

Table S1. SNP information and F values.

Age at smoking initiation

SNP	effect_allele	other_allele	effect_allele	other_allele	beta	expos	beta	outcor	eaf	exposur	eaf	outcom	remove	palindromic	ambiguous	id.outcome	se.outcome	pval.outcom	outcome	mr_keep	ori	pval_origin	data_source	chr.exposur	pos.exposu	se.exposure	pval.exposu	ncase.expos	exposure	mr_keep	ex	pval_origin	id.exposure	data_sourc	action	mr_keep	samplesize	EAF2	MAF	PVE	FSTAT
1 rs11080208	C	T	C	T	-0.0176	-0.1414	0.752485	0.75	FALSE	FALSE	FALSE	Dbvu5u	0.1846	0.4436	outcome	TRUE	reported	textfile	60	17	33223425	0.003	8.63E-10	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.247515	0.247515	0.0001064	34.417565					
2 rs11780471	A	G	A	G	0.0369	-0.3499	0.0755467	0.08	FALSE	FALSE	FALSE	Dbvu5u	0.3151	0.2668	outcome	TRUE	reported	textfile	681	8	27487202	0.005	1.59E-12	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.9244533	0.0755467	0.0001684	54.464063					
3 rs11915747	G	C	G	C	0.0174	0.1286	0.367793	0.37	FALSE	TRUE	FALSE	Dbvu5u	0.1622	0.4279	outcome	TRUE	reported	textfile	626	3	85649890	0.003	1.75E-11	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.632207	0.367793	0.000104	33.639792					
4 rs12575642	T	G	T	G	-0.0183	-0.1839	0.183897	0.18	FALSE	FALSE	FALSE	Dbvu5u	0.1988	0.3548	outcome	TRUE	reported	textfile	26	11	64212171	0.003	1.69E-08	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.816103	0.183897	0.0001151	37.20977					
5 rs241979	A	G	A	G	-0.0159	-0.0101	0.246521	0.25	FALSE	FALSE	FALSE	Dbvu5u	0.1809	0.9557	outcome	TRUE	reported	textfile	27	12	3725308	0.003	3.87E-08	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.753479	0.246521	8.69E-05	28.089826					
6 rs2491383	G	T	G	T	0.0152	-0.1024	0.61829	0.62	FALSE	FALSE	FALSE	Dbvu5u	0.1584	0.5181	outcome	TRUE	reported	textfile	2	10	104856882	0.003	1.30E-08	290963	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.38171	0.38171	8.82E-05	25.670935					
7 rs2607015	C	G	C	G	0.0154	-0.1235	0.441352	0.37	FALSE	TRUE	TRUE	Dbvu5u	0.1694	0.466	outcome	TRUE	reported	textfile	677	6	31795066	0.003	9.60E-09	288075	exposure	TRUE	reported	8Uel21	textfile	2	FALSE	NA	0.558648	0.441352	9.15E-05	26.350928					
8 rs4692334	C	G	C	G	0.018	0.1667	0.803181	0.8	FALSE	TRUE	FALSE	Dbvu5u	0.2016	0.4083	outcome	TRUE	reported	textfile	666	4	28615391	0.003	4.05E-08	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.196819	0.196819	0.0001113	35.999777					
9 rs571312	A	C	A	C	0.0176	0.039	0.239563	0.24	FALSE	FALSE	FALSE	Dbvu5u	0.1817	0.8299	outcome	TRUE	reported	textfile	90	18	60172536	0.003	2.21E-09	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.760437	0.239563	0.0001064	34.417565					
10 rs62180314	C	G	C	G	0.0236	-0.0282	0.207753	0.21	FALSE	TRUE	FALSE	Dbvu5u	0.1914	0.8828	outcome	TRUE	reported	textfile	151	2	63145998	0.003	1.39E-14	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.792247	0.207753	0.0001913	61.884062					
11 rs624833	G	T	G	T	0.0158	0.115	0.328032	0.33	FALSE	FALSE	FALSE	Dbvu5u	0.1678	0.493	outcome	TRUE	reported	textfile	670	4	2879529	0.003	4.98E-09	323386	exposure	TRUE	reported	8Uel21	textfile	2	TRUE	NA	0.671968	0.328032	8.58E-05	27.737606					

Smoking cessation

SNP	effect_allele	other_allele	effect_allele	other_allele	beta.expos	beta.outcor	eaf.exposur	eaf.outcom	remove	palindromic	ambiguous	id.outcome	se.outcome	pval.outcon	outcome	mr_keep	oi	pval_origin	data_source	chr.exposur	pos.exposur	se.exposure	pval.exposu	case.expo	exposure	mr_keep	ex	pval_origin	id.exposure	data_sourc	action	mr_keep	samplesize	EAF2	MAF	PVE	FSTAT
1 rs1009181	C	T	C	T	-0.013	-0.1718	0.33499	0.33	FALSE	FALSE	FALSE	E9Z4TX	0.1681	0.3068	outcome	TRUE	reported	textfile	1885	6	26158765	0.002	3.71E-08	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.66501	0.33499	0.0001088	42.249782	
2 rs10182249	A	G	A	G	-0.0136	0.2413	0.646123	0.65	FALSE	FALSE	FALSE	E9Z4TX	0.1656	0.1451	outcome	TRUE	reported	textfile	1247	2	22741564	0.002	1.61E-08	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.353877	0.353877	0.0001191	46.239762	
3 rs10402271	G	T	G	T	-0.0132	0.3054	0.34493	0.34	FALSE	FALSE	FALSE	E9Z4TX	0.1641	0.06263	outcome	TRUE	reported	textfile	765	19	44825957	0.002	4.30E-08	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.65507	0.34493	0.0001122	43.559776	
4 rs10821537	G	A	G	A	-0.0153	0.1648	0.652087	0.63	FALSE	FALSE	FALSE	E9Z4TX	0.1769	0.3515	outcome	TRUE	reported	textfile	2235	9	133621702	0.002	1.58E-10	375952	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.347913	0.347913	0.0001556	58.522189	
5 rs11338241	A	C	A	C	0.0501	-0.3238	0.0904573	0.09	FALSE	FALSE	FALSE	E9Z4TX	0.2522	0.1992	outcome	TRUE	reported	textfile	2170	9	133597897	0.004	4.96E-41	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.9095427	0.0904573	0.0004038	156.87482	
6 rs11697662	T	C	T	C	-0.0301	0.0315	0.804175	0.79	FALSE	FALSE	FALSE	E9Z4TX	0.2001	0.8751	outcome	TRUE	reported	textfile	855	20	63360653	0.003	2.26E-25	378958	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.195825	0.195825	0.0002656	100.66725	
7 rs11991338	A	G	A	G	0.0182	0.1426	0.170974	0.17	FALSE	FALSE	FALSE	E9Z4TX	0.2471	0.5639	outcome	TRUE	reported	textfile	2024	8	9430954	0.003	2.31E-08	333791	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.829026	0.170974	0.0001102	36.804224	
8 rs2006281	T	C	T	C	-0.0139	-0.1556	0.534791	0.53	FALSE	FALSE	FALSE	E9Z4TX	0.1569	0.3214	outcome	TRUE	reported	textfile	61	14	103861395	0.002	8.11E-10	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.465209	0.465209	0.0001244	48.302251	
9 rs2118362	C	T	C	T	0.0153	-0.064	0.286282	0.28	FALSE	FALSE	FALSE	E9Z4TX	0.1786	0.7203	outcome	TRUE	reported	textfile	3	11	16351537	0.003	2.19E-09	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.713718	0.286282	6.70E-05	26.009866	
10 rs215600	A	G	A	G	-0.0144	-0.0754	0.667992	0.66	FALSE	FALSE	FALSE	E9Z4TX	0.1615	0.6405	outcome	TRUE	reported	textfile	2008	7	32294030	0.002	1.50E-09	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.332008	0.332008	0.0001335	51.839733	
11 rs35033100	C	T	C	T	-0.0307	-0.4646	0.0417495	0.04	FALSE	FALSE	FALSE	E9Z4TX	0.3868	0.2297	outcome	TRUE	reported	textfile	767	20	63095021	0.005	2.31E-08	378958	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.9582505	0.0417495	9.95E-05	37.699401	
12 rs4705014	A	G	A	G	-0.0132	0.1147	0.661034	0.66	FALSE	FALSE	FALSE	E9Z4TX	0.1621	0.4793	outcome	TRUE	reported	textfile	1884	5	156425305	0.002	1.98E-08	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.338966	0.338966	0.0001122	43.559776	
13 rs56049603	G	C	G	C	0.0159	-0.2273	0.202783	0.2	FALSE	TRUE	FALSE	E9Z4TX	0.1832	0.2149	outcome	TRUE	reported	textfile	1423	3	49547810	0.003	8.42E-09	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.797217	0.202783	7.23E-05	28.089855	
14 rs56113850	C	T	C	T	-0.033	0.2074	0.592445	0.58	FALSE	FALSE	FALSE	E9Z4TX	0.165	0.2087	outcome	TRUE	reported	textfile	658	19	40847202	0.002	3.85E-47	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.407555	0.407555	0.0007006	272.2486	
15 rs591143	T	C	T	C	-0.0144	-0.0684	0.629225	0.63	FALSE	FALSE	FALSE	E9Z4TX	0.1571	0.6635	outcome	TRUE	reported	textfile	169	15	47355558	0.002	5.00E-10	388312	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.370775	0.370775	0.0001335	51.839733	
16 rs60749569	T	A	T	A	-0.0266	-0.2094	0.0805169	0.08	FALSE	TRUE	FALSE	E9Z4TX	0.2878	0.4668	outcome	TRUE	reported	textfile	2023	8	42747525	0.004	5.38E-10	355742	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.9194831	0.0805169	0.0001243	44.222251	
17 rs71563618	G	A	G	A	0.0207	0.4042	0.084493	0.09	FALSE	FALSE	FALSE	E9Z4TX	0.2526	0.1096	outcome	TRUE	reported	textfile	1886	7	115197750	0.004	6.91E-09	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.915507	0.084493	6.90E-05	26.780487	
18 rs72740955	T	C	T	C	0.0252	0.1454	0.373757	0.37	FALSE	FALSE	FALSE	E9Z4TX	0.1653	0.3792	outcome	TRUE	reported	textfile	345	15	78557437	0.002	1.30E-25	388312	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.626243	0.373757	0.0004087	158.759918	
19 rs7807019	G	A	G	A	0.0147	-0.0912	0.470179	0.47	FALSE	FALSE	FALSE	E9Z4TX	0.1564	0.5598	outcome	TRUE	reported	textfile	1915	7	117903009	0.002	1.00E-10	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.529821	0.470179	0.0001391	54.022222	
20 rs9607805	T	C	T	C	0.0189	0.2515	0.702783	0.7	FALSE	FALSE	FALSE	E9Z4TX	0.1764	0.1539	outcome	TRUE	reported	textfile	1172	22	41458442	0.003	8.88E-14	388313	exposure	TRUE	reported	FYQyoV	textfile	2	TRUE	NA	0.297217	0.297217	0.0001022	39.689796	

