16.3         9939113         rs599388         8.7×10 <sup>-9</sup> 0         1.000         rs599389         4.0×10 <sup>-12</sup> 2129215         Parkinson's disease         GAK           4p16.3         964359         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         3.0×10 <sup>-12</sup> 22438185         Parkinson's disease         DGKQ           4p15.22         15737348         rs142806         2.3×10 <sup>-1</sup> 0         1.000         rs1424065         1.0×10 <sup>-1</sup> 0         1.0×10 <sup>-1</sup> 2.0×10 <sup>-1</sup>											MCCC1, LAMP3
4916.3         858332         r31124805         2.4×10 <sup>-9</sup> 0         1.00         r3124805         3.0×10 <sup>-9</sup> 2071117         Parkinson's disease         GAK           4916.3         9399187         r65599388         R.7×10 <sup>-9</sup> 0         1.00         r65599389         4.0×10 <sup>-12</sup> 21738479         Parkinson's disease         GAK           4p16.3         964359         r311248060         2.3×10 <sup>-11</sup> 0         1.00         rs11248060         2.0×10 <sup>-1</sup> 0         1.00         rs11248060         2.0×10 <sup>-1</sup> 0         0.00         rs11248060         2.0×10 <sup>-1</sup> 0         1.00         rs11248060         2.0×10 <sup>-1</sup> 0         0.00         rs112				3.3×10 <sup>-9</sup>	0	1.000	rs11711441	8.0×10 <sup>-12</sup>			•
4p16.3         939087         65599388         0         1.00         re6599388         4.0×10 <sup>-18</sup> 2129315         Parkinson's disease         GAK           4p16.3         939113         re5599389         8.7×10 <sup>-9</sup> 0         1.000         re5599389         4.0×10 <sup>-8</sup> 21738487         Parkinson's disease         GAK           4p16.3         964359         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         3.0×10 <sup>-11</sup> 0         1.000         rs11248060         2.0×10 <sup>-11</sup> 0         1.000         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         2.0×10 <sup>-1</sup> 0         2.007865         Parkinson's disease         DGKQ           4p15.32         157377348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4698412         2.0×10 <sup>-6</sup> 2108426         Parkinson's disease         BST1           4p15.32         157377348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4598412         3.0×10 <sup>-9</sup> 2108426         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4528433         3.0×10 <sup>-9</sup> 210842											
4p16.3         939113         76599389         8.7×10 <sup>-9</sup> 0         1.000         re5599389         4.0×10 <sup>-8</sup> 21738487         Parkinson's disease         DGKQ           4p16.3         964359         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         3.0×10 <sup>-12</sup> 22451249         Parkinson's disease         DGKQ           4p16.3         964359         rs11248060         2.3×10 <sup>-17</sup> 0         1.000         rs11248060         2.0×10 <sup>-6</sup> 2007085         Parkinson's disease         DGKQ           4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs1124865         1.0×10 <sup>-6</sup> 21292315         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4698412         2.0×10 <sup>-6</sup> 2108426         Parkinson's disease         BST1           4p15.32         15737378         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs458475         3.0×10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4p15.32         15737937         rs4538757         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         3.0×10 <sup>-12</sup>											
4916.3         964359         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         3.0×10 <sup>-9</sup> 22451204         Parkinson's disease         GKQ           4p16.3         964359         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         3.0×10 <sup>-12</sup> 22438815         Parkinson's disease         GKQ           4p15.32         15737101         rs11724635         2.3×10 <sup>-7</sup> 0         1.000         rs11724635         1.0×10 <sup>-16</sup> 21292315         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4598412         3.0×10 <sup>-7</sup> 22451204         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4598412         3.0×10 <sup>-7</sup> 21815576         Parkinson's disease         BST1           4p15.32         15737393         rs4538475         2.1×10 <sup>-6</sup> 0         1.000         rs242330         2.0×10 <sup>-6</sup> 1000         rs242330         2.0×10 <sup>-6</sup> 1000         rs242330         2.0×10 <sup>-6</sup> 1000         rs55219         2.0×10 <sup>-6</sup> 1000         1000         rs56219		939113	rs6599389	8.7×10 <sup>-9</sup>	0	1.000	rs6599389				GAK
416.3         964359         rs1124806         2.3x10 <sup>-11</sup> 0         1.000         rs11248060         3.0x10 <sup>-12</sup> 2.243815         Parkinson's disease         GAK, DGKQ           4p16.32         15737301         rs11248060         2.3x10 <sup>-71</sup> 0         1.000         rs11248050         2.0x10 <sup>-6</sup> 2007805         Parkinson's disease         DGKQ           4p15.32         15737348         rs4698412         2.5x10 <sup>-7</sup> 0         1.000         rs4698412         2.0x10 <sup>-6</sup> 219315         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5x10 <sup>-7</sup> 0         1.000         rs4698412         2.0x10 <sup>-6</sup> 1000         rs4538475         3.0x10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4p15.32         15737937         rs4538475         2.1x10 <sup>-6</sup> 0         1.000         rs6931219         3.0x10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4p15.32         15737937         rs4538475         0.1x00         rs6812193         0.000         rs6812193         0.000         rs6812193         0.000         rs6812193         0.000         rs6812193         0.000         rs6812193         0.000         rs352											
4p16.3         964359         rs11248060         2.3×10 <sup>-11</sup> 0         1.000         rs11248060         2.0×10 <sup>-6</sup> 20070850         Parkinson's disease         DGKQ           4p15.32         15737101         rs11724635         2.3×10 <sup>-7</sup> 0         1.000         rs11724635         1.0×10 <sup>-16</sup> 21292315         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4598417         2.0×10 <sup>-6</sup> 221084426         Parkinson's disease         BST1           4p15.32         15737348         rs4598417         2.1×10 <sup>-6</sup> 0         1.000         rs4588475         3.0×10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4p15.32         15737378         rs4588475         2.1×10 <sup>-6</sup> 0         1.000         rs4538475         3.0×10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4q13.2         68447249         rs2242330         0.70         0         1.000         rs6812193         0.0×10 <sup>-6</sup> 1705267         Parkinson's disease         BST1           4q21.1         719886         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs3562193         0.0×10 <sup>-6</sup> </td <td></td> <td></td> <td></td> <td>2.3×10<sup>-11</sup></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				2.3×10 <sup>-11</sup>							
4p15.32         15737101         rs1724635         2.3x10 <sup>-7</sup> 0         1.000         rs14724635         1.0x10 <sup>-16</sup> 21292315         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5x10 <sup>-7</sup> 0         1.000         rs4698412         2.0x10 <sup>-6</sup> 22451204         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5x10 <sup>-7</sup> 0         1.000         rs4698412         2.0x10 <sup>-6</sup> 21084426         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5x10 <sup>-7</sup> 0         1.000         rs4538475         3.0x10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4q13.2         68447249         rs2242330         0.70         0         1.000         rs6812193         3.0x10 <sup>-11</sup> 0         1.000         rs6812193         3.0x10 <sup>-11</sup> 0         1.000         rs6812193         4.0x10 <sup>-7</sup> 19915575         Parkinson's disease         SCRAB2           4q22.1         90637601         rs356219         2.2x10 <sup>-56</sup> 0         1.000         rs356219         2.0x10 <sup>-47</sup> 21292315         Parkinson's disease         SNCA											, -
4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4698412         3.0×10 <sup>-7</sup> 22451204         Parkinson's disease         BST1           4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4698412         2.0×10 <sup>-6</sup> 2108426         Parkinson's disease         BST1           4p15.32         15737398         rs4538475         2.1×10 <sup>-6</sup> 0         1.000         rs4538475         3.0×10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4q13.2         68447249         rs2242330         0.70         0         1.000         rs6812193         4.0×10 <sup>-7</sup> 19915575         Parkinson's disease         SCARB2           4q21.1         77198986         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs356219         6.0×10 <sup>-65</sup> 19915575         Parkinson's disease         STBD1           4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-47</sup> 21292315         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-13</sup> <td></td> <td>*</td>											*
4p15.32         15737348         rs4698412         2.5×10 <sup>-7</sup> 0         1.000         rs4698412         2.0×10 <sup>-6</sup> 2.0×10 <sup>-6</sup> 2.0×10 <sup>-6</sup> 4.0×10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4p15.32         15737937         rs4538475         2.1×10 <sup>-6</sup> 0         1.000         rs4538475         3.0×10 <sup>-9</sup> 19915576         Parkinson's disease         BST0           4q21.1         77198986         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         4.0×10 <sup>-5</sup> 1.000         rs6812193         4.0×10 <sup>-5</sup> 1.000         rs6812193         4.0×10 <sup>-5</sup> 1.000         rs7198986         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         4.0×10 <sup>-5</sup> 1.000         rs719896         6.0×10 <sup>-65</sup> 2243818         Parkinson's disease         STBD1           4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-47</sup> 12915576         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-31</sup> 2915576         Parkinson's disease         SNCA											
4p15.32         15737937         rs4538475         2.1×10 <sup>-6</sup> 0         1.000         rs4538475         3.0×10 <sup>-9</sup> 19915576         Parkinson's disease         BST1           4q13.2         68447249         rs2242330         0.70         0         1.000         rs6812193         2.0×10 <sup>-10</sup> 17052657         Parkinson's disease         BRDG1           4q21.1         7719896         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         8.0×10 <sup>-10</sup> 19915575         Parkinson's disease         SCARB2           4q21.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-65</sup> 22438815         Parkinson's disease         SNCA           4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-47</sup> 21292315         Parkinson's disease         SNCA           4q22.1         90637601         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-14</sup> 24511991         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-13</sup> <td>•</td> <td></td>	•										
4q13.2         68447249         rs2242330         0.70         0         1.000         rs2242330         2.0×10 <sup>-6</sup> 17052657         Parkinson's disease         BRDG1           4q21.1         77198986         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         8.0×10 <sup>-10</sup> 21738487         Parkinson's disease         SCARB2           4q21.1         77198986         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         4.0×10 <sup>-7</sup> 1915575         Parkinson's disease         STBD1           4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-65</sup> 243815         Parkinson's disease         SNCA           4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-47</sup> 21292315         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> 24511991         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-18</sup>											
4q21.1         77198986         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         8.0×10 <sup>-10</sup> 21738487         Parkinson's disease         SCARB2           4q21.1         77198986         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         4.0×10 <sup>-7</sup> 19915575         Parkinson's disease         STBD1           4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-47</sup> 21292315         Parkinson's disease         SNCA           4q22.1         90639751         rs11931074         2.1×10 <sup>-21</sup> 0         1.000         rs356219         2.0×10 <sup>-47</sup> 21292315         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> 2451199         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         2.0×10 <sup>-19</sup> 21738487         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup></sup>				0.70							
4q21.1         77198986         rs6812193         7.3×10 <sup>-11</sup> 0         1.000         rs6812193         4.0×10 <sup>-75</sup> 19915575         Parkinson's disease         STBD1           4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-47</sup> 21292315         Parkinson's disease         SNCA           4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs1931074         7.0×10 <sup>-17</sup> 19915576         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> 24511991         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-13</sup> 24511991         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-19</sup> 21738487         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup>		77198986	rs6812193	7.3×10 <sup>-11</sup>	0	1.000	rs6812193				SCARB2
4q22.1         96637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-67</sup> 21292315         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> 24511991         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-13</sup> 24511991         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-19</sup> 21738487         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-8</sup> 21084426         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0				7.3×10 <sup>-11</sup>				4.0×10 <sup>-7</sup>			
4q22.1         90637601         rs356219         2.2×10 <sup>-56</sup> 0         1.000         rs356219         2.0×10 <sup>-47</sup> 21292315         Parkinson's disease         SNCA           4q22.1         90639515         rs11931074         2.1×10 <sup>-21</sup> 0         1.000         rs1931074         7.0×10 <sup>-17</sup> 19915576         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         8.0×10 <sup>-35</sup> 22451204         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         8.0×10 <sup>-35</sup> 22451204         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-19</sup> 2173487         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-16</sup> 21044948         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> <				2.2×10 <sup>-56</sup>							
4q22.1         90639515         rs11931074         2.1×10 <sup>-21</sup> 0         1.000         rs1931074         7.0×10 <sup>-17</sup> 19915576         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         8.0×10 <sup>-35</sup> 22451204         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         8.0×10 <sup>-35</sup> 22451204         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         2.0×10 <sup>-19</sup> 2173487         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         9.0×10 <sup>-16</sup> 21044948         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> 20711177         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         2.0×10 <sup>-16</sup>						1 000	rc2E6210		21202215	Parkinson's disease	CNCA
4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> 24511991         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         8.0×10 <sup>-35</sup> 22451204         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         2.0×10 <sup>-19</sup> 2173848         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-8</sup> 21084426         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-16</sup> 21044948         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> 20711177         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         2.0×10 <sup>-16</sup> <td></td> <td></td> <td></td> <td>2.1×10-21</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Parkingon's disease</td> <td></td>				2.1×10-21						Parkingon's disease	
4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         2.6×10 <sup>-54</sup> 0         1.000         rs356220         2.6×10 <sup>-54</sup> 0         1.000         rs356220         2.0×10 <sup>-19</sup> 21738487         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-8</sup> 21084426         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         9.0×10 <sup>-16</sup> 21044948         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-16</sup> 21044948         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         2.0×10 <sup>-16</sup> 19915575         Parkinson's disease         SNCA           4q22.1         90787091         rs6532194         0.104         0         1.000         rs6532194         5.0×10 <sup>-11</sup> 22438815         Parkinson's disease         SNCA				7.1×10 7.6×10=54							
4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         2.0×10 <sup>-19</sup> 21738487         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         9.0×10 <sup>-16</sup> 21044428         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         9.0×10 <sup>-16</sup> 21044948         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         7.0×10 <sup>-6</sup> 2070805         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         2.0×10 <sup>-16</sup> 19915575         Parkinson's disease         SNCA           4q22.1         9078090         rs6532194         0.104         0         1.000         rs6532194         5.0×10 <sup>-11</sup> 22438815         Parkinson's disease         SNCA           4q22.1         90797301         rs6532194         0.11         0         1.000         rs6732194         1.0×10 <sup>-7</sup>				7.6×10-54							
4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-8</sup> 21084426         Parkinson's disease         SNCA           4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-16</sup> 21044948         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         7.0×10 <sup>-8</sup> 20070850         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         2.0×10 <sup>-16</sup> 19915575         Parkinson's disease         SNCA           4q22.1         90780902         rs6532194         0.014         0         1.000         rs6532194         5.0×10 <sup>-11</sup> 2243815         Parkinson's disease         SNCA           4q22.1         90797301         rs6532197         1.8×10 <sup>-7</sup> 1.0×10 <sup>-7</sup> 19915575         Parkinson's disease         SNCA           5p15.31         9332281         rs7702187         0.1         1.000         rs7702187         8.0×10 <sup>-6</sup> 16252231         Parkinson's disease         SEMASA <td></td>											
4q2.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         9.0×10 <sup>-16</sup> 21044948         Parkinson's disease         SNCA           4q2.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         7.0×10 <sup>-8</sup> 20070850         Parkinson's disease         SNCA           4q2.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         7.0×10 <sup>-8</sup> 20070850         Parkinson's disease         SNCA           4q22.1         90780902         rs6532194         0.014         0         1.000         rs6532194         5.0×10 <sup>-11</sup> 22438815         Parkinson's disease         SNCA           4q22.1         90797301         rs6532197         1.8×10 <sup>-7</sup> 0         1.0×10 <sup>-7</sup> 19915575         Parkinson's disease         SNCA           5p15.31         9332281         rs7702187         0.11         0         1.000         rs7702187         8.0×10 <sup>-6</sup> 16252231         Parkinson's disease         SEMASA											
4q22.1         90641340         rs356220         7.6×10 <sup>-54</sup> 0         1.000         rs356220         3.0×10 <sup>-11</sup> 20711177         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         7.0×10 <sup>-8</sup> 20070850         Parkinson's disease         SNCA           4q22.1         90780954         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         2.0×10 <sup>-16</sup> 19915575         Parkinson's disease         SNCA           4q22.1         90780902         rs6532194         0.014         0         1.000         rs6532194         5.0×10 <sup>-11</sup> 2243815         Parkinson's disease         SNCA           4q22.1         90797301         rs6532197         1.8×10 <sup>-7</sup> 1.0×10 <sup>-7</sup> 19915575         Parkinson's disease         MRN1           5p15.31         9332281         rs7702187         0.11         0         1.000         rs7702187         8.0×10 <sup>-6</sup> 16252231         Parkinson's disease         SEMA5A				7.6×10 <sup>-54</sup>							
4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         7.0×10 <sup>-8</sup> 20070850         Parkinson's disease         SNCA           4q22.1         90678541         rs2736990         9.9×10 <sup>-44</sup> 0         1.000         rs2736990         2.0×10 <sup>-16</sup> 19915575         Parkinson's disease         SNCA           4q22.1         9078090         rs6532194         0.014         0         1.000         rs6532194         5.0×10 <sup>-11</sup> 22438815         Parkinson's disease         SNCA           4q22.1         90797301         rs6532197         1.8×10 <sup>-7</sup> 0         1.000         rs6532197         1.0×10 <sup>-7</sup> 19915575         Parkinson's disease         MMRN1           5p15.31         9332281         rs7702187         0.11         0         1.000         rs7702187         8.0×10 <sup>-6</sup> 16252231         Parkinson's disease         SEMA5A											
4q22.1 90678541 rs2736990 9.9×10 <sup>-44</sup> 0 1.000 rs2736990 2.0×10 <sup>-16</sup> 19915575 Parkinson's disease SNCA 4q22.1 9078092 rs6532194 0.014 0 1.000 rs6532194 5.0×10 <sup>-11</sup> 22438815 Parkinson's disease SNCA 4q22.1 90797301 rs6532197 1.8×10 <sup>-7</sup> 0 1.000 rs6532197 1.0×10 <sup>-7</sup> 19915575 Parkinson's disease MMRN1 5p15.31 9332281 rs7702187 0.11 0 1.000 rs7702187 8.0×10 <sup>-6</sup> 16252231 Parkinson's disease SEMASA											
4q22.1         90780902         rs6532194         0.014         0         1.000         rs6532194         5.0×10 <sup>-11</sup> 22438815         Parkinson's disease         SNCA           4q22.1         90797301         rs6532197         1.8×10 <sup>-7</sup> 0         1.000         rs6532197         1.0×10 <sup>-7</sup> 19915575         Parkinson's disease         MMRN1           5p15.31         9332281         rs7702187         0.11         0         1.000         rs7702187         8.0×10 <sup>-6</sup> 16252231         Parkinson's disease         SEMASA											
4q22.1 90797301 rs6532197 1.8×10 <sup>-7</sup> 0 1.000 rs6532197 1.0×10 <sup>-7</sup> 19915575 Parkinson's disease MMRN1 5p15.31 933281 rs7702187 0.11 0 1.000 rs7702187 8.0×10 <sup>-6</sup> 16252231 Parkinson's disease SEMASA											
5p15.31 9332281 rs7702187 0.11 0 1.000 rs7702187 8.0×10 <sup>-6</sup> 16252231 Parkinson's disease SEMASA											
5q35.3 179794208 rs10464059 0.66 0 1.000 rs10464059 3.0×10 <sup>-6</sup> 20070850 Parkinson's disease											SERROR
6p21.32 32387809 rs2395163 1.6×10 <sup>-10</sup> 0 1.000 rs2395163 3.0×10 <sup>-11</sup> 22451204 Parkinson's disease LOC642072											LOC642072
6p21.32 32409530 rs3129882 0.00032 0 1.000 rs3129882 5.0×10 <sup>-10</sup> 24511991 Parkinson's disease HLA											
	5p21.02	32.03330		3.0005E	3			2.020			

