Supplementary Table 1. Statistical power calculation for GWAS of endometriosis subtypes

	n_snp	sig_snps	Power
Deep endometriosis（DE）	13423001	726	0.0485
Endometriosis of intestine（EI）	13427626	24	4.20×10-5
Endometriosis of ovary（EO）	13427695	2881	0.551
Endometriosis of pelvic peritoneum（EPP）	13426467	1531	0.51
Endometriosis of rectovaginal septum and vagina（ERSV）	13427681	356	0.0261

Supplementary Table 2. Summary of GWAS data Sources for endometriosis subtypes, menstrual-cycle-related traits, and sex hormone levels

GWAS dataset ID	phenotype	phenotype code	cases	controls	total	PMID	Source	Measurement / phenotype definition
menstrual-cycle-related traits								
ieu-b-5106.vcf	Age at menarche（AAM）	NA	NA	NA	252514	2843698416	ReproGen + UK Biobank	Self-reported age at menarche, recorded in whole years
GCST90104596	Anti-Müllerian hormone (AMH)	NA	NA	NA	7049	3527412917	Ruth et al. + Doetinchem/SWAN/ALSPAC	Circulating AMH level measured in serum or plasma by ELISA
ukb-d-N92.vcf	frequent and irregular menstruation（FIM）	N92	8475	352719	361194	NA	UK Biobank	ICD-10 N92 diagnosis code-based binary case–control phenotype
ukb-b-3278.vcf	Length of menstrual cycle（LMC）	NA	NA	NA	43125	NA	UK Biobank	Self-reported usual menstrual cycle length in days
types of endometriosis								
finngen_R12_N14_ENDOMETRIOSIS_OVARY_QC_hg19	Endometriosis of ovary（EO）	N80.1	7878	130160	138038	NA	FinnGen Project (Release 12)	diagnosis code-based binary case–control phenotype
finngen_R12_N14_ENDOMETRIOSIS_DEEP_QC_hg19	Deep endometriosis（DE）	N80.80、N80.81	3806	271937	275743	NA	FinnGen Project (Release 12)	diagnosis code-based binary case–control phenotype
finngen_R12_N14_ENDOMETRIOSIS_PELVICPERITONEUM_QC_hg19	Endometriosis of pelvic peritoneum（EPP）	N80.3	7617	130160	137777	NA	FinnGen Project (Release 12)	diagnosis code-based binary case–control phenotype
finngen_R12_N14_ENDOMETRIOSIS_RECTPVAGSEPT_VAGINA_QC_hg19	Endometriosis of rectovaginal septum and vagina（ERSV）	N80.4	3226	130160	133386	NA	FinnGen Project (Release 12)	diagnosis code-based binary case–control phenotype
finngen_R12_N14_ENDOMETRIOSIS_INTESTINE_QC_hg19	Endometriosis of intestine（EI）	N80.5	617	130160	130777	NA	FinnGen Project (Release 12)	diagnosis code-based binary case–control phenotype
finngen_R12_N14_ENDOMETRIOSIS_QC_hg19	Endometriosis（EM）	N80	20190	130160	150350	NA	FinnGen Project (Release 12)	diagnosis code-based binary case–control phenotype
Sex hormones								
ieu-b-4864	Total Testosterone	NA	NA	NA	199569	NA	IEU OpenGWAS	Circulating total testosterone level
ieu-b-4869	Bioavailable Testosterone	NA	NA	NA	180386	NA	IEU OpenGWAS	Calculated bioavailable testosterone level
ieu-b-4870	Sex hormone binding globulin (SHBG)	NA	NA	NA	214989	NA	IEU OpenGWAS	Circulating sex hormone-binding globulin level
ieu-b-4872	Oestradiol	NA	NA	NA	53391	NA	IEU OpenGWAS	Circulating oestradiol level
GCST90483485	Progesterone levels	NA	NA	NA	17956	4022959918	GWAS Catalog	Progesterone level used as a quantitative reproductive hormone phe

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	6	151840684	rs9397422	A	G	-6.580463	43.302488	-58.608846	3.80E-21
AAM_EM	AAM	EM	6	151845578	rs7763324	C	T	-6.502106	42.277377	-57.789446	7.16E-21
AAM_EM	AAM	EM	3	127901786	rs2811479	A	G	6.903044	47.652011	45.215550	1.23E-16
AAM_EM	AAM	EM	3	127902091	rs2811480	T	G	6.899738	47.606391	44.692627	1.84E-16
AAM_EM	AAM	EM	3	127892037	rs2999052	C	T	6.870448	47.203060	44.404648	2.31E-16
AAM_EM	AAM	EM	3	127895226	rs2687729	G	A	6.863061	47.101608	44.318814	2.47E-16
AAM_EM	AAM	EM	3	127904496	rs2811481	C	T	6.869333	47.187733	44.312277	2.48E-16
AAM_EM	AAM	EM	3	127945349	rs6777054	A	G	-6.868675	47.178698	44.153954	2.80E-16
AAM_EM	AAM	EM	3	127909564	rs2811513	A	G	6.858468	47.038587	44.091281	2.94E-16
AAM_EM	AAM	EM	3	127940353	rs9845651	G	T	-6.852245	46.953259	44.050524	3.04E-16
AAM_EM	AAM	EM	3	127940534	rs6439122	G	A	-6.851662	46.945266	44.046774	3.05E-16
AAM_EM	AAM	EM	3	127944477	rs6775988	G	C	-6.853625	46.972179	44.042897	3.06E-16
AAM_EM	AAM	EM	3	127948149	rs4857878	C	T	-6.787623	46.071833	44.035058	3.07E-16
AAM_EM	AAM	EM	3	127905451	rs2811516	G	A	6.846459	46.873998	44.012670	3.13E-16
AAM_EM	AAM	EM	3	127940440	rs7372902	C	G	-6.846274	46.871470	44.012141	3.13E-16
AAM_EM	AAM	EM	3	127905518	rs2811515	A	G	6.846075	46.868747	44.010205	3.13E-16
AAM_EM	AAM	EM	3	127934329	rs6770140	C	T	-6.845706	46.863692	44.008949	3.14E-16
AAM_EM	AAM	EM	3	127935461	rs6439121	C	G	-6.845706	46.863692	44.008949	3.14E-16
AAM_EM	AAM	EM	3	127920023	rs2811508	C	T	6.844584	46.848335	44.001681	3.16E-16
AAM_EM	AAM	EM	3	127931402	rs7372439	G	A	-6.843463	46.832986	43.994529	3.17E-16
AAM_EM	AAM	EM	3	127934218	rs4857873	G	A	-6.835879	46.729239	43.973834	3.22E-16
AAM_EM	AAM	EM	3	127941439	rs6439123	C	T	-6.836771	46.741438	43.951049	3.28E-16
AAM_EM	AAM	EM	3	127923187	rs6439119	C	T	-6.832581	46.684164	43.924572	3.35E-16
AAM_EM	AAM	EM	3	127934774	rs4384971	A	C	-6.831379	46.667736	43.916843	3.37E-16
AAM_EM	AAM	EM	3	127934269	rs4857874	T	A	-6.831039	46.663099	43.914662	3.38E-16
AAM_EM	AAM	EM	3	127939357	rs4323023	A	T	-6.828340	46.626223	43.912249	3.38E-16
AAM_EM	AAM	EM	3	127943328	rs4857838	G	A	-6.830530	46.656146	43.910930	3.39E-16
AAM_EM	AAM	EM	3	127937645	rs9847576	G	A	-6.829188	46.637802	43.902297	3.41E-16
AAM_EM	AAM	EM	3	127938137	rs9814834	A	G	-6.828679	46.630854	43.899027	3.42E-16
AAM_EM	AAM	EM	3	127936527	rs9879865	T	C	-6.828509	46.628538	43.897937	3.42E-16
AAM_EM	AAM	EM	3	127936532	rs9879866	T	C	-6.828509	46.628538	43.897937	3.42E-16
AAM_EM	AAM	EM	3	127933822	rs4857872	G	T	-6.828015	46.621785	43.895217	3.43E-16
AAM_EM	AAM	EM	3	127918000	rs2492285	A	G	6.826193	46.596907	43.883389	3.46E-16
AAM_EM	AAM	EM	3	127916551	rs2811509	A	G	6.822608	46.547981	43.849053	3.55E-16
AAM_EM	AAM	EM	3	127878817	rs2999049	C	T	6.979135	48.708318	43.833183	3.60E-16
AAM_EM	AAM	EM	3	127934276	rs4857875	T	C	-6.815858	46.455923	43.817066	3.64E-16
AAM_EM	AAM	EM	3	127889287	rs3122173	G	A	6.781416	45.987609	43.812259	3.66E-16
AAM_EM	AAM	EM	3	127895986	rs1554535	A	G	6.870234	47.200112	43.795457	3.70E-16
AAM_EM	AAM	EM	3	127948060	rs4857877	G	A	-6.811624	46.398215	43.788354	3.72E-16
AAM_EM	AAM	EM	3	127898501	rs2811476	C	A	6.814183	46.433096	43.736077	3.88E-16
AAM_EM	AAM	EM	3	127930459	rs9838120	G	A	-6.799483	46.232972	43.710939	3.96E-16
AAM_EM	AAM	EM	3	127930866	rs7374072	A	C	-6.792765	46.141658	43.696092	4.00E-16
AAM_EM	AAM	EM	3	127888347	rs2955120	G	T	6.838542	46.765657	43.641077	4.18E-16
AAM_EM	AAM	EM	3	127939034	rs9857235	T	A	-6.786353	46.054591	43.626932	4.22E-16
AAM_EM	AAM	EM	3	127888067	rs872267	A	G	6.848172	46.897456	43.620342	4.24E-16
AAM_EM	AAM	EM	3	127856573	rs6414310	A	T	-6.881322	47.352595	43.255622	5.63E-16
AAM_EM	AAM	EM	3	127963448	rs13434079	G	A	-6.794084	46.159578	43.217753	5.80E-16
AAM_EM	AAM	EM	3	127907929	rs2811514	G	A	6.805065	46.308905	43.216918	5.81E-16
AAM_EM	AAM	EM	3	127904943	rs2811482	T	C	6.772014	45.860171	43.092561	6.40E-16
AAM_EM	AAM	EM	3	127911820	rs2811512	A	G	6.776646	45.922931	43.038308	6.67E-16
AAM_EM	AAM	EM	3	127836287	rs4857836	T	C	-6.819901	46.511048	42.984224	6.96E-16
AAM_EM	AAM	EM	3	127942379	rs9873786	G	A	-6.757913	45.669382	42.917777	7.33E-16
AAM_EM	AAM	EM	3	127958013	rs4074440	A	G	-6.766429	45.784564	42.895598	7.46E-16
AAM_EM	AAM	EM	3	127867397	rs67451924	A	G	6.834307	46.707758	42.894833	7.46E-16
AAM_EM	AAM	EM	3	127836319	rs4857837	G	A	-6.798111	46.214307	42.842077	7.77E-16
AAM_EM	AAM	EM	3	127933203	rs11707297	C	G	-6.744083	45.482657	42.830122	7.84E-16

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	3	127946788	rs9830294	A	G	-6.751824	45.587128	42.705244	8.64E-16
AAM_EM	AAM	EM	3	127819062	rs4857866	C	G	-6.768633	45.814397	42.668469	8.90E-16
AAM_EM	AAM	EM	3	127817508	rs7632756	T	C	-6.769758	45.829630	42.662774	8.93E-16
AAM_EM	AAM	EM	3	127822320	rs7641133	C	T	-6.785111	46.037737	42.636651	9.12E-16
AAM_EM	AAM	EM	3	127978795	rs4555544	A	G	-6.696816	44.847348	42.514887	1.00E-15
AAM_EM	AAM	EM	3	127878416	rs2999048	A	G	6.795411	46.177616	42.173108	1.31E-15
AAM_EM	AAM	EM	3	127881613	rs2955117	A	G	6.470468	41.866952	42.138321	1.34E-15
AAM_EM	AAM	EM	3	127882064	rs2955118	A	G	6.791460	46.123925	42.070996	1.42E-15
AAM_EM	AAM	EM	11	30382899	rs12294104	T	C	4.776918	22.818945	-42.054155	1.43E-15
AAM_EM	AAM	EM	3	127808502	rs7355887	G	C	-6.663710	44.405026	41.945772	1.56E-15
AAM_EM	AAM	EM	11	30381076	rs10835661	C	T	4.760620	22.663504	-41.921394	1.59E-15
AAM_EM	AAM	EM	3	127884937	rs2811473	C	A	6.435584	41.416742	41.904426	1.61E-15
AAM_EM	AAM	EM	6	151800761	rs9397412	T	G	-5.784801	33.463920	-41.669440	1.93E-15
AAM_EM	AAM	EM	3	127885008	rs2687728	A	C	6.333281	40.110443	41.113006	2.98E-15
AAM_EM	AAM	EM	6	151799355	rs1553002	T	A	-5.684751	32.316394	-40.958997	3.36E-15
AAM_EM	AAM	EM	3	128046643	rs4857841	A	G	6.718977	45.144648	40.941929	3.41E-15
AAM_EM	AAM	EM	3	128038373	rs10934853	A	C	6.681812	44.646613	40.876621	3.59E-15
AAM_EM	AAM	EM	11	30395871	rs12223987	T	C	4.563533	20.825835	-40.709970	4.08E-15
AAM_EM	AAM	EM	3	128058617	rs3849531	T	A	6.569749	43.161604	40.480678	4.88E-15
AAM_EM	AAM	EM	6	151849842	rs4870030	A	G	5.981564	35.779113	-40.385392	5.26E-15
AAM_EM	AAM	EM	3	127900522	rs2999055	T	G	5.861390	34.355891	39.256628	1.27E-14
AAM_EM	AAM	EM	3	127904190	rs2811517	C	T	5.845511	34.170004	39.148392	1.38E-14
AAM_EM	AAM	EM	3	127903522	rs2999056	A	G	5.841931	34.128154	39.124618	1.40E-14
AAM_EM	AAM	EM	3	127900494	rs2999060	G	A	5.841931	34.128154	39.116658	1.41E-14
AAM_EM	AAM	EM	3	127947032	rs2955134	C	T	5.847836	34.197185	39.062846	1.47E-14
AAM_EM	AAM	EM	3	127994160	rs2811529	A	G	-6.142761	37.733517	39.002327	1.54E-14
AAM_EM	AAM	EM	3	127891396	rs2955121	G	C	5.819289	33.864130	38.975032	1.58E-14
AAM_EM	AAM	EM	3	127909758	rs2999057	T	C	5.820993	33.883958	38.881765	1.69E-14
AAM_EM	AAM	EM	3	127928277	rs2955128	T	C	5.814263	33.805649	38.837345	1.75E-14
AAM_EM	AAM	EM	3	127926516	rs2955127	G	A	5.812080	33.780280	38.823016	1.77E-14
AAM_EM	AAM	EM	3	127988240	rs2999064	G	C	5.795056	33.582676	38.715880	1.93E-14
AAM_EM	AAM	EM	3	127726996	rs6777484	C	A	-5.779555	33.403251	38.700606	1.95E-14
AAM_EM	AAM	EM	3	127983209	rs2999035	T	C	5.773809	33.336874	38.545048	2.20E-14
AAM_EM	AAM	EM	3	127941947	rs2999088	G	A	5.765331	33.239038	38.541256	2.21E-14
AAM_EM	AAM	EM	3	127888694	rs2687731	T	C	5.753526	33.103058	38.534860	2.22E-14
AAM_EM	AAM	EM	3	127726637	rs6777095	G	A	-5.717659	32.691620	38.502868	2.28E-14
AAM_EM	AAM	EM	3	127730766	rs9824657	C	T	-5.717659	32.691620	38.495932	2.29E-14
AAM_EM	AAM	EM	3	127727450	rs6766665	C	T	-5.712999	32.638359	38.468829	2.34E-14
AAM_EM	AAM	EM	3	127898533	rs2999053	A	G	5.742661	32.978158	38.447412	2.38E-14
AAM_EM	AAM	EM	3	127913714	rs940061	G	A	5.727367	32.802735	38.447071	2.38E-14
AAM_EM	AAM	EM	3	127759214	rs1469658	A	T	-5.779099	33.397986	38.422718	2.42E-14
AAM_EM	AAM	EM	3	127937326	rs2254379	C	A	5.751414	33.078760	38.419937	2.43E-14
AAM_EM	AAM	EM	3	127899986	rs2999054	A	G	5.736422	32.906532	38.419369	2.43E-14
AAM_EM	AAM	EM	3	127877756	rs2955114	C	A	5.866904	34.420564	38.383186	2.50E-14
AAM_EM	AAM	EM	3	127877385	rs2492284	C	T	5.866904	34.420564	38.382770	2.50E-14
AAM_EM	AAM	EM	3	127763254	rs4857834	C	T	-5.762048	33.201194	38.309717	2.65E-14
AAM_EM	AAM	EM	3	127878871	rs2811472	G	A	5.854307	34.272910	38.300356	2.67E-14
AAM_EM	AAM	EM	3	127914512	rs2811510	G	A	5.727367	32.802735	38.286051	2.70E-14
AAM_EM	AAM	EM	3	127870929	rs10934849	G	C	5.849855	34.220802	38.271230	2.73E-14
AAM_EM	AAM	EM	3	127872175	rs11920225	G	C	5.847843	34.197263	38.243826	2.79E-14
AAM_EM	AAM	EM	3	127747841	rs6764517	G	A	-5.751988	33.085364	38.242710	2.79E-14
AAM_EM	AAM	EM	3	127867592	rs73192977	G	T	5.843220	34.143215	38.227820	2.82E-14
AAM_EM	AAM	EM	3	127939444	rs2955131	A	G	5.720833	32.727935	38.214970	2.85E-14
AAM_EM	AAM	EM	3	127903678	rs2955123	C	T	5.705502	32.552754	38.210927	2.86E-14
AAM_EM	AAM	EM	3	127869165	rs4857870	A	G	5.839045	34.094447	38.207996	2.87E-14
AAM_EM	AAM	EM	3	127941072	rs55775237	T	C	5.725718	32.783846	38.160215	2.97E-14

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trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	3	127916490	rs2955124	T	C	5.711473	32.620926	38.150948	3.00E-14
AAM_EM	AAM	EM	3	127726737	rs6777197	G	A	-5.694131	32.423132	38.100636	3.12E-14
AAM_EM	AAM	EM	3	127914853	rs2811484	A	G	5.702593	32.519567	38.091308	3.14E-14
AAM_EM	AAM	EM	3	127914673	rs2811483	C	G	5.699725	32.486866	38.071869	3.19E-14
AAM_EM	AAM	EM	3	127759668	rs1469657	T	C	-5.722451	32.746446	38.070543	3.19E-14
AAM_EM	AAM	EM	6	151768532	rs35143743	C	T	-4.894408	23.955234	-38.063032	3.21E-14
AAM_EM	AAM	EM	3	127890749	rs2248668	G	A	5.673390	32.187350	38.033552	3.28E-14
AAM_EM	AAM	EM	6	151795994	rs9478208	C	A	-5.596284	31.318395	-38.022377	3.31E-14
AAM_EM	AAM	EM	3	127919417	rs2140286	T	C	5.687388	32.346379	37.990064	3.40E-14
AAM_EM	AAM	EM	3	127923810	rs2999058	A	G	5.688710	32.361426	37.947495	3.51E-14
AAM_EM	AAM	EM	3	127775788	rs9847934	A	T	-5.789254	33.515463	37.915772	3.60E-14
AAM_EM	AAM	EM	3	127925192	rs2955125	G	A	5.668566	32.132636	37.865060	3.74E-14
AAM_EM	AAM	EM	3	127824017	rs9835383	G	A	-5.773594	33.334383	37.799293	3.94E-14
AAM_EM	AAM	EM	3	127731673	rs9809866	T	C	-5.720833	32.727935	37.791661	3.96E-14
AAM_EM	AAM	EM	3	127733069	rs4474992	G	A	-5.719246	32.709770	37.781132	4.00E-14
AAM_EM	AAM	EM	3	127913828	rs940062	A	T	5.651558	31.940110	37.750813	4.09E-14
AAM_EM	AAM	EM	3	127757422	rs2217629	G	A	-5.668566	32.132636	37.687749	4.30E-14
AAM_EM	AAM	EM	3	127861822	rs2955093	A	C	5.747632	33.035269	37.636251	4.47E-14
AAM_EM	AAM	EM	3	127872796	rs2999046	T	C	5.738707	32.932753	37.544476	4.81E-14
AAM_EM	AAM	EM	3	127878330	rs2999047	G	A	5.734670	32.886443	37.518070	4.91E-14
AAM_EM	AAM	EM	3	127835629	rs6788879	G	A	-5.708462	32.586540	37.477633	5.06E-14
AAM_EM	AAM	EM	3	127733091	rs4602341	G	A	-5.672169	32.173497	37.470143	5.09E-14
AAM_EM	AAM	EM	3	127838999	rs9821568	A	G	-5.711473	32.620926	37.450863	5.17E-14
AAM_EM	AAM	EM	3	127815475	rs4058156	C	T	-5.717659	32.691620	37.443937	5.20E-14
AAM_EM	AAM	EM	3	127835803	rs6439115	T	C	-5.709967	32.603726	37.440989	5.21E-14
AAM_EM	AAM	EM	3	127819151	rs4857867	C	T	-5.705502	32.552754	37.372738	5.49E-14
AAM_EM	AAM	EM	3	127791708	rs7612065	C	T	-5.705502	32.552754	37.320423	5.72E-14
AAM_EM	AAM	EM	3	127854684	rs2811471	A	G	-5.701149	32.503101	37.302240	5.81E-14
AAM_EM	AAM	EM	3	127845701	rs2811475	T	C	-5.687388	32.346379	37.293988	5.84E-14
AAM_EM	AAM	EM	3	127783442	rs6764003	G	A	-5.701149	32.503101	37.292740	5.85E-14
AAM_EM	AAM	EM	3	127715911	rs6795314	A	T	5.815923	33.824956	37.281096	5.90E-14
AAM_EM	AAM	EM	3	127780082	rs759945	A	G	-5.684754	32.316424	37.280392	5.91E-14
AAM_EM	AAM	EM	3	127781737	rs4857864	C	G	-5.711473	32.620926	37.254023	6.03E-14
AAM_EM	AAM	EM	3	127892851	rs2811474	C	G	5.788071	33.501771	37.215467	6.21E-14
AAM_EM	AAM	EM	3	127799669	rs1554534	T	G	-5.687388	32.346379	37.202216	6.28E-14
AAM_EM	AAM	EM	3	127790606	rs2241688	A	G	-5.678355	32.243711	37.196702	6.30E-14
AAM_EM	AAM	EM	3	127816572	rs6439113	G	A	-5.679616	32.258040	37.195205	6.31E-14
AAM_EM	AAM	EM	3	127716262	rs4857832	A	G	5.778657	33.392877	37.183490	6.37E-14
AAM_EM	AAM	EM	3	127721375	rs28520291	C	T	5.807529	33.727388	37.062779	7.00E-14
AAM_EM	AAM	EM	3	127721543	rs11917022	T	A	5.745776	33.013947	37.032056	7.17E-14
AAM_EM	AAM	EM	3	127720727	rs1469660	C	T	5.772721	33.324310	36.992384	7.39E-14
AAM_EM	AAM	EM	3	127719658	rs67986238	G	A	5.766152	33.248509	36.953986	7.62E-14
AAM_EM	AAM	EM	3	127720740	rs1469659	T	C	5.757832	33.152633	36.886615	8.03E-14
AAM_EM	AAM	EM	3	127721859	rs10433341	A	G	5.752182	33.087603	36.857683	8.21E-14
AAM_EM	AAM	EM	3	127721041	rs6781473	T	G	5.751034	33.074396	36.851070	8.25E-14
AAM_EM	AAM	EM	3	127716585	rs9870753	G	A	5.748011	33.039626	36.850166	8.26E-14
AAM_EM	AAM	EM	3	127723197	rs7611426	G	A	5.756253	33.134450	36.847003	8.28E-14
AAM_EM	AAM	EM	3	128059610	rs1735558	A	G	5.724070	32.764972	36.838919	8.33E-14
AAM_EM	AAM	EM	3	127721468	rs11924834	A	G	5.691405	32.392094	36.819425	8.46E-14
AAM_EM	AAM	EM	3	128038689	rs12486127	A	C	5.725718	32.783846	36.799287	8.59E-14
AAM_EM	AAM	EM	3	128038834	rs12486156	T	C	5.727367	32.802735	36.797064	8.61E-14
AAM_EM	AAM	EM	3	127715133	rs1549874	G	A	5.741032	32.959450	36.787292	8.67E-14
AAM_EM	AAM	EM	3	127721603	rs11924866	C	G	5.741391	32.963569	36.768743	8.80E-14
AAM_EM	AAM	EM	3	128036786	rs13095166	T	C	5.717659	32.691620	36.747901	8.94E-14
AAM_EM	AAM	EM	3	127723233	rs67464627	T	C	5.711473	32.620926	36.738518	9.01E-14
AAM_EM	AAM	EM	3	127723017	rs7645109	C	T	5.732089	32.856843	36.731542	9.06E-14

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	3	127721508	rs11924838	A	G	5.745776	33.013947	36.723082	9.12E-14
AAM_EM	AAM	EM	3	127717702	rs6439104	C	T	5.724070	32.764972	36.697277	9.31E-14
AAM_EM	AAM	EM	3	127724145	rs6767360	G	A	5.716092	32.673706	36.568463	1.03E-13
AAM_EM	AAM	EM	3	127723008	rs7633480	A	G	5.701149	32.503101	36.533403	1.06E-13
AAM_EM	AAM	EM	6	151773504	rs13201167	C	T	-5.222003	27.269318	-36.067966	1.52E-13
AAM_EM	AAM	EM	3	127782427	rs9864797	C	G	-5.511887	30.380902	36.054728	1.54E-13
AAM_EM	AAM	EM	6	151789355	rs963193	G	T	-5.250123	27.563788	-36.036687	1.56E-13
AAM_EM	AAM	EM	6	151771839	rs9371521	C	T	-5.311039	28.207133	-36.004224	1.60E-13
AAM_EM	AAM	EM	3	127721435	rs28636854	T	C	5.712999	32.638359	36.003977	1.60E-13
AAM_EM	AAM	EM	6	151775259	rs1825368	A	C	-5.238369	27.440505	-35.950313	1.67E-13
AAM_EM	AAM	EM	8	25280800	rs6185	G	C	5.970174	35.642976	-35.947380	1.67E-13
AAM_EM	AAM	EM	6	151756070	rs9479041	G	A	-5.326725	28.374000	-35.929765	1.69E-13
AAM_EM	AAM	EM	3	127991149	rs2811413	A	C	-5.408937	29.256603	35.903460	1.73E-13
AAM_EM	AAM	EM	6	151766162	rs3800279	C	T	-4.618249	21.328226	-35.893871	1.74E-13
AAM_EM	AAM	EM	3	127826618	rs11924142	T	C	-5.608573	31.456087	35.842624	1.81E-13
AAM_EM	AAM	EM	3	127719920	rs72967027	C	T	5.584032	31.181417	35.786455	1.89E-13
AAM_EM	AAM	EM	6	151774916	rs3806982	A	G	-5.206918	27.111999	-35.734475	1.97E-13
AAM_EM	AAM	EM	6	151781404	rs13212693	A	T	-5.184150	26.875411	-35.640156	2.12E-13
AAM_EM	AAM	EM	6	151782816	rs9383900	C	A	-5.177396	26.805434	-35.599520	2.19E-13
AAM_EM	AAM	EM	6	151781363	rs13212683	C	T	-5.181591	26.848888	-35.588530	2.21E-13
AAM_EM	AAM	EM	3	127755716	rs1987633	A	C	-5.448487	29.686012	35.540308	2.30E-13
AAM_EM	AAM	EM	8	25267103	rs4871939	A	G	5.885433	34.638321	-35.536211	2.30E-13
AAM_EM	AAM	EM	6	151792026	rs74798609	C	T	-4.033722	16.270912	-35.529828	2.31E-13
AAM_EM	AAM	EM	3	49959156	rs34034116	A	C	8.091157	65.466826	35.458861	2.45E-13
AAM_EM	AAM	EM	3	49959148	rs35275715	G	A	8.079185	65.273234	35.436541	2.49E-13
AAM_EM	AAM	EM	3	49961780	rs6774354	A	G	8.102133	65.644562	35.315516	2.74E-13
AAM_EM	AAM	EM	3	127808815	rs9855015	G	A	-5.753331	33.100818	35.310829	2.75E-13
AAM_EM	AAM	EM	12	115108907	rs8853	C	T	5.468440	29.903839	35.289762	2.79E-13
AAM_EM	AAM	EM	3	49956628	rs11709573	T	C	8.113948	65.836146	35.260426	2.86E-13
AAM_EM	AAM	EM	3	49948728	rs2352984	C	T	8.053590	64.860304	35.068447	3.32E-13
AAM_EM	AAM	EM	3	49949071	rs868891	G	A	8.065390	65.050509	35.056610	3.35E-13
AAM_EM	AAM	EM	6	151767907	rs2128945	G	A	-5.148198	26.503942	-35.042192	3.39E-13
AAM_EM	AAM	EM	3	50217234	rs9831967	T	C	-7.192108	51.726420	34.639992	4.64E-13
AAM_EM	AAM	EM	3	128064118	rs4857879	C	A	5.581097	31.148642	34.585494	4.84E-13
AAM_EM	AAM	EM	6	151757327	rs9383893	C	T	-5.098695	25.996686	-34.409294	5.55E-13
AAM_EM	AAM	EM	6	151794704	rs6937816	C	T	-4.415021	19.492409	-34.319376	5.96E-13
AAM_EM	AAM	EM	8	25248615	rs13261573	A	G	5.740494	32.953272	-34.257886	6.25E-13
AAM_EM	AAM	EM	3	49937505	rs7615206	C	T	8.088315	65.420842	34.251364	6.28E-13
AAM_EM	AAM	EM	6	151759035	rs3800273	C	G	-5.056065	25.563792	-34.183357	6.62E-13
AAM_EM	AAM	EM	3	49926613	rs7627864	G	C	8.094076	65.514071	34.183335	6.62E-13
AAM_EM	AAM	EM	3	49939503	rs3733134	T	C	8.068792	65.105408	34.168341	6.70E-13
AAM_EM	AAM	EM	11	30323189	rs1933349	T	C	4.657543	21.692703	-33.892293	8.32E-13
AAM_EM	AAM	EM	10	90186123	rs7921352	C	T	4.792157	22.964772	-33.786681	9.03E-13
AAM_EM	AAM	EM	11	30314253	rs11031038	C	T	4.660788	21.722943	-33.780420	9.08E-13
AAM_EM	AAM	EM	11	30324475	rs1933348	A	T	4.634962	21.482873	-33.727977	9.45E-13
AAM_EM	AAM	EM	11	30348638	rs4427542	C	G	4.633813	21.472222	-33.711929	9.57E-13
AAM_EM	AAM	EM	11	30356092	rs10767839	A	G	4.617178	21.318335	-33.681899	9.80E-13
AAM_EM	AAM	EM	3	50198537	rs12631337	G	A	-7.380244	54.468002	33.645924	1.01E-12
AAM_EM	AAM	EM	11	30350192	rs2065940	T	C	4.617711	21.323257	-33.590471	1.05E-12
AAM_EM	AAM	EM	3	49908023	rs952594	A	G	8.031237	64.500764	33.549065	1.09E-12
AAM_EM	AAM	EM	11	30309732	rs10767833	C	T	4.626438	21.403931	-33.517247	1.11E-12
AAM_EM	AAM	EM	3	49911155	rs55692411	A	G	8.019700	64.315591	33.492621	1.14E-12
AAM_EM	AAM	EM	11	30311316	rs10742238	G	A	4.622578	21.368228	-33.489281	1.14E-12
AAM_EM	AAM	EM	6	151751908	rs9322320	G	C	-5.016944	25.169723	-33.460673	1.17E-12
AAM_EM	AAM	EM	6	151753421	rs6914656	G	C	-5.021008	25.210525	-33.460015	1.17E-12
AAM_EM	AAM	EM	6	151753395	rs6936936	G	A	-5.018786	25.188215	-33.448736	1.18E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	11	30338275	rs10767835	A	T	4.592011	21.086568	-33.407005	1.22E-12
AAM_EM	AAM	EM	6	151743629	rs6912830	C	A	-4.908021	24.088674	-33.360590	1.26E-12
AAM_EM	AAM	EM	6	151744283	rs3800272	A	G	-4.915408	24.161237	-33.350564	1.27E-12
AAM_EM	AAM	EM	11	30253189	rs550312	G	T	4.531740	20.536668	-33.338581	1.28E-12
AAM_EM	AAM	EM	6	151739642	rs9371516	A	G	-4.906106	24.069881	-33.336666	1.28E-12
AAM_EM	AAM	EM	8	25247181	rs4872310	A	G	5.590820	31.257267	-33.322333	1.30E-12
AAM_EM	AAM	EM	3	49902160	rs2883059	C	T	8.008630	64.138162	33.309989	1.31E-12
AAM_EM	AAM	EM	11	30253318	rs611246	T	A	4.540957	20.620291	-33.297916	1.32E-12
AAM_EM	AAM	EM	11	30254268	rs580646	G	T	4.524639	20.472358	-33.286341	1.34E-12
AAM_EM	AAM	EM	6	151738131	rs3778608	G	A	-4.899262	24.002767	-33.278234	1.34E-12
AAM_EM	AAM	EM	6	151739810	rs9371517	T	G	-4.889680	23.908966	-33.223905	1.40E-12
AAM_EM	AAM	EM	3	49899795	rs3796386	A	G	8.004445	64.071137	33.216457	1.41E-12
AAM_EM	AAM	EM	3	49911449	rs34654589	G	C	7.945120	63.124926	33.181014	1.45E-12
AAM_EM	AAM	EM	6	151736084	rs9397405	T	G	-4.871056	23.727188	-33.099568	1.55E-12
AAM_EM	AAM	EM	6	151753470	rs6913515	C	G	-4.965008	24.651304	-33.088998	1.56E-12
AAM_EM	AAM	EM	11	30247886	rs939433	T	C	4.511735	20.355755	-33.053118	1.60E-12
AAM_EM	AAM	EM	11	30254550	rs595496	C	T	4.491874	20.176936	-33.045302	1.61E-12
AAM_EM	AAM	EM	11	30341210	rs10767837	G	A	4.553745	20.736593	-33.024292	1.64E-12
AAM_EM	AAM	EM	11	30240829	rs518357	T	C	4.527798	20.500957	-33.016433	1.65E-12
AAM_EM	AAM	EM	3	50217654	rs13085567	T	C	-7.271311	52.871969	33.012246	1.65E-12
AAM_EM	AAM	EM	10	90152085	rs1067839	G	A	4.914959	24.156827	-33.007714	1.66E-12
AAM_EM	AAM	EM	3	49901060	rs11130222	T	A	7.955793	63.294643	33.004846	1.66E-12
AAM_EM	AAM	EM	11	30342173	rs3897026	T	A	4.545520	20.661750	-32.959737	1.72E-12
AAM_EM	AAM	EM	11	30338392	rs10767836	C	T	4.531740	20.536668	-32.936485	1.76E-12
AAM_EM	AAM	EM	3	128083332	rs1702122	G	A	6.087066	37.052373	32.893520	1.82E-12
AAM_EM	AAM	EM	6	151732385	rs6921042	C	T	-4.842838	23.453083	-32.849751	1.88E-12
AAM_EM	AAM	EM	12	115092173	rs34803821	T	C	-4.957791	24.579693	32.823118	1.92E-12
AAM_EM	AAM	EM	10	90152140	rs1067840	T	A	4.871056	23.727188	-32.734150	2.06E-12
AAM_EM	AAM	EM	11	30250568	rs654669	C	T	4.475875	20.033457	-32.724456	2.07E-12
AAM_EM	AAM	EM	10	90054899	rs11202704	C	T	-5.454542	29.752025	-32.652958	2.19E-12
AAM_EM	AAM	EM	12	115099805	rs10774760	A	G	-5.242990	27.488942	32.648345	2.20E-12
AAM_EM	AAM	EM	3	50217899	rs11714799	G	T	-7.219191	52.116718	32.616755	2.25E-12
AAM_EM	AAM	EM	11	30255823	rs506197	G	A	4.441338	19.725484	-32.605071	2.28E-12
AAM_EM	AAM	EM	11	30255867	rs506306	G	C	4.440383	19.717003	-32.598142	2.29E-12
AAM_EM	AAM	EM	3	50216114	rs67627084	T	C	-7.192108	51.726420	32.581149	2.32E-12
AAM_EM	AAM	EM	6	151732017	rs6557138	T	C	-4.822177	23.253386	-32.556439	2.36E-12
AAM_EM	AAM	EM	11	30251625	rs639403	T	C	4.434704	19.666597	-32.556244	2.36E-12
AAM_EM	AAM	EM	11	30281330	rs6484477	A	G	4.496445	20.218022	-32.527158	2.42E-12
AAM_EM	AAM	EM	3	128094493	rs1702119	C	T	6.002749	36.032994	32.507270	2.46E-12
AAM_EM	AAM	EM	11	30241032	rs590833	A	G	4.462262	19.911784	-32.490233	2.49E-12
AAM_EM	AAM	EM	11	30271159	rs549346	G	A	4.456527	19.860629	-32.483137	2.50E-12
AAM_EM	AAM	EM	11	30257122	rs560078	G	A	4.442792	19.738401	-32.479798	2.51E-12
AAM_EM	AAM	EM	11	30258770	rs626869	T	C	4.463583	19.923574	-32.479494	2.51E-12
AAM_EM	AAM	EM	11	30255982	rs676349	G	A	4.442543	19.736186	-32.477853	2.51E-12
AAM_EM	AAM	EM	11	30223866	rs606642	A	G	4.292088	18.422018	-32.462819	2.54E-12
AAM_EM	AAM	EM	11	30261910	rs622356	C	A	4.461466	19.904678	-32.458143	2.55E-12
AAM_EM	AAM	EM	11	30253641	rs609896	C	T	4.420877	19.544151	-32.454738	2.56E-12
AAM_EM	AAM	EM	11	30258989	rs615577	A	G	4.456265	19.858300	-32.418700	2.63E-12
AAM_EM	AAM	EM	3	128092102	rs1735538	G	A	5.989879	35.878652	32.411168	2.65E-12
AAM_EM	AAM	EM	11	30369420	rs6484481	T	C	4.457039	19.865195	-32.403475	2.66E-12
AAM_EM	AAM	EM	11	30277028	rs4120820	T	C	4.465986	19.945028	-32.384224	2.70E-12
AAM_EM	AAM	EM	11	30250359	rs537263	C	T	4.429163	19.617481	-32.379833	2.71E-12
AAM_EM	AAM	EM	11	30251351	rs640748	C	A	4.412888	19.473584	-32.354025	2.77E-12
AAM_EM	AAM	EM	10	90167311	rs792208	G	C	4.786161	22.907339	-32.328180	2.83E-12
AAM_EM	AAM	EM	11	30242325	rs572883	T	C	4.412888	19.473584	-32.300203	2.89E-12
AAM_EM	AAM	EM	10	90150837	rs796945	T	C	4.889682	23.908991	-32.252250	3.00E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	11	30250479	rs538236	A	G	4.421535	19.549974	-32.252016	3.00E-12
AAM_EM	AAM	EM	11	30243247	rs543401	G	T	4.410778	19.454963	-32.248411	3.01E-12
AAM_EM	AAM	EM	11	30254683	rs594982	C	A	4.400501	19.364411	-32.247684	3.01E-12
AAM_EM	AAM	EM	11	30249522	rs1716023	C	T	4.410778	19.454963	-32.245431	3.01E-12
AAM_EM	AAM	EM	11	30248826	rs1782509	T	C	4.410778	19.454963	-32.236519	3.04E-12
AAM_EM	AAM	EM	3	128075398	rs1735546	G	T	6.011334	36.136142	32.220456	3.07E-12
AAM_EM	AAM	EM	10	90175306	rs792215	C	A	4.772445	22.776234	-32.208277	3.10E-12
AAM_EM	AAM	EM	11	30250177	rs1716022	T	C	4.394557	19.312133	-32.155318	3.23E-12
AAM_EM	AAM	EM	3	127710474	rs16845806	A	G	5.245329	27.513478	32.143366	3.27E-12
AAM_EM	AAM	EM	3	50223977	rs11717349	T	C	-7.112443	50.586845	32.137171	3.28E-12
AAM_EM	AAM	EM	11	30235497	rs586326	A	G	4.370438	19.100731	-32.134207	3.29E-12
AAM_EM	AAM	EM	11	30249550	rs1782510	C	A	4.394557	19.312133	-32.126847	3.31E-12
AAM_EM	AAM	EM	11	30237518	rs664147	T	C	4.366943	19.070189	-32.108585	3.36E-12
AAM_EM	AAM	EM	11	30248392	rs1630084	A	G	4.410778	19.454963	-32.087908	3.41E-12
AAM_EM	AAM	EM	11	30255185	rs6169	T	C	4.372198	19.116118	-32.087076	3.41E-12
AAM_EM	AAM	EM	3	50228767	rs3755831	T	G	-7.033091	49.464365	32.085542	3.42E-12
AAM_EM	AAM	EM	11	30249084	rs1716024	T	C	4.386856	19.244506	-32.069945	3.46E-12
AAM_EM	AAM	EM	3	50223593	rs2073726	A	T	-7.078243	50.101523	32.044653	3.53E-12
AAM_EM	AAM	EM	3	49914397	rs11712056	C	T	7.870935	61.951621	32.033207	3.56E-12
AAM_EM	AAM	EM	11	30225170	rs1716021	C	G	4.230665	17.898529	-32.023107	3.59E-12
AAM_EM	AAM	EM	11	30241731	rs489096	T	C	4.394557	19.312133	-31.981396	3.71E-12
AAM_EM	AAM	EM	11	30223861	rs606651	A	C	4.224004	17.842206	-31.947870	3.81E-12
AAM_EM	AAM	EM	11	30234394	rs601681	T	C	4.325772	18.712300	-31.947049	3.81E-12
AAM_EM	AAM	EM	11	30229234	rs476669	A	C	4.270536	18.237480	-31.935067	3.84E-12
AAM_EM	AAM	EM	11	30227923	rs655183	T	A	4.270536	18.237480	-31.910950	3.92E-12
AAM_EM	AAM	EM	12	115098094	rs9634162	A	G	-5.127894	26.295300	31.901105	3.95E-12
AAM_EM	AAM	EM	11	30234432	rs601640	A	G	4.322888	18.687360	-31.864012	4.06E-12
AAM_EM	AAM	EM	12	115100714	rs1427760	C	T	-5.202149	27.062351	31.863771	4.06E-12
AAM_EM	AAM	EM	8	25263294	rs61490611	G	T	5.913950	34.974804	-31.833609	4.16E-12
AAM_EM	AAM	EM	11	30232381	rs494779	T	C	4.307648	18.555828	-31.785369	4.32E-12
AAM_EM	AAM	EM	3	50234126	rs34877766	G	A	7.059590	49.837808	31.783916	4.33E-12
AAM_EM	AAM	EM	11	30264368	rs560109	A	G	4.358428	18.995894	-31.709324	4.59E-12
AAM_EM	AAM	EM	11	30263655	rs532667	T	C	4.356759	18.981348	-31.691336	4.65E-12
AAM_EM	AAM	EM	11	30236544	rs555621	C	T	4.294610	18.443677	-31.689759	4.66E-12
AAM_EM	AAM	EM	10	90177991	rs10736351	C	T	4.692412	22.018734	-31.673361	4.72E-12
AAM_EM	AAM	EM	11	30222637	rs622744	C	T	4.171949	17.405160	-31.622650	4.91E-12
AAM_EM	AAM	EM	11	30288698	rs7944484	G	T	4.342301	18.855581	-31.616611	4.93E-12
AAM_EM	AAM	EM	3	50225029	rs11711407	G	A	-7.070836	49.996717	31.593578	5.02E-12
AAM_EM	AAM	EM	11	30234782	rs540948	C	T	4.282269	18.337829	-31.571871	5.11E-12
AAM_EM	AAM	EM	3	50227871	rs9858059	T	C	-6.971767	48.605530	31.555804	5.17E-12
AAM_EM	AAM	EM	3	50216421	rs13059311	C	T	-6.497988	42.223846	31.554413	5.18E-12
AAM_EM	AAM	EM	11	30232615	rs492828	A	G	4.294610	18.443677	-31.552050	5.19E-12
AAM_EM	AAM	EM	3	50222926	rs1046956	A	T	-6.480534	41.997319	31.548629	5.20E-12
AAM_EM	AAM	EM	10	90110257	rs11202728	G	C	-5.182444	26.857722	-31.511534	5.36E-12
AAM_EM	AAM	EM	11	30217003	rs574096	T	A	4.160897	17.313066	-31.507193	5.37E-12
AAM_EM	AAM	EM	3	50233215	rs11919418	G	T	6.486593	42.075887	31.505509	5.38E-12
AAM_EM	AAM	EM	11	30376209	rs7929105	T	C	4.417177	19.511451	-31.501932	5.40E-12
AAM_EM	AAM	EM	10	90104705	rs11202727	G	A	-5.165345	26.680787	-31.443288	5.65E-12
AAM_EM	AAM	EM	11	30239470	rs618611	A	G	4.348612	18.910428	-31.406388	5.81E-12
AAM_EM	AAM	EM	11	30238832	rs621448	A	T	4.287129	18.379478	-31.399163	5.85E-12
AAM_EM	AAM	EM	12	115111318	rs484443	C	T	4.985192	24.852136	31.366592	6.00E-12
AAM_EM	AAM	EM	3	50243948	rs35137368	A	G	6.514983	42.445008	31.349176	6.08E-12
AAM_EM	AAM	EM	11	30234703	rs600333	A	G	4.251861	18.078325	-31.347413	6.09E-12
AAM_EM	AAM	EM	11	30216006	rs632939	C	T	4.151014	17.230916	-31.343184	6.11E-12
AAM_EM	AAM	EM	11	30226286	rs683054	C	T	4.192413	17.576328	-31.317458	6.23E-12
AAM_EM	AAM	EM	10	90206538	rs10736354	C	T	4.698565	22.076510	-31.314291	6.25E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	10	90092894	rs61855363	T	C	-5.250116	27.563713	-31.306214	6.29E-12
AAM_EM	AAM	EM	11	30234606	rs600768	T	C	4.240522	17.982030	-31.291060	6.36E-12
AAM_EM	AAM	EM	3	49916710	rs7613360	T	C	7.824919	61.229351	31.290910	6.37E-12
AAM_EM	AAM	EM	3	50240338	rs4688745	C	T	6.744076	45.482565	31.290344	6.37E-12
AAM_EM	AAM	EM	3	50243801	rs35219849	T	C	6.518522	42.491134	31.263537	6.50E-12
AAM_EM	AAM	EM	11	30227534	rs568394	T	C	4.194064	17.590173	-31.250617	6.57E-12
AAM_EM	AAM	EM	10	90205199	rs4596981	C	A	4.681345	21.914994	-31.217355	6.74E-12
AAM_EM	AAM	EM	3	50224562	rs12637671	A	G	-6.402360	40.990208	31.189797	6.89E-12
AAM_EM	AAM	EM	3	50236373	rs6807194	G	A	-6.565959	43.111823	31.180313	6.94E-12
AAM_EM	AAM	EM	10	90138748	rs11202735	A	G	-5.162245	26.648774	-31.180022	6.94E-12
AAM_EM	AAM	EM	11	30230216	rs1716025	A	G	4.177294	17.449782	-31.145824	7.13E-12
AAM_EM	AAM	EM	11	30240217	rs523875	T	C	4.318628	18.650551	-31.120007	7.28E-12
AAM_EM	AAM	EM	3	50209049	rs2624835	A	G	6.768633	45.814391	31.100604	7.39E-12
AAM_EM	AAM	EM	3	49997193	rs13083396	T	C	7.004431	49.062058	31.090185	7.45E-12
AAM_EM	AAM	EM	10	90115683	rs56155841	A	C	-5.182444	26.857722	-31.086500	7.47E-12
AAM_EM	AAM	EM	10	90126669	rs10887809	G	C	5.146073	26.482072	-31.081001	7.50E-12
AAM_EM	AAM	EM	3	50250837	rs2282749	C	T	6.874065	47.252767	31.062816	7.61E-12
AAM_EM	AAM	EM	10	90188027	rs7910594	G	C	4.638466	21.515370	-31.051163	7.68E-12
AAM_EM	AAM	EM	3	50221715	rs13067082	G	A	-6.463951	41.782665	31.049800	7.69E-12
AAM_EM	AAM	EM	11	30228264	rs653518	T	C	4.160176	17.307065	-31.047356	7.70E-12
AAM_EM	AAM	EM	10	90190619	rs10788600	C	T	4.636713	21.499112	-31.031900	7.80E-12
AAM_EM	AAM	EM	10	90190949	rs7911996	C	T	4.635542	21.488250	-31.025738	7.83E-12
AAM_EM	AAM	EM	10	90218338	rs4934411	C	G	4.656263	21.680785	-31.013161	7.91E-12
AAM_EM	AAM	EM	3	50212512	rs2624833	T	G	6.713512	45.071244	31.010158	7.93E-12
AAM_EM	AAM	EM	10	90208772	rs10749589	G	A	4.647488	21.599145	-31.008425	7.94E-12
AAM_EM	AAM	EM	10	90072352	rs10509543	C	T	-5.208865	27.132275	-31.006224	7.96E-12
AAM_EM	AAM	EM	10	90187924	rs10788599	A	G	4.626438	21.403931	-30.996178	8.02E-12
AAM_EM	AAM	EM	3	50218879	rs9858297	C	T	-6.452532	41.635164	30.990452	8.05E-12
AAM_EM	AAM	EM	10	90160023	rs2433340	G	A	4.747447	22.538254	-30.986643	8.08E-12
AAM_EM	AAM	EM	10	90206298	rs10736352	C	T	4.643841	21.565256	-30.966211	8.21E-12
AAM_EM	AAM	EM	3	50233317	rs13064381	T	C	6.397445	40.927297	30.922004	8.50E-12
AAM_EM	AAM	EM	10	90187112	rs10788598	G	A	4.616645	21.313414	-30.907194	8.60E-12
AAM_EM	AAM	EM	10	90133576	rs792221	T	C	5.137778	26.396764	-30.903870	8.62E-12
AAM_EM	AAM	EM	11	30378694	rs7952660	G	T	4.303656	18.521459	-30.892204	8.70E-12
AAM_EM	AAM	EM	8	25269102	rs1506869	A	C	5.810732	33.764606	-30.866385	8.88E-12
AAM_EM	AAM	EM	10	90187967	rs7909697	A	G	4.603723	21.194266	-30.843660	9.04E-12
AAM_EM	AAM	EM	11	30288255	rs11031021	A	T	4.266010	18.198845	-30.842033	9.05E-12
AAM_EM	AAM	EM	11	30239353	rs553190	T	C	4.279875	18.317333	-30.808022	9.29E-12
AAM_EM	AAM	EM	8	25255017	rs12675289	C	A	5.804396	33.691013	-30.791297	9.41E-12
AAM_EM	AAM	EM	10	90131045	rs3891323	C	G	-5.088972	25.897638	-30.782354	9.48E-12
AAM_EM	AAM	EM	3	50192760	rs2526390	T	C	6.688155	44.731418	30.775797	9.53E-12
AAM_EM	AAM	EM	10	90113168	rs4586059	G	T	-5.170876	26.737958	-30.755585	9.68E-12
AAM_EM	AAM	EM	11	30125619	rs11030946	C	G	4.041989	16.337673	-30.743943	9.77E-12
AAM_EM	AAM	EM	10	90205339	rs4619060	A	C	4.619855	21.343062	-30.728844	9.89E-12
AAM_EM	AAM	EM	11	30288256	rs10835641	A	C	4.249761	18.060466	-30.724552	9.92E-12
AAM_EM	AAM	EM	11	30239283	rs553406	G	A	4.264887	18.189265	-30.724453	9.92E-12
AAM_EM	AAM	EM	11	30214713	rs961605	A	G	4.059870	16.482541	-30.696539	1.01E-11
AAM_EM	AAM	EM	10	90208940	rs10788602	A	T	4.667423	21.784835	-30.673931	1.03E-11
AAM_EM	AAM	EM	3	50248807	rs2236942	C	G	6.759986	45.697405	30.658952	1.04E-11
AAM_EM	AAM	EM	3	50072987	rs12488521	C	T	-8.449321	71.391029	30.641692	1.06E-11
AAM_EM	AAM	EM	10	90204726	rs4509673	C	T	4.654356	21.663029	-30.603191	1.09E-11
AAM_EM	AAM	EM	10	90134370	rs792220	C	T	5.119716	26.211492	-30.571262	1.12E-11
AAM_EM	AAM	EM	10	90204887	rs2872092	C	T	4.651206	21.633718	-30.551443	1.14E-11
AAM_EM	AAM	EM	3	50198415	rs2624841	T	C	6.647065	44.183476	30.511115	1.17E-11
AAM_EM	AAM	EM	10	90112774	rs11492684	T	C	-5.137778	26.396764	-30.499942	1.18E-11
AAM_EM	AAM	EM	3	128084164	rs4277707	T	A	5.397440	29.132355	30.498098	1.18E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	3	50185508	rs11714286	A	G	-7.167995	51.380148	30.425912	1.25E-11
AAM_EM	AAM	EM	10	90082400	rs1582783	T	C	-5.314411	28.242966	-30.421933	1.26E-11
AAM_EM	AAM	EM	3	50101468	rs13097720	A	G	7.284029	53.057072	30.391901	1.29E-11
AAM_EM	AAM	EM	10	90211815	rs7899828	T	A	4.579090	20.968066	-30.386432	1.29E-11
AAM_EM	AAM	EM	10	90142203	rs11202736	T	A	-5.002470	25.024706	-30.363576	1.32E-11
AAM_EM	AAM	EM	3	50135412	rs7648652	C	A	7.404147	54.821395	30.241928	1.45E-11
AAM_EM	AAM	EM	3	50082914	rs2526747	G	C	-8.255710	68.156748	30.216629	1.48E-11
AAM_EM	AAM	EM	10	90210183	rs10887823	G	A	4.619855	21.343062	-30.215495	1.48E-11
AAM_EM	AAM	EM	10	90199209	rs10887821	C	T	4.623679	21.378405	-30.207522	1.49E-11
AAM_EM	AAM	EM	10	90182764	rs7907732	C	T	4.625882	21.398783	-30.198107	1.50E-11
AAM_EM	AAM	EM	10	90201642	rs2096194	A	G	4.607265	21.226893	-30.178155	1.52E-11
AAM_EM	AAM	EM	3	50124950	rs14333619	A	T	7.397286	54.719834	30.168817	1.53E-11
AAM_EM	AAM	EM	3	50174025	rs2189691	C	T	6.994086	48.917237	30.130978	1.58E-11
AAM_EM	AAM	EM	3	50088943	rs6446197	G	A	-8.228866	67.714234	30.122889	1.59E-11
AAM_EM	AAM	EM	6	151756612	rs8180642	G	A	-4.800845	23.048112	-30.114485	1.60E-11
AAM_EM	AAM	EM	3	50085153	rs17304079	G	A	7.492055	56.130893	30.113479	1.60E-11
AAM_EM	AAM	EM	10	90203479	rs4606392	T	A	4.603225	21.189681	-30.092764	1.63E-11
AAM_EM	AAM	EM	3	50136165	rs6808044	G	A	-8.166675	66.694578	30.087568	1.63E-11
AAM_EM	AAM	EM	3	50144951	rs1061474	C	T	-8.160011	66.585777	30.079860	1.64E-11
AAM_EM	AAM	EM	3	50062878	rs13071931	A	G	7.105373	50.486321	30.018406	1.73E-11
AAM_EM	AAM	EM	10	90210511	rs1935579	A	G	4.601234	21.171355	-30.017228	1.73E-11
AAM_EM	AAM	EM	10	90089525	rs11202717	A	G	-5.223045	27.280198	-30.011474	1.74E-11
AAM_EM	AAM	EM	10	90211230	rs10887824	G	A	4.589640	21.064798	-29.995522	1.76E-11
AAM_EM	AAM	EM	10	90182467	rs6586132	G	T	4.590114	21.069149	-29.963756	1.80E-11
AAM_EM	AAM	EM	3	50031840	rs35012435	T	C	7.111248	50.569853	29.957352	1.81E-11
AAM_EM	AAM	EM	10	90115782	rs61855396	A	G	-4.948205	24.484735	-29.948678	1.82E-11
AAM_EM	AAM	EM	3	50187596	rs2526398	C	G	6.669883	44.487340	29.946207	1.83E-11
AAM_EM	AAM	EM	10	90214072	rs1342456	G	A	4.582710	21.001230	-29.942339	1.83E-11
AAM_EM	AAM	EM	10	90223403	rs1342450	G	C	4.574220	20.923490	-29.939528	1.84E-11
AAM_EM	AAM	EM	3	50114515	rs7061	T	C	-8.169763	66.745028	29.918699	1.87E-11
AAM_EM	AAM	EM	3	49917686	rs62262061	A	G	7.002191	49.030686	29.897881	1.90E-11
AAM_EM	AAM	EM	8	25311269	rs17053711	A	G	5.687381	32.346302	-29.873582	1.93E-11
AAM_EM	AAM	EM	10	90093298	rs11594050	T	C	-5.051217	25.514796	-29.863177	1.95E-11
AAM_EM	AAM	EM	10	90214279	rs10749591	A	T	4.568599	20.872094	-29.851431	1.97E-11
AAM_EM	AAM	EM	3	50125219	rs9681286	C	T	-8.129512	66.088968	29.851223	1.97E-11
AAM_EM	AAM	EM	3	50046112	rs6787892	A	G	7.087057	50.226383	29.846592	1.97E-11
AAM_EM	AAM	EM	3	50187790	rs2526397	T	G	6.639848	44.087579	29.813418	2.03E-11
AAM_EM	AAM	EM	10	90156854	rs1935584	C	A	4.682786	21.928483	-29.811643	2.03E-11
AAM_EM	AAM	EM	10	90211164	rs10749590	T	C	4.561461	20.806928	-29.810579	2.03E-11
AAM_EM	AAM	EM	10	90102403	rs55894538	T	G	-5.181594	26.848918	-29.772739	2.09E-11
AAM_EM	AAM	EM	10	90152369	rs792235	G	A	4.687919	21.976580	-29.767807	2.10E-11
AAM_EM	AAM	EM	3	50153356	rs1138536	C	T	-8.143815	66.321725	29.713952	2.19E-11
AAM_EM	AAM	EM	10	90203900	rs7922551	C	T	4.543988	20.647828	-29.704225	2.21E-11
AAM_EM	AAM	EM	3	50165101	rs2624848	C	T	-8.121102	65.952296	29.691661	2.23E-11
AAM_EM	AAM	EM	3	50158774	rs2856237	G	A	-8.104422	65.681656	29.679509	2.25E-11
AAM_EM	AAM	EM	3	50158191	rs2856238	C	T	-8.103277	65.663105	29.675293	2.26E-11
AAM_EM	AAM	EM	3	50120257	rs55924524	G	A	7.319450	53.574349	29.663446	2.28E-11
AAM_EM	AAM	EM	3	50156695	rs2624829	G	A	-8.104178	65.677702	29.661593	2.28E-11
AAM_EM	AAM	EM	3	50003586	rs62262118	A	G	7.014970	49.209803	29.659489	2.29E-11
AAM_EM	AAM	EM	3	50072152	rs9844201	C	A	-8.168981	66.732254	29.625032	2.35E-11
AAM_EM	AAM	EM	3	50126215	rs2247510	A	C	-8.134976	66.177827	29.621953	2.36E-11
AAM_EM	AAM	EM	3	50067350	rs35849525	C	T	7.306600	53.386397	29.611970	2.37E-11
AAM_EM	AAM	EM	10	90215629	rs6586139	C	T	4.555342	20.751138	-29.589200	2.42E-11
AAM_EM	AAM	EM	8	25245432	rs931875	A	G	5.557282	30.883385	-29.540988	2.51E-11
AAM_EM	AAM	EM	3	128095278	rs1702118	G	T	5.101487	26.025166	29.525831	2.54E-11
AAM_EM	AAM	EM	3	50175348	rs2526387	C	G	7.038011	49.533605	29.497696	2.60E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	3	50032008	rs17657664	G	T	8.094282	65.517404	29.487296	2.62E-11
AAM_EM	AAM	EM	3	50136463	rs13095697	A	G	7.066410	49.934152	29.480680	2.63E-11
AAM_EM	AAM	EM	6	151754273	rs6904364	C	T	-4.756480	22.624098	-29.457862	2.68E-11
AAM_EM	AAM	EM	3	50119256	rs71326915	A	T	6.776648	45.922954	29.434215	2.73E-11
AAM_EM	AAM	EM	3	50033228	rs17657688	C	T	8.084933	65.366148	29.422463	2.75E-11
AAM_EM	AAM	EM	3	49991427	rs62262106	G	A	7.012552	49.175892	29.390185	2.82E-11
AAM_EM	AAM	EM	10	90168189	rs813782	G	T	4.614526	21.293847	-29.387901	2.83E-11
AAM_EM	AAM	EM	10	90216485	rs2312610	C	T	4.524989	20.475528	-29.384141	2.84E-11
AAM_EM	AAM	EM	3	49991060	rs71326904	T	C	7.009603	49.134536	29.377824	2.85E-11
AAM_EM	AAM	EM	10	90174582	rs792214	C	G	4.611387	21.264889	-29.377059	2.85E-11
AAM_EM	AAM	EM	3	50070853	rs6446195	G	A	-8.100127	65.612055	29.375329	2.86E-11
AAM_EM	AAM	EM	3	50081107	rs9682295	C	T	-8.095349	65.534681	29.352853	2.91E-11
AAM_EM	AAM	EM	3	50093209	rs6762477	A	G	-8.049261	64.790610	29.345589	2.93E-11
AAM_EM	AAM	EM	10	90151021	rs792234	G	A	4.590588	21.073502	-29.330638	2.96E-11
AAM_EM	AAM	EM	3	50098112	rs2624815	G	A	-8.066410	65.066975	29.304925	3.02E-11
AAM_EM	AAM	EM	3	128071809	rs1735549	T	A	5.467276	29.891111	29.302839	3.03E-11
AAM_EM	AAM	EM	3	50052834	rs6446191	C	T	-8.082208	65.322080	29.283771	3.07E-11
AAM_EM	AAM	EM	3	49996924	rs13079006	T	G	8.129798	66.093616	29.273238	3.10E-11
AAM_EM	AAM	EM	3	50076734	rs2526749	G	A	-8.071044	65.141745	29.269858	3.10E-11
AAM_EM	AAM	EM	3	50071279	rs7624030	C	A	-8.067252	65.080561	29.256109	3.14E-11
AAM_EM	AAM	EM	3	49898318	rs62260755	G	C	7.355645	54.105520	29.253512	3.14E-11
AAM_EM	AAM	EM	3	50025006	rs13082703	C	T	8.085326	65.372490	29.229442	3.20E-11
AAM_EM	AAM	EM	3	50108792	rs3774734	A	C	-8.058400	64.937806	29.223424	3.22E-11
AAM_EM	AAM	EM	10	90173536	rs814242	G	A	4.588240	21.051945	-29.221100	3.23E-11
AAM_EM	AAM	EM	10	90216054	rs4934409	T	A	4.510091	20.340924	-29.211089	3.25E-11
AAM_EM	AAM	EM	3	49991167	rs11709503	T	G	8.104647	65.685306	29.201476	3.28E-11
AAM_EM	AAM	EM	3	50065274	rs35375092	A	G	6.996194	48.946731	29.190940	3.30E-11
AAM_EM	AAM	EM	3	49988065	rs11706185	A	G	8.088708	65.427192	29.179000	3.33E-11
AAM_EM	AAM	EM	3	50107219	rs2624822	C	T	-8.039231	64.629242	29.153911	3.40E-11
AAM_EM	AAM	EM	3	50071677	rs7634441	A	G	-8.038832	64.622825	29.153043	3.40E-11
AAM_EM	AAM	EM	3	50100188	rs6793528	A	C	-8.038699	64.620686	29.152561	3.40E-11
AAM_EM	AAM	EM	3	50067298	rs6446194	A	T	-8.034976	64.560836	29.138840	3.44E-11
AAM_EM	AAM	EM	3	50020437	rs2681776	A	G	8.103953	65.674052	29.122107	3.49E-11
AAM_EM	AAM	EM	3	50074641	rs4688754	T	G	-8.014048	64.224968	29.114528	3.51E-11
AAM_EM	AAM	EM	3	50244080	rs2236940	A	G	6.593015	43.467852	29.108611	3.52E-11
AAM_EM	AAM	EM	3	49971831	rs7627910	C	T	7.967438	63.480072	29.089108	3.58E-11
AAM_EM	AAM	EM	8	25243213	rs34068702	G	A	4.579539	20.972174	-29.074203	3.62E-11
AAM_EM	AAM	EM	3	50074773	rs4688753	G	A	-8.038699	64.620686	29.068065	3.64E-11
AAM_EM	AAM	EM	3	50078221	rs7430334	C	T	-7.990862	63.853879	29.048002	3.70E-11
AAM_EM	AAM	EM	3	50008864	rs7648174	T	C	8.042122	64.675723	29.031546	3.74E-11
AAM_EM	AAM	EM	3	50010571	rs2624819	T	G	8.036951	64.592582	29.012880	3.80E-11
AAM_EM	AAM	EM	3	49996053	rs13077403	A	G	8.129232	66.084406	28.985897	3.88E-11
AAM_EM	AAM	EM	3	50053111	rs6446192	C	T	-7.980282	63.684899	28.940708	4.02E-11
AAM_EM	AAM	EM	10	90175462	rs806694	C	T	4.540955	20.620271	-28.919956	4.09E-11
AAM_EM	AAM	EM	3	49999086	rs62262114	A	G	8.008622	64.138024	28.897908	4.16E-11
AAM_EM	AAM	EM	3	50247824	rs2236941	T	C	6.526783	42.598902	28.770633	4.59E-11
AAM_EM	AAM	EM	10	90258744	rs2576170	C	T	-5.273288	27.807568	-28.764332	4.62E-11
AAM_EM	AAM	EM	3	49982765	rs11721204	T	C	8.077507	65.246122	28.739346	4.71E-11
AAM_EM	AAM	EM	3	128081260	rs1735545	C	G	5.350932	28.632473	28.704247	4.84E-11
AAM_EM	AAM	EM	3	49987475	rs7615318	T	C	6.843470	46.833078	28.682395	4.92E-11
AAM_EM	AAM	EM	10	90261930	rs2576169	G	A	-5.252557	27.589351	-28.666626	4.99E-11
AAM_EM	AAM	EM	3	49976972	rs7626952	G	A	8.019706	64.315677	28.656849	5.02E-11
AAM_EM	AAM	EM	3	50224225	rs12632110	G	A	-6.509306	42.371065	28.631513	5.12E-11
AAM_EM	AAM	EM	3	50175940	rs2014004	A	G	6.964316	48.501698	28.595983	5.27E-11
AAM_EM	AAM	EM	10	90167065	rs792207	C	A	4.164527	17.343281	-28.583401	5.32E-11
AAM_EM	AAM	EM	10	90257225	rs2576171	C	T	-5.266565	27.736707	-28.540207	5.51E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	6	151847647	rs12210735	A	G	5.446055	29.659510	-28.532058	5.54E-11
AAM_EM	AAM	EM	6	151849829	rs4870029	T	C	4.251865	18.078356	-28.456477	5.88E-11
AAM_EM	AAM	EM	10	90264140	rs2477954	C	T	-5.248913	27.551083	-28.437303	5.97E-11
AAM_EM	AAM	EM	3	50152491	rs62263602	T	C	6.973570	48.630681	28.432741	5.99E-11
AAM_EM	AAM	EM	3	128095767	rs2977565	A	G	5.273288	27.807568	28.415799	6.07E-11
AAM_EM	AAM	EM	3	127889404	rs2999051	C	T	5.674622	32.201332	28.404501	6.13E-11
AAM_EM	AAM	EM	6	151848611	rs6557143	A	G	5.449542	29.697506	-28.362116	6.33E-11
AAM_EM	AAM	EM	6	151847967	rs9479055	A	C	5.406416	29.229335	-28.311168	6.59E-11
AAM_EM	AAM	EM	12	115106350	rs71807	C	A	-4.823583	23.266955	28.289125	6.71E-11
AAM_EM	AAM	EM	3	128095652	rs3021461	C	T	5.244156	27.501170	28.284981	6.73E-11
AAM_EM	AAM	EM	3	128015236	rs2955103	T	C	-5.719240	32.709709	28.247743	6.93E-11
AAM_EM	AAM	EM	3	127926045	rs4362738	T	C	-5.696902	32.454693	28.176600	7.33E-11
AAM_EM	AAM	EM	6	151848899	rs9479056	A	C	5.402278	29.184612	-28.173003	7.35E-11
AAM_EM	AAM	EM	10	90174202	rs792213	C	A	4.087528	16.707882	-28.122926	7.64E-11
AAM_EM	AAM	EM	10	90177034	rs4933480	A	T	4.071063	16.573551	-28.032735	8.20E-11
AAM_EM	AAM	EM	6	151838856	rs57521493	T	C	-5.623620	31.625107	-27.970640	8.61E-11
AAM_EM	AAM	EM	12	50280430	rs11169199	C	T	-8.317541	69.181492	-27.969776	8.62E-11
AAM_EM	AAM	EM	10	90158608	rs1617881	T	C	4.136267	17.108705	-27.968831	8.63E-11
AAM_EM	AAM	EM	10	90255615	rs2576172	C	T	-5.212813	27.173420	-27.958977	8.69E-11
AAM_EM	AAM	EM	12	50246252	rs11250250	G	A	-8.865289	78.593341	-27.923108	8.94E-11
AAM_EM	AAM	EM	3	50242387	rs1858828	T	G	6.363665	40.496236	27.910754	9.03E-11
AAM_EM	AAM	EM	10	90157930	rs2488270	T	C	4.126708	17.029721	-27.892749	9.16E-11
AAM_EM	AAM	EM	10	90143657	rs1648520	C	T	4.626438	21.403931	-27.845790	9.50E-11
AAM_EM	AAM	EM	12	115118997	rs515746	A	G	4.694699	22.040201	27.817425	9.72E-11
AAM_EM	AAM	EM	10	90182963	rs10887817	A	G	4.029066	16.233374	-27.734228	1.04E-10
AAM_EM	AAM	EM	10	90231562	rs1169043	G	A	-4.580443	20.980457	-27.733289	1.04E-10
AAM_EM	AAM	EM	6	151849670	rs6919923	C	T	5.317845	28.279479	-27.704937	1.06E-10
AAM_EM	AAM	EM	12	50285780	rs73116335	G	T	-8.264740	68.305923	-27.646902	1.11E-10
AAM_EM	AAM	EM	10	90235457	rs2477956	C	T	-4.594395	21.108468	-27.614028	1.14E-10
AAM_EM	AAM	EM	10	90154277	rs792236	T	C	4.119926	16.973794	-27.567181	1.18E-10
AAM_EM	AAM	EM	10	90233105	rs2576181	G	T	-4.559402	20.788148	-27.545190	1.20E-10
AAM_EM	AAM	EM	6	151852555	rs9479059	C	T	5.301274	28.103503	-27.525302	1.22E-10
AAM_EM	AAM	EM	10	90232512	rs2185786	C	T	-4.555342	20.751138	-27.525189	1.22E-10
AAM_EM	AAM	EM	6	151851428	rs11753987	C	T	5.295025	28.037290	-27.515521	1.23E-10
AAM_EM	AAM	EM	3	50176739	rs2624846	A	C	6.714277	45.081516	27.401891	1.35E-10
