

Part 1

SNP	CHR	Minor allele	MAF cases	MAF controls	Major allele	CHISQ	P	OR	L95	U95	Emperical P-value	Number of permutations	Gene	Functional Class
rs1051677	2	C	0.045	0.1276	T	10.03	0.001539	0.3221	0.1548	0.6703	0.001016	30504	XRCC5	untranslated
rs6941	2	A	0.045	0.1263	C	9.808	0.001737	0.326	0.1567	0.6782	0.001161	26703	XRCC5	untranslated
rs10473282	5	A	0.4293	0.2947	G	10.49	0.0012	1.8	1.259	2.574	0.001844	16813	GHR	untranslated
rs3736265	4	A	0.025	0.09585	G	9.94	0.001617	0.2419	0.09352	0.6255	0.002531	12246	PPARGC1A	coding-nonsynon
rs582054	3	A	0.5152	0.3947	T	7.676	0.005597	1.629	1.152	2.304	0.003454	8685	IL12A	intron
rs10018284	4	C	0.245	0.3634	T	8.459	0.003632	0.5685	0.3876	0.8337	0.003516	8532	n/a	n/a
rs348457	9	G	0.5202	0.3918	C	8.8	0.003012	1.683	1.192	2.378	0.003707	8091	ALDH1A1	intron,TagSNP:ALDH1A1
rs610529	9	C	0.5255	0.3974	T	8.613	0.003338	1.68	1.186	2.378	0.004014	7472	ALDH1A1	intron,TagSNP:ALDH1A1
rs582537	3	A	0.515	0.3995	C	7.151	0.007491	1.596	1.132	2.251	0.00488	6146	IL12A	intron
rs2161811	9	A	0.565	0.445	G	7.564	0.005956	1.62	1.147	2.287	0.005649	5310	ALDH1A1	intron,TagSNP:ALDH1A1
rs4647201	3	A	0.03571	0.005263	C	7.795	0.005238	7	1.44	34.02	0.005999	5000	EPM2AIP1	coding-nonsynon
rs2227314	3	G	0.5101	0.3979	T	6.675	0.009779	1.576	1.115	2.227	0.006159	4870	IL12A	intron
rs1049216	4	C	0.19	0.2891	T	6.791	0.009163	0.5769	0.3804	0.875	0.006308	4755	CASP3	untranslated
rs348458	9	A	0.5051	0.3822	G	8.012	0.004646	1.65	1.165	2.336	0.007133	4205	ALDH1A1	intron,TagSNP:ALDH1A1
rs2267669	6	G	0.1198	0.2139	A	7.549	0.006006	0.5001	0.3031	0.8253	0.007158	4190	PPARD	intron
rs8191613	8	A	0	0.03109	G	6.348	0.01175	n/a	n/a	n/a	0.007977	3760	NEIL2	coding-nonsynon
rs1805405	1	A	0.09596	0.1727	C	6.162	0.01305	0.5085	0.296	0.8738	0.008212	3652	PARP1	intron
rs10516782	4	G	0.1134	0.2042	A	7.391	0.006554	0.4985	0.2997	0.8291	0.008549	3508	PTPN13	coding-nonsynon
rs1799999	7	T	0.06	0.1289	G	6.635	0.009997	0.4315	0.2242	0.8305	0.009904	3028	PPP1R3A	coding-nonsynon
rs8187915	9	C	0.565	0.451	T	6.86	0.008817	1.581	1.121	2.229	0.01003	2991	ALDH1A1	coding-synon
rs2288087	9	A	0.5619	0.4465	T	6.802	0.009106	1.59	1.121	2.254	0.01003	2991	ALDH1A1	intron,TagSNP:ALDH1A1
rs2839686	10	T	0.23	0.3351	C	6.944	0.008408	0.5928	0.401	0.8765	0.01014	2958	CXCL12	locus
rs13815	22	C	0.2576	0.3679	G	7.196	0.007307	0.5961	0.4078	0.8716	0.01017	2949	MT	coding-nonsynon
rs12922317	16	G	0.29	0.3958	A	6.396	0.01144	0.6234	0.4317	0.9004	0.01028	2916	TNFRSF17	intron,TagSNP:TNFRSF17(BCMA)
rs2303317	9	G	0.5657	0.4524	T	6.671	0.009799	1.576	1.115	2.229	0.01053	2847	ALDH1A1	intron,TagSNP:ALDH1A1
rs2267668	6	G	0.125	0.2088	A	6.266	0.01231	0.5414	0.3333	0.8797	0.01201	2496	PPARD	intron