Smoking cigarettes per day

SNP	effect_allele	other_allele	effect_allele	other_allele	beta	exposi	beta	outcor	eaf	exposur	eaf	outcom	remove	palindromic	ambiguous	id.outcome	se.outcome	pval.outcom	outcome	mr_keep	ori	pval_origin	data_source	CHR	exposu	pos.exposu	se.exposure	pval.exposu	case.expos	exposure	mr_keep	ex	pval_origin	id.exposure	data_sourc	action	mr_keep	sample	size	EAF2	MAF	PVE	FSTAT
1 rs11076320A	C	A	C	C	-0.0164	-0.138	0.632207	0.63	FALSE	FALSE	FALSE	Z1glEx	0.1628	0.3966	outcome	TRUE	reported	textfile	1839					16	52063640	0.003	1.06E-10	324557	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.367793	0.367793	9.21E-05	29.88426			
2 rs11217802T	C	T	C	C	0.0205	-0.0866	0.181909	0.18	FALSE	FALSE	FALSE	Z1glEx	0.2111	0.6816	outcome	TRUE	reported	textfile	2096				17	29236995	0.003	8.02E-10	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.818091	0.181909	0.000143	46.694158				
3 rs11663346T	A	T	A	A	-0.0141	0.1448	0.592445	0.59	FALSE	TRUE	FALSE	Z1glEx	0.1582	0.3599	outcome	TRUE	reported	textfile	2116				18	64485223	0.003	1.75E-08	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.407555	0.407555	6.77E-05	22.089865				
4 rs11686893C	T	C	T	T	0.0165	-0.0193	0.286282	0.29	FALSE	FALSE	FALSE	Z1glEx	0.1668	0.9078	outcome	TRUE	reported	textfile	3443				2	147737481	0.003	3.28E-10	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.713718	0.286282	9.26E-05	30.249815				
5 rs11725618C	T	C	T	T	0.0181	-0.1053	0.313121	0.31	FALSE	FALSE	FALSE	Z1glEx	0.1713	0.5387	outcome	TRUE	reported	textfile	3824				4	66188051	0.003	5.71E-11	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.686879	0.313121	0.000115	36.400888				
6 rs11940430A	T	A	T	T	-0.0146	0.2369	0.654076	0.65	FALSE	TRUE	FALSE	Z1glEx	0.1638	0.1483	outcome	TRUE	reported	textfile	3954				4	98588302	0.003	2.94E-08	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.345924	0.345924	7.25E-05	23.684299				
7 rs12660603C	T	C	T	T	-0.0303	-0.2385	0.0437376	0.04	FALSE	FALSE	FALSE	Z1glEx	0.3531	0.4995	outcome	TRUE	reported	textfile	4024				6	97522873	0.006	4.24E-08	300003	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.9562624	0.0437376	8.50E-05	25.50233				
8 rs13254578C	G	C	G	G	0.0353	-0.0505	0.777336	0.77	FALSE	TRUE	FALSE	Z1glEx	0.1854	0.7853	outcome	TRUE	reported	textfile	4283				8	42690703	0.003	4.81E-33	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.222664	0.222664	0.0004239	138.4536				
9 rs13875939C	G	C	G	G	0.0628	0.5082	0.0258449	0.03	FALSE	TRUE	FALSE	Z1glEx	0.5573	0.3618	outcome	TRUE	reported	textfile	1170				15	78719146	0.009	5.71E-13	325689	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.9741551	0.0258449	0.0001495	48.689084				
10 rs14114748G	C	G	C	C	-0.0588	-0.7523	0.0228628	0.02	FALSE	TRUE	FALSE	Z1glEx	0.6063	0.2147	outcome	TRUE	reported	textfile	775				15	78462897	0.009	3.61E-10	325625	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.9771372	0.0228628	0.0001311	42.684182				
11 rs1444026G	T	G	T	T	0.014	0.0741	0.446322	0.44	FALSE	FALSE	FALSE	Z1glEx	0.1669	0.6573	outcome	TRUE	reported	textfile	4165				8	136533583	0.002	2.15E-08	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.553678	0.446322	0.0001501	48.9997				
12 rs14510452T	C	T	C	C	0.0212	0.1482	0.125249	0.12	FALSE	FALSE	FALSE	Z1glEx	0.2323	0.5236	outcome	TRUE	reported	textfile	3436				21	39272184	0.004	1.09E-08	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.874751	0.125249	8.60E-05	28.089828				
13 rs1657936T	C	T	C	C	-0.0189	0.2317	0.781312	0.78	FALSE	FALSE	FALSE	Z1glEx	0.1977	0.2411	outcome	TRUE	reported	textfile	473				15	56820815	0.003	6.52E-10	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.218688	0.218688	0.0001215	39.689757				
14 rs17197116C	T	C	T	T	0.0298	-0.154	0.084493	0.08	FALSE	FALSE	FALSE	Z1glEx	0.2852	0.5892	outcome	TRUE	reported	textfile	176				11	46498752	0.005	4.52E-11	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.915507	0.084493	0.0001088	35.521382				
15 rs1737894G	C	G	C	C	0.0192	-0.1008	0.377734	0.37	FALSE	TRUE	FALSE	Z1glEx	0.1659	0.5433	outcome	TRUE	reported	textfile	3308				20	32466899	0.003	1.69E-14	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.622266	0.377734	0.0001254	40.959749				
16 rs18577141T	G	T	G	G	-0.054	-0.857	0.0238569	0.03	FALSE	FALSE	FALSE	Z1glEx	0.4931	0.08221	outcome	TRUE	reported	textfile	1625				15	78828147	0.007	1.20E-13	325812	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.9761431	0.0238569	0.0001826	59.509839				
17 rs2016968G	C	G	C	C	-0.0193	0.0185	0.571571	0.57	FALSE	TRUE	TRUE	Z1glEx	0.1594	0.9076	outcome	TRUE	reported	textfile	1978				16	89706498	0.003	2.04E-14	324557	exposure	TRUE	reported	88xvfw	textfile	2	FALSE	NA	0.428429	0.0001275	41.387523					
18 rs2060220T	A	T	A	A	0.0201	0.4426	0.133201	0.13	FALSE	TRUE	FALSE	Z1glEx	0.2358	0.06047	outcome	TRUE	reported	textfile	3955				5	167147537	0.004	2.16E-08	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.866799	0.133201	7.73E-05	25.25047				
19 rs2072659G	C	G	C	C	-0.0301	0.1616	0.101392	0.09	FALSE	TRUE	FALSE	Z1glEx	0.2668	0.5447	outcome	TRUE	reported	textfile	3029				1	154576045	0.004	6.44E-13	324557	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.898608	0.101392	0.0001744	56.625276				
20 rs2133203T	C	T	C	C	-0.0162	-0.1546	0.450298	0.45	FALSE	FALSE	FALSE	Z1glEx	0.1572	0.3256	outcome	TRUE	reported	textfile	3065				15	77508845	0.003	2.42E-09	280416	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.549702	0.450298	0.000104	29.159792				
21 rs215600A	G	A	G	G	-0.0225	-0.0754	0.667992	0.66	FALSE	FALSE	FALSE	Z1glEx	0.1615	0.6405	outcome	TRUE	reported	textfile	4111				7	32294030	0.003	2.81E-18	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.332008	0.332008	0.0001723	56.249655				
22 rs2273500C	T	C	T	T	0.035	-0.1402	0.146123	0.14	FALSE	FALSE	FALSE	Z1glEx	0.2175	0.5193	outcome	TRUE	reported	textfile	3405				20	63355597	0.003	7.09E-24	320237	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.853877	0.146123	0.0004249	136.11026				
23 rs2655008T	A	T	A	A	0.0161	0.2568	0.730616	0.73	FALSE	TRUE	FALSE	Z1glEx	0.1786	0.1505	outcome	TRUE	reported	textfile	3458				3	136404933	0.003	1.78E-08	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.269384	0.269384	8.82E-05	28.800935				
24 rs3025383C	T	C	T	T	-0.0307	0.2368	0.180915	0.18	FALSE	FALSE	FALSE	Z1glEx	0.1981	0.232	outcome	TRUE	reported	textfile	4669				9	133637247	0.003	6.01E-22	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.819056	0.180915	0.0003206	104.72047				
25 rs34370696T	C	T	C	C	-0.0192	-0.1108	0.175944	0.18	FALSE	FALSE	FALSE	Z1glEx	0.212	0.6011	outcome	TRUE	reported	textfile	3040				1	166890815	0.003	2.36E-08	324557	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.824056	0.175944	0.0001262	40.959748				
26 rs34406232A	C	A	C	C	-0.0796	-0.4474	0.0258449	0.02	FALSE	FALSE	FALSE	Z1glEx	0.4742	0.3454	outcome	TRUE	reported	textfile	2523				19	40799625	0.007	1.21E-26	325689	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.9741551	0.0258449	0.0003969	129.30859				
27 rs3796462T	C	T	C	C	-0.0147	-0.2045	0.701789	0.7	FALSE	FALSE	FALSE	Z1glEx	0.1659	0.2176	outcome	TRUE	reported	textfile	3949				4	95187678	0.003	3.11E-08	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.298211	0.298211	7.35E-05	24.009853				
28 rs56113850C	T	C	T	T	0.0622	0.2074	0.592445	0.58	FALSE	FALSE	FALSE	Z1glEx	0.165	0.2087	outcome	TRUE	reported	textfile	2661				19	40847202	0.002	1.36E-137	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.407555	0.407555	0.0029536	967.20408				
29 rs6078372A	G	A	G	A	0.0153	0.3046	0.420477	0.42	FALSE	FALSE	FALSE	Z1glEx	0.1578	0.05355	outcome	TRUE	reported	textfile	3080				20	11879643	0.003	1.22E-09	326497	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.579523	0.420477	7.97E-05	26.009841				
30 rs6603895A	T	A	T	T	-0.014	-0.0383	0.513916	0.51	FALSE	TRUE	TRUE	Z1glEx	0.1569	0.8071	outcome	TRUE	reported	textfile	3050				1	18424989	0.002	1.55E-08	324557	exposure	TRUE	reported	88xvfw	textfile	2	FALSE	NA	0.486084	0.486084	0.000151	48.999698				
31 rs669696A	C	A	C	C	-0.0194	0.0257	0.423459	0.42	FALSE	FALSE	FALSE	Z1glEx	0.1556	0.8688	outcome	TRUE	reported	textfile	1882				16	69592233	0.003	1.69E-11	246711	exposure	TRUE	reported	88xvfw	textfile	2	TRUE	NA	0.576541	0.423459	0.0001695	41.817439				
32 rs6699355T	C	T	C	C	-0.0207	0.0679	0.877734	0																																			