AAM_EM	AAM	EM	10	90160392	rs792230	T	C	4.090742	16.734168	-27.355598	1.40E-10
AAM_EM	AAM	EM	3	49611666	rs11130207	G	T	-8.390758	70.404813	27.341590	1.41E-10
AAM_EM	AAM	EM	3	50205642	rs2624838	G	C	6.681812	44.646613	27.328367	1.43E-10
AAM_EM	AAM	EM	12	50285562	rs17201502	T	C	-8.187815	67.040318	-27.317516	1.44E-10
AAM_EM	AAM	EM	12	50285061	rs297924	C	T	-8.077507	65.246122	-27.242131	1.53E-10
AAM_EM	AAM	EM	3	50044006	rs7635601	A	T	7.188513	51.674716	27.227297	1.55E-10
AAM_EM	AAM	EM	19	18829770	rs11668587	G	A	7.280732	53.009061	27.216943	1.56E-10
AAM_EM	AAM	EM	6	151851339	rs11155795	A	G	5.232755	27.381727	-27.207772	1.57E-10
AAM_EM	AAM	EM	10	90246530	rs2148127	C	T	-5.075732	25.763058	-27.206694	1.57E-10
AAM_EM	AAM	EM	3	49626306	rs6446285	A	G	-8.307056	69.007188	27.132601	1.67E-10
AAM_EM	AAM	EM	10	90245519	rs2576176	T	A	-5.057402	25.577310	-27.111092	1.69E-10
AAM_EM	AAM	EM	19	18826975	rs10221489	T	C	7.229151	52.260629	27.077600	1.74E-10
AAM_EM	AAM	EM	3	49615624	rs11130208	T	G	-8.296747	68.836011	27.062798	1.76E-10
AAM_EM	AAM	EM	10	90168367	rs792209	T	C	4.041989	16.337676	-27.041551	1.79E-10
AAM_EM	AAM	EM	3	49609794	rs6797299	T	G	-8.285104	68.642952	27.030468	1.80E-10
AAM_EM	AAM	EM	3	49609477	rs1532204	G	C	-8.284103	68.626368	27.029315	1.81E-10
AAM_EM	AAM	EM	16	29911260	rs7189550	A	G	-8.122682	65.977957	-27.002999	1.84E-10
AAM_EM	AAM	EM	10	90089426	rs10887804	C	T	-4.847545	23.498690	-27.002234	1.84E-10
AAM_EM	AAM	EM	10	90166989	rs792205	T	C	4.035436	16.284743	-26.997782	1.85E-10
AAM_EM	AAM	EM	10	90054268	rs11202702	A	G	-4.970729	24.708149	-26.976255	1.88E-10
AAM_EM	AAM	EM	10	90164478	rs1342451	A	C	4.030747	16.246925	-26.966195	1.90E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	10	90248945	rs2437875	C	A	-5.040634	25.407995	-26.955809	1.91E-10
AAM_EM	AAM	EM	10	90156383	rs811558	C	T	4.027801	16.223179	-26.939816	1.94E-10
AAM_EM	AAM	EM	12	50270855	rs1893492	G	T	-8.227598	67.693362	-26.907151	1.99E-10
AAM_EM	AAM	EM	6	151853479	rs6939820	C	T	3.997929	15.983437	-26.902191	2.00E-10
AAM_EM	AAM	EM	16	29911416	rs7189750	A	G	-8.127015	66.048370	-26.900232	2.00E-10
AAM_EM	AAM	EM	3	49624095	rs9869256	G	T	-8.307056	69.007188	26.865492	2.05E-10
AAM_EM	AAM	EM	3	49624065	rs9869120	C	T	-8.297866	68.854576	26.837181	2.10E-10
AAM_EM	AAM	EM	3	49621994	rs7629322	T	C	-8.285104	68.642952	26.810932	2.14E-10
AAM_EM	AAM	EM	10	90174153	rs792212	T	C	4.003929	16.031444	-26.786919	2.19E-10
AAM_EM	AAM	EM	3	49619493	rs34890793	T	C	-8.281145	68.577360	26.746033	2.26E-10
AAM_EM	AAM	EM	12	50270364	rs12146733	C	G	-8.258105	68.196296	-26.695661	2.35E-10
AAM_EM	AAM	EM	16	29906546	rs4787484	T	C	-8.236049	67.832510	-26.688030	2.36E-10
AAM_EM	AAM	EM	3	49645209	rs11130211	T	C	-8.356153	69.825296	26.635870	2.46E-10
AAM_EM	AAM	EM	3	49645458	rs12637313	G	A	-8.341269	69.576771	26.588049	2.56E-10
AAM_EM	AAM	EM	3	49646669	rs11721148	A	G	-8.343705	69.617413	26.587545	2.56E-10
AAM_EM	AAM	EM	3	49646981	rs2029591	C	T	-8.341269	69.576771	26.580585	2.57E-10
AAM_EM	AAM	EM	3	49647404	rs1463728	A	T	-8.343212	69.609185	26.575591	2.58E-10
AAM_EM	AAM	EM	10	90091540	rs1426619	T	C	-4.672199	21.829439	-26.505666	2.73E-10
AAM_EM	AAM	EM	3	49642027	rs4241405	T	C	-8.305619	68.983309	26.474836	2.79E-10
AAM_EM	AAM	EM	10	90225923	rs1750274	A	C	-4.480414	20.074105	-26.423841	2.91E-10
AAM_EM	AAM	EM	3	49639803	rs1491983	T	G	-8.286120	68.659780	26.414790	2.93E-10
AAM_EM	AAM	EM	12	50275385	rs73116325	T	C	-8.132083	66.130767	-26.392799	2.98E-10
AAM_EM	AAM	EM	16	29908777	rs12930239	G	C	-8.076600	65.231470	-26.289787	3.23E-10
AAM_EM	AAM	EM	10	90082746	rs1582784	A	C	-4.811239	23.148021	-26.287840	3.24E-10
AAM_EM	AAM	EM	16	29910725	rs7498372	G	A	-7.932366	62.922433	-26.268561	3.29E-10
AAM_EM	AAM	EM	10	90179192	rs4934403	T	C	3.916888	15.342013	-26.204642	3.46E-10
AAM_EM	AAM	EM	10	90183102	rs10887818	T	C	3.912354	15.306514	-26.167009	3.56E-10
AAM_EM	AAM	EM	10	90183038	rs7918921	A	G	3.897232	15.188419	-26.066216	3.86E-10
AAM_EM	AAM	EM	10	90079714	rs10887801	T	G	-4.725105	22.326619	-26.049570	3.91E-10
AAM_EM	AAM	EM	6	151855376	rs6923538	A	G	5.041870	25.420458	-25.905704	4.38E-10
AAM_EM	AAM	EM	16	29896390	rs8051833	A	G	-8.240853	67.911652	-25.777869	4.84E-10
AAM_EM	AAM	EM	10	90144950	rs701893	A	G	4.456268	19.858328	-25.740423	4.98E-10
AAM_EM	AAM	EM	12	50247468	rs7138803	A	G	-8.685218	75.433011	-25.729096	5.03E-10
AAM_EM	AAM	EM	8	25320594	rs12675625	C	T	4.941815	24.421536	-25.645653	5.37E-10
AAM_EM	AAM	EM	12	50256063	rs12367809	T	C	-8.845761	78.247486	-25.613565	5.51E-10
AAM_EM	AAM	EM	3	50043341	rs12634780	T	A	-8.058556	64.940321	25.503206	6.01E-10
AAM_EM	AAM	EM	1	72741829	rs11584611	C	T	7.894712	62.326484	-25.460449	6.22E-10
AAM_EM	AAM	EM	16	29895303	rs12919612	C	G	-8.111737	65.800278	-25.428447	6.37E-10
AAM_EM	AAM	EM	1	72733841	rs1380995	T	A	7.947045	63.155518	-25.393231	6.55E-10
AAM_EM	AAM	EM	1	72742235	rs9425081	T	G	7.869879	61.934988	-25.366454	6.69E-10
AAM_EM	AAM	EM	1	72740634	rs7549792	A	G	7.860690	61.790448	-25.365758	6.70E-10
AAM_EM	AAM	EM	12	50250111	rs7306275	A	G	-8.751261	76.584564	-25.361694	6.72E-10
AAM_EM	AAM	EM	1	72744144	rs3101340	A	G	7.853373	61.675466	-25.334748	6.86E-10
AAM_EM	AAM	EM	1	72747844	rs3101341	T	C	-7.921844	62.755613	-25.323869	6.92E-10
AAM_EM	AAM	EM	10	97877320	rs1172955	A	T	-8.844191	78.219708	-25.306700	7.02E-10
AAM_EM	AAM	EM	1	72725344	rs9424977	C	T	7.937082	62.997275	-25.297641	7.07E-10
AAM_EM	AAM	EM	1	72717743	rs1776012	G	A	7.928402	62.859556	-25.278061	7.18E-10
AAM_EM	AAM	EM	8	25321845	rs35698191	A	T	4.874650	23.762216	-25.274048	7.20E-10
AAM_EM	AAM	EM	10	90083345	rs11202713	T	C	-4.744519	22.510465	-25.246907	7.36E-10
AAM_EM	AAM	EM	10	90083187	rs11202712	A	G	-4.684971	21.948952	-25.224039	7.49E-10
AAM_EM	AAM	EM	12	50260264	rs7305229	T	C	-7.448373	55.478267	-25.183482	7.73E-10
AAM_EM	AAM	EM	6	151855593	rs10872673	T	G	5.138459	26.403762	-25.176912	7.77E-10
AAM_EM	AAM	EM	1	72735458	rs12137231	C	T	7.880148	62.096726	-25.139966	8.00E-10
AAM_EM	AAM	EM	3	50043654	rs9812936	T	C	-7.926720	62.832887	25.085980	8.35E-10
AAM_EM	AAM	EM	3	49724808	rs3020779	C	T	-8.227600	67.693400	25.071812	8.45E-10
AAM_EM	AAM	EM	3	49878264	rs1996663	G	C	8.140700	66.270990	25.060159	8.52E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	1	72744996	rs1870676	C	T	-7.823187	61.202247	-25.018268	8.81E-10
AAM_EM	AAM	EM	9	11813745	rs1601615	T	C	-6.379207	40.694287	-24.981624	9.07E-10
AAM_EM	AAM	EM	12	115114036	rs551510	T	C	4.268263	18.218065	24.959287	9.23E-10
AAM_EM	AAM	EM	6	151759630	rs9322321	C	T	-3.527819	12.445507	-24.931785	9.43E-10
AAM_EM	AAM	EM	3	49769071	rs9870858	T	C	-8.119270	65.922550	24.790539	1.05E-09
AAM_EM	AAM	EM	6	151761621	rs7752091	G	A	-3.488910	12.172490	-24.760859	1.08E-09
AAM_EM	AAM	EM	12	50245706	rs10875982	G	A	-7.405145	54.836168	-24.692919	1.14E-09
AAM_EM	AAM	EM	3	49866584	rs35129566	G	T	8.149310	66.411251	24.649127	1.18E-09
AAM_EM	AAM	EM	3	49652148	rs1352889	C	T	-8.107202	65.726731	24.648953	1.18E-09
AAM_EM	AAM	EM	3	49655927	rs62262672	A	T	8.105333	65.696428	24.648903	1.18E-09
AAM_EM	AAM	EM	3	49878395	rs1996664	G	A	8.087503	65.407708	24.620731	1.21E-09
AAM_EM	AAM	EM	3	49797769	rs9835157	A	G	8.064227	65.031759	24.605806	1.22E-09
AAM_EM	AAM	EM	6	151760382	rs9397409	T	C	-3.491117	12.187900	-24.575540	1.25E-09
AAM_EM	AAM	EM	6	151728714	rs6557135	C	T	-4.301038	18.498930	-24.571808	1.25E-09
AAM_EM	AAM	EM	3	49657441	rs4855833	G	A	-8.076051	65.222604	24.559066	1.27E-09
AAM_EM	AAM	EM	3	49665390	rs2131108	A	G	-8.072458	65.164584	24.548048	1.28E-09
AAM_EM	AAM	EM	3	49753788	rs11720705	G	A	-8.033147	64.531443	24.547811	1.28E-09
AAM_EM	AAM	EM	3	49653378	rs4855849	G	A	-8.071923	65.155935	24.546418	1.28E-09
AAM_EM	AAM	EM	3	49653457	rs4855848	T	C	-8.071923	65.155935	24.546418	1.28E-09
AAM_EM	AAM	EM	3	49868876	rs7649428	T	A	8.132653	66.140038	24.537947	1.29E-09
AAM_EM	AAM	EM	3	49754970	rs7628207	C	T	-8.044923	64.720784	24.535800	1.29E-09
AAM_EM	AAM	EM	3	49687043	rs4855845	C	T	-8.049989	64.802317	24.530953	1.29E-09
AAM_EM	AAM	EM	3	49683526	rs4855846	A	G	-8.105567	65.700215	24.523195	1.30E-09
AAM_EM	AAM	EM	3	49658084	rs13096480	G	A	-8.060962	64.979114	24.512857	1.31E-09
AAM_EM	AAM	EM	3	49685592	rs1078341	G	A	-8.080881	65.300632	24.507010	1.32E-09
AAM_EM	AAM	EM	3	49667691	rs9883000	C	T	-8.048966	64.785859	24.476886	1.35E-09
AAM_EM	AAM	EM	3	49687779	rs6774202	G	T	-8.065904	65.058804	24.461358	1.37E-09
AAM_EM	AAM	EM	3	49798864	rs7621797	A	G	8.016275	64.260662	24.459493	1.37E-09
AAM_EM	AAM	EM	3	49751856	rs12715437	C	T	-8.015156	64.242725	24.445015	1.39E-09
AAM_EM	AAM	EM	3	49680973	rs10452032	A	G	-8.071749	65.153130	24.421111	1.41E-09
AAM_EM	AAM	EM	3	49745235	rs11709734	A	G	-8.038700	64.620699	24.416640	1.42E-09
AAM_EM	AAM	EM	3	49739507	rs1491985	C	G	-8.036561	64.586313	24.410142	1.42E-09
AAM_EM	AAM	EM	3	49825369	rs9851930	A	G	8.110534	65.780761	24.408824	1.43E-09
AAM_EM	AAM	EM	3	49681704	rs6446286	G	A	-8.062580	65.005196	24.394712	1.44E-09
AAM_EM	AAM	EM	3	49853796	rs62260720	A	T	8.069303	65.113647	24.391874	1.44E-09
AAM_EM	AAM	EM	3	49674343	rs9824435	T	C	-8.061121	64.981675	24.391317	1.45E-09
AAM_EM	AAM	EM	3	49710444	rs13093525	G	C	-7.995551	63.928835	24.369418	1.47E-09
AAM_EM	AAM	EM	12	50244767	rs10875980	T	A	-7.378576	54.443388	-24.364882	1.48E-09
AAM_EM	AAM	EM	12	115116352	rs59336	A	T	4.372198	19.116118	24.357191	1.48E-09
AAM_EM	AAM	EM	3	49679072	rs2329021	A	G	-8.063245	65.015912	24.349513	1.49E-09
AAM_EM	AAM	EM	3	49829653	rs7637711	G	A	8.086500	65.391489	24.336123	1.51E-09
AAM_EM	AAM	EM	10	90139756	rs792218	A	G	4.183548	17.502071	-24.332841	1.51E-09
AAM_EM	AAM	EM	11	30261968	rs7951733	G	A	2.791279	7.791239	-24.327215	1.52E-09
AAM_EM	AAM	EM	15	60689179	rs8033800	A	T	7.804365	60.908108	-24.325309	1.52E-09
AAM_EM	AAM	EM	3	49872124	rs62260723	C	T	8.041702	64.668979	24.323649	1.52E-09
AAM_EM	AAM	EM	3	49671224	rs1586827	C	T	-8.020869	64.334337	24.321877	1.53E-09
AAM_EM	AAM	EM	6	151727545	rs9397403	T	C	-4.256129	18.114637	-24.319734	1.53E-09
AAM_EM	AAM	EM	3	49817450	rs9829155	C	T	8.059028	64.947931	24.280008	1.58E-09
AAM_EM	AAM	EM	3	49822909	rs9836756	A	G	8.065224	65.047844	24.272464	1.59E-09
AAM_EM	AAM	EM	3	49814949	rs62260663	C	T	8.062912	65.010553	24.265505	1.60E-09
AAM_EM	AAM	EM	3	127724733	rs6770337	G	A	5.143263	26.453157	24.247094	1.62E-09
AAM_EM	AAM	EM	15	60687230	rs12440452	C	A	7.874902	62.014075	-24.226444	1.65E-09
AAM_EM	AAM	EM	3	49825326	rs9851651	A	C	8.037480	64.601079	24.188965	1.70E-09
AAM_EM	AAM	EM	3	127723215	rs7611430	G	A	5.164562	26.672698	24.171553	1.72E-09
AAM_EM	AAM	EM	16	29885447	rs4787483	G	A	-7.907791	62.533157	-24.156077	1.74E-09
AAM_EM	AAM	EM	3	49737323	rs11130217	G	A	-7.909217	62.555707	24.148805	1.75E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	16	29882490	rs12917712	T	C	-7.641317	58.389719	-24.128480	1.78E-09
AAM_EM	AAM	EM	3	49835450	rs6790568	T	C	8.099906	65.608478	24.105266	1.81E-09
AAM_EM	AAM	EM	3	127724751	rs6794938	G	C	5.110681	26.119061	24.089267	1.83E-09
AAM_EM	AAM	EM	2	25156773	rs2384054	C	T	-6.224210	38.740789	24.083572	1.84E-09
AAM_EM	AAM	EM	12	50243672	rs7299134	G	A	-7.362872	54.211888	-24.080836	1.85E-09
AAM_EM	AAM	EM	16	29914142	rs28517865	T	C	-6.900552	47.617621	-24.034528	1.92E-09
AAM_EM	AAM	EM	3	128107982	rs1625296	A	G	5.030191	25.302824	24.031916	1.92E-09
AAM_EM	AAM	EM	12	15500183	rs11056439	A	G	-3.248539	10.553007	-24.003559	1.96E-09
AAM_EM	AAM	EM	3	49661634	rs62262673	T	C	7.980280	63.684866	24.001741	1.97E-09
AAM_EM	AAM	EM	16	29887215	rs66818723	C	T	-7.865379	61.864183	-23.987920	1.99E-09
AAM_EM	AAM	EM	6	100746305	rs9403595	T	C	-7.161498	51.287055	-23.985872	1.99E-09
AAM_EM	AAM	EM	12	15500176	rs11056438	C	T	-3.243671	10.521402	-23.969066	2.02E-09
AAM_EM	AAM	EM	3	49690199	rs4855885	A	G	-7.894699	62.326273	23.959408	2.03E-09
AAM_EM	AAM	EM	15	60687676	rs3940746	T	G	7.754927	60.138886	-23.938405	2.07E-09
AAM_EM	AAM	EM	3	49673662	rs62262675	G	A	7.988128	63.810187	23.904402	2.12E-09
AAM_EM	AAM	EM	3	128111174	rs4241495	C	T	4.990570	24.905788	23.853925	2.21E-09
AAM_EM	AAM	EM	3	49871201	rs61557789	T	C	8.000412	64.006600	23.837193	2.24E-09
AAM_EM	AAM	EM	3	49874246	rs59684465	T	C	7.999431	63.990899	23.834497	2.24E-09
AAM_EM	AAM	EM	3	128107020	rs7373685	C	A	5.003836	25.038377	23.793798	2.32E-09
AAM_EM	AAM	EM	19	18817903	rs10423674	A	C	6.281192	39.453371	23.788393	2.33E-09
AAM_EM	AAM	EM	6	100746390	rs9386079	C	T	-7.085042	50.197820	-23.787456	2.33E-09
AAM_EM	AAM	EM	6	151721749	rs7771156	A	G	-4.171955	17.405207	-23.785495	2.33E-09
AAM_EM	AAM	EM	3	128106267	rs2977562	G	A	4.991213	24.912211	23.782184	2.34E-09
AAM_EM	AAM	EM	6	100757711	rs9497097	A	G	-7.401158	54.777133	-23.707452	2.48E-09
AAM_EM	AAM	EM	12	50244043	rs7302855	T	C	-7.121182	50.711231	-23.704112	2.49E-09
AAM_EM	AAM	EM	12	49705661	rs12313488	G	A	-6.029957	36.360379	-23.700850	2.49E-09
AAM_EM	AAM	EM	3	49845006	rs58339610	A	T	7.963672	63.420064	23.693910	2.51E-09
AAM_EM	AAM	EM	3	49828021	rs7620848	C	G	7.989947	63.839256	23.685192	2.53E-09
AAM_EM	AAM	EM	12	15500036	rs11056436	T	C	-3.203007	10.259251	-23.668707	2.56E-09
AAM_EM	AAM	EM	3	49769419	rs62262722	C	G	7.935878	62.978161	23.664070	2.57E-09
AAM_EM	AAM	EM	6	151702442	rs6557132	G	C	-4.167471	17.367814	-23.656242	2.58E-09
AAM_EM	AAM	EM	2	430975	rs77165542	T	C	8.099899	65.608360	23.618635	2.66E-09
AAM_EM	AAM	EM	3	49886319	rs77941694	T	G	7.817219	61.108916	23.617553	2.66E-09
AAM_EM	AAM	EM	12	15463417	rs1479410	C	A	-3.198799	10.232315	-23.609801	2.68E-09
AAM_EM	AAM	EM	2	25145173	rs59086897	A	T	-6.471553	41.880999	23.606115	2.69E-09
AAM_EM	AAM	EM	12	15500105	rs11056437	C	T	-3.190553	10.179626	-23.576729	2.75E-09
AAM_EM	AAM	EM	12	50241013	rs11169176	A	G	-7.215091	52.057541	-23.574763	2.76E-09
AAM_EM	AAM	EM	6	100748397	rs6570643	T	C	-7.080147	50.128485	-23.574494	2.76E-09
AAM_EM	AAM	EM	3	128114587	rs7632169	C	T	4.954276	24.544852	23.544604	2.82E-09
AAM_EM	AAM	EM	6	100744157	rs12529274	A	G	-7.034477	49.483873	-23.524464	2.87E-09
AAM_EM	AAM	EM	6	100748384	rs6570642	A	G	-7.053875	49.757145	-23.492739	2.94E-09
AAM_EM	AAM	EM	3	128105972	rs2999033	A	G	4.355113	18.967006	23.488196	2.95E-09
AAM_EM	AAM	EM	6	100755613	rs1506090	G	A	-7.040901	49.574290	-23.467448	3.00E-09
AAM_EM	AAM	EM	3	49848414	rs28535523	T	C	7.879007	62.078753	23.460465	3.02E-09
AAM_EM	AAM	EM	6	100743942	rs7762259	T	A	-7.041637	49.584657	-23.451870	3.04E-09
AAM_EM	AAM	EM	6	100750221	rs9390218	A	G	-7.039444	49.553777	-23.444680	3.05E-09
AAM_EM	AAM	EM	6	100752967	rs2135356	T	C	-7.037298	49.523559	-23.443911	3.06E-09
AAM_EM	AAM	EM	6	100753889	rs9390229	G	A	-7.036592	49.513633	-23.435068	3.08E-09
AAM_EM	AAM	EM	6	100750194	rs9390217	A	G	-7.033788	49.474170	-23.425841	3.10E-09
AAM_EM	AAM	EM	3	127732271	rs6801467	A	G	-5.014759	25.147811	23.424389	3.10E-09
AAM_EM	AAM	EM	3	127711997	rs9839080	T	C	5.052523	25.527991	23.422257	3.11E-09
AAM_EM	AAM	EM	6	100752963	rs2135355	T	C	-7.032409	49.454773	-23.421134	3.11E-09
AAM_EM	AAM	EM	12	15498466	rs11056434	C	T	-3.168929	10.042113	-23.416067	3.12E-09
AAM_EM	AAM	EM	6	100745235	rs4373369	A	G	-7.030356	49.425909	-23.414412	3.13E-09
AAM_EM	AAM	EM	12	15468046	rs12317475	C	T	-3.145155	9.892001	-23.409441	3.14E-09
AAM_EM	AAM	EM	6	100744281	rs10499030	T	C	-7.029009	49.406961	-23.407079	3.15E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	3	49809841	rs9870755	T	C	7.887623	62.214595	23.397432	3.17E-09
AAM_EM	AAM	EM	6	100754406	rs1506089	A	T	-7.030356	49.425909	-23.395805	3.18E-09
AAM_EM	AAM	EM	6	152052215	rs2982564	G	A	-2.644134	6.991446	-23.395419	3.18E-09
AAM_EM	AAM	EM	6	100751499	rs1827854	C	T	-7.002188	49.030639	-23.394376	3.18E-09
AAM_EM	AAM	EM	3	49847642	rs1799844	A	G	7.855866	61.714635	23.391562	3.19E-09
AAM_EM	AAM	EM	2	25158008	rs713586	C	T	-6.213253	38.604508	23.390073	3.19E-09
AAM_EM	AAM	EM	6	100755083	rs9399504	C	T	-7.018036	49.252834	-23.382680	3.21E-09
AAM_EM	AAM	EM	2	25150758	rs10185143	C	T	-6.215069	38.627083	23.367293	3.25E-09
AAM_EM	AAM	EM	6	100746217	rs9403594	T	C	-7.014963	49.209708	-23.363146	3.26E-09
AAM_EM	AAM	EM	6	100747089	rs11756118	G	C	-7.014367	49.201340	-23.361159	3.26E-09
AAM_EM	AAM	EM	3	49834571	rs6809879	G	A	7.930088	62.886301	23.360083	3.27E-09
AAM_EM	AAM	EM	12	15481326	rs13313237	C	T	-3.165158	10.018225	-23.359571	3.27E-09
AAM_EM	AAM	EM	2	25158281	rs713587	T	C	-6.239485	38.931177	23.358294	3.27E-09
AAM_EM	AAM	EM	3	49812866	rs7613603	T	C	7.879007	62.078753	23.356324	3.28E-09
AAM_EM	AAM	EM	9	11862641	rs9969696	G	A	-5.909093	34.917378	-23.353610	3.28E-09
AAM_EM	AAM	EM	6	100751666	rs1827857	G	T	-7.010775	49.150971	-23.349255	3.29E-09
AAM_EM	AAM	EM	6	100748829	rs6933158	T	G	-7.014367	49.201340	-23.349011	3.29E-09
AAM_EM	AAM	EM	12	15447714	rs10082839	A	G	-3.163282	10.006355	-23.345934	3.30E-09
AAM_EM	AAM	EM	6	100751145	rs9390220	C	T	-7.009018	49.126337	-23.343403	3.31E-09
AAM_EM	AAM	EM	6	100747999	rs7763138	A	G	-7.003306	49.046301	-23.341936	3.31E-09
AAM_EM	AAM	EM	12	50244024	rs7303074	A	G	-7.031041	49.435536	-23.341587	3.31E-09
AAM_EM	AAM	EM	6	100751595	rs1827855	T	A	-7.008438	49.118199	-23.341470	3.31E-09
AAM_EM	AAM	EM	6	100744948	rs4357144	G	T	-7.006696	49.093786	-23.335612	3.33E-09
AAM_EM	AAM	EM	6	100748027	rs7764243	T	C	-7.006131	49.085878	-23.333732	3.34E-09
AAM_EM	AAM	EM	16	29892184	rs11344371	A	G	-7.104219	50.469926	-23.332504	3.34E-09
AAM_EM	AAM	EM	3	49811047	rs14838379	A	G	7.864361	61.848177	23.312908	3.39E-09
AAM_EM	AAM	EM	6	100745579	rs4129688	C	T	-6.999431	48.992038	-23.311417	3.39E-09
AAM_EM	AAM	EM	6	100749267	rs13201666	A	G	-6.997809	48.969328	-23.311226	3.39E-09
AAM_EM	AAM	EM	6	100749847	rs1354684	A	G	-7.013159	49.184402	-23.310887	3.40E-09
AAM_EM	AAM	EM	6	100747539	rs13193512	A	G	-6.996202	48.946848	-23.300664	3.42E-09
AAM_EM	AAM	EM	16	29922011	rs12933766	T	C	-7.027021	49.379025	-23.299452	3.43E-09
AAM_EM	AAM	EM	6	100751606	rs1827856	C	T	-6.994077	48.917112	-23.298418	3.43E-09
AAM_EM	AAM	EM	6	100741893	rs9403583	A	T	-6.994077	48.917112	-23.295378	3.44E-09
AAM_EM	AAM	EM	6	100742895	rs9321986	T	G	-6.989937	48.859215	-23.282041	3.47E-09
AAM_EM	AAM	EM	6	100746088	rs9403591	A	G	-6.990456	48.866473	-23.281525	3.48E-09
AAM_EM	AAM	EM	6	100747759	rs9390205	C	T	-6.984932	48.789278	-23.280695	3.48E-09
AAM_EM	AAM	EM	6	100743615	rs7765823	G	T	-6.989433	48.852172	-23.280532	3.48E-09
AAM_EM	AAM	EM	6	100747764	rs9386080	A	G	-6.982966	48.761813	-23.274141	3.50E-09
AAM_EM	AAM	EM	12	15491164	rs11833467	A	G	-3.146917	9.903086	-23.273027	3.50E-09
AAM_EM	AAM	EM	6	100750261	rs9403602	T	A	-6.985923	48.803125	-23.266430	3.52E-09
AAM_EM	AAM	EM	6	100752593	rs1506086	A	T	-6.987922	48.831051	-23.266373	3.52E-09
AAM_EM	AAM	EM	12	15472354	rs12306807	T	C	-3.165158	10.018225	-23.254026	3.55E-09
AAM_EM	AAM	EM	12	15480908	rs11357540	C	T	-3.150486	9.925563	-23.251495	3.56E-09
AAM_EM	AAM	EM	3	49808274	rs62262730	G	T	7.843543	61.521162	23.251195	3.56E-09
AAM_EM	AAM	EM	6	100752002	rs9390223	C	A	-7.346151	53.965929	-23.249517	3.56E-09
AAM_EM	AAM	EM	6	100741738	rs9390192	T	C	-7.351489	54.044397	-23.246937	3.57E-09
AAM_EM	AAM	EM	9	11821654	rs10960280	A	C	-6.151407	37.839803	-23.240270	3.59E-09
AAM_EM	AAM	EM	12	15476069	rs56354312	C	T	-3.148694	9.914273	-23.239702	3.59E-09
AAM_EM	AAM	EM	12	15474585	rs73057218	C	T	-3.150486	9.925563	-23.237381	3.60E-09
AAM_EM	AAM	EM	3	127727752	rs11717102	T	C	-5.010465	25.104760	23.235650	3.60E-09
AAM_EM	AAM	EM	6	100741699	rs9390191	T	G	-6.974945	48.649853	-23.231654	3.62E-09
AAM_EM	AAM	EM	12	15474108	rs73057216	T	C	-3.146917	9.903086	-23.227150	3.63E-09
AAM_EM	AAM	EM	12	15475227	rs73057219	A	G	-3.146917	9.903086	-23.226766	3.63E-09
AAM_EM	AAM	EM	6	100750512	rs13206155	A	G	-6.969537	48.574440	-23.211854	3.67E-09
AAM_EM	AAM	EM	9	11860372	rs68079409	A	T	-5.895742	34.759776	-23.206563	3.69E-09
AAM_EM	AAM	EM	3	127756718	rs6439110	T	C	-5.110088	26.112995	23.198944	3.71E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	6	100741783	rs9403582	C	A	-6.993557	48.909842	-23.198696	3.71E-09
AAM_EM	AAM	EM	12	115119903	rs545076	A	G	4.340744	18.842057	23.196839	3.72E-09
AAM_EM	AAM	EM	12	15480619	rs73057222	A	G	-3.150486	9.925563	-23.192439	3.73E-09
AAM_EM	AAM	EM	12	15497573	rs73057230	A	G	-3.138180	9.848176	-23.188114	3.74E-09
AAM_EM	AAM	EM	6	100750944	rs9376853	A	G	-6.960108	48.443099	-23.180508	3.76E-09
AAM_EM	AAM	EM	2	25150296	rs10182181	G	A	-6.304567	39.747560	23.180360	3.77E-09
AAM_EM	AAM	EM	12	15497636	rs16910766	A	G	-3.136461	9.837389	-23.175513	3.78E-09
AAM_EM	AAM	EM	12	15459404	rs1600334	C	T	-3.134750	9.826660	-23.172883	3.79E-09
AAM_EM	AAM	EM	6	100749058	rs13190996	C	T	-7.324949	53.654884	-23.168563	3.80E-09
AAM_EM	AAM	EM	2	25143649	rs6746013	G	C	-6.360572	40.456873	23.165682	3.81E-09
AAM_EM	AAM	EM	6	100744684	rs4357140	A	G	-6.955630	48.380783	-23.165537	3.81E-09
AAM_EM	AAM	EM	6	100751934	rs9403608	A	T	-6.951671	48.325732	-23.159745	3.83E-09
AAM_EM	AAM	EM	12	15491823	rs11831965	G	T	-3.129675	9.794865	-23.148911	3.86E-09
AAM_EM	AAM	EM	9	11861406	rs72706168	C	T	-5.861027	34.351634	-23.144017	3.88E-09
AAM_EM	AAM	EM	12	15474823	rs11056429	G	T	-3.134750	9.826660	-23.138115	3.89E-09
AAM_EM	AAM	EM	6	100744097	rs12528089	C	T	-6.931972	48.052238	-23.114411	3.97E-09
AAM_EM	AAM	EM	3	127745697	rs4857833	A	G	-5.051224	25.514864	23.094210	4.03E-09
AAM_EM	AAM	EM	2	25150116	rs6752378	A	C	-6.291697	39.585452	23.081774	4.07E-09
AAM_EM	AAM	EM	12	15497942	rs11056433	A	C	-3.123029	9.753308	-23.075471	4.09E-09
AAM_EM	AAM	EM	6	100748896	rs71539016	C	T	-6.926298	47.973603	-23.067849	4.12E-09
AAM_EM	AAM	EM	12	15361715	rs7965989	T	G	-3.455141	11.938003	-23.065526	4.12E-09
AAM_EM	AAM	EM	12	15460015	rs73055297	C	T	-3.123029	9.753308	-23.046664	4.19E-09
AAM_EM	AAM	EM	3	127715018	rs6803110	G	A	4.969000	24.690963	23.045639	4.19E-09
AAM_EM	AAM	EM	6	100744436	rs13211600	T	C	-6.918021	47.859021	-23.040284	4.21E-09
AAM_EM	AAM	EM	12	15465378	rs10161274	A	T	-3.119755	9.732871	-23.026390	4.25E-09
AAM_EM	AAM	EM	3	127713448	rs7630727	C	T	4.985813	24.858332	23.022108	4.27E-09
AAM_EM	AAM	EM	6	100701917	rs6915780	C	A	-7.392591	54.650401	-23.017683	4.28E-09
AAM_EM	AAM	EM	6	100714695	rs9386068	G	A	-7.381085	54.480422	-23.010974	4.31E-09
AAM_EM	AAM	EM	12	15362066	rs7969197	C	G	-3.445031	11.868241	-23.007527	4.32E-09
AAM_EM	AAM	EM	6	100700834	rs9376816	C	A	-7.370485	54.324046	-22.997809	4.35E-09
AAM_EM	AAM	EM	12	15461785	rs11056422	G	A	-3.124675	9.763591	-22.994685	4.36E-09
AAM_EM	AAM	EM	16	29918034	rs1129700	C	T	-6.774313	45.891312	-22.981375	4.41E-09
AAM_EM	AAM	EM	12	15465854	rs10161242	C	A	-3.113311	9.692707	-22.978830	4.42E-09
AAM_EM	AAM	EM	6	100701244	rs9376817	A	G	-7.364359	54.233784	-22.976093	4.43E-09
AAM_EM	AAM	EM	3	127714611	rs1549876	G	A	4.953471	24.536876	22.975018	4.43E-09
AAM_EM	AAM	EM	3	127806218	rs3732402	A	G	-5.019897	25.199366	22.965715	4.46E-09
AAM_EM	AAM	EM	12	15449761	rs2417434	C	T	-3.108562	9.663158	-22.943525	4.54E-09
AAM_EM	AAM	EM	16	29919792	rs8050576	G	A	-6.840715	46.795382	-22.937992	4.56E-09
AAM_EM	AAM	EM	3	127740453	rs35546672	G	C	-5.034141	25.342572	22.937247	4.56E-09
AAM_EM	AAM	EM	2	408713	rs62106252	A	G	8.910538	79.397691	22.931346	4.59E-09
AAM_EM	AAM	EM	3	127715049	rs1549875	C	T	4.942321	24.426536	22.922038	4.62E-09
AAM_EM	AAM	EM	6	100744446	rs13211682	T	C	-7.246722	52.514978	-22.914010	4.65E-09
AAM_EM	AAM	EM	12	15496734	rs10083121	A	G	-3.093219	9.568001	-22.857913	4.86E-09
AAM_EM	AAM	EM	12	15454217	rs12299598	T	A	-3.094716	9.577267	-22.834540	4.95E-09
AAM_EM	AAM	EM	1	72848682	rs2815781	T	A	-6.924991	47.955503	-22.813316	5.04E-09
AAM_EM	AAM	EM	16	29994922	rs3814883	T	C	-6.708978	45.010385	-22.810489	5.05E-09
AAM_EM	AAM	EM	3	127713943	rs7432496	G	A	4.912327	24.130953	22.807077	5.06E-09
AAM_EM	AAM	EM	6	100742969	rs9399491	A	T	-6.844773	46.850923	-22.798531	5.09E-09
AAM_EM	AAM	EM	12	15456242	rs10466856	G	A	-3.091723	9.558748	-22.762703	5.24E-09
AAM_EM	AAM	EM	6	100717723	rs6914044	T	G	-7.016186	49.226868	-22.759506	5.25E-09
AAM_EM	AAM	EM	3	127753730	rs981446	A	G	-5.010111	25.101215	22.750558	5.29E-09
AAM_EM	AAM	EM	3	127745765	rs6439108	C	G	-4.991220	24.912277	22.747901	5.30E-09
AAM_EM	AAM	EM	6	100743074	rs6941605	T	C	-7.191673	51.720159	-22.738513	5.34E-09
AAM_EM	AAM	EM	16	29932691	rs9936474	C	T	-6.585291	43.366061	-22.734417	5.36E-09
AAM_EM	AAM	EM	6	151876252	rs7740522	T	C	5.119708	26.211411	-22.728830	5.38E-09
AAM_EM	AAM	EM	3	49890967	rs59357103	A	G	7.697273	59.248015	22.724638	5.40E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	2	25150641	rs10182458	G	A	-6.154744	37.880873	22.720469	5.42E-09
AAM_EM	AAM	EM	3	127773676	rs1030655	C	T	-4.986446	24.864643	22.710969	5.46E-09
AAM_EM	AAM	EM	9	11857930	rs2068183	A	G	-5.800296	33.643432	-22.707244	5.48E-09
AAM_EM	AAM	EM	3	127730319	rs10934838	A	C	-4.948992	24.492518	22.701167	5.50E-09
AAM_EM	AAM	EM	3	127760928	rs11721312	A	G	-4.997762	24.977629	22.698970	5.51E-09
AAM_EM	AAM	EM	3	127783236	rs59766347	G	C	-4.985508	24.855290	22.695449	5.53E-09
AAM_EM	AAM	EM	12	115110571	rs567223	T	G	4.560629	20.799337	22.692476	5.54E-09
AAM_EM	AAM	EM	11	86715654	rs6592324	A	G	6.253636	39.107965	-22.690250	5.55E-09
AAM_EM	AAM	EM	6	100699272	rs6930495	G	A	-6.986419	48.810048	-22.650331	5.73E-09
AAM_EM	AAM	EM	6	100712884	rs4576252	T	C	-6.993555	48.909816	-22.647029	5.74E-09
AAM_EM	AAM	EM	2	658550	rs2867121	G	A	8.502844	72.298363	22.625459	5.84E-09
AAM_EM	AAM	EM	16	29995880	rs4787489	A	G	-7.027670	49.388150	-22.608501	5.92E-09
AAM_EM	AAM	EM	3	127784262	rs2075402	T	C	-4.959155	24.593214	22.601514	5.96E-09
AAM_EM	AAM	EM	6	151745522	rs6557139	T	C	-3.236511	10.475005	-22.600339	5.96E-09
AAM_EM	AAM	EM	3	127753688	rs981447	A	G	-4.997762	24.977629	22.599366	5.97E-09
AAM_EM	AAM	EM	11	86717987	rs7102513	C	T	6.236311	38.891573	-22.590109	6.01E-09
AAM_EM	AAM	EM	6	100719911	rs12524392	T	C	-7.057118	49.802911	-22.587597	6.02E-09
AAM_EM	AAM	EM	3	127713993	rs9849853	T	C	4.862349	23.642440	22.586586	6.03E-09
AAM_EM	AAM	EM	3	128109916	rs741925	T	C	4.459891	19.890630	22.579779	6.06E-09
AAM_EM	AAM	EM	2	455477	rs76111507	T	C	8.535943	72.862330	22.567352	6.12E-09
AAM_EM	AAM	EM	16	30011618	rs12921996	T	C	-7.062097	49.873214	-22.552677	6.19E-09
AAM_EM	AAM	EM	11	86716236	rs7108556	T	C	6.293698	39.610638	-22.547241	6.22E-09
AAM_EM	AAM	EM	3	127779944	rs2335771	G	A	-4.948468	24.487340	22.546815	6.22E-09
AAM_EM	AAM	EM	9	11852453	rs10448180	C	T	-5.714542	32.655994	-22.532372	6.29E-09
AAM_EM	AAM	EM	9	11852846	rs1843720	A	G	-5.743389	32.986523	-22.516596	6.37E-09
AAM_EM	AAM	EM	19	18806668	rs2003476	C	T	6.266612	39.270425	22.507587	6.42E-09
AAM_EM	AAM	EM	12	15368093	rs12322836	C	G	-3.352450	11.238919	-22.498071	6.46E-09
AAM_EM	AAM	EM	9	11864855	rs9969829	T	C	-5.694135	32.423178	-22.488671	6.51E-09
AAM_EM	AAM	EM	6	100707145	rs6908458	C	T	-7.325501	53.662970	-22.482230	6.55E-09
AAM_EM	AAM	EM	6	151874122	rs9478217	G	A	5.028238	25.283179	-22.482182	6.55E-09
AAM_EM	AAM	EM	6	100723855	rs7742131	G	T	-7.027676	49.388234	-22.472389	6.60E-09
AAM_EM	AAM	EM	16	30017895	rs3814880	C	T	-7.089081	50.255075	-22.466775	6.63E-09
AAM_EM	AAM	EM	9	11854933	rs10960321	C	T	-5.804649	33.693946	-22.456908	6.68E-09
AAM_EM	AAM	EM	9	11826851	rs10960290	G	C	-5.725714	32.783798	-22.451598	6.71E-09
AAM_EM	AAM	EM	16	30014564	rs11150580	T	C	-7.076356	50.074818	-22.447429	6.73E-09
AAM_EM	AAM	EM	9	11858044	rs10960326	A	G	-5.757041	33.143516	-22.445924	6.74E-09
AAM_EM	AAM	EM	12	15473696	rs12580434	T	C	-3.038196	9.230636	-22.445400	6.74E-09
AAM_EM	AAM	EM	9	11829232	rs10960295	A	G	-5.747822	33.037463	-22.445363	6.74E-09
AAM_EM	AAM	EM	9	86716873	rs10868097	G	A	-7.412434	54.944184	22.443820	6.75E-09
AAM_EM	AAM	EM	16	29954654	rs4402589	G	T	-6.796758	46.195922	-22.431952	6.81E-09
AAM_EM	AAM	EM	9	11809441	rs10756291	C	G	-4.755456	22.614365	-22.418507	6.88E-09
AAM_EM	AAM	EM	16	30013266	rs4788209	T	C	-7.049932	49.701546	-22.416319	6.90E-09
AAM_EM	AAM	EM	16	29993686	rs9925915	C	G	-6.942950	48.204552	-22.405513	6.96E-09
AAM_EM	AAM	EM	12	15365558	rs11056400	A	G	-3.348334	11.211340	-22.398661	6.99E-09
AAM_EM	AAM	EM	16	30000330	rs11150579	G	T	-7.033783	49.474107	-22.393400	7.02E-09
AAM_EM	AAM	EM	6	100709892	rs9403561	A	G	-7.294843	53.214734	-22.384859	7.07E-09
AAM_EM	AAM	EM	16	29988349	rs4283241	A	G	-6.915563	47.825017	-22.368226	7.16E-09
AAM_EM	AAM	EM	16	29986205	rs10871451	G	C	-6.914360	47.808370	-22.367068	7.17E-09
AAM_EM	AAM	EM	16	30013674	rs4788210	G	C	-7.050711	49.712527	-22.365952	7.18E-09
AAM_EM	AAM	EM	16	29994736	rs3814884	A	T	-6.929943	48.024109	-22.363600	7.19E-09
AAM_EM	AAM	EM	11	86708628	rs12800615	C	T	6.203847	38.487715	-22.351342	7.26E-09
AAM_EM	AAM	EM	9	11853376	rs34804069	G	A	-5.690051	32.376677	-22.349936	7.27E-09
AAM_EM	AAM	EM	9	11826101	rs12376115	G	A	-5.826802	33.951627	-22.348474	7.28E-09
AAM_EM	AAM	EM	3	127769408	rs1473246	A	G	-4.906106	24.069881	22.332715	7.37E-09
AAM_EM	AAM	EM	11	86711087	rs10898569	C	T	6.220683	38.696892	-22.320681	7.44E-09
AAM_EM	AAM	EM	16	29993108	rs11642046	G	C	-6.914656	47.812474	-22.320536	7.44E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	9	11799620	rs10809600	A	G	-4.709766	22.181898	-22.316772	7.46E-09
AAM_EM	AAM	EM	16	29983148	rs9925102	C	T	-6.912563	47.783530	-22.311030	7.50E-09
AAM_EM	AAM	EM	12	15455927	rs10466855	A	G	-3.172757	10.066384	-22.309779	7.50E-09
AAM_EM	AAM	EM	16	29988941	rs4583255	G	A	-6.909022	47.734591	-22.305671	7.53E-09
AAM_EM	AAM	EM	12	50248052	rs11169182	T	C	-7.562634	57.193433	-22.304383	7.54E-09
AAM_EM	AAM	EM	16	29983119	rs9932196	T	G	-6.889719	47.468233	-22.292488	7.61E-09
AAM_EM	AAM	EM	16	29982484	rs12445982	A	G	-6.886954	47.430138	-22.291716	7.61E-09
AAM_EM	AAM	EM	11	86714234	rs4944655	G	A	6.212639	38.596886	-22.284914	7.65E-09
AAM_EM	AAM	EM	16	30018500	rs3935873	T	C	-7.069053	49.971508	-22.282768	7.67E-09
AAM_EM	AAM	EM	11	86709891	rs55965748	C	T	6.212350	38.593290	-22.282737	7.67E-09
AAM_EM	AAM	EM	11	86715856	rs6592325	G	A	6.222279	38.716759	-22.278820	7.69E-09
AAM_EM	AAM	EM	11	86713340	rs7111944	C	T	6.203270	38.480553	-22.265551	7.77E-09
AAM_EM	AAM	EM	11	86713995	rs4944653	G	A	6.202704	38.473542	-22.262819	7.79E-09
AAM_EM	AAM	EM	11	86712933	rs10736773	A	T	6.203270	38.480553	-22.260242	7.80E-09
AAM_EM	AAM	EM	12	15365510	rs11056399	T	C	-3.329190	11.083508	-22.256222	7.83E-09
AAM_EM	AAM	EM	9	11824873	rs10960286	T	G	-5.727365	32.802712	-22.255714	7.83E-09
AAM_EM	AAM	EM	11	86712229	rs10898571	C	T	6.202704	38.473542	-22.255682	7.83E-09
AAM_EM	AAM	EM	11	86712464	rs12791285	G	T	6.202704	38.473542	-22.255651	7.83E-09
AAM_EM	AAM	EM	11	86711494	rs2187160	C	T	6.203270	38.480553	-22.255392	7.83E-09
AAM_EM	AAM	EM	11	86709404	rs61663753	T	C	6.203270	38.480553	-22.250978	7.86E-09
AAM_EM	AAM	EM	16	30003076	rs9924686	A	G	-7.006710	49.093986	-22.250255	7.87E-09
AAM_EM	AAM	EM	9	11810095	rs7028261	G	A	-4.740685	22.474090	-22.246145	7.89E-09
AAM_EM	AAM	EM	9	11833169	rs36113263	G	A	-5.711477	32.620965	-22.242147	7.92E-09
AAM_EM	AAM	EM	11	86710921	rs10898568	T	A	6.195775	38.387626	-22.231842	7.98E-09
AAM_EM	AAM	EM	10	97773115	rs12266567	A	G	6.964746	48.507681	-22.226770	8.01E-09
AAM_EM	AAM	EM	16	29986525	rs11150577	A	G	-6.872461	47.230725	-22.225985	8.02E-09
AAM_EM	AAM	EM	11	86709298	rs34403796	T	C	6.194959	38.377520	-22.223302	8.04E-09
AAM_EM	AAM	EM	9	11728121	rs7466633	A	G	5.119712	26.211453	-22.222310	8.04E-09
AAM_EM	AAM	EM	11	86712639	rs10898572	T	C	6.191483	38.334465	-22.221019	8.05E-09
AAM_EM	AAM	EM	6	151872448	rs9479068	T	G	4.992511	24.925168	-22.216531	8.08E-09
AAM_EM	AAM	EM	9	11833446	rs35829516	G	A	-5.704037	32.536033	-22.213972	8.10E-09
AAM_EM	AAM	EM	16	29982961	rs9932702	T	C	-6.874742	47.262080	-22.209564	8.12E-09
AAM_EM	AAM	EM	16	29984070	rs11901	G	C	-6.896503	47.561747	-22.200253	8.19E-09
AAM_EM	AAM	EM	11	101584172	rs10791519	C	T	8.464623	71.649845	-22.197362	8.20E-09
AAM_EM	AAM	EM	9	11839805	rs10960303	A	C	-5.683457	32.301680	-22.184802	8.29E-09
AAM_EM	AAM	EM	16	29936654	rs12716972	G	A	-6.129054	37.565307	-22.183901	8.29E-09
AAM_EM	AAM	EM	16	29995218	rs4788204	A	G	-6.946294	48.250994	-22.166118	8.41E-09
AAM_EM	AAM	EM	12	15363407	rs10846159	G	A	-3.315437	10.992125	-22.159869	8.45E-09
AAM_EM	AAM	EM	2	25141538	rs11676272	G	A	-6.262847	39.223255	22.150382	8.52E-09
AAM_EM	AAM	EM	9	11816870	rs36043248	A	G	-5.683457	32.301680	-22.129552	8.66E-09
AAM_EM	AAM	EM	1	204161591	rs2510	C	T	-6.697516	44.856718	-22.125162	8.69E-09
AAM_EM	AAM	EM	12	15371606	rs12312583	G	A	-3.334022	11.115705	-22.123092	8.70E-09
AAM_EM	AAM	EM	12	15370878	rs767201	A	G	-3.337620	11.139709	-22.121341	8.71E-09
AAM_EM	AAM	EM	6	100704146	rs8180548	A	G	-7.312095	53.466731	-22.113987	8.76E-09
AAM_EM	AAM	EM	12	15452087	rs28832932	T	A	-2.992169	8.953076	-22.084579	8.97E-09
AAM_EM	AAM	EM	9	11819319	rs10960274	C	T	-5.745039	33.005476	-22.056356	9.17E-09
AAM_EM	AAM	EM	6	151872567	rs7761420	T	C	4.955893	24.560871	-22.053445	9.20E-09
AAM_EM	AAM	EM	16	29937652	rs12716973	A	G	-6.190167	38.318164	-22.044575	9.26E-09
AAM_EM	AAM	EM	11	86712340	rs11234902	G	A	6.141009	37.711993	-22.034739	9.33E-09
AAM_EM	AAM	EM	9	11840417	rs10960304	A	G	-5.670955	32.159730	-22.011326	9.51E-09
AAM_EM	AAM	EM	6	151857594	rs6931664	G	A	4.951090	24.513295	-22.010198	9.52E-09
AAM_EM	AAM	EM	10	90202725	rs6586134	A	G	3.538771	12.522899	-22.004386	9.56E-09
AAM_EM	AAM	EM	12	15360454	rs7973089	C	T	-3.300831	10.895486	-22.000528	9.59E-09
AAM_EM	AAM	EM	1	72902776	rs1084440	A	T	7.031727	49.445180	-21.999675	9.60E-09
AAM_EM	AAM	EM	1	72916538	rs782243	T	C	7.014361	49.201257	-21.998883	9.60E-09
AAM_EM	AAM	EM	12	15367715	rs7980227	A	T	-3.287729	10.809161	-21.997348	9.61E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	9	11813305	rs67040713	G	A	-5.756650	33.139019	-21.991983	9.66E-09
AAM_EM	AAM	EM	12	15366321	rs73065457	T	C	-3.295349	10.859325	-21.987690	9.69E-09
AAM_EM	AAM	EM	1	72902623	rs1084441	A	G	7.024397	49.342158	-21.977658	9.77E-09
AAM_EM	AAM	EM	3	49878078	rs2271960	C	T	5.445707	29.655730	21.975723	9.78E-09
AAM_EM	AAM	EM	9	11813401	rs66803120	G	A	-5.743389	32.986523	-21.975592	9.78E-09
AAM_EM	AAM	EM	9	11815585	rs7036415	C	T	-5.736764	32.910467	-21.974426	9.79E-09
AAM_EM	AAM	EM	9	11815934	rs7020713	A	G	-5.732771	32.864663	-21.971167	9.82E-09
AAM_EM	AAM	EM	1	72911829	rs782252	T	C	7.013164	49.184465	-21.962647	9.88E-09
AAM_EM	AAM	EM	1	72850425	rs2815778	A	G	-7.014968	49.209770	-21.961687	9.89E-09
AAM_EM	AAM	EM	9	11834251	rs34323896	T	G	-5.650486	31.927993	-21.959389	9.91E-09
AAM_EM	AAM	EM	1	72866971	rs2613473	A	G	-6.938600	48.144171	-21.956922	9.93E-09
AAM_EM	AAM	EM	12	15477683	rs7304487	C	T	-3.134750	9.826660	-21.955047	9.94E-09
AAM_EM	AAM	EM	9	11812824	rs10960266	C	T	-5.754106	33.109741	-21.955039	9.94E-09
AAM_EM	AAM	EM	1	72908137	rs782239	C	T	6.993561	48.909899	-21.943758	1.00E-08
AAM_EM	AAM	EM	9	11818552	rs10960271	G	A	-5.733464	32.872604	-21.943679	1.00E-08
AAM_EM	AAM	EM	16	29948401	rs4788190	A	G	-6.624256	43.880770	-21.933610	1.01E-08
AAM_EM	AAM	EM	6	151857713	rs1832727	G	C	4.924676	24.252433	-21.915558	1.03E-08
AAM_EM	AAM	EM	12	15367769	rs7977262	G	A	-3.274094	10.719692	-21.905951	1.03E-08
AAM_EM	AAM	EM	9	11795994	rs10756285	A	G	-4.740685	22.474090	-21.903997	1.04E-08
AAM_EM	AAM	EM	1	72865045	rs1903372	G	A	-6.892036	47.500164	-21.901483	1.04E-08
AAM_EM	AAM	EM	3	128111201	rs1702134	T	G	4.342297	18.855544	21.893028	1.04E-08
AAM_EM	AAM	EM	1	204161026	rs7538038	G	A	-6.695450	44.829055	-21.891871	1.05E-08
AAM_EM	AAM	EM	9	11820083	rs10960278	G	A	-5.774684	33.346978	-21.888066	1.05E-08
AAM_EM	AAM	EM	1	204161490	rs4951316	C	T	-6.665926	44.434570	-21.885297	1.05E-08
AAM_EM	AAM	EM	1	72850392	rs2613480	C	T	-6.989439	48.852257	-21.881765	1.05E-08
AAM_EM	AAM	EM	1	72934826	rs782236	G	A	6.923705	47.937696	-21.873669	1.06E-08
AAM_EM	AAM	EM	9	11795313	rs10960237	G	A	-4.719865	22.277124	-21.871532	1.06E-08
AAM_EM	AAM	EM	16	29939877	rs12691307	G	A	-6.326368	40.022936	-21.865813	1.07E-08
AAM_EM	AAM	EM	9	11794905	rs2382304	T	C	-4.720735	22.285337	-21.859267	1.07E-08
AAM_EM	AAM	EM	9	11804718	rs10809604	A	G	4.528873	20.510688	-21.854636	1.08E-08
AAM_EM	AAM	EM	9	11819199	rs10960273	T	C	-5.751034	33.074388	-21.854291	1.08E-08
AAM_EM	AAM	EM	16	29924905	rs7201384	G	A	-6.085672	37.035406	-21.818007	1.11E-08
AAM_EM	AAM	EM	9	11795401	rs10960238	G	C	-4.710590	22.189661	-21.807914	1.12E-08
AAM_EM	AAM	EM	6	74763411	rs4605844	G	A	3.598546	12.949535	-21.805283	1.12E-08
AAM_EM	AAM	EM	3	49881134	rs2246832	T	A	5.431766	29.504086	21.792755	1.13E-08
AAM_EM	AAM	EM	9	11819429	rs10960275	A	G	-5.743213	32.984493	-21.791296	1.13E-08
AAM_EM	AAM	EM	9	11796169	rs10809596	C	A	-4.717299	22.252910	-21.779547	1.14E-08
AAM_EM	AAM	EM	9	11874502	rs10448181	T	G	-5.625469	31.645899	-21.778490	1.14E-08
AAM_EM	AAM	EM	1	204162230	rs4951319	C	T	-6.656205	44.305065	-21.773797	1.15E-08
AAM_EM	AAM	EM	6	100680260	rs2281425	A	G	-6.850092	46.923763	-21.773734	1.15E-08
AAM_EM	AAM	EM	1	72866847	rs2815767	G	A	-6.885219	47.406238	-21.773725	1.15E-08
AAM_EM	AAM	EM	12	15437905	rs1117153	C	T	-3.051106	9.309248	-21.770839	1.15E-08
AAM_EM	AAM	EM	9	11801962	rs10756288	G	A	-4.677072	21.874999	-21.763315	1.16E-08
AAM_EM	AAM	EM	9	11875357	rs7019378	C	A	-5.623618	31.625074	-21.758559	1.16E-08
AAM_EM	AAM	EM	3	128122396	rs2659685	A	G	4.640839	21.537390	21.749407	1.17E-08
AAM_EM	AAM	EM	1	204161069	rs7538055	G	A	-6.648052	44.196597	-21.736793	1.18E-08
AAM_EM	AAM	EM	9	11804849	rs10756290	A	G	4.496130	20.215185	-21.734802	1.18E-08
AAM_EM	AAM	EM	9	11801386	rs10756287	A	G	-4.671511	21.823015	-21.733133	1.19E-08
AAM_EM	AAM	EM	12	15370010	rs16910692	C	T	-3.279477	10.754970	-21.732392	1.19E-08
AAM_EM	AAM	EM	16	29925445	rs8059619	T	C	-6.590623	43.436317	-21.730735	1.19E-08
AAM_EM	AAM	EM	1	204157973	rs11240694	T	C	-6.602601	43.594346	-21.710316	1.21E-08
AAM_EM	AAM	EM	9	11875926	rs10960335	C	T	-5.610285	31.475294	-21.705918	1.21E-08
AAM_EM	AAM	EM	12	15369665	rs17835113	A	G	-3.274094	10.719692	-21.701445	1.22E-08
AAM_EM	AAM	EM	3	49818555	rs9814765	T	C	5.317845	28.279479	21.688267	1.23E-08
AAM_EM	AAM	EM	1	204162212	rs12097666	C	T	-6.628552	43.937708	-21.685526	1.23E-08
AAM_EM	AAM	EM	12	15359063	rs7303595	A	T	-3.261054	10.634472	-21.674045	1.24E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	9	11773304	rs10429527	C	T	-5.044795	25.449962	-21.669651	1.25E-08
AAM_EM	AAM	EM	6	151882362	rs9478219	G	T	4.889680	23.908966	-21.668188	1.25E-08
AAM_EM	AAM	EM	9	11772767	rs10809586	G	C	-5.013319	25.133372	-21.642988	1.27E-08
AAM_EM	AAM	EM	12	15368644	rs7965695	A	G	-3.266202	10.668075	-21.642569	1.27E-08
AAM_EM	AAM	EM	16	29927702	rs10083738	A	G	-6.607077	43.653468	-21.640119	1.28E-08
AAM_EM	AAM	EM	9	11799232	rs10960246	C	T	-4.664081	21.753654	-21.634840	1.28E-08
AAM_EM	AAM	EM	12	15359047	rs58368403	A	C	-3.253479	10.585122	-21.624465	1.29E-08
AAM_EM	AAM	EM	16	29931899	rs4407079	A	G	-6.610509	43.698827	-21.614078	1.30E-08
AAM_EM	AAM	EM	9	11794575	rs10756284	A	G	-4.662755	21.741281	-21.602960	1.31E-08
AAM_EM	AAM	EM	3	49869631	rs13085679	A	G	5.273288	27.807568	21.595483	1.32E-08
AAM_EM	AAM	EM	1	204160938	rs7524621	A	G	-6.602601	43.594346	-21.588489	1.33E-08
AAM_EM	AAM	EM	1	204148168	rs12040580	C	T	-6.600422	43.565576	-21.586891	1.33E-08
AAM_EM	AAM	EM	3	128112307	rs1620440	C	T	4.276327	18.286970	21.577405	1.34E-08
AAM_EM	AAM	EM	1	204147186	rs7513165	C	T	-6.582057	43.323478	-21.571748	1.35E-08
AAM_EM	AAM	EM	9	11796292	rs10809598	G	T	-4.660136	21.716870	-21.567959	1.35E-08
AAM_EM	AAM	EM	9	11796276	rs10960243	G	T	-4.660136	21.716870	-21.566914	1.35E-08
AAM_EM	AAM	EM	16	29924422	rs12444978	T	A	-6.583015	43.336091	-21.564319	1.36E-08
AAM_EM	AAM	EM	6	151876413	rs6557149	T	C	4.865785	23.675868	-21.558946	1.36E-08
AAM_EM	AAM	EM	3	49960388	rs62262093	C	T	5.766574	33.253372	21.551386	1.37E-08
AAM_EM	AAM	EM	3	49819102	rs11130221	G	C	5.281682	27.896161	21.535041	1.39E-08
AAM_EM	AAM	EM	12	15372062	rs12320285	T	G	-3.268814	10.685146	-21.533940	1.39E-08
AAM_EM	AAM	EM	9	11794539	rs10809594	G	T	-4.648720	21.610593	-21.528747	1.39E-08
AAM_EM	AAM	EM	3	128110390	rs1702131	C	T	4.277506	18.297054	21.516078	1.41E-08
AAM_EM	AAM	EM	9	11802674	rs36011602	G	A	-4.629244	21.429899	-21.514712	1.41E-08
AAM_EM	AAM	EM	16	29934819	rs11150574	T	C	-6.588933	43.414037	-21.514040	1.41E-08
AAM_EM	AAM	EM	6	151876815	rs7753676	A	G	4.847545	23.498690	-21.511141	1.41E-08
AAM_EM	AAM	EM	11	86714197	rs4944654	G	C	6.017618	36.211727	-21.502056	1.42E-08
AAM_EM	AAM	EM	11	101583073	rs12282604	G	A	8.344533	69.631224	-21.493015	1.43E-08
AAM_EM	AAM	EM	16	29950829	rs12716975	T	C	-6.691433	44.775271	-21.492356	1.44E-08
AAM_EM	AAM	EM	12	15430956	rs2417432	C	A	-3.013799	9.082984	-21.491789	1.44E-08
AAM_EM	AAM	EM	2	25161386	rs4430895	T	C	-6.046526	36.560473	21.488121	1.44E-08
AAM_EM	AAM	EM	16	29932064	rs4609871	T	C	-6.571536	43.185084	-21.480753	1.45E-08
AAM_EM	AAM	EM	3	49951316	rs9848497	C	T	5.734155	32.880538	21.475992	1.45E-08
AAM_EM	AAM	EM	12	115206320	rs1566643	G	A	3.656182	13.367665	-21.470590	1.46E-08
AAM_EM	AAM	EM	3	49813169	rs57648519	A	C	5.263939	27.709050	21.468414	1.46E-08
AAM_EM	AAM	EM	12	15429864	rs11056414	G	T	-3.040735	9.246069	-21.467737	1.46E-08
AAM_EM	AAM	EM	9	11801690	rs10738250	G	C	-4.625882	21.398783	-21.467575	1.46E-08
AAM_EM	AAM	EM	9	11774040	rs10960205	C	A	-4.997093	24.970934	-21.460679	1.47E-08
AAM_EM	AAM	EM	3	49949834	rs7634084	T	A	5.729045	32.821955	21.456851	1.48E-08
AAM_EM	AAM	EM	9	11790536	rs7867311	C	A	-4.642030	21.548441	-21.455101	1.48E-08
AAM_EM	AAM	EM	19	18812785	rs8112818	G	A	5.879701	34.570888	21.442902	1.49E-08
AAM_EM	AAM	EM	6	151893073	rs4391273	G	T	4.852361	23.545409	-21.431574	1.51E-08
AAM_EM	AAM	EM	7	121990361	rs79565496	C	T	5.266562	27.736676	21.416766	1.52E-08
AAM_EM	AAM	EM	4	130851720	rs13149087	A	G	-4.340745	18.842064	-21.412893	1.53E-08
AAM_EM	AAM	EM	3	49813013	rs34451146	T	C	5.250121	27.563765	21.412058	1.53E-08
AAM_EM	AAM	EM	16	29958216	rs8054556	A	G	-7.255892	52.647967	-21.409986	1.53E-08
AAM_EM	AAM	EM	12	50289667	rs73116339	A	G	-7.038727	49.543679	-21.407581	1.54E-08
AAM_EM	AAM	EM	2	25161265	rs4459693	T	G	-6.020386	36.245047	21.405615	1.54E-08
AAM_EM	AAM	EM	3	49930215	rs6795703	T	C	5.857105	34.305683	21.403103	1.54E-08
AAM_EM	AAM	EM	3	49809063	rs6446295	T	G	5.246515	27.525916	21.396334	1.55E-08
AAM_EM	AAM	EM	3	49936102	rs2230590	C	T	5.815089	33.815265	21.382378	1.57E-08
AAM_EM	AAM	EM	2	25159780	rs10865320	G	A	-6.028007	36.336869	21.381989	1.57E-08
AAM_EM	AAM	EM	12	15427487	rs73055272	T	G	-3.028219	9.170108	-21.381173	1.57E-08
AAM_EM	AAM	EM	12	15512137	rs11056448	T	A	-3.165158	10.018225	-21.375481	1.57E-08
AAM_EM	AAM	EM	16	29881482	rs60447887	G	A	-8.340148	69.558066	-21.374505	1.58E-08
AAM_EM	AAM	EM	3	49924940	rs1062633	C	T	5.796779	33.602645	21.370383	1.58E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	19	18812024	rs4808845	G	A	5.847506	34.193327	21.362963	1.59E-08
AAM_EM	AAM	EM	9	11801667	rs1601612	T	C	4.474473	20.020910	-21.353521	1.60E-08
AAM_EM	AAM	EM	3	49821625	rs13063621	C	T	5.245339	27.513579	21.353315	1.60E-08
AAM_EM	AAM	EM	2	25161236	rs4343432	G	A	-6.001916	36.022996	21.339891	1.62E-08
AAM_EM	AAM	EM	16	29939293	rs4424923	C	T	-6.150382	37.827193	-21.339585	1.62E-08
AAM_EM	AAM	EM	12	15503405	rs56195914	G	A	-3.105436	9.643731	-21.339084	1.62E-08
AAM_EM	AAM	EM	16	29938820	rs4420550	G	A	-6.137562	37.669663	-21.329331	1.63E-08
AAM_EM	AAM	EM	3	49808374	rs7431106	A	G	5.231655	27.370217	21.322005	1.64E-08
AAM_EM	AAM	EM	9	11776151	rs12378615	C	T	-4.961089	24.612407	-21.315165	1.65E-08
AAM_EM	AAM	EM	16	29954955	rs3924855	G	A	-6.668184	44.464681	-21.303240	1.67E-08
AAM_EM	AAM	EM	9	11801703	rs1601613	C	T	4.451431	19.815241	-21.295654	1.68E-08
AAM_EM	AAM	EM	3	49807085	rs9859153	T	G	5.225169	27.302393	21.295571	1.68E-08
AAM_EM	AAM	EM	3	128115381	rs1735527	G	A	4.121143	16.983816	21.290168	1.69E-08
AAM_EM	AAM	EM	12	15422843	rs9788092	T	A	-3.010287	9.061825	-21.286353	1.69E-08
AAM_EM	AAM	EM	12	15424108	rs12315037	A	G	-3.012625	9.075910	-21.270046	1.71E-08
AAM_EM	AAM	EM	12	15505731	rs16910770	T	C	-3.094717	9.577273	-21.267676	1.72E-08
AAM_EM	AAM	EM	12	115094260	rs11067228	G	A	-4.258289	18.133024	21.261286	1.72E-08
AAM_EM	AAM	EM	3	128117573	rs1702153	A	G	4.293347	18.432828	21.253631	1.73E-08
AAM_EM	AAM	EM	6	152513757	rs2635451	C	T	2.518067	6.340662	-21.243975	1.75E-08
AAM_EM	AAM	EM	3	49799475	rs9882639	C	A	5.207889	27.122113	21.238813	1.76E-08
AAM_EM	AAM	EM	12	15512617	rs11056449	T	C	-3.150486	9.925563	-21.236761	1.76E-08
AAM_EM	AAM	EM	3	49800272	rs60205400	T	C	5.206916	27.111971	21.234842	1.76E-08
AAM_EM	AAM	EM	3	49789664	rs7429353	A	T	-5.204994	27.091962	21.227234	1.77E-08
AAM_EM	AAM	EM	3	49858142	rs10865958	G	A	5.218885	27.236758	21.216246	1.79E-08
AAM_EM	AAM	EM	9	11755491	rs7868878	A	G	-6.426003	41.293508	-21.213693	1.79E-08
AAM_EM	AAM	EM	3	49924424	rs11713193	A	G	5.740317	32.951242	21.211913	1.79E-08
AAM_EM	AAM	EM	12	15506641	rs1304738	C	T	-3.146917	9.903086	-21.207400	1.80E-08
AAM_EM	AAM	EM	2	653623	rs10188118	G	C	8.240853	67.911652	21.201240	1.81E-08
AAM_EM	AAM	EM	12	15383037	rs17347323	T	C	-3.227215	10.414919	-21.195086	1.82E-08
AAM_EM	AAM	EM	6	151890789	rs9479072	T	C	4.802118	23.060341	-21.191728	1.82E-08
AAM_EM	AAM	EM	3	128122039	rs6780368	T	C	4.165259	17.349382	21.190660	1.82E-08
AAM_EM	AAM	EM	19	18811966	rs4808844	G	A	5.851559	34.240748	21.176497	1.84E-08
AAM_EM	AAM	EM	2	25159172	rs6728219	C	T	-5.989873	35.878573	21.161192	1.87E-08
AAM_EM	AAM	EM	3	49762662	rs7634902	T	G	-5.171676	26.746234	21.161040	1.87E-08
AAM_EM	AAM	EM	12	15501428	rs11056441	C	G	-3.077138	9.468776	-21.145042	1.89E-08
AAM_EM	AAM	EM	3	49939587	rs3733135	A	G	5.785497	33.471975	21.141534	1.90E-08
AAM_EM	AAM	EM	9	11782931	rs9918981	A	G	-4.951877	24.521083	-21.140297	1.90E-08
AAM_EM	AAM	EM	3	49783211	rs9853458	C	A	-5.174924	26.779840	21.138305	1.90E-08
AAM_EM	AAM	EM	12	15428939	rs12317051	G	A	-2.988879	8.933399	-21.127676	1.92E-08
AAM_EM	AAM	EM	3	49866392	rs1128535	T	C	5.172491	26.754661	21.123330	1.92E-08
AAM_EM	AAM	EM	9	11782807	rs9919059	G	A	-4.953203	24.534225	-21.122482	1.93E-08
AAM_EM	AAM	EM	9	11782926	rs9919029	G	T	-4.948212	24.484807	-21.119355	1.93E-08
AAM_EM	AAM	EM	16	29880874	rs35330978	T	C	-8.531869	72.792781	-21.117240	1.93E-08
AAM_EM	AAM	EM	16	29943367	rs12919683	C	T	-6.702413	44.922338	-21.115046	1.94E-08
AAM_EM	AAM	EM	11	30554476	rs559519	C	T	-4.307649	18.555841	-21.112830	1.94E-08
AAM_EM	AAM	EM	3	49772375	rs7649348	A	G	-5.174924	26.779840	21.108078	1.95E-08
AAM_EM	AAM	EM	3	49788969	rs7372966	C	T	-5.174109	26.771401	21.101277	1.96E-08
AAM_EM	AAM	EM	3	49790682	rs7372730	G	C	-5.174109	26.771401	21.101277	1.96E-08