rs3828942	7	A	0.38	0.4844	G	5.792	0.0161	0.6524	0.4604	0.9246	0.01248	2403	LEP	intron
rs3821107	2	G	0.1717	0.2634	A	6.109	0.01345	0.5796	0.375	0.8959	0.01351	2220	XRCC5	intron,TagSNP:XRCC5(KU80)
rs207928	2	A	0.4697	0.3698	G	5.416	0.01995	1.509	1.066	2.137	0.01365	2196	XRCC5	intron,TagSNP:XRCC5(KU80)
rs207932	2	T	0.475	0.3776	C	5.153	0.0232	1.491	1.055	2.107	0.01365	2196	XRCC5	intron,TagSNP:XRCC5(KU80)
rs2048426	1	T	0.2398	0.3376	C	5.882	0.0153	0.6188	0.4192	0.9136	0.01609	1864	PARP1	intron
rs1002153	1	C	0.1	0.1727	T	5.53	0.01869	0.5323	0.3128	0.906	0.01642	1826	PARP1	intron
rs4633	22	C	0.415	0.5207	T	5.896	0.01518	0.6529	0.4624	0.9219	0.01646	1822	COMT	coding-synon
rs20579	19	T	0.065	0.1263	C	5.256	0.02188	0.481	0.2544	0.9094	0.01666	1800	LIG1	untranslated
rs743534	10	G	0.075	0.1414	T	5.532	0.01867	0.4925	0.2704	0.8972	0.01679	1786	CYP2E1	intron,TagSNP:CYP2E1
rs6028	1	C	0.3737	0.2742	T	5.999	0.01431	1.58	1.094	2.28	0.01694	1770	F5	coding-synon
rs2028373	12	G	0.2778	0.3816	A	6.198	0.01279	0.6233	0.429	0.9057	0.01704	1760	AICDA	coding-synon
rs3774968	4	A	0.355	0.4581	G	5.72	0.01677	0.651	0.4575	0.9263	0.01757	1706	NFKB1	intron
rs7778377	7	T	0.15	0.2306	C	5.284	0.02152	0.5889	0.3737	0.9279	0.0191	1570	STARD3NL	intron
rs16879334	5	G	0	0.02835	C	5.778	0.01623	n/a	n/a	n/a	0.02117	1416	MTRR	coding-nonsynon
rs2193831	2	G	0.3485	0.4378	A	4.268	0.03884	0.6868	0.4805	0.9817	0.02179	1376	ABCB11	intron,TagSNP:ABCB11
rs722921	9	T	0.5606	0.4562	A	5.719	0.01678	1.521	1.078	2.146	0.02185	1372	ALDH1A1	intron,TagSNP:ALDH1A1
rs2082382	5	G	0.5	0.4021	A	5.149	0.02325	1.487	1.055	2.097	0.02208	1358	ADRB2	Promoter
rs12022378	1	T	0.2323	0.1536	C	5.469	0.01936	1.667	1.083	2.565	0.02261	1326	DCLRE1B	coding-nonsynon
rs2515641	10	T	0.08163	0.1495	C	5.418	0.01993	0.5057	0.2825	0.9055	0.02261	1326	CYP2E1	coding-synon,TagSNP:CYP2E1
rs8191664	8	T	0	0.02332	G	4.689	0.03036	n/a	n/a	n/a	0.02278	1316	NEIL2	coding-nonsynon
rs3130618	6	A	0.148	0.2266	C	5.011	0.02519	0.5928	0.3738	0.94	0.02375	1262	BAT4	coding-nonsynon
rs2410558	8	T	0.215	0.3032	C	5.121	0.02363	0.6295	0.4208	0.9416	0.02383	1258	NAT2	locus, TagSNP:NAT2
rs527221	19	C	0.06122	0.1263	G	5.871	0.01539	0.4511	0.2337	0.8708	0.02394	1252	DMPK	coding-nonsynon
rs1411425	9	T	0.0567	0.01579	G	7.48	0.00624	3.747	1.364	10.29	0.02402	1248	ALDH1A1	intron,TagSNP:ALDH1A1
rs2070677	10	T	0.07576	0.1425	A	5.524	0.01876	0.4933	0.2711	0.8977	0.02425	1236	CYP2E1	intron,TagSNP:CYP2E1
rs4986894	10	C	0.095	0.1658	T	5.432	0.01977	0.5281	0.3067	0.9094	0.02506	1196	CYP2C19	locus
rs1042194	10	T	0.1	0.1693	G	5.074	0.02429	0.5453	0.3199	0.9296	0.02506	1196	CYP2C18	untranslated,TagSNP:CYP2C18_19_cluster

Part 2

SNP	CHR	Minor allele	MAF cases	MAF controls	Major allele	CHISQ	P	OR	L95	U95	Empirical P-value	Number of permutations	Gene	Functional Class