Smoking initiation

...	SNP	effect_allele	other_allele	effect_allele	other_allele	beta	se	expos	beta	se	outc	efaf	expos	efaf	outc	remove	palindromic	ambiguous	id.outcome	se.outcome	pval.outc	ncase.outc	outcome	mr_keep	oi	pval_origin	data_sourc	chr.expos	pos.expos	se.expos	pval.expos	ncase.expo	exposure	mr_keep	oe	pval_origin	id.exposure	data_sourc	action	mr_keep	samplesize	EAF2	MAF	PVE	FSTAT
1	rs10001365A	G	A	G	A	-0.0152	0.0654	0.378728	0.38	FALSE	FALSE	FALSE	9MV276	0.1582	0.6791	28243	outcome	TRUE	reported	textfile	174	18260	4	1.47E+08	0.002	4.32E-21	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.621272	0.378728	7.17E-05	57.575986								
2	rs10062607A	C	A	C	A	0.0103	0.0572	0.635189	0.63	FALSE	FALSE	9MV276	0.1604	0.7214	28243	outcome	TRUE	reported	textfile	195	21282	5	79994811	0.002	2.28E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.364811	0.364811	3.29E-05	26.52243									
3	rs1023301G	A	G	A	G	0.0139	-0.0119	0.512922	0.51	FALSE	FALSE	9MV276	0.1564	0.9393	28243	outcome	TRUE	reported	textfile	217	24192	7	1.18E+08	0.002	1.49E-18	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.487078	0.487078	6.00E-05	48.30238									
4	rs1025910C	G	A	G	A	-0.0123	-0.1952	0.294235	0.29	FALSE	TRUE	9MV276	0.1652	0.2373	28243	outcome	TRUE	reported	textfile	83	7504	18	52344970	0.002	4.83E-13	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.705765	0.294235	4.70E-05	37.82241									
5	rs10279261A	G	A	G	G	-0.0122	-0.2131	0.629225	0.63	FALSE	FALSE	9MV276	0.1602	0.1835	28243	outcome	TRUE	reported	textfile	220	24780	7	1.34E+08	0.002	6.87E-14	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.370775	0.370775	4.62E-05	37.20991									
6	rs10444314G	T	G	T	G	-0.00922	-0.0609	0.428429	0.43	FALSE	FALSE	9MV276	0.1578	0.6996	28243	outcome	TRUE	reported	textfile	207	3387	11	7929695	0.002	1.77E-08	780334	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.571571	0.428429	2.72E-05	21.25205									
7	rs10458566G	A	G	A	A	0.0171	-0.2172	0.190855	0.19	FALSE	FALSE	9MV276	0.1962	0.2682	28243	outcome	TRUE	reported	textfile	107	8769	1	50146578	0.002	2.17E-18	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.809145	0.190855	9.08E-05	73.10232									
8	rs1050847T	C	T	C	C	-0.0105	-0.0224	0.550686	0.55	FALSE	FALSE	9MV276	0.1576	0.8868	28243	outcome	TRUE	reported	textfile	69	6512	16	87410128	0.002	3.71E-11	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.449304	0.449304	3.42E-05	27.56243									
9	rs10698711A	G	A	G	G	-0.0201	0.2549	0.052684	0.05	FALSE	FALSE	9MV276	0.339	0.4521	28243	outcome	TRUE	reported	textfile	204	22518	6	1.84E+08	0.002	1.84E-08	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.947316	0.052684	3.13E-05	25.25056									
10	rs10745324G	A	G	A	A	-0.00962	-0.1489	0.672962	0.67	FALSE	FALSE	9MV276	0.1627	0.3601	28243	outcome	TRUE	reported	textfile	92	7780	1	1.12E+08	0.002	1.97E-08	748334	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.327038	0.327038	3.09E-05	23.13604									
11	rs10753633C	C	T	C	C	0.0109	0.0398	0.348907	0.35	FALSE	FALSE	9MV276	0.1672	0.8121	28243	outcome	TRUE	reported	textfile	94	7868	1	1.64E+08	0.002	9.96E-11	780334	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.651093	0.348907	3.81E-05	29.70242									
12	rs10786721A	C	A	C	C	0.0179	2.00E-04	0.416501	0.42	FALSE	FALSE	9MV276	0.1562	0.9991	28243	outcome	TRUE	reported	textfile	2	716	10	1.03E+08	0.002	7.91E-27	748334	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.583499	0.416501	0.000107	80.10229									
13	rs1084445C	T	C	T	T	-0.0121	0.0626	0.225644	0.22	FALSE	FALSE	9MV276	0.1826	0.7317	28243	outcome	TRUE	reported	textfile	110	9213	1	72530838	0.002	1.80E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.774354	0.225644	4.54E-05	36.60241									
14	rs10927035C	T	C	T	T	-0.0127	0.0978	0.196819	0.2	FALSE	FALSE	9MV276	0.2046	0.6327	28243	outcome	TRUE	reported	textfile	103	8089	1	2.44E+08	0.002	2.39E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.803181	0.196819	5.01E-05	40.3224									
15	rs1095041C	C	G	C	C	-0.0113	-0.0426	0.609344	0.6	FALSE	TRUE	9MV276	0.1588	0.7885	28243	outcome	TRUE	reported	textfile	222	25032	7	1869450	0.002	1.54E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.390656	0.390656	3.96E-05	31.92242									
16	rs1101272C	T	C	T	T	0.0143	-0.0133	0.33002	0.33	FALSE	FALSE	9MV276	0.1675	0.9367	28243	outcome	TRUE	reported	textfile	9	1356	10	1.808340	0.002	4.25E-17	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.66998	0.33002	6.35E-05	51.12237									
17	rs11103667T	C	T	C	C	0.0129	-0.129	0.178926	0.18	FALSE	FALSE	9MV276	0.1975	0.5136	28243	outcome	TRUE	reported	textfile	242	27488	9	2.15E+08	0.002	1.47E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.821074	0.178926	1.16E-05	41.6024									
18	rs1111578T	G	T	G	G	-0.0125	-0.214	0.15507	0.15	FALSE	FALSE	9MV276	0.216	0.322	28243	outcome	TRUE	reported	textfile	29	3617	12	1.17E+08	0.002	8.22E-09	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.84493	0.15507	4.85E-05	39.0624									
19	rs11130381T	C	T	C	C	-0.00862	-0.0938	0.525845	0.53	FALSE	FALSE	9MV276	0.163	0.549	28243	outcome	TRUE	reported	textfile	163	16360	3	53815978	0.002	4.83E-08	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.474155	0.474155	2.31E-05	18.57605									
20	rs11162015T	C	T	C	C	-0.00971	-0.2605	0.379722	0.38	FALSE	FALSE	9MV276	0.1606	0.1048	28243	outcome	TRUE	reported	textfile	115	10629	1	87447493	0.002	3.40E-09	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.620278	0.379722	2.93E-05	23.57097									
21	rs11162976C	A	C	A	A	0.0108	0.4936	0.306163	0.31	FALSE	FALSE	9MV276	0.1751	0.004817	28243	outcome	TRUE	reported	textfile	113	10541	1	80356597	0.002	6.47E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.693837	0.306163	3.62E-05	29.15993									
22	rs11186174A	G	A	G	G	-0.0179	0.4184	0.124254	0.12	FALSE	FALSE	9MV276	0.2563	0.1025	28243	outcome	TRUE	reported	textfile	208	23373	6	50921306	0.002	3.16E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.875746	0.124254	4.42E-05	35.60102									
23	rs1119216C	G	C	G	G	0.0139	-0.1384	0.185885	0.19	FALSE	TRUE	9MV276	0.1982	0.485	28243	outcome	TRUE	reported	textfile	3	1159	10	1.05E+08	0.002	8.66E-10	630626	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.814115	0.185885	7.68E-05	48.93025									
24	rs11210225G	A	G	A	A	-0.014	0.05	0.564612	0.56	FALSE	FALSE	9MV276	0.1619	0.7574	28243	outcome	TRUE	reported	textfile	111	10183	1	73394345	0.002	4.94E-18	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.435388	0.435388	6.06E-05	48.99988									
25	rs11258417T	C	T	C	C	-0.0101	-0.1622	0.335984	0.34	FALSE	FALSE	9MV276	0.16	0.3107	28243	outcome	TRUE	reported	textfile	8	1325	10	1.3491053	0.002	3.83E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.664016	0.335984	3.17E-05	25.50244									
26	rs1126757T	C	T	C	C	0.0104	0.0294	0.472167	0.47	FALSE	FALSE	9MV276	0.1578	0.852	28243	outcome	TRUE	reported	textfile	91	7777	19	55368504	0.002	4.15E-11	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.527833	0.472167	3.36E-05	27.03993									
27	rs11405014G	T	A	T	T	-0.0227	0.0659	0.06163	0.06	FALSE	TRUE	9MV276	0.3327	0.8428	28243	outcome	TRUE	reported	textfile	156	15504	3	1.51E+08	0.003	2.56E-11	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.93837	0.06163	7.11E-05	57.543									
28	rs11490018G	C	G	C	C	-0.0209	-0.226	0.058648	0.06	FALSE	TRUE	9MV276	0.3038	0.4569	28243	outcome	TRUE	reported	textfile	67	6236	16	72595157	0.003	1.45E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.941352	0.058648	6.03E-05	48.5342									
29	rs1155641A	G	A	G	G	0.0102	0.1037	0.333996	0.33	FALSE	FALSE	9MV276	0.1649	0.5294	28243	outcome	TRUE	reported	textfile	56	5853	15	965959765	0.002	7.72E-10	805430	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.666004	0.333996	3.23E-05	26.00994									
30	rs11626597T	C	T	C	C	-0.0151	0.284	0.156064	0.16	FALSE	FALSE	9MV276	0.2117	0.1797	28243	outcome	TRUE	reported	textfile	44	4584	14	1.04E+08	0.002	2.73E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.843936	0.156064	7.08E-05	57.00236									
31	rs11632439G	A	G	A	A	0.00898	0.0442	0.44831	0.45	FALSE	FALSE	9MV276	0.1576	0.7793	28243	outcome	TRUE	reported	textfile	54	5614	15	80649671	0.002	3.13E-08	805430	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA													