6-21-22	22400520		0.00022	_	1 000	2420002	2 010=10	20711177	Deutsteren for diseases	III A DDA
6p21.32		rs3129882	0.00032			rs3129882	2.0×10 <sup>-10</sup>		Parkinson's disease	HLA-DRA
6q25.2		rs2275336	0.43			rs2275336	9.0×10 <sup>-7</sup>		Parkinson's disease	CNKSR3
8p23.1		rs1296028	0.0048			rs1296028	1.0×10 <sup>-6</sup>		Parkinson's disease	Intergenic
9p22.2		rs1536076	2.3×10 <sup>-7</sup>			rs1536076	5.0×10 <sup>-7</sup>		Parkinson's disease	SH3GL2
9p13.3		rs10121009	0.56			rs10121009	3.0×10 <sup>-6</sup>		Parkinson's disease	UNC13B
9q33.1		rs4837628	0.57		1.000		1.0×10 <sup>-6</sup>	20070850		DBC1
10p13		rs7077361	0.0083	0		rs7077361	5.0×10 <sup>-6</sup>	19915575	Parkinson's disease	ITGA8
10q11.21	45161109	rs1480597	0.62	0	1.000	rs1480597	2.0×10 <sup>-6</sup>	17052657	Parkinson's disease	Intergenic
10q22.1	71580120	rs17497526	0.26	0	1.000	rs17497526	6.0×10 <sup>-7</sup>	23793441	Parkinson's disease	COL13A1
10q24.32	104591393	rs17115100	0.98	0	1.000	rs17115100	7.0×10 <sup>-8</sup>	19915575	Parkinson's disease	CYP17A1, C10orf32, CNNM2, SFXN2
11p14.3	22114093	rs11026412	0.34	0	1.000	rs11026412	3.0×10 <sup>-6</sup>	22451204	Parkinson's disease	Intergenic
11q14.1	84417846	rs10501570	0.91	0	1.000	rs10501570	7.0×10 <sup>-6</sup>	17052657	Parkinson's disease	DLG2
11q21	96108428	rs7118648	0.78	0	1.000	rs7118648	$2.0 \times 10^{-7}$	23793441	Parkinson's disease	CCDC82
12q12	40352996	rs10877840	0.76	0	1.000	rs10877840	$1.0 \times 10^{-6}$	22451204	Parkinson's disease	SLC2A13
12q12	40428561	rs1994090	0.27	0	1.000	rs1994090	$3.0 \times 10^{-8}$	19915576	Parkinson's disease	LRRK2
12q12	40620808	rs1491942	7.9×10 <sup>-8</sup>	0	1.000	rs1491942	$6.0 \times 10^{-15}$	22438815	Parkinson's disease	LRRK2
12q12	40620808	rs1491942	7.9×10 <sup>-8</sup>	0	1.000	rs1491942	$6.0 \times 10^{-14}$	21292315	Parkinson's disease	LRRK2
12q12	40734202	rs34637584		0	1.000	rs34637584	$2.0 \times 10^{-28}$	21738487	Parkinson's disease	LRRK2
12q12	40757328	rs34778348		0	1.000	rs34778348	$3.0 \times 10^{-21}$	22438815	Parkinson's disease	LRRK2
12q12	41365640	rs1442190	2.5×10 <sup>-9</sup>	0	1.000	rs1442190	$2.0 \times 10^{-27}$	24842889	Parkinson's disease	LRRK2
12q23.3	106949987	rs4964469	0.86	0	1.000	rs4964469	$2.0 \times 10^{-7}$	21084426	Parkinson's disease	Intergenic
12q24.31	123296294	rs12817488	$3.8 \times 10^{-10}$	0	1.000	rs12817488	$3.0 \times 10^{-13}$	21292315	Parkinson's disease	CCDC62, HIP1R
14q22.2	54290830	rs12431733	0.043	0	1.000	rs12431733	$3.0 \times 10^{-6}$	19915575	Parkinson's disease	BMP4
15q22.2	62001132	rs10519131	1.2×10 <sup>-5</sup>	0	1.000	rs10519131	$1.0 \times 10^{-6}$	22451204	Parkinson's disease	Intergenic
15q25.1	81626725	rs3935740	0.92	0	1.000	rs3935740	$2.0 \times 10^{-7}$	23793441	Parkinson's disease	TMC3
16p11.2	31095171	rs11865038	4.2×10 <sup>-5</sup>	0	1.000	rs11865038	$4.0 \times 10^{-7}$	22451204	Parkinson's disease	POL3S
17p11.2	17715101	rs11868035	1.6×10 <sup>-5</sup>	0	1.000	rs11868035	6.0×10 <sup>-8</sup>	21738487	Parkinson's disease	SREBF1, RAI1
17q21.31	43513441	rs11012	1.9×10 <sup>-28</sup>	0	1.000	rs11012	6.0×10 <sup>-8</sup>	20070850	Parkinson's disease	PLEKHM1, MAPT, IMP5
17q21.31	43714850	rs2942168	$4.0 \times 10^{-30}$	0	1.000	rs2942168	$1.0 \times 10^{-28}$	21292315	Parkinson's disease	MAPT
17q21.31	43719143	rs393152	$4.0 \times 10^{-30}$	0	1.000	rs393152	$2.0 \times 10^{-16}$	19915575	Parkinson's disease	MAPT, C17orf69, KIAA1267, LOC644246
17q21.31	43923683	rs12185268	$9.9 \times 10^{-31}$	0	1.000	rs12185268	$3.0 \times 10^{-14}$	21738487	Parkinson's disease	MAPT
17q21.31	44081064	rs8070723	$7.0 \times 10^{-30}$	0	1.000	rs8070723	$7.0 \times 10^{-12}$	21044948	Parkinson's disease	MAPT
17q21.31	44187492	rs17577094	$5.2 \times 10^{-30}$	0	1.000	rs17577094	$8.0 \times 10^{-9}$	24842889	Parkinson's disease	MAPT
17q21.31	44788310	rs183211	$3.5 \times 10^{-21}$	0	1.000	rs183211	$3.0 \times 10^{-7}$	21812969	Parkinson's disease	NSF
17q21.31	44828931	rs199533	$4.4 \times 10^{-26}$	0	1.000	rs199533	$1.0 \times 10^{-6}$	20711177	Parkinson's disease	MAPT
17q21.31	44828931	rs199533	$4.4 \times 10^{-26}$	0	1.000	rs199533	$1.0 \times 10^{-14}$	19915575	Parkinson's disease	NSF
17q21.31	44856641	rs199515	$3.3 \times 10^{-25}$	0	1.000	rs199515	$3.0 \times 10^{-17}$	22451204	Parkinson's disease	WNT3
17q21.31	44859144	rs415430	$4.3 \times 10^{-25}$	0	1.000	rs415430	$7.0 \times 10^{-7}$	21812969	Parkinson's disease	WNT3
17q21.31	44865603	rs199498	2.8×10 <sup>-23</sup>	0	1.000	rs199498	$8.0 \times 10^{-7}$	24511991	Parkinson's disease	MAPT
18q12.3	40673380	rs12456492	$2.3 \times 10^{-10}$	0	1.000	rs12456492	$2.0 \times 10^{-10}$	22451204	Parkinson's disease	RIT2
18q12.3	40678235	rs4130047	$1.5 \times 10^{-10}$	0	1.000	rs4130047	2.0×10 <sup>-7</sup>	21738487	Parkinson's disease	RIT2, SYT4
20p12.1	13296912	rs1223271	0.83	0	1.000	rs1223271	5.0×10 <sup>-6</sup>	19915575	Parkinson's disease	C20orf82
21q21.1	16914905	rs2823357	0.50	0	1.000	rs2823357	6.0×10 <sup>-7</sup>	21738487	Parkinson's disease	USP25
21q22.3	43286352	rs2839398	0.36	0	1.000	rs2839398	5.0×10 <sup>-6</sup>	22451204	Daulinaan'a diasaa	PRDM15
_1422.5	.5200552		0.50		1.000			51_0+	Parkinson's disease	

# Nearby Nonsynonymous SNPs

region	position	our.name	our.pval	dist	rsqr	assay.name	gene	aa.chg
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-198304	0.594	rs12949256	ARHGAP27	A117T
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	217341	0.993	rs62621252	SPPL2C	S224P
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	217665	0.993	rs62054815	SPPL2C	A332T
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	218053	0.993	rs12185233	SPPL2C	R461P
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	218082	0.993	rs12185268	SPPL2C	I471V
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	218472	0.993	rs12373123	SPPL2C	S601P
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	218529	0.993	rs12373139	SPPL2C	G620R
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	218599	0.985	rs12373142	SPPL2C	P643R
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	218618	0.985	rs12373124	SPPL2C	H649H
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	218630	0.985	rs12373140	SPPL2C	Q653Q
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	355174	0.993	rs63750417	MAPT	P202L
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	355422	0.993	rs62063786	MAPT	D285N
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	355435	0.993	rs62063787	MAPT	V289A
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	355677	0.993	rs17651549	MAPT	R370W
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	361799	0.993	rs10445337	MAPT	S447P
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	398810	0.942	rs199706121	MAPT	?1735?
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	402885	0.756	rs200384907	KANSL1	?1225?
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	403305	0.993	rs34579536	KANSL1	I1085T
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	404931	0.993	rs36076725	KANSL1	F917F
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	404940	0.993	rs35833914	KANSL1	D914D
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	411518	0.993	rs34043286	KANSL1	S718P
6p21.32	32571961	rs17425622	$3.8 \times 10^{-17}$	38440	0.634	rs9272785	HLA-DQA1	A210T
1q22	155206167	rs2230288	4.7×10 <sup>-17</sup>	0	1.000	rs2230288	GBA	E365K
14q22.2	55348869	rs11158026	8.8×10 <sup>-15</sup>	57448	0.646	rs199893292	WDHD1	?1761?
3q27.1	182730291	rs9858038	3.0×10 <sup>-14</sup>	24918	0.708	rs2270968	MCCC1	H464P

# **Nearby Expression QTLs**

region	position	our.name	our.pval	dist	rsqr	assay.name	eqtl.dist	eqtl.gene	eqtl.pval	eqtl.rsqr	tissue	pubmed.id
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-194166	0.720	rs34465449	0	CRHR1-IT1	2.3×10 <sup>-13</sup>	0.395	Whole_Blood	23715323
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-192160	0.707	rs11012	201708	MGC57346	$6.7 \times 10^{-23}$	0.297	B-Cell	22446964
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-166164	0.563	rs117169618	0	CRHR1	$2.1 \times 10^{-11}$	0.362	Lung	23715323
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-156075	0.722	rs17631676	42490	LRRC37A4	$6.0 \times 10^{-208}$	0.475	Monocyte	20502693
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-156075	0.722	rs17631676	165623	MGC57346	1.8×10 <sup>-59</sup>	0.613	Monocyte	22446964
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-156075	0.722	rs17631676	378322	HS.554608	0.00057	0.042	B-Cell	22446964
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-156075	0.722	rs17631676	170002	C170RF69	$7.7 \times 10^{-5}$	0.055	B-Cell	22446964
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-150348	0.722	rs56192752	0	MAPT	$3.0 \times 10^{-6}$	0.196	Lung	23715323