rs17112809	10	T	0.025	0.002604	C	6.487	0.01087	9.821	1.139	84.64	0.02558	1172	MMS19L	coding-nonsynon
rs4244285	10	A	0.09596	0.1675	G	5.468	0.01937	0.5275	0.3065	0.9077	0.02566	1168	CYP2C19	coding-synon
rs10249476	7	T	0.405	0.3115	G	5.086	0.02412	1.504	1.054	2.147	0.02634	1138	LEP	Promoter
rs956868	12	A	0.08081	0.1492	C	5.547	0.01852	0.5013	0.2797	0.8983	0.02639	1136	WNK1	coding-nonsynon
rs4129472	5	G	0.148	0.2326	A	5.687	0.01709	0.5729	0.3611	0.9088	0.02643	1134	GHR	intron
rs3731258	7	T	0	0.03158	A	5.937	0.01483	n/a	n/a	n/a	0.02775	1080	CDK6	locus
rs230521	4	G	0.46	0.3627	C	5.216	0.02239	1.497	1.058	2.118	0.02828	1060	NFKB1	intron
rs5882	16	G	0.25	0.3378	A	4.577	0.0324	0.6533	0.4418	0.9662	0.02871	1044	CETP	coding-nonsynon
rs17572019	5	A	0.06111	0.1278	G	5.631	0.01765	0.444	0.2237	0.8813	0.02887	1038	PPARGC1B	coding-nonsynon
rs2070682	7	C	0.365	0.4562	T	4.49	0.0341	0.6852	0.4827	0.9728	0.02927	1024	SERPINE1	intron
rs2470144	15	A	0.5404	0.4471	G	4.534	0.03324	1.454	1.03	2.054	0.02938	1020	CYP19A1	intron
rs2281891	10	A	0.095	0.1605	G	4.732	0.02961	0.549	0.3179	0.9479	0.02967	1010	CYP2C18	coding-nonsynon
rs4151060	10	T	0.1	0.04922	G	5.468	0.01937	2.146	1.117	4.122	0.02979	1006	BTRC	coding-nonsynon
rs1027970	23	C	0.2039	0.1196	T	5.488	0.01915	1.887	1.103	3.226	0.03115	962	Admixture	Admixture
rs679899	2	A	0.3939	0.4895	G	4.788	0.02866	0.678	0.4783	0.961	0.03308	906	APOB	coding-nonsynon
rs2302524	19	C	0.234	0.1603	T	4.48	0.03429	1.6	1.033	2.479	0.03308	906	PLAUR	coding-nonsynon
rs207921	2	G	0.475	0.3856	A	4.289	0.03835	1.441	1.019	2.039	0.03308	906	XRCC5	intron,TagSNP:XRCC5(KU80)
rs1042714	5	G	0.4949	0.4031	C	4.473	0.03443	1.451	1.027	2.05	0.03311	905	ADR2	coding-nonsynon
rs1805414	1	C	0.25	0.3376	T	4.756	0.02919	0.6539	0.4459	0.9592	0.03326	901	PARP1	coding-synon
rs491061	19	G	0	0.02162	A	4.255	0.03914	n/a	n/a	n/a	0.03344	896	CD244	intron
rs3774932	4	A	0.385	0.4845	G	5.281	0.02155	0.666	0.4705	0.9427	0.0348	861	NFKB1	intron
rs4253211	10	C	0.1616	0.09896	G	4.847	0.02769	1.755	1.059	2.909	0.03484	860	ERCC6	coding-nonsynon
rs11862958	16	T	0.43	0.3325	C	5.412	0.02	1.515	1.067	2.151	0.03509	854	TNFRSF17	locus,TagSNP:TNFRSF17(BCMA)
rs7011	14	T	0.3081	0.2266	C	4.578	0.03238	1.52	1.034	2.233	0.0361	830	CINP	coding-nonsynon
rs8679	1	C	0.295	0.2139	T	4.737	0.02953	1.538	1.042	2.269	0.03699	810	PARP1	untranslated
rs216902	12	A	0.3081	0.4043	G	5.14	0.02338	0.6562	0.4554	0.9455	0.03713	807	VWF	coding-synon
rs747657	1	G	0.245	0.3351	C	5.054	0.02457	0.644	0.4382	0.9465	0.03786	765	PARP1	intron
rs488133	6	T	0.3838	0.2995	C	4.217	0.04003	1.457	1.016	2.089	0.03793	790	ESR1	Promoter
rs578430	9	T	0.06061	0.02577	G	4.402	0.03589	2.439	1.035	5.748	0.03856	751	MUSK	coding-nonsynon