93	98	rs2135160	C	T	C	T	0.0157	-0.0451	0.091451	0.09	FALSE	FALSE	FALSE	9MV276	0.2612	0.8628	28243	outcome	TRUE	reported	textfile	138	13968	2	2.12E+08	0.003	8.23E-09	748334	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.908549	0.091451	3.66E-05	27.3877
94	99	rs2163413	G	A	G	A	-0.0138	-0.0909	0.175944	0.18	FALSE	FALSE	FALSE	9MV276	0.2052	0.6577	28243	outcome	TRUE	reported	textfile	140	14043	2	2.25E+08	0.002	3.06E-11	796935	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.824056	0.175944	5.97E-05	47.60988
95	100	rs2173019	A	T	A	T	0.0131	-0.1386	0.170974	0.17	FALSE	TRUE	FALSE	9MV276	0.2018	0.4922	28243	outcome	TRUE	reported	textfile	188	20163	5	1.68E+08	0.002	3.47E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.829026	0.170974	5.33E-05	42.90239
96	101	rs2237303	A	G	A	G	-0.0102	0.3805	0.656064	0.66	FALSE	FALSE	FALSE	9MV276	0.1629	0.01953	28243	outcome	TRUE	reported	textfile	223	25083	7	21443987	0.002	6.37E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.343936	0.343936	3.23E-05	26.00994
97	102	rs2289791	T	G	T	G	-0.0128	0.1979	0.240557	0.23	FALSE	FALSE	FALSE	9MV276	0.1791	0.2693	28243	outcome	TRUE	reported	textfile	53	5382	15	67184614	0.002	2.87E-12	805430	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.759443	0.240557	5.09E-05	40.9599
98	103	rs2292239	G	T	G	T	0.0108	-0.0479	0.666998	0.66	FALSE	FALSE	FALSE	9MV276	0.1638	0.7697	28243	outcome	TRUE	reported	textfile	33	3792	12	56088396	0.002	1.03E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.333002	0.333002	3.62E-05	29.15999
99	104	rs2313500	T	C	T	C	0.0128	0.2521	0.244533	0.25	FALSE	FALSE	FALSE	9MV276	0.2034	0.2152	28243	outcome	TRUE	reported	textfile	186	19820	5	1.55E+08	0.002	1.99E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.755467	0.244533	5.09E-05	40.9599
100	105	rs2402821	A	G	A	G	0.0103	-0.036	0.623236	0.62	FALSE	FALSE	FALSE	9MV276	0.1566	0.818	28243	outcome	TRUE	reported	textfile	219	24596	7	1.27E+08	0.002	3.51E-09	697342	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.37674	0.37674	3.80E-05	26.52242
101	106	rs2678903	G	A	G	A	0.0104	0.3282	0.591451	0.59	FALSE	FALSE	FALSE	9MV276	0.1583	0.03812	28243	outcome	TRUE	reported	textfile	144	14232	2	57910795	0.002	1.25E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.408549	0.408549	3.36E-05	27.03993
102	107	rs2708630	T	C	T	C	-0.0102	-0.1452	0.691849	0.69	FALSE	FALSE	FALSE	9MV276	0.1666	0.3837	28243	outcome	TRUE	reported	textfile	114	10578	1	8387344	0.002	9.99E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.308151	0.308151	3.23E-05	26.00994
103	108	rs2711607	T	G	T	G	0.0114	0.2028	0.157058	0.16	FALSE	FALSE	FALSE	9MV276	0.2071	0.3275	28243	outcome	TRUE	reported	textfile	52	5368	15	53825245	0.002	4.09E-08	805430	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.842942	0.157058	4.03E-05	32.48992
104	109	rs2783130	G	A	G	A	-0.00877	-0.0351	0.502982	0.5	FALSE	FALSE	FALSE	9MV276	0.155	0.8207	28243	outcome	TRUE	reported	textfile	41	4543	13	79596025	0.002	2.71E-08	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.497018	0.497018	2.39E-05	19.22818
105	110	rs2876586	A	G	A	G	0.00905	0.2323	0.407555	0.41	FALSE	FALSE	FALSE	9MV276	0.1588	0.1435	28243	outcome	TRUE	reported	textfile	202	22490	6	1.45E+08	0.002	1.88E-08	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.592445	0.407555	2.54E-05	20.47557
106	111	rs288181	T	C	T	C	-0.00923	-0.0837	0.317097	0.31	FALSE	FALSE	FALSE	9MV276	0.1681	0.6183	28243	outcome	TRUE	reported	textfile	184	19759	5	1.08E+08	0.002	4.11E-08	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.682903	0.317097	2.64E-05	21.29817
107	112	rs2939756	A	G	A	G	-0.0103	-0.182	0.489066	0.49	FALSE	FALSE	FALSE	9MV276	0.1555	0.2419	28243	outcome	TRUE	reported	textfile	22	3310	11	41414747	0.002	6.87E-11	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.510934	0.489066	3.69E-05	26.52242
108	113	rs3110590	A	C	A	C	0.0111	-0.0967	0.248509	0.25	FALSE	FALSE	FALSE	9MV276	0.1777	0.5863	28243	outcome	TRUE	reported	textfile	80	7303	18	30228203	0.002	1.22E-09	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.751491	0.248509	3.82E-05	30.80242
109	114	rs3213876	T	C	T	C	0.0115	0.0381	0.315109	0.31	FALSE	FALSE	FALSE	9MV276	0.1635	0.8157	28243	outcome	TRUE	reported	textfile	85	7677	18	75472023	0.002	5.08E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.684891	0.315109	4.10E-05	30.06242