17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-132705	0.676	rs5026246	0	CRHR1	2.3×10 <sup>-10</sup>	0.397	Nerve_Tibial	23715323
17q21.31	43705601	rs365825		-131952	0.781	rs188710438	0	CRHR1-IT1	6.0×10 <sup>-8</sup>	0.333	Esophagus_Mucosa	23715323
17q21.31	43705601	rs365825	4.2×10 <sup>-32</sup>			rs149133346	0	DND1P1	4.8×10 <sup>-7</sup>	0.309	Esophagus_Muscularis	23715323
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-43581	0.697	rs116954807	0	ARHGAP27	6.1×10 <sup>-7</sup>	0.238	Skin_Sun_Exposed_Lower_leg	23715323
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	-14964	0.963	rs147670174	0	CRHR1-IT1	$4.8 \times 10^{-28}$	0.699	Lung	23715323
17q21.31	43705601	re365825	4.2×10 <sup>-32</sup>	10554	0.685	rs112550936	0	RP11- 798G7.5	4.9×10 <sup>-8</sup>	0.336	Esophagus_Mucosa	23715323
17q21.31	43705601		4.2×10 <sup>-32</sup>			rs393152	580720	NMT1	0.00045		Lymphoblastoid	19644074
17q21.31	43705601		4.2×10 <sup>-32</sup>			chr17:43751598:D	0	LRRC37A4P	4.1×10 <sup>-33</sup>		Thyroid	23715323
17q21.31	43705601		4.2×10 <sup>-32</sup>			chr17:43751598:D	0	LRRC37A4P	6.7×10 <sup>-20</sup>		Heart_Left_Ventricle	23715323
17q21.31	43705601		4.2×10 <sup>-32</sup>			rs113871181	0	LRRC37A4P	1.1×10 <sup>-32</sup>		Whole_Blood	23715323
17q21.31	43705601		4.2×10 <sup>-32</sup>			rs117631329	446394	KANSL1	5.3×10 <sup>-8</sup>	0.077	Lymphoblastoid	24037378
17q21.31	43705601		4.2×10 <sup>-32</sup>			rs111825734	0	LRRC37A	6.6×10 <sup>-7</sup>		Heart_Left_Ventricle	23715323
17q21.31	43705601		4.2×10 <sup>-32</sup>			rs112310745	0	MAPT	3.2×10 <sup>-6</sup>		Artery_Aorta	23715323
17421.51	43703001	13303023		370031	0.505	13112310743	Ü	RP11-	3.2×10	0.544	Artery_Aorta	23713323
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	464476	0.725	chr17:44170077:D	0	669E14.6	1.5×10 <sup>-6</sup>	0.228	Thyroid	23715323
17q21.31	43705601	rs365825	$4.2 \times 10^{-32}$	491826	0.704	chr17:44197427:I	0	LRRC37A2	$3.7 \times 10^{-19}$	0.634	Nerve_Tibial	23715323
17021 21	4270E601	m26E02E	4.2×10 <sup>-32</sup>	401026	0.704	chr17,44107427,I	0	RP11-	4.1×10 <sup>-33</sup>	0.700	Thyroid	22715222
17q21.31	43705601		4.2×10 <sup>-32</sup>			chr17:44197427:I	0	259G18.2 LRRC37A4P	3.5×10 <sup>-23</sup>		Thyroid	23715323
17q21.31	43705601	18303023	4.2×10	493/3/	0.971	chr17:44201358:D	U	XXbac-	3.5×10	0.651	Artery_Aorta	23715323
6p21.32	32571961	rs17425622	$3.8 \times 10^{-17}$	-12057	0.573	rs35743245	246695	BPG246D15.9	1.2×10 <sup>-6</sup>	0.061	Lymphoblastoid	24037378
6p21.32	32571961	rs17425622	$3.8 \times 10^{-17}$	1601	0.602	rs602457	-1018080	LST1	0.00022	0.048	Monocyte	22446964
6p21.32	32571961	rs17425622	$3.8 \times 10^{-17}$	8656	0.660	rs3997872	116324	HLA-DRB3	2.2×10 <sup>-48</sup>	0.136	Monocyte	20502693
1q22	155206167	rs2230288	$4.7 \times 10^{-17}$	231544	0.830	rs35777901	-326859	RAG1AP1	0.00022	0.048	Monocyte	22446964
2q24.3	169155595	rs13016703		1312	0.768	rs12616285	-346138	STK39	$8.6 \times 10^{-7}$	0.083	B-Cell	22446964
4p16.3	873286	rs35541465	$2.8 \times 10^{-15}$	65801	0.677	rs6599388	0	IDUA	$8.6 \times 10^{-8}$	0.342	Esophagus_Muscularis	23715323
14q22.2	55348869	rs11158026	$8.8 \times 10^{-15}$	3994	0.826	rs10136545	0	SAMD4A	$3.6 \times 10^{-6}$	0.188	Whole_Blood	23715323
3q27.1	182730291		$3.0 \times 10^{-14}$	-3194	0.600	rs9841498	820265	PARL	0.00031	0.046	Monocyte	22446964
7p15.3			2.1×10 <sup>-12</sup>	-4560	0.988	rs7776649	0	KLHL7-AS1	2.8×10 <sup>-8</sup>	0.261	Muscle_Skeletal	23715323
7p15.3		rs10256359				rs6953728	0	KLHL7-AS1	5.5×10 <sup>-24</sup>		Adipose_Subcutaneous	23715323
7p15.3		rs10256359				rs10235786	0	KLHL7-AS1	1.6×10 <sup>-13</sup>	0.528	Esophagus_Mucosa	23715323
7p15.3		rs10256359		19236	0.971	rs10233039	2209	KLHL7-AS1	6.4×10 <sup>-100</sup>	0.705	Lymphoblastoid	24037378
7p15.3		rs10256359				rs10233039		KLHL7-AS1	9.3×10 <sup>-23</sup>		Skin_Sun_Exposed_Lower_leg	23715323
7p15.3		rs10256359		19236	0.971	rs10233039	0	KLHL7-AS1	2.4×10 <sup>-18</sup>	0.534	Artery_Tibial	23715323
7p15.3		rs10256359		21418	0.730	rs10256996	107	KLHL7	4.6×10 <sup>-6</sup>		Monocyte	20502693
7p15.3		rs10256359				rs10256996	0	KLHL7-AS1	5.0×10 <sup>-8</sup>		Heart_Left_Ventricle	23715323
7p15.3			2.1×10 <sup>-12</sup>			rs1005786	0	AC005082.12	3.9×10 <sup>-8</sup>	0.261	_	23715323
7p15.3		rs10256359				rs73272048	0	KLHL7-AS1	3.7×10 <sup>-17</sup>	0.508	_	23715323
7p15.3		rs10256359				rs764533	0	NUPL2	1.8×10 <sup>-6</sup>	0.249	Nerve_Tibial	23715323
7p15.3		rs10256359				rs4140959		NUPL2	3.7×10 <sup>-44</sup>		Monocyte	20502693
7p15.3		rs10256359				rs6948469		NUPL2	5.9×10 <sup>-9</sup>		Heart_Left_Ventricle	23715323
7p15.3		rs10256359				rs6962213	0	NUPL2	$3.0 \times 10^{-6}$	0.196	•	23715323
7p15.3		rs10256359				rs955187	45526	NUPL2	1.4×10 <sup>-9</sup>		B-Cell	22446964
7p15.3		rs10256359				rs955187		NUPL2	6.1×10 <sup>-19</sup>		Monocyte	22446964
7p15.3			2.1×10 <sup>-12</sup>			rs6964665	0	KLHL7-AS1	1.2×10 <sup>-21</sup>		Thyroid	23715323
7p15.3		rs10256359		96358		rs10254544	0	KLHL7-AS1	2.1×10 <sup>-9</sup>	0.489	Stomach	23715323
7p15.3		rs10256359				rs10242104	0	KLHL7-AS1	7.7×10 <sup>-18</sup>	0.660	Esophagus_Muscularis	23715323
7p15.3		rs10256359				rs7808488	0	AC005082.12	4.9×10 <sup>-7</sup>	0.294	Esophagus_Mucosa	23715323
7p15.3		rs10256359				rs858272		GPNMB	2.3×10 <sup>-17</sup>		Brain Frontal Cortex	20485568
7p15.3			2.1×10 <sup>-12</sup>			rs6970694	0	KLHL7-AS1	2.1×10 <sup>-20</sup>		Nerve_Tibial	23715323
7p15.3		rs10256359				rs7807879	0	KLHL7-AS1	1.2×10 <sup>-6</sup>		Whole_Blood	23715323
7p15.3			2.1×10 <sup>-12</sup>			rs1624451	0	AC005082.12	9.2×10 <sup>-11</sup>	0.458	Esophagus_Muscularis	23715323
7p15.3		rs10256359				rs10227559	0	NUPL2	2.4×10 <sup>-8</sup>		Muscle_Skeletal	23715323
7p15.3		rs10256359	2.1×10 12	171023		rs858273	0	AC005082.12	3.0×10 <sup>-10</sup>		Heart_Left_Ventricle	23715323
7p15.3			$2.1 \times 10^{-12}$ $2.1 \times 10^{-12}$			rs199355		GPNMB	1.5×10 <sup>-42</sup> 1.6×10 <sup>-6</sup>		Monocyte	20502693
7p15.3			$6.3 \times 10^{-12}$			rs199355		GPNMB	6.6×10 <sup>-11</sup>		Monocyte	22446964
1q32.1	205723572		6.3×10 <sup>-12</sup>			rs823094 rs823094		RAB7L1	3.1×10 <sup>-6</sup>		Lymphoblastoid	24037378 23715323
1q32.1	205723572		$6.3 \times 10^{-12}$			rs823130		SLC41A1	$3.9 \times 10^{-6}$		Esophagus_Mucosa Whole Blood	
1q32.1 1q32.1	205723572 205723572		6.3×10 <sup>-12</sup>			rs823130 rs823114		SLC41A1 NUCKS1	7.1×10 <sup>-5</sup>	0.187	_	23715323 19644074
1q32.1 1q32.1	205723572		6.3×10 <sup>-12</sup>			rs823114		NUCKS1	2.3×10 <sup>-16</sup>		B-Cell	22446964
1q32.1 1q32.1	205723572		$6.3 \times 10^{-12}$			rs823114 rs823118		NUCKS1	1.3×10 <sup>-9</sup>		Thyroid	23715323
1q32.1 1q32.1	205723572		6.3×10 <sup>-12</sup>			rs823121		NUCKS1	1.2×10 <sup>-29</sup>		Monocyte	20502693
1q32.1	205723572		6.3×10 <sup>-12</sup>			rs2014202		RAB7L1	3.1×10 <sup>-8</sup>		Whole Blood	23715323
1q32.1	205723572		6.3×10 <sup>-12</sup>			rs7522056	2507	RAB7L1	6.1×10 <sup>-8</sup>		Monocyte	22446964
1q32.1	205723572		6.3×10 <sup>-12</sup>			rs7522056		RAB7L1	6.1×10 <sup>-9</sup>		Nerve_Tibial	23715323
1q32.1	205723572		6.3×10 <sup>-12</sup>			rs7522056	0	RAB7L1	1.8×10 <sup>-9</sup>		Skin_Sun_Exposed_Lower_leg	23715323
1q32.1	205723572		$6.3 \times 10^{-12}$			rs7522056	0	RAB7L1	1.4×10 <sup>-6</sup>		Adipose_Subcutaneous	23715323
1q32.1	205723572		6.3×10 <sup>-12</sup>			rs708723		NUCKS1	2.1×10 <sup>-9</sup>		Monocyte	22446964
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	34252	0.620	rs1775148	0	RAB7L1	$7.5 \times 10^{-8}$	0.430	Artery_Aorta	23715323
1q32.1	205723572		$6.3 \times 10^{-12}$			rs1775148	0	RAB7L1	$1.9 \times 10^{-10}$		Artery_Tibial	23715323
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	35623	0.549	rs1772159	0	PM20D1	$5.3 \times 10^{-19}$	0.592	Adipose_Subcutaneous	23715323
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	38834	0.552	rs823154	-3940	SLC41A1	$3.3 \times 10^{-5}$	0.060	Monocyte	22446964
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	38834	0.552	rs823154	0	NUCKS1	$1.8 \times 10^{-7}$	0.399	Stomach	23715323
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	44313	0.501	rs708727	80776	NUCKS1	0.00027	0.167	Lymphoblastoid	19644074
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	44313	0.501	rs708727	29269	PM20D1	0.00019	0.176	T-cell	19644074
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	44313	0.501	rs708727	-196686	MFSD4	0.00027	0.046	Monocyte	22446964
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	44313	0.501	rs708727	0	PM20D1	$1.4 \times 10^{-11}$	0.367	Artery_Tibial	23715323
1q32.1	205723572	rs823118	$6.3 \times 10^{-12}$	51267	0.504	rs823074	0	PM20D1	$1.1 \times 10^{-17}$	0.679	Heart_Left_Ventricle	23715323
		rs823118	6.3×10 <sup>-12</sup>	51267	0.504	rs823074	0	PM20D1	$1.0 \times 10^{-15}$	0.475	Lung	23715323
1q32.1	205723572		$6.3 \times 10^{-12}$	51267	0.504	rs823074	0	PM20D1	3.3×10 <sup>-22</sup>	0.693	Nerve_Tibial	23715323
•	205723572 205723572	rs823118		31207		022074	0	NUCKS1	$1.4 \times 10^{-9}$	0.330	Skin_Sun_Exposed_Lower_leg	23715323
1q32.1			$6.3 \times 10^{-12}$		0.504	rs823074	Ü				Skiii_Suii_Exposed_Eowei_ieg	23/13323
1q32.1 1q32.1	205723572 205723572 27676794	rs823118 rs4713118	6.3×10 <sup>-12</sup> 2.0×10 <sup>-10</sup>	51267		rs2056923		HIST1H4A	0.00064		B-Cell	22446964
1q32.1 1q32.1 1q32.1 6p22.1 6p22.1	205723572 205723572 27676794 27676794	rs823118 rs4713118 rs4713118	$6.3 \times 10^{-12}$ $2.0 \times 10^{-10}$ $2.0 \times 10^{-10}$	51267 13145 69796	0.570 0.868	rs2056923 rs10484401	-1667740 0	ZNF184	$8.4 \times 10^{-6}$	0.041 0.180	B-Cell Artery_Tibial	22446964 23715323
1q32.1 1q32.1 1q32.1 6p22.1 6p22.1 6p22.1	205723572 205723572 27676794 27676794 27676794	rs823118 rs4713118 rs4713118 rs4713118	$6.3 \times 10^{-12}$ $2.0 \times 10^{-10}$ $2.0 \times 10^{-10}$ $2.0 \times 10^{-10}$	51267 13145 69796 96870	0.570 0.868 0.723	rs2056923 rs10484401 rs200480	-1667740 0 0	ZNF184 ZSCAN23	8.4×10 <sup>-6</sup> 5.2×10 <sup>-6</sup>	0.041 0.180	B-Cell Artery_Tibial Muscle_Skeletal	22446964 23715323 23715323
1q32.1 1q32.1 1q32.1 6p22.1 6p22.1 6p22.1 6p22.1	205723572 205723572 27676794 27676794 27676794 27676794	rs823118 rs4713118 rs4713118 rs4713118 rs4713118	$6.3 \times 10^{-12}$ $2.0 \times 10^{-10}$	51267 13145 69796 96870 153020	0.570 0.868 0.723 0.637	rs2056923 rs10484401 rs200480 rs4713120	-1667740 0 0 394259	ZNF184 ZSCAN23 ZNF192	8.4×10 <sup>-6</sup> 5.2×10 <sup>-6</sup> 0.00016	0.041 0.180 0.185	B-Cell Artery_Tibial Muscle_Skeletal Lymphoblastoid	22446964 23715323 23715323 20220756
1q32.1 1q32.1 1q32.1 6p22.1 6p22.1 6p22.1	205723572 205723572 27676794 27676794 27676794 27676794	rs823118 rs4713118 rs4713118 rs4713118	$6.3 \times 10^{-12}$ $2.0 \times 10^{-10}$ $2.0 \times 10^{-10}$ $2.0 \times 10^{-10}$	51267 13145 69796 96870 153020	0.570 0.868 0.723 0.637	rs2056923 rs10484401 rs200480	-1667740 0 0	ZNF184 ZSCAN23 ZNF192 ZNF323	8.4×10 <sup>-6</sup> 5.2×10 <sup>-6</sup>	0.041 0.180 0.185	B-Cell Artery_Tibial Muscle_Skeletal	22446964 23715323 23715323
1q32.1 1q32.1 1q32.1 6p22.1 6p22.1 6p22.1 6p22.1	205723572 205723572 27676794 27676794 27676794 27676794 27676794	rs823118 rs4713118 rs4713118 rs4713118 rs4713118 rs4713118	$6.3 \times 10^{-12}$ $2.0 \times 10^{-10}$	51267 13145 69796 96870 153020 168178	0.570 0.868 0.723 0.637 0.574	rs2056923 rs10484401 rs200480 rs4713120 rs9295747	-1667740 0 0 394259 555520	ZNF184 ZSCAN23 ZNF192 ZNF323 RP1-	8.4×10 <sup>-6</sup> 5.2×10 <sup>-6</sup> 0.00016 6.8×10 <sup>-9</sup>	0.041 0.180 0.185 0.217	B-Cell Artery_Tibial Muscle_Skeletal Lymphoblastoid Brain Pons	22446964 23715323 23715323 20220756 20485568
1q32.1 1q32.1 1q32.1 6p22.1 6p22.1 6p22.1 6p22.1	205723572 205723572 27676794 27676794 27676794 27676794 27676794	rs823118 rs4713118 rs4713118 rs4713118 rs4713118	$6.3 \times 10^{-12}$ $2.0 \times 10^{-10}$	51267 13145 69796 96870 153020 168178	0.570 0.868 0.723 0.637 0.574	rs2056923 rs10484401 rs200480 rs4713120	-1667740 0 0 394259 555520	ZNF184 ZSCAN23 ZNF192 ZNF323	8.4×10 <sup>-6</sup> 5.2×10 <sup>-6</sup> 0.00016	0.041 0.180 0.185 0.217	B-Cell Artery_Tibial Muscle_Skeletal Lymphoblastoid	22446964 23715323 23715323 20220756