rs2076167	6	G	0.1927	0.2732	A	4.407	0.03578	0.635	0.4147	0.9722	0.03903	742	PPARD	coding-synon
rs739485	23	T	0.2745	0.1871	C	4.427	0.03538	1.644	1.032	2.62	0.03978	728	WWC3	intron,Admixture
rs2242578	12	G	0.2979	0.3984	C	5.406	0.02007	0.6408	0.4397	0.9337	0.03989	726	GLI1	locus
rs1709182	6	C	0.2895	0.3743	T	4.038	0.04448	0.6809	0.4676	0.9915	0.04	724	ESR1	intron
rs1801249	13	T	0.5213	0.4317	C	4.01	0.04523	1.433	1.007	2.04	0.04033	718	ATP7B	coding-nonsynon
rs7732671	5	C	0.075	0.1392	G	5.248	0.02198	0.5015	0.2753	0.9134	0.04056	714	PPARGC1B	coding-nonsynon
rs2302387	7	A	0.085	0.1432	G	4.125	0.04225	0.5557	0.3133	0.9857	0.04113	704	ABC4	coding-synon
rs299295	5	T	0.28	0.1979	C	5.065	0.02441	1.576	1.059	2.346	0.04119	703	HMMR	coding-nonsynon
rs882709	9	G	0.035	0.07772	C	4.065	0.04379	0.4304	0.1856	0.9981	0.04119	703	SETX	coding-nonsynon
rs2140516	7	C	0.3586	0.2708	T	4.784	0.02872	1.505	1.042	2.173	0.04125	702	SLC13A1	coding-nonsynon
rs2237580	7	G	0.1222	0.07065	T	4.022	0.0449	1.832	1.007	3.331	0.04149	698	PON1	intron,TagSNP:PON1
rs1801132	6	G	0.275	0.1933	C	5.115	0.02371	1.583	1.061	2.361	0.04246	682	ESR1	coding-synon
rs1341160	10	A	0.075	0.1347	T	4.639	0.03125	0.5208	0.2853	0.9507	0.04296	674	CYP2C9	intron,TagSNP:CYP2C9_8_cluster
rs7709790	5	G	0.1616	0.2345	C	4.203	0.04034	0.6292	0.403	0.9821	0.04328	669	GHR	intron
rs1788817	18	G	0.4293	0.5212	A	4.389	0.03618	0.6911	0.4888	0.9771	0.04348	666	C18orf8	intron
rs506504	11	T	0.06633	0.02865	C	4.645	0.03115	2.409	1.059	5.481	0.04414	656	CHEK1	coding-nonsynon
rs3789452	1	A	0.37	0.2891	T	3.98	0.04603	1.444	1.006	2.075	0.04489	645	ABCA4	locus
rs502570	2	T	0.4082	0.3194	C	4.492	0.03405	1.47	1.029	2.1	0.04503	643	ABCB11	locus,TagSNP:ABCB11
rs17110453	10	C	0.08586	0.1447	A	4.138	0.04193	0.555	0.3128	0.9848	0.04531	639	CYP2C8	locus
rs7751481	6	A	0.195	0.2784	G	4.89	0.02701	0.628	0.415	0.9504	0.04553	636	PPARD	intron
rs520354	2	G	0.4133	0.5	A	3.925	0.04757	0.7043	0.4977	0.9969	0.04603	629	APOB	intron
rs2108622	19	T	0.0731	0.2345	C	3.904	0.04816	1.466	1.002	2.146	0.04685	618	CYP4F2	coding-nonsynon
rs216321	12	T	0.07732	0.1383	C	4.587	0.03221	0.5221	0.2858	0.954	0.04723	613	VWF	coding-nonsynon
rs552976	2	T	0.405	0.3203	C	4.15	0.04165	1.444	1.013	2.059	0.04739	611	ABCB11	intron,TagSNP:ABCB11
rs9862	22	T	0.425	0.5129	C	4.082	0.04334	0.702	0.4977	0.9901	0.04817	601	TIMP3	coding-synon
rs9890721	17	C	0.5	0.4136	T	3.944	0.04704	1.418	1.004	2.002	0.04833	599	MYCBPAP	coding-nonsynon
rs508506	2	T	0.4394	0.3474	G	4.684	0.03044	1.473	1.036	2.092	0.04866	595	ABCB11	intron,TagSNP:ABCB11
rs3731055	3	A	0.02525	0.005291	G	4.313	0.03783	4.87	0.9363	25.33	0.04899	591	XPC	locus,intron
rs3219090	1	A	0.245	0.3237	G	3.889	0.04861	0.678	0.4603	0.9988	0.04983	581	PARP1	intron