110	115	rs326341	A	G	A	G	-0.0101	0.4109	0.462227	0.46	FALSE	FALSE	FALSE	9MV276	0.1558	0.008344	28243	outcome	TRUE	reported	textfile	151	14819	3	1.08E+08	0.002	6.16E-10	748334	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.537773	0.462227	3.41E-05	25.50243
111	116	rs332827	A	G	A	G	-0.00893	-0.0913	0.452286	0.45	FALSE	FALSE	FALSE	9MV276	0.1656	0.5812	28243	outcome	TRUE	reported	textfile	108	8797	1	61277488	0.002	2.81E-08	780334	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.547714	0.452286	2.55E-05	19.93617
112	117	rs3436705E	T	C	T	C	0.0138	-0.2587	0.170974	0.17	FALSE	FALSE	FALSE	9MV276	0.1891	0.1713	28243	outcome	TRUE	reported	textfile	130	12483	2	1.37E+08	0.002	1.36E-13	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.829026	0.170974	5.91E-05	47.60988
113	118	rs3448867C	T	C	T	C	0.0176	-0.1623	0.206759	0.21	FALSE	FALSE	FALSE	9MV276	0.1893	0.3912	28243	outcome	TRUE	reported	textfile	51	5260	15	47392739	0.002	8.73E-20	805430	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.793241	0.206759	9.61E-05	77.43891
114	119	rs35891966A	G	A	G	A	-0.019	-0.1058	0.071571	0.07	FALSE	FALSE	FALSE	9MV276	0.3067	0.7301	28243	outcome	TRUE	reported	textfile	20	2960	11	20107765	0.003	6.52E-10	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.928429	0.071571	4.98E-05	40.11101
115	120	rs3781295	A	G	A	G	-0.0116	0.2714	0.387674	0.38	FALSE	FALSE	FALSE	9MV276	0.1611	0.09208	28243	outcome	TRUE	reported	textfile	1	206	10	1.02E+08	0.002	1.13E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.612326	0.387674	4.18E-05	33.63992
116	121	rs3801289	A	C	A	C	-0.0115	0.1933	0.363817	0.36	FALSE	FALSE	FALSE	9MV276	0.1646	0.2402	28243	outcome	TRUE	reported	textfile	229	25951	7	97008955	0.002	3.64E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.636183	0.363817	4.10E-05	33.06242
117	122	rs3814994	T	G	T	G	0.00962	0.0434	0.373757	0.37	FALSE	FALSE	FALSE	9MV276	0.1621	0.789	28243	outcome	TRUE	reported	textfile	228	25935	7	88798071	0.002	7.44E-09	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.626243	0.373757	2.87E-05	23.13604
118	123	rs3895907	A	G	A	G	-0.0129	-0.1279	0.548708	0.55	FALSE	FALSE	FALSE	9MV276	0.156	0.4124	28243	outcome	TRUE	reported	textfile	112	10424	1	74540343	0.002	1.56E-14	723237	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.451292	0.548708	5.75E-05	41.60393
119	124	rs3905125	T	C	T	C	0.0104	0.2819	0.542744	0.54	FALSE	FALSE	FALSE	9MV276	0.1584	0.07516	28243	outcome	TRUE	reported	textfile	101	8049	1	2.37E+08	0.002	4.28E-11	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.457256	0.542744	3.36E-05	27.03993
120	125	rs3934797	A	G	A	G	-0.0151	0.1048	0.171968	0.17	FALSE	FALSE	FALSE	9MV276	0.2063	0.6114	28243	outcome	TRUE	reported	textfile	172	18012	4	1.12E+08	0.002	1.90E-13	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.828032	0.171968	7.08E-05	57.00236
121	126	rs39784	A	C	A	C	0.0115	0.3864	0.722664	0.72	FALSE	FALSE	FALSE	9MV276	0.1761	0.0282	28243	outcome	TRUE	reported	textfile	189	20660	5	1.17E+08	0.002	6.41E-11	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.277336	0.722664	4.10E-05	33.06242
122	127	rs404263	T	C	T	C	-0.0112	0.1716	0.65507	0.65	FALSE	FALSE	FALSE	9MV276	0.1617	0.2885	28243	outcome	TRUE	reported	textfile	31	3720	12	1.25E+08	0.002	1.55E-10	697342	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.34493	0.34493	4.50E-05	31.35991
123	128	rs4044321	G	A	G	A	-0.0164	-0.2424	0.668986	0.66	FALSE	FALSE	FALSE	9MV276	0.164	0.1393	28243	outcome	TRUE	reported	textfile	187	20073	5	1.68E+08	0.002	3.04E-23	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.331014	0.331014	8.35E-05	67.23989
124	129	rs4374330	T	C	T	C	0.0127	0.1765	0.764414	0.76	FALSE	FALSE	FALSE	9MV276	0.1814	0.3305	28243	outcome	TRUE	reported	textfile	135	13576	2	1.81E+08	0.002	3.73E-12	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.235586	0.235586	5.01E-05	40.3224
125	131	rs4479577	T	C	T	C	0.00898	-0.0946	0.498012	0.5	FALSE	FALSE	FALSE	9MV276	0.1567	0.5462	28243	outcome	TRUE	reported	textfile	165	16369	3	5682131	0.002	2.11E-08	780334	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.501988	0.498012	2.58E-05	20.16005
126	132	rs4543592	C	T	C	T	0.012	-0.006	0.49006	0.48	FALSE	FALSE	FALSE	9MV276	0.1571	0.9696	28243	outcome	TRUE	reported	textfile	245	27525	9	3014254	0.002	2.51E-14	805431	exposure	TRUE	reported	ibwP7P	textfile	2	TRUE	NA	0.50994	0.49006	4.47E-05	35.99991
127	133	rs4571506	T	C	T	C	-0.0151	-0.0303	0.481113	0.48	FALSE	FALSE	FALSE	9MV276	0.153	0.8432	2																							