6p22.1	27676794	rs4713118		243000	0.608	rs200997	480698	ZNF323		0.214	Brain Temporal Cortex	20485568
6p22.1	27676794	rs4713118	$2.0 \times 10^{-10}$	303426	0.588	rs149970	254616	ZNF187	$4.4 \times 10^{-6}$	0.017	Monocyte	20502693
6p22.1	27676794	rs4713118	$2.0 \times 10^{-10}$	314213	0.533	rs149979	0	ZKSCAN8	$8.6 \times 10^{-6}$	0.178	Muscle_Skeletal	23715323
6p22.1	27676794	rs4713118	$2.0 \times 10^{-10}$	356380	0.508	rs9295755	0	OR2B8P	$1.3 \times 10^{-7}$	0.262	Skin_Sun_Exposed_Lower_leg	23715323
11q12.1	57694260	rs687432	$2.0 \times 10^{-9}$	36792	0.968	rs7102929	-2151688	OR5L1	$2.5 \times 10^{-5}$	0.063	Monocyte	22446964
11q12.1	57694260	rs687432	$2.0 \times 10^{-9}$	39828	0.815	rs12804093	-414908	UBE2L6	0.00040	0.044	B-Cell	22446964
16p12.3	19279464	rs11343	$1.0 \times 10^{-8}$	-652	0.774	rs12445464	258	SYT17	9.5×10 <sup>-9</sup>	0.025	Monocyte	20502693
16p12.3	19279464	rs11343	$1.0 \times 10^{-8}$	-84	1.000	rs1051547	-1121	SYT17	$1.3 \times 10^{-5}$	0.066	B-Cell	22446964
5a12 1	60260543	rs162227	1.4×10 <sup>-8</sup>	-171107	0.733	rs921898	0	FLOVL7	3.8×10 <sup>-6</sup>	0.236	Nerve Tibial	23715323

# **Nearby Clinical Variants**

source	region	our.name	our.pval	dist	rsqr	assay.name	gene	phenotype	accession
clinvar	1q22	rs2230288	$4.7 \times 10^{-17}$	0	1.000	rs2230288	GBA	Parkinson's disease	SNOMED CT49049000
clinvar	1q22	rs2230288	$4.7 \times 10^{-17}$	0	1.000	rs2230288	GBA	Lewy body dementia	Office of Rare Diseases3243
clinvar	1q22	rs2230288	$4.7 \times 10^{-17}$	0	1.000	rs2230288	GBA	Gaucher disease, perinatal lethal	NCBI curation
clinvar	1q22	rs2230288	$4.7 \times 10^{-17}$	0	1.000	rs2230288	GBA	Gaucher's disease, type 1	SNOMED CT62201009
clinvar	1q22	rs2230288	$4.7 \times 10^{-17}$	0	1.000	rs2230288	GBA	Subacute neuronopathic Gaucher's disease	SNOMED CT5963005
clinvar	1q22	rs2230288	$4.7 \times 10^{-17}$	0	1.000	rs2230288	GBA	Acute neuronopathic Gaucher's disease	SNOMED CT12246008
clinvar	1q22	rs2230288	$4.7 \times 10^{-17}$	0	1.000	rs2230288	GBA	Gaucher disease type 3C	NCBI curation
omim	1q22	rs2230288	$4.7 \times 10^{-17}$	0	1.000	rs2230288	GBA		
clinvar	3a27.1	rs9858038	3 0×10-14	24918	0.708	rs2270968	MCCC1	3 Methylcrotonyl-CoA carboxylase 1 deficiency	Office of Rare Diseases 5665

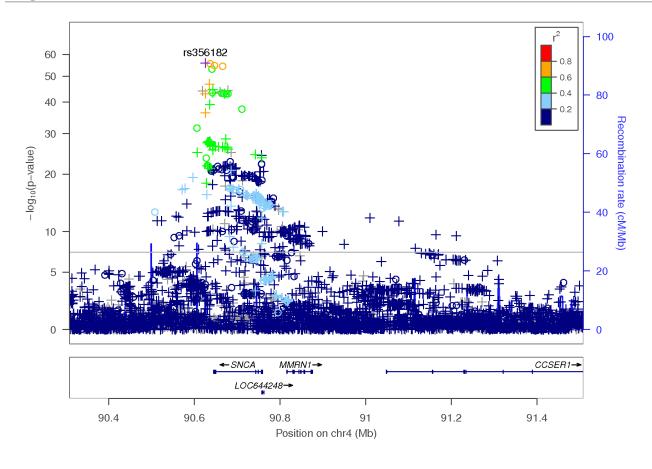
# **Shared Associations with Other 23andMe Phenotypes**

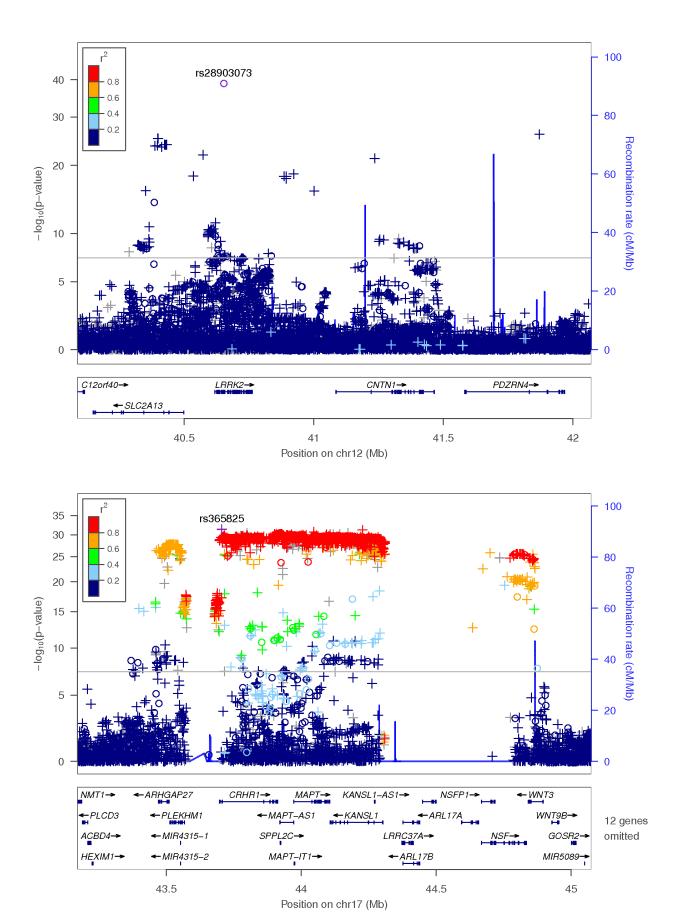
region	position	our.name	our.pval	dist	rsgr	assay.name	phenotype	pvalue	gene.context	match
1p36.23	-	rs3765971	1.2×10 <sup>-6</sup>	14887		rs138050288	any_animal_allergy	1.6×10 <sup>-10</sup>	[RERE]	
1p36.23		rs3765971	1.2×10 <sup>-6</sup>	14887		rs138050288	any_plant_allergy	5.6×10 <sup>-12</sup>	[RERE]	
1p36.23	8445360	rs3765971	1.2×10 <sup>-6</sup>	14887		rs138050288	dust mites allergy	1.2×10 <sup>-8</sup>	[RERE]	
1p36.11		rs35065124	$1.4 \times 10^{-5}$	-75195		rs642255	hair curl	$5.9 \times 10^{-7}$	[RHCE]	TRUE
1p36.11		rs111941366	1.1×10 <sup>-5</sup>			rs111941366	iqb.blood_donation_frequency	2.1×10 <sup>-20</sup>	[RHCE]	TRUE
1p36.11		rs111941366	1.1×10 <sup>-5</sup>			rs909832	iqb.bruise_easily	5.7×10 <sup>-14</sup>	RHCE-[]-TMEM57	FALSE
1p36.11	25736369	rs111941366	1.1×10 <sup>-5</sup>	89580		rs200391466	high cholesterol broad	2.8×10 <sup>-7</sup>	[TMEM57]	
3p21.31		rs34618864	$7.3 \times 10^{-5}$	19392	0.787	rs34644650	blood_pressure_meds	$4.0 \times 10^{-9}$	NME6-[]-SPINK8	
3p21.31	49013383	rs6768433	$2.6 \times 10^{-7}$	-28876	0.831	rs200143221	iqb.carry_a_tune	$4.5 \times 10^{-8}$	[ARIH2]	
3p21.31	49013383	rs6768433	2.6×10 <sup>-7</sup>	-28876		rs200143221	motionsick_combined	$3.8 \times 10^{-8}$	[ARIH2]	
3p21.1	53094194	rs11712910	$4.4 \times 10^{-5}$	-59150	0.874	rs2581792	hemorrhoids	$6.4 \times 10^{-9}$	[SFMBT1]	FALSE
3q13.32	118291124	rs6438460	1.6×10 <sup>-5</sup>	37631	0.509	rs6799936	motionsick_combined	$5.6 \times 10^{-9}$	[]IGSF11	FALSE
3q25.1	151111173	rs12498042	$7.1 \times 10^{-7}$	19168	0.653	rs10935845	iqb.sound_sleeper	$3.6 \times 10^{-7}$	[MED12L]	TRUE
3q27.1	182811490	rs3772722	1.6×10 <sup>-9</sup>	38074	0.546	rs3772715	iqb.fruit_juice_frequency	$6.6 \times 10^{-7}$	[LAMP3]	FALSE
4p16.3	976598	rs17783233	$3.3 \times 10^{-12}$	-24651	0.534	rs34311866	pd_family_history	$7.1 \times 10^{-7}$	[TMEM175]	TRUE
4p16.3	1841330	rs115564335	3.3×10 <sup>-5</sup>	-47050	0.642	rs10012764	linebacker	$3.6 \times 10^{-7}$	TACC3[]FGFR3	TRUE
4p15.31	17853921	rs16895888	1.3×10 <sup>-5</sup>	20168	0.784	rs7671110	height	$2.1 \times 10^{-54}$	NCAPG[]-LCORL	TRUE
4p15.31	17853921	rs16895888	1.3×10 <sup>-5</sup>	77397	0.775	rs13146142	shoe_size_normalized	$1.9 \times 10^{-17}$	[LCORL]	TRUE
4p15.31	17940197	rs71603391	6.4×10 <sup>-5</sup>	89639	0.829	rs112093994	weight	$6.3 \times 10^{-10}$	LCORL-[]	
			7					7	CCDC158[]-	
4q21.1		rs13104972	2.8×10 <sup>-7</sup>			rs59136511	gallstones_or_gall_bladder_removal	1.6×10 <sup>-7</sup>	SHROOM3	TRUE
4q22.1	90626111		1.2×10 <sup>-56</sup>			rs356220	any_neurological	5.4×10 <sup>-12</sup>	GPRIN3[]-SNCA	TRUE
4q22.1	90626111		1.2×10 <sup>-56</sup>	15229		rs356220	pd_family_history	4.6×10 <sup>-9</sup>	GPRIN3[]-SNCA	TRUE
4q22.1		rs2737029	2.4×10 <sup>-38</sup>			rs2619344	updrs_constipation	9.0×10 <sup>-7</sup>	[SNCA]	FALSE
4q22.1	90/81538	rs10025824	1.7×10 <sup>-5</sup>	34485	0.5/6	rs1442140	panic	6.0×10 <sup>-7</sup>	SNCA[]MMRN1 BANK1[]	FALSE
4q24	103188709	rs13107325	8.2×10 <sup>-7</sup>	-41821	0.820	rs35225200	iqb.rotator_cuff_tear	$4.3 \times 10^{-7}$	SLC39A8	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0	1.000	rs13107325	iqb.excess_hair	3.8×10 <sup>-8</sup>	[SLC39A8]	FALSE
4q24	103188709	rs13107325	8.2×10 <sup>-7</sup>	0	1.000	rs13107325	any_animal_allergy	2.3×10 <sup>-7</sup>	[SLC39A8]	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0		rs13107325	bmi	7.7×10 <sup>-30</sup>	[SLC39A8]	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0	1.000	rs13107325	high_plasma_glucose	9.0×10 <sup>-7</sup>	[SLC39A8]	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0		rs13107325	iqb.low_hdl	3.6×10 <sup>-14</sup>	[SLC39A8]	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0		rs13107325	obesity	3.0×10 <sup>-9</sup>	[SLC39A8]	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0		rs13107325	weight	2.3×10 <sup>-17</sup>	[SLC39A8]	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0		rs13107325	height	6.0×10 <sup>-11</sup>	[SLC39A8]	TRUE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0	1.000		iqb.arthritis_any	2.2×10 <sup>-7</sup>	[SLC39A8]	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	0		rs13107325	osteoarthritis_broad	1.3×10 <sup>-8</sup>	[SLC39A8]	FALSE
4q24		rs13107325	8.2×10 <sup>-7</sup>	9373		rs13135092	iqb.stretch_marks	$3.0 \times 10^{-10}$	[SLC39A8]	FALSE
4q24	103188709	rs13107325	8.2×10 <sup>-7</sup>	9373	0.931	rs13135092	stretch_marks_any	4.1×10 <sup>-9</sup>	[SLC39A8] TMEM161B[]	FALSE
5q14.3	87721684	rs35182117	3.7×10 <sup>-6</sup>	-75557	0.666	rs71639107	any_psychiatric	2.1×10 <sup>-9</sup>	MEF2C TMEM161B[]	
5q14.3	87721684	rs35182117	3.7×10 <sup>-6</sup>	-75557	0.666	rs71639107	depression	$6.1 \times 10^{-9}$	MEF2C	
5q14.3	87721684	rs35182117	3.7×10 <sup>-6</sup>	-71805	0.641	rs113828108	morning_person	2.4×10 <sup>-10</sup>	TMEM161B[] MEF2C	
5q31.1	134335383	rs299366	$4.2 \times 10^{-5}$	37302	0.606	rs31198	height	$3.4 \times 10^{-17}$	[LOC100996485]	TRUE
6p22.1	27676704	rs4713118	2.0×10 <sup>-10</sup>	17245	0 020	rs67869107	any_immune	5.8×10 <sup>-7</sup>	ZNF184[] HIST1H2BL	
6p22.1	27850873		5.7×10 <sup>-6</sup>			rs200484	glasses_any	7.4×10 <sup>-8</sup>	[HIST1H2BL]	TRUE
•									HIST1H2BM-[]-	
6p22.1		rs9468206	9.7×10 <sup>-9</sup>			rs200502	urine_control	2.1×10 <sup>-7</sup>	HIST1H4J	FALSE
6p22.1	27968350	rs78094982	6.6×10 <sup>-7</sup>	-57135	0.715	rs151313790	any_neurological	7.3×10 <sup>-7</sup>	OR2B2[]OR2B6 SCAND3[]	TRUE
6p22.1		rs11970409	4.5×10 <sup>-6</sup>			rs34388845	bmi	6.8×10 <sup>-10</sup>	TRIM27	TRUE
6p21.33		rs9263960	1.2×10 <sup>-5</sup>			rs1986997	weight	6.3×10 <sup>-15</sup>	HCG27[]-HLA-C	TRUE
6p21.32	32398853	rs377537858	2.4×10 <sup>-6</sup>	10203	0.596	rs9268652	hepatitis_b	3.1×10 <sup>-9</sup>	[HLA-DRA] HLA-DRA[]HLA-	
6p21.32	32427748	rs9268831	1.0×10 <sup>-5</sup>	-4511	0.522	rs9268803	iqb.poison_oak	5.3×10 <sup>-8</sup>	DRB5	FALSE
6p21.32	32406843	rs3763323	1.8×10 <sup>-5</sup>	22739	0.853	rs9268851	multiple_sclerosis	5.3×10 <sup>-85</sup>	HLA-DRA[]HLA- DRB5	TRUE
-							. –		HLA-DRB5[]	FALSE
6p21.32	325/2/55	rs9270936	7.3×10 <sup>-6</sup>	-61/8	0.//3	rs4329147	iqb.childhood_ear_infections	9.5×10 <sup>-12</sup>	HLA-DQA1 HLA-DRB5[]	FALSE
6p21.32	32572904	rs574170	2.8×10 <sup>-9</sup>	-3742	0.549	rs28752504	depression	$2.8 \times 10^{-7}$	HLA-DQA1	FALSE