AAM_EM	AAM	EM	3	49938227	rs3774758	G	C	5.774459	33.344375	21.101251	1.96E-08
AAM_EM	AAM	EM	12	15512044	rs11056447	A	G	-3.129675	9.794865	-21.094390	1.97E-08
AAM_EM	AAM	EM	3	49790544	rs7372725	A	C	-5.166903	26.696884	21.071889	2.00E-08
AAM_EM	AAM	EM	12	15411810	rs28410854	G	A	-3.196720	10.219017	-21.070213	2.01E-08
AAM_EM	AAM	EM	12	15406228	rs56090796	A	T	-3.198799	10.232315	-21.061785	2.02E-08
AAM_EM	AAM	EM	3	49752427	rs11130219	T	C	-5.110681	26.119061	21.057595	2.03E-08
AAM_EM	AAM	EM	3	49780844	rs9876508	A	G	-5.163022	26.656801	21.056960	2.03E-08
AAM_EM	AAM	EM	9	11731570	rs4416919	T	C	-6.214156	38.615733	-21.055895	2.03E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	3	49936910	rs11130224	A	T	5.760024	33.177872	21.048501	2.04E-08
AAM_EM	AAM	EM	3	49783103	rs9815766	T	C	-5.161484	26.640918	21.045193	2.05E-08
AAM_EM	AAM	EM	3	49773236	rs35261599	A	G	-5.156959	26.594227	21.043050	2.05E-08
AAM_EM	AAM	EM	3	49842625	rs2234391	G	A	5.223048	27.280229	21.042658	2.05E-08
AAM_EM	AAM	EM	16	29946708	rs11642933	A	G	-6.643178	44.131818	-21.039496	2.06E-08
AAM_EM	AAM	EM	9	11784454	rs9919005	T	C	-4.865785	23.675868	-21.038380	2.06E-08
AAM_EM	AAM	EM	3	49868455	rs7648987	G	A	5.145368	26.474815	21.034341	2.07E-08
AAM_EM	AAM	EM	9	11782803	rs9918980	T	C	-4.927241	24.277705	-21.030550	2.07E-08
AAM_EM	AAM	EM	3	49772647	rs7618501	G	A	-5.155473	26.578898	21.028737	2.07E-08
AAM_EM	AAM	EM	3	49772708	rs7618519	T	A	-5.155473	26.578898	21.028737	2.07E-08
AAM_EM	AAM	EM	9	11731076	rs72702265	T	C	-6.219417	38.681148	-21.025532	2.08E-08
AAM_EM	AAM	EM	3	49763338	rs1049256	C	T	-5.157697	26.601834	21.021855	2.09E-08
AAM_EM	AAM	EM	12	15502404	rs1870695	G	A	-3.059106	9.358131	-21.021409	2.09E-08
AAM_EM	AAM	EM	3	49853073	rs6775384	A	G	5.208864	27.132260	21.015492	2.10E-08
AAM_EM	AAM	EM	3	49792023	rs9872864	G	A	-5.152526	26.548529	21.006615	2.11E-08
AAM_EM	AAM	EM	12	15411547	rs73055254	G	A	-3.190553	10.179626	-21.000691	2.12E-08
AAM_EM	AAM	EM	9	11732375	rs4433241	G	A	-6.217546	38.657877	-20.999737	2.12E-08
AAM_EM	AAM	EM	12	15407185	rs12578517	C	T	-3.188525	10.166690	-20.994329	2.13E-08
AAM_EM	AAM	EM	3	49868842	rs7645061	T	C	5.140511	26.424855	20.992732	2.13E-08
AAM_EM	AAM	EM	3	49799729	rs9865480	C	T	5.147487	26.496625	20.992481	2.14E-08
AAM_EM	AAM	EM	12	15508743	rs55716164	A	G	-3.113312	9.692712	-20.986990	2.14E-08
AAM_EM	AAM	EM	6	151734051	rs9383891	A	C	-2.999977	8.999862	-20.985626	2.15E-08
AAM_EM	AAM	EM	12	15501355	rs11056440	A	C	-3.053748	9.325378	-20.984683	2.15E-08
AAM_EM	AAM	EM	6	152513858	rs2813531	T	C	2.486516	6.182763	-20.984149	2.15E-08
AAM_EM	AAM	EM	3	49785133	rs7374183	A	G	-5.145368	26.474815	20.983794	2.15E-08
AAM_EM	AAM	EM	6	74624442	rs12209746	C	A	-3.357327	11.271645	-20.983687	2.15E-08
AAM_EM	AAM	EM	16	29943459	rs12933498	A	C	-6.659915	44.354466	-20.981232	2.15E-08
AAM_EM	AAM	EM	9	11752509	rs35066064	T	C	-6.216302	38.642416	-20.981099	2.15E-08
AAM_EM	AAM	EM	16	29946670	rs11649612	C	T	-6.643178	44.131818	-20.980271	2.16E-08
AAM_EM	AAM	EM	1	44029353	rs11210871	G	C	-8.163299	66.639458	-20.974508	2.17E-08
AAM_EM	AAM	EM	12	15508221	rs1461034	A	C	-3.110136	9.672947	-20.969395	2.17E-08
AAM_EM	AAM	EM	3	49784777	rs7374277	C	T	-5.148909	26.511262	20.964873	2.18E-08
AAM_EM	AAM	EM	9	11800439	rs35782699	G	C	-6.188341	38.295566	-20.959012	2.19E-08
AAM_EM	AAM	EM	3	49761605	rs3811696	T	C	-5.137102	26.389820	20.955432	2.20E-08
AAM_EM	AAM	EM	12	15386448	rs12303992	G	A	-3.194648	10.205773	-20.951041	2.21E-08
AAM_EM	AAM	EM	3	49832261	rs6802890	G	A	5.213814	27.183854	20.949140	2.21E-08
AAM_EM	AAM	EM	1	204159787	rs4889	C	G	-6.370023	40.577189	-20.948897	2.21E-08
AAM_EM	AAM	EM	12	15395548	rs12580862	G	A	-3.188529	10.166715	-20.947477	2.21E-08
AAM_EM	AAM	EM	9	11778684	rs12380715	G	A	-4.924907	24.254708	-20.931689	2.24E-08
AAM_EM	AAM	EM	12	15377717	rs11056403	G	T	-3.186511	10.153853	-20.925062	2.25E-08
AAM_EM	AAM	EM	9	11779583	rs35093033	G	C	-4.899056	24.000751	-20.918658	2.26E-08
AAM_EM	AAM	EM	3	49753003	rs34614773	G	T	-5.127894	26.295300	20.917871	2.27E-08
AAM_EM	AAM	EM	3	49750188	rs3749240	A	T	-5.126616	26.282189	20.912656	2.27E-08
AAM_EM	AAM	EM	11	86707651	rs4944651	G	A	4.762726	22.683555	-20.911039	2.28E-08
AAM_EM	AAM	EM	6	152514601	rs9918328	T	C	2.578604	6.649201	-20.903006	2.29E-08
AAM_EM	AAM	EM	9	11778766	rs12379444	G	T	-4.925369	24.259259	-20.901337	2.30E-08
AAM_EM	AAM	EM	16	30018720	rs12921753	T	C	-6.307812	39.788495	-20.899536	2.30E-08
AAM_EM	AAM	EM	16	29946945	rs4527039	C	T	-6.633421	44.002269	-20.897948	2.30E-08
AAM_EM	AAM	EM	9	11752581	rs35622491	A	G	-6.182738	38.226247	-20.890042	2.32E-08
AAM_EM	AAM	EM	9	11729532	rs72702261	T	G	-5.837159	34.072429	-20.887262	2.32E-08
AAM_EM	AAM	EM	12	15381210	rs12300553	A	G	-3.176627	10.090961	-20.885713	2.32E-08
AAM_EM	AAM	EM	9	11733220	rs7038777	A	T	-6.213558	38.608303	-20.884716	2.33E-08
AAM_EM	AAM	EM	3	49798920	rs7634886	G	A	5.120328	26.217756	20.881719	2.33E-08
AAM_EM	AAM	EM	9	11738713	rs72702282	G	T	-6.232521	38.844322	-20.877649	2.34E-08
AAM_EM	AAM	EM	9	11739277	rs67385235	G	A	-6.233196	38.852737	-20.876820	2.34E-08
AAM_EM	AAM	EM	9	11846006	rs10960314	G	A	-5.323124	28.335652	-20.876719	2.34E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	3	49792158	rs9855505	G	T	-5.169282	26.721479	20.873579	2.35E-08
AAM_EM	AAM	EM	3	49752372	rs11130218	T	C	-5.112451	26.137152	20.869326	2.35E-08
AAM_EM	AAM	EM	12	15402932	rs12307681	T	C	-3.167041	10.030149	-20.866075	2.36E-08
AAM_EM	AAM	EM	12	15406943	rs11056412	C	T	-3.168934	10.042140	-20.865228	2.36E-08
AAM_EM	AAM	EM	9	11733621	rs10960136	G	T	-6.178043	38.168218	-20.860756	2.37E-08
AAM_EM	AAM	EM	9	11731919	rs7030979	G	T	-6.175151	38.132492	-20.859667	2.37E-08
AAM_EM	AAM	EM	11	86716726	rs1456274	G	A	4.750411	22.566406	-20.856056	2.38E-08
AAM_EM	AAM	EM	9	11733031	rs7022134	G	C	-6.173958	38.117760	-20.850217	2.39E-08
AAM_EM	AAM	EM	3	49761613	rs3811695	T	C	-5.111275	26.125130	20.850076	2.39E-08
AAM_EM	AAM	EM	3	49804119	rs6809431	G	A	5.120328	26.217756	20.848722	2.39E-08
AAM_EM	AAM	EM	11	86711141	rs10898570	T	C	4.741637	22.483124	-20.848352	2.39E-08
AAM_EM	AAM	EM	9	11779202	rs10809587	T	C	-4.887745	23.890049	-20.848351	2.39E-08
AAM_EM	AAM	EM	9	11770392	rs10960201	T	C	-6.188082	38.292356	-20.848294	2.39E-08
AAM_EM	AAM	EM	3	49736565	rs6785549	A	G	-5.110681	26.119061	20.848195	2.39E-08
AAM_EM	AAM	EM	9	11736154	rs7035402	G	A	-6.209065	38.552491	-20.846412	2.40E-08
AAM_EM	AAM	EM	12	15501860	rs73057240	G	T	-3.033172	9.200133	-20.843338	2.40E-08
AAM_EM	AAM	EM	16	29960468	rs8056535	A	G	-7.040898	49.574248	-20.842447	2.41E-08
AAM_EM	AAM	EM	7	121971996	rs6963586	T	G	5.273288	27.807568	20.838572	2.41E-08
AAM_EM	AAM	EM	9	11786029	rs12380402	G	T	-4.889680	23.908966	-20.837569	2.41E-08
AAM_EM	AAM	EM	9	11738476	rs1948078	A	G	-6.216611	38.646250	-20.827019	2.44E-08
AAM_EM	AAM	EM	12	15382815	rs11056410	C	T	-3.172754	10.066369	-20.826704	2.44E-08
AAM_EM	AAM	EM	12	15376420	rs7297771	G	A	-3.170836	10.054198	-20.821026	2.45E-08
AAM_EM	AAM	EM	9	11748620	rs71505187	G	A	-6.154111	37.873085	-20.820738	2.45E-08
AAM_EM	AAM	EM	12	15394463	rs7302643	C	T	-3.168934	10.042140	-20.819146	2.45E-08
AAM_EM	AAM	EM	11	86715034	rs10898574	T	C	4.742590	22.492162	-20.817268	2.45E-08
AAM_EM	AAM	EM	9	11733274	rs7022402	T	C	-6.182491	38.223197	-20.816584	2.46E-08
AAM_EM	AAM	EM	12	15417595	rs73055263	C	A	-3.165158	10.018225	-20.816248	2.46E-08
AAM_EM	AAM	EM	19	18834514	rs10404726	T	C	6.006131	36.073608	20.815398	2.46E-08
AAM_EM	AAM	EM	9	11727056	rs10960129	T	C	-5.882962	34.609236	-20.814887	2.46E-08
AAM_EM	AAM	EM	2	25159855	rs10865321	C	T	-5.866903	34.420545	20.813354	2.46E-08
AAM_EM	AAM	EM	12	15384217	rs12301533	C	T	-3.168934	10.042140	-20.812957	2.46E-08
AAM_EM	AAM	EM	12	15382567	rs11056409	C	T	-3.168934	10.042140	-20.811430	2.47E-08
AAM_EM	AAM	EM	12	15383650	rs56269213	C	A	-3.168934	10.042140	-20.810745	2.47E-08
AAM_EM	AAM	EM	9	11781469	rs12552353	A	G	-4.880157	23.815935	-20.810291	2.47E-08
AAM_EM	AAM	EM	11	101581644	rs6590916	A	T	8.269080	68.377690	-20.807701	2.47E-08
AAM_EM	AAM	EM	9	11745572	rs10960158	T	C	-6.169056	38.057252	-20.805204	2.48E-08
AAM_EM	AAM	EM	12	15372662	rs1382803	G	A	-3.139908	9.859019	-20.802837	2.48E-08
AAM_EM	AAM	EM	12	15382293	rs7358676	G	T	-3.167041	10.030149	-20.799644	2.49E-08
AAM_EM	AAM	EM	9	11778476	rs12377944	A	C	-4.899868	24.008704	-20.795610	2.50E-08
AAM_EM	AAM	EM	9	11732555	rs10960135	C	T	-6.171608	38.088742	-20.793046	2.50E-08
AAM_EM	AAM	EM	9	11778314	rs10960207	C	A	-4.891832	23.930023	-20.791552	2.50E-08
AAM_EM	AAM	EM	9	11734433	rs1906114	A	G	-6.187822	38.289146	-20.788704	2.51E-08
AAM_EM	AAM	EM	9	11734891	rs1906116	G	A	-6.158798	37.930798	-20.788651	2.51E-08
AAM_EM	AAM	EM	12	15415874	rs7132318	C	T	-3.072884	9.442619	-20.787521	2.51E-08
AAM_EM	AAM	EM	9	11780448	rs34574178	A	G	-4.867534	23.692883	-20.785956	2.52E-08
AAM_EM	AAM	EM	9	11780588	rs12379427	T	A	-4.867534	23.692883	-20.784759	2.52E-08
AAM_EM	AAM	EM	9	11738661	rs72702281	G	T	-6.233549	38.857133	-20.779778	2.53E-08
AAM_EM	AAM	EM	6	152510750	rs2813523	G	A	2.530190	6.401860	-20.773944	2.54E-08
AAM_EM	AAM	EM	9	11753744	rs10960175	C	A	-6.154528	37.878214	-20.769847	2.55E-08
AAM_EM	AAM	EM	9	11736515	rs12380853	A	C	-6.186797	38.276462	-20.767929	2.55E-08
AAM_EM	AAM	EM	9	11736618	rs12376871	C	T	-6.185773	38.263784	-20.763791	2.56E-08
AAM_EM	AAM	EM	3	49869158	rs695238	C	A	5.113651	26.149425	20.762103	2.56E-08
AAM_EM	AAM	EM	12	15505312	rs56060060	C	T	-3.038194	9.230625	-20.760615	2.57E-08
AAM_EM	AAM	EM	12	15388204	rs12307666	G	A	-3.159572	9.982895	-20.751042	2.59E-08
AAM_EM	AAM	EM	9	11782247	rs10809589	C	T	-4.860650	23.625916	-20.750966	2.59E-08
AAM_EM	AAM	EM	9	11747333	rs10960163	G	A	-6.149759	37.819535	-20.748252	2.59E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	9	11783978	rs7860873	G	A	-4.853987	23.561194	-20.742978	2.60E-08
AAM_EM	AAM	EM	6	152513525	rs2635452	C	T	2.462426	6.063540	-20.742401	2.60E-08
AAM_EM	AAM	EM	9	11739358	rs10960148	A	T	-6.192284	38.344386	-20.739221	2.61E-08
AAM_EM	AAM	EM	9	11783050	rs9919039	G	T	-4.862349	23.642440	-20.735133	2.62E-08
AAM_EM	AAM	EM	6	74623372	rs7752254	T	G	-3.292217	10.838694	-20.734190	2.62E-08
AAM_EM	AAM	EM	3	49810961	rs6766836	G	A	5.083778	25.844802	20.732663	2.62E-08
AAM_EM	AAM	EM	9	11761616	rs10960196	T	A	-6.173246	38.108966	-20.732628	2.63E-08
AAM_EM	AAM	EM	12	15388131	rs12307658	C	A	-3.154091	9.948289	-20.728948	2.63E-08
AAM_EM	AAM	EM	7	121983205	rs9656292	A	T	5.291981	28.005063	20.726792	2.64E-08
AAM_EM	AAM	EM	9	11744080	rs35314276	A	G	-6.174671	38.126568	-20.721350	2.65E-08
AAM_EM	AAM	EM	9	11754268	rs36088670	C	T	-6.139653	37.695333	-20.720167	2.65E-08
AAM_EM	AAM	EM	9	11779061	rs12553512	T	C	-4.882029	23.834210	-20.716942	2.66E-08
AAM_EM	AAM	EM	9	11786682	rs7873121	T	C	-4.847545	23.498690	-20.715395	2.66E-08
AAM_EM	AAM	EM	9	11789900	rs10960224	T	C	-4.836715	23.393810	-20.714489	2.66E-08
AAM_EM	AAM	EM	16	29878161	rs4474709	T	A	-8.399608	70.553419	-20.714195	2.66E-08
AAM_EM	AAM	EM	9	11781165	rs10960213	T	C	-4.857299	23.593358	-20.712797	2.67E-08
AAM_EM	AAM	EM	9	11788893	rs9695672	G	A	-4.842838	23.453083	-20.710782	2.67E-08
AAM_EM	AAM	EM	16	29878468	rs7198022	C	T	-8.386225	70.328761	-20.710778	2.67E-08
AAM_EM	AAM	EM	9	11789706	rs12380203	T	C	-4.844391	23.468126	-20.709100	2.67E-08
AAM_EM	AAM	EM	9	11768548	rs11523721	G	A	-6.160316	37.949494	-20.708520	2.68E-08
AAM_EM	AAM	EM	9	11750380	rs7847864	G	A	-6.139653	37.695333	-20.708171	2.68E-08
AAM_EM	AAM	EM	12	15409959	rs12579002	G	A	-3.059106	9.358131	-20.707304	2.68E-08
AAM_EM	AAM	EM	9	11789284	rs10960223	T	G	-4.842838	23.453083	-20.705644	2.68E-08
AAM_EM	AAM	EM	9	11735041	rs10960139	T	G	-6.151613	37.842338	-20.705015	2.68E-08
AAM_EM	AAM	EM	12	15412898	rs9787983	G	A	-3.057757	9.349876	-20.699205	2.70E-08
AAM_EM	AAM	EM	12	15420288	rs12317636	A	G	-3.154091	9.948289	-20.698972	2.70E-08
AAM_EM	AAM	EM	6	152510957	rs2813524	G	A	2.503419	6.267109	-20.697543	2.70E-08
AAM_EM	AAM	EM	9	11751995	rs10960171	G	T	-6.120301	37.458080	-20.693000	2.71E-08
AAM_EM	AAM	EM	6	152509985	rs7745102	C	T	2.489285	6.196539	-20.682794	2.73E-08
AAM_EM	AAM	EM	9	11740814	rs13295519	G	C	-6.178536	38.174304	-20.680490	2.74E-08
AAM_EM	AAM	EM	9	11749261	rs10960166	G	A	-6.124799	37.513162	-20.673487	2.75E-08
AAM_EM	AAM	EM	9	11782178	rs10809588	A	G	-4.858963	23.609520	-20.672527	2.75E-08
AAM_EM	AAM	EM	9	11737002	rs35233568	A	G	-6.177563	38.162286	-20.671648	2.76E-08
AAM_EM	AAM	EM	9	11736462	rs7035775	G	A	-6.157509	37.914918	-20.670135	2.76E-08
AAM_EM	AAM	EM	9	11755197	rs10960181	A	G	-6.178535	38.174294	-20.662186	2.78E-08
AAM_EM	AAM	EM	12	15390019	rs12310061	T	A	-3.145156	9.892004	-20.660139	2.78E-08
AAM_EM	AAM	EM	12	15387519	rs1479405	T	C	-3.145156	9.892004	-20.658836	2.78E-08
AAM_EM	AAM	EM	9	11735126	rs10960141	C	T	-6.150377	37.827134	-20.658474	2.78E-08
AAM_EM	AAM	EM	9	11791989	rs36088434	C	A	-6.089874	37.086570	-20.656167	2.79E-08
AAM_EM	AAM	EM	12	15391524	rs1479407	T	G	-3.143397	9.880947	-20.654359	2.79E-08
AAM_EM	AAM	EM	12	15389637	rs12311304	C	T	-3.145156	9.892004	-20.651296	2.80E-08
AAM_EM	AAM	EM	12	15391157	rs56148413	A	G	-3.143397	9.880947	-20.648695	2.81E-08
AAM_EM	AAM	EM	12	15388361	rs12309210	C	T	-3.143397	9.880947	-20.646967	2.81E-08
AAM_EM	AAM	EM	9	11736693	rs12376875	C	T	-6.152445	37.852583	-20.646893	2.81E-08
AAM_EM	AAM	EM	9	11788593	rs9695120	C	T	-4.842838	23.453083	-20.645980	2.81E-08
AAM_EM	AAM	EM	6	152511318	rs2635458	A	T	2.506306	6.281568	-20.643586	2.82E-08
AAM_EM	AAM	EM	9	11778059	rs7860951	G	A	-4.858963	23.609520	-20.641842	2.82E-08
AAM_EM	AAM	EM	9	11787339	rs66964574	G	T	-4.850747	23.529748	-20.640671	2.82E-08
AAM_EM	AAM	EM	9	11733783	rs13285871	A	G	-6.291706	39.585569	-20.639781	2.83E-08
AAM_EM	AAM	EM	9	11735088	rs10960140	C	T	-6.144330	37.752795	-20.637644	2.83E-08
AAM_EM	AAM	EM	9	11736985	rs35094746	A	C	-6.166994	38.031818	-20.636615	2.83E-08
AAM_EM	AAM	EM	6	100750852	rs12111503	A	G	-7.044599	49.626371	-20.632720	2.84E-08
AAM_EM	AAM	EM	9	11762597	rs35172165	G	A	-6.142758	37.733472	-20.631749	2.84E-08
AAM_EM	AAM	EM	9	11762410	rs10756278	G	A	4.807274	23.109884	-20.631347	2.85E-08
AAM_EM	AAM	EM	9	11742877	rs10960152	A	G	-6.162961	37.982088	-20.631022	2.85E-08
AAM_EM	AAM	EM	9	11737404	rs10960145	A	T	-6.153064	37.860192	-20.625316	2.86E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	9	11752940	rs10960173	G	A	-6.110365	37.336566	-20.621423	2.87E-08
AAM_EM	AAM	EM	9	11787691	rs75966800	A	G	-4.826432	23.294449	-20.619193	2.87E-08
AAM_EM	AAM	EM	9	11750690	rs7848257	G	A	-6.109407	37.324857	-20.617200	2.88E-08
AAM_EM	AAM	EM	9	11788519	rs12001029	G	A	-4.841286	23.438055	-20.611435	2.89E-08
AAM_EM	AAM	EM	1	43919413	rs6692611	G	A	-5.356820	28.695521	-20.606729	2.90E-08
AAM_EM	AAM	EM	6	152509822	rs7758071	A	G	2.494880	6.224425	-20.604140	2.91E-08
AAM_EM	AAM	EM	9	11770240	rs12377578	G	A	-6.166318	38.023477	-20.602883	2.91E-08
AAM_EM	AAM	EM	7	121972034	rs6963328	G	A	5.301273	28.103495	20.602484	2.91E-08
AAM_EM	AAM	EM	9	11794977	rs10960236	A	C	-4.829318	23.322313	-20.597071	2.92E-08
AAM_EM	AAM	EM	9	11762493	rs71505191	A	C	-6.131784	37.598779	-20.594846	2.93E-08
AAM_EM	AAM	EM	12	15412945	rs12296735	G	A	-3.042017	9.253866	-20.591417	2.94E-08
AAM_EM	AAM	EM	9	11741181	rs7861493	G	A	-6.151814	37.844821	-20.589043	2.94E-08
AAM_EM	AAM	EM	16	30023786	rs12325400	G	C	-6.257576	39.157254	-20.588122	2.94E-08
AAM_EM	AAM	EM	9	11761892	rs10960197	A	C	-6.129604	37.572050	-20.586626	2.95E-08
AAM_EM	AAM	EM	9	11786470	rs7872741	T	A	-4.845956	23.483292	-20.585823	2.95E-08
AAM_EM	AAM	EM	9	11739533	rs10960149	T	C	-6.144922	37.760064	-20.585412	2.95E-08
AAM_EM	AAM	EM	9	11755162	rs10960180	G	C	-6.155374	37.888628	-20.584731	2.95E-08
AAM_EM	AAM	EM	9	11755255	rs10960182	G	A	-6.155374	37.888628	-20.584731	2.95E-08
AAM_EM	AAM	EM	9	11793643	rs10960233	G	T	-4.823583	23.266955	-20.583213	2.96E-08
AAM_EM	AAM	EM	9	11786376	rs7858903	A	T	-4.829318	23.322313	-20.580044	2.96E-08
AAM_EM	AAM	EM	19	18819060	rs60021783	A	T	6.835711	46.726949	20.577382	2.97E-08
AAM_EM	AAM	EM	9	11742001	rs1352195	T	A	-6.147730	37.794584	-20.576716	2.97E-08
AAM_EM	AAM	EM	9	11743343	rs10809574	G	T	-6.107828	37.305558	-20.575503	2.97E-08
AAM_EM	AAM	EM	9	11741707	rs7862308	G	C	-6.140042	37.700117	-20.574275	2.98E-08
AAM_EM	AAM	EM	9	11790689	rs7867801	T	G	-4.832252	23.350658	-20.570662	2.99E-08
AAM_EM	AAM	EM	16	30016022	rs12928610	T	C	-6.863272	47.104500	-20.568900	2.99E-08
AAM_EM	AAM	EM	9	11748821	rs66777182	G	A	-6.151196	37.837217	-20.568342	2.99E-08
AAM_EM	AAM	EM	9	11741320	rs7861814	T	C	-6.146118	37.774764	-20.568050	2.99E-08
AAM_EM	AAM	EM	9	11764983	rs71505193	G	C	-6.122012	37.479027	-20.567531	2.99E-08
AAM_EM	AAM	EM	9	11746740	rs13290359	C	T	-6.152647	37.855067	-20.567293	2.99E-08
AAM_EM	AAM	EM	3	49761571	rs4855850	A	G	-5.041872	25.420469	20.566964	2.99E-08
AAM_EM	AAM	EM	9	11794224	rs10960235	C	G	-4.820782	23.239936	-20.566735	3.00E-08
AAM_EM	AAM	EM	3	49941436	rs2280406	A	G	5.466897	29.886960	20.551372	3.03E-08
AAM_EM	AAM	EM	12	15375619	rs961176	C	A	-3.129674	9.794857	-20.550130	3.04E-08
AAM_EM	AAM	EM	9	11792791	rs9695463	T	A	-4.812573	23.160861	-20.540081	3.06E-08
AAM_EM	AAM	EM	9	11763150	rs1486811	G	A	-6.170444	38.074374	-20.535923	3.07E-08
AAM_EM	AAM	EM	3	185618532	rs6781387	G	C	-5.473999	29.964670	-20.534359	3.07E-08
AAM_EM	AAM	EM	12	15383683	rs56232194	C	G	-3.126333	9.773957	-20.533243	3.08E-08
AAM_EM	AAM	EM	6	151895777	rs12197879	T	C	4.849134	23.514102	-20.531978	3.08E-08
AAM_EM	AAM	EM	12	15381505	rs7299887	C	T	-3.126333	9.773957	-20.531657	3.08E-08
AAM_EM	AAM	EM	6	152511420	rs2813526	T	C	2.492071	6.210416	-20.529190	3.09E-08
AAM_EM	AAM	EM	6	74608903	rs1529992	T	G	-3.287729	10.809161	-20.525459	3.10E-08
AAM_EM	AAM	EM	7	121983719	rs873376	G	C	5.244156	27.501177	20.524657	3.10E-08
AAM_EM	AAM	EM	12	15422505	rs7956696	T	A	-2.834479	8.034274	-20.523428	3.10E-08
AAM_EM	AAM	EM	9	11779723	rs12379819	C	T	-4.804678	23.084934	-20.521215	3.11E-08
AAM_EM	AAM	EM	12	15401796	rs1120565	A	T	-3.114911	9.702672	-20.520649	3.11E-08
AAM_EM	AAM	EM	9	11741954	rs1352194	A	C	-6.130506	37.583106	-20.517697	3.11E-08
AAM_EM	AAM	EM	9	11745919	rs10960161	A	G	-6.147327	37.789627	-20.516687	3.12E-08
AAM_EM	AAM	EM	12	15375929	rs34562067	G	A	-3.123027	9.753299	-20.516210	3.12E-08
AAM_EM	AAM	EM	9	11740248	rs72702286	T	A	-6.138886	37.685923	-20.514067	3.12E-08
AAM_EM	AAM	EM	9	11797972	rs10960245	G	C	-4.829318	23.322313	-20.513732	3.12E-08
AAM_EM	AAM	EM	12	15374630	rs6488766	C	T	-3.114911	9.702672	-20.511733	3.13E-08
AAM_EM	AAM	EM	9	11740546	rs1906117	G	A	-6.126387	37.532622	-20.509437	3.13E-08
AAM_EM	AAM	EM	9	11740740	rs36100946	G	C	-6.126563	37.534768	-20.507850	3.14E-08
AAM_EM	AAM	EM	9	11789555	rs34539190	G	T	-4.792157	22.964772	-20.506434	3.14E-08
AAM_EM	AAM	EM	16	30008644	rs11649149	T	C	-6.850674	46.931737	-20.506352	3.14E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	9	11783939	rs7861176	A	G	-4.825002	23.280642	-20.501535	3.15E-08
AAM_EM	AAM	EM	7	121983517	rs873378	G	A	5.281690	27.896251	20.500936	3.16E-08
AAM_EM	AAM	EM	9	11740781	rs35946441	T	C	-6.124099	37.504585	-20.499319	3.16E-08
AAM_EM	AAM	EM	12	15395799	rs16910711	T	C	-3.119756	9.732879	-20.498494	3.16E-08
AAM_EM	AAM	EM	9	11761121	rs13292892	G	A	-6.162733	37.979280	-20.496530	3.17E-08
AAM_EM	AAM	EM	9	11782345	rs10809590	A	G	-4.807274	23.109884	-20.495420	3.17E-08
AAM_EM	AAM	EM	9	11756486	rs10960187	A	T	-6.127801	37.549950	-20.495295	3.17E-08
AAM_EM	AAM	EM	16	29928115	rs11647753	G	A	-5.988341	35.860230	-20.494612	3.17E-08
AAM_EM	AAM	EM	16	30021402	rs1140239	T	C	-6.235969	38.887310	-20.493961	3.17E-08
AAM_EM	AAM	EM	9	11757283	rs10960189	A	T	-6.125149	37.517451	-20.492405	3.18E-08
AAM_EM	AAM	EM	9	11783657	rs7860511	C	A	-4.800845	23.048112	-20.491848	3.18E-08
AAM_EM	AAM	EM	12	57376840	rs3894415	T	C	4.457812	19.872085	-20.491706	3.18E-08
AAM_EM	AAM	EM	9	11760452	rs67589545	A	G	-6.161189	37.960250	-20.489827	3.18E-08
AAM_EM	AAM	EM	9	11782763	rs9919057	C	A	-4.794597	22.988162	-20.489818	3.18E-08
AAM_EM	AAM	EM	12	15381237	rs7310253	A	G	-3.119756	9.732879	-20.487886	3.19E-08
AAM_EM	AAM	EM	9	11761235	rs34514190	T	C	-6.159443	37.938742	-20.487047	3.19E-08
AAM_EM	AAM	EM	9	11755685	rs7869159	A	G	-6.125674	37.523886	-20.486858	3.19E-08
AAM_EM	AAM	EM	7	121981921	rs17461878	C	T	5.234985	27.405072	20.486350	3.19E-08
AAM_EM	AAM	EM	9	11793635	rs10960232	A	G	-4.800845	23.048112	-20.485916	3.19E-08
AAM_EM	AAM	EM	9	11787456	rs35981805	G	A	-4.809906	23.135192	-20.481759	3.20E-08
AAM_EM	AAM	EM	9	11759666	rs10960193	G	A	-6.157509	37.914918	-20.476782	3.22E-08
AAM_EM	AAM	EM	9	11759590	rs10960192	A	G	-6.157724	37.917564	-20.476642	3.22E-08
AAM_EM	AAM	EM	6	152513874	rs7766507	G	T	2.539536	6.449243	-20.475783	3.22E-08
AAM_EM	AAM	EM	9	11741178	rs7861596	T	C	-6.117592	37.424936	-20.474507	3.22E-08
AAM_EM	AAM	EM	2	203014959	rs77251002	C	T	-6.775468	45.906969	-20.474477	3.22E-08
AAM_EM	AAM	EM	7	121972281	rs6945851	C	T	5.256276	27.628441	20.472081	3.23E-08
AAM_EM	AAM	EM	9	11755046	rs10960178	C	T	-6.119964	37.453954	-20.466312	3.24E-08
AAM_EM	AAM	EM	9	11790500	rs7867629	A	G	-4.789742	22.941626	-20.465183	3.25E-08
AAM_EM	AAM	EM	9	11792029	rs10960229	A	G	-4.793371	22.976410	-20.464453	3.25E-08
AAM_EM	AAM	EM	9	11763818	rs12376993	C	A	-6.136237	37.653401	-20.464436	3.25E-08
AAM_EM	AAM	EM	3	49890613	rs2352974	T	C	5.148909	26.511262	20.462074	3.26E-08
AAM_EM	AAM	EM	16	30026748	rs12935701	T	C	-6.239846	38.935676	-20.454065	3.28E-08
AAM_EM	AAM	EM	6	74621193	rs2917884	G	A	-3.276776	10.737262	-20.454051	3.28E-08
AAM_EM	AAM	EM	6	74621505	rs2917885	C	A	-3.276776	10.737262	-20.454051	3.28E-08
AAM_EM	AAM	EM	9	11768112	rs11523720	T	C	-6.140809	37.709532	-20.452808	3.28E-08
AAM_EM	AAM	EM	16	29934050	rs12932403	G	A	-5.744301	32.996988	-20.452708	3.28E-08
AAM_EM	AAM	EM	9	11749855	rs10511570	G	C	-6.115759	37.402509	-20.451026	3.28E-08
AAM_EM	AAM	EM	16	30026469	rs11649274	A	G	-6.220052	38.689042	-20.446593	3.30E-08
AAM_EM	AAM	EM	9	11761975	rs10960198	A	G	-6.143940	37.748002	-20.446059	3.30E-08
AAM_EM	AAM	EM	9	11756342	rs10960186	C	T	-6.175152	38.132502	-20.444432	3.30E-08
AAM_EM	AAM	EM	7	121983707	rs873377	T	A	5.266562	27.736676	20.442330	3.31E-08
AAM_EM	AAM	EM	9	11738565	rs7470179	G	A	-6.131960	37.600931	-20.440796	3.31E-08
AAM_EM	AAM	EM	3	49789814	rs7426497	A	G	-4.945365	24.456635	20.437519	3.32E-08
AAM_EM	AAM	EM	10	90078723	rs7091066	A	T	-3.536805	12.508990	-20.434895	3.33E-08
AAM_EM	AAM	EM	12	15417022	rs9787991	T	C	-3.020926	9.125996	-20.431909	3.33E-08
AAM_EM	AAM	EM	16	30010274	rs4788207	G	A	-6.889472	47.464827	-20.427959	3.34E-08
AAM_EM	AAM	EM	9	11754031	rs1486808	T	A	-6.107828	37.305558	-20.425680	3.35E-08
AAM_EM	AAM	EM	9	11758871	rs71505188	A	G	-6.142368	37.728682	-20.424630	3.35E-08
AAM_EM	AAM	EM	6	152511675	rs2763016	C	T	2.475632	6.128753	-20.424101	3.36E-08
AAM_EM	AAM	EM	9	11756301	rs10960185	C	A	-6.136802	37.660334	-20.423953	3.36E-08
AAM_EM	AAM	EM	7	121965266	rs62473063	G	A	5.247708	27.538442	20.419681	3.37E-08
AAM_EM	AAM	EM	9	11792032	rs10960230	A	G	-4.782651	22.873753	-20.418685	3.37E-08
AAM_EM	AAM	EM	6	152510712	rs2635459	G	A	2.486516	6.182763	-20.417681	3.37E-08
AAM_EM	AAM	EM	9	11746364	rs72702297	G	A	-6.107828	37.305558	-20.415349	3.38E-08
AAM_EM	AAM	EM	9	11777918	rs7857944	C	A	-4.808584	23.122480	-20.411125	3.39E-08
AAM_EM	AAM	EM	7	121968547	rs10216012	A	G	5.265245	27.722804	20.410979	3.39E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	9	11787966	rs10960221	A	C	-4.805976	23.097404	-20.410704	3.39E-08
AAM_EM	AAM	EM	7	121990735	rs17365158	G	A	5.764910	33.234191	20.410309	3.39E-08
AAM_EM	AAM	EM	7	121978267	rs62473069	A	G	5.255033	27.615375	20.401435	3.42E-08
AAM_EM	AAM	EM	7	121968769	rs17144227	C	T	5.258799	27.654963	20.400758	3.42E-08
AAM_EM	AAM	EM	9	11754666	rs995281	A	C	-6.100103	37.211253	-20.399847	3.42E-08
AAM_EM	AAM	EM	9	11756605	rs1906118	T	C	-6.136048	37.651091	-20.397766	3.43E-08
AAM_EM	AAM	EM	16	30013066	rs12931955	G	A	-6.895961	47.554283	-20.396357	3.43E-08
AAM_EM	AAM	EM	3	49907111	rs6446187	A	C	5.650476	31.927876	20.394377	3.44E-08
AAM_EM	AAM	EM	16	30027694	rs12444108	A	G	-6.212952	38.600777	-20.392523	3.44E-08
AAM_EM	AAM	EM	12	15378291	rs11056404	T	C	-3.105432	9.643706	-20.392029	3.44E-08
AAM_EM	AAM	EM	7	121968563	rs10216014	A	G	5.252558	27.589363	20.377992	3.48E-08
AAM_EM	AAM	EM	7	121972559	rs6967924	A	C	5.247708	27.538442	20.369324	3.50E-08
AAM_EM	AAM	EM	6	74610844	rs3005517	G	T	-3.263615	10.651185	-20.367865	3.51E-08
AAM_EM	AAM	EM	7	121979064	rs10229985	T	C	5.256276	27.628441	20.367639	3.51E-08
AAM_EM	AAM	EM	9	11760770	rs67141366	A	G	-6.123574	37.498155	-20.365441	3.52E-08
AAM_EM	AAM	EM	9	11763706	rs12379701	G	C	-6.135672	37.646471	-20.363765	3.52E-08
AAM_EM	AAM	EM	9	11747025	rs16928070	T	C	-6.136048	37.651091	-20.360993	3.53E-08
AAM_EM	AAM	EM	6	152512902	rs2813529	T	C	2.425199	5.881591	-20.360558	3.53E-08
AAM_EM	AAM	EM	9	11746299	rs16928065	T	C	-6.091296	37.103891	-20.359530	3.53E-08
AAM_EM	AAM	EM	9	11788189	rs10960222	G	C	-4.774670	22.797471	-20.355363	3.54E-08
AAM_EM	AAM	EM	3	49916044	rs9838987	G	A	5.816199	33.828169	20.352589	3.55E-08
AAM_EM	AAM	EM	7	121972566	rs6950106	C	T	5.242988	27.488922	20.351002	3.56E-08
AAM_EM	AAM	EM	9	11750858	rs7848788	A	G	-6.029957	36.360379	-20.349268	3.56E-08
AAM_EM	AAM	EM	9	11760995	rs35533389	C	T	-6.116420	37.410593	-20.342309	3.58E-08
AAM_EM	AAM	EM	9	11754635	rs995280	T	G	-6.150995	37.834735	-20.342028	3.58E-08
AAM_EM	AAM	EM	9	11759536	rs10960191	A	G	-6.144142	37.750476	-20.341442	3.58E-08
AAM_EM	AAM	EM	9	11761048	rs13292875	G	C	-6.115921	37.404492	-20.333138	3.61E-08
AAM_EM	AAM	EM	7	121976842	rs10280555	T	G	5.237239	27.428670	20.331785	3.61E-08
AAM_EM	AAM	EM	9	11767921	rs11523222	A	G	-6.103143	37.248356	-20.327781	3.62E-08
AAM_EM	AAM	EM	9	11750868	rs7848498	T	A	-6.029957	36.360379	-20.324680	3.63E-08
AAM_EM	AAM	EM	6	152511974	rs2813528	G	T	2.442154	5.964117	-20.316978	3.65E-08
AAM_EM	AAM	EM	9	11780875	rs12376787	A	G	-4.761667	22.673475	-20.305824	3.69E-08
AAM_EM	AAM	EM	9	11762138	rs67776961	G	T	-6.101616	37.229722	-20.305070	3.69E-08
AAM_EM	AAM	EM	16	29968015	rs7204797	T	C	-7.031722	49.445121	-20.303834	3.69E-08
AAM_EM	AAM	EM	12	15417254	rs9788111	C	T	-3.001104	9.006625	-20.295544	3.72E-08
AAM_EM	AAM	EM	9	11747929	rs16928075	C	G	-6.028006	36.336858	-20.295087	3.72E-08
AAM_EM	AAM	EM	9	11756684	rs1906119	G	C	-6.123224	37.493869	-20.294205	3.72E-08
AAM_EM	AAM	EM	3	49916018	rs9821433	C	T	5.772939	33.326822	20.292227	3.73E-08
AAM_EM	AAM	EM	7	121972419	rs6967614	G	A	5.233864	27.393330	20.289836	3.73E-08
AAM_EM	AAM	EM	16	30019375	rs11863174	C	A	-6.962625	48.478142	-20.286084	3.74E-08
AAM_EM	AAM	EM	9	11792860	rs9696632	G	C	-4.768068	22.734468	-20.278889	3.77E-08
AAM_EM	AAM	EM	2	203017167	rs73992849	A	G	-6.713506	45.071156	-20.266677	3.80E-08
AAM_EM	AAM	EM	12	15416115	rs7132337	G	A	-2.993274	8.959691	-20.244935	3.87E-08
AAM_EM	AAM	EM	9	11794276	rs12005306	A	C	-4.744519	22.510460	-20.242223	3.88E-08
AAM_EM	AAM	EM	9	11672095	rs1596337	A	T	-5.527403	30.552185	-20.237525	3.89E-08
AAM_EM	AAM	EM	7	121971057	rs10277721	G	C	5.211820	27.163065	20.232071	3.91E-08
AAM_EM	AAM	EM	9	11790743	rs7867573	T	A	-4.736910	22.438314	-20.230030	3.92E-08
AAM_EM	AAM	EM	9	11766273	rs1843712	G	C	-5.997001	35.964027	-20.229690	3.92E-08
AAM_EM	AAM	EM	16	29995803	rs4787488	C	A	-6.747905	45.534225	-20.229580	3.92E-08
AAM_EM	AAM	EM	16	30029548	rs12598856	T	C	-6.246414	39.017689	-20.214505	3.96E-08
AAM_EM	AAM	EM	7	121973934	rs62473065	G	A	5.206918	27.111995	20.213887	3.97E-08
AAM_EM	AAM	EM	6	74609732	rs1437569	A	G	-3.238880	10.490346	-20.213741	3.97E-08
AAM_EM	AAM	EM	16	29971265	rs4788200	T	G	-6.956425	48.391848	-20.211833	3.97E-08
AAM_EM	AAM	EM	6	74605806	rs3005511	G	A	-3.241267	10.505811	-20.205861	3.99E-08
AAM_EM	AAM	EM	2	203324750	rs116635509	G	A	-6.768637	45.814453	-20.203148	4.00E-08
AAM_EM	AAM	EM	9	11620693	rs28465187	G	C	-5.586269	31.206401	-20.202355	4.00E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	6	74613060	rs4540228	T	C	3.236511	10.475005	-20.199517	4.01E-08
AAM_EM	AAM	EM	6	152512869	rs2635454	A	C	2.406639	5.791910	-20.197817	4.02E-08
AAM_EM	AAM	EM	3	49734229	rs9873183	A	G	-4.948990	24.492503	20.188603	4.05E-08
AAM_EM	AAM	EM	6	152514055	rs7741849	A	G	2.503419	6.267109	-20.184585	4.06E-08
AAM_EM	AAM	EM	6	74611047	rs3005519	A	G	-3.234160	10.459788	-20.175835	4.09E-08
AAM_EM	AAM	EM	1	204158228	rs12040249	A	G	-6.327605	40.038591	-20.174171	4.09E-08
AAM_EM	AAM	EM	6	74607842	rs1370438	C	A	-3.231832	10.444740	-20.170132	4.11E-08
AAM_EM	AAM	EM	16	29972690	rs4788201	T	C	-6.962625	48.478142	-20.166909	4.12E-08
AAM_EM	AAM	EM	6	74612582	rs2917871	C	G	-3.231832	10.444740	-20.160991	4.14E-08
AAM_EM	AAM	EM	16	29977562	rs4787486	T	A	-6.962625	48.478142	-20.160255	4.14E-08
AAM_EM	AAM	EM	16	29978003	rs4788202	T	C	-6.959701	48.437438	-20.157706	4.15E-08
AAM_EM	AAM	EM	6	74610360	rs3005516	G	A	-3.229515	10.429768	-20.155050	4.16E-08
AAM_EM	AAM	EM	16	30030699	rs11150581	C	T	-6.167453	38.037479	-20.144951	4.19E-08
AAM_EM	AAM	EM	12	15438032	rs1117152	G	T	-2.973940	8.844318	-20.140231	4.21E-08
AAM_EM	AAM	EM	16	29998200	rs4077410	G	A	-6.794083	46.159565	-20.138642	4.21E-08
AAM_EM	AAM	EM	6	74606325	rs1437568	G	T	-3.224940	10.400235	-20.128706	4.24E-08
AAM_EM	AAM	EM	7	121975010	rs1899691	G	C	5.183292	26.866518	20.122169	4.27E-08
AAM_EM	AAM	EM	16	29967434	rs4788196	G	A	-7.009608	49.134602	-20.116329	4.29E-08
AAM_EM	AAM	EM	3	128110770	rs729847	A	G	4.299739	18.487753	20.110650	4.31E-08
AAM_EM	AAM	EM	10	90192003	rs1578696	T	C	4.653089	21.651237	-20.106007	4.32E-08
AAM_EM	AAM	EM	11	78116959	rs7941639	A	G	6.830193	46.651535	-20.104938	4.33E-08
AAM_EM	AAM	EM	6	74611632	rs1595344	G	A	-3.222674	10.385627	-20.103859	4.33E-08
AAM_EM	AAM	EM	6	74613447	rs2118333	A	T	-3.222674	10.385627	-20.103859	4.33E-08
AAM_EM	AAM	EM	3	49910084	rs1317154	C	T	5.584032	31.181408	20.095014	4.36E-08
AAM_EM	AAM	EM	1	44026180	rs68191270	C	A	-7.240812	52.429362	-20.092763	4.37E-08
AAM_EM	AAM	EM	11	78126754	rs11237487	C	G	6.786362	46.054707	-20.091518	4.37E-08
AAM_EM	AAM	EM	9	11759418	rs10960190	T	G	-6.042223	36.508459	-20.090417	4.38E-08
AAM_EM	AAM	EM	1	44037685	rs3001723	A	G	8.060154	64.966086	-20.089292	4.38E-08
AAM_EM	AAM	EM	6	152513105	rs2635453	C	T	2.391055	5.717143	-20.089059	4.38E-08
AAM_EM	AAM	EM	6	152509954	rs7740884	G	A	2.429973	5.904767	-20.082618	4.40E-08
AAM_EM	AAM	EM	9	11769246	rs72704137	T	C	-6.121325	37.470616	-20.077085	4.42E-08
AAM_EM	AAM	EM	16	30068354	rs9939774	T	C	-6.258780	39.172323	-20.075891	4.43E-08
AAM_EM	AAM	EM	6	74608139	rs3005514	T	G	-3.215979	10.342519	-20.071028	4.44E-08
AAM_EM	AAM	EM	2	203418537	rs1991371	A	G	-7.021814	49.305878	-20.063631	4.47E-08
AAM_EM	AAM	EM	9	11666175	rs77790266	T	A	-5.512386	30.386401	-20.063025	4.47E-08
AAM_EM	AAM	EM	6	152509865	rs7758220	A	G	2.427581	5.893149	-20.061780	4.48E-08
AAM_EM	AAM	EM	11	78121978	rs10431155	C	T	6.956836	48.397571	-20.059185	4.49E-08
AAM_EM	AAM	EM	16	30048553	rs35467921	T	C	-6.307822	39.788615	-20.052133	4.51E-08
AAM_EM	AAM	EM	9	11622644	rs10960031	G	A	-5.537394	30.662735	-20.042275	4.55E-08
AAM_EM	AAM	EM	1	44026656	rs12076635	C	G	-7.250248	52.566097	-20.038388	4.56E-08
AAM_EM	AAM	EM	7	121982909	rs886497	G	T	5.162248	26.648803	20.035531	4.57E-08
AAM_EM	AAM	EM	16	30030195	rs11642612	C	A	-6.184249	38.244941	-20.025110	4.61E-08
AAM_EM	AAM	EM	6	151895456	rs6909279	C	G	4.728665	22.360270	-20.023916	4.61E-08
AAM_EM	AAM	EM	9	11627541	rs10960035	C	G	-5.558566	30.897661	-20.021929	4.62E-08
AAM_EM	AAM	EM	7	121990196	rs17462508	C	T	5.684755	32.316434	20.015271	4.65E-08
AAM_EM	AAM	EM	1	199883741	rs4915187	C	T	6.209949	38.563464	-19.998917	4.71E-08
AAM_EM	AAM	EM	1	44026089	rs3000761	T	C	7.234278	52.334782	-19.997428	4.71E-08
AAM_EM	AAM	EM	11	78117534	rs10899493	C	T	6.772021	45.860266	-19.995108	4.72E-08
AAM_EM	AAM	EM	16	29962802	rs7193532	A	G	-6.967330	48.543690	-19.994747	4.72E-08
AAM_EM	AAM	EM	9	11672086	rs1596338	G	A	-5.469626	29.916809	-19.987640	4.75E-08
AAM_EM	AAM	EM	9	11704718	rs13299412	T	C	-5.665023	32.092487	-19.986432	4.75E-08
AAM_EM	AAM	EM	16	29960593	rs4788195	C	T	-7.040898	49.574248	-19.980542	4.78E-08
AAM_EM	AAM	EM	3	49745822	rs4855867	T	C	-5.122199	26.236926	19.979743	4.78E-08
AAM_EM	AAM	EM	11	78123293	rs10899495	T	C	6.924668	47.951031	-19.972139	4.81E-08
AAM_EM	AAM	EM	1	44026053	rs10789435	G	T	-7.224211	52.189224	-19.971320	4.81E-08
AAM_EM	AAM	EM	2	203347284	rs14880232	T	C	-6.904450	47.671429	-19.966722	4.83E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EM	AAM	EM	7	121988980	rs17462307	A	G	5.678347	32.243630	19.965974	4.83E-08
AAM_EM	AAM	EM	1	44022534	rs2842176	T	C	7.189141	51.683743	-19.965835	4.83E-08
AAM_EM	AAM	EM	11	78117875	rs7110387	G	A	6.786362	46.054707	-19.962340	4.85E-08
AAM_EM	AAM	EM	1	43793214	rs4660731	A	G	-5.083266	25.839594	-19.960693	4.85E-08
AAM_EM	AAM	EM	9	11672216	rs1596336	C	G	-5.448140	29.682227	-19.959578	4.86E-08
AAM_EM	AAM	EM	9	11667205	rs71502912	G	A	-5.468835	29.908161	-19.957527	4.86E-08
AAM_EM	AAM	EM	2	203421199	rs1061157	A	G	-6.982483	48.755067	-19.953162	4.88E-08
AAM_EM	AAM	EM	10	90195149	rs1935581	T	C	4.660136	21.716870	-19.951063	4.89E-08
AAM_EM	AAM	EM	7	121989787	rs17462418	C	T	5.675857	32.215352	19.946828	4.91E-08
AAM_EPP	AAM	EPP	1	22116812	rs10753520	A	G	3.838079	14.730851	20.742893	2.51E-08
AAM_EPP	AAM	EPP	1	199884929	rs1559753	G	C	6.235263	38.878510	-19.930215	4.77E-08
AAM_EPP	AAM	EPP	1	204147186	rs7513165	C	T	-6.582057	43.323478	-20.649356	2.70E-08
AAM_EPP	AAM	EPP	1	204148168	rs12040580	C	T	-6.600422	43.565576	-20.639924	2.72E-08
AAM_EPP	AAM	EPP	1	204157973	rs11240694	T	C	-6.602601	43.594346	-20.845449	2.31E-08
AAM_EPP	AAM	EPP	1	204159787	rs4889	C	G	-6.370023	40.577189	-20.120567	4.10E-08
AAM_EPP	AAM	EPP	1	204160938	rs7524621	A	G	-6.602601	43.594346	-20.881372	2.25E-08
AAM_EPP	AAM	EPP	1	204161026	rs7538038	G	A	-6.695450	44.829055	-21.174949	1.78E-08
AAM_EPP	AAM	EPP	1	204161069	rs7538055	G	A	-6.648052	44.196597	-21.024981	2.01E-08
AAM_EPP	AAM	EPP	1	204161490	rs4951316	C	T	-6.665926	44.434570	-21.196241	1.75E-08
AAM_EPP	AAM	EPP	1	204161591	rs2510	C	T	-6.697516	44.856718	-21.245251	1.68E-08
AAM_EPP	AAM	EPP	1	204162212	rs12097666	C	T	-6.628552	43.937708	-20.898379	2.22E-08
AAM_EPP	AAM	EPP	1	204162230	rs4951319	C	T	-6.656205	44.305065	-20.984857	2.07E-08
AAM_EPP	AAM	EPP	2	25145173	rs59086897	A	T	-6.471553	41.880999	20.094643	4.19E-08
AAM_EPP	AAM	EPP	2	25150116	rs6752378	A	C	-6.291697	39.585452	19.878857	4.97E-08
AAM_EPP	AAM	EPP	2	25150296	rs10182181	G	A	-6.304567	39.747560	19.991924	4.54E-08
AAM_EPP	AAM	EPP	2	25150758	rs10185143	C	T	-6.215069	38.627083	20.183199	3.90E-08
AAM_EPP	AAM	EPP	2	25156773	rs2384054	C	T	-6.224210	38.740789	20.324064	3.49E-08
AAM_EPP	AAM	EPP	2	202991651	rs77319662	C	T	-6.807654	46.344155	-24.886387	9.55E-10
AAM_EPP	AAM	EPP	2	203001990	rs34829484	G	A	-6.627686	43.926222	-24.208905	1.63E-09
AAM_EPP	AAM	EPP	2	203004970	rs79058237	T	C	-6.750827	45.573665	-24.301781	1.51E-09
AAM_EPP	AAM	EPP	2	203007253	rs114634431	G	T	-6.709716	45.020286	-24.102008	1.77E-09
AAM_EPP	AAM	EPP	2	203014959	rs77251002	C	T	-6.775468	45.906969	-26.369531	2.98E-10
AAM_EPP	AAM	EPP	2	203017167	rs73992849	A	G	-6.713506	45.071156	-26.146207	3.55E-10
AAM_EPP	AAM	EPP	2	203037846	rs76552560	A	G	-6.929608	48.019473	-22.133329	8.35E-09
AAM_EPP	AAM	EPP	2	203043319	rs1474267	G	A	6.895439	47.547075	-22.085951	8.67E-09
AAM_EPP	AAM	EPP	2	203051886	rs6722588	T	C	6.956028	48.386322	-22.309914	7.27E-09
AAM_EPP	AAM	EPP	2	203055831	rs6753802	C	T	7.032411	49.454799	-22.594815	5.80E-09
AAM_EPP	AAM	EPP	2	203056243	rs79071680	A	G	-7.015575	49.218287	-22.549278	6.02E-09
AAM_EPP	AAM	EPP	2	203057120	rs79860867	A	G	-7.021814	49.305878	-22.563512	5.95E-09
AAM_EPP	AAM	EPP	2	203059431	rs78798541	A	G	-6.918948	47.871844	-22.223734	7.78E-09
AAM_EPP	AAM	EPP	2	203060148	rs147392255	A	G	-6.918948	47.871844	-22.233309	7.72E-09
AAM_EPP	AAM	EPP	2	203060179	rs2350357	G	A	6.332645	40.102390	-20.349285	3.42E-08
AAM_EPP	AAM	EPP	2	203062502	rs9917128	G	A	6.930957	48.038170	-22.470098	6.40E-09
AAM_EPP	AAM	EPP	2	203064494	rs2350358	G	C	6.948192	48.277367	-22.556664	5.98E-09
AAM_EPP	AAM	EPP	2	203069878	rs3181153	G	T	6.975405	48.656275	-22.635822	5.62E-09
AAM_EPP	AAM	EPP	2	203078792	rs59293950	T	C	-6.952838	48.341950	-22.585513	5.85E-09
AAM_EPP	AAM	EPP	2	203079307	rs3769817	C	T	6.970863	48.592935	-22.650049	5.56E-09
AAM_EPP	AAM	EPP	2	203079580	rs6435134	A	G	6.980087	48.721621	-22.683016	5.41E-09
AAM_EPP	AAM	EPP	2	203080347	rs2350359	G	A	6.650554	44.229871	-21.612509	1.26E-08
AAM_EPP	AAM	EPP	2	203085644	rs7599049	C	T	7.139022	50.965636	-23.217371	3.55E-09
AAM_EPP	AAM	EPP	2	203085649	rs35530837	G	A	6.934729	48.090468	-22.552974	6.00E-09
AAM_EPP	AAM	EPP	2	203085653	rs7585027	T	C	6.655672	44.297976	-21.645432	1.23E-08
AAM_EPP	AAM	EPP	2	203086693	rs12472035	A	G	-6.982970	48.761877	-22.712664	5.29E-09
AAM_EPP	AAM	EPP	2	203092429	rs13003810	G	A	6.642693	44.125365	-21.606853	1.27E-08
AAM_EPP	AAM	EPP	2	203098927	rs6435137	T	A	6.884722	47.399396	-22.397909	6.78E-09
AAM_EPP	AAM	EPP	2	203099033	rs6435138	G	A	6.954823	48.369566	-22.627822	5.65E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	2	203101159	rs12470401	A	G	-6.964315	48.501677	-22.677358	5.44E-09
AAM_EPP	AAM	EPP	2	203102398	rs6761131	T	C	6.990448	48.866368	-22.826320	4.84E-09
AAM_EPP	AAM	EPP	2	203107740	rs10931993	G	A	6.948189	48.277333	-22.645137	5.58E-09
AAM_EPP	AAM	EPP	2	203107868	rs4675274	T	C	6.954429	48.364080	-22.665473	5.49E-09
AAM_EPP	AAM	EPP	2	203110825	rs3843338	T	C	6.967339	48.543819	-22.725251	5.24E-09
AAM_EPP	AAM	EPP	2	203111266	rs12463937	C	T	-6.879410	47.326281	-22.439033	6.56E-09
AAM_EPP	AAM	EPP	2	203114985	rs10166594	T	C	6.974028	48.637072	-22.755481	5.11E-09
AAM_EPP	AAM	EPP	2	203115333	rs14696108	C	G	-6.858271	47.035879	-22.358100	7.00E-09
AAM_EPP	AAM	EPP	2	203117496	rs12693967	C	T	6.933349	48.071334	-22.639340	5.60E-09
AAM_EPP	AAM	EPP	2	203119191	rs187232961	C	T	-6.854622	46.985848	-22.481125	6.35E-09
AAM_EPP	AAM	EPP	2	203119508	rs6751314	G	C	6.753826	45.614166	-22.075822	8.74E-09
AAM_EPP	AAM	EPP	2	203119868	rs6435139	G	T	6.788886	46.088977	-22.196071	7.95E-09
AAM_EPP	AAM	EPP	2	203122778	rs12467111	C	G	-6.861800	47.084304	-23.161341	3.71E-09
AAM_EPP	AAM	EPP	2	203124004	rs147851075	G	A	-6.847786	46.892168	-22.436121	6.58E-09
AAM_EPP	AAM	EPP	2	203128958	rs149963203	G	A	-6.889476	47.464884	-22.590711	5.82E-09
AAM_EPP	AAM	EPP	2	203134839	rs13392645	G	A	-6.786358	46.054654	-22.222317	7.79E-09
AAM_EPP	AAM	EPP	2	203137347	rs16824590	A	G	-6.669315	44.479758	-21.616181	1.26E-08
AAM_EPP	AAM	EPP	2	203137889	rs77018809	T	A	-6.734056	45.347511	-21.829244	1.06E-08
AAM_EPP	AAM	EPP	2	203138645	rs138758736	G	A	-7.083062	50.169770	-22.939103	4.42E-09
AAM_EPP	AAM	EPP	2	203139290	rs116601501	G	A	-6.940763	48.174188	-22.500084	6.25E-09
AAM_EPP	AAM	EPP	2	203139844	rs80282360	C	T	-6.915568	47.825084	-22.419531	6.66E-09
AAM_EPP	AAM	EPP	2	203140271	rs76658848	T	C	-6.951665	48.325649	-22.537020	6.07E-09
AAM_EPP	AAM	EPP	2	203146720	rs57571703	C	T	-7.082090	50.156003	-22.909777	4.53E-09
AAM_EPP	AAM	EPP	2	203146783	rs60722019	A	G	-7.061264	49.861447	-22.895662	4.58E-09
AAM_EPP	AAM	EPP	2	203147991	rs58670031	C	T	-6.979134	48.708310	-22.576366	5.89E-09
AAM_EPP	AAM	EPP	2	203150362	rs77062060	C	T	-7.079187	50.114883	-22.901076	4.56E-09
AAM_EPP	AAM	EPP	2	203150949	rs7568159	T	C	-6.944804	48.230297	-22.452718	6.49E-09
AAM_EPP	AAM	EPP	2	203152079	rs116109806	G	A	-7.073564	50.035302	-22.886500	4.61E-09
AAM_EPP	AAM	EPP	2	203152716	rs78175596	T	A	-7.073564	50.035302	-22.890407	4.60E-09
AAM_EPP	AAM	EPP	2	203152767	rs74454549	C	G	-6.993038	48.902583	-22.682758	5.41E-09
AAM_EPP	AAM	EPP	2	203153126	rs140481340	T	G	-7.018662	49.261621	-22.740620	5.17E-09
AAM_EPP	AAM	EPP	2	203154251	rs56684065	T	C	-7.026356	49.369683	-23.072809	3.98E-09
AAM_EPP	AAM	EPP	2	203154918	rs1474002	C	A	-6.814946	46.443490	-22.373622	6.91E-09
AAM_EPP	AAM	EPP	2	203154953	rs1474001	A	G	-7.026356	49.369683	-23.067463	4.00E-09
AAM_EPP	AAM	EPP	2	203155936	rs3731700	C	A	-6.996734	48.954285	-22.969574	4.32E-09
AAM_EPP	AAM	EPP	2	203156284	rs148585524	G	C	-7.060418	49.849497	-23.178810	3.66E-09
AAM_EPP	AAM	EPP	2	203156319	rs114177656	G	A	-7.029688	49.416509	-22.907183	4.54E-09
AAM_EPP	AAM	EPP	2	203156984	rs143719010	T	G	-7.026356	49.369683	-23.072108	3.98E-09
AAM_EPP	AAM	EPP	2	203158947	rs143590081	A	C	-7.031720	49.445092	-23.139462	3.78E-09
AAM_EPP	AAM	EPP	2	203161021	rs76664732	T	C	-6.999433	48.992057	-22.444768	6.53E-09
AAM_EPP	AAM	EPP	2	203165433	rs6753044	T	C	-6.899738	47.606382	-22.756975	5.11E-09
AAM_EPP	AAM	EPP	2	203166364	rs12464254	C	T	-7.081118	50.142232	-23.259212	3.44E-09
AAM_EPP	AAM	EPP	2	203168235	rs16841867	G	C	-7.101957	50.437800	-23.327663	3.26E-09
AAM_EPP	AAM	EPP	2	203172413	rs79117531	C	A	-7.040900	49.574277	-23.127445	3.81E-09
AAM_EPP	AAM	EPP	2	203173497	rs16839065	T	C	-7.057110	49.802802	-23.299641	3.33E-09
AAM_EPP	AAM	EPP	2	203174320	rs12471060	G	A	-7.062104	49.873319	-23.201923	3.60E-09
AAM_EPP	AAM	EPP	2	203174611	rs12463995	A	G	-6.972214	48.611772	-22.902826	4.55E-09
AAM_EPP	AAM	EPP	2	203174628	rs7588835	G	A	-6.769759	45.829638	-22.237787	7.69E-09
AAM_EPP	AAM	EPP	2	203175409	rs146671566	A	T	-7.018662	49.261621	-23.058207	4.03E-09
AAM_EPP	AAM	EPP	2	203179868	rs115418918	G	A	-7.010185	49.142697	-23.050731	4.05E-09
AAM_EPP	AAM	EPP	2	203180681	rs114922024	G	C	-7.076348	50.074700	-23.259070	3.44E-09
AAM_EPP	AAM	EPP	2	203180956	rs77261109	A	G	-7.089088	50.255164	-23.301197	3.33E-09
AAM_EPP	AAM	EPP	2	203181516	rs146226790	T	C	-7.011964	49.167634	-23.048949	4.06E-09
AAM_EPP	AAM	EPP	2	203182040	rs12466003	A	G	-7.086042	50.211995	-23.293147	3.35E-09
AAM_EPP	AAM	EPP	2	203182765	rs76501067	T	C	-7.070834	49.996687	-23.245005	3.48E-09
AAM_EPP	AAM	EPP	2	203182767	rs80315897	T	C	-7.047620	49.668946	-23.168692	3.69E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	2	203194062	rs7597156	A	G	-6.951665	48.325649	-23.180540	3.66E-09
AAM_EPP	AAM	EPP	2	203194270	rs7597469	T	G	-7.013156	49.184362	-23.388277	3.10E-09
AAM_EPP	AAM	EPP	2	203194721	rs113877751	T	A	-7.010771	49.150913	-23.381232	3.12E-09
AAM_EPP	AAM	EPP	2	203195092	rs111542497	T	G	-6.878937	47.319770	-22.941030	4.42E-09
AAM_EPP	AAM	EPP	2	203195171	rs113021930	A	G	-7.044600	49.626384	-23.508736	2.82E-09
AAM_EPP	AAM	EPP	2	203195835	rs143368288	T	C	-7.010186	49.142703	-23.382983	3.12E-09
AAM_EPP	AAM	EPP	2	203196447	rs113491584	C	T	-7.022462	49.314967	-23.426330	3.01E-09
AAM_EPP	AAM	EPP	2	203197601	rs111620073	A	G	-6.996734	48.954285	-23.339633	3.23E-09
AAM_EPP	AAM	EPP	2	203198618	rs112849283	C	T	-6.937894	48.134374	-23.143530	3.77E-09
AAM_EPP	AAM	EPP	2	203198888	rs77435512	C	G	-6.879173	47.323025	-23.044579	4.07E-09
AAM_EPP	AAM	EPP	2	203198918	rs112306637	A	C	-7.013156	49.184350	-23.400885	3.07E-09
AAM_EPP	AAM	EPP	2	203199188	rs111252524	A	G	-7.011964	49.167634	-23.397790	3.08E-09
AAM_EPP	AAM	EPP	2	203199219	rs112753638	T	C	-7.018662	49.261621	-23.420282	3.03E-09
AAM_EPP	AAM	EPP	2	203199824	rs7592692	G	A	-7.068158	49.958853	-23.626300	2.57E-09
AAM_EPP	AAM	EPP	2	203200960	rs113188021	A	G	-7.028343	49.397609	-23.458486	2.94E-09
AAM_EPP	AAM	EPP	2	203202166	rs6731027	G	A	-7.022462	49.314967	-23.442872	2.97E-09
AAM_EPP	AAM	EPP	2	203208345	rs138478681	A	G	-6.964315	48.501677	-23.493506	2.86E-09
AAM_EPP	AAM	EPP	2	203208693	rs16839077	G	A	-6.960529	48.448969	-23.478545	2.89E-09
AAM_EPP	AAM	EPP	2	203213061	rs16839090	C	T	-7.004993	49.069926	-23.752277	2.33E-09
AAM_EPP	AAM	EPP	2	203213093	rs13389798	C	T	-7.048386	49.679741	-23.901791	2.07E-09
AAM_EPP	AAM	EPP	2	203214739	rs58288071	G	A	-6.998891	48.984470	-23.981363	1.95E-09
AAM_EPP	AAM	EPP	2	203216422	rs7587234	T	C	-7.031041	49.435532	-24.151562	1.70E-09
AAM_EPP	AAM	EPP	2	203222966	rs16824599	A	G	-7.049162	49.690685	-24.446095	1.35E-09
AAM_EPP	AAM	EPP	2	203224161	rs12467948	A	C	-7.171281	51.427270	-24.926460	9.25E-10
AAM_EPP	AAM	EPP	2	203235139	rs6714523	A	G	-7.087055	50.226344	-24.851706	9.81E-10
AAM_EPP	AAM	EPP	2	203236039	rs11899836	A	G	-6.983946	48.775499	-24.495102	1.30E-09
AAM_EPP	AAM	EPP	2	203238623	rs139042575	T	C	-7.023102	49.323955	-24.649448	1.15E-09
AAM_EPP	AAM	EPP	2	203247137	rs144942495	T	C	-6.688158	44.731457	-23.443488	2.97E-09
AAM_EPP	AAM	EPP	2	203247509	rs79919139	A	C	-6.928607	48.005600	-24.286317	1.53E-09
AAM_EPP	AAM	EPP	2	203255485	rs13426118	C	A	-6.913457	47.795888	-24.108133	1.76E-09
AAM_EPP	AAM	EPP	2	203278696	rs12472408	C	T	-6.981041	48.734937	-24.506765	1.29E-09
AAM_EPP	AAM	EPP	2	203281513	rs115170232	A	G	-6.973564	48.630597	-24.443831	1.35E-09
AAM_EPP	AAM	EPP	2	203284266	rs11889765	C	G	-6.938955	48.149101	-24.358774	1.45E-09
AAM_EPP	AAM	EPP	2	203291839	rs76284304	T	C	-6.857657	47.027465	-23.959269	1.98E-09
AAM_EPP	AAM	EPP	2	203292344	rs16839149	C	T	-6.978668	48.701801	-24.382110	1.42E-09
AAM_EPP	AAM	EPP	2	203309891	rs74766638	A	G	-6.915265	47.820896	-24.122918	1.74E-09
AAM_EPP	AAM	EPP	2	203324750	rs116635505	G	A	-6.768637	45.814453	-22.943741	4.41E-09
AAM_EPP	AAM	EPP	2	203328933	rs2350809	C	T	-6.905289	47.683022	-24.130541	1.73E-09
AAM_EPP	AAM	EPP	2	203337001	rs12468226	G	A	-6.871343	47.215355	-23.930398	2.03E-09
AAM_EPP	AAM	EPP	2	203347284	rs148802328	T	C	-6.904450	47.671429	-24.539578	1.25E-09
AAM_EPP	AAM	EPP	2	203347460	rs6720579	T	C	-6.881798	47.359139	-24.405833	1.39E-09
AAM_EPP	AAM	EPP	2	203351696	rs75040639	G	A	-6.852437	46.955896	-24.233969	1.60E-09
AAM_EPP	AAM	EPP	2	203356996	rs6739198	T	G	-6.907000	47.706652	-24.438423	1.36E-09
AAM_EPP	AAM	EPP	2	203360074	rs115187557	T	C	-6.889724	47.468296	-24.368049	1.44E-09
AAM_EPP	AAM	EPP	2	203365009	rs190286519	T	A	-6.885712	47.413032	-24.349007	1.46E-09
AAM_EPP	AAM	EPP	2	203366869	rs6715927	A	T	-6.880604	47.342706	-24.384029	1.42E-09
AAM_EPP	AAM	EPP	2	203368211	rs4281883	T	C	-6.865631	47.136884	-24.330967	1.48E-09
AAM_EPP	AAM	EPP	2	203369051	rs13430577	C	G	-6.919884	47.884799	-24.624159	1.17E-09
AAM_EPP	AAM	EPP	2	203376199	rs76021735	A	G	-6.809559	46.370092	-24.199561	1.64E-09
AAM_EPP	AAM	EPP	2	203376547	rs57080353	A	G	-6.820069	46.513338	-24.204411	1.63E-09
AAM_EPP	AAM	EPP	2	203381135	rs7565875	T	C	-6.812675	46.412542	-24.604334	1.19E-09
AAM_EPP	AAM	EPP	2	203382013	rs74508472	G	A	-6.853234	46.966810	-24.503645	1.29E-09
AAM_EPP	AAM	EPP	2	203384712	rs3736578	G	C	-6.827185	46.610450	-24.367415	1.44E-09
AAM_EPP	AAM	EPP	2	203394348	rs12467409	T	G	-6.841990	46.812830	-24.314978	1.50E-09
AAM_EPP	AAM	EPP	2	203399999	rs193159913	G	T	-6.783870	46.020896	-24.108432	1.76E-09