188	196	rs7333559	A	G	G	-0.014	0.0937	0.791252	0.79	FALSE	FALSE	FALSE	9MV276	0.1887	0.6195	28243	outcome	TRUE	reported	textfile	43	4563	13	99894196	0.002	3.24E-13	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.208748	0.208748	6.08E-05	48.99988
189	197	rs745570	G	A	A	-0.0104	0.0024	0.49503	0.49	FALSE	FALSE	FALSE	9MV276	0.1559	0.988	28243	outcome	TRUE	reported	textfile	77	7264	17	79807926	0.002	8.70E-11	780334	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.50497	0.49503	3.47E-05	27.03993
190	199	rs7613227T	G	C	C	0.018	0.1966	0.055666	0.06	FALSE	FALSE	FALSE	9MV276	0.2993	0.5114	28243	outcome	TRUE	reported	textfile	100	8008	1	2.27E+08	0.003	9.43E-09	748334	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.944334	0.055666	4.81E-05	35.9999
191	200	rs7629352	G	A	A	0.00986	-0.1243	0.296223	0.3	FALSE	FALSE	FALSE	9MV276	0.1681	0.4598	28243	outcome	TRUE	reported	textfile	158	15764	3	16807327	0.002	7.82E-09	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.703777	0.296223	3.02E-05	24.30484
192	201	rs763053	C	T	T	-0.0149	0.1047	0.267396	0.26	FALSE	FALSE	FALSE	9MV276	0.1886	0.5787	28243	outcome	TRUE	reported	textfile	65	6057	16	685921	0.002	6.71E-16	799280	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.732604	0.267396	6.94E-05	55.50236
193	202	rs7660858A	A	C	C	-0.0267	0.5149	0.045726	0.04	FALSE	FALSE	FALSE	9MV276	0.3791	0.1744	28243	outcome	TRUE	reported	textfile	90	7774	19	4474728	0.004	2.76E-13	799016	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.954274	0.045726	5.58E-05	44.55551
194	203	rs7666804	C	T	T	-0.0109	-0.0474	0.393638	0.39	FALSE	FALSE	FALSE	9MV276	0.1585	0.7649	28243	outcome	TRUE	reported	textfile	180	19364	4	56883982	0.002	1.18E-08	573529	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.606362	0.393638	5.18E-05	29.7024
195	204	rs77307355C	C	C	T	-0.0112	-0.146	0.21173	0.21	FALSE	FALSE	FALSE	9MV276	0.197	0.4586	28243	outcome	TRUE	reported	textfile	179	19190	4	34838145	0.002	2.07E-08	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.78827	0.21173	3.89E-05	31.35992
196	205	rs7788527	C	T	T	0.00952	-0.2171	0.686879	0.68	FALSE	FALSE	FALSE	9MV276	0.1654	0.1893	28243	outcome	TRUE	reported	textfile	226	25890	7	71114501	0.002	1.58E-08	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.313121	0.313121	2.81E-05	22.65754
197	206	rs7804551	G	A	A	-0.0152	0.1069	0.163022	0.16	FALSE	FALSE	FALSE	9MV276	0.2162	0.621	28243	outcome	TRUE	reported	textfile	230	26024	7	99521487	0.002	1.09E-12	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.836978	0.163022	7.17E-05	57.75986
198	207	rs78175438C	C	T	T	0.0162	0.2166	0.11829	0.12	FALSE	FALSE	FALSE	9MV276	0.2424	0.3716	28243	outcome	TRUE	reported	textfile	122	11331	21	39291329	0.002	2.02E-11	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.88171	0.11829	8.15E-05	65.60984
199	208	rs7829715	C	T	T	-0.0117	0.1677	0.560636	0.56	FALSE	FALSE	FALSE	9MV276	0.1565	0.2839	28243	outcome	TRUE	reported	textfile	234	26226	8	58891277	0.002	1.30E-13	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.439364	0.439364	4.25E-05	34.22242
200	209	rs7830359	T	C	C	-0.0103	0.0309	0.350895	0.35	FALSE	FALSE	FALSE	9MV276	0.1955	0.8744	28243	outcome	TRUE	reported	textfile	231	26068	8	10976748	0.002	3.88E-09	697342	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.649105	0.350895	3.80E-05	26.52242
201	210	rs7922257G	T	G	T	0.0103	0.1471	0.255467	0.26	FALSE	FALSE	FALSE	9MV276	0.1802	0.4142	28243	outcome	TRUE	reported	textfile	205	22526	6	1.65E+08	0.002	1.53E-08	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.744533	0.255467	3.29E-05	26.52243
202	211	rs7929518	G	A	A	0.0116	0.4139	0.772366	0.77	FALSE	FALSE	FALSE	9MV276	0.1854	0.02558	28243	outcome	TRUE	reported	textfile	28	3401	11	86269916	0.002	9.06E-10	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.227634	0.227634	4.18E-05	33.63992
203	212	rs7947391	G	A	A	0.00929	0.1122	0.577535	0.57	FALSE	FALSE	FALSE	9MV276	0.1578	0.4771	28243	outcome	TRUE	reported	textfile	25	3375	11	66419411	0.002	7.55E-09	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.422465	0.422465	2.68E-05	21.57597
204	213	rs7969559	G	A	A	-0.011	0.2541	0.681909	0.68	FALSE	FALSE	FALSE	9MV276	0.1739	0.144	28243	outcome	TRUE	reported	textfile	34	3806	12	69261387	0.002	3.28E-10	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.318091	0.318091	3.76E-05	30.24992
205	214	rs7984311	A	G	G	0.00921	0.2197	0.387674	0.38	FALSE	FALSE	FALSE	9MV276	0.1624	0.1761	28243	outcome	TRUE	reported	textfile	35	3828	13	1E+08	0.002	1.77E-08	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.612326	0.387674	2.63E-05	21.20597
206	215	rs7986094	C	A	A	0.00988	0.1304	0.694831	0.69	FALSE	FALSE	FALSE	9MV276	0.1718	0.448	28243	outcome	TRUE	reported	textfile	36	3838	13	30455794	0.002	5.99E-09	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.305169	0.305169	3.03E-05	24.40354
207	216	rs8001839	G	A	A	0.0094	0.0837	0.323062	0.32	FALSE	FALSE	FALSE	9MV276	0.1639	0.6096	28243	outcome	TRUE	reported	textfile	42	4560	13	96457819	0.002	3.74E-08	780334	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.676938	0.323062	2.83E-05	22.08994
208	217	rs8067305	A	G	G	0.011	-0.0972	0.574553	0.57	FALSE	FALSE	FALSE	9MV276	0.1601	0.5437	28243	outcome	TRUE	reported	textfile	71	6545	17	2072363	0.002	4.95E-12	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.425447	0.425447	3.76E-05	30.24992
209	218	rs8069451	C	T	T	0.0112	0.0641	0.246521	0.25	FALSE	FALSE	FALSE	9MV276	0.181	0.7231	28243	outcome	TRUE	reported	textfile	73	6817	17	39348680	0.002	1.02E-09	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.753479	0.246521	3.89E-05	31.35992
210	219	rs846781	C	T	T	-0.0115	-0.0147	0.737575	0.73	FALSE	FALSE	FALSE	9MV276	0.1726	0.9321	28243	outcome	TRUE	reported	textfile	198	21979	6	1.01E+08	0.002	4.80E-11	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.262425	0.262425	4.10E-05	33.06242
211	220	rs853684	C	T	T	-0.0116	-0.0488	0.380716	0.4	FALSE	FALSE	FALSE	9MV276	0.1753	0.7807	28243	outcome	TRUE	reported	textfile	206	23073	6	28326773	0.002	8.55E-13	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.619284	0.380716	4.18E-05	33.63992
212	221	rs888292	T	A	A	-0.0107	-0.2589	0.295229	0.29	FALSE	TRUE	FALSE	9MV276	0.1693	0.1263	28243	outcome	TRUE	reported	textfile	79	7286	18	27631008	0.002	2.03E-09	748334	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.704771	0.295229	3.82E-05	28.62242
213	222	rs911781	G	A	A	-0.00878	0.0465	0.568588	0.56	FALSE	FALSE	FALSE	9MV276	0.1583	0.7691	28243	outcome	TRUE	reported	textfile	6	1293	10	1.22E+08	0.002	4.99E-08	780334	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.431412	0.431412	2.47E-05	19.27205
214	223	rs9323328	G	A	A	-0.0108	0.1523	0.526839	0.53	FALSE	FALSE	FALSE	9MV276	0.1563	0.33	28243	outcome	TRUE	reported	textfile	47	4649	14	58186796	0.002	7.25E-12	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.473161	0.473161	3.62E-05	29.15993
215	224	rs9375371	A	G	G	0.013	0.0306	0.293241	0.29	FALSE	FALSE	FALSE	9MV276	0.173	0.8596	28243	outcome	TRUE	reported	textfile	213	23858	6	98303804	0.002	1.41E-13	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.706759	0.293241	5.25E-05	42.2499
216	225	rs9402093	T	G	G	0.0101	0.3462	0.691849	0.71	FALSE	FALSE	FALSE	9MV276	0.1693	0.0409	28243	outcome	TRUE	reported	textfile	201	22462	6	1.29E+08	0.002	3.38E-09	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.308151	0.308151	3.17E-05	25.50244
217	226	rs9423279	G	C	C	-0.0108	-0.1743	0.638171	0.63	FALSE	TRUE	FALSE	9MV276	0.166	0.2935	28243	outcome	TRUE	reported	textfile	7	1294	10	1.24E+08	0.002	9.64E-11	775111	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.361829	0.361829	3.76E-05	29.15992
218	227	rs951740	A	G	G	0.0172	-0.1073	0.636183	0.64	FALSE	FALSE	FALSE	9MV276	0.1593	0.5006	28243	outcome	TRUE	reported	textfile	106	8343	1	43546066	0.002	3.78E-26	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.363817	0.363817	9.18E-05	73.95982
219	229	rs9538536	G	T	T	-0.00936	-0.029	0.668986	0.67	FALSE	FALSE	FALSE	9MV276	0.1674	0.8626	28243	outcome	TRUE	reported	textfile	38	4382	13	59962187	0.002	4.28E-08	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.331014	0.331014	2.72E-05	21.90235
220	230	rs9613472	G	A	A	0.00867	0.1095	0.541749	0.54	FALSE	FALSE	FALSE	9MV276	0.1617	0.4984	28243	outcome	TRUE	reported	textfile	124	11350	22	27576518	0.002	4.02E-08	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.458251	0.458251	2.33E-05	18.79218
221	231	rs9627272	C	G	G	-0.00991	0.0928	0.389662	0.38	FALSE	TRUE	FALSE	9MV276	0.1642	0.5721	28243	outcome	TRUE	reported	textfile	127	11605	22	46046408	0.002	1.28E-09	780334	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.610338	0.389662	3.15E-05	24.55196
222	232	rs9633354	A	C	C	0.0107	-0.016	0.704771	0.7	FALSE	FALSE	FALSE	9MV276	0.1667	0.9236	28243	outcome	TRUE	reported	textfile	157	15510	3	1.58E+08	0.002	2.35E-10	805431	exposure	TRUE	reported	iBwP7P	textfile	2	TRUE	NA	0.295229	0.295229</		