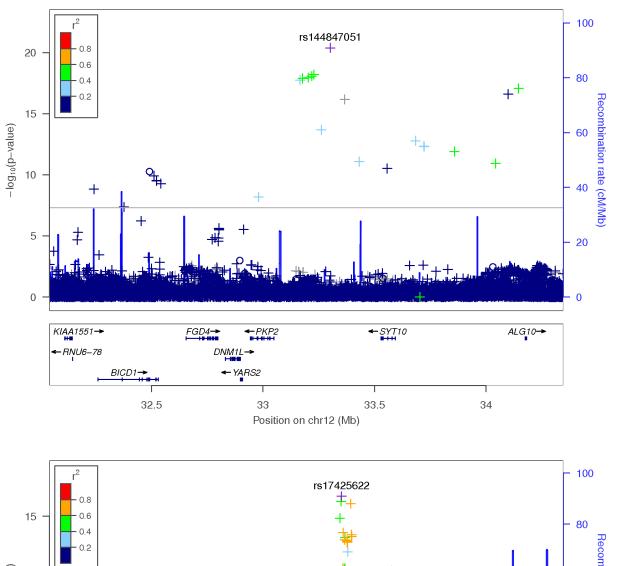
6p21.32	32571961	rs17425622	$3.8 \times 10^{-17}$	1304	0.523	rs601148	iqb.took_meds_prednisone_or_steroid	6.7×10 <sup>-8</sup>	HLA-DRB5[]	FALSE
									HLA-DQA1 HLA-DRB5[]	
6p21.32	32582577	rs3104415	4.2×10 <sup>-6</sup>	35	0.927	rs3104414	rheumatoid_arthritis	2.8×10 <sup>-39</sup>	HLA-DQA1	FALSE
6p21.32	32583603	rs28752515	2.0×10 <sup>-5</sup>	716	0.608	rs28383241	heart_metabolic_disease	2.2×10 <sup>-8</sup>	HLA-DRB5[] HLA-DQA1	FALSE
6,21,22	22502012	rs1846190	7.6×10 <sup>-8</sup>	3200	0 601	rs557011	vitiliae	6.2×10 <sup>-26</sup>	HLA-DRB5[]	FALSE
6p21.32	32303013	151040190	7.0×10	3200	0.001	1555/011	vitiligo	0.2×10	HLA-DQA1 HLA-DRB5[]	FALSE
6p21.32	32587416	rs9271386	1.6×10 <sup>-5</sup>	-7	0.752	rs9271385	juvenile_asthma	3.2×10 <sup>-11</sup>	HLA-DQA1	FALSE
6p21.32	32591332	rs9271600	2.7×10 <sup>-9</sup>	-2909	0.510	rs9271455	any_psychiatric	7.3×10 <sup>-8</sup>	HLA-DRB5[] HLA-DQA1	FALSE
•				2770	0.517	0271465			HLA-DRB5[]	
6p21.32	32591332	rs9271600	2.7×10 <sup>-9</sup>	-2778	0.517	rs9271465	iqb.bronchitis_frequency	1.6×10 <sup>-15</sup>	HLA-DQA1 HLA-DRB5[]	FALSE
6p21.32	32571961	rs17425622	$3.8 \times 10^{-17}$	17454	0.658	rs9271509	blood_sugar_meds	$2.1 \times 10^{-14}$	HLA-DQA1	FALSE
6p21.32	32591332	rs9271600	2.7×10 <sup>-9</sup>	5	0.989	rs9271601	any_skin_cancer	7.6×10 <sup>-10</sup>	HLA-DRB5[] HLA-DQA1	TRUE
C-21.22	22507552	0271404	2440=9	2020	0.526	0271602			HLA-DRB5[]	ENICE
6p21.32	3258/553	rs9271404	3.1×10 <sup>-9</sup>	3830	0.536	rs9271602	milk_allergy	7.0×10 <sup>-7</sup>	HLA-DQA1 HLA-DRB5[]	FALSE
6p21.32	32572755	rs9270936	$7.3 \times 10^{-6}$	19167	0.617	rs4959108	high_cholesterol_broad	$8.4 \times 10^{-18}$	HLA-DQA1	FALSE
6p21.32	32602872	rs9272245	4.7×10 <sup>-5</sup>	-3801	0.703	rs9272050	plantar_warts	$9.6 \times 10^{-31}$	HLA-DRB5[]- HLA-DQA1	FALSE
6,21,22	22602072	rc027224E	4.7×10 <sup>-5</sup>	176	0.050	rc0272226		1.8×10 <sup>-40</sup>	HLA-DRB5[]-	ENICE
6p21.32	32002872	rs9272245		-4/6	0.958	rs9272226	iqb.plantar_warts		HLA-DQA1 HLA-DRB5[]-	FALSE
6p21.32	32566149	rs9270664	$1.3 \times 10^{-6}$	37338	0.513	rs3104367	allergic_asthma	$3.4 \times 10^{-13}$	HLA-DQA1	FALSE
6p21.32	32566149	rs9270664	1.3×10 <sup>-6</sup>	37338	0.513	rs3104367	any_asthma	1.0×10 <sup>-40</sup>	HLA-DRB5[]- HLA-DQA1	FALSE
C=21.22	22566140	···0270664	1.3×10 <sup>-6</sup>	27220	0.512	2104267	inh hank made actions as lives	5.3×10 <sup>-39</sup>	HLA-DRB5[]-	EALCE
6p21.32	32300149	rs9270664	1.3×10 -	3/338	0.513	rs3104367	iqb.took_meds_asthma_or_lung		HLA-DQA1 HLA-DRB5[]-	FALSE
6p21.32	32571961	rs17425622	$3.8 \times 10^{-17}$	31837	0.629	rs1391371	iqb.acne_as_teenager	1.2×10 <sup>-9</sup>	HLA-DQA1	TRUE
6p21.32	32626021	rs6905775	8.7×10 <sup>-6</sup>	251	0.534	rs9273363	t1d	1.1×10 <sup>-201</sup>	HLA-DQA1[]HLA- DQB1	FALSE
•									HLA-DQA1[]HLA-	
6p21.32 6p21.32		rs9270810	3.6×10 <sup>-7</sup> 5.9×10 <sup>-5</sup>	56833 -8790		rs9273370 rs1063346	hypothyroidism	$4.5 \times 10^{-34}$ $6.3 \times 10^{-13}$	DQB1 [HLA-DQB1]	FALSE
6p21.32	32030/3/	rs3134998		-8790	0.595	rs1003340	juvenile_allergic_asthma		HLA-DQB1[]	FALSE
6p21.32	32663986	rs6457619	$4.1 \times 10^{-5}$	-10260	0.520	rs9275170	acid_reflux_meds	$6.8 \times 10^{-10}$	HLA-DQA2	FALSE
6p21.32	32667638	rs9275348	4.2×10 <sup>-9</sup>	462	0.508	rs2647045	any_non_melanoma_skin_cancer	4.9×10 <sup>-10</sup>	HLA-DQB1[] HLA-DQA2	TRUE
C=21.22	22650022	**027F210	1.1×10 <sup>-5</sup>	14021	0 520		liable and ad	3.7×10 <sup>-7</sup>	HLA-DQB1[]	EALCE
6p21.32	32038933	rs9275218		14821	0.539	rs28772279	lightheaded	3.7×10 ·	HLA-DQA2 HLA-DQB1[]	FALSE
6p21.32	32587117	rs28383313	9.7×10 <sup>-9</sup>	90795	0.505	rs9275563	iqb.oral_corticosteroid_ever	$3.5 \times 10^{-7}$	HLA-DQA2	FALSE
6p21.32	32587117	rs28383313	9.7×10 <sup>-9</sup>	90795	0.505	rs9275563	iqb.pneumonia_frequency	$1.4 \times 10^{-11}$	HLA-DQB1[] HLA-DQA2	FALSE
C=21 22	22604025	***027FC42	6.5×10 <sup>-5</sup>	0	1 000	027FC42	hazal call causinama	7.7×10 <sup>-11</sup>	HLA-DQB1[]	TDUE
6p21.32 6q21		rs9275642 rs12661198	9.3×10 <sup>-5</sup>			rs9275642 rs139971631	basal_cell_carcinoma mpn_or_v617f	2.0×10 <sup>-7</sup>	HLA-DQA2 FYN[]WISP3	TRUE
7p15.3		rs111254487	7.2×10 <sup>-5</sup>	-92994		rs112316332	iqb.math_class	4.4×10 <sup>-7</sup>	[IGF2BP3]	FALSE
9p22.2		rs10756788	2.9×10 <sup>-6</sup>			rs13284478	hair_curl	5.0×10 <sup>-8</sup>	[BNC2]	TRUE
12012	40824058	rc149557347	7 7 × 10 - 7	_183	0 033	rc189621487	igh rotator cuff tear	2 9×10-7	MUC19[]	FALSE
12q12 12q12		rs149557347 rs187043470	7.7×10 <sup>-7</sup> 7.6×10 <sup>-27</sup>	-183 0		rs189621487 rs187043470	iqb.rotator_cuff_tear any neurological	2.9×10 <sup>-7</sup> 8.4×10 <sup>-8</sup>	MUC19	FALSE TRUE
12q12 12q12 12q12	41870804	rs149557347 rs187043470 rs187043470	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup>		1.000	rs189621487 rs187043470 rs187043470	iqb.rotator_cuff_tear any_neurological pd_family_history	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup>		FALSE TRUE TRUE
12q12 12q12 16p11.2	41870804 41870804 28620572	rs187043470 rs187043470 rs750155	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup>	0 0 -81186	1.000 1.000 0.543	rs187043470 rs187043470 rs189278832	any_neurological pd_family_history iqb.stretch_marks	$8.4 \times 10^{-8}$ $6.7 \times 10^{-16}$ $7.3 \times 10^{-11}$	MUC19 [PDZRN4] [PDZRN4] [NPIPL1]	TRUE TRUE FALSE
12q12 12q12 16p11.2 16p11.2	41870804 41870804 28620572 28620572	rs187043470 rs187043470 rs750155 rs750155	$7.6 \times 10^{-27}$ $7.6 \times 10^{-27}$ $2.1 \times 10^{-5}$ $2.1 \times 10^{-5}$	0 0 -81186 -81186	1.000 1.000 0.543 0.543	rs187043470 rs187043470 rs189278832 rs189278832	any_neurological pd_family_history iqb.stretch_marks stretch_marks_any	$8.4 \times 10^{-8}$ $6.7 \times 10^{-16}$ $7.3 \times 10^{-11}$ $7.8 \times 10^{-11}$	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1]	TRUE TRUE
12q12 12q12 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146	rs187043470 rs187043470 rs750155 rs750155 rs11364090	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup>	0 0 -81186 -81186 -18559	1.000 1.000 0.543 0.543 0.558	rs187043470 rs187043470 rs189278832 rs189278832 rs231976	any_neurological pd_family_history iqb.stretch_marks stretch_marks_any mosquito_severe	$8.4 \times 10^{-8}$ $6.7 \times 10^{-16}$ $7.3 \times 10^{-11}$ $7.8 \times 10^{-11}$ $1.7 \times 10^{-7}$	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1]	TRUE TRUE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572	rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup>	0 0 -81186 -81186 -18559 -13040	1.000 1.000 0.543 0.543 0.558 0.512	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668	any_neurological pd_family_history iqb.stretch_marks stretch_marks_any mosquito_severe any_allergy	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2]	TRUE TRUE FALSE FALSE TRUE
12q12 12q12 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146	rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155	$7.6 \times 10^{-27}$ $7.6 \times 10^{-27}$ $2.1 \times 10^{-5}$	0 0 -81186 -81186 -18559 -13040	1.000 1.000 0.543 0.543 0.558 0.512 0.512	rs187043470 rs187043470 rs189278832 rs189278832 rs231976	any_neurological pd_family_history iqb.stretch_marks stretch_marks_any mosquito_severe	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1]	TRUE TRUE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818	rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs12919058	$7.6 \times 10^{-27}$ $7.6 \times 10^{-27}$ $2.1 \times 10^{-5}$ $2.3 \times 10^{-5}$	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902	1.000 1.000 0.543 0.543 0.558 0.512 0.512 1.000 0.675	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333	any_neurological pd_family_history iqb.stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1]	TRUE TRUE FALSE FALSE TRUE TRUE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818	rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs12919058 rs12919058	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup>	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902 -56618	1.000 1.000 0.543 0.543 0.558 0.512 0.512 1.000 0.675 0.671	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562	any_neurological pd_family_history iqb.stretch_marks strettch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1,SULT1A1] [NPIPL1]	TRUE TRUE FALSE FALSE TRUE TRUE TRUE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818	rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs12919058 rs12919058 rs12919058	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup>	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902 -56618 -29025	1.000 1.000 0.543 0.543 0.558 0.512 0.512 1.000 0.675 0.671 0.760	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259	any_neurological pd_family_history iqb.stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1]	TRUE TRUE FALSE FALSE TRUE TRUE TRUE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818	rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs12919058 rs12919058 rs12919058 rs12919058	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup>	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902 -56618 -29025 -8477	1.000 1.000 0.543 0.543 0.558 0.512 0.512 1.000 0.675 0.671 0.760 0.814	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2]	TRUE TRUE FALSE FALSE TRUE TRUE TRUE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 30914626	rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs12919058 rs12919058 rs12919058	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup>	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902 -56618 -29025 -8477 -85954	1.000 1.000 0.543 0.558 0.512 0.512 1.000 0.675 0.671 0.760 0.814 0.602	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259	any_neurological pd_family_history iqb.stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1]	TRUE TRUE FALSE FALSE TRUE TRUE TRUE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 30914626 30980130	rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 2.3×10 <sup>-6</sup> 2.3×10 <sup>-7</sup> 7.1×10 <sup>-6</sup>	0 0 -81186 -81186 -18559 -13040 0 -61902 -56618 -29025 -8477 -85954 -93487 -85454	1.000 1.000 0.543 0.543 0.558 0.512 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347	any_neurological pd_family_history iqb.stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C	TRUE TRUE FALSE FALSE TRUE TRUE TRUE FALSE FALSE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394	rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs12919058	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup>	0 0 -81186 -81186 -18559 -13040 0 -61902 -56618 -29025 -8477 -85954 -93487 -85954	1.000 1.000 0.543 0.543 0.558 0.512 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602	any_neurological pd_family_history iqb.stretch_marks stretch_marks search search search stretch_marks stretch_mark	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,BABEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A]	TRUE TRUE FALSE FALSE  TRUE TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs1191058 rs11150604 rs11281612	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.1×10 <sup>-6</sup> 7.0×10 <sup>-6</sup>	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902 -56618 -29025 -8477 -85954 -93487 -93571 -70215	1.000 1.000 0.543 0.558 0.512 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease_burden	$8.4 \times 10^{-8}$ $6.7 \times 10^{-16}$ $7.3 \times 10^{-11}$ $7.8 \times 10^{-11}$ $1.7 \times 10^{-7}$ $5.9 \times 10^{-8}$ $3.8 \times 10^{-8}$ $6.1 \times 10^{-8}$ $2.6 \times 10^{-17}$ $9.6 \times 10^{-21}$ $1.4 \times 10^{-7}$ $5.5 \times 10^{-11}$ $6.3 \times 10^{-7}$ $2.2 \times 10^{-7}$ $3.4 \times 10^{-8}$ $6.2 \times 10^{-11}$ $5.6 \times 10^{-11}$	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B]	TRUE TRUE FALSE FALSE  TRUE TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12918058 rs12919058 rs112810612	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup>	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902 -56618 -29025 -8477 -85954 -93487 -90571 -70215 -36315	1.000 1.000 0.543 0.558 0.512 1.000 0.675 0.671 0.760 0.814 0.692 0.599 0.795 0.610 0.837 0.884	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs718733 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease warfarin_dosage	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [STTA1] [STX1B] [STX1B] [STX1B]	TRUE TRUE FALSE FALSE  TRUE TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28620572 28620572 28620572 28620572 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12191058 rs12191058 rs11219058 rs112181612 rs11281612	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup>	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902 -56618 -29025 -8477 -85954 -93487 -85454 -90571 -70215 -36315 3953	1.000 1.000 0.543 0.543 0.558 0.512 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.795 0.695 0.795 0.610 0.837 0.884 0.879	rs187043470 rs187043470 rs189278832 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease_burden warfarin_dosage warfarin_sensitivity	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 5.6×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ARBEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX4] [ZNF646]	TRUE TRUE FALSE FALSE TRUE TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28520572 28520572 28620572 28620572 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12919058 rs12919058 rs12919058 rs12919058 rs12918058 rs12919058 rs112810612	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup>	0 0 -81186 -81186 -18559 -13040 -13040 -61902 -56618 -29025 -8477 -85954 -93487 -85454 -90571 -70215 -36315 3953 -54500	1.000 1.000 0.543 0.543 0.552 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.884 0.879 0.619	rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs718733 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease warfarin_dosage	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [NFIPL1,ATP2A1] [STTA1] [STX1B] [STX1B] [STX1B]	TRUE TRUE FALSE FALSE TRUE TRUE FALSE FALSE FALSE FALSE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28622571 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 31084394 52635000 52635000	rs187043470 rs187043470 rs187043470 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs12919058	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 2.0×10 <sup>-5</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.558 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.795 0.610 0.837 0.884 0.879 0.619	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3104793	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease warfarin_dosage warfarin_sensitivity breast_cancer	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-7</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 5.6×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-15</sup>	MUC19 [PDZRN4] [PDZRN4] [NDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX4] [ZNF646] [TOX3]	TRUE TRUE FALSE FALSE TRUE TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000 52635000 52644895 17715101	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs11291061 rs4346218 rs1150604 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs12922061 rs3104798 rs11868035	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.0×10 <sup>-5</sup> 1.6×10 <sup>-5</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.5543 0.558 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.84 0.879 0.619 0.619	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs718733 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3104793 rs11649804	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-7</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-5</sup> 2.9×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX4] [ZNF646] [TOX3] TOX3[]CHD9 [RAI1]	TRUE TRUE FALSE
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28620572 28620572 28620572 28620572 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 31084394 52635000 52635000 52644895 17715101 17853454	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12910064 rs1291281612 rs11281612 rs11281612 rs11281612 rs12922061 rs12922061 rs12922061 rs1304798 rs11868035 rs8077530	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.5543 0.5512 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.884 0.879 0.619 0.937 0.936 0.936	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 5.6×10 <sup>-11</sup> 5.6×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-15</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ARBEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] TOX3[]CHD9 [RA11] [TOM1L2]	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000 52635000 52644895 17715101	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12910064 rs1291281612 rs11281612 rs11281612 rs11281612 rs12922061 rs12922061 rs12922061 rs1304798 rs11868035 rs8077530	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.5543 0.5512 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.884 0.879 0.619 0.937 0.936 0.936	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs718733 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3104793 rs11649804	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-7</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-5</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.5×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX4] [ZNF646] [TOX3] TOX3[]CHD9 [RAI1]	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28620572 28620572 28620572 28620572 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000 52644895 17715101 17853454 40698158	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12910064 rs1291281612 rs11281612 rs11281612 rs11281612 rs12922061 rs12922061 rs12922061 rs1304798 rs11868035 rs8077530	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.5543 0.558 0.5512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.844 0.879 0.619 0.619 0.693 0.937	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 5.6×10 <sup>-11</sup> 5.6×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-15</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ARBEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SET01A] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] TOX3[]CHD9 [RA11] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2	41870804 41870804 28620572 28620572 28620572 28620572 28620572 28620572 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000 52644895 17715101 17853454 40698158	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs12919058 rs1180604 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281613 rs12922061 rs3104798 rs11868035 rs8077530 rs601999	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup>	0 0 -81186 -81186 -18559 -13040 -13040 0 -61902 -56618 -29025 -8477 -85954 -93487 -70215 -36315 3953 -54500 -54500 -3709 -18346 -91207 0 56969	1.000 1.000 0.543 0.543 0.558 0.512 0.671 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.884 0.879 0.619 0.619 0.937 0.936 0.823 1.000	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-7</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-5</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.5×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] TOX3[]CHD9 [RAI1] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]-	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17q11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000 52644895 17715101 17853454 40698158 43705601	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs12919058 rs1150604 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 7.0×10 <sup>-</sup>	0 0 -81186 -81186 -18559 -13040 -13040 -619022 -8477 -85954 -93487 -85454 -90571 -70215 -36315 3953 -54500 -3709 -18346 -91207 0 56969	1.000 1.000 0.543 0.543 0.558 0.558 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.884 0.619 0.937 0.936 0.823 1.000	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246	any_neurological pd_family_history iqb.stretch_marks stretch_marks stret	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-15</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ARBEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SET01A] [STX1B] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] TOX3[]CHD9 [RA11] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRH11 LRRC37A3[]	TRUE TRUE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 16p11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000 52644895 17715101 17853454 40698158 43705601	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs12919058 rs1180604 