AAM_EPP	AAM	EPP	2	203406855	rs77090459	C	A	-6.821333	46.530584	-24.121230	1.74E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	2	203418537	rs1991371	A	G	-7.021814	49.305878	-24.968166	8.95E-10
AAM_EPP	AAM	EPP	2	203421199	rs1061157	A	G	-6.982483	48.755067	-24.677283	1.13E-09
AAM_EPP	AAM	EPP	2	203431804	rs3731696	G	A	-6.898651	47.591390	-24.255593	1.57E-09
AAM_EPP	AAM	EPP	2	203439034	rs11182639	G	A	-6.747896	45.534096	-23.924394	2.04E-09
AAM_EPP	AAM	EPP	2	203447875	rs148566631	A	G	-6.718183	45.133979	-23.819242	2.21E-09
AAM_EPP	AAM	EPP	3	24718337	rs9853608	A	C	6.453916	41.653032	22.723959	5.24E-09
AAM_EPP	AAM	EPP	3	49609477	rs1532204	G	C	-8.284103	68.626368	30.497994	1.17E-11
AAM_EPP	AAM	EPP	3	49609794	rs6797299	T	G	-8.285104	68.642952	30.501464	1.17E-11
AAM_EPP	AAM	EPP	3	49611666	rs11130207	G	T	-8.390758	70.404813	30.860366	8.84E-12
AAM_EPP	AAM	EPP	3	49615624	rs11130208	T	G	-8.296747	68.836011	30.536881	1.14E-11
AAM_EPP	AAM	EPP	3	49619493	rs34890793	T	C	-8.281145	68.577360	30.249829	1.42E-11
AAM_EPP	AAM	EPP	3	49621994	rs7629322	T	C	-8.285104	68.642952	30.290968	1.38E-11
AAM_EPP	AAM	EPP	3	49624065	rs9869120	C	T	-8.297866	68.854576	30.468775	1.20E-11
AAM_EPP	AAM	EPP	3	49624095	rs9869256	G	T	-8.307056	69.007188	30.502523	1.17E-11
AAM_EPP	AAM	EPP	3	49626306	rs6446285	A	G	-8.307056	69.007188	30.738734	9.72E-12
AAM_EPP	AAM	EPP	3	49639803	rs1491983	T	G	-8.286120	68.659780	29.746586	2.11E-11
AAM_EPP	AAM	EPP	3	49642027	rs4241405	T	C	-8.305619	68.983309	29.815268	2.00E-11
AAM_EPP	AAM	EPP	3	49645209	rs11130211	T	C	-8.356153	69.825296	29.997088	1.74E-11
AAM_EPP	AAM	EPP	3	49645458	rs12637313	G	A	-8.341269	69.576771	29.943613	1.81E-11
AAM_EPP	AAM	EPP	3	49646669	rs11721148	A	G	-8.343705	69.617413	29.949116	1.80E-11
AAM_EPP	AAM	EPP	3	49646981	rs2029591	C	T	-8.341269	69.576771	29.941050	1.81E-11
AAM_EPP	AAM	EPP	3	49647404	rs1463728	A	T	-8.343212	69.609185	29.944978	1.81E-11
AAM_EPP	AAM	EPP	3	49652148	rs1352889	C	T	-8.107202	65.726731	28.407439	6.02E-11
AAM_EPP	AAM	EPP	3	49653378	rs4855849	G	A	-8.071923	65.155935	28.295379	6.58E-11
AAM_EPP	AAM	EPP	3	49653457	rs4855848	T	C	-8.071923	65.155935	28.295379	6.58E-11
AAM_EPP	AAM	EPP	3	49655927	rs62262672	A	T	8.105333	65.696428	28.413044	6.00E-11
AAM_EPP	AAM	EPP	3	49657441	rs4855833	G	A	-8.076051	65.222604	28.309912	6.50E-11
AAM_EPP	AAM	EPP	3	49658084	rs13096480	G	A	-8.060962	64.979114	28.256777	6.78E-11
AAM_EPP	AAM	EPP	3	49661634	rs62262673	T	C	7.980280	63.684866	27.817696	9.56E-11
AAM_EPP	AAM	EPP	3	49665390	rs2131108	A	G	-8.072458	65.164584	28.297166	6.57E-11
AAM_EPP	AAM	EPP	3	49667691	rs9883000	C	T	-8.048966	64.785859	28.215074	7.00E-11
AAM_EPP	AAM	EPP	3	49671224	rs1586827	C	T	-8.020869	64.334337	27.950728	8.62E-11
AAM_EPP	AAM	EPP	3	49673662	rs62262675	G	A	7.988128	63.810187	27.569110	1.16E-10
AAM_EPP	AAM	EPP	3	49674343	rs9824435	T	C	-8.061121	64.981675	27.979057	8.43E-11
AAM_EPP	AAM	EPP	3	49679072	rs2329021	A	G	-8.063245	65.015912	27.927199	8.78E-11
AAM_EPP	AAM	EPP	3	49680973	rs10452032	A	G	-8.071749	65.153130	28.016019	8.19E-11
AAM_EPP	AAM	EPP	3	49681704	rs6446286	G	A	-8.062580	65.005196	27.985117	8.39E-11
AAM_EPP	AAM	EPP	3	49683526	rs4855846	A	G	-8.105567	65.700215	28.133170	7.47E-11
AAM_EPP	AAM	EPP	3	49685592	rs1078341	G	A	-8.080881	65.300632	28.047670	7.99E-11
AAM_EPP	AAM	EPP	3	49687043	rs4855845	C	T	-8.049989	64.802317	28.228760	6.93E-11
AAM_EPP	AAM	EPP	3	49687779	rs6774202	G	T	-8.065904	65.058804	27.995566	8.32E-11
AAM_EPP	AAM	EPP	3	49690199	rs4855885	A	G	-7.894699	62.326273	27.413727	1.31E-10
AAM_EPP	AAM	EPP	3	49710444	rs13093525	G	C	-7.995551	63.928835	28.025956	8.12E-11
AAM_EPP	AAM	EPP	3	49724808	rs3020779	C	T	-8.227600	67.693400	28.841477	4.29E-11
AAM_EPP	AAM	EPP	3	49736565	rs6785549	A	G	-5.110681	26.119061	20.206206	3.83E-08
AAM_EPP	AAM	EPP	3	49737323	rs11130217	G	A	-7.909217	62.555707	27.490569	1.24E-10
AAM_EPP	AAM	EPP	3	49739507	rs1491985	C	G	-8.036561	64.586313	27.928650	8.77E-11
AAM_EPP	AAM	EPP	3	49744392	rs3749241	G	A	-5.179908	26.831443	21.588940	1.28E-08
AAM_EPP	AAM	EPP	3	49744890	rs11716575	G	A	-5.111275	26.125130	21.303476	1.61E-08
AAM_EPP	AAM	EPP	3	49745188	rs11709680	T	C	-5.102041	26.030820	21.264405	1.66E-08
AAM_EPP	AAM	EPP	3	49745235	rs11709734	A	G	-8.038700	64.620699	27.936084	8.72E-11
AAM_EPP	AAM	EPP	3	49745677	rs4855841	A	G	-5.125971	26.275576	21.203710	1.74E-08
AAM_EPP	AAM	EPP	3	49745822	rs4855867	T	C	-5.122199	26.236926	21.784390	1.10E-08
AAM_EPP	AAM	EPP	3	49746819	rs12381242	T	C	-5.123452	26.249759	21.348985	1.55E-08
AAM_EPP	AAM	EPP	3	49748833	rs4855862	T	C	-5.129186	26.308544	21.387585	1.51E-08
AAM_EPP	AAM	EPP	3	49750188	rs3749240	A	T	-5.126616	26.282189	20.269207	3.65E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	3	49751856	rs12715437	C	T	-8.015156	64.242725	28.096479	7.69E-11
AAM_EPP	AAM	EPP	3	49752372	rs11130218	T	C	-5.112451	26.137152	20.219583	3.79E-08
AAM_EPP	AAM	EPP	3	49752427	rs11130219	T	C	-5.110681	26.119061	20.323421	3.49E-08
AAM_EPP	AAM	EPP	3	49753003	rs34614773	G	T	-5.127894	26.295300	20.274262	3.63E-08
AAM_EPP	AAM	EPP	3	49753788	rs11720705	G	A	-8.033147	64.531443	28.349913	6.30E-11
AAM_EPP	AAM	EPP	3	49754970	rs7628207	C	T	-8.044923	64.720784	28.200825	7.08E-11
AAM_EPP	AAM	EPP	3	49761571	rs4855850	A	G	-5.041872	25.420469	19.934152	4.76E-08
AAM_EPP	AAM	EPP	3	49761605	rs3811696	T	C	-5.137102	26.389820	20.310668	3.53E-08
AAM_EPP	AAM	EPP	3	49761613	rs3811695	T	C	-5.111275	26.125130	20.208553	3.83E-08
AAM_EPP	AAM	EPP	3	49762662	rs7634902	T	G	-5.171676	26.746234	20.476131	3.10E-08
AAM_EPP	AAM	EPP	3	49763338	rs1049256	C	T	-5.157697	26.601834	20.367683	3.37E-08
AAM_EPP	AAM	EPP	3	49769071	rs9870858	T	C	-8.119270	65.922550	28.496154	5.62E-11
AAM_EPP	AAM	EPP	3	49769419	rs62262722	C	G	7.935878	62.978161	27.427131	1.30E-10
AAM_EPP	AAM	EPP	3	49772375	rs7649348	A	G	-5.174924	26.779840	20.459075	3.14E-08
AAM_EPP	AAM	EPP	3	49772647	rs7618501	G	A	-5.155473	26.578898	20.382173	3.34E-08
AAM_EPP	AAM	EPP	3	49772708	rs7618519	T	A	-5.155473	26.578898	20.382173	3.34E-08
AAM_EPP	AAM	EPP	3	49773236	rs35261599	A	G	-5.156959	26.594227	20.399078	3.29E-08
AAM_EPP	AAM	EPP	3	49780844	rs9876508	A	G	-5.163022	26.656801	20.381915	3.34E-08
AAM_EPP	AAM	EPP	3	49783103	rs9815766	T	C	-5.161484	26.640918	20.385288	3.33E-08
AAM_EPP	AAM	EPP	3	49783211	rs9853458	C	A	-5.174924	26.779840	20.409359	3.26E-08
AAM_EPP	AAM	EPP	3	49784777	rs7374277	C	T	-5.148909	26.511262	20.369692	3.37E-08
AAM_EPP	AAM	EPP	3	49785133	rs7374183	A	G	-5.145368	26.474815	20.324090	3.49E-08
AAM_EPP	AAM	EPP	3	49788969	rs7372966	C	T	-5.174109	26.771401	20.437970	3.19E-08
AAM_EPP	AAM	EPP	3	49789664	rs7429353	A	T	-5.204994	27.091962	20.559968	2.90E-08
AAM_EPP	AAM	EPP	3	49790544	rs7372725	A	C	-5.166903	26.696884	20.409506	3.26E-08
AAM_EPP	AAM	EPP	3	49790682	rs7372730	G	C	-5.174109	26.771401	20.437970	3.19E-08
AAM_EPP	AAM	EPP	3	49792023	rs9872864	G	A	-5.152526	26.548529	20.344208	3.44E-08
AAM_EPP	AAM	EPP	3	49792158	rs9855505	G	T	-5.169282	26.721479	20.308581	3.54E-08
AAM_EPP	AAM	EPP	3	49797769	rs9835157	A	G	8.064227	65.031759	28.267328	6.72E-11
AAM_EPP	AAM	EPP	3	49798864	rs7621797	A	G	8.016275	64.260662	28.099242	7.67E-11
AAM_EPP	AAM	EPP	3	49798920	rs7634886	G	A	5.120328	26.217756	20.225915	3.77E-08
AAM_EPP	AAM	EPP	3	49799475	rs9882639	C	A	5.207889	27.122113	20.571794	2.87E-08
AAM_EPP	AAM	EPP	3	49799729	rs9865480	C	T	5.147487	26.496625	20.333198	3.47E-08
AAM_EPP	AAM	EPP	3	49800272	rs60205400	T	C	5.206916	27.111971	20.567948	2.88E-08
AAM_EPP	AAM	EPP	3	49804119	rs6809431	G	A	5.120328	26.217756	20.333408	3.47E-08
AAM_EPP	AAM	EPP	3	49807085	rs9859153	T	G	5.225169	27.302393	20.607281	2.79E-08
AAM_EPP	AAM	EPP	3	49808274	rs62262730	G	T	7.843543	61.521162	27.640483	1.10E-10
AAM_EPP	AAM	EPP	3	49808374	rs7431106	A	G	5.231655	27.370217	20.632862	2.73E-08
AAM_EPP	AAM	EPP	3	49809063	rs6446295	T	G	5.246515	27.525916	20.724368	2.54E-08
AAM_EPP	AAM	EPP	3	49809841	rs9870755	T	C	7.887623	62.214595	27.776161	9.88E-11
AAM_EPP	AAM	EPP	3	49810961	rs6766836	G	A	5.083778	25.844802	20.081540	4.23E-08
AAM_EPP	AAM	EPP	3	49811047	rs14838379	A	G	7.864361	61.848177	27.713847	1.04E-10
AAM_EPP	AAM	EPP	3	49812866	rs7613603	T	C	7.879007	62.078753	27.765459	9.96E-11
AAM_EPP	AAM	EPP	3	49813013	rs34451146	T	C	5.250121	27.563765	20.738160	2.52E-08
AAM_EPP	AAM	EPP	3	49813169	rs57648519	A	C	5.263939	27.709050	20.792742	2.41E-08
AAM_EPP	AAM	EPP	3	49814949	rs62260663	C	T	8.062912	65.010553	28.420041	5.97E-11
AAM_EPP	AAM	EPP	3	49817450	rs9829155	C	T	8.059028	64.947931	28.409186	6.02E-11
AAM_EPP	AAM	EPP	3	49818555	rs9814765	T	C	5.317845	28.279479	21.005675	2.04E-08
AAM_EPP	AAM	EPP	3	49819102	rs11130221	G	C	5.281682	27.896161	20.862165	2.28E-08
AAM_EPP	AAM	EPP	3	49821625	rs13063621	C	T	5.245339	27.513579	20.519043	2.99E-08
AAM_EPP	AAM	EPP	3	49822909	rs9836756	A	G	8.065224	65.047844	28.428191	5.93E-11
AAM_EPP	AAM	EPP	3	49825326	rs9851651	A	C	8.037480	64.601079	28.330397	6.40E-11
AAM_EPP	AAM	EPP	3	49825369	rs9851930	A	G	8.110534	65.780761	28.587898	5.23E-11
AAM_EPP	AAM	EPP	3	49828021	rs7620848	C	G	7.989947	63.839256	28.156409	7.33E-11
AAM_EPP	AAM	EPP	3	49829653	rs7637711	G	A	8.086500	65.391489	28.503154	5.59E-11
AAM_EPP	AAM	EPP	3	49832261	rs6802890	G	A	5.213814	27.183854	20.357443	3.40E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	3	49834571	rs6809879	G	A	7.930088	62.886301	27.753158	1.01E-10
AAM_EPP	AAM	EPP	3	49835450	rs6790568	T	C	8.099906	65.608478	28.391255	6.10E-11
AAM_EPP	AAM	EPP	3	49842625	rs2234391	G	A	5.223048	27.280229	20.469325	3.11E-08
AAM_EPP	AAM	EPP	3	49845006	rs58339610	A	T	7.963672	63.420064	28.262622	6.75E-11
AAM_EPP	AAM	EPP	3	49847642	rs1799844	A	G	7.855866	61.714635	27.842673	9.38E-11
AAM_EPP	AAM	EPP	3	49848414	rs28535523	T	C	7.879007	62.078753	27.924688	8.79E-11
AAM_EPP	AAM	EPP	3	49853073	rs6775384	A	G	5.208864	27.132260	20.277354	3.62E-08
AAM_EPP	AAM	EPP	3	49853796	rs62260720	A	T	8.069303	65.113647	28.604728	5.16E-11
AAM_EPP	AAM	EPP	3	49858142	rs10865958	G	A	5.218885	27.236758	20.459776	3.14E-08
AAM_EPP	AAM	EPP	3	49866392	rs1128535	T	C	5.172491	26.754661	20.303903	3.55E-08
AAM_EPP	AAM	EPP	3	49866584	rs35129566	G	T	8.149310	66.411251	28.925542	4.02E-11
AAM_EPP	AAM	EPP	3	49868455	rs7648987	G	A	5.145368	26.474815	20.194045	3.87E-08
AAM_EPP	AAM	EPP	3	49868842	rs7645061	T	C	5.140511	26.424855	20.178372	3.92E-08
AAM_EPP	AAM	EPP	3	49868876	rs7649428	T	A	8.132653	66.140038	28.766798	4.55E-11
AAM_EPP	AAM	EPP	3	49869158	rs695238	C	A	5.113651	26.149425	20.093700	4.19E-08
AAM_EPP	AAM	EPP	3	49869631	rs13085679	A	G	5.273288	27.807568	20.735348	2.52E-08
AAM_EPP	AAM	EPP	3	49871201	rs61557789	T	C	8.000412	64.006600	28.391654	6.10E-11
AAM_EPP	AAM	EPP	3	49872124	rs62260723	C	T	8.041702	64.668979	28.543595	5.41E-11
AAM_EPP	AAM	EPP	3	49874246	rs59684465	T	C	7.999431	63.990899	28.388678	6.11E-11
AAM_EPP	AAM	EPP	3	49878078	rs2271960	C	T	5.445707	29.655730	21.247418	1.68E-08
AAM_EPP	AAM	EPP	3	49878264	rs1996663	G	C	8.140700	66.270990	29.050444	3.64E-11
AAM_EPP	AAM	EPP	3	49878395	rs1996664	G	A	8.087503	65.407708	28.682800	4.86E-11
AAM_EPP	AAM	EPP	3	49881134	rs2246832	T	A	5.431766	29.504086	21.149852	1.82E-08
AAM_EPP	AAM	EPP	3	49886319	rs77941694	T	G	7.817219	61.108916	27.879908	9.11E-11
AAM_EPP	AAM	EPP	3	49890967	rs59357103	A	G	7.697273	59.248015	25.386579	6.44E-10
AAM_EPP	AAM	EPP	3	49898318	rs62260755	G	C	7.355645	54.105520	25.550880	5.66E-10
AAM_EPP	AAM	EPP	3	49899795	rs3796386	A	G	8.004445	64.071137	32.897907	1.80E-12
AAM_EPP	AAM	EPP	3	49901060	rs11130222	T	A	7.955793	63.294643	32.660957	2.16E-12
AAM_EPP	AAM	EPP	3	49902160	rs2883059	C	T	8.008630	64.138162	32.857542	1.86E-12
AAM_EPP	AAM	EPP	3	49908023	rs952594	A	G	8.031237	64.500764	33.264817	1.35E-12
AAM_EPP	AAM	EPP	3	49911155	rs55692411	A	G	8.019700	64.315591	33.196402	1.43E-12
AAM_EPP	AAM	EPP	3	49911449	rs34654589	G	C	7.945120	63.124926	32.888587	1.81E-12
AAM_EPP	AAM	EPP	3	49914397	rs11712056	C	T	7.870935	61.951621	31.075407	7.47E-12
AAM_EPP	AAM	EPP	3	49916710	rs7613360	T	C	7.824919	61.229351	31.670329	4.69E-12
AAM_EPP	AAM	EPP	3	49917686	rs62262061	A	G	7.002191	49.030686	26.251777	3.27E-10
AAM_EPP	AAM	EPP	3	49926613	rs7627864	G	C	8.094076	65.514071	33.709329	9.55E-13
AAM_EPP	AAM	EPP	3	49937505	rs7615206	C	T	8.088315	65.420842	33.752616	9.23E-13
AAM_EPP	AAM	EPP	3	49939503	rs3733134	T	C	8.068792	65.105408	33.671010	9.84E-13
AAM_EPP	AAM	EPP	3	49948728	rs2352984	C	T	8.053590	64.860304	34.064866	7.24E-13
AAM_EPP	AAM	EPP	3	49949071	rs868891	G	A	8.065390	65.050509	34.070700	7.20E-13
AAM_EPP	AAM	EPP	3	49956628	rs11709573	T	C	8.113948	65.836146	34.175508	6.64E-13
AAM_EPP	AAM	EPP	3	49959148	rs35275715	G	A	8.079185	65.273234	33.376557	1.24E-12
AAM_EPP	AAM	EPP	3	49959156	rs34034116	A	C	8.091157	65.466826	33.582149	1.05E-12
AAM_EPP	AAM	EPP	3	49961780	rs6774354	A	G	8.102133	65.644562	34.259205	6.22E-13
AAM_EPP	AAM	EPP	3	49971831	rs7627910	C	T	7.967438	63.480072	26.502841	2.68E-10
AAM_EPP	AAM	EPP	3	49976972	rs7626952	G	A	8.019706	64.315677	26.806951	2.11E-10
AAM_EPP	AAM	EPP	3	49982765	rs11721204	T	C	8.077507	65.246122	26.906039	1.95E-10
AAM_EPP	AAM	EPP	3	49987475	rs7615318	T	C	6.843470	46.833078	25.939743	4.17E-10
AAM_EPP	AAM	EPP	3	49988065	rs11706185	A	G	8.088708	65.427192	27.547375	1.18E-10
AAM_EPP	AAM	EPP	3	49991060	rs71326904	T	C	7.009603	49.134536	26.601008	2.48E-10
AAM_EPP	AAM	EPP	3	49991167	rs11709503	T	G	8.104647	65.685306	27.582222	1.15E-10
AAM_EPP	AAM	EPP	3	49991427	rs62262106	G	A	7.012552	49.175892	26.612201	2.46E-10
AAM_EPP	AAM	EPP	3	49996053	rs13077403	A	G	8.129232	66.084406	26.688412	2.32E-10
AAM_EPP	AAM	EPP	3	49996924	rs13079006	T	G	8.129798	66.093616	27.187983	1.57E-10
AAM_EPP	AAM	EPP	3	49997193	rs13083396	T	C	7.004431	49.062058	27.669044	1.07E-10
AAM_EPP	AAM	EPP	3	49999086	rs62262114	A	G	8.008622	64.138024	26.822587	2.09E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	3	50003586	rs62262118	A	G	7.014970	49.209803	26.642594	2.40E-10
AAM_EPP	AAM	EPP	3	50008864	rs7648174	T	C	8.042122	64.675723	26.942336	1.90E-10
AAM_EPP	AAM	EPP	3	50010571	rs2624819	T	G	8.036951	64.592582	26.925014	1.93E-10
AAM_EPP	AAM	EPP	3	50020437	rs2681776	A	G	8.103953	65.674052	26.723607	2.26E-10
AAM_EPP	AAM	EPP	3	50025006	rs13082703	C	T	8.085326	65.372490	26.970992	1.86E-10
AAM_EPP	AAM	EPP	3	50031840	rs35012435	T	C	7.111248	50.569853	26.974467	1.85E-10
AAM_EPP	AAM	EPP	3	50032008	rs17657664	G	T	8.094282	65.517404	27.220232	1.53E-10
AAM_EPP	AAM	EPP	3	50033228	rs17657688	C	T	8.084933	65.366148	27.130920	1.64E-10
AAM_EPP	AAM	EPP	3	50043341	rs12634780	T	A	-8.058556	64.940321	24.701352	1.10E-09
AAM_EPP	AAM	EPP	3	50043654	rs9812936	T	C	-7.926720	62.832887	24.297244	1.52E-09
AAM_EPP	AAM	EPP	3	50044006	rs7635601	A	T	7.188513	51.674716	26.087277	3.72E-10
AAM_EPP	AAM	EPP	3	50046112	rs6787892	A	G	7.087057	50.226383	26.866719	2.02E-10
AAM_EPP	AAM	EPP	3	50052834	rs6446191	C	T	-8.082208	65.322080	26.718018	2.27E-10
AAM_EPP	AAM	EPP	3	50053111	rs6446192	C	T	-7.980282	63.684899	26.417330	2.87E-10
AAM_EPP	AAM	EPP	3	50062878	rs13071931	A	G	7.105373	50.486321	26.949396	1.89E-10
AAM_EPP	AAM	EPP	3	50065274	rs35375092	A	G	6.996194	48.946731	25.955191	4.12E-10
AAM_EPP	AAM	EPP	3	50067298	rs6446194	A	T	-8.034976	64.560836	26.598243	2.49E-10
AAM_EPP	AAM	EPP	3	50067350	rs35849525	C	T	7.306600	53.386397	25.594815	5.47E-10
AAM_EPP	AAM	EPP	3	50070853	rs6446195	G	A	-8.100127	65.612055	26.814056	2.10E-10
AAM_EPP	AAM	EPP	3	50071279	rs7624030	C	A	-8.067252	65.080561	26.705231	2.29E-10
AAM_EPP	AAM	EPP	3	50071677	rs7634441	A	G	-8.038832	64.622825	26.611151	2.46E-10
AAM_EPP	AAM	EPP	3	50072152	rs9844201	C	A	-8.168981	66.732254	27.041986	1.76E-10
AAM_EPP	AAM	EPP	3	50072987	rs12488521	C	T	-8.449321	71.391029	27.970003	8.49E-11
AAM_EPP	AAM	EPP	3	50074641	rs4688754	T	G	-8.014048	64.224968	26.598945	2.49E-10
AAM_EPP	AAM	EPP	3	50074773	rs4688753	G	A	-8.038699	64.620686	26.479204	2.73E-10
AAM_EPP	AAM	EPP	3	50076734	rs2526749	G	A	-8.071044	65.141745	26.717781	2.27E-10
AAM_EPP	AAM	EPP	3	50078221	rs7430334	C	T	-7.990862	63.853879	26.490036	2.71E-10
AAM_EPP	AAM	EPP	3	50081107	rs9682295	C	T	-8.095349	65.534681	26.794477	2.13E-10
AAM_EPP	AAM	EPP	3	50082914	rs2526747	G	C	-8.255710	68.156748	28.727627	4.69E-11
AAM_EPP	AAM	EPP	3	50085153	rs17304079	G	A	7.492055	56.130893	26.128134	3.60E-10
AAM_EPP	AAM	EPP	3	50088943	rs6446197	G	A	-8.228866	67.714234	28.619605	5.10E-11
AAM_EPP	AAM	EPP	3	50093209	rs6762477	A	G	-8.049261	64.790610	26.796045	2.13E-10
AAM_EPP	AAM	EPP	3	50098112	rs2624815	G	A	-8.066410	65.066975	26.717230	2.27E-10
AAM_EPP	AAM	EPP	3	50100188	rs6793528	A	C	-8.038699	64.620686	26.610710	2.46E-10
AAM_EPP	AAM	EPP	3	50101468	rs13097720	A	G	7.284029	53.057072	27.023028	1.78E-10
AAM_EPP	AAM	EPP	3	50107219	rs2624822	C	T	-8.039231	64.629242	26.612237	2.46E-10
AAM_EPP	AAM	EPP	3	50108792	rs3774734	A	C	-8.058400	64.937806	26.675689	2.34E-10
AAM_EPP	AAM	EPP	3	50114515	rs7061	T	C	-8.169763	66.745028	28.428364	5.93E-11
AAM_EPP	AAM	EPP	3	50119256	rs71326915	A	T	6.776648	45.922954	25.230754	7.28E-10
AAM_EPP	AAM	EPP	3	50120257	rs55924524	G	A	7.319450	53.574349	25.639614	5.28E-10
AAM_EPP	AAM	EPP	3	50124950	rs14333619	A	T	7.397286	54.719834	26.050308	3.83E-10
AAM_EPP	AAM	EPP	3	50125219	rs9681286	C	T	-8.129512	66.088968	28.503222	5.59E-11
AAM_EPP	AAM	EPP	3	50126215	rs2247510	A	C	-8.134976	66.177827	28.218948	6.98E-11
AAM_EPP	AAM	EPP	3	50135412	rs7648652	C	A	7.404147	54.821395	26.148303	3.54E-10
AAM_EPP	AAM	EPP	3	50136165	rs6808044	G	A	-8.166675	66.694578	28.596149	5.20E-11
AAM_EPP	AAM	EPP	3	50136463	rs13095697	A	G	7.066410	49.934152	26.216489	3.36E-10
AAM_EPP	AAM	EPP	3	50144951	rs1061474	C	T	-8.160011	66.585777	28.572624	5.29E-11
AAM_EPP	AAM	EPP	3	50152491	rs62263602	T	C	6.973570	48.630681	25.441784	6.17E-10
AAM_EPP	AAM	EPP	3	50153356	rs1138536	C	T	-8.143815	66.321725	28.168809	7.26E-11
AAM_EPP	AAM	EPP	3	50156695	rs2624829	G	A	-8.104178	65.677702	28.050695	7.97E-11
AAM_EPP	AAM	EPP	3	50158191	rs2856238	C	T	-8.103277	65.663105	28.180348	7.20E-11
AAM_EPP	AAM	EPP	3	50158774	rs2856237	G	A	-8.104422	65.681656	28.203436	7.07E-11
AAM_EPP	AAM	EPP	3	50165101	rs2624848	C	T	-8.121102	65.952296	28.284348	6.63E-11
AAM_EPP	AAM	EPP	3	50174025	rs2189691	C	T	6.994086	48.917237	26.278971	3.20E-10
AAM_EPP	AAM	EPP	3	50175348	rs2526387	C	G	7.038011	49.533605	26.763359	2.19E-10
AAM_EPP	AAM	EPP	3	50175940	rs2014004	A	G	6.964316	48.501698	25.853594	4.47E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	3	50176739	rs2624846	A	C	6.714277	45.081516	24.323155	1.49E-09
AAM_EPP	AAM	EPP	3	50185508	rs11714286	A	G	-7.167995	51.380148	23.460235	2.93E-09
AAM_EPP	AAM	EPP	3	50187596	rs2526398	C	G	6.669883	44.487340	27.694481	1.05E-10
AAM_EPP	AAM	EPP	3	50187790	rs2526397	T	G	6.639848	44.087579	27.565845	1.17E-10
AAM_EPP	AAM	EPP	3	50192760	rs2526390	T	C	6.688155	44.731418	28.225334	6.95E-11
AAM_EPP	AAM	EPP	3	50198415	rs2624841	T	C	6.647065	44.183476	27.979378	8.43E-11
AAM_EPP	AAM	EPP	3	50198537	rs12631337	G	A	-7.380244	54.468002	28.958158	3.91E-11
AAM_EPP	AAM	EPP	3	50205642	rs2624838	G	C	6.681812	44.646613	23.226782	3.53E-09
AAM_EPP	AAM	EPP	3	50209049	rs2624835	A	G	6.768633	45.814391	28.870996	4.19E-11
AAM_EPP	AAM	EPP	3	50212512	rs2624833	T	G	6.713512	45.071244	28.258282	6.77E-11
AAM_EPP	AAM	EPP	3	50216114	rs67627084	T	C	-7.192108	51.726420	25.662135	5.19E-10
AAM_EPP	AAM	EPP	3	50216421	rs13059311	C	T	-6.497988	42.223846	29.093458	3.52E-11
AAM_EPP	AAM	EPP	3	50217234	rs9831967	T	C	-7.192108	51.726420	29.935412	1.82E-11
AAM_EPP	AAM	EPP	3	50217654	rs13085567	T	C	-7.271311	52.871969	25.953401	4.13E-10
AAM_EPP	AAM	EPP	3	50217899	rs11714799	G	T	-7.219191	52.116718	25.768537	4.77E-10
AAM_EPP	AAM	EPP	3	50218879	rs9858297	C	T	-6.452532	41.635164	28.788733	4.47E-11
AAM_EPP	AAM	EPP	3	50221715	rs13067082	G	A	-6.463951	41.782665	28.876133	4.17E-11
AAM_EPP	AAM	EPP	3	50222926	rs1046956	A	T	-6.480534	41.997319	29.176849	3.30E-11
AAM_EPP	AAM	EPP	3	50223593	rs2073726	A	T	-7.078243	50.101523	25.581376	5.53E-10
AAM_EPP	AAM	EPP	3	50223977	rs11717349	T	C	-7.112443	50.586845	25.663079	5.19E-10
AAM_EPP	AAM	EPP	3	50224225	rs12632110	G	A	-6.509306	42.371065	24.653714	1.15E-09
AAM_EPP	AAM	EPP	3	50224562	rs12637671	A	G	-6.402360	40.990208	28.819458	4.36E-11
AAM_EPP	AAM	EPP	3	50225029	rs11711407	G	A	-7.070836	49.996717	25.459864	6.08E-10
AAM_EPP	AAM	EPP	3	50227871	rs9858059	T	C	-6.971767	48.605530	25.073198	8.24E-10
AAM_EPP	AAM	EPP	3	50228767	rs3755831	T	G	-7.033091	49.464365	25.031233	8.52E-10
AAM_EPP	AAM	EPP	3	50233215	rs11919418	G	T	6.486593	42.075887	29.163521	3.33E-11
AAM_EPP	AAM	EPP	3	50233317	rs13064381	T	C	6.397445	40.927297	28.615114	5.12E-11
AAM_EPP	AAM	EPP	3	50234126	rs34877766	G	A	7.059590	49.837808	25.350290	6.63E-10
AAM_EPP	AAM	EPP	3	50236373	rs6807194	G	A	-6.565959	43.111823	28.997835	3.79E-11
AAM_EPP	AAM	EPP	3	50240338	rs4688745	C	T	6.744076	45.482565	24.906066	9.40E-10
AAM_EPP	AAM	EPP	3	50242387	rs1858828	T	G	6.363665	40.496236	22.940514	4.42E-09
AAM_EPP	AAM	EPP	3	50243801	rs35219849	T	C	6.518522	42.491134	28.364602	6.23E-11
AAM_EPP	AAM	EPP	3	50243948	rs35137368	A	G	6.514983	42.445008	28.331063	6.40E-11
AAM_EPP	AAM	EPP	3	50244080	rs2236940	A	G	6.593015	43.467852	23.653751	2.52E-09
AAM_EPP	AAM	EPP	3	50247824	rs2236941	T	C	6.526783	42.598902	23.561422	2.71E-09
AAM_EPP	AAM	EPP	3	50248807	rs2236942	C	G	6.759986	45.697405	24.793441	1.03E-09
AAM_EPP	AAM	EPP	3	50250837	rs2282749	C	T	6.874065	47.252767	24.331080	1.48E-09
AAM_EPP	AAM	EPP	3	127710474	rs16845806	A	G	5.245329	27.513478	20.992230	2.06E-08
AAM_EPP	AAM	EPP	3	127711997	rs9839080	T	C	5.052523	25.527991	20.435895	3.20E-08
AAM_EPP	AAM	EPP	3	127713993	rs9849853	T	C	4.862349	23.642440	20.084618	4.22E-08
AAM_EPP	AAM	EPP	3	127714611	rs1549876	G	A	4.953471	24.536876	19.915438	4.83E-08
AAM_EPP	AAM	EPP	3	127715018	rs6803110	G	A	4.969000	24.690963	19.979200	4.59E-08
AAM_EPP	AAM	EPP	3	127715049	rs1549875	C	T	4.942321	24.426536	19.872016	5.00E-08
AAM_EPP	AAM	EPP	3	127715133	rs1549874	G	A	5.741032	32.959450	21.124482	1.85E-08
AAM_EPP	AAM	EPP	3	127715911	rs6795314	A	T	5.815923	33.824956	21.386608	1.51E-08
AAM_EPP	AAM	EPP	3	127716262	rs4857832	A	G	5.778657	33.392877	21.333748	1.57E-08
AAM_EPP	AAM	EPP	3	127716585	rs9870753	G	A	5.748011	33.039626	20.831033	2.34E-08
AAM_EPP	AAM	EPP	3	127717702	rs6439104	C	T	5.724070	32.764972	20.746093	2.50E-08
AAM_EPP	AAM	EPP	3	127719658	rs67986238	G	A	5.766152	33.248509	21.230121	1.71E-08
AAM_EPP	AAM	EPP	3	127719920	rs72967027	C	T	5.584032	31.181417	20.561921	2.89E-08
AAM_EPP	AAM	EPP	3	127720727	rs1469660	C	T	5.772721	33.324310	21.253718	1.67E-08
AAM_EPP	AAM	EPP	3	127720740	rs1469659	T	C	5.757832	33.152633	21.192458	1.76E-08
AAM_EPP	AAM	EPP	3	127721041	rs6781473	T	G	5.751034	33.074396	21.172805	1.78E-08
AAM_EPP	AAM	EPP	3	127721375	rs28520291	C	T	5.807529	33.727388	21.251367	1.68E-08
AAM_EPP	AAM	EPP	3	127721435	rs28636854	T	C	5.712999	32.638359	21.111072	1.87E-08
AAM_EPP	AAM	EPP	3	127721468	rs11924834	A	G	5.691405	32.392094	21.399218	1.49E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	3	127721508	rs11924838	A	G	5.745776	33.013947	21.192956	1.76E-08
AAM_EPP	AAM	EPP	3	127721543	rs11917022	T	A	5.745776	33.013947	21.264564	1.66E-08
AAM_EPP	AAM	EPP	3	127721603	rs11924866	C	G	5.741391	32.963569	21.245761	1.68E-08
AAM_EPP	AAM	EPP	3	127721859	rs10433341	A	G	5.752182	33.087603	21.176699	1.78E-08
AAM_EPP	AAM	EPP	3	127723008	rs7633480	A	G	5.701149	32.503101	20.989244	2.06E-08
AAM_EPP	AAM	EPP	3	127723017	rs7645109	C	T	5.732089	32.856843	21.103043	1.89E-08
AAM_EPP	AAM	EPP	3	127723197	rs7611426	G	A	5.756253	33.134450	21.165354	1.79E-08
AAM_EPP	AAM	EPP	3	127723215	rs7611430	G	A	5.164562	26.672698	20.990443	2.06E-08
AAM_EPP	AAM	EPP	3	127723233	rs67464627	T	C	5.711473	32.620926	21.023114	2.01E-08
AAM_EPP	AAM	EPP	3	127724145	rs6767360	G	A	5.716092	32.673706	20.937053	2.15E-08
AAM_EPP	AAM	EPP	3	127724733	rs6770337	G	A	5.143263	26.453157	21.027291	2.00E-08
AAM_EPP	AAM	EPP	3	127724751	rs6794938	G	C	5.110681	26.119061	20.871305	2.26E-08
AAM_EPP	AAM	EPP	3	127726637	rs6777095	G	A	-5.717659	32.691620	22.504773	6.23E-09
AAM_EPP	AAM	EPP	3	127726737	rs6777197	G	A	-5.694131	32.423132	22.228330	7.75E-09
AAM_EPP	AAM	EPP	3	127726996	rs6777484	C	A	-5.779555	33.403251	22.617993	5.70E-09
AAM_EPP	AAM	EPP	3	127727450	rs6766665	C	T	-5.712999	32.638359	22.485935	6.32E-09
AAM_EPP	AAM	EPP	3	127727752	rs11717102	T	C	-5.010465	25.104760	20.428215	3.22E-08
AAM_EPP	AAM	EPP	3	127730766	rs9824657	C	T	-5.717659	32.691620	22.502862	6.24E-09
AAM_EPP	AAM	EPP	3	127731673	rs9809866	T	C	-5.720833	32.727935	22.300810	7.32E-09
AAM_EPP	AAM	EPP	3	127732271	rs6801467	A	G	-5.014759	25.147811	20.563516	2.89E-08
AAM_EPP	AAM	EPP	3	127733069	rs4474992	G	A	-5.719246	32.709770	22.294672	7.35E-09
AAM_EPP	AAM	EPP	3	127733091	rs4602341	G	A	-5.672169	32.173497	22.111158	8.50E-09
AAM_EPP	AAM	EPP	3	127740453	rs35546672	G	C	-5.034141	25.342572	20.444918	3.17E-08
AAM_EPP	AAM	EPP	3	127745697	rs4857833	A	G	-5.051224	25.514864	19.958990	4.66E-08
AAM_EPP	AAM	EPP	3	127745765	rs6439108	C	G	-4.991220	24.912277	20.111724	4.13E-08
AAM_EPP	AAM	EPP	3	127747841	rs6764517	G	A	-5.751988	33.085364	22.431573	6.60E-09
AAM_EPP	AAM	EPP	3	127755716	rs1987633	A	C	-5.448487	29.686012	21.043068	1.98E-08
AAM_EPP	AAM	EPP	3	127756718	rs6439110	T	C	-5.110088	26.112995	20.621473	2.76E-08
AAM_EPP	AAM	EPP	3	127757422	rs2217629	G	A	-5.668566	32.132636	22.106088	8.54E-09
AAM_EPP	AAM	EPP	3	127759214	rs1469658	A	T	-5.779099	33.397986	22.537222	6.07E-09
AAM_EPP	AAM	EPP	3	127759668	rs1469657	T	C	-5.722451	32.746446	22.330768	7.15E-09
AAM_EPP	AAM	EPP	3	127763254	rs4857834	C	T	-5.762048	33.201194	22.470960	6.40E-09
AAM_EPP	AAM	EPP	3	127773676	rs1030655	C	T	-4.986446	24.864643	20.104174	4.16E-08
AAM_EPP	AAM	EPP	3	127775788	rs9847934	A	T	-5.789254	33.515463	22.212430	7.85E-09
AAM_EPP	AAM	EPP	3	127779944	rs2335771	G	A	-4.948468	24.487340	19.955655	4.68E-08
AAM_EPP	AAM	EPP	3	127780082	rs759945	A	G	-5.684754	32.316424	22.059442	8.86E-09
AAM_EPP	AAM	EPP	3	127781737	rs4857864	C	G	-5.711473	32.620926	22.058158	8.86E-09
AAM_EPP	AAM	EPP	3	127782427	rs9864797	C	G	-5.511887	30.380902	21.440189	1.44E-08
AAM_EPP	AAM	EPP	3	127783236	rs59766347	G	C	-4.985508	24.855290	20.084739	4.22E-08
AAM_EPP	AAM	EPP	3	127783442	rs6764003	G	A	-5.701149	32.503101	22.176381	8.07E-09
AAM_EPP	AAM	EPP	3	127790606	rs2241688	A	G	-5.678355	32.243711	22.613878	5.72E-09
AAM_EPP	AAM	EPP	3	127791708	rs7612065	C	T	-5.705502	32.552754	22.192152	7.97E-09
AAM_EPP	AAM	EPP	3	127799669	rs1554534	T	G	-5.687388	32.346379	22.121903	8.43E-09
AAM_EPP	AAM	EPP	3	127806218	rs3732402	A	G	-5.019897	25.199366	20.505999	3.02E-08
AAM_EPP	AAM	EPP	3	127808502	rs7355887	G	C	-6.663710	44.405026	29.685128	2.22E-11
AAM_EPP	AAM	EPP	3	127808815	rs9855015	G	A	-5.753331	33.100818	22.227233	7.76E-09
AAM_EPP	AAM	EPP	3	127815475	rs4058156	C	T	-5.717659	32.691620	22.284343	7.41E-09
AAM_EPP	AAM	EPP	3	127816572	rs6439113	G	A	-5.679616	32.258040	22.136231	8.33E-09
AAM_EPP	AAM	EPP	3	127817508	rs7632756	T	C	-6.769758	45.829630	30.183440	1.50E-11
AAM_EPP	AAM	EPP	3	127819062	rs4857866	C	G	-6.768633	45.814397	30.178487	1.51E-11
AAM_EPP	AAM	EPP	3	127819151	rs4857867	C	T	-5.705502	32.552754	22.238976	7.69E-09
AAM_EPP	AAM	EPP	3	127822320	rs7641133	C	T	-6.785111	46.037737	29.686874	2.21E-11
AAM_EPP	AAM	EPP	3	127824017	rs9835383	G	A	-5.773594	33.334383	22.512691	6.19E-09
AAM_EPP	AAM	EPP	3	127826618	rs11924142	T	C	-5.608573	31.456087	21.359584	1.54E-08
AAM_EPP	AAM	EPP	3	127835629	rs6788879	G	A	-5.708462	32.586540	22.714891	5.28E-09
AAM_EPP	AAM	EPP	3	127835803	rs6439115	T	C	-5.709967	32.603726	22.780550	5.01E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	3	127836287	rs4857836	T	C	-6.819901	46.511048	30.403961	1.26E-11
AAM_EPP	AAM	EPP	3	127836319	rs4857837	G	A	-6.798111	46.214307	30.310036	1.36E-11
AAM_EPP	AAM	EPP	3	127838999	rs9821568	A	G	-5.711473	32.620926	22.786558	4.99E-09
AAM_EPP	AAM	EPP	3	127845701	rs2811475	T	C	-5.687388	32.346379	22.785270	4.99E-09
AAM_EPP	AAM	EPP	3	127854684	rs2811471	A	G	-5.701149	32.503101	22.595754	5.80E-09
AAM_EPP	AAM	EPP	3	127856573	rs6414310	A	T	-6.881322	47.352595	30.514636	1.16E-11
AAM_EPP	AAM	EPP	3	127861822	rs2955093	A	C	5.747632	33.035269	22.805156	4.92E-09
AAM_EPP	AAM	EPP	3	127867397	rs67451924	A	G	6.834307	46.707758	30.263386	1.41E-11
AAM_EPP	AAM	EPP	3	127867592	rs73192977	G	T	5.843220	34.143215	23.157862	3.72E-09
AAM_EPP	AAM	EPP	3	127869165	rs4857870	A	G	5.839045	34.094447	23.156058	3.73E-09
AAM_EPP	AAM	EPP	3	127870929	rs10934849	G	C	5.849855	34.220802	23.184159	3.65E-09
AAM_EPP	AAM	EPP	3	127872175	rs11920225	G	C	5.847843	34.197263	23.177518	3.67E-09
AAM_EPP	AAM	EPP	3	127872796	rs2999046	T	C	5.738707	32.932753	22.743815	5.16E-09
AAM_EPP	AAM	EPP	3	127877385	rs2492284	C	T	5.866904	34.420564	23.251729	3.46E-09
AAM_EPP	AAM	EPP	3	127877756	rs2955114	C	A	5.866904	34.420564	23.251891	3.46E-09
AAM_EPP	AAM	EPP	3	127878330	rs2999047	G	A	5.734670	32.886443	22.727818	5.23E-09
AAM_EPP	AAM	EPP	3	127878416	rs2999048	A	G	6.795411	46.177616	29.240660	3.14E-11
AAM_EPP	AAM	EPP	3	127878817	rs2999049	C	T	6.979135	48.708318	30.972137	8.10E-12
AAM_EPP	AAM	EPP	3	127878871	rs2811472	G	A	5.854307	34.272910	23.201804	3.60E-09
AAM_EPP	AAM	EPP	3	127881613	rs2955117	A	G	6.470468	41.866952	31.251560	6.51E-12
AAM_EPP	AAM	EPP	3	127882064	rs2955118	A	G	6.791460	46.123925	28.204414	7.06E-11
AAM_EPP	AAM	EPP	3	127884937	rs2811473	C	A	6.435584	41.416742	25.772818	4.76E-10
AAM_EPP	AAM	EPP	3	127885008	rs2687728	A	C	6.333281	40.110443	24.659222	1.14E-09
AAM_EPP	AAM	EPP	3	127888067	rs872267	A	G	6.848172	46.897456	30.443480	1.22E-11
AAM_EPP	AAM	EPP	3	127888347	rs2955120	G	T	6.838542	46.765657	30.300951	1.37E-11
AAM_EPP	AAM	EPP	3	127888694	rs2687731	T	C	5.753526	33.103058	23.657480	2.51E-09
AAM_EPP	AAM	EPP	3	127889287	rs3122173	G	A	6.781416	45.987609	31.000279	7.92E-12
AAM_EPP	AAM	EPP	3	127890749	rs2248668	G	A	5.673390	32.187350	23.374466	3.14E-09
AAM_EPP	AAM	EPP	3	127891396	rs2955121	G	C	5.819289	33.864130	23.927808	2.03E-09
AAM_EPP	AAM	EPP	3	127892037	rs2999052	C	T	6.870448	47.203060	31.420380	5.70E-12
AAM_EPP	AAM	EPP	3	127892851	rs2811474	C	G	5.788071	33.501771	22.728376	5.22E-09
AAM_EPP	AAM	EPP	3	127895226	rs2687729	G	A	6.863061	47.101608	31.339766	6.08E-12
AAM_EPP	AAM	EPP	3	127895986	rs1554535	A	G	6.870234	47.200112	30.451049	1.22E-11
AAM_EPP	AAM	EPP	3	127898501	rs2811476	C	A	6.814183	46.433096	30.521955	1.15E-11
AAM_EPP	AAM	EPP	3	127898533	rs2999053	A	G	5.742661	32.978158	23.618980	2.59E-09
AAM_EPP	AAM	EPP	3	127899986	rs2999054	A	G	5.736422	32.906532	23.585962	2.66E-09
AAM_EPP	AAM	EPP	3	127900494	rs2999060	G	A	5.841931	34.128154	24.011562	1.90E-09
AAM_EPP	AAM	EPP	3	127900522	rs2999055	T	G	5.861390	34.355891	24.099781	1.77E-09
AAM_EPP	AAM	EPP	3	127901786	rs2811479	A	G	6.903044	47.652011	31.938737	3.80E-12
AAM_EPP	AAM	EPP	3	127902091	rs2811480	T	G	6.899738	47.606391	31.488056	5.41E-12
AAM_EPP	AAM	EPP	3	127903522	rs2999056	A	G	5.841931	34.128154	24.019719	1.89E-09
AAM_EPP	AAM	EPP	3	127903678	rs2955123	C	T	5.705502	32.552754	23.458778	2.94E-09
AAM_EPP	AAM	EPP	3	127904190	rs2811517	C	T	5.845511	34.170004	24.034307	1.87E-09
AAM_EPP	AAM	EPP	3	127904496	rs2811481	C	T	6.869333	47.187733	31.300081	6.27E-12
AAM_EPP	AAM	EPP	3	127904943	rs2811482	T	C	6.772014	45.860171	29.866290	1.92E-11
AAM_EPP	AAM	EPP	3	127905451	rs2811516	G	A	6.846459	46.873998	31.063228	7.54E-12
AAM_EPP	AAM	EPP	3	127905518	rs2811515	A	G	6.846075	46.868747	31.061488	7.55E-12
AAM_EPP	AAM	EPP	3	127907929	rs2811514	G	A	6.805065	46.308905	29.914911	1.85E-11
AAM_EPP	AAM	EPP	3	127909564	rs2811513	A	G	6.858468	47.038587	31.117791	7.23E-12
AAM_EPP	AAM	EPP	3	127909758	rs2999057	T	C	5.820993	33.883958	23.737433	2.36E-09
AAM_EPP	AAM	EPP	3	127911820	rs2811512	A	G	6.776646	45.922931	29.790848	2.04E-11
AAM_EPP	AAM	EPP	3	127913714	rs940061	G	A	5.727367	32.802735	23.663452	2.50E-09
AAM_EPP	AAM	EPP	3	127913828	rs940062	A	T	5.651558	31.940110	23.046392	4.07E-09
AAM_EPP	AAM	EPP	3	127914512	rs2811510	G	A	5.727367	32.802735	23.384415	3.11E-09
AAM_EPP	AAM	EPP	3	127914673	rs2811483	C	G	5.699725	32.486866	23.242942	3.48E-09
AAM_EPP	AAM	EPP	3	127914853	rs2811484	A	G	5.702593	32.519567	23.254873	3.45E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	3	127916490	rs2955124	T	C	5.711473	32.620926	23.289719	3.36E-09
AAM_EPP	AAM	EPP	3	127916551	rs2811509	A	G	6.822608	46.547981	30.962832	8.16E-12
AAM_EPP	AAM	EPP	3	127918000	rs2492285	A	G	6.826193	46.596907	30.970626	8.11E-12
AAM_EPP	AAM	EPP	3	127919417	rs2140286	T	C	5.687388	32.346379	23.191558	3.63E-09
AAM_EPP	AAM	EPP	3	127920023	rs2811508	C	T	6.844584	46.848335	31.054107	7.59E-12
AAM_EPP	AAM	EPP	3	127923187	rs6439119	C	T	-6.832581	46.684164	30.999498	7.93E-12
AAM_EPP	AAM	EPP	3	127923810	rs2999058	A	G	5.688710	32.361426	23.198415	3.61E-09
AAM_EPP	AAM	EPP	3	127925192	rs2955125	G	A	5.668566	32.132636	23.115094	3.85E-09
AAM_EPP	AAM	EPP	3	127926516	rs2955127	G	A	5.812080	33.780280	23.700020	2.43E-09
AAM_EPP	AAM	EPP	3	127928277	rs2955128	T	C	5.814263	33.805649	23.709052	2.41E-09
AAM_EPP	AAM	EPP	3	127930459	rs9838120	G	A	-6.799483	46.232972	30.849184	8.91E-12
AAM_EPP	AAM	EPP	3	127930866	rs7374072	A	C	-6.792765	46.141658	30.847177	8.93E-12
AAM_EPP	AAM	EPP	3	127931402	rs7372439	G	A	-6.843463	46.832986	31.049207	7.62E-12
AAM_EPP	AAM	EPP	3	127933203	rs11707297	C	G	-6.744083	45.482657	29.646763	2.28E-11
AAM_EPP	AAM	EPP	3	127933822	rs4857872	G	T	-6.828015	46.621785	30.979117	8.05E-12
AAM_EPP	AAM	EPP	3	127934218	rs4857873	G	A	-6.835879	46.729239	31.043114	7.66E-12
AAM_EPP	AAM	EPP	3	127934269	rs4857874	T	A	-6.831039	46.663099	30.992840	7.97E-12
AAM_EPP	AAM	EPP	3	127934276	rs4857875	T	C	-6.815858	46.455923	30.923962	8.41E-12
AAM_EPP	AAM	EPP	3	127934329	rs6770140	C	T	-6.845706	46.863692	31.059384	7.56E-12
AAM_EPP	AAM	EPP	3	127934774	rs4384971	A	C	-6.831379	46.667736	30.994380	7.96E-12
AAM_EPP	AAM	EPP	3	127935461	rs6439121	C	G	-6.845706	46.863692	31.059384	7.56E-12
AAM_EPP	AAM	EPP	3	127936527	rs9879865	T	C	-6.828509	46.628538	30.981211	8.04E-12
AAM_EPP	AAM	EPP	3	127936532	rs9879866	T	C	-6.828509	46.628538	30.981211	8.04E-12
AAM_EPP	AAM	EPP	3	127937326	rs2254379	C	A	5.751414	33.078760	23.453670	2.95E-09
AAM_EPP	AAM	EPP	3	127937645	rs9847576	G	A	-6.829188	46.637802	30.984289	8.02E-12
AAM_EPP	AAM	EPP	3	127938137	rs9814834	A	G	-6.828679	46.630854	30.981980	8.04E-12
AAM_EPP	AAM	EPP	3	127939034	rs9857235	T	A	-6.786353	46.054591	30.789948	9.34E-12
AAM_EPP	AAM	EPP	3	127939357	rs4323023	A	T	-6.828340	46.626223	30.955546	8.20E-12
AAM_EPP	AAM	EPP	3	127939444	rs2955131	A	G	5.720833	32.727935	23.328651	3.25E-09
AAM_EPP	AAM	EPP	3	127940353	rs9845651	G	T	-6.852245	46.953259	31.088900	7.39E-12
AAM_EPP	AAM	EPP	3	127940440	rs7372902	C	G	-6.846274	46.871470	31.061811	7.55E-12
AAM_EPP	AAM	EPP	3	127940534	rs6439122	G	A	-6.851662	46.945266	31.086254	7.41E-12
AAM_EPP	AAM	EPP	3	127941072	rs55775237	T	C	5.725718	32.783846	23.303004	3.32E-09
AAM_EPP	AAM	EPP	3	127941439	rs6439123	C	T	-6.836771	46.741438	31.018695	7.81E-12
AAM_EPP	AAM	EPP	3	127941947	rs2999088	G	A	5.765331	33.239038	23.538990	2.76E-09
AAM_EPP	AAM	EPP	3	127942379	rs9873786	G	A	-6.757913	45.669382	29.707369	2.18E-11
AAM_EPP	AAM	EPP	3	127943328	rs4857838	G	A	-6.830530	46.656146	30.990381	7.98E-12
AAM_EPP	AAM	EPP	3	127944477	rs6775988	G	C	-6.853625	46.972179	31.103706	7.31E-12
AAM_EPP	AAM	EPP	3	127945349	rs6777054	A	G	-6.868675	47.178698	31.167212	6.95E-12
AAM_EPP	AAM	EPP	3	127946788	rs9830294	A	G	-6.751824	45.587128	29.599282	2.37E-11
AAM_EPP	AAM	EPP	3	127947032	rs2955134	C	T	5.847836	34.197185	23.845659	2.17E-09
AAM_EPP	AAM	EPP	3	127948060	rs4857877	G	A	-6.811624	46.398215	30.903817	8.54E-12
AAM_EPP	AAM	EPP	3	127948149	rs4857878	C	T	-6.787623	46.071833	32.420186	2.61E-12
AAM_EPP	AAM	EPP	3	127958013	rs4074440	A	G	-6.766429	45.784564	29.736784	2.13E-11
AAM_EPP	AAM	EPP	3	127963448	rs13434079	G	A	-6.794084	46.159578	29.948782	1.80E-11
AAM_EPP	AAM	EPP	3	127978795	rs4555544	A	G	-6.696816	44.847348	29.447083	2.67E-11
AAM_EPP	AAM	EPP	3	127983209	rs2999035	T	C	5.773809	33.336874	23.536493	2.76E-09
AAM_EPP	AAM	EPP	3	127988240	rs2999064	G	C	5.795056	33.582676	23.651766	2.52E-09
AAM_EPP	AAM	EPP	3	127991149	rs2811413	A	C	-5.408937	29.256603	26.381198	2.95E-10
AAM_EPP	AAM	EPP	3	127994160	rs2811529	A	G	-6.142761	37.733517	27.013279	1.80E-10
AAM_EPP	AAM	EPP	3	128036786	rs13095166	T	C	5.717659	32.691620	24.606302	1.19E-09
AAM_EPP	AAM	EPP	3	128038373	rs10934853	A	C	6.681812	44.646613	30.218502	1.46E-11
AAM_EPP	AAM	EPP	3	128038689	rs12486127	A	C	5.725718	32.783846	24.639967	1.16E-09
AAM_EPP	AAM	EPP	3	128038834	rs12486156	T	C	5.727367	32.802735	24.642166	1.16E-09
AAM_EPP	AAM	EPP	3	128046643	rs4857841	A	G	6.718977	45.144648	30.288534	1.38E-11
AAM_EPP	AAM	EPP	3	128058617	rs3849531	T	A	6.569749	43.161604	29.984494	1.75E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	3	128059610	rs1735558	A	G	5.724070	32.764972	24.674254	1.13E-09
AAM_EPP	AAM	EPP	3	128064118	rs4857879	C	A	5.581097	31.148642	22.501059	6.25E-09
AAM_EPP	AAM	EPP	3	128071809	rs1735549	T	A	5.467276	29.891111	25.098157	8.08E-10
AAM_EPP	AAM	EPP	3	128075398	rs1735546	G	T	6.011334	36.136142	27.495107	1.23E-10
AAM_EPP	AAM	EPP	3	128081260	rs1735545	C	G	5.350932	28.632473	24.581891	1.21E-09
AAM_EPP	AAM	EPP	3	128083332	rs1702122	G	A	6.087066	37.052373	27.706765	1.04E-10
AAM_EPP	AAM	EPP	3	128084164	rs4277707	T	A	5.397440	29.132355	24.514789	1.28E-09
AAM_EPP	AAM	EPP	3	128092102	rs1735538	G	A	5.989879	35.878652	27.276262	1.46E-10
AAM_EPP	AAM	EPP	3	128094493	rs1702119	C	T	6.002749	36.032994	27.369410	1.36E-10
AAM_EPP	AAM	EPP	3	128095278	rs1702118	G	T	5.101487	26.025166	23.907213	2.06E-09
AAM_EPP	AAM	EPP	3	128095652	rs3021461	C	T	5.244156	27.501170	24.390722	1.41E-09
AAM_EPP	AAM	EPP	3	128095767	rs2977565	A	G	5.273288	27.807568	24.510321	1.28E-09
AAM_EPP	AAM	EPP	3	128105972	rs2999033	A	G	4.355113	18.967006	21.695568	1.18E-08
AAM_EPP	AAM	EPP	3	128106267	rs2977562	G	A	4.991213	24.912211	22.955043	4.37E-09
AAM_EPP	AAM	EPP	3	128107020	rs7373685	C	A	5.003836	25.038377	22.970918	4.31E-09
AAM_EPP	AAM	EPP	3	128107982	rs1625296	A	G	5.030191	25.302824	22.984475	4.27E-09
AAM_EPP	AAM	EPP	3	128109916	rs741925	T	C	4.459891	19.890630	21.178188	1.78E-08
AAM_EPP	AAM	EPP	3	128110390	rs1702131	C	T	4.277506	18.297054	20.342216	3.44E-08
AAM_EPP	AAM	EPP	3	128110770	rs729847	A	G	4.299739	18.487753	20.125564	4.09E-08
AAM_EPP	AAM	EPP	3	128111174	rs4241495	C	T	4.990570	24.905788	22.988788	4.25E-09
AAM_EPP	AAM	EPP	3	128111201	rs1702134	T	G	4.342297	18.855544	20.692902	2.61E-08
AAM_EPP	AAM	EPP	3	128112307	rs1620440	C	T	4.276327	18.286970	20.393793	3.30E-08
AAM_EPP	AAM	EPP	3	128114587	rs7632169	C	T	4.954276	24.544852	22.799362	4.94E-09
AAM_EPP	AAM	EPP	3	128115381	rs1735527	G	A	4.121143	16.983816	20.130924	4.07E-08
AAM_EPP	AAM	EPP	3	128117573	rs1702153	A	G	4.293347	18.432828	20.442539	3.18E-08
AAM_EPP	AAM	EPP	3	128118711	rs1702136	A	G	4.222132	17.826402	19.882986	4.95E-08
AAM_EPP	AAM	EPP	3	128119565	rs760383	G	A	4.243564	18.007839	19.897003	4.90E-08
AAM_EPP	AAM	EPP	3	128122039	rs6780368	T	C	4.165259	17.349382	20.232383	3.76E-08
AAM_EPP	AAM	EPP	3	128122396	rs2659685	A	G	4.640839	21.537390	20.748036	2.50E-08
AAM_EPP	AAM	EPP	6	74603664	rs3005507	A	G	-3.141648	9.869952	-20.593497	2.82E-08
AAM_EPP	AAM	EPP	6	74605806	rs3005511	G	A	-3.241267	10.505811	-21.198343	1.75E-08
AAM_EPP	AAM	EPP	6	74606325	rs1437568	G	T	-3.224940	10.400235	-21.144143	1.83E-08
AAM_EPP	AAM	EPP	6	74607842	rs1370438	C	A	-3.231832	10.444740	-21.187418	1.76E-08
AAM_EPP	AAM	EPP	6	74608139	rs3005514	T	G	-3.215979	10.342519	-21.083485	1.91E-08
AAM_EPP	AAM	EPP	6	74608903	rs1529992	T	G	-3.287729	10.809161	-21.556998	1.32E-08
AAM_EPP	AAM	EPP	6	74609732	rs1437569	A	G	-3.238880	10.490346	-21.233625	1.70E-08
AAM_EPP	AAM	EPP	6	74610360	rs3005516	G	A	-3.229515	10.429768	-21.172228	1.78E-08
AAM_EPP	AAM	EPP	6	74610844	rs3005517	G	T	-3.263615	10.651185	-21.395783	1.50E-08
AAM_EPP	AAM	EPP	6	74611047	rs3005519	A	G	-3.234160	10.459788	-21.206446	1.74E-08
AAM_EPP	AAM	EPP	6	74611632	rs1595344	G	A	-3.222674	10.385627	-21.130379	1.85E-08
AAM_EPP	AAM	EPP	6	74612582	rs2917871	C	G	-3.231832	10.444740	-21.190429	1.76E-08
AAM_EPP	AAM	EPP	6	74613060	rs4540228	T	C	3.236511	10.475005	-21.227101	1.71E-08
AAM_EPP	AAM	EPP	6	74613447	rs2118333	A	T	-3.222674	10.385627	-21.130379	1.85E-08
AAM_EPP	AAM	EPP	6	74621193	rs2917884	G	A	-3.276776	10.737262	-21.530299	1.34E-08
AAM_EPP	AAM	EPP	6	74621505	rs2917885	C	A	-3.276776	10.737262	-21.530299	1.34E-08
AAM_EPP	AAM	EPP	6	74623372	rs7752254	T	G	-3.292217	10.838694	-21.808155	1.08E-08
AAM_EPP	AAM	EPP	6	74624442	rs12209746	C	A	-3.357327	11.271645	-22.087297	8.66E-09
AAM_EPP	AAM	EPP	6	74629114	rs11285993	A	G	-3.067303	9.408349	-20.175557	3.93E-08
AAM_EPP	AAM	EPP	6	74631732	rs181258027	G	C	-3.134754	9.826683	-20.705755	2.58E-08
AAM_EPP	AAM	EPP	6	74633850	rs1898487	G	A	-3.165158	10.018225	-20.809765	2.38E-08
AAM_EPP	AAM	EPP	6	74678611	rs3003182	C	A	3.330151	11.089907	-21.832883	1.06E-08
AAM_EPP	AAM	EPP	6	74679490	rs3003183	C	T	3.194648	10.205773	-20.933415	2.16E-08
AAM_EPP	AAM	EPP	6	74679757	rs3003184	C	T	3.174682	10.078608	-20.794293	2.41E-08
AAM_EPP	AAM	EPP	6	74679826	rs3012530	T	C	3.174682	10.078608	-20.791031	2.41E-08
AAM_EPP	AAM	EPP	6	74679978	rs3003186	G	T	3.139908	9.859019	-20.570400	2.87E-08
AAM_EPP	AAM	EPP	6	74680038	rs3003187	G	A	3.145156	9.892004	-20.586907	2.84E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	6	74680513	rs3003188	T	G	3.209428	10.300428	-21.010975	2.03E-08
AAM_EPP	AAM	EPP	6	74680590	rs3003189	G	A	3.134754	9.826683	-20.523083	2.98E-08
AAM_EPP	AAM	EPP	6	74682934	rs3012532	A	G	3.113311	9.692707	-20.100920	4.17E-08
AAM_EPP	AAM	EPP	6	74688446	rs3003197	G	A	3.220425	10.371139	-20.836365	2.33E-08
AAM_EPP	AAM	EPP	6	74690742	rs3003200	T	C	3.200900	10.245760	-20.690864	2.61E-08
AAM_EPP	AAM	EPP	6	74760775	rs4529263	T	C	3.170836	10.054198	-20.395136	3.30E-08
AAM_EPP	AAM	EPP	6	74761908	rs6914017	C	T	3.172754	10.066369	-20.407481	3.27E-08
AAM_EPP	AAM	EPP	6	74762082	rs6914381	C	T	3.159572	9.982895	-20.322408	3.50E-08
AAM_EPP	AAM	EPP	6	74762145	rs9341445	G	A	3.172754	10.066369	-20.417015	3.24E-08
AAM_EPP	AAM	EPP	6	74763411	rs4605844	G	A	3.598546	12.949535	-23.958929	1.98E-09
AAM_EPP	AAM	EPP	6	100746305	rs9403595	T	C	-7.161498	51.287055	-19.926975	4.78E-08
AAM_EPP	AAM	EPP	6	151702442	rs6557132	G	C	-4.167471	17.367814	-20.141984	4.03E-08
AAM_EPP	AAM	EPP	6	151721749	rs7771156	A	G	-4.171955	17.405207	-20.564895	2.89E-08
AAM_EPP	AAM	EPP	6	151727545	rs9397403	T	C	-4.256129	18.114637	-21.033619	1.99E-08
AAM_EPP	AAM	EPP	6	151728714	rs6557135	C	T	-4.301038	18.498930	-21.247598	1.68E-08
AAM_EPP	AAM	EPP	6	151730802	rs9383889	T	C	-4.272842	18.257182	-30.862391	8.82E-12
AAM_EPP	AAM	EPP	6	151732017	rs6557138	T	C	-4.822177	23.253386	-28.442496	5.86E-11
AAM_EPP	AAM	EPP	6	151732385	rs6921042	C	T	-4.842838	23.453083	-28.636464	5.04E-11
AAM_EPP	AAM	EPP	6	151736084	rs9397405	T	G	-4.871056	23.727188	-28.832802	4.32E-11
AAM_EPP	AAM	EPP	6	151738131	rs3778608	G	A	-4.899262	24.002767	-29.014752	3.74E-11
AAM_EPP	AAM	EPP	6	151739642	rs9371516	A	G	-4.906106	24.069881	-29.035340	3.68E-11
AAM_EPP	AAM	EPP	6	151739810	rs9371517	T	G	-4.889680	23.908966	-28.937836	3.98E-11
AAM_EPP	AAM	EPP	6	151743629	rs6912830	C	A	-4.908021	24.088674	-28.996750	3.80E-11
AAM_EPP	AAM	EPP	6	151744283	rs3800272	A	G	-4.915408	24.161237	-29.091958	3.52E-11
AAM_EPP	AAM	EPP	6	151751908	rs9322320	G	C	-5.016944	25.169723	-29.377944	2.82E-11
AAM_EPP	AAM	EPP	6	151753395	rs6936936	G	A	-5.018786	25.188215	-29.378661	2.82E-11
AAM_EPP	AAM	EPP	6	151753421	rs6914656	G	C	-5.021008	25.210525	-29.390374	2.79E-11
AAM_EPP	AAM	EPP	6	151753470	rs6913515	C	G	-4.965008	24.651304	-29.062627	3.61E-11
AAM_EPP	AAM	EPP	6	151754273	rs6904364	C	T	-4.756480	22.624098	-26.014194	3.94E-10
AAM_EPP	AAM	EPP	6	151756070	rs9479041	G	A	-5.326725	28.374000	-31.821114	4.17E-12
AAM_EPP	AAM	EPP	6	151756612	rs8180642	G	A	-4.800845	23.048112	-26.998381	1.82E-10
AAM_EPP	AAM	EPP	6	151757327	rs9383893	C	T	-5.098695	25.996686	-30.444896	1.22E-11
AAM_EPP	AAM	EPP	6	151759035	rs3800273	C	G	-5.056065	25.563792	-30.285650	1.39E-11
AAM_EPP	AAM	EPP	6	151759630	rs9322321	C	T	-3.527819	12.445507	-21.220459	1.72E-08
AAM_EPP	AAM	EPP	6	151760382	rs9397409	T	C	-3.491117	12.187900	-20.728005	2.54E-08
AAM_EPP	AAM	EPP	6	151761621	rs7752091	G	A	-3.488910	12.172490	-20.820192	2.36E-08
AAM_EPP	AAM	EPP	6	151762344	rs73783018	G	A	-3.614440	13.064179	-27.223880	1.52E-10
AAM_EPP	AAM	EPP	6	151764648	rs59753385	G	A	-3.594510	12.920505	-27.078168	1.71E-10
AAM_EPP	AAM	EPP	6	151764723	rs7748822	G	C	-3.459590	11.968764	-26.061787	3.79E-10
AAM_EPP	AAM	EPP	6	151765296	rs3823311	C	T	-3.510657	12.324710	-26.446480	2.80E-10
AAM_EPP	AAM	EPP	6	151765356	rs3800277	T	G	-3.588178	12.875019	-27.030462	1.77E-10
AAM_EPP	AAM	EPP	6	151766162	rs3800279	C	T	-4.618249	21.328226	-30.653827	1.04E-11
AAM_EPP	AAM	EPP	6	151767483	rs76363440	G	A	-3.611869	13.045595	-27.342193	1.39E-10
AAM_EPP	AAM	EPP	6	151767907	rs2128945	G	A	-5.148198	26.503942	-30.696411	1.00E-11
AAM_EPP	AAM	EPP	6	151768532	rs35143743	C	T	-4.894408	23.955234	-32.562214	2.34E-12
AAM_EPP	AAM	EPP	6	151769132	rs7741193	A	G	-3.588957	12.880611	-27.051842	1.74E-10
AAM_EPP	AAM	EPP	6	151771839	rs9371521	C	T	-5.311039	28.207133	-31.317028	6.18E-12
AAM_EPP	AAM	EPP	6	151773504	rs13201167	C	T	-5.222003	27.269318	-31.579618	5.04E-12
AAM_EPP	AAM	EPP	6	151774916	rs3806982	A	G	-5.206918	27.111999	-31.242852	6.55E-12
AAM_EPP	AAM	EPP	6	151775259	rs1825368	A	C	-5.238369	27.440505	-31.431561	5.65E-12
AAM_EPP	AAM	EPP	6	151781363	rs13212683	C	T	-5.181591	26.848888	-31.161769	6.98E-12
AAM_EPP	AAM	EPP	6	151781404	rs13212693	A	T	-5.184150	26.875411	-31.314687	6.20E-12
AAM_EPP	AAM	EPP	6	151782816	rs9383900	C	A	-5.177396	26.805434	-31.283048	6.35E-12
AAM_EPP	AAM	EPP	6	151789355	rs963193	G	T	-5.250123	27.563788	-31.658371	4.74E-12
AAM_EPP	AAM	EPP	6	151792026	rs74798609	C	T	-4.033722	16.270912	-29.538948	2.48E-11
AAM_EPP	AAM	EPP	6	151794704	rs6937816	C	T	-4.415021	19.492409	-29.820219	1.99E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	6	151795994	rs9478208	C	A	-5.596284	31.318395	-33.785204	9.00E-13
AAM_EPP	AAM	EPP	6	151799355	rs1553002	T	A	-5.684751	32.316394	-36.228291	1.34E-13
AAM_EPP	AAM	EPP	6	151800761	rs9397412	T	G	-5.784801	33.463920	-36.000736	1.60E-13
AAM_EPP	AAM	EPP	6	151803754	rs6933660	A	C	-7.257947	52.677801	-57.178718	1.16E-20