Supplementary Table 2. Per-study descriptive statistics for trans-ancestry and ancestry-stratified meta-analyses.

Ancestry	Study Name	Smoking Initiation				Age of Initiation of Smoking					Cigarettes per Day ^{b,e}					Smoking Cessation			
		Phenotype Descriptives		Genomic Control Values		Phenotype Descriptives			Genomic Control Values		Phenotype Descriptives			Genomic Control Values		Phenotype Descriptives		Genomic Control Values	
		N	% Ever Regular Smoker	MAF > 0.01	0.01<= MAF >0.001	N	Mean	Var	MAF > 0.01	0.01<= MAF >0.001	N	Mean	Var	MAF > 0.01	0.01<= MAF >0.001	N	% Current Smoker	MAF > 0.01	0.01<= MAF >0.001
EUR	23andMe - EUR Males	866,242	43%	2.13	1.14	129,200	17.35	18.42	1.11	1.01	129,471	2.38	2.76	1.18	1.02	362,467	23%	1.18	1.04
EUR	23andMe - EUR Females	997,356	41%	1.93	1.13	165,955	16.95	18.80	1.11	1.02	162,521	2.30	2.30	1.22	1.03	396,492	25%	1.30	1.07
EUR	ALSPAC	11,345	42%	1.00	1.01	4,691	16.00	7.80	1.00	1.01	4,314	3.40	2.50	1.01	1.00	4,748	65%	1.00	0.99
EUR	ARIC - TOPMed	6,010	60%	1.04	1.09	3,485	18.72	23.80	1.00	0.90	3,494	2.97	1.17	1.01	0.92	3,575	41%	1.02	0.99
EUR	BEAGESS	4,293	65%	1.02	1.03											2,805	20%	1.02	1.07
EUR	BLS	1,238	46%	1.05	1.03	546	15.70	6.40	1.02	1.05	546	0.70	0.70	1.04	1.02	548	48%	1.03	1.00
EUR	CADD	1,192	85%	1.01	1.00	775	16.10	0.40	1.01	0.89	523	2.40	1.40	1.01	1.06	1,002	33%	1.01	0.95
EUR	COGEND					1,952	13.70	10.70	0.99	1.01	1,940	2.60	2.00	1.01	0.98	1,954	69%	1.02	1.01
EUR	COPDGene - TOPMed					6,520	17.02	17.12	0.96	0.87	6,520	3.43	0.91	0.99	0.80	6,520	39%	0.99	0.84
EUR	deCODE	57,097	70%	1.11	1.05	40,314	9.5 ^a	8.4 ^a	1.06	1.01	44,505	0.9 ^c	0.7 ^c	1.14	1.08	34,820	37%	1.08	1.06
EUR	EGCUT	48,038	42%	1.13	1.07	19,511	18.69	1.06	1.02	1.01	19,732	2.08	0.67	1.06	1.03	20,210	67%	1.04	1.03
EUR	eMERGE - Cataracts	3,873	49%	1.01	1.01											1,884	17%	1.01	1.01
EUR	eMERGE - PAD	1,350	74%	1.01	1.13											1,002	52%	1.03	1.18
EUR	FinnTwin 1	1,006	54%	1.01	1.03	509	16.10	4.60	1.00	1.03	498	2.20	0.60	1.02	0.99	498	76%	1.01	1.05
EUR	FinnTwin 2	8,259	48%	1.02	1.07	3,913	19.25	23.64	1.01	1.04	3,913	14.85	77.90	1.01	1.03	4,163	55%	1.01	1.02
EUR	Framingham - TOPMed	4,076	55%	1.01	1.00	1,399	17.63	9.99	1.00	0.99	1,588	2.80	1.33	0.99	1.00	2,241	59%	1.00	0.98
EUR	Genes for Good	6,151	39%	1.01	1.03	2,198	17.98	16.19	0.99	1.02	2,209	2.16	0.94	0.99	0.97	2,413	31%	1.02	1.09
EUR	GERA																		
EUR	Harvard - Affy	6,901	56%	1.01	1.02	2,160	19.70	15.21	1.00	1.00	3,788	2.82	1.31	1.01	1.00	3,883	22%	1.01	1.06
EUR	Harvard - Illumina	6,456	50%	1.01	1.03	2,390	19.11	11.69	1.01	0.99	3,168	2.69	1.24	1.02	1.01	3,222	22%	1.01	1.06
EUR	Harvard - HumanCore	7,829	44%	1.03	1.03	2,464	17.90	14.41	1.01	1.00	3,395	2.69	1.28	1.00	1.00	3,467	22%	1.01	1.05
EUR	Harvard - OmniExpress	7,819	54%	1.01	1.02	2,734	19.70	13.69	1.00	1.00	4,153	2.73	1.25	1.02	1.01	4,258	22%	1.02	1.05
EUR	Harvard - OncoArray	9,087	46%	1.03	1.03	3,296	18.32	12.65	1.00	1.01	4,051	2.62	1.22	1.01	1.01	4,137	24%	1.01	1.05
EUR	HRS	9,989	57%	1.03	1.02	5,585	17.70	32.70	1.00	0.99	5,306	2.90	1.80	1.00	1.00				
EUR	HUNT	66,716	57%	1.20	1.10	35,311	18.80	26.20	1.05	1.05	33,705	2.10	0.50	1.05	1.05	37,964	58%	1.15	1.10
EUR	MCTFR	6,181	45%	1.02	1.05						2,535	2.60	2.30	1.00	1.03	2,808	67%	1.00	1.02
EUR	MESA - TOPMed	1,963	56%	0.98	0.99						1,034	2.75	1.52	1.04	0.98				
EUR	METSIM	9,607	57%	1.01	1.02	1,500	22.90	70.70	0.99	1.01	1,507	2.30	0.70	1.01	1.00	5,504	72%	1.01	1.02
EUR	NESCOG	477	45%	1.04	1.57						210	2.10	0.80	1.02	1.02	216	27%	1.10	1.24
EUR	NAG-FIN	2,052	85%	0.99	1.00	1,704	17.70	20.50	1.00	1.01	1,716	2.80	0.90	0.99	1.00	1,649	49%	1.01	1.03
EUR	NTR	7,266	47%	1.01	1.06	2,955	18.00	18.10	1.01	1.02	2,725	2.40	0.80	1.00	1.01	3,107	38%	1.01	1.06
EUR	PAGE - CARDIA										685	15.18	10.65	1.02	NA				
EUR	QIMR					4,193	16.80	11.50	1.04	1.04	4,409	3.70	1.20	1.05	1.05				
EUR	SardiNIA	5,459	39%	1.00	1.03	2,057	21.00	40.50	1.00	1.01	2,105	2.50	1.20	1.01	1.03	2,105	54%	1.01	1.01