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281613 rs12922061 rs3104798 rs11868035 rs8077530 rs601999	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-5</sup> 5.0×10 <sup>-28</sup> 4.2×10 <sup>-32</sup> 5.0×10 <sup>-29</sup>	0 0 -81186 -81186 -18559 -13040 -13040 -619022 -8477 -85954 -93487 -85454 -90571 -70215 -36315 3953 -54500 -3709 -18346 -91207 0 56969	1.000 1.000 0.543 0.543 0.558 0.558 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.884 0.619 0.937 0.936 0.823 1.000	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999	any_neurological pd_family_history iqb.stretch_marks stretch_marks shot_severe any_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 5.6×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-7</sup> 3.3×10 <sup>-15</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [SETD1A] [SETD1A] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] TOX3[]CHD9 [RAI1] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHMI-[]- ARL17A LRRC37A3[] CRHR1	TRUE TRUE FALSE  FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17q11.2	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000 52634895 17715101 17853454 40698158 43515927 43705601 43807911	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs12919058 rs1150604 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 7.0×10 <sup>-</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.558 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.884 0.879 0.619 0.619 0.693 1.000 0.591	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246	any_neurological pd_family_history iqb.stretch_marks stretch_marks stret	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-15</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] [TOX3-[]CHD9 [RAI1] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRCG37A3[] CRHR1 LRRCG37A3[] CRHR1	TRUE TRUE FALSE  FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17q21.3	41870804 41870804 28620572 28620572 28620572 28620572 28620572 28927818 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 31084394 31084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 41084394 410853494 4108544 41085	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs1291906062 rs31046276 rs4346218 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.558 0.5512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.795 0.610 0.837 0.884 0.879 0.619 0.619 0.937 0.936 0.823 1.000 0.591	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552	any_neurological pd_family_history iqb.stretch_marks stretch_marks shore_severe any_allergy seasonal_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease burden warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness nearsightedness extraversion_combined iqb.talk_versus_listen	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 7.8×10 <sup>-17</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.5×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] TOX3[]CHD9 [RAI1] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1 LRRC37A3[] CRHR1 LRRC37A3[] CRHR1 LRRC37A3[]	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17p11.2 17q11.3 17q21.31	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 28927818 30914626 31084394 31084394 31084394 31084394 52635000 52644895 17715101 17853454 40698158 43515927 43705601 43807911 43807911	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs12919058 rs1291906062 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs12922061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062 rs192006062	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.558 0.5512 1.000 0.675 0.671 0.760 0.814 0.692 0.599 0.619 0.619 0.619 0.619 0.620 0.675 0.671 0.837 0.837 0.837 0.937 0.936 0.823 1.000 0.591 0.591	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552 rs71363552	any_neurological pd_family_history iqb.stretch_marks stretch_marks any mosquito_severe any_allergy seasonal_allergy seasonal_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease_burden warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness nearsightedness extraversion_combined iqb.talk_versus_listen unibrow	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-17</sup> 3.3×10 <sup>-17</sup> 3.5×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup> 2.9×10 <sup>-32</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,RABEP2] [NPIPL1,RABEP2] ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] [TOX3] [TOX3] [TOX3-[]CHD9 [RAI1] [RAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1 LRRC37A3[]	TRUE TRUE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17q21.3	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 28927818 30914626 31084394 31084394 31084394 31084394 52635000 52644895 17715101 17853454 40698158 43515927 43705601 43807911 43807911	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs1291906062 rs31046276 rs4346218 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.558 0.5512 1.000 0.675 0.671 0.760 0.814 0.692 0.599 0.619 0.619 0.619 0.619 0.620 0.675 0.671 0.837 0.837 0.837 0.937 0.936 0.823 1.000 0.591 0.591	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552	any_neurological pd_family_history iqb.stretch_marks stretch_marks shore_severe any_allergy seasonal_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease burden warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness nearsightedness extraversion_combined iqb.talk_versus_listen	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 7.8×10 <sup>-17</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.5×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] [TOX3[]CHD9 [RAI1] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17q11.2 17q11.3 17q21.31 17q21.31	41870804 41870804 41870804 28620572 28620572 28620572 28620572 28620572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 52635000 52644895 17715101 17853454 40698158 43515927 43705601 43807911 43849572 43924337	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs12919058 rs129190604 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062 rs192006062 17:43849572:AT_A rs12373168	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-7</sup> 1.7×10 <sup>-28</sup> 4.2×10 <sup>-32</sup> 5.0×10 <sup>-29</sup> 4.8×10 <sup>-30</sup> 3.0×10 <sup>-31</sup> 3.0×10 <sup>-31</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.558 0.5512 0.512 1.000 0.675 0.671 0.760 0.814 0.692 0.599 0.619 0.837 0.837 0.937 0.936 0.823 1.000 0.591 0.9591 0.591 0.591	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552 rs71363552 17:43849572:AT_A rs113518470 rs117631329	any_neurological pd_family_history iqb.stretch_marks stretch_marks any mosquito_severe any_allergy seasonal_allergy seasonal meight bond brice iqb.ingnown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease_burden warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness nearsightedness extraversion_combined iqb.talk_versus_listen unibrow beighton_hypermobility_qtl any_neurological	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 7.5×10 <sup>-1</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-5</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup> 2.9×10 <sup>-32</sup> 4.7×10 <sup>-11</sup> 8.0×10 <sup>-10</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SET01A] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] [TOX3-[]CHD9 [RAI1] RAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1	TRUE TRUE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17q21.3 17q21.31 17q21.31 17q21.31 17q21.31	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28620572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 3108444 3108444 3108444 3108444 3108444 3108444 3108444 3108444 3108444 3108444 3108444 31084	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12919060 rs129106061 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062 rs192006062 rs192006062 rs192106062 rs12373168 rs12373168 rs12373168	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-7</sup> 3.0×10 <sup>-31</sup> 3.0×10 <sup>-31</sup> 3.0×10 <sup>-31</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.5543 0.5512 1.000 0.675 0.671 0.760 0.814 0.692 0.599 0.619 0.837 0.884 0.879 0.619 0.937 0.936 0.823 1.000 0.591 0.591 0.591	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552 rs71363552 17:43849572:AT_A rs113518470 rs117631329 rs17690703	any_neurological pd_family_history iqb.stretch_marks stretch_marks sany mosquito_severe any_allergy seasonal_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness nearsightedness extraversion_combined iqb.talk_versus_listen unibrow beighton_hypermobility_qtl any_neurological iqb.forward_splits	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 7.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 7.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 7.2×10 <sup>-7</sup> 7.3×10 <sup>-8</sup> 7.3×10 <sup>-9</sup> 7.3×10 <sup>-9</sup> 7.3×10 <sup>-7</sup> 7.3×10 <sup>-8</sup> 7.3×10 <sup>-8</sup> 7.3×10 <sup>-8</sup> 7.3×10 <sup>-10</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1,RABEP2] [NPIPL1,RABEP2] [STA19] [STX1B] [STX1B] [STX1B] [STX4] [ZNF629-[]BCL7C [FBXL19] [STX1B] [STX4] [TOX3] [TOX3] [TOX3] [TOX3] TOX3[]CHD9 [RAI1] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1 SPPL2C[]MAPT	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17q21.3 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31	41870804 41870804 28620572 28620572 28564146 28620572 28620572 28927818 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 3108444 3108444 3108444 3108444 3108444 3108444 3108444 3108444 3108444 3108444 3108444 31084	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs12919060 rs4346218 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062 rr192006062 rr192006062 rr19373168 rs12373168 rs12373168 rs12373168 rs72834575	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.5548 0.5512 1.000 0.675 0.671 0.760 0.814 0.602 0.795 0.610 0.837 0.884 0.879 0.619 0.937 0.936 0.823 1.000 0.591 0.501 0.501 0.501 0.501	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552 rs71363552 rs71363552 rs71363552 rs713631329 rs17690703 rs62054826	any_neurological pd_family_history iqb.stretch_marks stretch_marks shore_severe any_allergy seasonal_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease burden warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness nearsightedness extraversion_combined iqb.talk_versus_listen unibrow beighton_hypermobility_qtl any_neurological iqb.forward_splits iqb.shaves_legs	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 7.8×10 <sup>-17</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup> 2.9×10 <sup>-32</sup> 4.7×10 <sup>-11</sup> 8.0×10 <sup>-10</sup> 1.0×10 <sup>-8</sup> 3.0×10 <sup>-8</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,FULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] [TOX3[]CHD9 [RAI1] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1 LRRC	TRUE TRUE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17q21.3 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31	41870804 41870804 28620572 28620572 28620572 28620572 28620572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 32635000 52644895 17715101 17853454 40698158 43515927 43705601 43807911 43807911 43807911 43849572 43924337 43924337 43924337 43924337 43924337	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs129190604 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs1292061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062 rs192006062 17:43849572:AT_A rs12373168 rs12373168 rs12373168 rs72834575 17:43931855:GAGAG	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 7.0×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 5.9×10 <sup>-6</sup> 2.0×10 <sup>-5</sup> 1.6×10 <sup>-5</sup> 3.5×10 <sup>-5</sup> 6.7×10 <sup>-8</sup> 1.7×10 <sup>-28</sup> 4.2×10 <sup>-32</sup> 5.0×10 <sup>-29</sup> 4.8×10 <sup>-30</sup> 3.0×10 <sup>-31</sup> 3.0×10 <sup>-31</sup> 3.0×10 <sup>-31</sup> 3.1×10 <sup>-5</sup> 4.4×10 <sup>-22</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.5548 0.5512 0.5512 1.000 0.675 0.671 0.760 0.814 0.602 0.795 0.610 0.837 0.884 0.879 0.619 0.937 0.936 0.823 1.000 0.591 0.501 1.000 0.912	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552 rs71363552 rs71363552 17:43849572:AT_A rs113518470 rs117631329 rs17690703 rs62054826 17:43931855:GAGAG	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks stretch_marks stretch_marks stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness nearsightedness extraversion_combined iqb.talk_versus_listen unibrow beighton_hypermobility_qtl any_neurological iqb.forward_splits iqb.shaves_legs iqb.self_rated_attractiveness	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 5.6×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-7</sup> 3.3×10 <sup>-15</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup> 2.9×10 <sup>-32</sup> 4.7×10 <sup>-11</sup> 8.0×10 <sup>-10</sup> 1.0×10 <sup>-8</sup> 3.0×10 <sup>-8</sup> 4.7×10 <sup>-7</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] [TOX3]-[]CHD9 [RA11] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1 LRC37A3[] CRHR1 LRRC37A3[] CRHR1 LRRC37A3[]-	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16q12.2 17p11.2 17q21.3 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31	41870804 41870804 41870804 28620572 28620572 28620572 28620572 28622572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394 31084394 31084394 31084394 31084394 31084394 31084394 43635000 52635000 52635000 52635000 52635001 43807911 43807911 43807911 43807911 43807911 43849572 43924337 43924337 43924337 43924337 43924337 43924337 43924337	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs129190604 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062 17:43849572:AT_A rs12373168 rs12373155:GAGAG rs2664006	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.558 0.558 0.512 0.675 0.671 0.760 0.814 0.699 0.795 0.610 0.837 0.837 0.839 0.619 0.619 0.936 0.823 1.000 0.599 0.591 0.591 0.591 0.591	rs187043470 rs187043470 rs187043470 rs189278832 rs189278832 rs231976 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3095602 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552 rs71363552 rs71363552 rs71363552 rs713631329 rs17690703 rs62054826	any_neurological pd_family_history iqb.stretch_marks stretch_marks stret	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 7.8×10 <sup>-17</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup> 2.9×10 <sup>-32</sup> 4.7×10 <sup>-11</sup> 8.0×10 <sup>-10</sup> 1.0×10 <sup>-8</sup> 3.0×10 <sup>-8</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ARBEP2] ZNF629[]BCL7C ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] TOX3[]CHD9 [RA11] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1 LRRC37A3[] CRHR	TRUE TRUE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 16p11.2 17p11.2 17q21.3 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31	41870804 41870804 41870804 28620572 28620572 28620572 28620572 28622572 28927818 28927818 28927818 28927818 30914626 30980130 31037020 31084394	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs129190604 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs1292061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062 rs192006062 17:43849572:AT_A rs12373168 rs12373168 rs12373168 rs72834575 17:43931855:GAGAG	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 0.543 0.543 0.558 0.552 0.512 1.000 0.675 0.671 0.760 0.814 0.602 0.599 0.619 0.837 0.837 0.937 0.936 0.823 1.000 0.591 0.935 0.591 0.935 0.591 0.935	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552 rs71363552 17:43849572:AT_A rs113518470 rs117691703 rs62054826 17:43931855:GAGAG rs242554	any_neurological pd_family_history iqb.stretch_marks stretch_marks stretch_marks stretch_marks stretch_marks stretch_marks stretch_marks stretch_marks_any mosquito_severe any_allergy any_plant_allergy seasonal_allergies_broad bmi weight iqb.ingrown_hair_bumps shoe_size_normalized number_of_cavities iqb.took_meds_prednisone_or_steroid high_blood_pressure heart_metabolic_disease heart_metabolic_disease heart_metabolic_disease warfarin_dosage warfarin_sensitivity breast_cancer breast_or_ovarian_cancer iqb.restless_leg_syndrome myringotomy iqb.strep_throat body_type personality_assertiveness nearsightedness extraversion_combined iqb.talk_versus_listen unibrow beighton_hypermobility_qtl any_neurological iqb.forward_splits iqb.shaves_legs iqb.self_rated_attractiveness	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 2.6×10 <sup>-17</sup> 9.6×10 <sup>-21</sup> 1.4×10 <sup>-7</sup> 5.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 2.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-18</sup> 3.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup> 2.9×10 <sup>-32</sup> 4.7×10 <sup>-11</sup> 8.0×10 <sup>-10</sup> 1.0×10 <sup>-8</sup> 3.0×10 <sup>-8</sup> 4.7×10 <sup>-7</sup> 2.9×10 <sup>-7</sup> 2.9×10 <sup>-7</sup> 2.3×10 <sup>-10</sup> 6.3×10 <sup>-9</sup>	MUC19 [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,RABEP2] ZNF629[]BCL7C ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SETD1A] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] [TOX3]-[]CHD9 [RA11] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1 LRC37A3[] CRHR1 LRRC37A3[] CRHR1 LRRC37A3[]-	TRUE TRUE FALSE FALSE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU
12q12 12q12 16p11.2 17p11.2 17p11.2 17q21.3 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31 17q21.31	41870804 41870804 41870804 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28620572 28927818 28927818 28927818 28927818 28927818 28927818 28927818 28927818 28927818 28927818 28927818 28927818 28927818 28927818 28927818 4364594 40698158 43515927 43705601 43807911 43849572 43924337 43924337 43924337 43924337 43924337 43924337 43924337 44040934	rs187043470 rs187043470 rs187043470 rs750155 rs750155 rs11364090 rs750155 rs750155 rs750155 rs750155 rs750155 rs12919058 rs1316604 rs11281612 rs11281612 rs11281612 rs11281612 rs11281612 rs12922061 rs3104798 rs11868035 rs8077530 rs601999 rs35354512 rs365825 rs192006062 rs192006062 rs192006062 17:43849572:AT_A rs12373168 rs12373168 rs12373168 rs12373168 rs72834575 17:43931855:GAGAG rs2664006 rs8067056	7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 7.6×10 <sup>-27</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.1×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-5</sup> 2.3×10 <sup>-6</sup> 7.0×10 <sup>-7</sup> 7.0×10 <sup></sup>	0 0 81186 818186 -18559 -13040 0 6-61902 88477 -85954 -90571 -70215 -36315 3953 -54500 -3709 -18346 -91207 26760 0 73405 -67998 960 50997 0 -2406 0 44952	1.000 1.000 0.543 0.543 0.5543 0.5512 1.000 0.675 0.671 0.760 0.814 0.692 0.599 0.795 0.610 0.837 0.84 0.879 0.619 0.619 0.937 0.936 0.823 1.000 0.591 0.591 0.591 0.591 0.591	rs187043470 rs187043470 rs187043470 rs189278832 rs231976 rs4115668 rs4115668 rs4115668 rs750155 rs7187333 rs199766562 rs6565259 rs7206214 rs7192475 rs897984 rs13336347 rs11150602 rs9926533 rs10871454 rs749671 rs3095602 rs3095602 rs3104793 rs11649804 rs11658309 rs601999 rs5026246 rs4479288 rs71363552 rs71363552 rs71363552 17:43849572:AT_A rs113518470 rs117631329 rs17690703 rs60254826 fr:43931855:GAGAG rs242554 rs8067056	any_neurological pd_family_history iqb.stretch_marks stretch_marks stret	8.4×10 <sup>-8</sup> 6.7×10 <sup>-16</sup> 7.3×10 <sup>-11</sup> 7.8×10 <sup>-11</sup> 1.7×10 <sup>-7</sup> 5.9×10 <sup>-8</sup> 3.8×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-8</sup> 6.1×10 <sup>-7</sup> 7.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 7.5×10 <sup>-11</sup> 6.3×10 <sup>-7</sup> 7.2×10 <sup>-7</sup> 3.4×10 <sup>-8</sup> 6.2×10 <sup>-11</sup> 1.7×10 <sup>-28</sup> 2.3×10 <sup>-9</sup> 1.6×10 <sup>-19</sup> 1.9×10 <sup>-17</sup> 3.3×10 <sup>-15</sup> 2.9×10 <sup>-7</sup> 4.7×10 <sup>-7</sup> 3.1×10 <sup>-8</sup> 3.7×10 <sup>-7</sup> 9.7×10 <sup>-8</sup> 5.2×10 <sup>-10</sup> 2.9×10 <sup>-32</sup> 4.7×10 <sup>-11</sup> 8.0×10 <sup>-10</sup> 1.0×10 <sup>-8</sup> 3.0×10 <sup>-8</sup> 4.7×10 <sup>-7</sup> 2.9×10 <sup>-7</sup> 2.3×10 <sup>-10</sup>	MUC19 [PDZRN4] [PDZRN4] [PDZRN4] [NPIPL1] [NPIPL1] [NPIPL1] [NPIPL1,SULT1A2] [NPIPL1,SULT1A2] [NPIPL1,SULT1A1] [NPIPL1] [NPIPL1] [NPIPL1,ATP2A1] [NPIPL1,ATP2A1] [NPIPL1,ARBEP2] ZNF629[]BCL7C ZNF629[]BCL7C ZNF629[]BCL7C [FBXL19] [SET01A] [STX1B] [STX1B] [STX1B] [STX4] [ZNF646] [TOX3] [TOX3] [TOX3] [TOX3-[]CHD9 [RA11] [TOM1L2] NAGLU-[]-HSD17B1 PLEKHM1-[]- ARL17A LRRC37A3[] CRHR1 SPPL2CC[]MAPT SPPL2CC-[]MAPT SPPL2C-[]MAPT [MAPT] [MAPT]	TRUE TRUE FALSE FALSE FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU

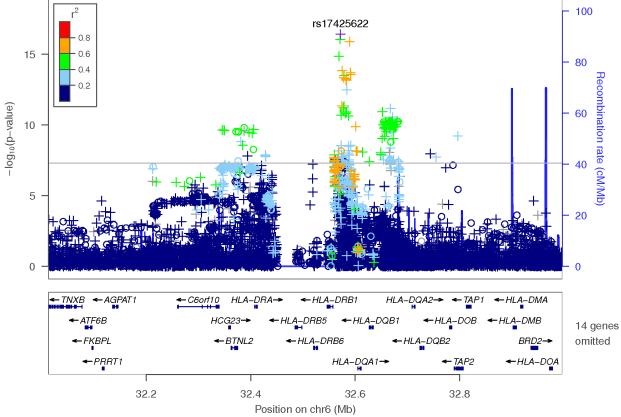
17q21.31	44191483	rs11653367	2.0×10 <sup>-7</sup>	-69904	0.582	rs72836318	heart_metabolic_disease	8.1×10 <sup>-7</sup>	[KANSL1]	FALSE
17q21.31	44191483	rs11653367	2.0×10 <sup>-7</sup>	-69904	0.582	rs72836318	bmi	6.4×10 <sup>-9</sup>	[KANSL1]	FALSE
17q21.31	44191483	rs11653367	$2.0 \times 10^{-7}$	-69904	0.582	rs72836318	weight	5.1×10 <sup>-8</sup>	[KANSL1]	FALSE
17q21.31	44227393	rs2696579	$6.5 \times 10^{-32}$	-61315	0.613	rs201408539	male_pattern_meta	$8.4 \times 10^{-20}$	[KANSL1]	
17q21.31	44227393	rs2696579	$6.5 \times 10^{-32}$	-44410	0.547	rs78381082	height	9.2×10 <sup>-8</sup>	[KANSL1]	TRUE
17q21.31	44289832	rs2696466	$4.0 \times 10^{-19}$	-89640	0.537	rs9908639	iqb.cartwheel	$3.4 \times 10^{-7}$	[KANSL1]	TRUE
17q21.31	44227393	rs2696579	6.5×10 <sup>-32</sup>	55079	0.599	rs2668658	iqb.fresh_cucumbers_yummy	6.8×10 <sup>-9</sup>	KANSL1[] LRRC37A KANSL1[]	TRUE
17q21.31	44227393	rs2696579	$6.5 \times 10^{-32}$	77806	0.765	rs2260227	bald_image	$2.8 \times 10^{-13}$	LRRC37A	TRUE
17q21.31	44699851	rs116956554	$1.5 \times 10^{-26}$	-26900	0.681	rs147847247	nearsightedness	$3.7 \times 10^{-7}$	[NSF]	TRUE
17q21.31	44699851	rs116956554	$1.5 \times 10^{-26}$	0	1.000	rs116956554	hair_loss	$5.4 \times 10^{-18}$	[NSF]	TRUE
17q21.31	44812188	rs199447	2.5×10 <sup>-26</sup>		0.661	rs7224296	community_standing	$6.0 \times 10^{-8}$	[NSF]	TRUE
17q21.31	44812188	rs199447	2.5×10 <sup>-26</sup>	13868	0.992	rs9896243	vertex	9.5×10 <sup>-7</sup>	[NSF]	TRUE
17q21.31	44812188	rs199447	2.5×10 <sup>-26</sup>	36250	0.767	rs199524	eyecolor_herc2_blue	$1.1 \times 10^{-10}$	[WNT3]	TRUE
17q24.2	65892280	rs59640213	$1.0 \times 10^{-6}$	55360	0.658	rs12449442	weight	4.6×10 <sup>-7</sup>	[BPTF]	FALSE
Xq24	119436726	rs5909698	4.4×10 <sup>-5</sup>	2609	0.966	rs5957354	eyecolor_herc2_blue	2.2×10 <sup>-16</sup>	[TMEM255A]	TRUE
Xq24	119436726	rs5909698	4.4×10 <sup>-5</sup>	2609	0.966	rs5957354	eyecolor_simple	2.3×10 <sup>-14</sup>	[TMEM255A]	TRUE