AAM_EPP	AAM	EPP	6	151806102	rs9371219	G	A	-6.998895	48.984532	-55.108298	5.77E-20
AAM_EPP	AAM	EPP	6	151806124	rs9397413	G	A	-7.231688	52.297317	-56.923617	1.42E-20
AAM_EPP	AAM	EPP	6	151806283	rs9397414	G	A	-7.108867	50.535989	-55.969550	2.96E-20
AAM_EPP	AAM	EPP	6	151821024	rs9383911	T	A	-4.266008	18.198820	-35.685141	2.05E-13
AAM_EPP	AAM	EPP	6	151822156	rs4869733	C	G	-4.406611	19.418220	-36.865679	8.16E-14
AAM_EPP	AAM	EPP	6	151824449	rs12173791	A	G	-4.320039	18.662737	-36.164637	1.41E-13
AAM_EPP	AAM	EPP	6	151826249	rs7740302	C	T	-6.156008	37.896431	-55.059891	5.99E-20
AAM_EPP	AAM	EPP	6	151829474	rs4870022	C	T	-4.227788	17.874192	-35.081585	3.28E-13
AAM_EPP	AAM	EPP	6	151829487	rs4870023	T	A	-4.205070	17.682612	-34.893071	3.79E-13
AAM_EPP	AAM	EPP	6	151830769	rs4870024	C	T	-6.085675	37.035443	-54.037213	1.32E-19
AAM_EPP	AAM	EPP	6	151838245	rs7759516	C	T	-6.119114	37.443556	-54.003207	1.36E-19
AAM_EPP	AAM	EPP	6	151838856	rs57521493	T	C	-5.623620	31.625107	-25.375812	6.50E-10
AAM_EPP	AAM	EPP	6	151840684	rs9397422	A	G	-6.580463	43.302488	-48.690651	8.34E-18
AAM_EPP	AAM	EPP	6	151841594	rs7775980	G	A	-6.041169	36.495720	-53.335542	2.28E-19
AAM_EPP	AAM	EPP	6	151842860	rs9371529	T	A	-5.906717	34.889304	-52.163446	5.65E-19
AAM_EPP	AAM	EPP	6	151845578	rs7763324	C	T	-6.502106	42.277377	-48.669024	8.48E-18
AAM_EPP	AAM	EPP	6	151847647	rs12210735	A	G	5.446055	29.659510	-27.031980	1.77E-10
AAM_EPP	AAM	EPP	6	151847967	rs9479055	A	C	5.406416	29.229335	-26.673495	2.35E-10
AAM_EPP	AAM	EPP	6	151848611	rs6557143	A	G	5.449542	29.697506	-26.528359	2.63E-10
AAM_EPP	AAM	EPP	6	151848899	rs9479056	A	C	5.402278	29.184612	-26.450998	2.79E-10
AAM_EPP	AAM	EPP	6	151849670	rs6919923	C	T	5.317845	28.279479	-26.016922	3.93E-10
AAM_EPP	AAM	EPP	6	151849829	rs4870029	T	C	4.251865	18.078356	-24.670027	1.13E-09
AAM_EPP	AAM	EPP	6	151849842	rs4870030	A	G	5.981564	35.779113	-35.654222	2.10E-13
AAM_EPP	AAM	EPP	6	151851339	rs11155795	A	G	5.232755	27.381727	-25.468851	6.04E-10
AAM_EPP	AAM	EPP	6	151851428	rs11753987	C	T	5.295025	28.037290	-25.789116	4.70E-10
AAM_EPP	AAM	EPP	6	151852555	rs9479059	C	T	5.301274	28.103503	-25.801220	4.65E-10
AAM_EPP	AAM	EPP	6	151853479	rs6939820	C	T	3.997929	15.983437	-23.115086	3.85E-09
AAM_EPP	AAM	EPP	6	151855376	rs6923538	A	G	5.041870	25.420458	-23.971405	1.96E-09
AAM_EPP	AAM	EPP	6	151855593	rs10872673	T	G	5.138459	26.403762	-24.017057	1.89E-09
AAM_EPP	AAM	EPP	6	151876252	rs7740522	T	C	5.119708	26.211411	-20.024296	4.43E-08
AAM_EPP	AAM	EPP	8	25243213	rs34068702	G	A	4.579539	20.972174	-20.740219	2.51E-08
AAM_EPP	AAM	EPP	8	25245432	rs931875	A	G	5.557282	30.883385	-22.980060	4.28E-09
AAM_EPP	AAM	EPP	8	25247181	rs4872310	A	G	5.590820	31.257267	-25.906115	4.28E-10
AAM_EPP	AAM	EPP	8	25248615	rs13261573	A	G	5.740494	32.953272	-27.070994	1.72E-10
AAM_EPP	AAM	EPP	8	25255017	rs12675289	C	A	5.804396	33.691013	-24.119209	1.75E-09
AAM_EPP	AAM	EPP	8	25263294	rs61490611	G	T	5.913950	34.974804	-25.669917	5.16E-10
AAM_EPP	AAM	EPP	8	25267103	rs4871939	A	G	5.885433	34.638321	-28.551229	5.38E-11
AAM_EPP	AAM	EPP	8	25269102	rs1506869	A	C	5.810732	33.764606	-24.751302	1.06E-09
AAM_EPP	AAM	EPP	8	25280800	rs6185	G	C	5.970174	35.642976	-29.440870	2.68E-11
AAM_EPP	AAM	EPP	8	25311269	rs17053711	A	G	5.687381	32.346302	-24.409926	1.39E-09
AAM_EPP	AAM	EPP	8	25320594	rs12675625	C	T	4.941815	24.421536	-24.408038	1.39E-09
AAM_EPP	AAM	EPP	8	25321845	rs35698191	A	T	4.874650	23.762216	-23.989649	1.93E-09
AAM_EPP	AAM	EPP	9	7174673	rs913588	A	G	-8.635438	74.570781	-21.917537	9.91E-09
AAM_EPP	AAM	EPP	9	96276910	rs10992769	G	C	-6.803647	46.289609	20.958191	2.11E-08
AAM_EPP	AAM	EPP	9	96314397	rs10821159	T	A	-6.104689	37.267223	20.174158	3.93E-08
AAM_EPP	AAM	EPP	9	96326127	rs10821160	C	T	-6.104689	37.267223	20.158482	3.98E-08
AAM_EPP	AAM	EPP	9	96328303	rs564	C	T	-6.073694	36.889761	20.066209	4.28E-08
AAM_EPP	AAM	EPP	9	96341357	rs10992790	T	C	-6.026059	36.313391	20.023477	4.43E-08
AAM_EPP	AAM	EPP	10	90054899	rs11202704	C	T	-5.454542	29.752025	-25.366364	6.55E-10
AAM_EPP	AAM	EPP	10	90072352	rs10509543	C	T	-5.208865	27.132275	-24.832917	9.96E-10
AAM_EPP	AAM	EPP	10	90082400	rs1582783	T	C	-5.314411	28.242966	-24.922016	9.29E-10
AAM_EPP	AAM	EPP	10	90089525	rs11202717	A	G	-5.223045	27.280198	-24.074913	1.81E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	10	90092894	rs61855363	T	C	-5.250116	27.563713	-24.917454	9.32E-10
AAM_EPP	AAM	EPP	10	90093298	rs11594050	T	C	-5.051217	25.514796	-22.904216	4.55E-09
AAM_EPP	AAM	EPP	10	90102403	rs55894538	T	G	-5.181594	26.848918	-23.884452	2.10E-09
AAM_EPP	AAM	EPP	10	90104705	rs11202727	G	A	-5.165345	26.680787	-24.278111	1.54E-09
AAM_EPP	AAM	EPP	10	90110257	rs11202728	G	C	-5.182444	26.857722	-24.383700	1.42E-09
AAM_EPP	AAM	EPP	10	90112774	rs11492684	T	C	-5.137778	26.396764	-23.546726	2.74E-09
AAM_EPP	AAM	EPP	10	90113168	rs4586059	G	T	-5.170876	26.737958	-23.931645	2.02E-09
AAM_EPP	AAM	EPP	10	90115683	rs56155841	A	C	-5.182444	26.857722	-23.970548	1.96E-09
AAM_EPP	AAM	EPP	10	90115782	rs61855396	A	G	-4.948205	24.484735	-23.016402	4.16E-09
AAM_EPP	AAM	EPP	10	90126669	rs10887809	G	C	5.146073	26.482072	-23.929038	2.03E-09
AAM_EPP	AAM	EPP	10	90131045	rs3891323	C	G	-5.088972	25.897638	-23.953024	1.99E-09
AAM_EPP	AAM	EPP	10	90133576	rs792221	T	C	5.137778	26.396764	-23.735726	2.36E-09
AAM_EPP	AAM	EPP	10	90134370	rs792220	C	T	5.119716	26.211492	-23.456921	2.94E-09
AAM_EPP	AAM	EPP	10	90138748	rs11202735	A	G	-5.162245	26.648774	-24.109030	1.76E-09
AAM_EPP	AAM	EPP	10	90142203	rs11202736	T	A	-5.002470	25.024706	-23.599422	2.63E-09
AAM_EPP	AAM	EPP	10	90143657	rs1648520	C	T	4.626438	21.403931	-22.943963	4.41E-09
AAM_EPP	AAM	EPP	10	90144950	rs701893	A	G	4.456268	19.858328	-19.922839	4.80E-08
AAM_EPP	AAM	EPP	10	90150837	rs796945	T	C	4.889682	23.908991	-27.318862	1.41E-10
AAM_EPP	AAM	EPP	10	90151021	rs792234	G	A	4.590588	21.073502	-23.758280	2.32E-09
AAM_EPP	AAM	EPP	10	90152085	rs1067839	G	A	4.914959	24.156827	-27.314425	1.42E-10
AAM_EPP	AAM	EPP	10	90152140	rs1067840	T	A	4.871056	23.727188	-27.129416	1.64E-10
AAM_EPP	AAM	EPP	10	90152369	rs792235	G	A	4.687919	21.976580	-22.603099	5.77E-09
AAM_EPP	AAM	EPP	10	90154277	rs792236	T	C	4.119926	16.973794	-21.525246	1.35E-08
AAM_EPP	AAM	EPP	10	90156383	rs811558	C	T	4.027801	16.223179	-21.007859	2.03E-08
AAM_EPP	AAM	EPP	10	90156854	rs1935584	C	A	4.682786	21.928483	-22.651859	5.55E-09
AAM_EPP	AAM	EPP	10	90157930	rs2488270	T	C	4.126708	17.029721	-21.852953	1.04E-08
AAM_EPP	AAM	EPP	10	90158608	rs1617881	T	C	4.136267	17.108705	-21.906364	9.99E-09
AAM_EPP	AAM	EPP	10	90160023	rs2433340	G	A	4.747447	22.538254	-24.760223	1.05E-09
AAM_EPP	AAM	EPP	10	90160392	rs792230	T	C	4.090742	16.734168	-21.338473	1.57E-08
AAM_EPP	AAM	EPP	10	90164478	rs1342451	A	C	4.030747	16.246925	-20.997034	2.05E-08
AAM_EPP	AAM	EPP	10	90166989	rs792205	T	C	4.035436	16.284743	-21.021769	2.01E-08
AAM_EPP	AAM	EPP	10	90167065	rs792207	C	A	4.164527	17.343281	-22.938458	4.43E-09
AAM_EPP	AAM	EPP	10	90167311	rs792208	G	C	4.786161	22.907339	-26.574385	2.54E-10
AAM_EPP	AAM	EPP	10	90168189	rs813782	G	T	4.614526	21.293847	-22.290172	7.38E-09
AAM_EPP	AAM	EPP	10	90168367	rs792209	T	C	4.041989	16.337676	-21.055883	1.96E-08
AAM_EPP	AAM	EPP	10	90173536	rs814242	G	A	4.588240	21.051945	-22.161266	8.17E-09
AAM_EPP	AAM	EPP	10	90174153	rs792212	T	C	4.003929	16.031444	-20.857614	2.29E-08
AAM_EPP	AAM	EPP	10	90174202	rs792213	C	A	4.087528	16.707882	-22.558066	5.97E-09
AAM_EPP	AAM	EPP	10	90174582	rs792214	C	G	4.611387	21.264889	-22.266224	7.52E-09
AAM_EPP	AAM	EPP	10	90175306	rs792215	C	A	4.772445	22.776234	-26.458782	2.78E-10
AAM_EPP	AAM	EPP	10	90175462	rs806694	C	T	4.540955	20.620271	-21.932878	9.79E-09
AAM_EPP	AAM	EPP	10	90177034	rs4933480	A	T	4.071063	16.573551	-22.500690	6.25E-09
AAM_EPP	AAM	EPP	10	90177991	rs10736351	C	T	4.692412	22.018734	-26.047658	3.83E-10
AAM_EPP	AAM	EPP	10	90179192	rs4934403	T	C	3.916888	15.342013	-20.404196	3.28E-08
AAM_EPP	AAM	EPP	10	90182467	rs6586132	G	T	4.590114	21.069149	-23.907335	2.06E-09
AAM_EPP	AAM	EPP	10	90182764	rs7907732	C	T	4.625882	21.398783	-24.093946	1.78E-09
AAM_EPP	AAM	EPP	10	90182963	rs10887817	A	G	4.029066	16.233374	-22.308219	7.28E-09
AAM_EPP	AAM	EPP	10	90183038	rs7918921	A	G	3.897232	15.188419	-20.308299	3.54E-08
AAM_EPP	AAM	EPP	10	90183102	rs10887818	T	C	3.912354	15.306514	-20.382947	3.33E-08
AAM_EPP	AAM	EPP	10	90186123	rs7921352	C	T	4.792157	22.964772	-28.318543	6.46E-11
AAM_EPP	AAM	EPP	10	90187112	rs10788598	G	A	4.616645	21.313414	-25.456594	6.10E-10
AAM_EPP	AAM	EPP	10	90187924	rs10788599	A	G	4.626438	21.403931	-25.554898	5.65E-10
AAM_EPP	AAM	EPP	10	90187967	rs7909697	A	G	4.603723	21.194266	-25.429588	6.23E-10
AAM_EPP	AAM	EPP	10	90188027	rs7910594	G	C	4.638466	21.515370	-25.582893	5.52E-10
AAM_EPP	AAM	EPP	10	90190619	rs10788600	C	T	4.636713	21.499112	-25.576266	5.55E-10
AAM_EPP	AAM	EPP	10	90190949	rs7911996	C	T	4.635542	21.488250	-25.562620	5.61E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	10	90192003	rs1578696	T	C	4.653089	21.651237	-21.035337	1.99E-08
AAM_EPP	AAM	EPP	10	90192530	rs1935582	A	T	4.575978	20.939578	-20.688795	2.62E-08
AAM_EPP	AAM	EPP	10	90195149	rs1935581	T	C	4.660136	21.716870	-21.103472	1.88E-08
AAM_EPP	AAM	EPP	10	90199209	rs10887821	C	T	4.623679	21.378405	-24.512742	1.28E-09
AAM_EPP	AAM	EPP	10	90201642	rs2096194	A	G	4.607265	21.226893	-24.453081	1.34E-09
AAM_EPP	AAM	EPP	10	90203479	rs4606392	T	A	4.603225	21.189681	-24.441576	1.35E-09
AAM_EPP	AAM	EPP	10	90203900	rs7922551	C	T	4.543988	20.647828	-24.127048	1.74E-09
AAM_EPP	AAM	EPP	10	90204726	rs4509673	C	T	4.654356	21.663029	-24.870952	9.67E-10
AAM_EPP	AAM	EPP	10	90204887	rs2872092	C	T	4.651206	21.633718	-24.857831	9.77E-10
AAM_EPP	AAM	EPP	10	90205199	rs4596981	C	A	4.681345	21.914994	-25.644496	5.26E-10
AAM_EPP	AAM	EPP	10	90205339	rs4619060	A	C	4.619855	21.343062	-25.204397	7.44E-10
AAM_EPP	AAM	EPP	10	90206298	rs10736352	C	T	4.643841	21.565256	-25.439304	6.18E-10
AAM_EPP	AAM	EPP	10	90206538	rs10736354	C	T	4.698565	22.076510	-25.733625	4.91E-10
AAM_EPP	AAM	EPP	10	90208772	rs10749589	G	A	4.647488	21.599145	-25.493227	5.93E-10
AAM_EPP	AAM	EPP	10	90208940	rs10788602	A	T	4.667423	21.784835	-24.978967	8.88E-10
AAM_EPP	AAM	EPP	10	90210183	rs10887823	G	A	4.619855	21.343062	-24.564394	1.23E-09
AAM_EPP	AAM	EPP	10	90210511	rs1935579	A	G	4.601234	21.171355	-24.398966	1.40E-09
AAM_EPP	AAM	EPP	10	90211164	rs10749590	T	C	4.561461	20.806928	-24.262562	1.56E-09
AAM_EPP	AAM	EPP	10	90211230	rs10887824	G	A	4.589640	21.064798	-24.411769	1.39E-09
AAM_EPP	AAM	EPP	10	90211815	rs7899828	T	A	4.579090	20.968066	-24.978546	8.88E-10
AAM_EPP	AAM	EPP	10	90214072	rs1342456	G	A	4.582710	21.001230	-24.385070	1.42E-09
AAM_EPP	AAM	EPP	10	90214279	rs10749591	A	T	4.568599	20.872094	-24.311888	1.50E-09
AAM_EPP	AAM	EPP	10	90215629	rs6586139	C	T	4.555342	20.751138	-24.342819	1.46E-09
AAM_EPP	AAM	EPP	10	90216054	rs4934409	T	A	4.510091	20.340924	-23.980556	1.95E-09
AAM_EPP	AAM	EPP	10	90216485	rs2312610	C	T	4.524989	20.475528	-24.177146	1.67E-09
AAM_EPP	AAM	EPP	10	90218338	rs4934411	C	G	4.656263	21.680785	-25.562751	5.61E-10
AAM_EPP	AAM	EPP	10	90223403	rs1342450	G	C	4.574220	20.923490	-24.485160	1.31E-09
AAM_EPP	AAM	EPP	10	90225923	rs1750274	A	C	-4.480414	20.074105	-23.503867	2.83E-09
AAM_EPP	AAM	EPP	10	90231562	rs1169043	G	A	-4.580443	20.980457	-24.931730	9.21E-10
AAM_EPP	AAM	EPP	10	90232512	rs2185786	C	T	-4.555342	20.751138	-24.695598	1.11E-09
AAM_EPP	AAM	EPP	10	90233105	rs2576181	G	T	-4.559402	20.788148	-24.765001	1.05E-09
AAM_EPP	AAM	EPP	10	90235457	rs2477956	C	T	-4.594395	21.108468	-25.036223	8.49E-10
AAM_EPP	AAM	EPP	10	90245519	rs2576176	T	A	-5.057402	25.577310	-22.974331	4.30E-09
AAM_EPP	AAM	EPP	10	90246530	rs2148127	C	T	-5.075732	25.763058	-23.040720	4.08E-09
AAM_EPP	AAM	EPP	10	90248945	rs2437875	C	A	-5.040634	25.407995	-22.963675	4.34E-09
AAM_EPP	AAM	EPP	10	90255615	rs2576172	C	T	-5.212813	27.173420	-23.762428	2.31E-09
AAM_EPP	AAM	EPP	10	90257225	rs2576171	C	T	-5.266565	27.736707	-24.125590	1.74E-09
AAM_EPP	AAM	EPP	10	90258744	rs2576170	C	T	-5.273288	27.807568	-24.356361	1.45E-09
AAM_EPP	AAM	EPP	10	90261930	rs2576169	G	A	-5.252557	27.589351	-24.288821	1.53E-09
AAM_EPP	AAM	EPP	10	90264140	rs2477954	C	T	-5.248913	27.551083	-24.128368	1.73E-09
AAM_EPP	AAM	EPP	10	97773115	rs12266567	A	G	6.964746	48.507681	-20.701220	2.59E-08
AAM_EPP	AAM	EPP	10	97877320	rs1172955	A	T	-8.844191	78.219708	-31.610001	4.92E-12
AAM_EPP	AAM	EPP	11	30226356	rs11031005	C	T	5.859594	34.334846	-48.669658	8.47E-18
AAM_EPP	AAM	EPP	11	30226528	rs11031006	A	G	5.825033	33.931006	-48.357570	1.08E-17
AAM_EPP	AAM	EPP	11	30240178	rs11031010	A	C	5.477651	30.004662	-35.711054	2.01E-13
AAM_EPP	AAM	EPP	11	30242287	rs74485684	C	T	5.910535	34.934428	-46.721957	3.84E-17
AAM_EPP	AAM	EPP	11	30252352	rs10835638	T	G	5.400917	29.169902	-32.779808	1.97E-12
AAM_EPP	AAM	EPP	11	30296055	rs12364889	C	T	5.596284	31.318395	-36.527385	1.06E-13
AAM_EPP	AAM	EPP	11	30305675	rs11031033	T	C	5.601100	31.372320	-36.543518	1.05E-13
AAM_EPP	AAM	EPP	11	30306439	rs11031034	T	C	5.597072	31.327214	-36.389583	1.18E-13
AAM_EPP	AAM	EPP	11	30306650	rs11031035	T	A	5.659290	32.027565	-36.923172	7.80E-14
AAM_EPP	AAM	EPP	11	30307989	rs75525300	G	A	6.095639	37.156813	-48.083761	1.33E-17
AAM_EPP	AAM	EPP	11	30308159	rs4120817	T	C	5.633101	31.731824	-36.709099	9.21E-14
AAM_EPP	AAM	EPP	11	30309827	rs10835644	T	C	5.650482	31.927944	-36.865703	8.16E-14
AAM_EPP	AAM	EPP	11	30309869	rs10835645	T	C	5.649408	31.915811	-36.858697	8.20E-14
AAM_EPP	AAM	EPP	11	30309905	rs10835646	T	C	5.638038	31.787472	-36.785636	8.68E-14

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	11	30312187	rs12281078	G	A	5.650482	31.927944	-36.865703	8.16E-14
AAM_EPP	AAM	EPP	11	30312239	rs12294258	T	C	5.649408	31.915811	-36.858697	8.20E-14
AAM_EPP	AAM	EPP	11	30314858	rs11031039	A	C	5.650482	31.927944	-36.865703	8.16E-14
AAM_EPP	AAM	EPP	11	30316822	rs12278989	G	A	6.107819	37.305449	-48.176774	1.24E-17
AAM_EPP	AAM	EPP	11	30317733	rs11031040	G	T	6.126207	37.530411	-48.319621	1.11E-17
AAM_EPP	AAM	EPP	11	30319259	rs12271187	A	G	6.100101	37.211231	-48.115898	1.30E-17
AAM_EPP	AAM	EPP	11	30319433	rs12271300	A	G	6.094185	37.139088	-48.087696	1.33E-17
AAM_EPP	AAM	EPP	11	30325865	rs7123626	A	G	5.601100	31.372320	-36.621532	9.86E-14
AAM_EPP	AAM	EPP	11	30327006	rs12361594	A	G	5.627347	31.667033	-36.557732	1.04E-13
AAM_EPP	AAM	EPP	11	30329175	rs10835649	G	A	6.069887	36.843528	-47.995593	1.43E-17
AAM_EPP	AAM	EPP	11	30336002	rs4071563	A	G	6.077592	36.937121	-48.032580	1.39E-17
AAM_EPP	AAM	EPP	11	30337523	rs11031047	T	C	6.014004	36.168245	-47.553717	2.01E-17
AAM_EPP	AAM	EPP	11	30338842	rs7947350	G	A	6.068635	36.828325	-47.985690	1.44E-17
AAM_EPP	AAM	EPP	11	30339461	rs7929660	G	A	6.027997	36.336753	-47.664366	1.85E-17
AAM_EPP	AAM	EPP	11	30342150	rs12363824	A	G	6.062527	36.754236	-47.937398	1.50E-17
AAM_EPP	AAM	EPP	11	30342495	rs6484479	A	G	6.064943	36.783539	-47.956503	1.47E-17
AAM_EPP	AAM	EPP	11	30343757	rs3858429	T	C	6.061330	36.739725	-47.927934	1.51E-17
AAM_EPP	AAM	EPP	11	30344591	rs4071558	T	C	6.033952	36.408579	-47.713399	1.78E-17
AAM_EPP	AAM	EPP	11	30344725	rs4071559	T	C	5.989100	35.869317	-47.359322	2.34E-17
AAM_EPP	AAM	EPP	11	30354895	rs7118949	G	A	5.439272	29.585682	-35.688760	2.04E-13
AAM_EPP	AAM	EPP	11	30354904	rs7121963	C	A	5.401464	29.175811	-35.440687	2.48E-13
AAM_EPP	AAM	EPP	11	30355197	rs7122449	T	C	5.415844	29.331363	-35.535039	2.30E-13
AAM_EPP	AAM	EPP	11	30355857	rs11512201	T	C	5.440937	29.603795	-35.705756	2.01E-13
AAM_EPP	AAM	EPP	11	30355903	rs10835655	T	C	5.427031	29.452666	-35.608442	2.17E-13
AAM_EPP	AAM	EPP	11	30356420	rs12272134	C	T	5.460052	29.812168	-35.825103	1.83E-13
AAM_EPP	AAM	EPP	11	30359231	rs7116893	G	A	5.414964	29.321834	-35.522542	2.32E-13
AAM_EPP	AAM	EPP	11	30359892	rs7117691	G	A	5.426092	29.442479	-35.602573	2.18E-13
AAM_EPP	AAM	EPP	11	30360026	rs12278112	C	T	5.425476	29.435790	-35.598529	2.19E-13
AAM_EPP	AAM	EPP	11	30360225	rs14140248	A	G	5.405853	29.223245	-35.469774	2.42E-13
AAM_EPP	AAM	EPP	11	30360794	rs11031052	T	C	5.390145	29.053668	-35.366712	2.62E-13
AAM_EPP	AAM	EPP	11	30363545	rs12285277	C	T	5.366903	28.803651	-35.237061	2.90E-13
AAM_EPP	AAM	EPP	11	30366528	rs11031056	A	T	5.360484	28.734791	-35.203371	2.98E-13
AAM_EPP	AAM	EPP	11	30370218	rs12365913	G	A	5.398502	29.143827	-35.462960	2.43E-13
AAM_EPP	AAM	EPP	11	30371313	rs10835658	T	C	5.352809	28.652560	-35.249892	2.87E-13
AAM_EPP	AAM	EPP	11	30371615	rs12363432	T	C	5.348675	28.608326	-35.224378	2.93E-13
AAM_EPP	AAM	EPP	11	30372818	rs74331022	T	C	5.250117	27.563731	-34.580927	4.84E-13
AAM_EPP	AAM	EPP	11	30374608	rs7949790	G	A	5.071836	25.723525	-32.480259	2.49E-12
AAM_EPP	AAM	EPP	11	30375889	rs11031058	T	C	5.059210	25.595608	-32.403447	2.65E-12
AAM_EPP	AAM	EPP	11	30376314	rs76959488	A	T	5.043540	25.437292	-32.305031	2.86E-12
AAM_EPP	AAM	EPP	11	30376902	rs10835660	C	A	5.033744	25.338579	-32.242262	3.00E-12
AAM_EPP	AAM	EPP	11	30381076	rs10835661	C	T	4.760620	22.663504	-26.829187	2.08E-10
AAM_EPP	AAM	EPP	11	30382899	rs12294104	T	C	4.776918	22.818945	-26.912647	1.94E-10
AAM_EPP	AAM	EPP	11	30395448	rs80268871	T	G	3.536154	12.504388	-24.354366	1.45E-09
AAM_EPP	AAM	EPP	11	30395871	rs12223987	T	C	4.563533	20.825835	-25.283506	6.99E-10
AAM_EPP	AAM	EPP	11	101590923	rs4754019	A	G	8.587745	73.749369	-20.878773	2.25E-08
AAM_EPP	AAM	EPP	12	15463417	rs1479410	C	A	-3.198799	10.232315	-20.094993	4.19E-08
AAM_EPP	AAM	EPP	12	15472354	rs12306807	T	C	-3.165158	10.018225	-19.883616	4.95E-08
AAM_EPP	AAM	EPP	12	15481326	rs13313237	C	T	-3.165158	10.018225	-19.879686	4.97E-08
AAM_EPP	AAM	EPP	12	15498466	rs11056434	C	T	-3.168929	10.042113	-19.942301	4.73E-08
AAM_EPP	AAM	EPP	12	15500036	rs11056436	T	C	-3.203007	10.259251	-20.157262	3.99E-08
AAM_EPP	AAM	EPP	12	15500105	rs11056437	C	T	-3.190553	10.179626	-20.078886	4.24E-08
AAM_EPP	AAM	EPP	12	15500176	rs11056438	C	T	-3.243671	10.521402	-20.412657	3.26E-08
AAM_EPP	AAM	EPP	12	15500183	rs11056439	A	G	-3.248539	10.553007	-20.441567	3.18E-08
AAM_EPP	AAM	EPP	12	115777452	rs10774806	A	G	-4.537960	20.593081	20.118780	4.11E-08
AAM_EPP	AAM	EPP	16	69554585	rs2311380	A	T	6.998348	48.976880	-22.201927	7.91E-09
AAM_EPP	AAM	EPP	16	69555247	rs2311381	G	A	6.949726	48.298687	-21.878700	1.02E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
AAM_EPP	AAM	EPP	16	69555876	rs889400	T	A	7.999429	63.990868	-24.745507	1.07E-09
FIM_EM	FIM	EM	11	30382899	rs12294104	T	C	-4.965040	24.651623	43.710311	2.82E-18
FIM_EM	FIM	EM	11	30381076	rs10835661	C	T	-4.961028	24.611796	43.686157	2.89E-18
FIM_EM	FIM	EM	11	30395871	rs12223987	T	C	-4.797008	23.011289	42.792736	6.39E-18
FIM_EM	FIM	EM	11	30232381	rs494779	T	C	-4.335828	18.799402	31.993304	9.68E-14
FIM_EM	FIM	EM	11	30236544	rs555621	C	T	-4.334414	18.787143	31.983467	9.76E-14
FIM_EM	FIM	EM	11	30234432	rs601640	A	G	-4.333276	18.777277	31.940580	1.01E-13
FIM_EM	FIM	EM	11	30234782	rs540948	C	T	-4.330666	18.754666	31.928685	1.03E-13
FIM_EM	FIM	EM	11	30234703	rs600333	A	G	-4.323178	18.689866	31.873203	1.08E-13
FIM_EM	FIM	EM	11	30234394	rs601681	T	C	-4.314762	18.617174	31.865743	1.08E-13
FIM_EM	FIM	EM	11	30232615	rs492828	A	G	-4.335756	18.798780	31.854344	1.10E-13
FIM_EM	FIM	EM	11	30261968	rs7951733	G	A	-3.653458	13.347755	31.841480	1.11E-13
FIM_EM	FIM	EM	11	30214713	rs961605	A	G	-4.205246	17.684097	31.795728	1.15E-13
FIM_EM	FIM	EM	11	30234606	rs600768	T	C	-4.304825	18.531519	31.765553	1.19E-13
FIM_EM	FIM	EM	11	30235497	rs586326	A	G	-4.319667	18.659525	31.760906	1.19E-13
FIM_EM	FIM	EM	11	30238832	rs621448	A	T	-4.335070	18.792836	31.750286	1.20E-13
FIM_EM	FIM	EM	11	30237518	rs664147	T	C	-4.313607	18.607203	31.716424	1.24E-13
FIM_EM	FIM	EM	11	30216006	rs632939	C	T	-4.179481	17.468059	31.558129	1.43E-13
FIM_EM	FIM	EM	11	30222637	rs622744	C	T	-4.150469	17.226394	31.459834	1.56E-13
FIM_EM	FIM	EM	11	30217003	rs574096	T	A	-4.149563	17.218871	31.421365	1.61E-13
FIM_EM	FIM	EM	11	30225170	rs1716021	C	G	-4.149399	17.217508	31.407976	1.63E-13
FIM_EM	FIM	EM	11	30223866	rs606642	A	G	-4.133794	17.088249	31.265574	1.85E-13
FIM_EM	FIM	EM	11	30223861	rs606651	A	C	-4.125417	17.019067	31.202221	1.96E-13
FIM_EM	FIM	EM	11	30227534	rs568394	T	C	-4.084033	16.679324	30.430757	3.91E-13
FIM_EM	FIM	EM	11	30228264	rs653518	T	C	-4.069596	16.561615	30.371361	4.13E-13
FIM_EM	FIM	EM	11	30226286	rs683054	C	T	-4.056959	16.458916	30.305612	4.38E-13
FIM_EM	FIM	EM	11	30229234	rs476669	A	C	-4.047760	16.384359	30.269145	4.52E-13
FIM_EM	FIM	EM	11	30227923	rs655183	T	A	-4.048774	16.392574	30.253868	4.58E-13
FIM_EM	FIM	EM	11	30230216	rs1716025	A	G	-4.027624	16.221756	30.029891	5.60E-13
FIM_EM	FIM	EM	11	30125619	rs11030946	C	G	-3.879108	15.047478	29.505048	8.96E-13
FIM_EM	FIM	EM	11	30288698	rs7944484	G	T	-3.892802	15.153907	28.343774	2.54E-12
FIM_EM	FIM	EM	1	169160458	rs144737447	T	C	-5.024991	25.250532	28.294042	2.65E-12
FIM_EM	FIM	EM	11	30353881	rs77055031	G	A	-3.256950	10.607722	28.271262	2.71E-12
FIM_EM	FIM	EM	1	169324793	rs1209731	C	T	4.899116	24.001335	28.004053	3.44E-12
FIM_EM	FIM	EM	11	30288255	rs11031021	A	T	-3.843595	14.773220	27.788088	4.17E-12
FIM_EM	FIM	EM	11	30288256	rs10835641	A	C	-3.843595	14.773220	27.788088	4.17E-12
FIM_EM	FIM	EM	11	30239283	rs553406	G	A	-3.850546	14.826706	27.739519	4.36E-12
FIM_EM	FIM	EM	11	30239353	rs553190	T	C	-3.842817	14.767240	27.661923	4.67E-12
FIM_EM	FIM	EM	11	30268544	rs1716029	C	G	-3.806394	14.488634	27.639605	4.77E-12
FIM_EM	FIM	EM	8	25280800	rs6185	G	C	-4.587275	21.043093	27.620723	4.85E-12
FIM_EM	FIM	EM	11	30239470	rs618611	A	G	-3.821782	14.606018	27.601534	4.93E-12
FIM_EM	FIM	EM	11	30240217	rs523875	T	C	-3.823333	14.617878	27.550914	5.16E-12
FIM_EM	FIM	EM	11	30249522	rs1716023	C	T	-3.757372	14.117847	27.468644	5.56E-12
FIM_EM	FIM	EM	11	30257122	rs560078	G	A	-3.756418	14.110674	27.461939	5.59E-12
FIM_EM	FIM	EM	11	30249550	rs1782510	C	A	-3.755428	14.103242	27.454432	5.63E-12
FIM_EM	FIM	EM	11	30300692	rs4120821	T	C	-3.789436	14.359822	27.453502	5.63E-12
FIM_EM	FIM	EM	11	30255823	rs506197	G	A	-3.737139	13.966208	27.435354	5.72E-12
FIM_EM	FIM	EM	11	30271159	rs549346	G	A	-3.763651	14.165067	27.432841	5.74E-12
FIM_EM	FIM	EM	11	30250177	rs1716022	T	C	-3.748378	14.050336	27.427173	5.77E-12
FIM_EM	FIM	EM	11	30253641	rs609896	C	T	-3.732234	13.929568	27.399240	5.91E-12
FIM_EM	FIM	EM	1	169216412	rs2040445	G	C	4.870923	23.725895	27.399218	5.91E-12
FIM_EM	FIM	EM	11	30251351	rs640748	C	A	-3.736238	13.959474	27.393019	5.95E-12
FIM_EM	FIM	EM	11	30251625	rs639403	T	C	-3.729374	13.908232	27.378248	6.03E-12
FIM_EM	FIM	EM	11	30242325	rs572883	T	C	-3.740083	13.988222	27.375594	6.04E-12
FIM_EM	FIM	EM	11	30243247	rs543401	G	T	-3.742561	14.006761	27.362891	6.11E-12
FIM_EM	FIM	EM	11	30258770	rs626869	T	C	-3.758355	14.125229	27.347862	6.19E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	11	30255867	rs506306	G	C	-3.725028	13.875837	27.346515	6.20E-12
FIM_EM	FIM	EM	11	30258989	rs615577	A	G	-3.758383	14.125441	27.341704	6.23E-12
FIM_EM	FIM	EM	11	30261910	rs622356	C	A	-3.756952	14.114685	27.332647	6.28E-12
FIM_EM	FIM	EM	11	30255982	rs676349	G	A	-3.735482	13.953824	27.308781	6.41E-12
FIM_EM	FIM	EM	11	30264368	rs560109	A	G	-3.752756	14.083181	27.302819	6.45E-12
FIM_EM	FIM	EM	11	30263655	rs532667	T	C	-3.752530	14.081483	27.296139	6.49E-12
FIM_EM	FIM	EM	11	30250359	rs537263	C	T	-3.732824	13.933972	27.289178	6.53E-12
FIM_EM	FIM	EM	8	25267103	rs4871939	A	G	-4.519082	20.422100	27.286190	6.54E-12
FIM_EM	FIM	EM	11	30261215	rs7126848	T	C	-3.748081	14.048112	27.267128	6.66E-12
FIM_EM	FIM	EM	11	30253189	rs550312	G	T	-3.706195	13.735878	27.265303	6.67E-12
FIM_EM	FIM	EM	11	30254550	rs595496	C	T	-3.705799	13.732946	27.262393	6.68E-12
FIM_EM	FIM	EM	11	30254268	rs580646	G	T	-3.705771	13.732736	27.262185	6.69E-12
FIM_EM	FIM	EM	11	30241032	rs590833	A	G	-3.740044	13.987931	27.231683	6.87E-12
FIM_EM	FIM	EM	11	30250479	rs538236	A	G	-3.731859	13.926771	27.221309	6.94E-12
FIM_EM	FIM	EM	11	30241731	rs489096	T	C	-3.740083	13.988222	27.218460	6.95E-12
FIM_EM	FIM	EM	11	30248392	rs1630084	A	G	-3.739906	13.986900	27.207393	7.02E-12
FIM_EM	FIM	EM	11	30253318	rs611246	T	A	-3.706195	13.735878	27.176772	7.22E-12
FIM_EM	FIM	EM	11	30247886	rs939433	T	C	-3.707326	13.744264	27.159988	7.33E-12
FIM_EM	FIM	EM	11	30250568	rs654669	C	T	-3.712370	13.781689	27.142242	7.45E-12
FIM_EM	FIM	EM	1	169090748	rs145163454	C	T	-4.852133	23.543197	27.136001	7.49E-12
FIM_EM	FIM	EM	11	30341210	rs10767837	G	A	-3.739848	13.986463	27.121815	7.58E-12
FIM_EM	FIM	EM	11	30342173	rs3897026	T	A	-3.739848	13.986463	27.117780	7.61E-12
FIM_EM	FIM	EM	11	30277028	rs4120820	T	C	-3.739018	13.980253	27.112758	7.64E-12
FIM_EM	FIM	EM	11	30323189	rs1933349	T	C	-3.724007	13.868228	27.099084	7.74E-12
FIM_EM	FIM	EM	11	30324475	rs1933348	A	T	-3.723979	13.868017	27.098878	7.74E-12
FIM_EM	FIM	EM	11	30248826	rs1782509	T	C	-3.707152	13.742973	27.094010	7.77E-12
FIM_EM	FIM	EM	11	30338275	rs10767835	A	T	-3.723866	13.867176	27.091222	7.79E-12
FIM_EM	FIM	EM	11	30240829	rs518357	T	C	-3.713893	13.793004	27.081487	7.86E-12
FIM_EM	FIM	EM	11	30249084	rs1716024	T	C	-3.702452	13.708153	27.066637	7.97E-12
FIM_EM	FIM	EM	11	30338392	rs10767836	C	T	-3.723855	13.867097	27.064813	7.98E-12
FIM_EM	FIM	EM	2	11742458	rs72772088	G	A	-3.218833	10.360886	27.060554	8.01E-12
FIM_EM	FIM	EM	11	30322610	rs75682475	TACC	T	-3.718451	13.826875	27.058651	8.03E-12
FIM_EM	FIM	EM	11	30322611	rs76242056	TAA	T	-3.718451	13.826875	27.058651	8.03E-12
FIM_EM	FIM	EM	11	30255185	rs6169	T	C	-3.686945	13.593565	27.058080	8.03E-12
FIM_EM	FIM	EM	11	30254683	rs594982	C	A	-3.691234	13.625210	27.050044	8.09E-12
FIM_EM	FIM	EM	11	30322609	rs74640038	TGG	T	-3.718451	13.826875	27.029899	8.23E-12
FIM_EM	FIM	EM	11	30311316	rs10742238	G	A	-3.729863	13.911877	27.021810	8.29E-12
FIM_EM	FIM	EM	11	30309732	rs10767833	C	T	-3.729433	13.908669	27.018694	8.32E-12
FIM_EM	FIM	EM	11	30378694	rs7952660	G	T	-3.763374	14.162981	27.013983	8.35E-12
FIM_EM	FIM	EM	11	30281330	rs6484477	A	G	-3.733787	13.941165	27.010108	8.38E-12
FIM_EM	FIM	EM	11	30314253	rs11031038	C	T	-3.724339	13.870700	26.993233	8.51E-12
FIM_EM	FIM	EM	1	169208179	rs2227246	T	C	4.807858	23.115501	26.945581	8.88E-12
FIM_EM	FIM	EM	1	169467654	rs1894692	A	G	5.028528	25.286098	26.815864	9.98E-12
FIM_EM	FIM	EM	2	11742854	rs62118315	A	C	-3.704019	13.719756	26.802904	1.01E-11
FIM_EM	FIM	EM	11	30376209	rs7929105	T	C	-3.743056	14.010466	26.694310	1.11E-11
FIM_EM	FIM	EM	2	11739368	rs10929760	T	G	-3.177865	10.098825	26.587817	1.22E-11
FIM_EM	FIM	EM	2	11727087	rs17529680	T	G	-3.720473	13.841918	26.516037	1.31E-11
FIM_EM	FIM	EM	11	30367332	rs1538109	C	T	-3.632783	13.197109	26.408536	1.44E-11
FIM_EM	FIM	EM	11	30369420	rs6484481	T	C	-3.621867	13.117920	26.331625	1.54E-11
FIM_EM	FIM	EM	11	30356092	rs10767839	A	G	-3.604539	12.992701	26.294787	1.59E-11
FIM_EM	FIM	EM	11	30348638	rs4427542	C	G	-3.607943	13.017255	26.248519	1.66E-11
FIM_EM	FIM	EM	2	11744694	rs746579	T	C	-3.699896	13.689231	26.195568	1.74E-11
FIM_EM	FIM	EM	11	30350192	rs2065940	T	C	-3.600429	12.963088	26.190487	1.75E-11
FIM_EM	FIM	EM	11	30195542	rs4923626	G	T	-3.238008	10.484696	26.100278	1.90E-11
FIM_EM	FIM	EM	11	30208486	rs10835634	C	A	-3.152838	9.940389	25.730161	2.64E-11
FIM_EM	FIM	EM	11	30208516	rs11030998	A	G	-3.149113	9.916916	25.704867	2.70E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	8	25263294	rs61490611	G	T	-4.766390	22.718473	25.656523	2.82E-11
FIM_EM	FIM	EM	8	25248615	rs13261573	A	G	-4.297363	18.467329	25.645627	2.85E-11
FIM_EM	FIM	EM	11	30190813	rs10501121	G	T	-3.155580	9.957683	25.628569	2.90E-11
FIM_EM	FIM	EM	8	25269102	rs1506869	A	C	-4.822778	23.259188	25.618412	2.92E-11
FIM_EM	FIM	EM	11	30189761	rs17622950	G	A	-3.159033	9.979488	25.596991	2.98E-11
FIM_EM	FIM	EM	11	30190076	rs1417016	G	A	-3.159117	9.980019	25.580351	3.02E-11
FIM_EM	FIM	EM	11	30190139	rs1417015	A	G	-3.159052	9.979607	25.579683	3.03E-11
FIM_EM	FIM	EM	8	25247181	rs4872310	A	G	-4.289010	18.395608	25.563304	3.07E-11
FIM_EM	FIM	EM	11	30191237	rs7128357	T	G	-3.154649	9.951809	25.543584	3.13E-11
FIM_EM	FIM	EM	11	30192962	rs12793581	C	T	-3.138403	9.849573	25.466702	3.35E-11
FIM_EM	FIM	EM	11	30207239	rs7122731	A	G	-3.131421	9.805796	25.456961	3.38E-11
FIM_EM	FIM	EM	11	30198439	rs11030993	C	T	-3.134328	9.824012	25.456795	3.38E-11
FIM_EM	FIM	EM	11	30200473	rs7123331	A	G	-3.131754	9.807885	25.435642	3.44E-11
FIM_EM	FIM	EM	11	30197429	rs11030992	A	G	-3.134439	9.824711	25.426744	3.47E-11
FIM_EM	FIM	EM	11	30192151	rs10501122	C	T	-3.133005	9.815722	25.418080	3.50E-11
FIM_EM	FIM	EM	11	30206532	rs11030997	G	A	-3.135212	9.829554	25.415231	3.51E-11
FIM_EM	FIM	EM	11	30192333	rs11030991	T	C	-3.132390	9.811865	25.364928	3.67E-11
FIM_EM	FIM	EM	8	25311269	rs17053711	A	G	-4.816717	23.200758	25.300323	3.89E-11
FIM_EM	FIM	EM	11	30202285	rs11493214	A	G	-3.121285	9.742417	25.298955	3.89E-11
FIM_EM	FIM	EM	11	30199688	rs7940816	C	A	-3.128740	9.789017	25.226650	4.16E-11
FIM_EM	FIM	EM	11	30199020	rs10767832	T	C	-3.124337	9.761480	25.131818	4.53E-11
FIM_EM	FIM	EM	11	30200751	rs7109221	C	T	-3.116142	9.710343	25.123331	4.56E-11
FIM_EM	FIM	EM	11	30203825	rs7943756	C	T	-3.109422	9.668507	25.081705	4.73E-11
FIM_EM	FIM	EM	11	30217503	rs605765	T	C	-3.895950	15.178428	25.029809	4.96E-11
FIM_EM	FIM	EM	11	30223574	rs607987	A	G	-3.911262	15.297972	25.000287	5.09E-11
FIM_EM	FIM	EM	11	30193060	rs623837	A	G	-3.097024	9.591555	24.985222	5.16E-11
FIM_EM	FIM	EM	2	11718858	rs7578132	C	T	2.948903	8.696029	24.913034	5.51E-11
FIM_EM	FIM	EM	8	25245432	rs931875	A	G	-4.678171	21.885287	24.867876	5.74E-11
FIM_EM	FIM	EM	11	30201790	rs7113525	C	T	-3.055224	9.334394	24.681505	6.78E-11
FIM_EM	FIM	EM	11	30200581	rs7108968	C	T	-3.055186	9.334162	24.643432	7.02E-11
FIM_EM	FIM	EM	11	30271433	rs35243946	AG	A	-3.837381	14.725492	24.532260	7.76E-11
FIM_EM	FIM	EM	11	30203374	rs7928429	A	G	-3.055161	9.334008	24.501370	7.97E-11
FIM_EM	FIM	EM	8	25243213	rs34068702	G	A	-3.828036	14.653861	24.303125	9.53E-11
FIM_EM	FIM	EM	8	25255017	rs12675289	C	A	-4.580843	20.984118	24.300562	9.55E-11
FIM_EM	FIM	EM	2	11748585	rs4669755	A	C	-3.380277	11.426271	24.205416	1.04E-10
FIM_EM	FIM	EM	2	11729606	rs2358039	G	A	-3.329830	11.087770	24.126666	1.12E-10
FIM_EM	FIM	EM	8	25320594	rs12675625	C	T	-4.624815	21.388913	24.000574	1.25E-10
FIM_EM	FIM	EM	8	25321845	rs35698191	A	T	-4.623525	21.376981	23.972014	1.28E-10
FIM_EM	FIM	EM	11	30220739	rs7925930	T	A	-3.724581	13.872502	23.897906	1.37E-10
FIM_EM	FIM	EM	11	30243795	rs1782508	G	C	-3.729504	13.909201	23.871241	1.41E-10
FIM_EM	FIM	EM	11	30288532	rs140000637	A	G	3.724477	13.871727	23.858016	1.42E-10
FIM_EM	FIM	EM	11	30207843	rs17623478	G	A	-3.216256	10.344301	23.843610	1.44E-10
FIM_EM	FIM	EM	11	30303443	rs4359180	G	A	3.738157	13.973815	23.785688	1.52E-10
FIM_EM	FIM	EM	11	30284949	rs77966083	C	T	3.721804	13.851827	23.781597	1.52E-10
FIM_EM	FIM	EM	11	30302923	rs11031028	A	G	3.711359	13.774185	23.761106	1.55E-10
FIM_EM	FIM	EM	11	30295232	rs4923629	T	C	3.709172	13.757954	23.750463	1.57E-10
FIM_EM	FIM	EM	11	30289511	rs7940387	T	C	3.708397	13.752211	23.740491	1.58E-10
FIM_EM	FIM	EM	11	30287070	rs34609938	A	G	3.706221	13.736070	23.727874	1.60E-10
FIM_EM	FIM	EM	11	30290012	rs11031022	A	G	3.703544	13.716236	23.709450	1.63E-10
FIM_EM	FIM	EM	11	30285107	rs190167777	G	A	3.721849	13.852157	23.681703	1.67E-10
FIM_EM	FIM	EM	11	30286207	rs141011680	G	T	3.721740	13.851347	23.680474	1.67E-10
FIM_EM	FIM	EM	11	30271845	rs673740	T	C	-3.703126	13.713142	23.674365	1.68E-10
FIM_EM	FIM	EM	11	30274776	rs61179368	G	A	3.719022	13.831123	23.672382	1.68E-10
FIM_EM	FIM	EM	11	30282779	rs4267046	C	A	3.719779	13.836758	23.668194	1.69E-10
FIM_EM	FIM	EM	11	30287896	rs200742291	C	A	3.724358	13.870842	23.664653	1.69E-10
FIM_EM	FIM	EM	11	30290814	rs61886090	T	G	3.708771	13.754982	23.658444	1.70E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	11	30292176	rs11031024	T	G	3.709488	13.760298	23.654194	1.71E-10
FIM_EM	FIM	EM	11	30297374	rs11031027	C	T	3.716771	13.814387	23.649516	1.72E-10
FIM_EM	FIM	EM	11	30352473	rs35824273	CAG	C	-3.645301	13.288219	23.649441	1.72E-10
FIM_EM	FIM	EM	11	30240470	rs521271	A	T	-3.774709	14.248431	23.640044	1.73E-10
FIM_EM	FIM	EM	11	30286978	rs145052476	A	T	3.690461	13.619500	23.627041	1.75E-10
FIM_EM	FIM	EM	11	30244235	rs653452	T	C	-3.691178	13.624796	23.625321	1.75E-10
FIM_EM	FIM	EM	11	30287046	rs79028439	G	A	3.690063	13.616564	23.624494	1.75E-10
FIM_EM	FIM	EM	11	30301607	rs12363576	A	G	3.712154	13.780088	23.620203	1.76E-10
FIM_EM	FIM	EM	11	30301868	rs4923631	C	T	3.711848	13.777817	23.618257	1.76E-10
FIM_EM	FIM	EM	11	30274686	rs60781817	A	G	3.694637	13.650344	23.617583	1.77E-10
FIM_EM	FIM	EM	11	30302023	rs4923632	A	C	3.712094	13.779639	23.612703	1.77E-10
FIM_EM	FIM	EM	11	30292350	rs11031025	A	G	3.710083	13.764714	23.607667	1.78E-10
FIM_EM	FIM	EM	11	30304455	rs11031030	C	T	3.710323	13.766498	23.603751	1.79E-10
FIM_EM	FIM	EM	11	30294329	rs10835643	C	T	3.709253	13.758558	23.602549	1.79E-10
FIM_EM	FIM	EM	11	30270667	rs689233	A	G	-3.682587	13.561444	23.600950	1.79E-10
FIM_EM	FIM	EM	11	30243868	rs1782507	T	G	-3.691121	13.624373	23.600843	1.79E-10
FIM_EM	FIM	EM	11	30279609	rs1933347	C	T	3.707459	13.745253	23.598845	1.80E-10
FIM_EM	FIM	EM	11	30282274	rs4244552	T	C	3.705151	13.728145	23.574538	1.84E-10
FIM_EM	FIM	EM	11	30280075	rs7924960	T	C	3.706778	13.740200	23.558512	1.86E-10
FIM_EM	FIM	EM	11	30288586	rs9732252	T	G	3.679647	13.539801	23.556965	1.86E-10
FIM_EM	FIM	EM	11	30281066	rs11031014	C	T	3.707462	13.745275	23.544637	1.89E-10
FIM_EM	FIM	EM	11	30274837	rs60968445	T	A	3.702576	13.709072	23.536829	1.90E-10
FIM_EM	FIM	EM	11	30278829	rs4531442	G	A	3.703965	13.719360	23.533902	1.90E-10
FIM_EM	FIM	EM	11	30271406	rs675635	T	C	-3.701086	13.698035	23.531105	1.91E-10
FIM_EM	FIM	EM	11	30187958	rs12282076	A	C	-3.182639	10.129193	23.524353	1.92E-10
FIM_EM	FIM	EM	11	30187044	rs7102959	T	C	-3.184502	10.141051	23.524010	1.92E-10
FIM_EM	FIM	EM	11	30185696	rs11030988	T	C	-3.184180	10.139002	23.521720	1.92E-10
FIM_EM	FIM	EM	11	30186858	rs1819673	G	A	-3.184502	10.141051	23.521719	1.92E-10
FIM_EM	FIM	EM	11	30188285	rs7930471	C	G	-3.183797	10.136563	23.519378	1.93E-10
FIM_EM	FIM	EM	11	30279268	rs1933345	C	G	3.698703	13.680405	23.515463	1.94E-10
FIM_EM	FIM	EM	11	30272226	rs645161	C	A	-3.670489	13.472491	23.515293	1.94E-10
FIM_EM	FIM	EM	11	30188505	rs7945546	C	T	-3.182575	10.128786	23.508774	1.95E-10
FIM_EM	FIM	EM	11	30275141	rs35458722	C	T	3.699640	13.687333	23.506545	1.95E-10
FIM_EM	FIM	EM	11	30297809	rs7108615	C	T	3.685299	13.581428	23.505751	1.95E-10
FIM_EM	FIM	EM	11	30187905	rs12282163	T	G	-3.182639	10.129193	23.503699	1.96E-10
FIM_EM	FIM	EM	11	30187216	rs552501	C	T	-3.181369	10.121108	23.501183	1.96E-10
FIM_EM	FIM	EM	11	30279354	rs1933346	T	C	3.698849	13.681484	23.500816	1.96E-10
FIM_EM	FIM	EM	11	30187828	rs12282113	A	G	-3.182639	10.129193	23.500633	1.96E-10
FIM_EM	FIM	EM	11	30275351	rs34487664	C	T	3.698037	13.675475	23.496040	1.97E-10
FIM_EM	FIM	EM	11	30185395	rs11030985	T	G	-3.180169	10.113472	23.492213	1.98E-10
FIM_EM	FIM	EM	11	30185477	rs11030986	C	T	-3.181364	10.121076	23.485887	1.99E-10
FIM_EM	FIM	EM	11	30304726	rs11031032	C	G	3.680703	13.547573	23.476659	2.00E-10
FIM_EM	FIM	EM	11	30266370	rs642126	A	G	-3.703088	13.712860	23.464214	2.03E-10
FIM_EM	FIM	EM	11	30293769	rs4267043	A	T	3.678117	13.528548	23.460297	2.03E-10
FIM_EM	FIM	EM	11	30349694	rs2485398	T	A	-3.596172	12.932456	23.457494	2.04E-10
FIM_EM	FIM	EM	11	30267038	rs515997	C	T	-3.698791	13.681057	23.446480	2.06E-10
FIM_EM	FIM	EM	11	30186511	rs1361421	T	C	-3.173141	10.068822	23.428296	2.09E-10
FIM_EM	FIM	EM	11	30365045	rs1222200	T	C	-3.595707	12.929107	23.422801	2.10E-10
FIM_EM	FIM	EM	11	30340725	rs2786257	A	G	-3.594924	12.923481	23.413146	2.12E-10
FIM_EM	FIM	EM	11	30199907	rs7943867	C	A	-3.168287	10.038042	23.307558	2.33E-10
FIM_EM	FIM	EM	11	30361670	rs1222209	A	C	-3.579831	12.815187	23.285411	2.38E-10
FIM_EM	FIM	EM	11	30203286	rs201618035	T	TA	-2.870510	8.239825	23.266909	2.42E-10
FIM_EM	FIM	EM	6	153261120	rs117851271	T	A	-3.354125	11.250151	-23.263723	2.43E-10
FIM_EM	FIM	EM	11	30350185	rs1717774	C	G	-3.577529	12.798716	23.253225	2.45E-10
FIM_EM	FIM	EM	11	30184538	rs4396264	C	T	-3.158570	9.976566	23.226041	2.51E-10
FIM_EM	FIM	EM	11	30356057	rs1222205	G	A	-3.590336	12.890512	23.220714	2.52E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	11	30184483	rs11030983	T	C	-3.162167	9.999298	23.213546	2.54E-10
FIM_EM	FIM	EM	11	30181778	rs11030982	G	A	-3.161780	9.996853	23.196697	2.58E-10
FIM_EM	FIM	EM	11	30181153	rs892949	T	C	-3.162094	9.998837	23.195726	2.58E-10
FIM_EM	FIM	EM	11	30328026	rs55715542	T	C	3.598809	12.951423	23.194092	2.58E-10
FIM_EM	FIM	EM	11	30183831	rs4922834	G	A	-3.158427	9.975660	23.185693	2.60E-10
FIM_EM	FIM	EM	11	30182270	rs7112118	T	A	-3.159252	9.980872	23.185365	2.60E-10
FIM_EM	FIM	EM	11	30181651	rs12287556	G	T	-3.159643	9.983341	23.184161	2.61E-10
FIM_EM	FIM	EM	11	30184860	rs4313561	G	C	-3.157740	9.971320	23.181274	2.61E-10
FIM_EM	FIM	EM	11	30181671	rs12293737	T	A	-3.160111	9.986302	23.181267	2.61E-10
FIM_EM	FIM	EM	11	30181316	rs1808771	A	G	-3.160020	9.985724	23.180511	2.62E-10
FIM_EM	FIM	EM	11	30327162	rs12361937	A	G	3.603018	12.981741	23.166707	2.65E-10
FIM_EM	FIM	EM	11	30183344	rs10835631	C	T	-3.157700	9.971072	23.159396	2.67E-10
FIM_EM	FIM	EM	11	30327981	rs59475325	T	C	3.601734	12.972491	23.158452	2.67E-10
FIM_EM	FIM	EM	11	30182303	rs7112549	C	G	-3.154492	9.950820	23.150084	2.69E-10
FIM_EM	FIM	EM	11	30185486	rs11030987	G	A	-3.155068	9.954454	23.146332	2.70E-10
FIM_EM	FIM	EM	11	30183742	rs4922833	A	T	-3.158280	9.974735	23.144570	2.70E-10
FIM_EM	FIM	EM	11	30333224	rs1222204	C	T	-3.598437	12.948752	23.137690	2.72E-10
FIM_EM	FIM	EM	11	30336613	rs1222202	A	G	-3.598002	12.945620	23.134891	2.73E-10
FIM_EM	FIM	EM	11	30336334	rs1222203	G	A	-3.597948	12.945228	23.134541	2.73E-10
FIM_EM	FIM	EM	11	30330963	rs7125524	A	G	3.597765	12.943913	23.132929	2.73E-10
FIM_EM	FIM	EM	11	30180685	rs1361422	C	T	-3.153494	9.944525	23.132642	2.73E-10
FIM_EM	FIM	EM	11	30185849	rs11030989	C	T	-3.130710	9.801344	23.127905	2.74E-10
FIM_EM	FIM	EM	11	30182068	rs1340030	C	T	-3.150646	9.926571	23.119593	2.76E-10
FIM_EM	FIM	EM	11	30180671	rs1361423	G	C	-3.151855	9.934191	23.118020	2.77E-10
FIM_EM	FIM	EM	11	30314585	rs12793271	A	G	3.600206	12.961481	23.055819	2.93E-10
FIM_EM	FIM	EM	11	30312519	rs35665615	A	C	3.600196	12.961410	23.055756	2.93E-10
FIM_EM	FIM	EM	6	153225235	rs11775466	T	C	-3.266217	10.668172	-23.054413	2.93E-10
FIM_EM	FIM	EM	11	30363727	rs1765141	G	A	-3.538844	12.523414	23.042506	2.96E-10
FIM_EM	FIM	EM	11	30319432	rs61626579	T	C	3.598272	12.947562	23.030197	3.00E-10
FIM_EM	FIM	EM	11	30318720	rs11031041	C	G	3.590991	12.895220	23.005977	3.06E-10
FIM_EM	FIM	EM	11	30312743	rs12805098	C	T	3.591155	12.896392	22.997856	3.08E-10
FIM_EM	FIM	EM	11	30343925	rs1222220	A	C	-3.563314	12.697206	22.966263	3.17E-10
FIM_EM	FIM	EM	11	30344761	rs1222218	G	A	-3.569531	12.741549	22.951732	3.21E-10
FIM_EM	FIM	EM	11	30344799	rs1222217	G	A	-3.569123	12.738636	22.949884	3.22E-10
FIM_EM	FIM	EM	6	153229045	rs11796704	C	T	-3.243370	10.519446	-22.937039	3.26E-10
FIM_EM	FIM	EM	11	30365566	rs1228479	T	C	-3.509017	12.313200	22.906169	3.35E-10
FIM_EM	FIM	EM	11	30185850	rs72885907	A	G	-3.093598	9.570351	22.879433	3.43E-10
FIM_EM	FIM	EM	11	30181389	rs11224528	GA	G	-3.117068	9.716111	22.865491	3.47E-10
FIM_EM	FIM	EM	1	169435027	rs2678166	T	C	4.041069	16.330235	22.808424	3.66E-10
FIM_EM	FIM	EM	6	153210935	rs11754224	A	C	-3.225597	10.404478	-22.747202	3.86E-10
FIM_EM	FIM	EM	11	30180390	rs1361424	G	A	-3.100545	9.613381	22.744233	3.88E-10
FIM_EM	FIM	EM	2	11718591	rs1529868	T	C	2.592302	6.720027	22.719036	3.96E-10
FIM_EM	FIM	EM	11	30165896	rs930321	C	T	-3.141844	9.871185	22.693703	4.06E-10
FIM_EM	FIM	EM	11	30315071	rs61886116	T	G	3.545038	12.567296	22.688688	4.07E-10
FIM_EM	FIM	EM	11	30177817	rs3858481	T	C	-3.145462	9.893931	22.500325	4.83E-10
FIM_EM	FIM	EM	11	30177821	rs3858482	C	T	-3.140577	9.863227	22.465385	4.98E-10
FIM_EM	FIM	EM	11	30170254	rs3858478	T	C	-3.137531	9.844101	22.443904	5.08E-10
FIM_EM	FIM	EM	11	30176879	rs1340032	C	T	-3.112462	9.687417	22.433557	5.13E-10
FIM_EM	FIM	EM	6	127455821	rs2489623	C	A	3.331663	11.099976	22.421244	5.18E-10
FIM_EM	FIM	EM	11	30166397	rs10835622	A	G	-3.133888	9.821254	22.417476	5.20E-10
FIM_EM	FIM	EM	6	127439297	rs2800709	G	T	3.191308	10.184447	22.408332	5.24E-10
FIM_EM	FIM	EM	11	30394949	rs571174	C	T	3.288599	10.814882	22.376381	5.40E-10
FIM_EM	FIM	EM	11	30165710	rs475305	G	A	-3.122622	9.750769	22.358176	5.49E-10
FIM_EM	FIM	EM	11	30166109	rs930320	C	T	-3.114957	9.702957	22.310293	5.73E-10
FIM_EM	FIM	EM	11	30173187	rs12282309	C	T	-3.118459	9.724789	22.307169	5.74E-10
FIM_EM	FIM	EM	11	30174438	rs10835629	T	C	-3.118384	9.724317	22.306627	5.75E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	11	30177120	rs3858480	C	T	-3.115275	9.704938	22.305046	5.76E-10
FIM_EM	FIM	EM	11	30166391	rs637542	G	A	-3.117622	9.719569	22.300675	5.78E-10
FIM_EM	FIM	EM	11	30174019	rs10835628	T	G	-3.117239	9.717177	22.298436	5.79E-10
FIM_EM	FIM	EM	11	30175950	rs11030977	C	G	-3.117192	9.716887	22.298104	5.79E-10
FIM_EM	FIM	EM	11	30176085	rs4512795	A	T	-3.117192	9.716887	22.298104	5.79E-10
FIM_EM	FIM	EM	11	30176106	rs2884134	A	G	-3.117192	9.716887	22.298104	5.79E-10
FIM_EM	FIM	EM	11	30173987	rs10835627	T	G	-3.117184	9.716834	22.298042	5.79E-10
FIM_EM	FIM	EM	11	30176241	rs2226272	G	T	-3.117184	9.716834	22.298042	5.79E-10
FIM_EM	FIM	EM	11	30176743	rs1340033	C	T	-3.117184	9.716834	22.298042	5.79E-10
FIM_EM	FIM	EM	11	30176794	rs1938315	T	A	-3.117184	9.716834	22.298042	5.79E-10
FIM_EM	FIM	EM	11	30163013	rs12272116	C	T	-3.116540	9.712825	22.293862	5.81E-10
FIM_EM	FIM	EM	11	30168320	rs11030971	T	A	-3.116490	9.712511	22.293391	5.82E-10
FIM_EM	FIM	EM	11	30172916	rs1890826	C	A	-3.116358	9.711689	22.292615	5.82E-10
FIM_EM	FIM	EM	11	30177840	rs3858483	A	T	-3.112782	9.689409	22.292424	5.82E-10
FIM_EM	FIM	EM	11	30174370	rs10501124	T	C	-3.116331	9.711517	22.291942	5.82E-10
FIM_EM	FIM	EM	11	30172517	rs778943787	AT	A	-3.127937	9.783989	22.291112	5.83E-10
FIM_EM	FIM	EM	11	30164732	rs10835621	G	A	-3.115366	9.705506	22.289861	5.83E-10
FIM_EM	FIM	EM	11	30170373	rs3908935	C	T	-3.114458	9.699850	22.286570	5.85E-10
FIM_EM	FIM	EM	11	30375316	rs1235089	G	A	-3.259343	10.623315	22.286295	5.85E-10
FIM_EM	FIM	EM	11	30163183	rs11030966	T	A	-3.115284	9.704992	22.284871	5.86E-10
FIM_EM	FIM	EM	11	30177267	rs7113720	A	G	-3.115284	9.704992	22.284451	5.86E-10
FIM_EM	FIM	EM	11	30165272	rs1819675	T	C	-3.115366	9.705506	22.284425	5.86E-10
FIM_EM	FIM	EM	11	30162984	rs12291589	A	G	-3.114933	9.702808	22.282364	5.87E-10
FIM_EM	FIM	EM	11	30167113	rs11030968	G	T	-3.114513	9.700193	22.279249	5.89E-10
FIM_EM	FIM	EM	11	30167121	rs11030969	A	G	-3.114513	9.700193	22.279249	5.89E-10
FIM_EM	FIM	EM	11	30168564	rs11030972	C	A	-3.114513	9.700193	22.279249	5.89E-10
FIM_EM	FIM	EM	11	30168871	rs4337008	T	C	-3.114513	9.700193	22.279249	5.89E-10
FIM_EM	FIM	EM	11	30169198	rs3858477	T	C	-3.114513	9.700193	22.279249	5.89E-10
FIM_EM	FIM	EM	11	30171174	rs3847633	G	C	-3.114458	9.699850	22.278547	5.89E-10
FIM_EM	FIM	EM	11	30171615	rs3847635	T	A	-3.114431	9.699679	22.278350	5.90E-10
FIM_EM	FIM	EM	11	30376044	rs1765134	T	C	-3.257747	10.612919	22.275068	5.91E-10
FIM_EM	FIM	EM	11	30167835	rs11030970	T	C	-3.114431	9.699679	22.274612	5.92E-10
FIM_EM	FIM	EM	11	30179949	rs3858484	G	A	-3.112550	9.687969	22.272037	5.93E-10
FIM_EM	FIM	EM	11	30163968	rs10835620	A	G	-3.115110	9.703910	22.271800	5.93E-10
FIM_EM	FIM	EM	11	30179758	rs3847637	T	C	-3.112550	9.687969	22.265318	5.97E-10
FIM_EM	FIM	EM	11	30178465	rs10835630	C	T	-3.112523	9.687797	22.264701	5.97E-10
FIM_EM	FIM	EM	11	30179203	rs12786317	T	C	-3.112523	9.687797	22.264701	5.97E-10
FIM_EM	FIM	EM	11	30173317	rs7948109	T	C	-3.116303	9.711346	22.257779	6.01E-10
FIM_EM	FIM	EM	11	30166628	rs10835624	C	T	-3.115476	9.706192	22.253601	6.03E-10
FIM_EM	FIM	EM	11	30376782	rs1765135	C	T	-3.254757	10.593446	22.252068	6.04E-10
FIM_EM	FIM	EM	11	30166240	rs1898174	T	C	-3.115476	9.706192	22.249450	6.05E-10
FIM_EM	FIM	EM	11	30176985	rs78330906	T	C	-3.334087	11.116139	22.244165	6.08E-10
FIM_EM	FIM	EM	11	30173963	rs10835626	C	T	-3.116358	9.711689	22.214444	6.25E-10
FIM_EM	FIM	EM	11	30174965	rs6484476	A	C	-3.105002	9.641039	22.210906	6.26E-10
FIM_EM	FIM	EM	11	30169574	rs11030974	C	T	-3.104020	9.634941	22.204188	6.30E-10
FIM_EM	FIM	EM	11	30170837	rs7114540	G	A	-3.104890	9.640343	22.193893	6.36E-10
FIM_EM	FIM	EM	6	127528104	rs6914968	T	C	3.947636	15.583831	22.147947	6.63E-10
FIM_EM	FIM	EM	11	30165706	rs7101406	C	T	-3.088108	9.536413	22.137165	6.70E-10
FIM_EM	FIM	EM	11	30177690	rs34811743	CTG	C	-3.093599	9.570352	22.129332	6.74E-10
FIM_EM	FIM	EM	11	30177010	rs3858479	A	G	-3.088512	9.538909	22.120119	6.80E-10
FIM_EM	FIM	EM	11	30174667	rs10501125	C	T	-3.088500	9.538831	22.118187	6.81E-10
FIM_EM	FIM	EM	11	30170152	rs588929	T	C	-3.089926	9.547643	22.102923	6.91E-10
FIM_EM	FIM	EM	11	30167587	rs2460713	T	G	-3.086050	9.523705	22.096214	6.95E-10
FIM_EM	FIM	EM	3	127882064	rs2955118	A	G	3.565810	12.715003	22.089094	6.99E-10
FIM_EM	FIM	EM	11	30175706	rs2226016	T	C	-3.087895	9.535094	22.079722	7.05E-10
FIM_EM	FIM	EM	6	127476717	rs2489629	T	C	3.459842	11.970510	22.023412	7.42E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	6	127528421	rs6915525	G	C	3.908753	15.278348	22.017145	7.46E-10
FIM_EM	FIM	EM	6	127486617	rs2489630	T	C	3.454685	11.934848	21.997555	7.59E-10
FIM_EM	FIM	EM	11	30169856	rs663173	A	G	-3.090844	9.553314	21.978196	7.73E-10
FIM_EM	FIM	EM	2	11722468	rs11679605	A	G	-3.733204	13.936815	21.961651	7.84E-10
FIM_EM	FIM	EM	11	30169998	rs7129554	C	T	-3.068360	9.414833	21.949098	7.93E-10
FIM_EM	FIM	EM	3	127878416	rs2999048	A	G	3.528915	12.453242	21.900855	8.28E-10
FIM_EM	FIM	EM	6	127490599	rs2489631	A	C	3.445086	11.868619	21.883196	8.42E-10
FIM_EM	FIM	EM	3	127867397	rs67451924	A	G	3.481869	12.123415	21.853598	8.65E-10
FIM_EM	FIM	EM	6	127474331	rs2489628	T	G	3.428213	11.752647	21.805449	9.03E-10
FIM_EM	FIM	EM	3	127878817	rs2999049	C	T	3.469504	12.037459	21.790583	9.15E-10
FIM_EM	FIM	EM	3	127856573	rs6414310	A	T	-3.461116	11.979321	21.756386	9.44E-10
FIM_EM	FIM	EM	3	128094493	rs1702119	C	T	4.016699	16.133870	21.752021	9.47E-10
FIM_EM	FIM	EM	6	127448249	rs1936807	G	C	3.146186	9.898489	21.694710	9.98E-10
FIM_EM	FIM	EM	3	127994160	rs2811529	A	G	-3.415830	11.667896	21.688182	1.00E-09