EUR	UKB	448,196	45%	1.56	1.07	147,551	17.19	11.46	1.20	1.08	143,301	2.70	0.87	1.24	1.10	199,612	17%	1.21	1.06
EUR	NINDS SIGN	3,665	43%	1.00	1.03											1,562	37%	1.00	1.10
EUR	FINRISK	25,097	51%	1.12	1.06	12,912	18.15	23.85	1.03	1.01	6,762	2.30	0.80	1.04	1.02	12,361	55%	1.05	1.03
EUR	WLS	8,496	58%	1.00	1.03	4,709	18.01	18.53	1.01	1.00	4,821	3.24	1.77	1.00	1.01	4,915	27%	1.00	1.01
EUR	Spit for Science	2,734	24%	1.03	1.01						585	1.43	0.51	0.99	0.98				
EUR	AMISH - TOPMed	846	30%	1.01	1.15	222	18.17	11.12	0.90	1.07	123	1.66	0.82	1.02	1.19	209	50%	0.94	1.15
EUR	CFS - TOPMed					228	17.56	23.38	1.05	1.09	228	2.67	1.24	1.08	0.95	228	41%	0.92	0.98
EUR	ECLIPSE - TOPMed					1,353	17.04	16.32	1.00	1.02	1,202	3.15	0.99	1.00	1.04	1,349	39%	1.01	1.01
EUR	GeneSTAR	913	44%	1.06	0.95	382	17.39	13.02	0.94	0.97	160	2.56	0.86	1.07	1.11	403	40%	0.95	1.05
EUR	GOLDN - TOPMed	849	28%	1.03	1.00	197	16.89	17.58	0.95	0.97	117	2.79	2.34	1.01	1.00	234	27%	0.97	0.97
EUR	Boston - TOPMed										64	3.61	1.04	1.03	0.96	64	17%	1.05	1.11

EUR	IPF - TOPMed	425	73%	0.98	0.96	125	18.42	30.29	1.02	1.00	126	2.88	1.18	1.01	1.02	275	11%	1.03	1.05
EUR	CHS - TOPMed	2,295	55%	1.03	0.84						1,219	2.70	1.19	0.91	0.81	1,264	20%	1.04	1.09
EUR	HCHS SOL - TOPMed										91	2.01	1.43	0.98	1.05	107	62%	1.00	1.04
EUR	HVH - TOPMed	626	47%	1.01	0.99											296	17%	1.00	1.02
EUR	JHS - TOPMed	48	29%	1.00	1.10														
EUR	VTE - TOPMed	348	64%	1.00	0.96											223	61%	1.00	1.00
EUR	WGHS - TOPMed	113	50%	1.03	1.00											57	23%	1.04	1.00
EUR	WHI - TOPMed	9,050	50%	1.08	1.49	3,545	19.70	15.56	1.02	1.13	3,424	2.66	1.37	1.00	1.05	4,451	15%	1.04	1.27
EUR	WHI - MOPMAP																		
EUR	WHI - HIPFX																		
EUR	WHI - GARNET																		
EUR	WHI - LLS																		
EUR	WHI - GECCO																		
EUR	WHI - WHIMS+																		
EUR TOTAL SAMPLE SIZE		2,669,029				618,541					618,489					1,147,272			

Table S3. Characteristics of source GWAS cohorts for exposure and outcome variables

Variable	Source	Sample Size	Available Descriptives
Smoking amount (cig/day)	GSCAN	618,489	• <i>None beyond summary statistics</i>
Smoking initiation	GSCAN	2,669,029	• Ever-smoker proportion: 53.7%
Age at smoking initiation	GSCAN	618,514	• Mean age: 17.2 years (SD=4.3)
Smoking cessation	GSCAN	1,147,272	• Former-smoker proportion: 38.2%
Laryngeal cancer	NCI GWAS	89 cases 28,154 controls	• <i>None beyond case-control counts</i> • Control age range: 55–74 years

Table S4. Power analysis results for Mendelian randomization estimates, demonstrating reduced sensitivity to detect moderate effect sizes (odds ratio <15) due to the limited number of laryngeal cancer cases (n=89). The analysis highlights the constraints in statistical power and the increased uncertainty around effect size precision.

Two-stage least squares

Power 0.06

NCP 0.10 Non-Centrality-Parameter

F-statistic 1.72 The strength of the instrument

Power or sample size calculations for two-stage least squares Mendelian Randomization studies using a genetic instrument Z (a SNP or allele score), a continuous exposure variable X (e.g. body mass index [BMI, kgm2]) and a continuous outcome variable Y (e.g. blood pressure [mmHg]).

YZ association

Power 0.49

NCP 3.79 Non-Centrality-Parameter

Power or sample size calculations for the regression association of a genetic instrument Z (e.g. a BMI SNP), with a continuous outcome variable Y (blood pressure).


```
"b<-extract_outcome_data(snps = a$SNP,outcomes = ""ebi-a-GCST90018678"")#Ã·»°/œflΩ·æ÷ "æ>E™b"
```

```
"dat<-harmonise_data(exposure_dat =a,outcome_dat =b)#Ω'±©-∂E f'ç"ÍΩ·æ÷E f'ç-≠Õ .. ¥ÊE™dat"
```

```
"write.csv(dat,file = ""harmonising.csv"")#¥ç¥Ê""...œΩ·π°"
```

```
mr(dat)#MR Σ ÷ E^ dat
```

```
generate_odds_ratios(mr_res = mr(dat))#∂ç Σ ÷ ì‡± %i ∅™a∅or
```

Supplementary Figure 1: Experimental flow chart for the examination of the effect of smoking amount on the risk of laryngeal cancer.