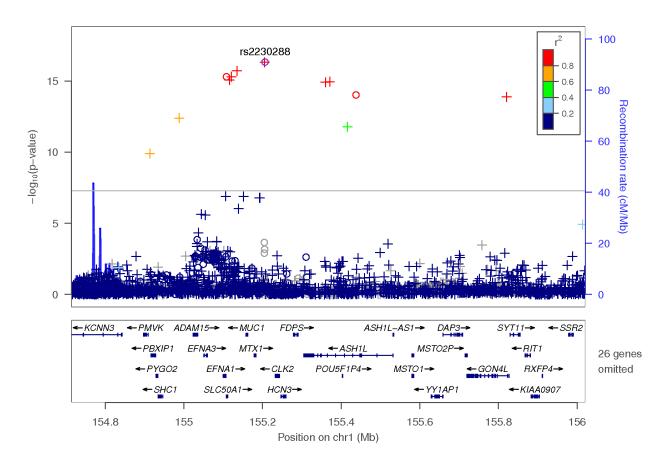
# **Regional Association Plots**

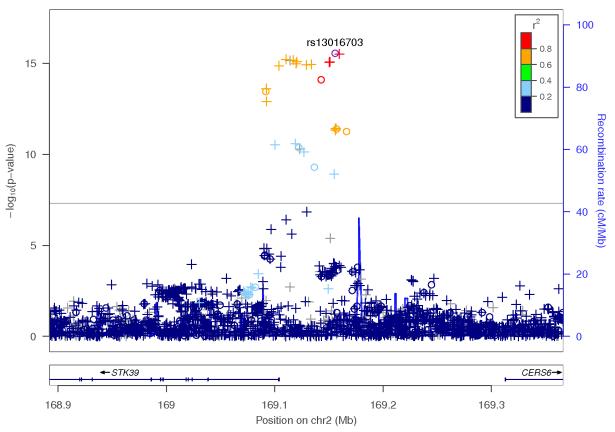


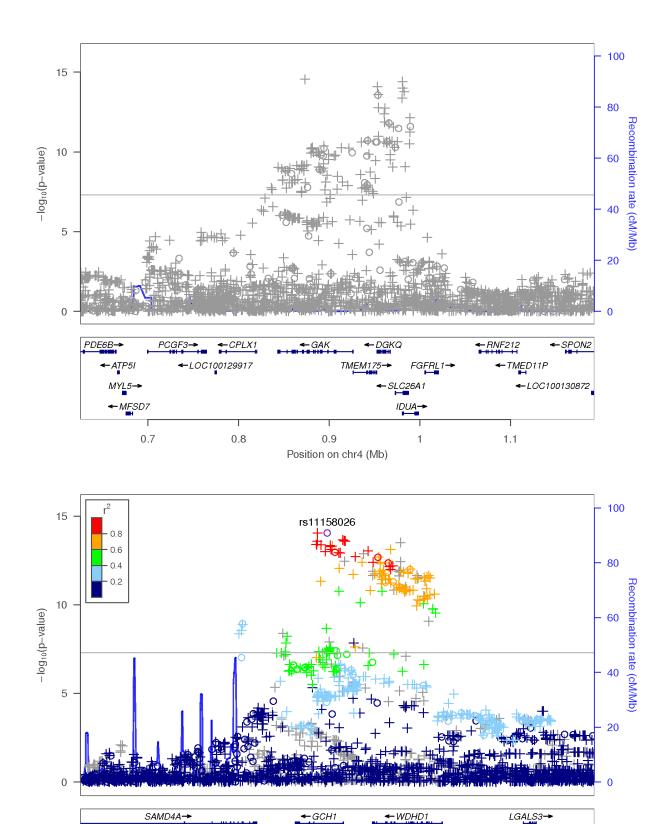












**←** WDHD1

55.5

-DLGAP5

55.6

**←** MIR4308

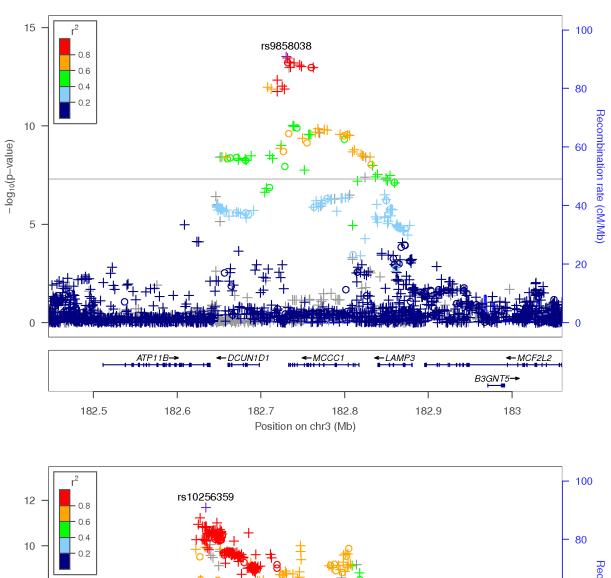
Position on chr14 (Mb)

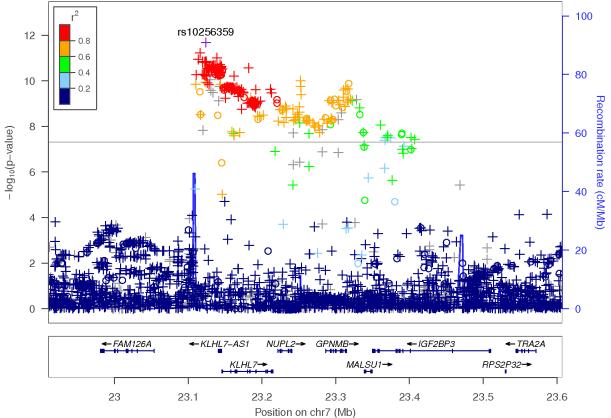
55.4

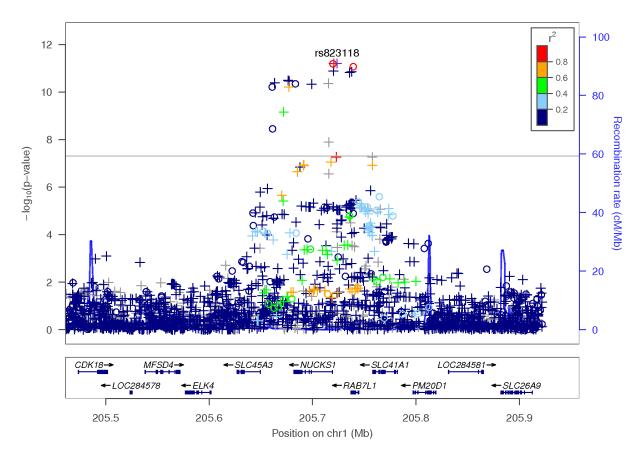
55.3

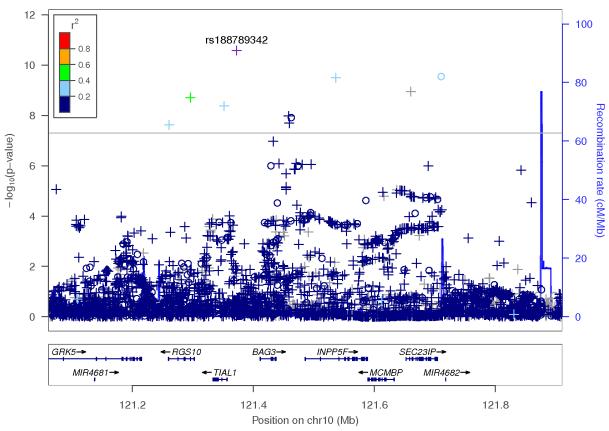
55.1

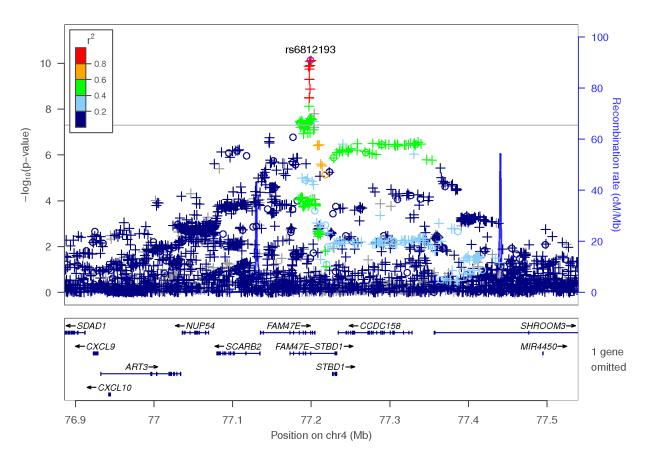
55.2

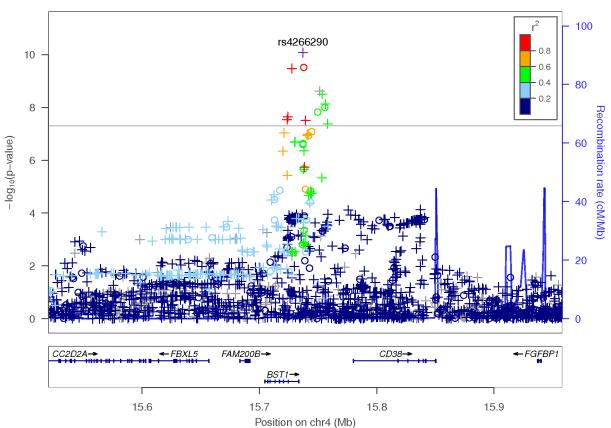


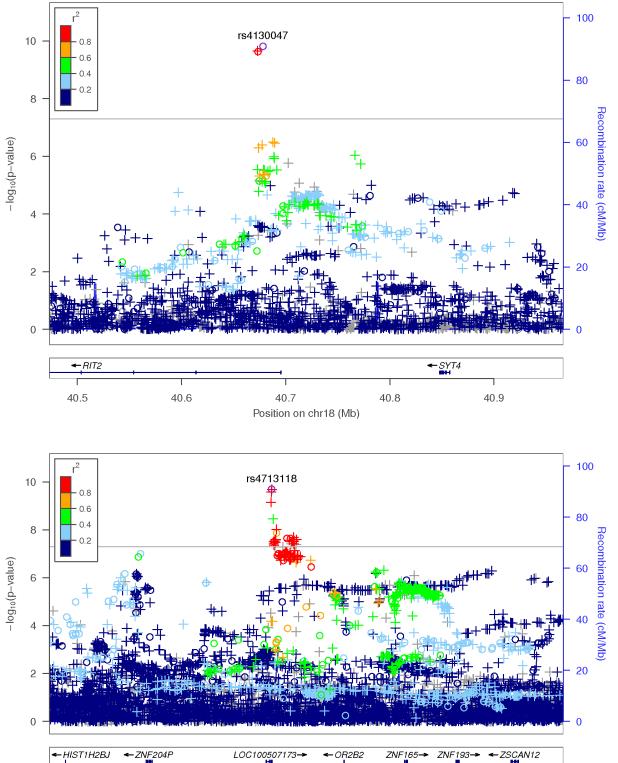


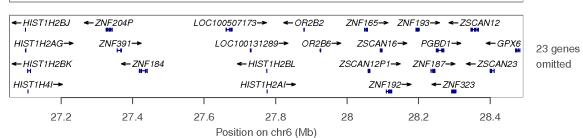


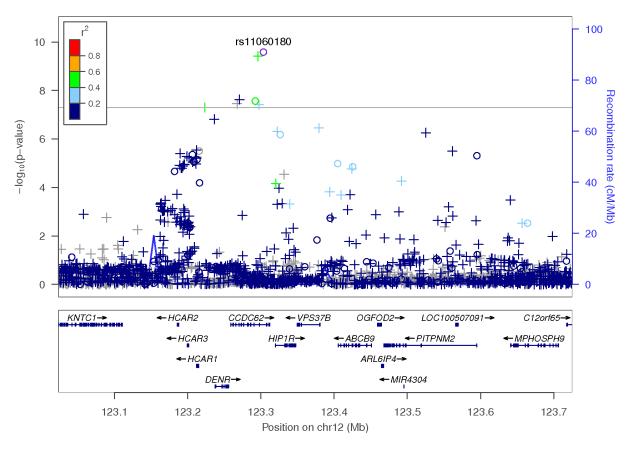


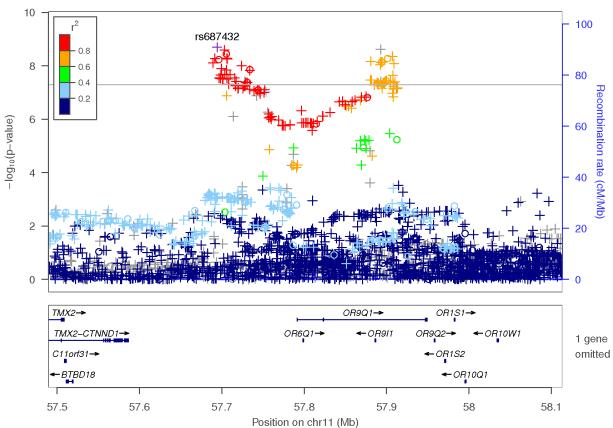


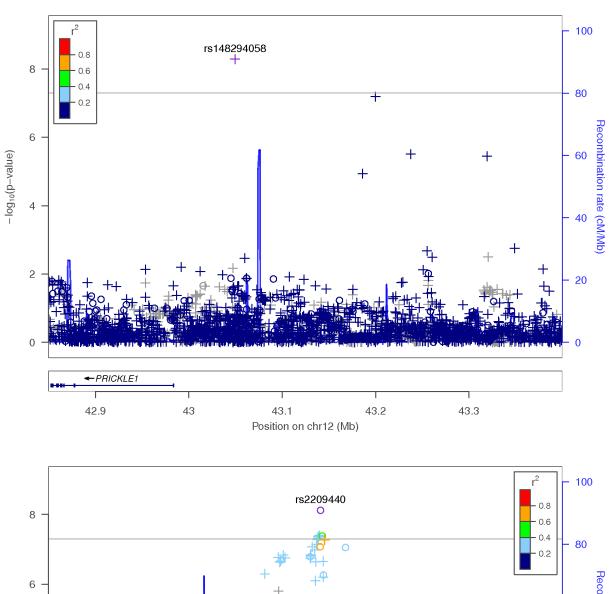


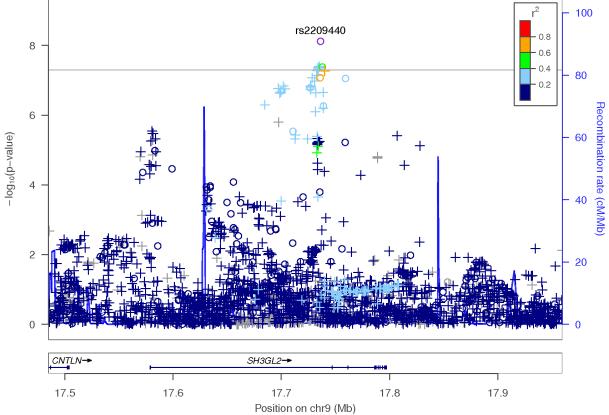


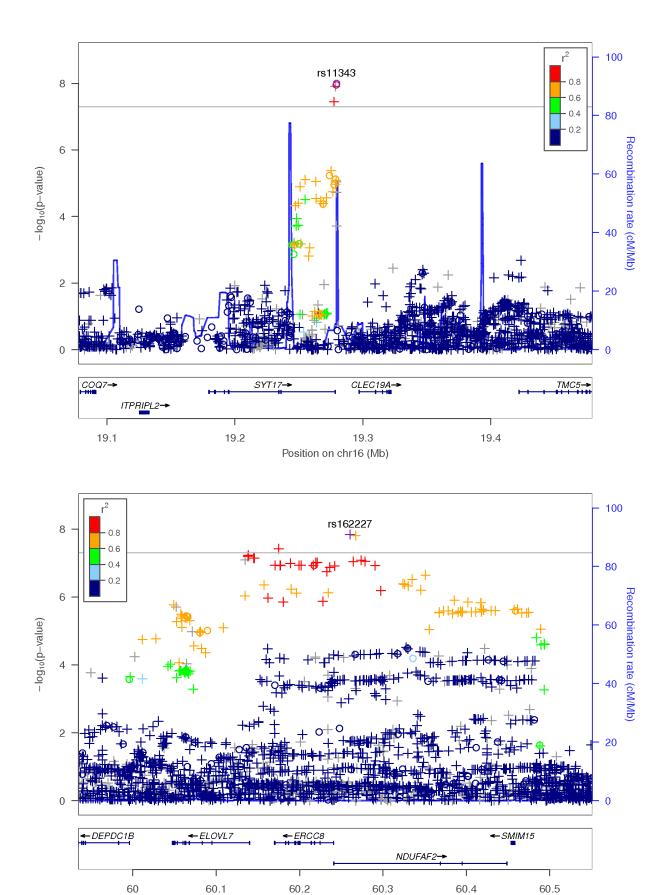












60.3

Position on chr5 (Mb)