FIM_EM	FIM	EM	6	127496512	rs2503323	G	A	3.417310	11.678006	21.677799	1.01E-09
FIM_EM	FIM	EM	6	127452935	rs2745353	T	C	3.141618	9.869763	21.655146	1.03E-09
FIM_EM	FIM	EM	11	30172579	rs1890825	A	G	-3.022599	9.136102	21.654444	1.03E-09
FIM_EM	FIM	EM	6	127529209	rs9968920	T	C	3.838849	14.736761	21.635578	1.05E-09
FIM_EM	FIM	EM	6	127532807	rs9482775	A	G	3.824175	14.624317	21.630422	1.06E-09
FIM_EM	FIM	EM	6	127452581	rs2800710	C	T	3.137418	9.843394	21.622148	1.07E-09
FIM_EM	FIM	EM	6	127452426	rs1967685	G	C	3.136318	9.836490	21.614304	1.07E-09
FIM_EM	FIM	EM	6	127455029	rs2186037	G	A	3.135394	9.830693	21.607935	1.08E-09
FIM_EM	FIM	EM	6	127501926	rs2503326	C	T	3.404041	11.587494	21.607848	1.08E-09
FIM_EM	FIM	EM	3	128058617	rs3849531	T	A	3.506111	12.292814	21.603526	1.08E-09
FIM_EM	FIM	EM	3	128092102	rs1735538	G	A	3.992496	15.940025	21.603351	1.08E-09
FIM_EM	FIM	EM	6	127452116	rs1936805	T	C	3.134030	9.822145	21.602642	1.08E-09
FIM_EM	FIM	EM	3	128083332	rs1702122	G	A	3.995779	15.966247	21.592542	1.09E-09
FIM_EM	FIM	EM	3	127961396	rs9843281	T	A	-3.395216	11.527491	21.555858	1.13E-09
FIM_EM	FIM	EM	6	127449246	rs1474696	G	A	3.125341	9.767754	21.550881	1.14E-09
FIM_EM	FIM	EM	3	127958013	rs4074440	A	G	-3.397537	11.543260	21.538597	1.15E-09
FIM_EM	FIM	EM	3	127978795	rs4555544	A	G	-3.391654	11.503319	21.531993	1.16E-09
FIM_EM	FIM	EM	2	11722575	rs11674605	G	A	-2.543956	6.471714	21.524938	1.16E-09
FIM_EM	FIM	EM	3	127963448	rs13434079	G	A	-3.382315	11.440058	21.515200	1.17E-09
FIM_EM	FIM	EM	3	127933203	rs11707297	C	G	-3.386180	11.466214	21.504850	1.18E-09
FIM_EM	FIM	EM	3	127913263	rs883238	G	A	3.382964	11.444448	21.485007	1.21E-09
FIM_EM	FIM	EM	3	127933786	rs4857871	T	C	-3.339484	11.152154	21.479492	1.21E-09
FIM_EM	FIM	EM	3	127930866	rs7374072	A	C	-3.339005	11.148956	21.478952	1.21E-09
FIM_EM	FIM	EM	3	127934774	rs4384971	A	C	-3.340400	11.158271	21.474409	1.22E-09
FIM_EM	FIM	EM	3	127939034	rs9857235	T	A	-3.339577	11.152772	21.468891	1.22E-09
FIM_EM	FIM	EM	3	127936527	rs9879865	T	C	-3.339333	11.151143	21.467324	1.22E-09
FIM_EM	FIM	EM	3	127936532	rs9879866	T	C	-3.339333	11.151143	21.467324	1.22E-09
FIM_EM	FIM	EM	6	127449447	rs2745352	G	A	3.126971	9.777947	21.459963	1.23E-09
FIM_EM	FIM	EM	3	127934276	rs4857875	T	C	-3.337997	11.142223	21.458960	1.23E-09
FIM_EM	FIM	EM	3	127937645	rs9847576	G	A	-3.337921	11.141717	21.458249	1.23E-09
FIM_EM	FIM	EM	3	127933822	rs4857872	G	T	-3.337652	11.139923	21.456745	1.24E-09
FIM_EM	FIM	EM	3	127938137	rs9814834	A	G	-3.336518	11.132352	21.449228	1.24E-09
FIM_EM	FIM	EM	3	127943328	rs4857838	G	A	-3.336409	11.131622	21.448525	1.25E-09
FIM_EM	FIM	EM	3	127940440	rs7372902	C	G	-3.336341	11.131173	21.448093	1.25E-09
FIM_EM	FIM	EM	11	30395895	rs490937	G	T	3.239246	10.492713	21.446984	1.25E-09
FIM_EM	FIM	EM	3	127939357	rs4323023	A	T	-3.334661	11.119964	21.444812	1.25E-09
FIM_EM	FIM	EM	3	127940534	rs6439122	G	A	-3.335266	11.123998	21.441179	1.25E-09
FIM_EM	FIM	EM	3	127945349	rs6777054	A	G	-3.335417	11.125006	21.441085	1.25E-09
FIM_EM	FIM	EM	3	127940353	rs9845651	G	T	-3.333964	11.115313	21.432807	1.26E-09
FIM_EM	FIM	EM	3	127948060	rs4857877	G	A	-3.333216	11.110327	21.427495	1.27E-09
FIM_EM	FIM	EM	3	127944477	rs6775988	G	C	-3.332249	11.103886	21.413765	1.29E-09
FIM_EM	FIM	EM	6	127532381	rs6919601	C	T	3.786464	14.337311	21.398142	1.30E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	3	127942379	rs9873786	G	A	-3.365092	11.323843	21.370839	1.34E-09
FIM_EM	FIM	EM	3	127901786	rs2811479	A	G	3.260039	10.627855	21.353547	1.36E-09
FIM_EM	FIM	EM	6	127468188	rs2503111	A	G	3.345666	11.193483	21.328126	1.39E-09
FIM_EM	FIM	EM	3	127941439	rs6439123	C	T	-3.317310	11.004548	21.325750	1.39E-09
FIM_EM	FIM	EM	3	128038373	rs10934853	A	C	3.485912	12.151584	21.325400	1.39E-09
FIM_EM	FIM	EM	3	127918955	rs2687720	T	C	3.357815	11.274923	21.324770	1.39E-09
FIM_EM	FIM	EM	3	127934329	rs6770140	C	T	-3.313277	10.977801	21.300041	1.42E-09
FIM_EM	FIM	EM	3	127935461	rs6439121	C	G	-3.312949	10.975630	21.297934	1.43E-09
FIM_EM	FIM	EM	3	127934218	rs4857873	G	A	-3.310722	10.960881	21.297209	1.43E-09
FIM_EM	FIM	EM	3	127931402	rs7372439	G	A	-3.310672	10.960548	21.283296	1.45E-09
FIM_EM	FIM	EM	3	127888347	rs2955120	G	T	3.332644	11.106513	21.267714	1.47E-09
FIM_EM	FIM	EM	3	127934269	rs4857874	T	A	-3.307512	10.939637	21.262983	1.47E-09
FIM_EM	FIM	EM	3	127923187	rs6439119	C	T	-3.306573	10.933425	21.256946	1.48E-09
FIM_EM	FIM	EM	3	127942729	rs35277207	T	TA	-3.305117	10.923801	21.249871	1.49E-09
FIM_EM	FIM	EM	3	127930459	rs9838120	G	A	-3.304950	10.922691	21.246092	1.50E-09
FIM_EM	FIM	EM	3	127946788	rs9830294	A	G	-3.358119	11.276965	21.240083	1.50E-09
FIM_EM	FIM	EM	3	127888067	rs872267	A	G	3.333005	11.108924	21.230021	1.52E-09
FIM_EM	FIM	EM	3	127895986	rs1554535	A	G	3.328631	11.079783	21.218915	1.53E-09
FIM_EM	FIM	EM	3	127948149	rs4857878	C	T	-3.270705	10.697512	21.218869	1.53E-09
FIM_EM	FIM	EM	3	127911820	rs2811512	A	G	3.340878	11.161463	21.217830	1.53E-09
FIM_EM	FIM	EM	3	127904943	rs2811482	T	C	3.334309	11.117614	21.217307	1.53E-09
FIM_EM	FIM	EM	3	127905518	rs2811515	A	G	3.299451	10.886374	21.210619	1.54E-09
FIM_EM	FIM	EM	3	127905451	rs2811516	G	A	3.297546	10.873809	21.198375	1.56E-09
FIM_EM	FIM	EM	3	127918000	rs2492285	A	G	3.297111	10.870941	21.196062	1.56E-09
FIM_EM	FIM	EM	3	127920023	rs2811508	C	T	3.296581	10.867449	21.192685	1.57E-09
FIM_EM	FIM	EM	3	127909564	rs2811513	A	G	3.293700	10.848456	21.174324	1.60E-09
FIM_EM	FIM	EM	3	127892037	rs2999052	C	T	3.274548	10.722663	21.163851	1.61E-09
FIM_EM	FIM	EM	3	127904496	rs2811481	C	T	3.278365	10.747680	21.147881	1.63E-09
FIM_EM	FIM	EM	3	127836319	rs4857837	G	A	-3.355567	11.259831	21.146974	1.63E-09
FIM_EM	FIM	EM	6	127509157	rs7745274	A	G	3.391470	11.502070	21.140929	1.64E-09
FIM_EM	FIM	EM	3	127902091	rs2811480	T	G	3.262711	10.645285	21.134009	1.65E-09
FIM_EM	FIM	EM	3	127836287	rs4857836	T	C	-3.353032	11.242827	21.133371	1.66E-09
FIM_EM	FIM	EM	3	127819062	rs4857866	C	G	-3.350427	11.225363	21.120601	1.67E-09
FIM_EM	FIM	EM	3	127817508	rs7632756	T	C	-3.350844	11.228156	21.116898	1.68E-09
FIM_EM	FIM	EM	3	127889287	rs3122173	G	A	3.267441	10.676168	21.109742	1.69E-09
FIM_EM	FIM	EM	3	127895226	rs2687729	G	A	3.268814	10.685146	21.108652	1.69E-09
FIM_EM	FIM	EM	3	127926045	rs4362738	T	C	-4.266007	18.198816	21.099463	1.71E-09
FIM_EM	FIM	EM	3	127916551	rs2811509	A	G	3.280878	10.764162	21.086277	1.73E-09
FIM_EM	FIM	EM	3	127907929	rs2811514	G	A	3.318606	11.013145	21.075467	1.74E-09
FIM_EM	FIM	EM	3	127822320	rs7641133	C	T	-3.351508	11.232603	21.060385	1.77E-09
FIM_EM	FIM	EM	3	127889404	rs2999051	C	T	4.204057	17.674099	21.043544	1.79E-09
FIM_EM	FIM	EM	3	128046643	rs4857841	A	G	3.450643	11.906936	21.026413	1.82E-09
FIM_EM	FIM	EM	11	30378559	rs1765142	A	C	-2.996193	8.977170	21.014914	1.84E-09
FIM_EM	FIM	EM	2	11722082	rs10200851	T	C	-2.459124	6.047289	20.988513	1.89E-09
FIM_EM	FIM	EM	3	127898501	rs2811476	C	A	3.265354	10.662539	20.958313	1.94E-09
FIM_EM	FIM	EM	2	11722012	rs10929759	G	C	-2.463723	6.069933	20.924760	2.00E-09
FIM_EM	FIM	EM	2	11722102	rs10165819	T	A	-2.455317	6.028581	20.887018	2.07E-09
FIM_EM	FIM	EM	3	128015236	rs2955103	T	C	-4.227056	17.868003	20.877737	2.08E-09
FIM_EM	FIM	EM	3	127808502	rs7355887	G	C	-3.291168	10.831790	20.716779	2.41E-09
FIM_EM	FIM	EM	6	152567983	rs75730028	G	A	-2.306459	5.319751	20.551473	2.80E-09
FIM_EM	FIM	EM	3	127881613	rs2955117	A	G	3.151060	9.929178	20.520985	2.88E-09
FIM_EM	FIM	EM	6	127463376	rs2503107	A	C	3.337413	11.138323	20.452790	3.06E-09
FIM_EM	FIM	EM	6	127458308	rs2489625	A	G	3.336712	11.133649	20.445327	3.08E-09
FIM_EM	FIM	EM	6	127459004	rs2489626	T	G	3.333475	11.112058	20.432371	3.12E-09
FIM_EM	FIM	EM	6	127460349	rs1892171	A	G	3.330844	11.094522	20.415210	3.16E-09
FIM_EM	FIM	EM	6	127461152	rs2489627	C	T	3.330787	11.094144	20.414740	3.17E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	6	127462149	rs2503106	C	T	3.329926	11.088407	20.409431	3.18E-09
FIM_EM	FIM	EM	6	127464754	rs2503320	T	C	3.328525	11.079080	20.406494	3.19E-09
FIM_EM	FIM	EM	6	127465044	rs2503109	C	T	3.328468	11.078702	20.405872	3.19E-09
FIM_EM	FIM	EM	6	127461682	rs1936802	C	A	3.330835	11.094460	20.403737	3.20E-09
FIM_EM	FIM	EM	3	127919046	rs2811485	T	G	3.209225	10.299128	20.397680	3.22E-09
FIM_EM	FIM	EM	3	127919045	rs2687733	A	T	3.205006	10.272060	20.370859	3.29E-09
FIM_EM	FIM	EM	2	11716919	rs4668732	T	A	3.092713	9.564874	20.260684	3.64E-09
FIM_EM	FIM	EM	3	128111174	rs4241495	C	T	4.223621	17.838971	20.188061	3.89E-09
FIM_EM	FIM	EM	6	127482362	rs4566896	G	A	3.321176	11.030213	20.165971	3.96E-09
FIM_EM	FIM	EM	6	127523602	rs9491709	T	C	3.459282	11.966632	20.145637	4.04E-09
FIM_EM	FIM	EM	6	127476516	rs1892172	A	G	3.312695	10.973951	20.135595	4.07E-09
FIM_EM	FIM	EM	6	127481154	rs4644087	C	A	3.314866	10.988335	20.103677	4.19E-09
FIM_EM	FIM	EM	6	127475433	rs4382293	C	T	3.307163	10.937325	20.082339	4.27E-09
FIM_EM	FIM	EM	3	128114587	rs7632169	C	T	4.224252	17.844308	20.075254	4.30E-09
FIM_EM	FIM	EM	6	127477268	rs1936809	C	T	3.305277	10.924854	20.063136	4.35E-09
FIM_EM	FIM	EM	6	127493611	rs6569474	T	A	3.303142	10.910744	20.053053	4.39E-09
FIM_EM	FIM	EM	6	127523608	rs9491710	C	T	3.440425	11.836526	20.035604	4.46E-09
FIM_EM	FIM	EM	3	128107982	rs1625296	A	G	4.191940	17.572357	20.027140	4.49E-09
FIM_EM	FIM	EM	6	127484851	rs4053254	CAT	C	3.297918	10.876263	20.001522	4.60E-09
FIM_EM	FIM	EM	6	127437617	rs2800708	T	C	2.980532	8.883571	19.983352	4.67E-09
FIM_EM	FIM	EM	6	127487806	rs2154167	C	T	3.292639	10.841469	19.975823	4.71E-09
FIM_EM	FIM	EM	6	127456122	rs9491697	G	A	3.205072	10.272489	19.974345	4.71E-09
FIM_EM	FIM	EM	3	128105972	rs2999033	A	G	3.695142	13.654077	19.928813	4.91E-09
FIM_EM	FIM	EM	6	127446790	rs9482772	C	T	3.072297	9.439007	19.822369	5.41E-09
FIM_EM	FIM	EM	6	127457260	rs2503322	G	A	3.241316	10.506127	19.813360	5.45E-09
FIM_EM	FIM	EM	3	128075398	rs1735546	G	T	3.686429	13.589761	19.759079	5.72E-09
FIM_EM	FIM	EM	3	128106536	rs2977561	C	T	4.152072	17.239704	19.741727	5.82E-09
FIM_EM	FIM	EM	3	128106267	rs2977562	G	A	4.130246	17.058930	19.679837	6.15E-09
FIM_EM	FIM	EM	3	128107020	rs7373685	C	A	4.136058	17.106972	19.667414	6.22E-09
FIM_EM	FIM	EM	3	127815320	rs940060	G	A	-3.451365	11.911921	19.514885	7.14E-09
FIM_EM	FIM	EM	2	11723021	rs7576826	T	C	-2.315239	5.360330	19.443046	7.62E-09
FIM_EM	FIM	EM	6	127451665	rs1936806	T	C	2.998733	8.992400	19.160812	9.83E-09
FIM_EM	FIM	EM	6	153475561	rs9322410	A	C	-4.318102	18.646003	-19.051335	1.09E-08
FIM_EM	FIM	EM	6	127471533	rs9491699	T	C	3.265479	10.663354	18.980058	1.16E-08
FIM_EM	FIM	EM	8	25310042	rs11995050	C	A	4.618878	21.334039	18.930871	1.21E-08
FIM_EM	FIM	EM	6	127443092	rs9482770	C	T	2.953277	8.721847	18.851630	1.30E-08
FIM_EM	FIM	EM	6	127487902	rs2154168	A	G	3.240640	10.501746	18.817021	1.34E-08
FIM_EM	FIM	EM	6	153503386	rs9478395	T	C	-4.202743	17.663051	-18.787081	1.38E-08
FIM_EM	FIM	EM	6	127509139	rs7744964	G	C	3.226918	10.413000	18.780878	1.39E-08
FIM_EM	FIM	EM	6	127489818	rs7763784	T	C	3.221203	10.376147	18.712213	1.48E-08
FIM_EM	FIM	EM	3	128095278	rs1702118	G	T	3.222587	10.385070	18.651342	1.56E-08
FIM_EM	FIM	EM	3	127991149	rs2811413	A	C	-2.798826	7.833429	18.578058	1.67E-08
FIM_EM	FIM	EM	3	128115381	rs1735527	G	A	3.587100	12.867283	18.531257	1.74E-08
FIM_EM	FIM	EM	3	128095767	rs2977565	A	G	3.436339	11.808428	18.517161	1.76E-08
FIM_EM	FIM	EM	3	128095652	rs3021461	C	T	3.432498	11.782044	18.513589	1.77E-08
FIM_EM	FIM	EM	3	128063879	rs139071297	G	C	4.248654	18.051062	18.496689	1.79E-08
FIM_EM	FIM	EM	6	153502539	rs9479539	A	C	-4.241078	17.986741	-18.470416	1.84E-08
FIM_EM	FIM	EM	10	90157930	rs2488270	T	C	-2.725295	7.427232	18.420484	1.92E-08
FIM_EM	FIM	EM	10	90183038	rs7918921	A	G	-2.753675	7.582724	18.417654	1.93E-08
FIM_EM	FIM	EM	8	25275495	rs12155980	A	C	4.587884	21.048677	18.399224	1.96E-08
FIM_EM	FIM	EM	10	90183102	rs10887818	T	C	-2.750582	7.565699	18.396722	1.96E-08
FIM_EM	FIM	EM	10	90179192	rs4934403	T	C	-2.743825	7.528578	18.356654	2.04E-08
FIM_EM	FIM	EM	6	127436313	rs1936801	G	A	2.853578	8.142910	18.353716	2.04E-08
FIM_EM	FIM	EM	6	127436064	rs1936800	T	C	2.860446	8.182152	18.353381	2.04E-08
FIM_EM	FIM	EM	10	90158608	rs1617881	T	C	-2.712986	7.360296	18.344817	2.06E-08
FIM_EM	FIM	EM	3	128109916	rs741925	T	C	3.621764	13.117176	18.336464	2.07E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EM	FIM	EM	10	90174153	rs792212	T	C	-2.739713	7.506027	18.329115	2.09E-08
FIM_EM	FIM	EM	6	127511523	rs6569475	A	G	3.502259	12.265816	18.277224	2.19E-08
FIM_EM	FIM	EM	10	90168367	rs792209	T	C	-2.728807	7.446386	18.256151	2.23E-08
FIM_EM	FIM	EM	10	90166989	rs792205	T	C	-2.721497	7.406545	18.207296	2.33E-08
FIM_EM	FIM	EM	6	127468274	rs7741021	C	A	3.150462	9.925408	18.205890	2.33E-08
FIM_EM	FIM	EM	10	90156383	rs811558	C	T	-2.716726	7.380598	18.170732	2.41E-08
FIM_EM	FIM	EM	10	90164478	rs1342451	A	C	-2.713150	7.361182	18.151305	2.45E-08
FIM_EM	FIM	EM	10	90160392	rs792230	T	C	-2.714101	7.366343	18.149728	2.46E-08
FIM_EM	FIM	EM	2	11744573	rs7571803	A	G	2.467053	6.086349	18.127272	2.51E-08
FIM_EM	FIM	EM	6	127477021	rs139087942	GTATA	G	3.079074	9.480695	18.120982	2.52E-08
FIM_EM	FIM	EM	3	128122039	rs6780368	T	C	3.559035	12.666733	18.106512	2.55E-08
FIM_EM	FIM	EM	10	90154277	rs792236	T	C	-2.691748	7.245508	18.010979	2.78E-08
FIM_EM	FIM	EM	1	169272453	rs10800428	A	G	4.398284	19.344901	17.947640	2.95E-08
FIM_EM	FIM	EM	1	169272451	rs10800427	T	A	4.392807	19.296755	17.925292	3.01E-08
FIM_EM	FIM	EM	3	128081260	rs1735545	C	G	3.337793	11.140861	17.905073	3.06E-08
FIM_EM	FIM	EM	12	102767892	rs1980236	A	G	-2.973554	8.842026	17.795800	3.38E-08
FIM_EM	FIM	EM	3	128101344	rs74924715	C	G	4.144502	17.176901	17.778744	3.44E-08
FIM_EM	FIM	EM	11	30201133	rs681993	G	A	-3.067296	9.408307	17.638118	3.90E-08
FIM_EM	FIM	EM	6	127521127	rs4318902	G	A	3.474663	12.073280	17.617969	3.98E-08
FIM_EM	FIM	EM	10	90155155	rs10887813	G	T	-2.700391	7.292109	17.608187	4.01E-08
FIM_EM	FIM	EM	3	128117573	rs1702153	A	G	3.552409	12.619612	17.585720	4.09E-08
FIM_EM	FIM	EM	6	127523603	rs62438503	G	A	3.444998	11.868015	17.569067	4.16E-08
FIM_EM	FIM	EM	11	30205523	rs621220	A	G	-3.048885	9.295698	17.548901	4.23E-08
FIM_EM	FIM	EM	3	128084164	rs4277707	T	A	3.105167	9.642062	17.545668	4.24E-08
FIM_EM	FIM	EM	6	127459552	rs9482773	C	G	3.171221	10.056644	17.542769	4.26E-08
FIM_EM	FIM	EM	3	128077602	rs6785384	T	C	3.296208	10.864987	17.542268	4.26E-08
FIM_EM	FIM	EM	3	128111201	rs1702134	T	G	3.473901	12.067990	17.514742	4.36E-08
FIM_EM	FIM	EM	3	128112307	rs1620440	C	T	3.467234	12.021711	17.494901	4.44E-08
FIM_EM	FIM	EM	6	127519234	rs10457487	A	C	3.298371	10.879251	17.465717	4.56E-08
FIM_EM	FIM	EM	3	128110390	rs1702131	C	T	3.471626	12.052186	17.462460	4.58E-08
FIM_EM	FIM	EM	10	90154174	rs4934399	T	A	-2.669171	7.124474	17.415570	4.78E-08
FIM_EM	FIM	EM	10	90182963	rs10887817	A	G	-2.529885	6.400320	17.414561	4.78E-08
FIM_EM	FIM	EM	6	153735302	rs55821059	C	T	3.151948	9.934775	17.378095	4.94E-08
FIM_EO	FIM	EO	11	30252352	rs10835638	T	G	-5.254364	27.608339	46.283968	7.92E-20
FIM_EO	FIM	EO	11	30374608	rs7949790	G	A	-5.130275	26.319718	45.416379	1.76E-19
FIM_EO	FIM	EO	11	30376314	rs76959488	A	T	-5.123417	26.249405	45.344164	1.88E-19
FIM_EO	FIM	EO	11	30375889	rs11031058	T	C	-5.122018	26.235064	45.336661	1.89E-19
FIM_EO	FIM	EO	11	30376902	rs10835660	C	A	-5.118966	26.203817	45.303248	1.95E-19
FIM_EO	FIM	EO	1	169160458	rs144737447	T	C	-5.024991	25.250532	39.522814	3.93E-17
FIM_EO	FIM	EO	1	169324793	rs1209731	C	T	4.899116	24.001335	38.998099	6.36E-17
FIM_EO	FIM	EO	1	169467654	rs1894692	A	G	5.028528	25.286098	38.704517	8.33E-17
FIM_EO	FIM	EO	1	169216412	rs2040445	G	C	4.870923	23.725895	38.355894	1.15E-16
FIM_EO	FIM	EO	11	30382899	rs12294104	T	C	-4.965040	24.651623	38.127513	1.42E-16
FIM_EO	FIM	EO	11	30381076	rs10835661	C	T	-4.961028	24.611796	38.110669	1.44E-16
FIM_EO	FIM	EO	1	169208179	rs2227246	T	C	4.807858	23.115501	37.739512	2.02E-16
FIM_EO	FIM	EO	1	169090748	rs145163454	C	T	-4.852133	23.543197	37.494703	2.54E-16
FIM_EO	FIM	EO	11	30395871	rs12223987	T	C	-4.797008	23.011289	36.959463	4.15E-16
FIM_EO	FIM	EO	1	169435027	rs2678166	T	C	4.041069	16.330235	31.917728	4.32E-14
FIM_EO	FIM	EO	11	30125619	rs11030946	C	G	-3.879108	15.047478	30.992790	1.01E-13
FIM_EO	FIM	EO	11	30261968	rs7951733	G	A	-3.653458	13.347755	29.341925	4.65E-13
FIM_EO	FIM	EO	11	30238832	rs621448	A	T	-4.335070	18.792836	27.409615	2.78E-12
FIM_EO	FIM	EO	11	30232615	rs492828	A	G	-4.335756	18.798780	27.381249	2.85E-12
FIM_EO	FIM	EO	11	30234432	rs601640	A	G	-4.333276	18.777277	27.365476	2.89E-12
FIM_EO	FIM	EO	11	30234782	rs540948	C	T	-4.330666	18.754666	27.358247	2.91E-12
FIM_EO	FIM	EO	11	30235497	rs586326	A	G	-4.319667	18.659525	27.357211	2.91E-12
FIM_EO	FIM	EO	11	30234394	rs601681	T	C	-4.314762	18.617174	27.338979	2.96E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	11	30237518	rs664147	T	C	-4.313607	18.607203	27.318829	3.02E-12
FIM_EO	FIM	EO	11	30234703	rs600333	A	G	-4.323178	18.689866	27.310684	3.04E-12
FIM_EO	FIM	EO	11	30232381	rs494779	T	C	-4.335828	18.799402	27.305685	3.06E-12
FIM_EO	FIM	EO	11	30236544	rs555621	C	T	-4.334414	18.787143	27.294175	3.09E-12
FIM_EO	FIM	EO	11	30234606	rs600768	T	C	-4.304825	18.531519	27.218034	3.32E-12
FIM_EO	FIM	EO	11	30214713	rs961605	A	G	-4.205246	17.684097	26.744411	5.14E-12
FIM_EO	FIM	EO	11	30216006	rs632939	C	T	-4.179481	17.468059	26.471473	6.62E-12
FIM_EO	FIM	EO	11	30222637	rs622744	C	T	-4.150469	17.226394	26.450989	6.74E-12
FIM_EO	FIM	EO	11	30217003	rs574096	T	A	-4.149563	17.218871	26.391129	7.13E-12
FIM_EO	FIM	EO	11	30225170	rs1716021	C	G	-4.149399	17.217508	26.383608	7.18E-12
FIM_EO	FIM	EO	11	30223866	rs606642	A	G	-4.133794	17.088249	26.307012	7.70E-12
FIM_EO	FIM	EO	11	30223861	rs606651	A	C	-4.125417	17.019067	26.253706	8.09E-12
FIM_EO	FIM	EO	11	30353881	rs77055031	G	A	-3.256950	10.607722	26.026456	9.99E-12
FIM_EO	FIM	EO	11	30227534	rs568394	T	C	-4.084033	16.679324	25.561888	1.54E-11
FIM_EO	FIM	EO	11	30228264	rs653518	T	C	-4.069596	16.561615	25.496957	1.63E-11
FIM_EO	FIM	EO	11	30226286	rs683054	C	T	-4.056959	16.458916	25.410854	1.77E-11
FIM_EO	FIM	EO	11	30229234	rs476669	A	C	-4.047760	16.384359	25.385308	1.81E-11
FIM_EO	FIM	EO	11	30227923	rs655183	T	A	-4.048774	16.392574	25.352164	1.87E-11
FIM_EO	FIM	EO	11	30230216	rs1716025	A	G	-4.027624	16.221756	25.186973	2.17E-11
FIM_EO	FIM	EO	3	127878416	rs2999048	A	G	3.528915	12.453242	24.614024	3.70E-11
FIM_EO	FIM	EO	3	128094493	rs1702119	C	T	4.016699	16.133870	24.515314	4.05E-11
FIM_EO	FIM	EO	2	11733545	rs10693974	AACTC	A	-2.926331	8.563413	24.514791	4.05E-11
FIM_EO	FIM	EO	3	127882064	rs2955118	A	G	3.565810	12.715003	24.366330	4.65E-11
FIM_EO	FIM	EO	3	128092102	rs1735538	G	A	3.992496	15.940025	24.348297	4.73E-11
FIM_EO	FIM	EO	3	128083332	rs1702122	G	A	3.995779	15.966247	24.316357	4.87E-11
FIM_EO	FIM	EO	3	128058617	rs3849531	T	A	3.506111	12.292814	24.163708	5.61E-11
FIM_EO	FIM	EO	2	11735061	rs28689909	A	C	-2.909630	8.465946	24.157038	5.65E-11
FIM_EO	FIM	EO	3	127926045	rs4362738	T	C	-4.266007	18.198816	24.068267	6.13E-11
FIM_EO	FIM	EO	3	127994160	rs2811529	A	G	-3.415830	11.667896	24.053118	6.22E-11
FIM_EO	FIM	EO	3	127961396	rs9843281	T	A	-3.395216	11.527491	23.905984	7.13E-11
FIM_EO	FIM	EO	3	128038373	rs10934853	A	C	3.485912	12.151584	23.900731	7.16E-11
FIM_EO	FIM	EO	3	127978795	rs4555544	A	G	-3.391654	11.503319	23.880906	7.30E-11
FIM_EO	FIM	EO	3	127963448	rs13434079	G	A	-3.382315	11.440058	23.874044	7.34E-11
FIM_EO	FIM	EO	3	127933203	rs11707297	C	G	-3.386180	11.466214	23.871862	7.36E-11
FIM_EO	FIM	EO	3	127958013	rs4074440	A	G	-3.397537	11.543260	23.861859	7.43E-11
FIM_EO	FIM	EO	3	127913263	rs883238	G	A	3.382964	11.444448	23.849003	7.52E-11
FIM_EO	FIM	EO	3	128015236	rs2955103	T	C	-4.227056	17.868003	23.808024	7.81E-11
FIM_EO	FIM	EO	3	127889404	rs2999051	C	T	4.204057	17.674099	23.806662	7.82E-11
FIM_EO	FIM	EO	2	11728388	rs59129126	C	T	-2.852371	8.136020	23.763321	8.14E-11
FIM_EO	FIM	EO	3	127942379	rs9873786	G	A	-3.365092	11.323843	23.723005	8.45E-11
FIM_EO	FIM	EO	2	11733488	rs57439315	T	G	-2.831418	8.016931	23.716891	8.50E-11
FIM_EO	FIM	EO	3	127946788	rs9830294	A	G	-3.358119	11.276965	23.678594	8.80E-11
FIM_EO	FIM	EO	3	127918955	rs2687720	T	C	3.357815	11.274923	23.671708	8.86E-11
FIM_EO	FIM	EO	3	128046643	rs4857841	A	G	3.450643	11.906936	23.619876	9.30E-11
FIM_EO	FIM	EO	2	11742458	rs72772088	G	A	-3.218833	10.360886	23.582152	9.63E-11
FIM_EO	FIM	EO	3	127911820	rs2811512	A	G	3.340878	11.161463	23.552302	9.90E-11
FIM_EO	FIM	EO	2	11732547	rs58502716	GAATCAC	G	-2.822844	7.968449	23.544001	9.97E-11
FIM_EO	FIM	EO	3	127904943	rs2811482	T	C	3.334309	11.117614	23.512534	1.03E-10
FIM_EO	FIM	EO	3	127888347	rs2955120	G	T	3.332644	11.106513	23.500459	1.04E-10
FIM_EO	FIM	EO	3	127895986	rs1554535	A	G	3.328631	11.079783	23.477572	1.06E-10
FIM_EO	FIM	EO	3	127888067	rs872267	A	G	3.333005	11.108924	23.462818	1.08E-10
FIM_EO	FIM	EO	11	30195542	rs4923626	G	T	-3.238008	10.484696	23.429703	1.11E-10
FIM_EO	FIM	EO	11	30239283	rs553406	G	A	-3.850546	14.826706	23.410902	1.13E-10
FIM_EO	FIM	EO	3	127907929	rs2811514	G	A	3.318606	11.013145	23.395667	1.14E-10
FIM_EO	FIM	EO	11	30239353	rs553190	T	C	-3.842817	14.767240	23.340251	1.21E-10
FIM_EO	FIM	EO	12	95679109	rs12423799	A	G	2.682733	7.197056	23.262085	1.30E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	11	30239470	rs618611	A	G	-3.821782	14.606018	23.259564	1.30E-10
FIM_EO	FIM	EO	12	95642168	rs10161330	G	A	2.683096	7.199006	23.255435	1.30E-10
FIM_EO	FIM	EO	11	30240217	rs523875	T	C	-3.823333	14.617878	23.254599	1.30E-10
FIM_EO	FIM	EO	12	95678387	rs12371088	G	A	2.676529	7.163809	23.208293	1.36E-10
FIM_EO	FIM	EO	2	11728080	rs4669753	A	G	-2.784562	7.753785	23.188070	1.39E-10
FIM_EO	FIM	EO	3	127867397	rs67451924	A	G	3.481869	12.123415	23.151089	1.44E-10
FIM_EO	FIM	EO	11	30288698	rs7944484	G	T	-3.892802	15.153907	23.148689	1.44E-10
FIM_EO	FIM	EO	2	11739368	rs10929760	T	G	-3.177865	10.098825	23.142652	1.45E-10
FIM_EO	FIM	EO	3	127878817	rs2999049	C	T	3.469504	12.037459	23.119651	1.48E-10
FIM_EO	FIM	EO	12	95661809	rs10859863	C	T	2.732103	7.464384	23.092123	1.52E-10
FIM_EO	FIM	EO	12	95676053	rs3215007	TG	T	2.728629	7.445416	23.086706	1.52E-10
FIM_EO	FIM	EO	12	95675407	rs4762166	C	T	2.660311	7.077254	23.063558	1.56E-10
FIM_EO	FIM	EO	3	127856573	rs6414310	A	T	-3.461116	11.979321	23.033409	1.60E-10
FIM_EO	FIM	EO	2	11728089	rs4669754	T	C	-2.764747	7.643828	23.025317	1.61E-10
FIM_EO	FIM	EO	12	95673184	rs7967299	A	G	2.651803	7.032057	22.987983	1.67E-10
FIM_EO	FIM	EO	12	95668437	rs3816838	T	G	2.651869	7.032410	22.986398	1.67E-10
FIM_EO	FIM	EO	12	95667337	rs4471514	T	C	2.718518	7.390342	22.977307	1.69E-10
FIM_EO	FIM	EO	12	95668951	rs4762326	T	C	2.719374	7.394995	22.971284	1.70E-10
FIM_EO	FIM	EO	12	95687497	rs7309252	T	A	2.713566	7.363441	22.955884	1.72E-10
FIM_EO	FIM	EO	11	30190813	rs10501121	G	T	-3.155580	9.957683	22.952433	1.73E-10
FIM_EO	FIM	EO	12	95659012	rs1038652	T	C	2.646681	7.004918	22.942421	1.74E-10
FIM_EO	FIM	EO	12	95658769	rs7957257	T	A	2.646681	7.004918	22.942276	1.74E-10
FIM_EO	FIM	EO	11	30189761	rs17622950	G	A	-3.159033	9.979488	22.935625	1.75E-10
FIM_EO	FIM	EO	11	30190076	rs1417016	G	A	-3.159117	9.980019	22.934105	1.76E-10
FIM_EO	FIM	EO	11	30190139	rs1417015	A	G	-3.159052	9.979607	22.933632	1.76E-10
FIM_EO	FIM	EO	12	95672642	rs11107959	C	T	2.711426	7.351834	22.922086	1.78E-10
FIM_EO	FIM	EO	12	95658282	rs10777679	G	A	2.710491	7.346761	22.907290	1.80E-10
FIM_EO	FIM	EO	11	30191237	rs7128357	T	G	-3.154649	9.951809	22.901854	1.81E-10
FIM_EO	FIM	EO	2	11727087	rs17529680	T	G	-3.720473	13.841918	22.899594	1.81E-10
FIM_EO	FIM	EO	11	30208486	rs10835634	C	A	-3.152838	9.940389	22.873975	1.86E-10
FIM_EO	FIM	EO	11	30288255	rs11031021	A	T	-3.843595	14.773220	22.851709	1.90E-10
FIM_EO	FIM	EO	11	30288256	rs10835641	A	C	-3.843595	14.773220	22.851709	1.90E-10
FIM_EO	FIM	EO	11	30208516	rs11030998	A	G	-3.149113	9.916916	22.845200	1.91E-10
FIM_EO	FIM	EO	11	30192962	rs12793581	C	T	-3.138403	9.849573	22.812274	1.97E-10
FIM_EO	FIM	EO	12	95614953	rs10859853	C	T	2.630432	6.919175	22.810652	1.97E-10
FIM_EO	FIM	EO	11	30192151	rs10501122	C	T	-3.133005	9.815722	22.781752	2.02E-10
FIM_EO	FIM	EO	11	30207239	rs7122731	A	G	-3.131421	9.805796	22.760578	2.06E-10
FIM_EO	FIM	EO	11	30197429	rs11030992	A	G	-3.134439	9.824711	22.752339	2.08E-10
FIM_EO	FIM	EO	11	30198439	rs11030993	C	T	-3.134328	9.824012	22.744425	2.10E-10
FIM_EO	FIM	EO	12	95647235	rs7954978	G	A	2.623872	6.884702	22.741968	2.10E-10
FIM_EO	FIM	EO	11	30192333	rs11030991	T	C	-3.132390	9.811865	22.740459	2.10E-10
FIM_EO	FIM	EO	11	30206532	rs11030997	G	A	-3.135212	9.829554	22.726110	2.13E-10
FIM_EO	FIM	EO	11	30200473	rs7123331	A	G	-3.131754	9.807885	22.725749	2.13E-10
FIM_EO	FIM	EO	12	95628466	rs10777678	T	A	2.616950	6.848428	22.674078	2.24E-10
FIM_EO	FIM	EO	12	95645385	rs12320196	G	A	2.682813	7.197488	22.673015	2.24E-10
FIM_EO	FIM	EO	11	30268544	rs1716029	C	G	-3.806394	14.488634	22.659911	2.27E-10
FIM_EO	FIM	EO	12	95649013	rs4762308	A	G	2.694947	7.262737	22.635125	2.32E-10
FIM_EO	FIM	EO	11	30202285	rs11493214	A	G	-3.121285	9.742417	22.621462	2.35E-10
FIM_EO	FIM	EO	12	95610220	rs7310833	A	G	2.651683	7.031422	22.595375	2.41E-10
FIM_EO	FIM	EO	3	127919046	rs2811485	T	G	3.209225	10.299128	22.592047	2.41E-10
FIM_EO	FIM	EO	8	25280800	rs6185	G	C	-4.587275	21.043093	22.573771	2.46E-10
FIM_EO	FIM	EO	3	127919045	rs2687733	A	T	3.205006	10.272060	22.562339	2.48E-10
FIM_EO	FIM	EO	11	30300692	rs4120821	T	C	-3.789436	14.359822	22.554047	2.50E-10
FIM_EO	FIM	EO	11	30199688	rs7940816	C	A	-3.128740	9.789017	22.533381	2.55E-10
FIM_EO	FIM	EO	12	95627237	rs6538622	G	A	2.665123	7.102879	22.523507	2.57E-10
FIM_EO	FIM	EO	3	127933786	rs4857871	T	C	-3.339484	11.152154	22.513738	2.60E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	3	127930866	rs7374072	A	C	-3.339005	11.148956	22.513420	2.60E-10
FIM_EO	FIM	EO	3	127934774	rs4384971	A	C	-3.340400	11.158271	22.509502	2.61E-10
FIM_EO	FIM	EO	3	127939034	rs9857235	T	A	-3.339577	11.152772	22.503954	2.62E-10
FIM_EO	FIM	EO	12	95643298	rs7967229	T	A	2.662619	7.089538	22.502967	2.62E-10
FIM_EO	FIM	EO	3	127936527	rs9879865	T	C	-3.339333	11.151143	22.502311	2.62E-10
FIM_EO	FIM	EO	3	127936532	rs9879866	T	C	-3.339333	11.151143	22.502311	2.62E-10
FIM_EO	FIM	EO	3	127934276	rs4857875	T	C	-3.337997	11.142223	22.493309	2.65E-10
FIM_EO	FIM	EO	3	127937645	rs9847576	G	A	-3.337921	11.141717	22.492799	2.65E-10
FIM_EO	FIM	EO	12	95617829	rs10777677	G	A	2.594092	6.729313	22.491233	2.65E-10
FIM_EO	FIM	EO	3	127933822	rs4857872	G	T	-3.337652	11.139923	22.490988	2.65E-10
FIM_EO	FIM	EO	3	127945349	rs6777054	A	G	-3.335417	11.125006	22.488402	2.66E-10
FIM_EO	FIM	EO	3	127938137	rs9814834	A	G	-3.336518	11.132352	22.483344	2.67E-10
FIM_EO	FIM	EO	3	127943328	rs4857838	G	A	-3.336409	11.131622	22.482606	2.67E-10
FIM_EO	FIM	EO	3	127940440	rs7372902	C	G	-3.336341	11.131173	22.482153	2.67E-10
FIM_EO	FIM	EO	3	127836319	rs4857837	G	A	-3.355567	11.259831	22.480723	2.68E-10
FIM_EO	FIM	EO	3	127940534	rs6439122	G	A	-3.335266	11.123998	22.474906	2.69E-10
FIM_EO	FIM	EO	11	30258770	rs626869	T	C	-3.758355	14.125229	22.474075	2.69E-10
FIM_EO	FIM	EO	11	30258989	rs615577	A	G	-3.758383	14.125441	22.473835	2.69E-10
FIM_EO	FIM	EO	11	30261910	rs622356	C	A	-3.756952	14.114685	22.467516	2.71E-10
FIM_EO	FIM	EO	3	127940353	rs9845651	G	T	-3.333964	11.115313	22.466130	2.71E-10
FIM_EO	FIM	EO	12	95631276	rs10859856	C	T	2.658233	7.066205	22.464794	2.72E-10
FIM_EO	FIM	EO	12	95639676	rs10859858	C	T	2.593484	6.726162	22.464472	2.72E-10
FIM_EO	FIM	EO	3	127836287	rs4857836	T	C	-3.353032	11.242827	22.462868	2.72E-10
FIM_EO	FIM	EO	11	30199020	rs10767832	T	C	-3.124337	9.761480	22.462177	2.72E-10
FIM_EO	FIM	EO	3	127948060	rs4857877	G	A	-3.333216	11.110327	22.461092	2.73E-10
FIM_EO	FIM	EO	3	127939357	rs4323023	A	T	-3.334661	11.119964	22.458766	2.73E-10
FIM_EO	FIM	EO	3	127944477	rs6775988	G	C	-3.332249	11.103886	22.451322	2.75E-10
FIM_EO	FIM	EO	3	127817508	rs7632756	T	C	-3.350844	11.228156	22.448893	2.76E-10
FIM_EO	FIM	EO	3	127819062	rs4857866	C	G	-3.350427	11.225363	22.446970	2.76E-10
FIM_EO	FIM	EO	11	30264368	rs560109	A	G	-3.752756	14.083181	22.443785	2.77E-10
FIM_EO	FIM	EO	11	30263655	rs532667	T	C	-3.752530	14.081483	22.438864	2.78E-10
FIM_EO	FIM	EO	11	30249522	rs1716023	C	T	-3.757372	14.117847	22.436250	2.79E-10
FIM_EO	FIM	EO	11	30200751	rs7109221	C	T	-3.116142	9.710343	22.433970	2.80E-10
FIM_EO	FIM	EO	12	95631556	rs10859857	C	G	2.588007	6.697783	22.431264	2.80E-10
FIM_EO	FIM	EO	11	30257122	rs560078	G	A	-3.756418	14.110674	22.430640	2.80E-10
FIM_EO	FIM	EO	11	30250177	rs1716022	T	C	-3.748378	14.050336	22.426535	2.81E-10
FIM_EO	FIM	EO	11	30249550	rs1782510	C	A	-3.755428	14.103242	22.424642	2.82E-10
FIM_EO	FIM	EO	11	30261215	rs7126848	T	C	-3.748081	14.048112	22.415121	2.84E-10
FIM_EO	FIM	EO	12	95630035	rs9739396	A	C	2.585296	6.683756	22.407763	2.86E-10
FIM_EO	FIM	EO	12	95630044	rs9739397	G	C	2.585276	6.683653	22.407590	2.86E-10
FIM_EO	FIM	EO	11	30242325	rs572883	T	C	-3.740083	13.988222	22.400322	2.88E-10
FIM_EO	FIM	EO	11	30203825	rs7943756	C	T	-3.109422	9.668507	22.399565	2.89E-10
FIM_EO	FIM	EO	12	95699240	rs7966079	C	T	2.651515	7.030534	22.395390	2.90E-10
FIM_EO	FIM	EO	11	30271159	rs549346	G	A	-3.763651	14.165067	22.389066	2.91E-10
FIM_EO	FIM	EO	11	30241731	rs489096	T	C	-3.740083	13.988222	22.367019	2.97E-10
FIM_EO	FIM	EO	11	30248392	rs1630084	A	G	-3.739906	13.986900	22.364050	2.98E-10
FIM_EO	FIM	EO	11	30243247	rs543401	G	T	-3.742561	14.006761	22.359783	2.99E-10
FIM_EO	FIM	EO	11	30241032	rs590833	A	G	-3.740044	13.987931	22.359054	3.00E-10
FIM_EO	FIM	EO	3	127941439	rs6439123	C	T	-3.317310	11.004548	22.353912	3.01E-10
FIM_EO	FIM	EO	11	30193060	rs623837	A	G	-3.097024	9.591555	22.347995	3.03E-10
FIM_EO	FIM	EO	3	127934329	rs6770140	C	T	-3.313277	10.977801	22.326730	3.09E-10
FIM_EO	FIM	EO	3	127935461	rs6439121	C	G	-3.312949	10.975630	22.324522	3.09E-10
FIM_EO	FIM	EO	3	127934218	rs4857873	G	A	-3.310722	10.960881	22.322904	3.10E-10
FIM_EO	FIM	EO	11	30255823	rs506197	G	A	-3.737139	13.966208	22.317569	3.11E-10
FIM_EO	FIM	EO	11	30251351	rs640748	C	A	-3.736238	13.959474	22.313044	3.13E-10
FIM_EO	FIM	EO	3	127931402	rs7372439	G	A	-3.310672	10.960548	22.309178	3.14E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	12	95696420	rs3596	G	A	2.641134	6.975589	22.307243	3.14E-10
FIM_EO	FIM	EO	11	30255982	rs676349	G	A	-3.735482	13.953824	22.305580	3.15E-10
FIM_EO	FIM	EO	3	127942729	rs35277207	T	TA	-3.305117	10.923801	22.291979	3.19E-10
FIM_EO	FIM	EO	11	30250359	rs537263	C	T	-3.732824	13.933972	22.289663	3.20E-10
FIM_EO	FIM	EO	11	30253641	rs609896	C	T	-3.732234	13.929568	22.288231	3.20E-10
FIM_EO	FIM	EO	3	127934269	rs4857874	T	A	-3.307512	10.939637	22.287886	3.20E-10
FIM_EO	FIM	EO	3	127923187	rs6439119	C	T	-3.306573	10.933425	22.281557	3.22E-10
FIM_EO	FIM	EO	12	95611185	rs6538618	C	T	2.634178	6.938893	22.279780	3.23E-10
FIM_EO	FIM	EO	11	30251625	rs639403	T	C	-3.729374	13.908232	22.271154	3.25E-10
FIM_EO	FIM	EO	3	127930459	rs9838120	G	A	-3.304950	10.922691	22.270434	3.25E-10
FIM_EO	FIM	EO	11	30277028	rs4120820	T	C	-3.739018	13.980253	22.263759	3.27E-10
FIM_EO	FIM	EO	11	30255867	rs506306	G	C	-3.725028	13.875837	22.245270	3.33E-10
FIM_EO	FIM	EO	3	128075398	rs1735546	G	T	3.686429	13.589761	22.242323	3.34E-10
FIM_EO	FIM	EO	3	127901786	rs2811479	A	G	3.260039	10.627855	22.240657	3.35E-10
FIM_EO	FIM	EO	11	30250479	rs538236	A	G	-3.731859	13.926771	22.239160	3.35E-10
FIM_EO	FIM	EO	3	127905518	rs2811515	A	G	3.299451	10.886374	22.233930	3.37E-10
FIM_EO	FIM	EO	11	30240829	rs518357	T	C	-3.713893	13.793004	22.233170	3.37E-10
FIM_EO	FIM	EO	3	127822320	rs7641133	C	T	-3.351508	11.232603	22.227984	3.38E-10
FIM_EO	FIM	EO	3	127905451	rs2811516	G	A	3.297546	10.873809	22.221096	3.41E-10
FIM_EO	FIM	EO	2	11742854	rs62118315	A	C	-3.704019	13.719756	22.219614	3.41E-10
FIM_EO	FIM	EO	3	127918000	rs2492285	A	G	3.297111	10.870941	22.217798	3.42E-10
FIM_EO	FIM	EO	3	127920023	rs2811508	C	T	3.296581	10.867449	22.214229	3.43E-10
FIM_EO	FIM	EO	1	169272453	rs10800428	A	G	4.398284	19.344901	22.212980	3.43E-10
FIM_EO	FIM	EO	11	30281330	rs6484477	A	G	-3.733787	13.941165	22.211914	3.44E-10
FIM_EO	FIM	EO	11	30311316	rs10742238	G	A	-3.729863	13.911877	22.199390	3.48E-10
FIM_EO	FIM	EO	11	30309732	rs10767833	C	T	-3.729433	13.908669	22.196830	3.48E-10
FIM_EO	FIM	EO	3	127909564	rs2811513	A	G	3.293700	10.848456	22.195176	3.49E-10
FIM_EO	FIM	EO	1	169272451	rs10800427	T	A	4.392807	19.296755	22.185321	3.52E-10
FIM_EO	FIM	EO	11	30253318	rs611246	T	A	-3.706195	13.735878	22.182038	3.53E-10
FIM_EO	FIM	EO	11	30342173	rs3897026	T	A	-3.739848	13.986463	22.182024	3.53E-10
FIM_EO	FIM	EO	11	30341210	rs10767837	G	A	-3.739848	13.986463	22.181167	3.54E-10
FIM_EO	FIM	EO	11	30247886	rs939433	T	C	-3.707326	13.744264	22.162069	3.60E-10
FIM_EO	FIM	EO	11	30253189	rs550312	G	T	-3.706195	13.735878	22.157249	3.61E-10
FIM_EO	FIM	EO	11	30254550	rs595496	C	T	-3.705799	13.732946	22.154884	3.62E-10
FIM_EO	FIM	EO	11	30254268	rs580646	G	T	-3.705771	13.732736	22.154715	3.62E-10
FIM_EO	FIM	EO	11	30314253	rs11031038	C	T	-3.724339	13.870700	22.152926	3.63E-10
FIM_EO	FIM	EO	11	30250568	rs654669	C	T	-3.712370	13.781689	22.149474	3.64E-10
FIM_EO	FIM	EO	11	30254683	rs594982	C	A	-3.691234	13.625210	22.136564	3.68E-10
FIM_EO	FIM	EO	11	30338275	rs10767835	A	T	-3.723866	13.867176	22.135904	3.69E-10
FIM_EO	FIM	EO	11	30323189	rs1933349	T	C	-3.724007	13.868228	22.130348	3.71E-10
FIM_EO	FIM	EO	11	30324475	rs1933348	A	T	-3.723979	13.868017	22.130180	3.71E-10
FIM_EO	FIM	EO	11	30248826	rs1782509	T	C	-3.707152	13.742973	22.126152	3.72E-10
FIM_EO	FIM	EO	11	30322609	rs74640038	TGG	T	-3.718451	13.826875	22.121587	3.74E-10
FIM_EO	FIM	EO	11	30338392	rs10767836	C	T	-3.723855	13.867097	22.117557	3.75E-10
FIM_EO	FIM	EO	3	127916551	rs2811509	A	G	3.280878	10.764162	22.114317	3.76E-10
FIM_EO	FIM	EO	3	127902091	rs2811480	T	G	3.262711	10.645285	22.111794	3.77E-10
FIM_EO	FIM	EO	3	127904496	rs2811481	C	T	3.278365	10.747680	22.109728	3.78E-10
FIM_EO	FIM	EO	11	30249084	rs1716024	T	C	-3.702452	13.708153	22.108397	3.78E-10
FIM_EO	FIM	EO	11	30322610	rs75682475	TACC	T	-3.718451	13.826875	22.097329	3.82E-10
FIM_EO	FIM	EO	11	30322611	rs76242056	TAA	T	-3.718451	13.826875	22.097329	3.82E-10
FIM_EO	FIM	EO	3	127892037	rs2999052	C	T	3.274548	10.722663	22.060365	3.96E-10
FIM_EO	FIM	EO	11	30201790	rs7113525	C	T	-3.055224	9.334394	22.054223	3.98E-10
FIM_EO	FIM	EO	2	11723110	rs16857668	A	G	-2.827366	7.993998	22.052171	3.99E-10
FIM_EO	FIM	EO	3	127895226	rs2687729	G	A	3.268814	10.685146	22.040620	4.03E-10
FIM_EO	FIM	EO	3	127889287	rs3122173	G	A	3.267441	10.676168	22.037238	4.04E-10
FIM_EO	FIM	EO	3	127808502	rs7355887	G	C	-3.291168	10.831790	22.034719	4.05E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	11	30255185	rs6169	T	C	-3.686945	13.593565	22.017698	4.12E-10
FIM_EO	FIM	EO	11	30200581	rs7108968	C	T	-3.055186	9.334162	22.008503	4.15E-10
FIM_EO	FIM	EO	2	11744694	rs746579	T	C	-3.699896	13.689231	21.977517	4.27E-10
FIM_EO	FIM	EO	11	30378694	rs7952660	G	T	-3.763374	14.162981	21.935903	4.44E-10
FIM_EO	FIM	EO	1	169115022	rs77979353	C	T	-4.683240	21.932739	21.935345	4.44E-10
FIM_EO	FIM	EO	11	30203374	rs7928429	A	G	-3.055161	9.334008	21.886852	4.65E-10
FIM_EO	FIM	EO	8	25267103	rs4871939	A	G	-4.519082	20.422100	21.863322	4.75E-10
FIM_EO	FIM	EO	2	11723858	rs1865573	A	G	-2.784982	7.756126	21.735285	5.35E-10
FIM_EO	FIM	EO	11	30367332	rs1538109	C	T	-3.632783	13.197109	21.723580	5.41E-10
FIM_EO	FIM	EO	3	127948149	rs4857878	C	T	-3.270705	10.697512	21.704626	5.51E-10
FIM_EO	FIM	EO	11	30369420	rs6484481	T	C	-3.621867	13.117920	21.661498	5.73E-10
FIM_EO	FIM	EO	2	11729606	rs2358039	G	A	-3.329830	11.087770	21.626223	5.92E-10
FIM_EO	FIM	EO	11	30376209	rs7929105	T	C	-3.743056	14.010466	21.620186	5.95E-10
FIM_EO	FIM	EO	11	30348638	rs4427542	C	G	-3.607943	13.017255	21.610447	6.01E-10
FIM_EO	FIM	EO	11	30350192	rs2065940	T	C	-3.600429	12.963088	21.564744	6.27E-10
FIM_EO	FIM	EO	3	128063879	rs139071297	G	C	4.248654	18.051062	21.560831	6.29E-10
FIM_EO	FIM	EO	11	30356092	rs10767839	A	G	-3.604539	12.992701	21.560646	6.29E-10
FIM_EO	FIM	EO	3	127898501	rs2811476	C	A	3.265354	10.662539	21.529980	6.48E-10
FIM_EO	FIM	EO	3	128111174	rs4241495	C	T	4.223621	17.838971	21.397797	7.32E-10
FIM_EO	FIM	EO	1	169481121	rs6427194	A	T	4.440700	19.719817	21.380890	7.44E-10
FIM_EO	FIM	EO	1	169481223	rs6427196	G	C	4.435805	19.676363	21.363036	7.56E-10
FIM_EO	FIM	EO	1	169481176	rs6427195	T	A	4.435805	19.676363	21.357320	7.60E-10
FIM_EO	FIM	EO	1	169476052	rs10737547	G	A	4.430299	19.627546	21.332901	7.78E-10
FIM_EO	FIM	EO	1	169472899	rs6670848	G	A	4.432347	19.645698	21.323386	7.85E-10
FIM_EO	FIM	EO	6	151769132	rs7741193	A	G	2.439559	5.951447	21.286962	8.12E-10
FIM_EO	FIM	EO	3	128107982	rs1625296	A	G	4.191940	17.572357	21.236669	8.51E-10
FIM_EO	FIM	EO	3	128114587	rs7632169	C	T	4.224252	17.844308	21.234079	8.53E-10
FIM_EO	FIM	EO	1	169477574	rs6687813	C	A	4.402608	19.382958	21.205223	8.76E-10
FIM_EO	FIM	EO	1	169470748	rs4264045	G	T	4.396103	19.325718	21.136415	9.34E-10
FIM_EO	FIM	EO	1	169490401	rs6682179	C	T	4.388068	19.255140	21.122327	9.46E-10
FIM_EO	FIM	EO	6	151767483	rs76363440	G	A	2.418674	5.849984	21.101772	9.64E-10
FIM_EO	FIM	EO	3	128106536	rs2977561	C	T	4.152072	17.239704	21.037045	1.02E-09
FIM_EO	FIM	EO	1	169490392	rs2420370	C	G	4.336776	18.807627	21.024601	1.04E-09
FIM_EO	FIM	EO	8	25247181	rs4872310	A	G	-4.289010	18.395608	20.991626	1.07E-09
FIM_EO	FIM	EO	3	128107020	rs7373685	C	A	4.136058	17.106972	20.957867	1.10E-09
FIM_EO	FIM	EO	3	128095767	rs2977565	A	G	3.436339	11.808428	20.885876	1.18E-09
FIM_EO	FIM	EO	3	128106267	rs2977562	G	A	4.130246	17.058930	20.877140	1.19E-09
FIM_EO	FIM	EO	3	128095652	rs3021461	C	T	3.432498	11.782044	20.872024	1.19E-09
FIM_EO	FIM	EO	6	151762344	rs73783018	G	A	2.388310	5.704026	20.825404	1.25E-09
FIM_EO	FIM	EO	11	30203286	rs201618035	T	TA	-2.870510	8.239825	20.803975	1.27E-09
FIM_EO	FIM	EO	6	151764723	rs7748822	G	C	2.384357	5.685160	20.799038	1.28E-09
FIM_EO	FIM	EO	6	151764648	rs59753385	G	A	2.382312	5.675411	20.781197	1.30E-09
FIM_EO	FIM	EO	11	30223574	rs607987	A	G	-3.911262	15.297972	20.772038	1.31E-09
FIM_EO	FIM	EO	11	30217503	rs605765	T	C	-3.895950	15.178428	20.770900	1.31E-09
FIM_EO	FIM	EO	6	151765356	rs3800277	T	G	2.378347	5.656533	20.746491	1.34E-09
FIM_EO	FIM	EO	1	169498834	rs6009	C	T	4.435012	19.669331	20.743638	1.35E-09
FIM_EO	FIM	EO	6	151765296	rs3823311	C	T	2.377910	5.654456	20.742681	1.35E-09
FIM_EO	FIM	EO	11	30207843	rs17623478	G	A	-3.216256	10.344301	20.727176	1.37E-09
FIM_EO	FIM	EO	8	25248615	rs13261573	A	G	-4.297363	18.467329	20.714768	1.38E-09
FIM_EO	FIM	EO	1	169486641	rs9332666	C	G	4.291010	18.412763	20.642398	1.48E-09
FIM_EO	FIM	EO	2	11725241	rs12470971	A	G	-2.659608	7.073514	20.620427	1.51E-09
FIM_EO	FIM	EO	1	169479974	rs970740	T	C	4.279510	18.314206	20.590171	1.55E-09
FIM_EO	FIM	EO	11	30187044	rs7102959	T	C	-3.184502	10.141051	20.550213	1.61E-09
FIM_EO	FIM	EO	11	30186858	rs1819673	G	A	-3.184502	10.141051	20.549337	1.61E-09
FIM_EO	FIM	EO	1	169500590	rs6427197	A	C	4.425285	19.583147	20.548489	1.61E-09
FIM_EO	FIM	EO	11	30185696	rs11030988	T	C	-3.184180	10.139002	20.548137	1.61E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	11	30188285	rs7930471	C	G	-3.183797	10.136563	20.545921	1.62E-09
FIM_EO	FIM	EO	11	30187905	rs12282163	T	G	-3.182639	10.129193	20.534961	1.63E-09
FIM_EO	FIM	EO	11	30187828	rs12282113	A	G	-3.182639	10.129193	20.533363	1.64E-09
FIM_EO	FIM	EO	11	30188505	rs7945546	C	T	-3.182575	10.128786	20.531645	1.64E-09
FIM_EO	FIM	EO	11	30187216	rs552501	C	T	-3.181369	10.121108	20.530063	1.64E-09
FIM_EO	FIM	EO	11	30187958	rs12282076	A	C	-3.182639	10.129193	20.528619	1.64E-09
FIM_EO	FIM	EO	11	30185395	rs11030985	T	G	-3.180169	10.113472	20.521686	1.65E-09
FIM_EO	FIM	EO	3	127881613	rs2955117	A	G	3.151060	9.929178	20.519877	1.66E-09
FIM_EO	FIM	EO	11	30185477	rs11030986	C	T	-3.181364	10.121076	20.495432	1.70E-09
FIM_EO	FIM	EO	11	30186511	rs1361421	T	C	-3.173141	10.068822	20.467689	1.74E-09
FIM_EO	FIM	EO	6	153225235	rs117754666	T	C	-3.266217	10.668172	-20.406132	1.84E-09
FIM_EO	FIM	EO	6	153261120	rs117851271	T	A	-3.354125	11.250151	-20.325493	1.99E-09
FIM_EO	FIM	EO	6	153229045	rs117967041	C	T	-3.243370	10.519446	-20.299547	2.03E-09
FIM_EO	FIM	EO	1	169498056	rs2420372	G	A	4.375047	19.141038	20.289335	2.05E-09
FIM_EO	FIM	EO	11	30199907	rs7943867	C	A	-3.168287	10.038042	20.271417	2.09E-09
FIM_EO	FIM	EO	11	30184538	rs4396264	C	T	-3.158570	9.976566	20.250778	2.13E-09
FIM_EO	FIM	EO	3	128095278	rs1702118	G	T	3.222587	10.385070	20.244587	2.14E-09
FIM_EO	FIM	EO	11	30184483	rs11030983	T	C	-3.162167	9.999298	20.241903	2.15E-09
FIM_EO	FIM	EO	11	30181778	rs11030982	G	A	-3.161780	9.996853	20.233011	2.16E-09
FIM_EO	FIM	EO	11	30181153	rs892949	T	C	-3.162094	9.998837	20.232659	2.16E-09
FIM_EO	FIM	EO	11	30181651	rs12287556	G	T	-3.159643	9.983341	20.229765	2.17E-09
FIM_EO	FIM	EO	11	30181671	rs12293737	T	A	-3.160111	9.986302	20.219972	2.19E-09
FIM_EO	FIM	EO	11	30181316	rs1808771	A	G	-3.160020	9.985724	20.219387	2.19E-09
FIM_EO	FIM	EO	11	30182270	rs7112118	T	A	-3.159252	9.980872	20.219174	2.19E-09
FIM_EO	FIM	EO	11	30183831	rs4922834	G	A	-3.158427	9.975660	20.217521	2.20E-09
FIM_EO	FIM	EO	11	30184860	rs4313561	G	C	-3.157740	9.971320	20.212816	2.21E-09
FIM_EO	FIM	EO	11	30185849	rs11030989	C	T	-3.130710	9.801344	20.203956	2.22E-09
FIM_EO	FIM	EO	2	11748585	rs4669755	A	C	-3.380277	11.426271	20.191290	2.25E-09
FIM_EO	FIM	EO	11	30182303	rs7112549	C	G	-3.154492	9.950820	20.188846	2.25E-09
FIM_EO	FIM	EO	11	30183344	rs10835631	C	T	-3.157700	9.971072	20.187719	2.26E-09
FIM_EO	FIM	EO	3	128105972	rs2999033	A	G	3.695142	13.654077	20.186405	2.26E-09
FIM_EO	FIM	EO	11	30180685	rs1361422	C	T	-3.153494	9.944525	20.177633	2.28E-09
FIM_EO	FIM	EO	11	30183742	rs4922833	A	T	-3.158280	9.974735	20.172056	2.29E-09
FIM_EO	FIM	EO	11	30180671	rs1361423	G	C	-3.151855	9.934191	20.167722	2.30E-09
FIM_EO	FIM	EO	11	30182068	rs1340030	C	T	-3.150646	9.926571	20.162732	2.31E-09
FIM_EO	FIM	EO	2	11724580	rs9789525	T	G	-2.576072	6.636148	20.162429	2.31E-09
FIM_EO	FIM	EO	11	30185486	rs11030987	G	A	-3.155068	9.954454	20.161918	2.31E-09
FIM_EO	FIM	EO	1	169491555	rs2420371	A	G	4.302489	18.511408	20.135062	2.37E-09
FIM_EO	FIM	EO	6	153210935	rs117542246	A	C	-3.225597	10.404478	-20.131512	2.38E-09
FIM_EO	FIM	EO	3	128081260	rs1735545	C	G	3.337793	11.140861	20.087681	2.48E-09
FIM_EO	FIM	EO	8	25243213	rs34068702	G	A	-3.828036	14.653861	20.084439	2.48E-09
FIM_EO	FIM	EO	3	128101344	rs74924715	C	G	4.144502	17.176901	20.015342	2.65E-09
FIM_EO	FIM	EO	11	30220739	rs7925930	T	A	-3.724581	13.872502	19.970153	2.76E-09
FIM_EO	FIM	EO	8	25263294	rs61490611	G	T	-4.766390	22.718473	19.968934	2.77E-09
FIM_EO	FIM	EO	11	30185850	rs72885907	A	G	-3.093598	9.570351	19.964276	2.78E-09
FIM_EO	FIM	EO	11	30181389	rs112245286	GA	G	-3.117068	9.716111	19.944559	2.83E-09
FIM_EO	FIM	EO	11	30165896	rs930321	C	T	-3.141844	9.871185	19.850702	3.09E-09
FIM_EO	FIM	EO	11	30180390	rs1361424	G	A	-3.100545	9.613381	19.838841	3.12E-09
FIM_EO	FIM	EO	3	128077602	rs6785384	T	C	3.296208	10.864987	19.826259	3.16E-09
FIM_EO	FIM	EO	8	25269102	rs1506869	A	C	-4.822778	23.259188	19.823586	3.17E-09
FIM_EO	FIM	EO	3	127815320	rs940060	G	A	-3.451365	11.911921	19.709299	3.52E-09
FIM_EO	FIM	EO	11	30177817	rs3858481	T	C	-3.145462	9.893931	19.681638	3.62E-09
FIM_EO	FIM	EO	11	30177821	rs3858482	C	T	-3.140577	9.863227	19.651075	3.72E-09
FIM_EO	FIM	EO	11	30176879	rs1340032	C	T	-3.112462	9.687417	19.636742	3.77E-09
FIM_EO	FIM	EO	11	30170254	rs3858478	T	C	-3.137531	9.844101	19.632571	3.79E-09
FIM_EO	FIM	EO	8	25311269	rs17053711	A	G	-4.816717	23.200758	19.630342	3.79E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	3	127991149	rs2811413	A	C	-2.798826	7.833429	19.611279	3.86E-09
FIM_EO	FIM	EO	11	30166397	rs10835622	A	G	-3.133888	9.821254	19.609403	3.87E-09
FIM_EO	FIM	EO	3	128084164	rs4277707	T	A	3.105167	9.642062	19.604060	3.89E-09
FIM_EO	FIM	EO	11	30240470	rs521271	A	T	-3.774709	14.248431	19.597183	3.91E-09
FIM_EO	FIM	EO	11	30165710	rs475305	G	A	-3.122622	9.750769	19.574462	4.00E-09
FIM_EO	FIM	EO	11	30177120	rs3858480	C	T	-3.115275	9.704938	19.568531	4.02E-09
FIM_EO	FIM	EO	3	127948958	rs34834087	T	TC	-3.258043	10.614845	19.537658	4.14E-09
FIM_EO	FIM	EO	11	30173187	rs12282309	C	T	-3.118459	9.724789	19.512679	4.23E-09
FIM_EO	FIM	EO	11	30166109	rs930320	C	T	-3.114957	9.702957	19.512493	4.23E-09
FIM_EO	FIM	EO	11	30174438	rs10835629	T	C	-3.118384	9.724317	19.512205	4.23E-09
FIM_EO	FIM	EO	11	30166391	rs637542	G	A	-3.117622	9.719569	19.507810	4.25E-09
FIM_EO	FIM	EO	11	30174019	rs10835628	T	G	-3.117239	9.717177	19.505041	4.26E-09
FIM_EO	FIM	EO	11	30175950	rs11030977	C	G	-3.117192	9.716887	19.504750	4.26E-09
FIM_EO	FIM	EO	11	30176085	rs4512795	A	T	-3.117192	9.716887	19.504750	4.26E-09
FIM_EO	FIM	EO	11	30176106	rs2884134	A	G	-3.117192	9.716887	19.504750	4.26E-09
FIM_EO	FIM	EO	11	30173987	rs10835627	T	G	-3.117184	9.716834	19.504696	4.26E-09
FIM_EO	FIM	EO	11	30176241	rs2226272	G	T	-3.117184	9.716834	19.504696	4.26E-09
FIM_EO	FIM	EO	11	30176743	rs1340033	C	T	-3.117184	9.716834	19.504696	4.26E-09
FIM_EO	FIM	EO	11	30176794	rs1938315	T	A	-3.117184	9.716834	19.504696	4.26E-09
FIM_EO	FIM	EO	11	30163013	rs12272116	C	T	-3.116540	9.712825	19.501226	4.28E-09
FIM_EO	FIM	EO	11	30168320	rs11030971	T	A	-3.116490	9.712511	19.500911	4.28E-09
FIM_EO	FIM	EO	11	30172916	rs1890826	C	A	-3.116358	9.711689	19.499832	4.28E-09
FIM_EO	FIM	EO	11	30174370	rs10501124	T	C	-3.116331	9.711517	19.499360	4.29E-09
FIM_EO	FIM	EO	11	30164732	rs10835621	G	A	-3.115366	9.705506	19.499155	4.29E-09
FIM_EO	FIM	EO	11	30170373	rs3908935	C	T	-3.114458	9.699850	19.495361	4.30E-09
FIM_EO	FIM	EO	11	30163183	rs11030966	T	A	-3.115284	9.704992	19.493361	4.31E-09
FIM_EO	FIM	EO	11	30165272	rs1819675	T	C	-3.115366	9.705506	19.493071	4.31E-09
FIM_EO	FIM	EO	11	30177267	rs7113720	A	G	-3.115284	9.704992	19.492808	4.31E-09
FIM_EO	FIM	EO	11	30162984	rs12291589	A	G	-3.114933	9.702808	19.491168	4.32E-09
FIM_EO	FIM	EO	11	30167113	rs11030968	G	T	-3.114513	9.700193	19.488541	4.33E-09
FIM_EO	FIM	EO	11	30167121	rs11030969	A	G	-3.114513	9.700193	19.488541	4.33E-09
FIM_EO	FIM	EO	11	30168564	rs11030972	C	A	-3.114513	9.700193	19.488541	4.33E-09
FIM_EO	FIM	EO	11	30168871	rs4337008	T	C	-3.114513	9.700193	19.488541	4.33E-09
FIM_EO	FIM	EO	11	30169198	rs3858477	T	C	-3.114513	9.700193	19.488541	4.33E-09
FIM_EO	FIM	EO	11	30171174	rs3847633	G	C	-3.114458	9.699850	19.487643	4.33E-09
FIM_EO	FIM	EO	11	30171615	rs3847635	T	A	-3.114431	9.699679	19.487471	4.33E-09
FIM_EO	FIM	EO	11	30173963	rs10835626	C	T	-3.116358	9.711689	19.487036	4.33E-09
FIM_EO	FIM	EO	11	30167835	rs11030970	T	C	-3.114431	9.699679	19.486641	4.34E-09
FIM_EO	FIM	EO	11	30179949	rs3858484	G	A	-3.112550	9.687969	19.482471	4.35E-09
FIM_EO	FIM	EO	11	30163968	rs10835620	A	G	-3.115110	9.703910	19.481950	4.36E-09
FIM_EO	FIM	EO	11	30176985	rs78330906	T	C	-3.334087	11.116139	19.479895	4.36E-09
FIM_EO	FIM	EO	11	30271433	rs35243946	AG	A	-3.837381	14.725492	19.477448	4.37E-09
FIM_EO	FIM	EO	11	30177840	rs3858483	A	T	-3.112782	9.689409	19.476967	4.38E-09
FIM_EO	FIM	EO	11	30179758	rs3847637	T	C	-3.112550	9.687969	19.475888	4.38E-09
FIM_EO	FIM	EO	11	30178465	rs10835630	C	T	-3.112523	9.687797	19.475532	4.38E-09
FIM_EO	FIM	EO	11	30179203	rs12786317	T	C	-3.112523	9.687797	19.475532	4.38E-09
FIM_EO	FIM	EO	11	30173317	rs7948109	T	C	-3.116303	9.711346	19.467813	4.41E-09
FIM_EO	FIM	EO	11	30166628	rs10835624	C	T	-3.115476	9.706192	19.466311	4.42E-09
FIM_EO	FIM	EO	11	30166240	rs1898174	T	C	-3.115476	9.706192	19.442825	4.52E-09
FIM_EO	FIM	EO	11	30172517	rs778943787	AT	A	-3.127937	9.783989	19.441157	4.52E-09
FIM_EO	FIM	EO	11	30174965	rs6484476	A	C	-3.105002	9.641039	19.428476	4.58E-09
FIM_EO	FIM	EO	11	30170837	rs7114540	G	A	-3.104890	9.640343	19.427430	4.58E-09
FIM_EO	FIM	EO	11	30169574	rs11030974	C	T	-3.104020	9.634941	19.422882	4.60E-09
FIM_EO	FIM	EO	11	30165706	rs7101406	C	T	-3.088108	9.536413	19.357743	4.89E-09
FIM_EO	FIM	EO	11	30177690	rs34811743	CTG	C	-3.093599	9.570352	19.357121	4.89E-09
FIM_EO	FIM	EO	11	30170152	rs588929	T	C	-3.089926	9.547643	19.334691	5.00E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	11	30177010	rs3858479	A	G	-3.088512	9.538909	19.328700	5.02E-09
FIM_EO	FIM	EO	11	30175706	rs2226016	T	C	-3.087895	9.535094	19.324263	5.04E-09
FIM_EO	FIM	EO	11	30174667	rs10501125	C	T	-3.088500	9.538831	19.319574	5.07E-09
FIM_EO	FIM	EO	11	30167587	rs2460713	T	G	-3.086050	9.523705	19.307446	5.12E-09
FIM_EO	FIM	EO	11	30169856	rs663173	A	G	-3.090844	9.553314	19.223573	5.54E-09
FIM_EO	FIM	EO	11	30169998	rs7129554	C	T	-3.068360	9.414833	19.199744	5.67E-09
FIM_EO	FIM	EO	3	128071809	rs1735549	T	A	3.192011	10.188936	19.190645	5.71E-09
FIM_EO	FIM	EO	2	11718858	rs7578132	C	T	2.948903	8.696029	19.171289	5.82E-09
FIM_EO	FIM	EO	2	11736037	rs11679686	G	A	-2.439301	5.950191	19.124698	6.08E-09
FIM_EO	FIM	EO	11	30284949	rs77966083	C	T	3.721804	13.851827	19.060444	6.45E-09
FIM_EO	FIM	EO	3	128109916	rs741925	T	C	3.621764	13.117176	19.053307	6.49E-09
FIM_EO	FIM	EO	11	30243795	rs1782508	G	C	-3.729504	13.909201	19.011278	6.75E-09
FIM_EO	FIM	EO	12	95602319	rs10777675	T	A	-2.342164	5.485734	19.003837	6.80E-09
FIM_EO	FIM	EO	11	30303443	rs4359180	G	A	3.738157	13.973815	18.997489	6.84E-09
FIM_EO	FIM	EO	11	30274776	rs61179368	G	A	3.719022	13.831123	18.941381	7.21E-09
FIM_EO	FIM	EO	11	30279609	rs1933347	C	T	3.707459	13.745253	18.941201	7.21E-09
FIM_EO	FIM	EO	11	30172579	rs1890825	A	G	-3.022599	9.136102	18.920644	7.35E-09
FIM_EO	FIM	EO	2	11718591	rs1529868	T	C	2.592302	6.720027	18.918252	7.36E-09
FIM_EO	FIM	EO	11	30288532	rs140000637	A	G	3.724477	13.871727	18.917354	7.37E-09
FIM_EO	FIM	EO	11	30285107	rs190167777	G	A	3.721849	13.852157	18.914988	7.39E-09
FIM_EO	FIM	EO	11	30290814	rs61886090	T	G	3.708771	13.754982	18.914717	7.39E-09
FIM_EO	FIM	EO	11	30286207	rs141011680	G	T	3.721740	13.851347	18.913736	7.40E-09
FIM_EO	FIM	EO	11	30287896	rs200742291	C	A	3.724358	13.870842	18.910658	7.42E-09
FIM_EO	FIM	EO	11	30282779	rs4267046	C	A	3.719779	13.836758	18.903579	7.47E-09
FIM_EO	FIM	EO	8	25255017	rs12675289	C	A	-4.580843	20.984118	18.902867	7.47E-09
FIM_EO	FIM	EO	11	30297374	rs11031027	C	T	3.716771	13.814387	18.888764	7.57E-09
FIM_EO	FIM	EO	11	30292176	rs11031024	T	G	3.709488	13.760298	18.881043	7.62E-09
FIM_EO	FIM	EO	11	30301607	rs12363576	A	G	3.712154	13.780088	18.865321	7.74E-09
FIM_EO	FIM	EO	11	30301868	rs4923631	C	T	3.711848	13.777817	18.863766	7.75E-09
FIM_EO	FIM	EO	2	11734905	rs13016186	A	G	-2.409112	5.803821	18.860577	7.77E-09
FIM_EO	FIM	EO	11	30280075	rs7924960	T	C	3.706778	13.740200	18.860297	7.77E-09
FIM_EO	FIM	EO	11	30304455	rs11031030	C	T	3.710323	13.766498	18.857688	7.79E-09
FIM_EO	FIM	EO	11	30292350	rs11031025	A	G	3.710083	13.764714	18.856046	7.80E-09
FIM_EO	FIM	EO	11	30302023	rs4923632	A	C	3.712094	13.779639	18.853259	7.83E-09
FIM_EO	FIM	EO	11	30294329	rs10835643	C	T	3.709253	13.758558	18.852318	7.83E-09
FIM_EO	FIM	EO	2	11734909	rs13017593	G	C	-2.406739	5.792394	18.842901	7.90E-09
FIM_EO	FIM	EO	11	30302923	rs11031028	A	G	3.711359	13.774185	18.842443	7.90E-09
FIM_EO	FIM	EO	11	30271406	rs675635	T	C	-3.701086	13.698035	18.839866	7.92E-09
FIM_EO	FIM	EO	11	30295232	rs4923629	T	C	3.709172	13.757954	18.831603	7.98E-09
FIM_EO	FIM	EO	11	30281066	rs11031014	C	T	3.707462	13.745275	18.830985	7.99E-09
FIM_EO	FIM	EO	11	30274837	rs60968445	T	A	3.702576	13.709072	18.830249	7.99E-09
FIM_EO	FIM	EO	11	30282274	rs4244552	T	C	3.705151	13.728145	18.828964	8.00E-09
FIM_EO	FIM	EO	11	30289511	rs7940387	T	C	3.708397	13.752211	18.826853	8.02E-09
FIM_EO	FIM	EO	11	30278829	rs4531442	G	A	3.703965	13.719360	18.821909	8.06E-09
FIM_EO	FIM	EO	11	30287070	rs34609938	A	G	3.706221	13.736070	18.816268	8.10E-09
FIM_EO	FIM	EO	11	30244235	rs653452	T	C	-3.691178	13.624796	18.815974	8.10E-09
FIM_EO	FIM	EO	11	30243868	rs1782507	T	G	-3.691121	13.624373	18.807715	8.16E-09
FIM_EO	FIM	EO	11	30279268	rs1933345	C	G	3.698703	13.680405	18.804760	8.19E-09
FIM_EO	FIM	EO	11	30271845	rs673740	T	C	-3.703126	13.713142	18.803299	8.20E-09
FIM_EO	FIM	EO	11	30290012	rs11031022	A	G	3.703544	13.716236	18.802254	8.21E-09
FIM_EO	FIM	EO	11	30266370	rs642126	A	G	-3.703088	13.712860	18.799485	8.23E-09
FIM_EO	FIM	EO	11	30275141	rs35458722	C	T	3.699640	13.687333	18.799354	8.23E-09
FIM_EO	FIM	EO	3	128122039	rs6780368	T	C	3.559035	12.666733	18.798873	8.23E-09
FIM_EO	FIM	EO	11	30279354	rs1933346	T	C	3.698849	13.681484	18.795084	8.26E-09
FIM_EO	FIM	EO	11	30275351	rs34487664	C	T	3.698037	13.675475	18.790997	8.29E-09
FIM_EO	FIM	EO	11	30267038	rs515997	C	T	-3.698791	13.681057	18.780189	8.38E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	11	30274686	rs60781817	A	G	3.694637	13.650344	18.767522	8.48E-09
FIM_EO	FIM	EO	11	30297809	rs7108615	C	T	3.685299	13.581428	18.752145	8.60E-09
FIM_EO	FIM	EO	11	30286978	rs145052476	A	T	3.690461	13.619500	18.736299	8.73E-09
FIM_EO	FIM	EO	11	30287046	rs79028439	G	A	3.690063	13.616564	18.734279	8.74E-09
FIM_EO	FIM	EO	11	30304726	rs11031032	C	G	3.680703	13.547573	18.728884	8.79E-09
FIM_EO	FIM	EO	11	30293769	rs4267043	A	T	3.678117	13.528548	18.717370	8.88E-09
FIM_EO	FIM	EO	11	30270667	rs689233	A	G	-3.682587	13.561444	18.716215	8.89E-09
FIM_EO	FIM	EO	3	128122396	rs2659685	A	G	3.702085	13.705432	18.700980	9.02E-09
FIM_EO	FIM	EO	11	30288586	rs9732252	T	G	3.679647	13.539801	18.681881	9.18E-09
FIM_EO	FIM	EO	11	30272226	rs645161	C	A	-3.670489	13.472491	18.626837	9.66E-09
FIM_EO	FIM	EO	3	128115381	rs1735527	G	A	3.587100	12.867283	18.588766	1.00E-08
FIM_EO	FIM	EO	11	30352473	rs35824273	CAG	C	-3.645301	13.288219	18.555582	1.03E-08
FIM_EO	FIM	EO	8	25245432	rs931875	A	G	-4.678171	21.885287	18.553356	1.04E-08
FIM_EO	FIM	EO	2	11734880	rs12993278	G	A	-2.366336	5.599544	18.520769	1.07E-08
FIM_EO	FIM	EO	6	152564994	rs17082381	C	G	-2.303830	5.307634	18.499263	1.09E-08
FIM_EO	FIM	EO	6	152564752	rs74636305	A	G	-2.303430	5.305791	18.496931	1.09E-08
FIM_EO	FIM	EO	11	30349694	rs2485398	T	A	-3.596172	12.932456	18.484728	1.10E-08
FIM_EO	FIM	EO	2	11734335	rs9678410	C	A	-2.355218	5.547053	18.424637	1.17E-08
FIM_EO	FIM	EO	6	127455821	rs2489623	C	A	3.331663	11.099976	18.421897	1.17E-08
FIM_EO	FIM	EO	11	30365045	rs1222200	T	C	-3.595707	12.929107	18.396968	1.20E-08
FIM_EO	FIM	EO	11	30356057	rs1222205	G	A	-3.590336	12.890512	18.341523	1.26E-08
FIM_EO	FIM	EO	11	30350185	rs1717774	C	G	-3.577529	12.798716	18.320600	1.29E-08
FIM_EO	FIM	EO	3	127857144	rs76464926	C	T	3.559323	12.668782	18.303440	1.31E-08
FIM_EO	FIM	EO	11	30361670	rs1222209	A	C	-3.579831	12.815187	18.299218	1.31E-08
FIM_EO	FIM	EO	11	30340725	rs2786257	A	G	-3.594924	12.923481	18.289522	1.32E-08
FIM_EO	FIM	EO	11	30314585	rs12793271	A	G	3.600206	12.961481	18.278048	1.34E-08
FIM_EO	FIM	EO	11	30312519	rs35665615	A	C	3.600196	12.961410	18.277998	1.34E-08
FIM_EO	FIM	EO	11	30319432	rs61626579	T	C	3.598272	12.947562	18.257822	1.36E-08
FIM_EO	FIM	EO	6	127439297	rs2800709	G	T	3.191308	10.184447	18.255604	1.37E-08
FIM_EO	FIM	EO	6	152567983	rs75730028	G	A	-2.306459	5.319751	18.253346	1.37E-08
FIM_EO	FIM	EO	11	30328026	rs55715542	T	C	3.598809	12.951423	18.250282	1.37E-08
FIM_EO	FIM	EO	11	30327162	rs12361937	A	G	3.603018	12.981741	18.250273	1.37E-08
FIM_EO	FIM	EO	11	30327981	rs59475325	T	C	3.601734	12.972491	18.243769	1.38E-08
FIM_EO	FIM	EO	3	128117573	rs1702153	A	G	3.552409	12.619612	18.238011	1.39E-08
FIM_EO	FIM	EO	11	30312743	rs12805098	C	T	3.591155	12.896392	18.232097	1.40E-08
FIM_EO	FIM	EO	11	30333224	rs1222204	C	T	-3.598437	12.948752	18.226863	1.40E-08
FIM_EO	FIM	EO	11	30336613	rs1222202	A	G	-3.598002	12.945620	18.224658	1.41E-08
FIM_EO	FIM	EO	11	30336334	rs1222203	G	A	-3.597948	12.945228	18.224383	1.41E-08
FIM_EO	FIM	EO	11	30330963	rs7125524	A	G	3.597765	12.943913	18.223663	1.41E-08
FIM_EO	FIM	EO	11	30318720	rs11031041	C	G	3.590991	12.895220	18.217322	1.42E-08
FIM_EO	FIM	EO	8	25320594	rs12675625	C	T	-4.624815	21.388913	18.203232	1.43E-08
FIM_EO	FIM	EO	3	128111201	rs1702134	T	G	3.473901	12.067990	18.196666	1.44E-08
FIM_EO	FIM	EO	3	127988219	rs4470541	T	C	3.545404	12.569888	18.175032	1.47E-08
FIM_EO	FIM	EO	3	128112307	rs1620440	C	T	3.467234	12.021711	18.171362	1.48E-08
FIM_EO	FIM	EO	1	169514006	rs1018827	G	A	4.180882	17.479775	18.168743	1.48E-08
FIM_EO	FIM	EO	3	128110390	rs1702131	C	T	3.471626	12.052186	18.158707	1.50E-08
FIM_EO	FIM	EO	8	25310042	rs11995050	C	A	4.618878	21.334039	18.135858	1.53E-08
FIM_EO	FIM	EO	11	30363727	rs1765141	G	A	-3.538844	12.523414	18.103668	1.57E-08
FIM_EO	FIM	EO	3	128109941	rs3887841	C	T	3.626727	13.153147	18.097338	1.58E-08
FIM_EO	FIM	EO	2	11734315	rs9798272	C	T	-2.322760	5.395215	18.096174	1.59E-08
FIM_EO	FIM	EO	2	11728381	rs6746291	C	T	-2.323601	5.399124	18.088546	1.60E-08
FIM_EO	FIM	EO	11	30344761	rs1222218	G	A	-3.569531	12.741549	18.081750	1.61E-08
FIM_EO	FIM	EO	11	30344799	rs1222217	G	A	-3.569123	12.738636	18.079990	1.61E-08
FIM_EO	FIM	EO	3	128064118	rs4857879	C	A	2.519059	6.345657	18.079547	1.61E-08
FIM_EO	FIM	EO	11	30343925	rs1222220	A	C	-3.563314	12.697206	18.072114	1.62E-08
FIM_EO	FIM	EO	8	25321845	rs35698191	A	T	-4.623525	21.376981	18.047193	1.66E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	6	127476717	rs2489629	T	C	3.459842	11.970510	18.016732	1.71E-08
FIM_EO	FIM	EO	6	127486617	rs2489630	T	C	3.454685	11.934848	17.996479	1.74E-08
FIM_EO	FIM	EO	11	30315071	rs61886116	T	G	3.545038	12.567296	17.985045	1.76E-08
FIM_EO	FIM	EO	11	30365566	rs1228479	T	C	-3.509017	12.313200	17.975884	1.77E-08
FIM_EO	FIM	EO	2	11731846	rs2884374	C	T	-2.306609	5.320445	17.949336	1.82E-08
FIM_EO	FIM	EO	2	11727507	rs13394619	A	G	-2.312305	5.346752	17.948879	1.82E-08
FIM_EO	FIM	EO	2	11735115	rs12473442	C	T	-2.290287	5.245413	17.948424	1.82E-08
FIM_EO	FIM	EO	6	127490599	rs2489631	A	C	3.445086	11.868619	17.931205	1.85E-08
FIM_EO	FIM	EO	6	152570274	rs17215781	G	A	-2.245287	5.041314	17.918742	1.87E-08
FIM_EO	FIM	EO	2	11735135	rs11686429	T	A	-2.277261	5.185920	17.901190	1.90E-08
FIM_EO	FIM	EO	6	153495323	rs9478393	G	C	-3.667749	13.452380	-17.892195	1.92E-08
FIM_EO	FIM	EO	8	25275495	rs12155980	A	C	4.587884	21.048677	17.882705	1.94E-08
FIM_EO	FIM	EO	6	127474331	rs2489628	T	G	3.428213	11.752647	17.835942	2.02E-08
FIM_EO	FIM	EO	2	11727988	rs4669752	C	G	-2.292565	5.255854	17.821891	2.05E-08
FIM_EO	FIM	EO	3	128110770	rs729847	A	G	3.578395	12.804911	17.794318	2.10E-08
FIM_EO	FIM	EO	6	153493694	rs9479532	A	C	-3.648108	13.308692	-17.784457	2.12E-08
FIM_EO	FIM	EO	6	153475561	rs9322410	A	C	-4.318102	18.646003	-17.774890	2.14E-08
FIM_EO	FIM	EO	6	127496512	rs2503323	G	A	3.417310	11.678006	17.762062	2.17E-08
FIM_EO	FIM	EO	6	127501926	rs2503326	C	T	3.404041	11.587494	17.733139	2.23E-08
FIM_EO	FIM	EO	2	11724684	rs9789414	G	A	-2.420930	5.860900	17.728194	2.24E-08
FIM_EO	FIM	EO	3	128119565	rs760383	G	A	3.554911	12.637396	17.710728	2.27E-08
FIM_EO	FIM	EO	6	127448249	rs1936807	G	C	3.146186	9.898489	17.651990	2.40E-08
FIM_EO	FIM	EO	3	127719920	rs72967027	C	T	2.447231	5.988937	17.610758	2.49E-08
FIM_EO	FIM	EO	6	127452935	rs2745353	T	C	3.141618	9.869763	17.602718	2.51E-08
FIM_EO	FIM	EO	6	127452581	rs2800710	C	T	3.137418	9.843394	17.576343	2.58E-08
FIM_EO	FIM	EO	6	127452426	rs1967685	G	C	3.136318	9.836490	17.569780	2.59E-08
FIM_EO	FIM	EO	2	11722468	rs11679605	A	G	-3.733204	13.936815	17.567094	2.60E-08
FIM_EO	FIM	EO	6	127455029	rs2186037	G	A	3.135394	9.830693	17.564944	2.60E-08
FIM_EO	FIM	EO	6	127452116	rs1936805	T	C	3.134030	9.822145	17.559824	2.62E-08
FIM_EO	FIM	EO	2	11731774	rs2358040	G	T	-2.267752	5.142698	17.553827	2.63E-08
FIM_EO	FIM	EO	6	151819857	rs115429675	T	C	1.971114	3.885290	17.548844	2.64E-08
FIM_EO	FIM	EO	6	127449246	rs1474696	G	A	3.125341	9.767754	17.534995	2.68E-08
FIM_EO	FIM	EO	3	128118711	rs1702136	A	G	3.556179	12.646412	17.520631	2.71E-08
FIM_EO	FIM	EO	3	127923177	rs7653755	G	A	3.398022	11.546550	17.510409	2.74E-08
FIM_EO	FIM	EO	6	127449447	rs2745352	G	A	3.126971	9.777947	17.472026	2.84E-08
FIM_EO	FIM	EO	1	169032877	rs114964168	T	C	-3.077716	9.472338	17.465179	2.86E-08
FIM_EO	FIM	EO	2	11721535	rs11674184	G	T	-2.336166	5.457670	17.440145	2.93E-08
FIM_EO	FIM	EO	3	127867592	rs73192977	G	T	2.501680	6.258401	17.422044	2.98E-08
FIM_EO	FIM	EO	3	127869165	rs4857870	A	G	2.502331	6.261661	17.422002	2.98E-08
FIM_EO	FIM	EO	3	127878330	rs2999047	G	A	2.499038	6.245192	17.403767	3.03E-08
FIM_EO	FIM	EO	3	127870929	rs10934849	G	C	2.497893	6.239468	17.395672	3.05E-08
FIM_EO	FIM	EO	3	127878064	rs2955115	T	C	2.493311	6.216601	17.363766	3.14E-08
FIM_EO	FIM	EO	3	127877756	rs2955114	C	A	2.492695	6.213531	17.359595	3.15E-08
FIM_EO	FIM	EO	3	127878871	rs2811472	G	A	2.492263	6.211373	17.356464	3.16E-08
FIM_EO	FIM	EO	3	127872175	rs11920225	G	C	2.493057	6.215333	17.355815	3.17E-08
FIM_EO	FIM	EO	3	127877385	rs2492284	C	T	2.491739	6.208761	17.352813	3.17E-08
FIM_EO	FIM	EO	6	127468188	rs2503111	A	G	3.345666	11.193483	17.346117	3.19E-08
FIM_EO	FIM	EO	3	127872796	rs2999046	T	C	2.489735	6.198779	17.338976	3.22E-08
FIM_EO	FIM	EO	6	153496718	rs4870173	G	T	-3.615350	13.070757	-17.280963	3.39E-08
FIM_EO	FIM	EO	6	127509157	rs7745274	A	G	3.391470	11.502070	17.270292	3.43E-08
FIM_EO	FIM	EO	6	153496654	rs4869781	T	G	-3.613107	13.054543	-17.270048	3.43E-08
FIM_EO	FIM	EO	3	128122820	rs1735537	C	T	3.499086	12.243602	17.253273	3.48E-08
FIM_EO	FIM	EO	6	153499921	rs4869783	C	T	-3.600170	12.961225	-17.206200	3.64E-08
FIM_EO	FIM	EO	3	127826618	rs11924142	T	C	-2.362351	5.580702	17.174400	3.75E-08
FIM_EO	FIM	EO	3	128059610	rs1735558	A	G	2.468948	6.095703	17.173088	3.75E-08
FIM_EO	FIM	EO	6	153496061	rs9479534	T	A	-3.609797	13.030631	-17.163491	3.79E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EO	FIM	EO	3	127721333	rs58170120	A	T	2.310295	5.337463	17.077096	4.11E-08
FIM_EO	FIM	EO	3	127861822	rs2955093	A	C	2.446126	5.983533	17.044035	4.24E-08
FIM_EO	FIM	EO	3	127854684	rs2811471	A	G	-2.441800	5.962388	17.005958	4.39E-08
FIM_EO	FIM	EO	3	127759668	rs1469657	T	C	-2.371167	5.622432	16.909177	4.80E-08
FIM_EO	FIM	EO	6	127528104	rs6914968	T	C	3.947636	15.583831	16.904960	4.82E-08
FIM_EO	FIM	EO	3	127747841	rs6764517	G	A	-2.372668	5.629553	16.900633	4.84E-08
FIM_EO	FIM	EO	3	127757422	rs2217629	G	A	-2.371173	5.622460	16.889870	4.89E-08
FIM_EPP	FIM	EPP	1	22367073	rs72665317	G	T	2.064801	4.263405	18.284024	9.73E-09
FIM_EPP	FIM	EPP	1	22371065	rs10917130	G	T	2.100094	4.410397	18.635107	6.97E-09
FIM_EPP	FIM	EPP	1	22422721	rs10917151	A	G	1.941792	3.770556	17.299420	2.48E-08
FIM_EPP	FIM	EPP	1	22436446	rs7412010	C	G	2.004337	4.017367	17.726650	1.65E-08
FIM_EPP	FIM	EPP	1	22462111	rs12037376	A	G	2.014040	4.056356	17.115275	2.96E-08
FIM_EPP	FIM	EPP	1	169090748	rs145163454	C	T	-4.852133	23.543197	19.285433	3.76E-09
FIM_EPP	FIM	EPP	1	169115022	rs77979353	C	T	-4.683240	21.932739	16.603675	4.81E-08
FIM_EPP	FIM	EPP	1	169160458	rs144737447	T	C	-5.024991	25.250532	19.888699	2.12E-09
FIM_EPP	FIM	EPP	1	169208179	rs2227246	T	C	4.807858	23.115501	19.107786	4.45E-09
FIM_EPP	FIM	EPP	1	169216412	rs2040445	G	C	4.870923	23.725895	19.197470	4.09E-09
FIM_EPP	FIM	EPP	1	169324793	rs1209731	C	T	4.899116	24.001335	20.004201	1.90E-09
FIM_EPP	FIM	EPP	1	169435027	rs2678166	T	C	4.041069	16.330235	16.860127	3.77E-08
FIM_EPP	FIM	EPP	1	169467654	rs1894692	A	G	5.028528	25.286098	20.968430	7.62E-10
FIM_EPP	FIM	EPP	11	30125619	rs11030946	C	G	-3.879108	15.047478	18.488264	8.01E-09
FIM_EPP	FIM	EPP	11	30214713	rs961605	A	G	-4.205246	17.684097	17.292554	2.50E-08
FIM_EPP	FIM	EPP	11	30215261	rs11031002	A	T	-5.142511	26.445416	36.936436	2.20E-16
FIM_EPP	FIM	EPP	11	30216006	rs632939	C	T	-4.179481	17.468059	17.140106	2.89E-08
FIM_EPP	FIM	EPP	11	30217003	rs574096	T	A	-4.149563	17.218871	17.103300	2.99E-08
FIM_EPP	FIM	EPP	11	30222637	rs622744	C	T	-4.150469	17.226394	17.103617	2.99E-08
FIM_EPP	FIM	EPP	11	30223861	rs606651	A	C	-4.125417	17.019067	16.962658	3.42E-08
FIM_EPP	FIM	EPP	11	30223866	rs606642	A	G	-4.133794	17.088249	16.997100	3.31E-08
FIM_EPP	FIM	EPP	11	30225170	rs1716021	C	G	-4.149399	17.217508	17.084783	3.04E-08
FIM_EPP	FIM	EPP	11	30226356	rs11031005	C	T	-5.786773	33.486742	48.064806	6.52E-21
FIM_EPP	FIM	EPP	11	30226528	rs11031006	A	G	-5.783214	33.445562	48.010403	6.86E-21
FIM_EPP	FIM	EPP	11	30232381	rs494779	T	C	-4.335828	18.799402	16.897997	3.64E-08
FIM_EPP	FIM	EPP	11	30232615	rs492828	A	G	-4.335756	18.798780	16.807152	3.96E-08
FIM_EPP	FIM	EPP	11	30234394	rs601681	T	C	-4.314762	18.617174	16.724823	4.29E-08
FIM_EPP	FIM	EPP	11	30234432	rs601640	A	G	-4.333276	18.777277	16.756591	4.16E-08
FIM_EPP	FIM	EPP	11	30234606	rs600768	T	C	-4.304825	18.531519	16.683478	4.46E-08
FIM_EPP	FIM	EPP	11	30234703	rs600333	A	G	-4.323178	18.689866	16.732804	4.25E-08
FIM_EPP	FIM	EPP	11	30234782	rs540948	C	T	-4.330666	18.754666	16.762094	4.14E-08
FIM_EPP	FIM	EPP	11	30235497	rs586326	A	G	-4.319667	18.659525	16.787163	4.04E-08
FIM_EPP	FIM	EPP	11	30236544	rs555621	C	T	-4.334414	18.787143	16.895865	3.64E-08
FIM_EPP	FIM	EPP	11	30237518	rs664147	T	C	-4.313607	18.607203	16.763636	4.13E-08
FIM_EPP	FIM	EPP	11	30238832	rs621448	A	T	-4.335070	18.792836	16.660256	4.56E-08
FIM_EPP	FIM	EPP	11	30240178	rs11031010	A	C	-5.334698	28.459001	34.779083	1.67E-15
FIM_EPP	FIM	EPP	11	30242287	rs74485684	C	T	-5.876721	34.535853	46.454661	2.94E-20
FIM_EPP	FIM	EPP	11	30252352	rs10835638	T	G	-5.254364	27.608339	31.890333	2.53E-14
FIM_EPP	FIM	EPP	11	30261968	rs7951733	G	A	-3.653458	13.347755	22.665699	1.53E-10
FIM_EPP	FIM	EPP	11	30296055	rs12364889	C	T	-5.353090	28.655576	34.940041	1.44E-15
FIM_EPP	FIM	EPP	11	30305675	rs11031033	T	C	-5.344209	28.560566	34.867471	1.54E-15
FIM_EPP	FIM	EPP	11	30306439	rs11031034	T	C	-5.340565	28.521635	34.721893	1.77E-15
FIM_EPP	FIM	EPP	11	30306650	rs11031035	T	A	-5.340422	28.520110	34.842767	1.58E-15
FIM_EPP	FIM	EPP	11	30307989	rs75525300	G	A	-5.928626	35.148601	46.766324	2.20E-20
FIM_EPP	FIM	EPP	11	30308159	rs4120817	T	C	-5.358454	28.713026	34.919313	1.47E-15
FIM_EPP	FIM	EPP	11	30309827	rs10835644	T	C	-5.357411	28.701856	34.953610	1.42E-15
FIM_EPP	FIM	EPP	11	30309869	rs10835645	T	C	-5.357411	28.701856	34.953610	1.42E-15
FIM_EPP	FIM	EPP	11	30309905	rs10835646	T	C	-5.357486	28.702653	34.955159	1.42E-15
FIM_EPP	FIM	EPP	11	30312187	rs12281078	G	A	-5.352966	28.654246	34.924608	1.46E-15

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EPP	FIM	EPP	11	30312239	rs12294258	T	C	-5.352351	28.647663	34.920595	1.46E-15
FIM_EPP	FIM	EPP	11	30314858	rs11031039	A	C	-5.353790	28.663067	34.929983	1.45E-15
FIM_EPP	FIM	EPP	11	30316822	rs12278989	G	A	-5.938650	35.267563	46.842418	2.05E-20
FIM_EPP	FIM	EPP	11	30317733	rs11031040	G	T	-5.938608	35.267064	46.839960	2.05E-20
FIM_EPP	FIM	EPP	11	30319259	rs12271187	A	G	-5.938734	35.268561	46.843081	2.05E-20
FIM_EPP	FIM	EPP	11	30319433	rs12271300	A	G	-5.937755	35.256938	46.853350	2.03E-20
FIM_EPP	FIM	EPP	11	30325865	rs7123626	A	G	-5.352053	28.644474	34.993196	1.37E-15
FIM_EPP	FIM	EPP	11	30327006	rs12361594	A	G	-5.352104	28.645017	34.769632	1.69E-15
FIM_EPP	FIM	EPP	11	30329175	rs10835649	G	A	-5.938419	35.264819	46.956053	1.84E-20
FIM_EPP	FIM	EPP	11	30336002	rs4071563	A	G	-5.940183	35.285768	46.946604	1.86E-20
FIM_EPP	FIM	EPP	11	30337523	rs11031047	T	C	-5.938385	35.264414	46.955783	1.84E-20
FIM_EPP	FIM	EPP	11	30338842	rs7947350	G	A	-5.942513	35.313464	46.988428	1.79E-20
FIM_EPP	FIM	EPP	11	30339461	rs7929660	G	A	-5.939653	35.279484	46.965815	1.82E-20
FIM_EPP	FIM	EPP	11	30342150	rs12363824	A	G	-5.936479	35.241780	46.940712	1.87E-20
FIM_EPP	FIM	EPP	11	30342495	rs6484479	A	G	-5.937805	35.257531	46.951201	1.85E-20
FIM_EPP	FIM	EPP	11	30343757	rs3858429	T	C	-5.928399	35.145910	46.876821	1.98E-20
FIM_EPP	FIM	EPP	11	30344591	rs4071558	T	C	-5.925521	35.111796	46.855978	2.02E-20
FIM_EPP	FIM	EPP	11	30344725	rs4071559	T	C	-5.926821	35.127209	46.866847	2.00E-20
FIM_EPP	FIM	EPP	11	30349487	rs10616649	C	CACTCTA	-5.759285	33.169361	45.619719	6.43E-20
FIM_EPP	FIM	EPP	11	30353881	rs77055031	G	A	-3.256950	10.607722	20.354970	1.36E-09
FIM_EPP	FIM	EPP	11	30354857	rs12278547	C	T	-5.272955	27.804054	34.597501	1.98E-15
FIM_EPP	FIM	EPP	11	30354895	rs7118949	G	A	-5.198392	27.023281	34.108271	3.14E-15
FIM_EPP	FIM	EPP	11	30354904	rs7121963	C	A	-5.218373	27.231418	34.239373	2.78E-15
FIM_EPP	FIM	EPP	11	30355197	rs7122449	T	C	-5.218074	27.228296	34.237409	2.78E-15
FIM_EPP	FIM	EPP	11	30355857	rs11512201	T	C	-5.219417	27.242312	34.252047	2.75E-15
FIM_EPP	FIM	EPP	11	30355903	rs10835655	T	C	-5.219852	27.246857	34.249077	2.75E-15
FIM_EPP	FIM	EPP	11	30356420	rs12272134	C	T	-5.218581	27.233587	34.240736	2.78E-15
FIM_EPP	FIM	EPP	11	30359231	rs7116893	G	A	-5.222542	27.274941	34.260238	2.72E-15
FIM_EPP	FIM	EPP	11	30359892	rs7117691	G	A	-5.222274	27.272143	34.265245	2.71E-15
FIM_EPP	FIM	EPP	11	30360026	rs12278112	C	T	-5.222284	27.272246	34.265309	2.71E-15
FIM_EPP	FIM	EPP	11	30360225	rs14140248	A	G	-5.266462	27.735619	34.555178	2.07E-15
FIM_EPP	FIM	EPP	11	30360794	rs11031052	T	C	-5.222438	27.273855	34.266320	2.71E-15
FIM_EPP	FIM	EPP	11	30363545	rs12285277	C	T	-5.183505	26.868724	34.032936	3.37E-15
FIM_EPP	FIM	EPP	11	30364183	rs563036352	T	TCTGGCCTTAG	-5.181146	26.844278	34.157646	3.00E-15
FIM_EPP	FIM	EPP	11	30364200	rs201665955	C	CAA	-5.155610	26.580319	33.989296	3.52E-15
FIM_EPP	FIM	EPP	11	30365903	rs67286303	A	AAAT	-5.121830	26.233138	33.432472	5.93E-15
FIM_EPP	FIM	EPP	11	30366528	rs11031056	A	T	-5.170073	26.729650	33.952899	3.64E-15
FIM_EPP	FIM	EPP	11	30369162	rs150144805	GA	G	-5.160265	26.628331	33.846458	4.02E-15
FIM_EPP	FIM	EPP	11	30370218	rs12365913	G	A	-5.166899	26.696847	33.941551	3.68E-15
FIM_EPP	FIM	EPP	11	30371313	rs10835658	T	C	-5.162446	26.650854	33.996298	3.49E-15
FIM_EPP	FIM	EPP	11	30371615	rs12363432	T	C	-5.161707	26.643221	33.993077	3.50E-15
FIM_EPP	FIM	EPP	11	30372818	rs74331022	T	C	-5.165417	26.681530	34.023031	3.41E-15
FIM_EPP	FIM	EPP	11	30374608	rs7949790	G	A	-5.130275	26.319718	32.854500	1.02E-14
FIM_EPP	FIM	EPP	11	30375889	rs11031058	T	C	-5.122018	26.235064	32.805718	1.07E-14
FIM_EPP	FIM	EPP	11	30376314	rs76959488	A	T	-5.123417	26.249405	32.816666	1.06E-14
FIM_EPP	FIM	EPP	11	30376902	rs10835660	C	A	-5.118966	26.203817	32.788131	1.09E-14
FIM_EPP	FIM	EPP	11	30381076	rs10835661	C	T	-4.961028	24.611796	27.958614	1.03E-12
FIM_EPP	FIM	EPP	11	30382899	rs12294104	T	C	-4.965040	24.651623	27.972507	1.01E-12
FIM_EPP	FIM	EPP	11	30395448	rs80268871	T	G	-4.230581	17.897813	29.137050	3.38E-13
FIM_EPP	FIM	EPP	11	30395871	rs12223987	T	C	-4.797008	23.011289	26.577037	3.79E-12
FIM_EPP	FIM	EPP	12	95610220	rs7310833	A	G	2.651683	7.031422	19.184403	4.14E-09
FIM_EPP	FIM	EPP	12	95611185	rs6538618	C	T	2.634178	6.938893	18.985214	5.00E-09
FIM_EPP	FIM	EPP	12	95614953	rs10859853	C	T	2.630432	6.919175	17.206199	2.71E-08
FIM_EPP	FIM	EPP	12	95617829	rs10777677	G	A	2.594092	6.729313	16.977272	3.37E-08
FIM_EPP	FIM	EPP	12	95627237	rs6538622	G	A	2.665123	7.102879	19.190276	4.11E-09
FIM_EPP	FIM	EPP	12	95628466	rs10777678	T	A	2.616950	6.848428	17.099170	3.00E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EPP	FIM	EPP	12	95630035	rs9739396	A	C	2.585296	6.683756	16.915989	3.57E-08
FIM_EPP	FIM	EPP	12	95630044	rs9739397	G	C	2.585276	6.683653	16.915859	3.57E-08
FIM_EPP	FIM	EPP	12	95631276	rs10859856	C	T	2.658233	7.066205	19.136870	4.33E-09
FIM_EPP	FIM	EPP	12	95631556	rs10859857	C	G	2.588007	6.697783	16.933730	3.51E-08
FIM_EPP	FIM	EPP	12	95639676	rs10859858	C	T	2.593484	6.726162	16.955614	3.44E-08
FIM_EPP	FIM	EPP	12	95642168	rs10161330	G	A	2.683096	7.199006	17.555911	1.94E-08
FIM_EPP	FIM	EPP	12	95643298	rs7967229	T	A	2.662619	7.089538	19.173164	4.18E-09
FIM_EPP	FIM	EPP	12	95645385	rs12320196	G	A	2.682813	7.197488	19.317769	3.64E-09
FIM_EPP	FIM	EPP	12	95647235	rs7954978	G	A	2.623872	6.884702	17.168395	2.81E-08
FIM_EPP	FIM	EPP	12	95649013	rs4762308	A	G	2.694947	7.262737	19.462409	3.18E-09
FIM_EPP	FIM	EPP	12	95658282	rs10777679	G	A	2.710491	7.346761	19.519066	3.01E-09
FIM_EPP	FIM	EPP	12	95658769	rs7957257	T	A	2.646681	7.004918	17.323467	2.43E-08
FIM_EPP	FIM	EPP	12	95659012	rs1038652	T	C	2.646681	7.004918	17.323609	2.42E-08
FIM_EPP	FIM	EPP	12	95661809	rs10859863	C	T	2.732103	7.464384	19.678495	2.59E-09
FIM_EPP	FIM	EPP	12	95667337	rs4471514	T	C	2.718518	7.390342	19.580182	2.84E-09
FIM_EPP	FIM	EPP	12	95668437	rs3816838	T	G	2.651869	7.032410	17.357427	2.35E-08
FIM_EPP	FIM	EPP	12	95668951	rs4762326	T	C	2.719374	7.394995	19.575413	2.85E-09
FIM_EPP	FIM	EPP	12	95672642	rs11107959	C	T	2.711426	7.351834	19.527406	2.99E-09
FIM_EPP	FIM	EPP	12	95673184	rs7967299	A	G	2.651803	7.032057	17.345156	2.38E-08
FIM_EPP	FIM	EPP	12	95675407	rs4762166	C	T	2.660311	7.077254	17.397593	2.26E-08
FIM_EPP	FIM	EPP	12	95676053	rs3215007	TG	T	2.728629	7.445416	19.670887	2.61E-09
FIM_EPP	FIM	EPP	12	95678387	rs12371088	G	A	2.676529	7.163809	17.495216	2.06E-08
FIM_EPP	FIM	EPP	12	95679109	rs12423799	A	G	2.682733	7.197056	17.535766	1.98E-08
FIM_EPP	FIM	EPP	12	95687497	rs7309252	T	A	2.713566	7.363441	19.452864	3.21E-09
FIM_EPP	FIM	EPP	12	95696420	rs3596	G	A	2.641134	6.975589	19.010007	4.88E-09
FIM_EPP	FIM	EPP	12	95699240	rs7966079	C	T	2.651515	7.030534	19.085338	4.54E-09
FIM_EPP	FIM	EPP	2	11718858	rs7578132	C	T	2.948903	8.696029	17.090675	3.03E-08
FIM_EPP	FIM	EPP	2	11733488	rs57439315	T	G	-2.831418	8.016931	16.577622	4.93E-08
FIM_EPP	FIM	EPP	2	11733545	rs10693974	AACTC	A	-2.926331	8.563413	17.141880	2.88E-08
FIM_EPP	FIM	EPP	2	11735061	rs28689909	A	C	-2.909630	8.465946	17.170041	2.81E-08
FIM_EPP	FIM	EPP	2	11739368	rs10929760	T	G	-3.177865	10.098825	17.011421	3.26E-08
FIM_EPP	FIM	EPP	2	11742458	rs72772088	G	A	-3.218833	10.360886	17.010189	3.27E-08
FIM_EPP	FIM	EPP	2	11742854	rs62118315	A	C	-3.704019	13.719756	17.091748	3.02E-08
FIM_EPP	FIM	EPP	2	11744694	rs746579	T	C	-3.699896	13.689231	17.111394	2.97E-08
FIM_EPP	FIM	EPP	3	127815320	rs940060	G	A	-3.451365	11.911921	17.917955	1.38E-08
FIM_EPP	FIM	EPP	3	127857144	rs76464926	C	T	3.559323	12.668782	16.805558	3.97E-08
FIM_EPP	FIM	EPP	3	127988219	rs4470541	T	C	3.545404	12.569888	16.651533	4.60E-08
FIM_EPP	FIM	EPP	3	128063879	rs139071297	G	C	4.248654	18.051062	18.572242	7.40E-09
FIM_EPP	FIM	EPP	3	128075398	rs1735546	G	T	3.686429	13.589761	16.861275	3.76E-08
FIM_EPP	FIM	EPP	3	128083332	rs1702122	G	A	3.995779	15.966247	18.187761	1.07E-08
FIM_EPP	FIM	EPP	3	128092102	rs1735538	G	A	3.992496	15.940025	18.180729	1.07E-08
FIM_EPP	FIM	EPP	3	128094493	rs1702119	C	T	4.016699	16.133870	18.314056	9.46E-09
FIM_EPP	FIM	EPP	3	128101344	rs74924715	C	G	4.144502	17.176901	19.141528	4.31E-09
FIM_EPP	FIM	EPP	3	128105972	rs2999033	A	G	3.695142	13.654077	18.407839	8.65E-09
FIM_EPP	FIM	EPP	3	128106267	rs2977562	G	A	4.130246	17.058930	18.995375	4.95E-09
FIM_EPP	FIM	EPP	3	128106536	rs2977561	C	T	4.152072	17.239704	19.057506	4.67E-09
FIM_EPP	FIM	EPP	3	128107020	rs7373685	C	A	4.136058	17.106972	18.987240	4.99E-09
FIM_EPP	FIM	EPP	3	128107982	rs1625296	A	G	4.191940	17.572357	19.154248	4.26E-09
FIM_EPP	FIM	EPP	3	128109916	rs741925	T	C	3.621764	13.117176	17.198268	2.73E-08
FIM_EPP	FIM	EPP	3	128109941	rs3887841	C	T	3.626727	13.153147	16.928851	3.53E-08
FIM_EPP	FIM	EPP	3	128110770	rs729847	A	G	3.578395	12.804911	16.749208	4.19E-08
FIM_EPP	FIM	EPP	3	128111174	rs4241495	C	T	4.223621	17.838971	19.455878	3.20E-09
FIM_EPP	FIM	EPP	3	128114587	rs7632169	C	T	4.224252	17.844308	19.439825	3.25E-09
FIM_EPP	FIM	EPP	3	128115381	rs1735527	G	A	3.587100	12.867283	17.522235	2.01E-08
FIM_EPP	FIM	EPP	3	128117573	rs1702153	A	G	3.552409	12.619612	16.914605	3.58E-08
FIM_EPP	FIM	EPP	3	128118711	rs1702136	A	G	3.556179	12.646412	16.746861	4.20E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
FIM_EPP	FIM	EPP	3	128119565	rs760383	G	A	3.554911	12.637396	16.668083	4.52E-08
FIM_EPP	FIM	EPP	3	128122039	rs6780368	T	C	3.559035	12.666733	17.287705	2.51E-08
FIM_EPP	FIM	EPP	6	151762344	rs73783018	G	A	2.388310	5.704026	17.988696	1.29E-08
FIM_EPP	FIM	EPP	6	151764648	rs59753385	G	A	2.382312	5.675411	17.946435	1.34E-08
FIM_EPP	FIM	EPP	6	151764723	rs7748822	G	C	2.384357	5.685160	17.961842	1.32E-08
FIM_EPP	FIM	EPP	6	151765296	rs3823311	C	T	2.377910	5.654456	17.913273	1.38E-08
FIM_EPP	FIM	EPP	6	151765356	rs3800277	T	G	2.378347	5.656533	17.916563	1.38E-08
FIM_EPP	FIM	EPP	6	151767483	rs76363440	G	A	2.418674	5.849984	18.309595	9.50E-09
FIM_EPP	FIM	EPP	6	151769132	rs7741193	A	G	2.439559	5.951447	18.388229	8.81E-09
FIM_EPP	FIM	EPP	6	151826249	rs7740302	C	T	2.330352	5.430540	20.842878	8.58E-10
FIM_EPP	FIM	EPP	6	151830769	rs4870024	C	T	2.235921	4.999341	19.853658	2.19E-09
FIM_EPP	FIM	EPP	6	151838245	rs7759516	C	T	2.096737	4.396306	18.504398	7.89E-09
FIM_EPP	FIM	EPP	6	151841594	rs7775980	G	A	2.119752	4.493349	18.714611	6.46E-09
FIM_EPP	FIM	EPP	6	151842860	rs9371529	T	A	2.158813	4.660475	19.064931	4.63E-09
FIM_EPP	FIM	EPP	6	152638239	rs931423	C	T	1.962665	3.852052	-16.795253	4.01E-08
FIM_EPP	FIM	EPP	8	25243213	rs34068702	G	A	-3.828036	14.653861	17.336748	2.39E-08
FIM_EPP	FIM	EPP	8	25245432	rs931875	A	G	-4.678171	21.885287	19.344826	3.55E-09
FIM_EPP	FIM	EPP	8	25247181	rs4872310	A	G	-4.289010	18.395608	19.873935	2.15E-09
FIM_EPP	FIM	EPP	8	25248615	rs13261573	A	G	-4.297363	18.467329	20.265483	1.48E-09
FIM_EPP	FIM	EPP	8	25255017	rs12675289	C	A	-4.580843	20.984118	19.034935	4.77E-09
FIM_EPP	FIM	EPP	8	25263294	rs61490611	G	T	-4.766390	22.718473	20.688852	9.93E-10
FIM_EPP	FIM	EPP	8	25267103	rs4871939	A	G	-4.519082	20.422100	21.922829	3.08E-10
FIM_EPP	FIM	EPP	8	25269102	rs1506869	A	C	-4.822778	23.259188	20.543029	1.14E-09
FIM_EPP	FIM	EPP	8	25280800	rs6185	G	C	-4.587275	21.043093	22.621346	1.59E-10
FIM_EPP	FIM	EPP	8	25311269	rs17053711	A	G	-4.816717	23.200758	20.673082	1.01E-09
FIM_EPP	FIM	EPP	8	25320594	rs12675625	C	T	-4.624815	21.388913	22.842347	1.29E-10
FIM_EPP	FIM	EPP	8	25321845	rs35698191	A	T	-4.623525	21.376981	22.753783	1.40E-10
LMC_DE	LMC	DE	4	55991042	rs12502008	T	G	-2.979581	8.877900	-18.696861	4.14E-09
LMC_DE	LMC	DE	4	55991731	rs7667298	C	T	-2.985844	8.915265	-18.308800	6.05E-09
LMC_DE	LMC	DE	4	55991827	rs9994560	G	A	2.915578	8.500593	-17.593939	1.21E-08
LMC_DE	LMC	DE	4	55992105	rs28695311	C	G	2.865969	8.213776	-17.399168	1.47E-08
LMC_DE	LMC	DE	4	55992366	rs2071559	G	A	2.915097	8.497793	-17.375698	1.50E-08
LMC_DE	LMC	DE	4	55993468	rs28517654	C	T	2.236203	5.000606	-16.367543	4.03E-08
LMC_DE	LMC	DE	4	55995061	rs9992737	T	C	2.239481	5.015277	-16.402154	3.89E-08
LMC_DE	LMC	DE	4	55996712	rs73236106	T	C	2.235268	4.996421	-16.351428	4.09E-08
LMC_DE	LMC	DE	4	55996903	rs10020668	A	G	2.234459	4.992807	-16.370665	4.01E-08
LMC_DE	LMC	DE	4	55997340	rs10013228	G	A	2.236273	5.000916	-16.361917	4.05E-08
LMC_DE	LMC	DE	4	55997622	rs28584303	T	C	2.237325	5.005625	-16.386464	3.95E-08
LMC_DE	LMC	DE	4	55998086	rs12331538	C	A	2.234602	4.993446	-16.366437	4.03E-08
LMC_DE	LMC	DE	6	151700893	rs57968001	C	T	-2.658594	7.068124	-22.682201	8.52E-11
LMC_DE	LMC	DE	6	151702237	rs115805051	C	T	-2.651173	7.028719	-22.726189	8.16E-11
LMC_DE	LMC	DE	6	151704548	rs75107694	C	T	-2.647573	7.009643	-22.693132	8.43E-11
LMC_DE	LMC	DE	6	151709978	rs9383568	T	C	-2.694166	7.258529	-23.375964	4.34E-11
LMC_DE	LMC	DE	6	151712026	rs139683250	A	G	-2.695781	7.267237	-23.847774	2.74E-11
LMC_DE	LMC	DE	6	151725403	rs116621273	C	T	-2.641595	6.978023	-22.797529	7.61E-11
LMC_DE	LMC	DE	6	151725666	rs118069541	T	C	-2.638114	6.959644	-22.720364	8.21E-11
LMC_DE	LMC	DE	6	151730232	rs78375092	G	C	-2.809957	7.895856	-24.666997	1.23E-11
LMC_DE	LMC	DE	6	151730903	rs9383890	G	A	-2.840128	8.066329	-25.203297	7.33E-12
LMC_DE	LMC	DE	6	151762169	rs3800275	C	T	-2.758161	7.607452	-22.883644	7.00E-11
LMC_DE	LMC	DE	6	151762305	rs73783017	C	A	-2.756855	7.600249	-22.886320	6.98E-11
LMC_DE	LMC	DE	6	151762610	rs6940667	C	G	-2.785058	7.756549	-23.111442	5.61E-11
LMC_DE	LMC	DE	6	151763400	rs73783019	G	A	-2.738747	7.500738	-22.727002	8.15E-11
LMC_DE	LMC	DE	6	151764239	rs73783022	C	T	-2.882659	8.309724	-23.881229	2.65E-11
LMC_DE	LMC	DE	6	151764539	rs55747952	T	C	-1.994496	3.978014	-16.262602	4.46E-08
LMC_DE	LMC	DE	6	151764665	rs7748785	T	C	-2.738228	7.497895	-22.712822	8.27E-11
LMC_DE	LMC	DE	6	151764955	rs3800276	A	C	-2.877086	8.277624	-23.834848	2.77E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_DE	LMC	DE	6	151765511	rs3800278	T	G	-2.763556	7.637239	-22.932526	6.68E-11
LMC_DE	LMC	DE	6	151766199	rs3800280	G	A	-2.727613	7.439873	-22.629842	8.96E-11
LMC_DE	LMC	DE	6	151766397	rs73783025	A	G	-2.719015	7.393043	-22.562794	9.57E-11
LMC_DE	LMC	DE	6	151773831	rs111270458	T	C	-2.589121	6.703549	-21.148241	3.79E-10
LMC_DE	LMC	DE	6	151776164	rs17081262	T	G	-2.598027	6.749742	-21.521911	2.64E-10
LMC_DE	LMC	DE	6	151778273	rs73783029	T	C	-2.504622	6.273131	-20.915980	4.76E-10
LMC_DE	LMC	DE	6	151781779	rs138584427	T	C	-2.541101	6.457193	-21.054242	4.16E-10
LMC_DE	LMC	DE	6	151782544	rs79540726	A	G	-2.545226	6.478174	-21.084453	4.04E-10
LMC_DE	LMC	DE	6	151784049	rs6557142	T	G	-2.543917	6.471515	-21.069661	4.10E-10
LMC_DE	LMC	DE	6	151785551	rs17081270	G	A	-2.545530	6.479723	-21.086713	4.03E-10
LMC_DE	LMC	DE	6	151788184	rs7748711	T	G	-2.538575	6.444363	-21.028890	4.26E-10
LMC_DE	LMC	DE	6	151788962	rs58952168	A	G	-2.578869	6.650567	-21.794210	2.02E-10
LMC_DE	LMC	DE	6	151789282	rs3734801	C	A	-2.536422	6.433437	-21.010896	4.34E-10
LMC_DE	LMC	DE	6	151799274	rs7762223	C	A	-2.646830	7.005708	-22.069399	1.55E-10
LMC_DE	LMC	DE	6	151802237	rs140993356	G	A	-3.143229	9.879886	-28.053167	4.59E-13
LMC_DE	LMC	DE	6	151814453	rs79554419	T	C	-2.742109	7.519162	-23.343119	4.48E-11
LMC_DE	LMC	DE	6	151816537	rs77600257	A	T	-2.677653	7.169826	-22.572021	9.48E-11
LMC_DE	LMC	DE	6	151819834	rs9383906	G	A	-2.209619	4.882416	-19.015415	3.03E-09
LMC_DE	LMC	DE	6	151819857	rs115429675	T	C	-2.773759	7.693737	-23.243712	4.93E-11
LMC_DE	LMC	DE	6	151821024	rs9383911	T	A	-2.147808	4.613079	-18.732712	4.00E-09
LMC_DE	LMC	DE	6	151822156	rs4869733	C	G	-2.131762	4.544407	-18.594476	4.57E-09
LMC_DE	LMC	DE	6	151823901	rs7762963	C	A	-2.671731	7.138145	-22.840560	7.30E-11
LMC_DE	LMC	DE	6	151824449	rs12173791	A	G	-2.143199	4.593303	-18.702242	4.12E-09
LMC_DE	LMC	DE	6	151826134	rs7753324	A	G	-2.619355	6.861019	-21.949775	1.74E-10
LMC_DE	LMC	DE	6	151826307	rs75969278	A	G	-3.148712	9.914387	-28.111830	4.34E-13
LMC_DE	LMC	DE	6	151827204	rs7453575	C	T	-2.619775	6.863219	-21.952974	1.73E-10
LMC_DE	LMC	DE	6	151828771	rs76969132	G	A	-2.851112	8.128837	-23.589283	3.52E-11
LMC_DE	LMC	DE	6	151829474	rs4870022	C	T	-2.151072	4.627111	-18.575380	4.66E-09
LMC_DE	LMC	DE	6	151829487	rs4870023	T	A	-2.167156	4.696565	-18.714271	4.07E-09
LMC_DE	LMC	DE	6	151833011	rs78588171	T	C	-2.441678	5.961792	-20.924812	4.72E-10
LMC_DE	LMC	DE	6	151833037	rs80347787	T	C	-2.441678	5.961792	-20.513945	7.04E-10
LMC_DE	LMC	DE	6	151835307	rs117595301	T	G	-2.636777	6.952595	-21.817369	1.98E-10
LMC_DE	LMC	DE	6	151839806	rs1874415	A	G	-2.638045	6.959281	-20.436075	7.59E-10
LMC_DE	LMC	DE	6	151840464	rs139951455	T	C	-2.680574	7.185479	-20.757219	5.55E-10
LMC_DE	LMC	DE	6	151840576	rs149746675	G	C	-2.682406	7.195303	-20.771419	5.48E-10
LMC_DE	LMC	DE	6	151841061	rs114137400	A	G	-2.725371	7.427650	-21.306963	3.25E-10
LMC_DE	LMC	DE	6	151842916	rs117027891	T	C	-2.748271	7.552996	-21.429867	2.88E-10
LMC_DE	LMC	DE	6	151844583	rs2001574	A	G	-2.610043	6.812325	-20.334015	8.39E-10
LMC_DE	LMC	DE	6	151844650	rs2001575	A	G	-2.714670	7.369432	-21.132582	3.85E-10
LMC_DE	LMC	DE	8	25243213	rs34068702	G	A	6.823676	46.562560	-31.672572	1.37E-14
LMC_DE	LMC	DE	8	25245432	rs931875	A	G	7.221249	52.146430	-32.763707	4.74E-15
LMC_DE	LMC	DE	8	25247181	rs4872310	A	G	7.489670	56.095161	-36.188971	1.71E-16
LMC_DE	LMC	DE	8	25248615	rs13261573	A	G	7.613560	57.966300	-36.856643	8.94E-17
LMC_DE	LMC	DE	8	25255017	rs12675289	C	A	7.065362	49.919341	-31.724059	1.30E-14
LMC_DE	LMC	DE	8	25263294	rs61490611	G	T	6.827924	46.620545	-30.956458	2.74E-14
LMC_DE	LMC	DE	8	25267103	rs4871939	A	G	7.362603	54.207919	-35.475552	3.41E-16
LMC_DE	LMC	DE	8	25269102	rs1506869	A	C	6.860558	47.067255	-30.649061	3.69E-14
LMC_DE	LMC	DE	8	25280800	rs6185	G	C	7.260856	52.720036	-34.405420	9.63E-16
LMC_DE	LMC	DE	8	25311269	rs17053711	A	G	7.103396	50.458233	-31.264472	2.03E-14
LMC_DE	LMC	DE	8	25320594	rs12675625	C	T	6.241340	38.954321	-24.313833	1.74E-11
LMC_DE	LMC	DE	8	25321845	rs35698191	A	T	6.259794	39.185021	-24.351771	1.68E-11
LMC_DE	LMC	DE	8	25389631	rs10098571	A	G	5.473128	29.955133	-17.231998	1.73E-08
LMC_DE	LMC	DE	9	344711	rs117608810	A	G	-4.112845	16.915491	18.635115	4.40E-09
LMC_DE	LMC	DE	9	374823	rs144668877	A	G	-3.805724	14.483538	16.184604	4.82E-08
LMC_DE	LMC	DE	11	30145730	rs1436098	T	C	8.461251	71.592765	-25.738717	4.36E-12
LMC_DE	LMC	DE	11	30146230	rs11030958	C	T	8.447382	71.358255	-25.622914	4.87E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_DE	LMC	DE	11	30146407	rs1436099	T	C	8.484559	71.987745	-25.576729	5.10E-12
LMC_DE	LMC	DE	11	30147285	rs4923621	A	C	8.475397	71.832357	-25.542876	5.27E-12
LMC_DE	LMC	DE	11	30147515	rs4923622	C	T	8.450230	71.406384	-25.637895	4.80E-12
LMC_DE	LMC	DE	11	30147562	rs4923623	T	C	8.488420	72.053281	-25.576869	5.10E-12
LMC_DE	LMC	DE	11	30148871	rs979210	C	T	8.431104	71.083518	-25.464082	5.69E-12
LMC_DE	LMC	DE	11	30149602	rs892950	G	C	8.472578	71.784581	-25.499795	5.49E-12
LMC_DE	LMC	DE	11	30150000	rs892951	A	G	8.473105	71.793515	-25.501455	5.49E-12
LMC_DE	LMC	DE	11	30151117	rs892952	T	C	8.472754	71.787555	-25.492582	5.53E-12
LMC_DE	LMC	DE	11	30151444	rs12800683	T	C	8.456265	71.508425	-25.316128	6.57E-12
LMC_DE	LMC	DE	11	30152078	rs1369811	G	A	8.484134	71.980527	-25.533259	5.32E-12
LMC_DE	LMC	DE	11	30152594	rs7935077	A	G	8.489561	72.072643	-25.547107	5.25E-12
LMC_DE	LMC	DE	11	30153348	rs1865731	C	A	8.489979	72.079748	-25.550230	5.23E-12
LMC_DE	LMC	DE	11	30154037	rs11030960	C	T	8.492402	72.120885	-25.523925	5.37E-12
LMC_DE	LMC	DE	11	30154407	rs10835617	G	C	8.489995	72.080023	-25.516693	5.40E-12
LMC_DE	LMC	DE	11	30154477	rs35078732	G	A	8.501174	72.269959	-25.566757	5.15E-12
LMC_DE	LMC	DE	11	30154609	rs11030961	T	C	8.489995	72.080023	-25.516693	5.40E-12
LMC_DE	LMC	DE	11	30154930	rs11030962	C	T	8.490086	72.081563	-25.515358	5.41E-12
LMC_DE	LMC	DE	11	30155086	rs17694317	C	T	8.490474	72.088145	-25.518131	5.40E-12
LMC_DE	LMC	DE	11	30155294	rs597235	G	A	-8.519972	72.589923	-25.607595	4.95E-12
LMC_DE	LMC	DE	11	30155490	rs2117911	C	A	8.490377	72.086496	-25.601588	4.98E-12
LMC_DE	LMC	DE	11	30155829	rs10835618	T	C	8.490390	72.086729	-25.517880	5.40E-12
LMC_DE	LMC	DE	11	30157917	rs2082917	C	T	8.490348	72.086013	-25.519140	5.39E-12
LMC_DE	LMC	DE	11	30158498	rs12290734	C	T	8.478789	71.889859	-25.483011	5.58E-12
LMC_DE	LMC	DE	11	30158828	rs12270725	G	A	8.478824	71.890450	-25.483116	5.58E-12
LMC_DE	LMC	DE	11	30158907	rs12290971	C	T	8.504154	72.320643	-25.559248	5.19E-12
LMC_DE	LMC	DE	11	30158908	rs12284112	A	G	8.478824	71.890450	-25.483116	5.58E-12
LMC_DE	LMC	DE	11	30159305	rs12796113	C	T	8.478840	71.890725	-25.471813	5.65E-12
LMC_DE	LMC	DE	11	30159379	rs12794770	T	C	8.478840	71.890725	-25.426668	5.90E-12
LMC_DE	LMC	DE	11	30159382	rs12796334	C	T	8.478805	71.890134	-25.426563	5.90E-12
LMC_DE	LMC	DE	11	30160204	rs12801198	G	A	8.481201	71.930766	-25.490261	5.55E-12
LMC_DE	LMC	DE	11	30160548	rs3847631	G	A	8.464221	71.643044	-25.400932	6.05E-12
LMC_DE	LMC	DE	11	30160793	rs3847632	C	T	8.486944	72.028224	-25.510298	5.44E-12
LMC_DE	LMC	DE	11	30160801	rs3886880	T	C	8.480587	71.920352	-25.491189	5.54E-12
LMC_DE	LMC	DE	11	30160908	rs12802602	G	A	8.483347	71.967171	-25.494555	5.52E-12
LMC_DE	LMC	DE	11	30161164	rs4285851	T	C	8.468497	71.715435	-25.445189	5.79E-12
LMC_DE	LMC	DE	11	30162194	rs12790814	A	C	8.510888	72.435219	-25.580036	5.08E-12
LMC_DE	LMC	DE	11	30162222	rs12792185	A	T	8.509741	72.415691	-25.576661	5.10E-12
LMC_DE	LMC	DE	11	30162744	rs72884326	G	A	8.523970	72.658068	-25.755922	4.28E-12
LMC_DE	LMC	DE	11	30162775	rs78026352	C	A	8.524164	72.661378	-25.756582	4.28E-12
LMC_DE	LMC	DE	11	30190496	rs76821060	T	C	6.241507	38.956415	-19.997581	1.16E-09
LMC_DE	LMC	DE	11	30230281	rs76757075	A	G	5.205299	27.095139	-17.767260	1.03E-08
LMC_DE	LMC	DE	11	30276409	rs11718264	T	C	5.009717	25.097261	-17.100185	1.97E-08
LMC_DE	LMC	DE	11	30278764	rs11727206	G	C	5.150507	26.527719	-17.580784	1.23E-08
LMC_DE	LMC	DE	11	30426237	rs869215	C	T	5.671298	32.163622	-16.425766	3.80E-08
LMC_EM	LMC	EM	1	199821515	rs9782959	A	G	7.162469	51.300969	-18.629018	1.60E-08
LMC_EM	LMC	EM	1	199822101	rs4915185	C	T	7.148307	51.098296	-18.602322	1.64E-08
LMC_EM	LMC	EM	1	199824908	rs4915390	C	G	7.171358	51.428377	-19.677234	6.18E-09
LMC_EM	LMC	EM	1	199879616	rs12748835	C	G	7.290243	53.147638	-18.326435	2.10E-08
LMC_EM	LMC	EM	1	199882001	rs1559750	T	C	6.272112	39.339385	-20.105387	4.19E-09
LMC_EM	LMC	EM	1	199882780	rs16845684	G	A	6.191163	38.330500	-19.795600	5.55E-09
LMC_EM	LMC	EM	1	199883124	rs1559752	T	A	6.190518	38.322508	-19.877997	5.15E-09
LMC_EM	LMC	EM	1	199883176	rs5025935	G	T	6.200664	38.448228	-19.737234	5.85E-09
LMC_EM	LMC	EM	1	199883178	rs1974950	G	T	6.175188	38.132953	-19.689694	6.11E-09
LMC_EM	LMC	EM	1	199883516	rs4915186	T	G	6.190214	38.318754	-19.795537	5.55E-09
LMC_EM	LMC	EM	1	199883741	rs4915187	C	T	6.190219	38.318813	-19.935378	4.89E-09
LMC_EM	LMC	EM	1	199883846	rs4915394	T	C	6.188883	38.302271	-19.821102	5.43E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	1	199884929	rs1559753	G	C	6.189388	38.308529	-19.787601	5.59E-09
LMC_EM	LMC	EM	1	199885509	rs4915395	A	G	6.188099	38.292570	-19.787591	5.59E-09
LMC_EM	LMC	EM	1	199886499	rs6702350	T	C	6.236383	38.892476	-19.937569	4.88E-09
LMC_EM	LMC	EM	1	199888044	rs12409183	G	A	6.245663	39.008305	-19.556085	6.90E-09
LMC_EM	LMC	EM	1	199888335	rs4915396	T	C	6.239744	38.934407	-19.534650	7.03E-09
LMC_EM	LMC	EM	1	199888665	rs12408064	C	T	6.225463	38.756386	-19.511169	7.18E-09
LMC_EM	LMC	EM	1	199888666	rs59743652	A	G	6.245932	39.011670	-19.575323	6.78E-09
LMC_EM	LMC	EM	1	199888707	rs4915397	G	A	6.233077	38.851254	-19.513481	7.17E-09
LMC_EM	LMC	EM	1	199889022	rs6663866	A	G	6.196288	38.393990	-19.373411	8.14E-09
LMC_EM	LMC	EM	1	199889037	rs6687938	G	A	6.212609	38.596515	-19.444935	7.63E-09
LMC_EM	LMC	EM	1	199889400	rs6676879	C	T	6.177593	38.162650	-19.330672	8.46E-09
LMC_EM	LMC	EM	1	199889671	rs6677214	G	T	6.205546	38.508798	-19.396790	7.97E-09
LMC_EM	LMC	EM	1	199890307	rs12402435	T	C	6.235821	38.885465	-19.925593	4.94E-09
LMC_EM	LMC	EM	1	199891001	rs1895817	T	C	6.210100	38.565345	-19.852465	5.27E-09
LMC_EM	LMC	EM	1	199891438	rs6670899	A	C	7.739936	59.906615	-24.190186	1.05E-10
LMC_EM	LMC	EM	1	199891555	rs34777525	A	G	6.909943	47.747308	-21.767178	9.33E-10
LMC_EM	LMC	EM	1	199892279	rs11578938	T	C	7.513593	56.454081	-21.277392	1.45E-09
LMC_EM	LMC	EM	2	49272770	rs17038141	A	G	-4.076283	16.616082	-18.001841	2.82E-08
LMC_EM	LMC	EM	2	49274423	rs62162079	A	G	-4.002134	16.017078	-17.574510	4.16E-08
LMC_EM	LMC	EM	2	49276646	rs62162080	T	C	-4.117912	16.957199	-18.222282	2.31E-08
LMC_EM	LMC	EM	2	49276771	rs17038169	T	C	-4.117728	16.955684	-18.199668	2.36E-08
LMC_EM	LMC	EM	2	49279672	rs62162081	C	T	-4.038433	16.308939	-18.266775	2.22E-08
LMC_EM	LMC	EM	2	49290520	rs73931507	T	G	-4.120219	16.976204	-18.496953	1.80E-08
LMC_EM	LMC	EM	2	49291991	rs11686941	A	G	-4.107020	16.867614	-18.639208	1.58E-08
LMC_EM	LMC	EM	2	49295975	rs62162086	C	G	-3.937923	15.507240	-20.003623	4.60E-09
LMC_EM	LMC	EM	2	49297762	rs62162087	G	T	-4.001162	16.009297	-20.739028	2.36E-09
LMC_EM	LMC	EM	2	49298647	rs55943184	G	A	-3.958238	15.667649	-20.487591	2.97E-09
LMC_EM	LMC	EM	2	49298703	rs57825020	C	G	-3.955676	15.647376	-20.476620	3.00E-09
LMC_EM	LMC	EM	2	49298764	rs57260003	A	G	-4.010591	16.084836	-20.504263	2.92E-09
LMC_EM	LMC	EM	2	49298926	rs60433531	G	A	-4.047127	16.379233	-20.947477	1.96E-09
LMC_EM	LMC	EM	2	49298935	rs59743603	T	C	-4.065591	16.529033	-21.042577	1.80E-09
LMC_EM	LMC	EM	2	49299633	rs11125207	G	A	-4.005108	16.040892	-20.456133	3.05E-09
LMC_EM	LMC	EM	2	49300163	rs11692426	A	G	-4.057691	16.464859	-20.866698	2.11E-09
LMC_EM	LMC	EM	2	49304669	rs72879812	A	G	-4.133987	17.089846	-21.061114	1.77E-09
LMC_EM	LMC	EM	2	49305470	rs55911208	T	C	-4.077955	16.629717	-19.617376	6.53E-09
LMC_EM	LMC	EM	2	49306268	rs12622916	T	C	-4.290645	18.409639	-21.788943	9.15E-10
LMC_EM	LMC	EM	2	49306318	rs12622922	T	C	-4.308380	18.562142	-21.901183	8.27E-10
LMC_EM	LMC	EM	2	49307259	rs73931521	C	G	-4.413047	19.474987	-22.711843	3.97E-10
LMC_EM	LMC	EM	2	49308467	rs11674572	C	G	-4.338576	18.823241	-21.988833	7.64E-10
LMC_EM	LMC	EM	2	49313029	rs62162101	T	C	-4.251122	18.072042	-21.324549	1.39E-09
LMC_EM	LMC	EM	2	49316892	rs12614425	G	C	-4.265566	18.195052	-21.453416	1.24E-09
LMC_EM	LMC	EM	2	49319146	rs6717598	T	C	-3.378505	11.414297	-17.726413	3.63E-08
LMC_EM	LMC	EM	2	49319402	rs11689334	C	T	-4.288943	18.395032	-21.792911	9.12E-10
LMC_EM	LMC	EM	2	49320324	rs6736924	C	T	-3.384350	11.453826	-17.760173	3.52E-08
LMC_EM	LMC	EM	2	49321645	rs62162105	A	T	-3.448127	11.889578	-18.100055	2.58E-08
LMC_EM	LMC	EM	2	49322127	rs2882224	C	G	-4.367731	19.077071	-21.981323	7.69E-10
LMC_EM	LMC	EM	2	49322616	rs6730592	A	G	-3.478043	12.096783	-18.247110	2.26E-08
LMC_EM	LMC	EM	2	49322965	rs11688474	A	G	-4.408280	19.432936	-22.187707	6.38E-10
LMC_EM	LMC	EM	2	49324064	rs6749906	G	T	-3.415357	11.664664	-17.911279	3.07E-08
LMC_EM	LMC	EM	2	49324105	rs62162106	G	C	-4.390314	19.274853	-22.099805	6.91E-10
LMC_EM	LMC	EM	2	49324109	rs6744698	G	A	-3.480997	12.117340	-18.302277	2.15E-08
LMC_EM	LMC	EM	2	49324567	rs73931542	G	T	-3.366233	11.331522	-17.711387	3.68E-08
LMC_EM	LMC	EM	2	49324685	rs61296268	A	G	-3.462153	11.986502	-18.262661	2.23E-08
LMC_EM	LMC	EM	2	49325023	rs11898451	A	T	-3.460358	11.974075	-18.250055	2.25E-08
LMC_EM	LMC	EM	2	49325354	rs2134812	G	C	-4.360474	19.013732	-22.017203	7.44E-10
LMC_EM	LMC	EM	2	49326166	rs62162135	A	G	-4.293674	18.435638	-21.717694	9.76E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	2	49327460	rs60745617	C	A	-4.343231	18.863659	-21.560656	1.12E-09
LMC_EM	LMC	EM	2	49328471	rs17038224	C	G	-3.431764	11.777003	-18.091003	2.61E-08
LMC_EM	LMC	EM	2	49329178	rs1504164	T	G	-4.056094	16.451902	-20.545185	2.82E-09
LMC_EM	LMC	EM	2	49329179	rs1504165	T	C	-4.067439	16.544057	-20.602646	2.67E-09
LMC_EM	LMC	EM	2	49330142	rs11675903	C	T	-3.305034	10.923250	-17.444218	4.69E-08
LMC_EM	LMC	EM	2	49330545	rs7590213	T	C	-3.367953	11.343108	-17.866317	3.19E-08
LMC_EM	LMC	EM	2	49335990	rs11125214	A	G	-4.426569	19.594516	-20.992200	1.88E-09
LMC_EM	LMC	EM	2	49340133	rs1126076	G	C	-4.351266	18.933514	-20.654722	2.55E-09
LMC_EM	LMC	EM	2	49340913	rs28513867	G	T	-4.348784	18.911919	-20.373179	3.29E-09
LMC_EM	LMC	EM	2	49341056	rs6760923	C	G	-4.354275	18.959707	-20.387806	3.25E-09
LMC_EM	LMC	EM	2	49343172	rs4971642	T	C	-4.285172	18.362699	-20.503843	2.92E-09
LMC_EM	LMC	EM	2	49343763	rs4971643	T	G	-4.300505	18.494344	-20.309780	3.49E-09
LMC_EM	LMC	EM	2	49344187	rs62162138	T	A	-4.336159	18.802273	-20.478700	2.99E-09
LMC_EM	LMC	EM	2	49344529	rs57051560	G	A	-4.427429	19.602131	-20.932000	1.99E-09
LMC_EM	LMC	EM	2	49345463	rs62162140	A	G	-4.334023	18.783756	-20.445168	3.08E-09
LMC_EM	LMC	EM	2	49352746	rs11688329	A	G	-4.567990	20.866534	-21.625865	1.06E-09
LMC_EM	LMC	EM	2	49356217	rs17038310	C	T	-4.549853	20.701165	-21.916564	8.15E-10
LMC_EM	LMC	EM	2	49357415	rs17038315	A	G	-4.551541	20.716523	-21.509644	1.18E-09
LMC_EM	LMC	EM	2	49358409	rs62162141	C	A	-4.382067	19.202514	-19.593565	6.67E-09
LMC_EM	LMC	EM	2	49359030	rs11678373	G	A	-4.584818	21.020552	-21.665615	1.02E-09
LMC_EM	LMC	EM	2	49359733	rs12614875	G	A	-4.533699	20.554423	-21.425119	1.27E-09
LMC_EM	LMC	EM	2	49360812	rs75673607	G	A	-4.573627	20.918060	-21.616787	1.07E-09
LMC_EM	LMC	EM	2	49361804	rs62162144	G	C	-4.620306	21.347232	-21.837756	8.75E-10
LMC_EM	LMC	EM	2	49362676	rs10432668	C	T	-4.665200	21.764087	-21.926478	8.08E-10
LMC_EM	LMC	EM	2	49366047	rs17038320	T	C	-4.558408	20.779085	-21.810857	8.97E-10
LMC_EM	LMC	EM	2	49369344	rs62162146	C	G	-4.582751	21.001604	-22.218779	6.20E-10
LMC_EM	LMC	EM	2	49371607	rs9789577	G	T	-5.204409	27.085877	-27.417849	5.74E-12
LMC_EM	LMC	EM	2	49371623	rs9789669	C	A	-5.292597	28.011582	-27.882439	3.78E-12
LMC_EM	LMC	EM	2	49372313	rs17038347	C	T	-5.131286	26.330098	-25.987167	2.08E-11
LMC_EM	LMC	EM	2	49372900	rs11686783	C	T	-5.152282	26.546010	-27.139408	7.37E-12
LMC_EM	LMC	EM	2	49374051	rs1504183	C	G	-5.286761	27.949838	-27.206705	6.94E-12
LMC_EM	LMC	EM	2	49376206	rs6733807	T	A	-5.313217	28.230276	-27.584800	4.94E-12
LMC_EM	LMC	EM	2	49380886	rs7572787	T	C	-5.245650	27.516843	-27.276170	6.52E-12
LMC_EM	LMC	EM	2	49381253	rs7589810	C	T	-5.297796	28.066641	-27.873112	3.81E-12
LMC_EM	LMC	EM	2	49383377	rs986036	T	C	-5.320895	28.311925	-27.560433	5.05E-12
LMC_EM	LMC	EM	2	49384585	rs11681105	A	T	-5.277050	27.847255	-27.763884	4.20E-12
LMC_EM	LMC	EM	2	49385310	rs4971681	C	T	-5.430603	29.491453	-28.627503	1.94E-12
LMC_EM	LMC	EM	2	49387764	rs4971561	G	C	-5.207022	27.113077	-27.397414	5.84E-12
LMC_EM	LMC	EM	2	49389140	rs55926033	T	C	-4.784345	22.889958	-23.562406	1.85E-10
LMC_EM	LMC	EM	3	127710474	rs16845806	A	G	-3.502502	12.267523	-21.463327	1.23E-09
LMC_EM	LMC	EM	3	127715133	rs1549874	G	A	-4.158308	17.291528	-26.645540	1.15E-11
LMC_EM	LMC	EM	3	127715911	rs6795314	A	T	-4.179238	17.466034	-26.789660	1.01E-11
LMC_EM	LMC	EM	3	127716262	rs4857832	A	G	-4.200269	17.642263	-27.027158	8.15E-12
LMC_EM	LMC	EM	3	127716585	rs9870753	G	A	-4.186525	17.526990	-26.839571	9.65E-12
LMC_EM	LMC	EM	3	127717702	rs6439104	C	T	-4.149620	17.219348	-26.603409	1.19E-11
LMC_EM	LMC	EM	3	127719658	rs67986238	G	A	-4.180065	17.472946	-26.789109	1.01E-11
LMC_EM	LMC	EM	3	127720727	rs1469660	C	T	-4.154908	17.263258	-26.625215	1.17E-11
LMC_EM	LMC	EM	3	127720740	rs1469659	T	C	-4.153146	17.248625	-26.606456	1.19E-11
LMC_EM	LMC	EM	3	127721041	rs6781473	T	G	-4.185272	17.516503	-26.818090	9.84E-12
LMC_EM	LMC	EM	3	127721242	rs9859280	T	C	-4.189362	17.550755	-26.841251	9.63E-12
LMC_EM	LMC	EM	3	127721333	rs58170120	A	T	-4.081702	16.660289	-26.737648	1.06E-11
LMC_EM	LMC	EM	3	127721375	rs28520291	C	T	-4.184050	17.506273	-26.701981	1.09E-11
LMC_EM	LMC	EM	3	127721435	rs28636854	T	C	-4.179523	17.468414	-26.339836	1.51E-11
LMC_EM	LMC	EM	3	127721468	rs11924834	A	G	-4.184786	17.512430	-27.072645	7.82E-12
LMC_EM	LMC	EM	3	127721508	rs11924838	A	G	-4.186288	17.525009	-26.755897	1.04E-11
LMC_EM	LMC	EM	3	127721543	rs11917022	T	A	-4.184889	17.513297	-26.971994	8.56E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	3	127721603	rs11924866	C	G	-4.182093	17.489901	-26.782761	1.02E-11
LMC_EM	LMC	EM	3	127721859	rs10433341	A	G	-4.183111	17.498421	-26.803704	9.96E-12
LMC_EM	LMC	EM	3	127723008	rs7633480	A	G	-4.196090	17.607169	-26.888866	9.23E-12
LMC_EM	LMC	EM	3	127723017	rs7645109	C	T	-4.196090	17.607169	-26.888775	9.23E-12
LMC_EM	LMC	EM	3	127723197	rs7611426	G	A	-4.190069	17.556676	-26.821523	9.81E-12
LMC_EM	LMC	EM	3	127723233	rs67464627	T	C	-4.186160	17.523933	-26.927082	8.92E-12
LMC_EM	LMC	EM	3	127724145	rs6767360	G	A	-4.186020	17.522759	-26.779888	1.02E-11
LMC_EM	LMC	EM	3	127726637	rs6777095	G	A	4.151185	17.232333	-27.954189	3.54E-12
LMC_EM	LMC	EM	3	127726737	rs6777197	G	A	4.224710	17.848178	-28.268430	2.67E-12
LMC_EM	LMC	EM	3	127727450	rs6766665	C	T	4.158653	17.294393	-28.002543	3.39E-12
LMC_EM	LMC	EM	3	127730766	rs9824657	C	T	4.176040	17.439312	-28.116502	3.06E-12
LMC_EM	LMC	EM	3	127731673	rs9809866	T	C	4.275350	18.278619	-28.242840	2.73E-12
LMC_EM	LMC	EM	3	127733069	rs4474992	G	A	4.234020	17.926927	-27.969786	3.49E-12
LMC_EM	LMC	EM	3	127733091	rs4602341	G	A	4.251054	18.071464	-28.082314	3.16E-12
LMC_EM	LMC	EM	3	127747841	rs6764517	G	A	4.182388	17.492368	-27.807056	4.04E-12
LMC_EM	LMC	EM	3	127755716	rs1987633	A	C	4.276527	18.288680	-27.895647	3.73E-12
LMC_EM	LMC	EM	3	127757422	rs2217629	G	A	4.181666	17.486334	-27.802023	4.06E-12
LMC_EM	LMC	EM	3	127759214	rs1469658	A	T	4.178741	17.461879	-27.782635	4.13E-12
LMC_EM	LMC	EM	3	127759668	rs1469657	T	C	4.178847	17.462761	-27.801194	4.06E-12
LMC_EM	LMC	EM	3	127763254	rs4857834	C	T	4.178863	17.462900	-27.783712	4.13E-12
LMC_EM	LMC	EM	3	127780082	rs759945	A	G	4.290721	18.410290	-28.138383	3.00E-12
LMC_EM	LMC	EM	3	127781737	rs4857864	C	G	4.311430	18.588429	-28.122011	3.05E-12
LMC_EM	LMC	EM	3	127782427	rs9864797	C	G	4.341479	18.848443	-28.398777	2.38E-12
LMC_EM	LMC	EM	3	127783442	rs6764003	G	A	4.318351	18.648156	-28.247489	2.72E-12
LMC_EM	LMC	EM	3	127790544	rs10934848	A	G	4.354957	18.965654	-28.527639	2.12E-12
LMC_EM	LMC	EM	3	127790606	rs2241688	A	G	4.351806	18.938213	-28.506993	2.16E-12
LMC_EM	LMC	EM	3	127791708	rs7612065	C	T	4.329219	18.742139	-28.317979	2.56E-12
LMC_EM	LMC	EM	3	127799669	rs1554534	T	G	4.357662	18.989215	-28.504240	2.16E-12
LMC_EM	LMC	EM	3	127808502	rs7355887	G	C	4.391380	19.284222	-27.642238	4.69E-12
LMC_EM	LMC	EM	3	127808815	rs9855015	G	A	4.168000	17.372221	-25.580923	2.99E-11
LMC_EM	LMC	EM	3	127815320	rs940060	G	A	3.085097	9.517823	-17.443913	4.69E-08
LMC_EM	LMC	EM	3	127815475	rs4058156	C	T	4.301166	18.500027	-28.167575	2.92E-12
LMC_EM	LMC	EM	3	127816572	rs6439113	G	A	4.269304	18.226955	-27.959219	3.53E-12
LMC_EM	LMC	EM	3	127817508	rs7632756	T	C	4.370879	19.104581	-27.545120	5.12E-12
LMC_EM	LMC	EM	3	127819062	rs4857866	C	G	4.357668	18.989268	-27.470097	5.47E-12
LMC_EM	LMC	EM	3	127819151	rs4857867	C	T	4.278066	18.301851	-28.022608	3.33E-12
LMC_EM	LMC	EM	3	127822320	rs7641133	C	T	4.346991	18.896330	-27.315857	6.29E-12
LMC_EM	LMC	EM	3	127824017	rs9835383	G	A	4.268952	18.223950	-27.948514	3.56E-12
LMC_EM	LMC	EM	3	127826618	rs11924142	T	C	4.282287	18.337979	-27.366747	6.01E-12
LMC_EM	LMC	EM	3	127835629	rs6788879	G	A	4.259734	18.145330	-27.966330	3.50E-12
LMC_EM	LMC	EM	3	127835803	rs6439115	T	C	4.259686	18.144929	-27.931311	3.62E-12
LMC_EM	LMC	EM	3	127836287	rs4857836	T	C	4.367136	19.071879	-27.525028	5.21E-12
LMC_EM	LMC	EM	3	127836319	rs4857837	G	A	4.355728	18.972369	-27.450046	5.57E-12
LMC_EM	LMC	EM	3	127838999	rs9821568	A	G	4.266111	18.199701	-27.973436	3.48E-12
LMC_EM	LMC	EM	3	127845701	rs2811475	T	C	4.259944	18.147124	-27.933792	3.61E-12
LMC_EM	LMC	EM	3	127854684	rs2811471	A	G	4.256467	18.117513	-27.849782	3.89E-12
LMC_EM	LMC	EM	3	127856573	rs6414310	A	T	4.405551	19.408880	-27.693057	4.48E-12
LMC_EM	LMC	EM	3	127861822	rs2955093	A	C	-4.255798	18.111819	-27.867529	3.83E-12
LMC_EM	LMC	EM	3	127867397	rs67451924	A	G	-4.410733	19.454567	-27.683517	4.52E-12
LMC_EM	LMC	EM	3	127867592	rs73192977	G	T	-4.297840	18.471428	-28.117555	3.06E-12
LMC_EM	LMC	EM	3	127869165	rs4857870	A	G	-4.294779	18.445125	-28.103036	3.10E-12
LMC_EM	LMC	EM	3	127870929	rs10934849	G	C	-4.298140	18.474004	-28.119516	3.05E-12
LMC_EM	LMC	EM	3	127872175	rs11920225	G	C	-4.289389	18.398856	-28.051822	3.25E-12
LMC_EM	LMC	EM	3	127872796	rs2999046	T	C	-4.250398	18.065886	-27.807482	4.04E-12
LMC_EM	LMC	EM	3	127877385	rs2492284	C	T	-4.291206	18.414447	-28.074153	3.18E-12
LMC_EM	LMC	EM	3	127877756	rs2955114	C	A	-4.288835	18.394104	-28.058945	3.22E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	3	127878064	rs2955115	T	C	-4.286976	18.378160	-28.046478	3.26E-12
LMC_EM	LMC	EM	3	127878330	rs2999047	G	A	-4.239696	17.975021	-27.737463	4.30E-12
LMC_EM	LMC	EM	3	127878416	rs2999048	A	G	-4.483741	20.103933	-27.826614	3.97E-12
LMC_EM	LMC	EM	3	127878817	rs2999049	C	T	-4.422972	19.562682	-27.778938	4.15E-12
LMC_EM	LMC	EM	3	127878871	rs2811472	G	A	-4.287402	18.381813	-28.049266	3.25E-12
LMC_EM	LMC	EM	3	127881613	rs2955117	A	G	-4.258095	18.131374	-27.730449	4.33E-12
LMC_EM	LMC	EM	3	127882064	rs2955118	A	G	-4.354838	18.964616	-26.976878	8.53E-12
LMC_EM	LMC	EM	3	127884937	rs2811473	C	A	-3.866313	14.948380	-25.174972	4.31E-11
LMC_EM	LMC	EM	3	127885008	rs2687728	A	C	-3.994737	15.957921	-25.932158	2.18E-11
LMC_EM	LMC	EM	3	127888067	rs872267	A	G	-4.791958	22.962859	-30.523013	3.53E-13
LMC_EM	LMC	EM	3	127888347	rs2955120	G	T	-4.777932	22.828633	-30.491016	3.64E-13
LMC_EM	LMC	EM	3	127888694	rs2687731	T	C	-4.481202	20.081173	-30.013336	5.58E-13
LMC_EM	LMC	EM	3	127888978	rs2687732	T	C	-4.520505	20.434961	-30.276280	4.41E-13
LMC_EM	LMC	EM	3	127889375	rs3122174	G	T	-4.516561	20.399326	-30.250222	4.51E-13
LMC_EM	LMC	EM	3	127890749	rs2248668	G	A	-4.516561	20.399326	-30.278348	4.40E-13
LMC_EM	LMC	EM	3	127891396	rs2955121	G	C	-4.516561	20.399326	-30.249934	4.51E-13
LMC_EM	LMC	EM	3	127892037	rs2999052	C	T	-4.694432	22.037693	-30.340757	4.16E-13
LMC_EM	LMC	EM	3	127892851	rs2811474	C	G	-4.155883	17.271360	-26.721010	1.07E-11
LMC_EM	LMC	EM	3	127895226	rs2687729	G	A	-4.695830	22.050818	-30.323730	4.22E-13
LMC_EM	LMC	EM	3	127895986	rs1554535	A	G	-4.776013	22.810304	-30.445498	3.79E-13
LMC_EM	LMC	EM	3	127898501	rs2811476	C	A	-4.697074	22.062501	-30.147644	4.95E-13
LMC_EM	LMC	EM	3	127898533	rs2999053	A	G	-4.480553	20.075352	-29.997530	5.66E-13
LMC_EM	LMC	EM	3	127899986	rs2999054	A	G	-4.480991	20.079283	-30.011194	5.59E-13
LMC_EM	LMC	EM	3	127900494	rs2999060	G	A	-4.520224	20.432423	-30.266714	4.45E-13
LMC_EM	LMC	EM	3	127900522	rs2999055	T	G	-4.520364	20.433687	-30.275112	4.41E-13
LMC_EM	LMC	EM	3	127901786	rs2811479	A	G	-4.685757	21.956320	-30.692126	3.04E-13
LMC_EM	LMC	EM	3	127902091	rs2811480	T	G	-4.681998	21.921108	-30.327353	4.21E-13
LMC_EM	LMC	EM	3	127903522	rs2999056	A	G	-4.514089	20.377003	-30.231790	4.59E-13
LMC_EM	LMC	EM	3	127903678	rs2955123	C	T	-4.486303	20.126915	-30.045699	5.42E-13
LMC_EM	LMC	EM	3	127904190	rs2811517	C	T	-4.523625	20.463183	-30.295492	4.33E-13
LMC_EM	LMC	EM	3	127904496	rs2811481	C	T	-4.706659	22.152636	-30.361430	4.08E-13
LMC_EM	LMC	EM	3	127904943	rs2811482	T	C	-4.788217	22.927026	-30.469009	3.71E-13
LMC_EM	LMC	EM	3	127905451	rs2811516	G	A	-4.709974	22.183851	-30.278209	4.40E-13
LMC_EM	LMC	EM	3	127905518	rs2811515	A	G	-4.709839	22.182585	-30.277345	4.40E-13
LMC_EM	LMC	EM	3	127905648	rs2999059	T	A	-4.478987	20.061324	-29.884985	6.26E-13
LMC_EM	LMC	EM	3	127907929	rs2811514	G	A	-4.812163	23.156915	-30.560600	3.42E-13
LMC_EM	LMC	EM	3	127909564	rs2811513	A	G	-4.691384	22.009083	-30.159669	4.89E-13
LMC_EM	LMC	EM	3	127909758	rs2999057	T	C	-4.602507	21.183069	-30.742795	2.90E-13
LMC_EM	LMC	EM	3	127911820	rs2811512	A	G	-4.785788	22.903768	-30.394420	3.96E-13
LMC_EM	LMC	EM	3	127913263	rs883238	G	A	-4.748549	22.548716	-30.157752	4.90E-13
LMC_EM	LMC	EM	3	127913714	rs940061	G	A	-4.565695	20.845570	-30.648916	3.16E-13
LMC_EM	LMC	EM	3	127913828	rs940062	A	T	-4.542690	20.636033	-30.343887	4.15E-13
LMC_EM	LMC	EM	3	127914512	rs2811510	G	A	-4.564788	20.837289	-30.514493	3.56E-13
LMC_EM	LMC	EM	3	127914673	rs2811483	C	G	-4.554753	20.745779	-30.423920	3.86E-13
LMC_EM	LMC	EM	3	127914853	rs2811484	A	G	-4.554404	20.742598	-30.421813	3.87E-13
LMC_EM	LMC	EM	3	127916490	rs2955124	T	C	-4.566966	20.857180	-30.505980	3.59E-13
LMC_EM	LMC	EM	3	127916551	rs2811509	A	G	-4.709048	22.175130	-30.265154	4.45E-13
LMC_EM	LMC	EM	3	127918000	rs2492285	A	G	-4.693703	22.030847	-30.174300	4.83E-13
LMC_EM	LMC	EM	3	127918955	rs2687720	T	C	-4.787774	22.922783	-30.406137	3.92E-13
LMC_EM	LMC	EM	3	127919417	rs2140286	T	C	-4.557273	20.768734	-30.441230	3.80E-13
LMC_EM	LMC	EM	3	127920023	rs2811508	C	T	-4.712541	22.208039	-30.295442	4.33E-13
LMC_EM	LMC	EM	3	127923187	rs6439119	C	T	4.688758	21.984454	-30.142592	4.97E-13
LMC_EM	LMC	EM	3	127923810	rs2999058	A	G	-4.562994	20.820912	-30.438214	3.81E-13
LMC_EM	LMC	EM	3	127925192	rs2955125	G	A	-4.546277	20.668639	-30.368365	4.06E-13
LMC_EM	LMC	EM	3	127926516	rs2955127	G	A	-4.640559	21.534788	-30.997592	2.31E-13
LMC_EM	LMC	EM	3	127928277	rs2955128	T	C	-4.607865	21.232420	-30.779010	2.81E-13

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	3	127930459	rs9838120	G	A	4.701512	22.104213	-30.223987	4.62E-13
LMC_EM	LMC	EM	3	127930866	rs7374072	A	C	4.706427	22.150455	-30.275221	4.41E-13
LMC_EM	LMC	EM	3	127931402	rs7372439	G	A	4.705351	22.140333	-30.249265	4.52E-13
LMC_EM	LMC	EM	3	127933203	rs11707297	C	G	4.773600	22.787261	-30.316040	4.25E-13
LMC_EM	LMC	EM	3	127933786	rs4857871	T	C	4.700551	22.095182	-30.233847	4.58E-13
LMC_EM	LMC	EM	3	127933822	rs4857872	G	T	4.693832	22.032056	-30.175208	4.83E-13
LMC_EM	LMC	EM	3	127934218	rs4857873	G	A	4.704508	22.132391	-30.263151	4.46E-13
LMC_EM	LMC	EM	3	127934269	rs4857874	T	A	4.698970	22.080317	-30.208239	4.69E-13
LMC_EM	LMC	EM	3	127934276	rs4857875	T	C	4.693073	22.024931	-30.170328	4.85E-13
LMC_EM	LMC	EM	3	127934329	rs6770140	C	T	4.702920	22.117457	-30.233634	4.58E-13
LMC_EM	LMC	EM	3	127934774	rs4384971	A	C	4.684189	21.941623	-30.113215	5.10E-13
LMC_EM	LMC	EM	3	127935461	rs6439121	C	G	4.702811	22.116433	-30.232933	4.58E-13
LMC_EM	LMC	EM	3	127936527	rs9879865	T	C	4.689562	21.991989	-30.147441	4.95E-13
LMC_EM	LMC	EM	3	127936532	rs9879866	T	C	4.689562	21.991989	-30.147441	4.95E-13
LMC_EM	LMC	EM	3	127937326	rs2254379	C	A	-4.550984	20.711457	-30.400964	3.94E-13
LMC_EM	LMC	EM	3	127937645	rs9847576	G	A	4.679316	21.896000	-30.081577	5.25E-13
LMC_EM	LMC	EM	3	127938137	rs9814834	A	G	4.696607	22.058117	-30.192733	4.75E-13
LMC_EM	LMC	EM	3	127939034	rs9857235	T	A	4.703413	22.122096	-30.236487	4.57E-13
LMC_EM	LMC	EM	3	127939357	rs4323023	A	T	4.717867	22.258268	-30.340047	4.16E-13
LMC_EM	LMC	EM	3	127939444	rs2955131	A	G	-4.549414	20.697164	-30.389925	3.98E-13
LMC_EM	LMC	EM	3	127940226	rs2955132	C	A	-4.533016	20.548231	-30.280388	4.39E-13
LMC_EM	LMC	EM	3	127940353	rs9845651	G	T	4.704073	22.128300	-30.240727	4.55E-13
LMC_EM	LMC	EM	3	127940440	rs7372902	C	G	4.710044	22.184511	-30.279112	4.40E-13
LMC_EM	LMC	EM	3	127940534	rs6439122	G	A	4.705523	22.141947	-30.250051	4.51E-13
LMC_EM	LMC	EM	3	127941072	rs55775237	T	C	-4.580778	20.983531	-30.529532	3.51E-13
LMC_EM	LMC	EM	3	127941439	rs6439123	C	T	4.709915	22.183303	-30.278288	4.40E-13
LMC_EM	LMC	EM	3	127941947	rs2999088	G	A	-4.580700	20.982812	-30.621995	3.23E-13
LMC_EM	LMC	EM	3	127942379	rs9873786	G	A	4.771259	22.764910	-30.301046	4.31E-13
LMC_EM	LMC	EM	3	127943328	rs4857838	G	A	4.709069	22.175334	-30.272849	4.42E-13
LMC_EM	LMC	EM	3	127944477	rs6775988	G	C	4.700294	22.092766	-30.205120	4.70E-13
LMC_EM	LMC	EM	3	127945349	rs6777054	A	G	4.685281	21.951855	-30.118423	5.08E-13
LMC_EM	LMC	EM	3	127946788	rs9830294	A	G	4.757379	22.632659	-30.090395	5.21E-13
LMC_EM	LMC	EM	3	127947032	rs2955134	C	T	-4.634658	21.480056	-30.958963	2.39E-13
LMC_EM	LMC	EM	3	127948060	rs4857877	G	A	4.728813	22.361676	-30.399060	3.95E-13
LMC_EM	LMC	EM	3	127948149	rs4857878	C	T	4.721564	22.293170	-30.631392	3.21E-13
LMC_EM	LMC	EM	3	127958013	rs4074440	A	G	4.843306	23.457612	-30.704009	3.00E-13
LMC_EM	LMC	EM	3	127961396	rs9843281	T	A	4.816444	23.198135	-30.579083	3.36E-13
LMC_EM	LMC	EM	3	127963448	rs13434079	G	A	4.815229	23.186428	-30.630084	3.21E-13
LMC_EM	LMC	EM	3	127978795	rs4555544	A	G	4.936788	24.371874	-31.341307	1.70E-13
LMC_EM	LMC	EM	3	127983209	rs2999035	T	C	-4.621384	21.357190	-30.851636	2.63E-13
LMC_EM	LMC	EM	3	127988240	rs2999064	G	C	-4.606209	21.217164	-30.773377	2.82E-13
LMC_EM	LMC	EM	3	127991149	rs2811413	A	C	4.226923	17.866882	-28.057485	3.23E-12
LMC_EM	LMC	EM	3	127994160	rs2811529	A	G	4.958110	24.582854	-31.480601	1.50E-13
LMC_EM	LMC	EM	3	128015236	rs2955103	T	C	3.547358	12.583749	-17.520659	4.37E-08
LMC_EM	LMC	EM	3	128036786	rs13095166	T	C	-5.073784	25.743289	-32.609664	5.45E-14
LMC_EM	LMC	EM	3	128038373	rs10934853	A	C	-5.334132	28.452969	-32.632063	5.34E-14
LMC_EM	LMC	EM	3	128038689	rs12486127	A	C	-5.071042	25.715469	-32.591675	5.54E-14
LMC_EM	LMC	EM	3	128038834	rs12486156	T	C	-5.070149	25.706412	-32.574583	5.62E-14
LMC_EM	LMC	EM	3	128046643	rs4857841	A	G	-5.364687	28.779865	-32.689596	5.07E-14
LMC_EM	LMC	EM	3	128058617	rs3849531	T	A	-5.364060	28.773140	-33.051610	3.67E-14
LMC_EM	LMC	EM	3	128059610	rs1735558	A	G	-5.092084	25.929316	-32.771590	4.71E-14
LMC_EM	LMC	EM	3	128064118	rs4857879	C	A	-5.099966	26.009657	-31.603978	1.34E-13
LMC_EM	LMC	EM	3	128071809	rs1735549	T	A	-5.386496	29.014343	-28.869884	1.56E-12
LMC_EM	LMC	EM	3	128075398	rs1735546	G	T	-5.426605	29.448045	-29.086336	1.28E-12
LMC_EM	LMC	EM	3	128077602	rs6785384	T	C	-5.493425	30.177723	-29.235758	1.12E-12
LMC_EM	LMC	EM	3	128081260	rs1735545	C	G	-5.473462	29.958783	-29.361538	1.00E-12

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	3	128083332	rs1702122	G	A	-5.634806	31.751042	-30.449582	3.77E-13
LMC_EM	LMC	EM	3	128084164	rs4277707	T	A	-5.085297	25.860250	-28.734346	1.76E-12
LMC_EM	LMC	EM	3	128092102	rs1735538	G	A	-5.651441	31.938788	-30.579884	3.36E-13
LMC_EM	LMC	EM	3	128094493	rs1702119	C	T	-5.663764	32.078219	-30.671531	3.09E-13
LMC_EM	LMC	EM	3	128095278	rs1702118	G	T	-5.106221	26.073498	-29.553235	8.43E-13
LMC_EM	LMC	EM	3	128095652	rs3021461	C	T	-5.570795	31.033753	-30.046747	5.42E-13
LMC_EM	LMC	EM	3	128095767	rs2977565	A	G	-5.565356	30.973183	-29.989642	5.70E-13
LMC_EM	LMC	EM	3	128105972	rs2999033	A	G	-4.596246	21.125480	-24.788689	6.11E-11
LMC_EM	LMC	EM	3	128106267	rs2977562	G	A	-4.796890	23.010153	-22.856269	3.49E-10
LMC_EM	LMC	EM	3	128106536	rs2977561	C	T	-4.725246	22.327951	-22.466978	4.96E-10
LMC_EM	LMC	EM	3	128107020	rs7373685	C	A	-4.698513	22.076021	-22.341950	5.55E-10
LMC_EM	LMC	EM	3	128107982	rs1625296	A	G	-4.638700	21.517540	-22.161555	6.53E-10
LMC_EM	LMC	EM	3	128109916	rs741925	T	C	-4.455044	19.847419	-22.555240	4.58E-10
LMC_EM	LMC	EM	3	128109941	rs3887841	C	T	-4.396047	19.325232	-20.628380	2.61E-09
LMC_EM	LMC	EM	3	128110390	rs1702131	C	T	-4.467455	19.958153	-22.471533	4.94E-10
LMC_EM	LMC	EM	3	128110770	rs729847	A	G	-4.514406	20.379865	-21.114689	1.68E-09
LMC_EM	LMC	EM	3	128111174	rs4241495	C	T	-4.633469	21.469034	-22.147054	6.62E-10
LMC_EM	LMC	EM	3	128111201	rs1702134	T	G	-4.492346	20.181174	-22.649546	4.20E-10
LMC_EM	LMC	EM	3	128112307	rs1620440	C	T	-4.468766	19.969871	-22.548413	4.61E-10
LMC_EM	LMC	EM	3	128114587	rs7632169	C	T	-4.640919	21.538125	-22.055410	7.19E-10
LMC_EM	LMC	EM	3	128115381	rs1735527	G	A	-4.564577	20.835362	-23.580987	1.81E-10
LMC_EM	LMC	EM	3	128117573	rs1702153	A	G	-4.536909	20.583542	-22.459352	4.99E-10
LMC_EM	LMC	EM	3	128118711	rs1702136	A	G	-4.421015	19.545374	-20.615899	2.64E-09
LMC_EM	LMC	EM	3	128119565	rs760383	G	A	-4.481509	20.083927	-20.988509	1.89E-09
LMC_EM	LMC	EM	3	128122039	rs6780368	T	C	-4.366442	19.065816	-22.214174	6.23E-10
LMC_EM	LMC	EM	3	128122396	rs2659685	A	G	-4.498501	20.236514	-21.082336	1.73E-09
LMC_EM	LMC	EM	4	55989675	rs1380057	A	T	-2.705647	7.320528	-21.220081	1.53E-09
LMC_EM	LMC	EM	4	55991042	rs12502008	T	G	-2.979581	8.877900	-21.174511	1.59E-09
LMC_EM	LMC	EM	4	55991731	rs7667298	C	T	-2.985844	8.915265	-23.689535	1.65E-10
LMC_EM	LMC	EM	4	55991827	rs9994560	G	A	2.915578	8.500593	-23.982576	1.26E-10
LMC_EM	LMC	EM	4	55992067	rs55713360	G	A	2.731912	7.463344	-19.653014	6.32E-09
LMC_EM	LMC	EM	4	55992105	rs28695311	C	G	2.865969	8.213776	-23.703074	1.63E-10
LMC_EM	LMC	EM	4	55992366	rs2071559	G	A	2.915097	8.497793	-23.938812	1.31E-10
LMC_EM	LMC	EM	4	56014393	rs1350542	T	C	-2.370783	5.620613	-20.384424	3.26E-09
LMC_EM	LMC	EM	4	56014425	rs2219469	T	C	-2.344962	5.498847	-20.144199	4.05E-09
LMC_EM	LMC	EM	4	56015840	rs6837695	T	C	2.308144	5.327530	-19.832759	5.37E-09
LMC_EM	LMC	EM	4	56015841	rs4864956	A	G	-2.340303	5.477020	-20.168833	3.96E-09
LMC_EM	LMC	EM	4	56016071	rs1458829	A	G	-2.352155	5.532634	-20.280815	3.58E-09
LMC_EM	LMC	EM	4	56016721	rs7686613	G	C	-2.375474	5.642874	-20.475139	3.00E-09
LMC_EM	LMC	EM	4	56017274	rs1580217	T	C	-2.399036	5.755371	-20.721125	2.40E-09
LMC_EM	LMC	EM	4	56017283	rs1580216	T	C	-2.358340	5.561769	-20.369693	3.30E-09
LMC_EM	LMC	EM	4	56017967	rs13143757	A	G	-2.357876	5.559580	-20.335736	3.40E-09
LMC_EM	LMC	EM	4	56019139	rs11935409	T	A	-2.351299	5.528607	-20.268599	3.62E-09
LMC_EM	LMC	EM	4	56019253	rs11936364	C	T	-2.353024	5.536723	-20.284411	3.57E-09
LMC_EM	LMC	EM	4	56022968	rs2899031	A	C	-2.393925	5.730875	-20.646060	2.57E-09
LMC_EM	LMC	EM	4	56023445	rs2412637	G	C	-2.400560	5.762687	-20.708204	2.43E-09
LMC_EM	LMC	EM	4	56023617	rs7679993	C	T	-2.390503	5.714506	-20.621687	2.63E-09
LMC_EM	LMC	EM	4	56023737	rs7680198	A	T	-2.296847	5.275508	-19.812999	5.47E-09
LMC_EM	LMC	EM	4	56023747	rs7696256	A	G	-2.313951	5.354371	-19.959721	4.79E-09
LMC_EM	LMC	EM	4	56023763	rs7675314	G	A	-2.242264	5.027746	-19.341987	8.38E-09
LMC_EM	LMC	EM	4	56024063	rs17712245	C	G	-2.341563	5.482919	-20.000481	4.61E-09
LMC_EM	LMC	EM	4	56024179	rs17081840	G	A	-2.310146	5.336773	-19.929698	4.92E-09
LMC_EM	LMC	EM	4	56024199	rs62304733	C	T	-2.286202	5.226718	-19.528219	7.07E-09
LMC_EM	LMC	EM	6	152470293	rs17082233	C	T	2.880628	8.298020	-20.128754	4.11E-09
LMC_EM	LMC	EM	6	152470752	rs17082236	A	C	2.782499	7.742302	-19.215104	9.40E-09
LMC_EM	LMC	EM	6	152471588	rs73632499	T	C	2.985721	8.914531	-20.903894	2.04E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	6	152471912	rs7743748	A	G	2.954551	8.729370	-20.682205	2.49E-09
LMC_EM	LMC	EM	6	152472210	rs2103809	C	T	2.830181	8.009926	-18.156809	2.45E-08
LMC_EM	LMC	EM	6	152472284	rs2092753	C	G	2.793782	7.805219	-17.922994	3.03E-08
LMC_EM	LMC	EM	6	152472660	rs2348080	A	T	2.825731	7.984755	-18.130978	2.51E-08
LMC_EM	LMC	EM	8	25243213	rs34068702	G	A	6.823676	46.562560	-43.321604	3.83E-18
LMC_EM	LMC	EM	8	25245432	rs931875	A	G	7.221249	52.146430	-38.386177	3.12E-16
LMC_EM	LMC	EM	8	25247181	rs4872310	A	G	7.489670	56.095161	-44.639837	1.18E-18
LMC_EM	LMC	EM	8	25248615	rs13261573	A	G	7.613560	57.966300	-45.435894	5.82E-19
LMC_EM	LMC	EM	8	25255017	rs12675289	C	A	7.065362	49.919341	-37.480499	7.00E-16
LMC_EM	LMC	EM	8	25263294	rs61490611	G	T	6.827924	46.620545	-36.753348	1.34E-15
LMC_EM	LMC	EM	8	25267103	rs4871939	A	G	7.362603	54.207919	-44.455354	1.39E-18
LMC_EM	LMC	EM	8	25269102	rs1506869	A	C	6.860558	47.067255	-36.443020	1.77E-15
LMC_EM	LMC	EM	8	25275495	rs12155980	A	C	-5.801090	33.652644	-23.264659	2.41E-10
LMC_EM	LMC	EM	8	25280800	rs6185	G	C	7.260856	52.720036	-43.718788	2.69E-18
LMC_EM	LMC	EM	8	25311269	rs17053711	A	G	7.103396	50.458233	-37.311354	8.14E-16
LMC_EM	LMC	EM	8	25320594	rs12675625	C	T	6.241340	38.954321	-32.389563	6.63E-14
LMC_EM	LMC	EM	8	25321845	rs35698191	A	T	6.259794	39.185021	-32.455730	6.25E-14
LMC_EM	LMC	EM	8	25389631	rs10098571	A	G	5.473128	29.955133	-20.367973	3.31E-09
LMC_EM	LMC	EM	11	30009190	rs76820729	G	A	4.861360	23.632817	-28.008301	3.37E-12
LMC_EM	LMC	EM	11	30039588	rs79484066	A	G	4.651527	21.636704	-26.135727	1.82E-11
LMC_EM	LMC	EM	11	30104841	rs7933948	G	A	5.180061	26.833028	-17.858825	3.22E-08
LMC_EM	LMC	EM	11	30118507	rs72882325	G	A	5.122504	26.240046	-17.547557	4.27E-08
LMC_EM	LMC	EM	11	30135595	rs1369810	C	T	5.192156	26.958483	-17.852470	3.24E-08
LMC_EM	LMC	EM	11	30145730	rs1436098	T	C	8.461251	71.592765	-57.102913	1.83E-23
LMC_EM	LMC	EM	11	30146230	rs11030958	C	T	8.447382	71.358255	-56.661306	2.71E-23
LMC_EM	LMC	EM	11	30146407	rs1436099	T	C	8.484559	71.987745	-56.986769	2.03E-23
LMC_EM	LMC	EM	11	30147285	rs4923621	A	C	8.475397	71.832357	-56.879202	2.23E-23
LMC_EM	LMC	EM	11	30147515	rs4923622	C	T	8.450230	71.406384	-56.628935	2.79E-23
LMC_EM	LMC	EM	11	30147562	rs4923623	T	C	8.488420	72.053281	-57.011456	1.99E-23
LMC_EM	LMC	EM	11	30148871	rs979210	C	T	8.431104	71.083518	-56.525415	3.06E-23
LMC_EM	LMC	EM	11	30149602	rs892950	G	C	8.472578	71.784581	-56.853459	2.29E-23
LMC_EM	LMC	EM	11	30150000	rs892951	A	G	8.473105	71.793515	-56.858463	2.28E-23
LMC_EM	LMC	EM	11	30151117	rs892952	T	C	8.472754	71.787555	-56.808420	2.38E-23
LMC_EM	LMC	EM	11	30151444	rs12800683	T	C	8.456265	71.508425	-56.553772	2.98E-23
LMC_EM	LMC	EM	11	30152078	rs1369811	G	A	8.484134	71.980527	-56.973792	2.05E-23
LMC_EM	LMC	EM	11	30152594	rs7935077	A	G	8.489561	72.072643	-57.027991	1.96E-23
LMC_EM	LMC	EM	11	30153348	rs1865731	C	A	8.489979	72.079748	-57.031961	1.95E-23
LMC_EM	LMC	EM	11	30154037	rs11030960	C	T	8.492402	72.120885	-56.949797	2.10E-23
LMC_EM	LMC	EM	11	30154407	rs10835617	G	C	8.489995	72.080023	-56.933661	2.13E-23
LMC_EM	LMC	EM	11	30154477	rs35078732	G	A	8.501174	72.269959	-57.464497	1.33E-23
LMC_EM	LMC	EM	11	30154609	rs11030961	T	C	8.489995	72.080023	-56.933661	2.13E-23
LMC_EM	LMC	EM	11	30154930	rs11030962	C	T	8.490086	72.081563	-56.933419	2.13E-23
LMC_EM	LMC	EM	11	30155086	rs17694317	C	T	8.490474	72.088145	-56.936869	2.12E-23
LMC_EM	LMC	EM	11	30155294	rs597235	G	A	-8.519972	72.589923	-57.133985	1.78E-23
LMC_EM	LMC	EM	11	30155490	rs2117911	C	A	8.490377	72.086496	-56.877455	2.24E-23
LMC_EM	LMC	EM	11	30155829	rs10835618	T	C	8.490390	72.086729	-56.936309	2.12E-23
LMC_EM	LMC	EM	11	30156019	rs1561088	G	T	8.469033	71.724526	-34.686537	8.50E-15
LMC_EM	LMC	EM	11	30156039	rs1561089	T	A	8.469033	71.724526	-34.691030	8.46E-15
LMC_EM	LMC	EM	11	30156168	rs1561090	C	T	8.471682	71.769400	-34.445912	1.05E-14
LMC_EM	LMC	EM	11	30156631	rs12362720	C	G	8.468683	71.718596	-34.685103	8.51E-15
LMC_EM	LMC	EM	11	30157917	rs2082917	C	T	8.490348	72.086013	-56.940214	2.12E-23
LMC_EM	LMC	EM	11	30158498	rs12290734	C	T	8.478789	71.889859	-56.858587	2.28E-23
LMC_EM	LMC	EM	11	30158828	rs12270725	G	A	8.478824	71.890450	-56.858820	2.28E-23
LMC_EM	LMC	EM	11	30158907	rs12290971	C	T	8.504154	72.320643	-57.028688	1.96E-23
LMC_EM	LMC	EM	11	30158908	rs12284112	A	G	8.478824	71.890450	-56.858820	2.28E-23
LMC_EM	LMC	EM	11	30159305	rs12796113	C	T	8.478840	71.890725	-56.917674	2.16E-23

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trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	11	30159379	rs12794770	T	C	8.478840	71.890725	-56.622555	2.81E-23
LMC_EM	LMC	EM	11	30159382	rs12796334	C	T	8.478805	71.890134	-56.622168	2.81E-23
LMC_EM	LMC	EM	11	30160204	rs12801198	G	A	8.481201	71.930766	-56.874607	2.24E-23
LMC_EM	LMC	EM	11	30160548	rs3847631	G	A	8.464221	71.643044	-56.714713	2.59E-23
LMC_EM	LMC	EM	11	30160793	rs3847632	C	T	8.486944	72.028224	-56.845945	2.30E-23
LMC_EM	LMC	EM	11	30160801	rs3886880	T	C	8.480587	71.920352	-56.803208	2.39E-23
LMC_EM	LMC	EM	11	30160908	rs12802602	G	A	8.483347	71.967171	-56.880060	2.23E-23
LMC_EM	LMC	EM	11	30161164	rs4285851	T	C	8.468497	71.715435	-56.864873	2.26E-23
LMC_EM	LMC	EM	11	30162194	rs12790814	A	C	8.510888	72.435219	-57.090272	1.85E-23
LMC_EM	LMC	EM	11	30162222	rs12792185	A	T	8.509741	72.415691	-57.082809	1.87E-23
LMC_EM	LMC	EM	11	30162744	rs72884326	G	A	8.523970	72.658068	-57.331805	1.50E-23
LMC_EM	LMC	EM	11	30162775	rs78026352	C	A	8.524164	72.661378	-57.334043	1.49E-23
LMC_EM	LMC	EM	11	30182946	rs18359031[4]	A	G	5.246001	27.520526	-29.005378	1.38E-12
LMC_EM	LMC	EM	11	30185613	rs18634332[5]	C	G	5.201991	27.060709	-28.761202	1.72E-12
LMC_EM	LMC	EM	11	30190496	rs76821060	T	C	6.241507	38.956415	-32.834223	4.46E-14
LMC_EM	LMC	EM	11	30195757	rs676217	T	G	3.440476	11.836874	-19.969727	4.74E-09
LMC_EM	LMC	EM	11	30201133	rs681993	G	A	3.547525	12.584933	-20.399614	3.21E-09
LMC_EM	LMC	EM	11	30205523	rs621220	A	G	3.529057	12.454242	-20.312696	3.48E-09
LMC_EM	LMC	EM	11	30214713	rs961605	A	G	3.455078	11.937563	-26.123729	1.84E-11
LMC_EM	LMC	EM	11	30216006	rs632939	C	T	3.444831	11.866859	-26.010985	2.03E-11
LMC_EM	LMC	EM	11	30217003	rs574096	T	A	3.428114	11.751964	-25.958402	2.13E-11
LMC_EM	LMC	EM	11	30217503	rs605765	T	C	4.207871	17.706178	-27.033766	8.10E-12
LMC_EM	LMC	EM	11	30222637	rs622744	C	T	3.465704	12.011102	-26.269432	1.61E-11
LMC_EM	LMC	EM	11	30223574	rs607987	A	G	4.042082	16.338423	-25.836468	2.38E-11
LMC_EM	LMC	EM	11	30223861	rs606651	A	C	3.452233	11.917912	-26.110652	1.86E-11
LMC_EM	LMC	EM	11	30223866	rs606642	A	G	3.456215	11.945421	-26.140769	1.81E-11
LMC_EM	LMC	EM	11	30225170	rs1716021	C	G	3.483802	12.136876	-26.369886	1.47E-11
LMC_EM	LMC	EM	11	30225324	rs118175327	T	C	6.551924	42.927708	-24.137367	1.10E-10
LMC_EM	LMC	EM	11	30226286	rs683054	C	T	3.261291	10.636017	-24.361945	8.97E-11
LMC_EM	LMC	EM	11	30227534	rs568394	T	C	3.306082	10.930176	-24.634124	7.02E-11
LMC_EM	LMC	EM	11	30227923	rs655183	T	A	3.424051	11.724124	-25.585713	2.98E-11
LMC_EM	LMC	EM	11	30228264	rs653518	T	C	3.271752	10.704360	-24.417054	8.54E-11
LMC_EM	LMC	EM	11	30229234	rs476669	A	C	3.436073	11.806595	-25.694948	2.70E-11
LMC_EM	LMC	EM	11	30230216	rs1716025	A	G	3.304385	10.918961	-24.637434	7.00E-11
LMC_EM	LMC	EM	11	30230281	rs76757075	A	G	5.205299	27.095139	-30.932100	2.45E-13
LMC_EM	LMC	EM	11	30232381	rs494779	T	C	3.195140	10.208919	-23.576371	1.82E-10
LMC_EM	LMC	EM	11	30232615	rs492828	A	G	3.195495	10.211185	-23.476963	1.99E-10
LMC_EM	LMC	EM	11	30234394	rs601681	T	C	3.349578	11.219675	-24.737586	6.40E-11
LMC_EM	LMC	EM	11	30234432	rs601640	A	G	3.195755	10.212850	-23.555913	1.86E-10
LMC_EM	LMC	EM	11	30234606	rs600768	T	C	3.157218	9.968027	-23.297295	2.34E-10
LMC_EM	LMC	EM	11	30234703	rs600333	A	G	3.168557	10.039756	-23.360611	2.21E-10
LMC_EM	LMC	EM	11	30234782	rs540948	C	T	3.227972	10.419806	-23.798861	1.49E-10
LMC_EM	LMC	EM	11	30235497	rs586326	A	G	3.345456	11.192073	-24.597890	7.25E-11
LMC_EM	LMC	EM	11	30236544	rs555621	C	T	3.203995	10.265585	-23.642153	1.72E-10
LMC_EM	LMC	EM	11	30237518	rs664147	T	C	3.345064	11.189454	-24.595072	7.27E-11
LMC_EM	LMC	EM	11	30238832	rs621448	A	T	3.180272	10.114127	-23.292478	2.35E-10
LMC_EM	LMC	EM	11	30239283	rs553406	G	A	3.048801	9.295188	-21.963709	7.81E-10
LMC_EM	LMC	EM	11	30239353	rs553190	T	C	3.049558	9.299806	-21.951774	7.90E-10
LMC_EM	LMC	EM	11	30239470	rs618611	A	G	3.201193	10.247637	-23.119539	2.75E-10
LMC_EM	LMC	EM	11	30240217	rs523875	T	C	3.064693	9.392342	-22.084155	7.01E-10
LMC_EM	LMC	EM	11	30240470	rs521271	A	T	3.871861	14.991310	-24.248482	9.94E-11
LMC_EM	LMC	EM	11	30240829	rs518357	T	C	3.209745	10.302462	-23.405266	2.13E-10
LMC_EM	LMC	EM	11	30241032	rs590833	A	G	3.042077	9.254234	-22.149707	6.60E-10
LMC_EM	LMC	EM	11	30241731	rs489096	T	C	3.042087	9.254295	-22.138794	6.67E-10
LMC_EM	LMC	EM	11	30242325	rs572883	T	C	3.042087	9.254295	-22.266603	5.94E-10
LMC_EM	LMC	EM	11	30243247	rs543401	G	T	3.042425	9.256351	-22.244007	6.06E-10

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	11	30243795	rs1782508	G	C	3.920636	15.371386	-25.094608	4.64E-11
LMC_EM	LMC	EM	11	30243868	rs1782507	T	G	3.859354	14.894610	-24.676514	6.76E-11
LMC_EM	LMC	EM	11	30244235	rs653452	T	C	3.857608	14.881143	-24.690555	6.67E-11
LMC_EM	LMC	EM	11	30247886	rs939433	T	C	3.199448	10.236465	-23.439256	2.06E-10
LMC_EM	LMC	EM	11	30248392	rs1630084	A	G	3.042528	9.256975	-22.134042	6.70E-10
LMC_EM	LMC	EM	11	30248826	rs1782509	T	C	3.066216	9.401678	-22.409679	5.22E-10
LMC_EM	LMC	EM	11	30249084	rs1716024	T	C	2.980339	8.882420	-21.787655	9.16E-10
LMC_EM	LMC	EM	11	30249522	rs1716023	C	T	3.070426	9.427514	-22.446652	5.05E-10
LMC_EM	LMC	EM	11	30249550	rs1782510	C	A	3.043029	9.260027	-22.246368	6.05E-10
LMC_EM	LMC	EM	11	30250177	rs1716022	T	C	3.012244	9.073613	-22.040823	7.29E-10
LMC_EM	LMC	EM	11	30250359	rs537263	C	T	3.044305	9.267793	-22.255694	6.00E-10
LMC_EM	LMC	EM	11	30250479	rs538236	A	G	3.035741	9.215726	-22.143617	6.64E-10
LMC_EM	LMC	EM	11	30250568	rs654669	C	T	3.200813	10.245203	-23.402097	2.13E-10
LMC_EM	LMC	EM	11	30251351	rs640748	C	A	3.055267	9.334656	-22.400335	5.27E-10
LMC_EM	LMC	EM	11	30251625	rs639403	T	C	3.026750	9.161217	-22.220114	6.20E-10
LMC_EM	LMC	EM	11	30253189	rs550312	G	T	3.185406	10.146811	-23.434026	2.07E-10
LMC_EM	LMC	EM	11	30253318	rs611246	T	A	3.185406	10.146811	-23.357935	2.22E-10
LMC_EM	LMC	EM	11	30253641	rs609896	C	T	3.045030	9.272208	-22.354310	5.49E-10
LMC_EM	LMC	EM	11	30254268	rs580646	G	T	3.194894	10.207349	-23.503828	1.95E-10
LMC_EM	LMC	EM	11	30254550	rs595496	C	T	3.194894	10.207349	-23.503828	1.95E-10
LMC_EM	LMC	EM	11	30254683	rs594982	C	A	2.973171	8.839744	-21.787942	9.16E-10
LMC_EM	LMC	EM	11	30255185	rs6169	T	C	2.961432	8.770078	-21.733618	9.62E-10
LMC_EM	LMC	EM	11	30255823	rs506197	G	A	3.042541	9.257053	-22.336118	5.58E-10
LMC_EM	LMC	EM	11	30255867	rs506306	G	C	3.022513	9.135585	-22.189146	6.37E-10
LMC_EM	LMC	EM	11	30255982	rs676349	G	A	3.033654	9.203054	-22.177965	6.44E-10
LMC_EM	LMC	EM	11	30257122	rs560078	G	A	3.046990	9.284150	-22.275548	5.89E-10
LMC_EM	LMC	EM	11	30258770	rs626869	T	C	3.028070	9.169211	-22.033912	7.33E-10
LMC_EM	LMC	EM	11	30258989	rs615577	A	G	3.028241	9.170241	-22.030022	7.36E-10
LMC_EM	LMC	EM	11	30261215	rs7126848	T	C	3.049881	9.301773	-22.187752	6.38E-10
LMC_EM	LMC	EM	11	30261910	rs622356	C	A	3.030491	9.183879	-22.047491	7.24E-10
LMC_EM	LMC	EM	11	30263655	rs532667	T	C	3.077842	9.473111	-22.388414	5.32E-10
LMC_EM	LMC	EM	11	30264368	rs560109	A	G	3.069427	9.421382	-22.331321	5.60E-10
LMC_EM	LMC	EM	11	30266370	rs642126	A	G	3.838751	14.736010	-24.323829	9.29E-11
LMC_EM	LMC	EM	11	30267038	rs515997	C	T	3.822077	14.608270	-24.227981	1.01E-10
LMC_EM	LMC	EM	11	30270667	rs689233	A	G	3.963413	15.708643	-25.400709	3.52E-11
LMC_EM	LMC	EM	11	30271159	rs549346	G	A	3.172431	10.064321	-23.123507	2.74E-10
LMC_EM	LMC	EM	11	30271406	rs675635	T	C	3.836938	14.722090	-24.394837	8.71E-11
LMC_EM	LMC	EM	11	30271845	rs673740	T	C	3.824106	14.623786	-24.447800	8.31E-11
LMC_EM	LMC	EM	11	30272226	rs645161	C	A	3.982343	15.859057	-25.513211	3.18E-11
LMC_EM	LMC	EM	11	30274686	rs60781817	A	G	-3.857406	14.879582	-24.658066	6.87E-11
LMC_EM	LMC	EM	11	30274837	rs60968445	T	A	-3.845992	14.791652	-24.448503	8.30E-11
LMC_EM	LMC	EM	11	30275141	rs35458722	C	T	-3.879322	15.049142	-24.648202	6.93E-11
LMC_EM	LMC	EM	11	30275351	rs34487664	C	T	-3.835550	14.711445	-24.369752	8.91E-11
LMC_EM	LMC	EM	11	30276409	rs11718264	T	C	5.009717	25.097261	-29.577113	8.25E-13
LMC_EM	LMC	EM	11	30277028	rs4120820	T	C	3.195037	10.208264	-23.168191	2.63E-10
LMC_EM	LMC	EM	11	30278764	rs11727206	G	C	5.150507	26.527719	-30.405829	3.92E-13
LMC_EM	LMC	EM	11	30278829	rs4531442	G	A	-3.824105	14.623783	-24.297236	9.51E-11
LMC_EM	LMC	EM	11	30279268	rs1933345	C	G	-3.830167	14.670177	-24.351277	9.06E-11
LMC_EM	LMC	EM	11	30279354	rs1933346	T	C	-3.829470	14.664837	-24.330719	9.23E-11
LMC_EM	LMC	EM	11	30279609	rs1933347	C	T	-3.846377	14.794618	-24.483092	8.05E-11
LMC_EM	LMC	EM	11	30280075	rs7924960	T	C	-3.819009	14.584827	-24.271800	9.73E-11
LMC_EM	LMC	EM	11	30281066	rs11031014	C	T	-3.817190	14.570942	-24.241478	1.00E-10
LMC_EM	LMC	EM	11	30281330	rs6484477	A	G	3.194199	10.202909	-23.106746	2.78E-10
LMC_EM	LMC	EM	11	30282274	rs4244552	T	C	-3.812676	14.536496	-24.258678	9.85E-11
LMC_EM	LMC	EM	11	30282779	rs4267046	C	A	-3.826187	14.639709	-24.345246	9.11E-11
LMC_EM	LMC	EM	11	30286978	rs14505247	A	T	-3.823478	14.618985	-24.478644	8.08E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	11	30287046	rs79028439	G	A	-3.826858	14.644840	-24.500281	7.92E-11
LMC_EM	LMC	EM	11	30287070	rs34609938	A	G	-3.845616	14.788761	-24.620307	7.11E-11
LMC_EM	LMC	EM	11	30289511	rs7940387	T	C	-3.802335	14.457748	-24.341859	9.14E-11
LMC_EM	LMC	EM	11	30290012	rs11031022	A	G	-3.795234	14.403804	-24.296438	9.52E-11
LMC_EM	LMC	EM	11	30290814	rs61886090	T	G	-3.801769	14.453444	-24.251681	9.91E-11
LMC_EM	LMC	EM	11	30292176	rs11031024	T	G	-3.798012	14.424898	-24.218688	1.02E-10
LMC_EM	LMC	EM	11	30292350	rs11031025	A	G	-3.802062	14.455676	-24.192942	1.05E-10
LMC_EM	LMC	EM	11	30293769	rs4267043	A	T	-3.961026	15.689723	-25.264782	3.98E-11
LMC_EM	LMC	EM	11	30294329	rs10835643	C	T	-3.795203	14.403568	-24.149464	1.09E-10
LMC_EM	LMC	EM	11	30295232	rs4923629	T	C	-3.795219	14.403687	-24.301439	9.48E-11
LMC_EM	LMC	EM	11	30297374	rs11031027	C	T	-3.793320	14.389276	-24.136590	1.10E-10
LMC_EM	LMC	EM	11	30297809	rs7108615	C	T	-3.974651	15.797849	-25.351309	3.68E-11
LMC_EM	LMC	EM	11	30300692	rs4120821	T	C	3.210694	10.308553	-23.260662	2.42E-10
LMC_EM	LMC	EM	11	30301607	rs12363576	A	G	-3.801557	14.451837	-24.189069	1.05E-10
LMC_EM	LMC	EM	11	30301868	rs4923631	C	T	-3.795269	14.404067	-24.149058	1.09E-10
LMC_EM	LMC	EM	11	30302023	rs4923632	A	C	-3.824456	14.626462	-24.327442	9.26E-11
LMC_EM	LMC	EM	11	30302923	rs11031028	A	G	-3.801906	14.454487	-24.340811	9.15E-11
LMC_EM	LMC	EM	11	30303443	rs4359180	G	A	-3.784721	14.324112	-24.081974	1.15E-10
LMC_EM	LMC	EM	11	30304455	rs11031030	C	T	-3.792515	14.383173	-24.126628	1.11E-10
LMC_EM	LMC	EM	11	30304726	rs11031032	C	G	-3.961850	15.696259	-25.269906	3.96E-11
LMC_EM	LMC	EM	11	30309732	rs10767833	C	T	3.229914	10.432346	-23.399822	2.14E-10
LMC_EM	LMC	EM	11	30311316	rs10742238	G	A	3.219037	10.362199	-23.321020	2.29E-10
LMC_EM	LMC	EM	11	30312519	rs35665615	A	C	-4.038833	16.312174	-25.864802	2.32E-11
LMC_EM	LMC	EM	11	30312743	rs12805098	C	T	-4.021236	16.170337	-25.752108	2.57E-11
LMC_EM	LMC	EM	11	30314253	rs11031038	C	T	3.233706	10.456852	-23.437225	2.07E-10
LMC_EM	LMC	EM	11	30314585	rs12793271	A	G	-4.038833	16.312174	-25.864802	2.32E-11
LMC_EM	LMC	EM	11	30315071	rs61886116	T	G	-4.043120	16.346821	-25.876474	2.29E-11
LMC_EM	LMC	EM	11	30315627	rs7102836	T	C	-7.966558	63.466051	-20.466119	3.03E-09
LMC_EM	LMC	EM	11	30318470	rs1933339	G	A	-7.966321	63.462275	-20.713659	2.42E-09
LMC_EM	LMC	EM	11	30318720	rs11031041	C	G	-4.022655	16.181756	-25.771466	2.52E-11
LMC_EM	LMC	EM	11	30319432	rs61626579	T	C	-4.050186	16.404003	-25.922601	2.20E-11
LMC_EM	LMC	EM	11	30323189	rs1933349	T	C	3.233907	10.458156	-23.532696	1.90E-10
LMC_EM	LMC	EM	11	30324475	rs1933348	A	T	3.233940	10.458367	-23.532934	1.89E-10
LMC_EM	LMC	EM	11	30327162	rs12361937	A	G	-4.040646	16.326824	-25.980570	2.09E-11
LMC_EM	LMC	EM	11	30327981	rs59475325	T	C	-4.036891	16.296486	-25.956421	2.14E-11
LMC_EM	LMC	EM	11	30328026	rs55715542	T	C	-4.044092	16.354684	-26.063919	1.94E-11
LMC_EM	LMC	EM	11	30329232	rs1933337	A	C	-7.957678	63.324645	-20.667083	2.52E-09
LMC_EM	LMC	EM	11	30330963	rs7125524	A	G	-4.041703	16.335362	-25.987363	2.08E-11
LMC_EM	LMC	EM	11	30333224	rs1222204	C	T	4.043273	16.348057	-25.997950	2.06E-11
LMC_EM	LMC	EM	11	30334223	rs1856142	T	C	-7.947184	63.157733	-20.530169	2.86E-09
LMC_EM	LMC	EM	11	30335633	rs7950187	A	T	-7.978269	63.652779	-20.714350	2.42E-09
LMC_EM	LMC	EM	11	30335654	rs11031046	A	T	-7.965587	63.450572	-20.681422	2.49E-09
LMC_EM	LMC	EM	11	30335691	rs7950221	C	T	-7.957413	63.320417	-20.666393	2.52E-09
LMC_EM	LMC	EM	11	30336334	rs1222203	G	A	4.046491	16.374087	-26.018639	2.02E-11
LMC_EM	LMC	EM	11	30336425	rs3904780	T	A	-7.955186	63.284982	-20.637282	2.59E-09
LMC_EM	LMC	EM	11	30336613	rs1222202	A	G	4.046600	16.374973	-26.019343	2.02E-11
LMC_EM	LMC	EM	11	30337470	rs3904779	T	C	-7.955171	63.284749	-20.660571	2.54E-09
LMC_EM	LMC	EM	11	30338275	rs10767835	A	T	3.238599	10.488525	-23.560896	1.85E-10
LMC_EM	LMC	EM	11	30338392	rs10767836	C	T	3.238599	10.488525	-23.537995	1.89E-10
LMC_EM	LMC	EM	11	30340362	rs4112796	C	T	-7.965041	63.441873	-20.668561	2.52E-09
LMC_EM	LMC	EM	11	30340725	rs2786257	A	G	4.010182	16.081560	-26.117650	1.85E-11
LMC_EM	LMC	EM	11	30341210	rs10767837	G	A	3.040116	9.242307	-22.047279	7.24E-10
LMC_EM	LMC	EM	11	30342173	rs3897026	T	A	3.040116	9.242307	-22.043998	7.26E-10
LMC_EM	LMC	EM	11	30343925	rs1222220	A	C	4.184204	17.507561	-26.968021	8.60E-12
LMC_EM	LMC	EM	11	30344761	rs1222218	G	A	4.051172	16.411996	-26.048640	1.96E-11
LMC_EM	LMC	EM	11	30344799	rs1222217	G	A	4.044207	16.355610	-26.004732	2.04E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	11	30344883	rs11826681	C	G	-7.982126	63.714333	-20.729754	2.38E-09
LMC_EM	LMC	EM	11	30346097	rs56340204	T	G	-7.925390	62.811807	-20.704172	2.44E-09
LMC_EM	LMC	EM	11	30347828	rs10835653	C	T	-7.949169	63.189292	-20.596240	2.69E-09
LMC_EM	LMC	EM	11	30347927	rs10767838	G	A	-7.949085	63.187956	-20.410580	3.18E-09
LMC_EM	LMC	EM	11	30348638	rs4427542	C	G	3.042440	9.256440	-22.134366	6.70E-10
LMC_EM	LMC	EM	11	30348973	rs3858430	A	G	-7.950364	63.208294	-20.560919	2.78E-09
LMC_EM	LMC	EM	11	30350185	rs1717774	C	G	4.069674	16.562243	-26.452065	1.37E-11
LMC_EM	LMC	EM	11	30350192	rs2065940	T	C	3.061412	9.372241	-22.269530	5.93E-10
LMC_EM	LMC	EM	11	30354707	rs1879671	T	G	-7.931569	62.909794	-20.551765	2.80E-09
LMC_EM	LMC	EM	11	30356057	rs1222205	G	A	4.090245	16.730106	-26.453908	1.36E-11
LMC_EM	LMC	EM	11	30356092	rs10767839	A	G	3.086829	9.528516	-22.518143	4.73E-10
LMC_EM	LMC	EM	11	30361670	rs1222209	A	C	4.073232	16.591223	-26.494800	1.32E-11
LMC_EM	LMC	EM	11	30363727	rs1765141	G	A	4.089564	16.724530	-26.628414	1.17E-11
LMC_EM	LMC	EM	11	30365566	rs1228479	T	C	4.259920	18.146918	-27.807915	4.04E-12
LMC_EM	LMC	EM	11	30367332	rs1538109	C	T	2.959059	8.756030	-21.510898	1.18E-09
LMC_EM	LMC	EM	11	30369420	rs6484481	T	C	2.958882	8.754984	-21.511607	1.18E-09
LMC_EM	LMC	EM	11	30373982	rs140873431	G	A	6.258641	39.170586	-22.384823	5.34E-10
LMC_EM	LMC	EM	11	30375316	rs1235089	G	A	3.300194	10.891278	-22.565620	4.54E-10
LMC_EM	LMC	EM	11	30376044	rs1765134	T	C	3.306363	10.932036	-22.607480	4.37E-10
LMC_EM	LMC	EM	11	30376209	rs7929105	T	C	3.082494	9.501768	-21.983388	7.67E-10
LMC_EM	LMC	EM	11	30376782	rs1765135	C	T	3.298262	10.878533	-22.549500	4.60E-10
LMC_EM	LMC	EM	11	30378559	rs1765142	A	C	4.430537	19.629655	-31.075221	2.15E-13
LMC_EM	LMC	EM	11	30378694	rs7952660	G	T	3.177978	10.099545	-22.811939	3.63E-10
LMC_EM	LMC	EM	11	30394949	rs571174	C	T	-3.272605	10.709943	-22.267556	5.94E-10
LMC_EM	LMC	EM	11	30395895	rs490937	G	T	-3.065967	9.400151	-20.299705	3.52E-09
LMC_EM	LMC	EM	11	30426237	rs869215	C	T	5.671298	32.163622	-22.731148	3.91E-10
LMC_EM	LMC	EM	11	30554476	rs559519	C	T	-3.571229	12.753675	-17.503456	4.44E-08
LMC_EM	LMC	EM	11	30613013	rs10835689	C	G	4.993614	24.936177	-18.842935	1.32E-08
LMC_EM	LMC	EM	11	30613995	rs11031141	G	A	4.998130	24.981306	-18.846392	1.31E-08
LMC_EM	LMC	EM	11	30618816	rs1374612	C	A	4.955837	24.560317	-18.621841	1.61E-08
LMC_EM	LMC	EM	11	30620829	rs7127318	A	G	4.889049	23.902799	-18.435002	1.91E-08
LMC_EM	LMC	EM	11	30621981	rs400581	G	A	4.896043	23.971234	-18.450091	1.88E-08
LMC_EM	LMC	EM	11	30771782	rs12419067	A	G	3.433439	11.788507	-17.574743	4.16E-08
LMC_EM	LMC	EM	11	100955250	rs509015	A	G	5.073630	25.741719	-17.423028	4.78E-08
LMC_EM	LMC	EM	11	100956659	rs523081	C	T	5.068406	25.688742	-17.406028	4.85E-08
LMC_EM	LMC	EM	11	100963509	rs559700	C	T	5.073672	25.742151	-17.425211	4.77E-08
LMC_EM	LMC	EM	11	100965666	rs512846	C	T	5.087654	25.884227	-17.492230	4.49E-08
LMC_EM	LMC	EM	11	100975985	rs482765	C	T	5.110334	26.115509	-17.545623	4.28E-08
LMC_EM	LMC	EM	11	100979145	rs495210	T	C	5.106440	26.075732	-17.561147	4.22E-08
LMC_EM	LMC	EM	11	100982183	rs520017	C	T	5.106243	26.073722	-17.562736	4.21E-08
LMC_EM	LMC	EM	11	100983340	rs541463	A	G	5.106761	26.079004	-17.564515	4.20E-08
LMC_EM	LMC	EM	11	100983629	rs565186	C	T	5.107487	26.086419	-17.567470	4.19E-08
LMC_EM	LMC	EM	11	100983724	rs673943	C	G	5.105524	26.066371	-17.560482	4.22E-08
LMC_EM	LMC	EM	11	100984260	rs570885	A	C	5.102041	26.030818	-17.549585	4.26E-08
LMC_EM	LMC	EM	11	100984413	rs571923	G	A	5.145169	26.472763	-17.697697	3.72E-08
LMC_EM	LMC	EM	11	100984417	rs571925	T	G	5.155052	26.574565	-17.731624	3.61E-08
LMC_EM	LMC	EM	11	100986597	rs471715	C	T	5.106745	26.078844	-17.563100	4.21E-08
LMC_EM	LMC	EM	11	100990788	rs548711	G	A	5.103991	26.050729	-17.555201	4.24E-08
LMC_EM	LMC	EM	11	100991685	rs562894	C	T	5.103280	26.043471	-17.552823	4.25E-08
LMC_EM	LMC	EM	11	100993690	rs502471	A	G	5.104815	26.059132	-17.558066	4.23E-08
LMC_EM	LMC	EM	11	100998076	rs3740752	A	T	5.079258	25.798866	-17.488120	4.50E-08
LMC_EM	LMC	EM	11	100998771	rs3740753	G	C	5.147456	26.496305	-17.702612	3.71E-08
LMC_EM	LMC	EM	11	101003112	rs507141	A	G	5.079925	25.805641	-17.664967	3.84E-08
LMC_EM	LMC	EM	12	115109223	rs3741698	G	C	-3.164934	10.016805	18.837765	1.32E-08
LMC_EM	LMC	EM	21	36445050	rs6517273	T	C	4.181541	17.485283	-18.896121	1.25E-08
LMC_EM	LMC	EM	21	36445121	rs2834747	G	T	4.315060	18.619739	-20.349848	3.36E-09

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_EM	LMC	EM	21	36446597	rs1003473	C	G	4.188746	17.545590	-19.643312	6.37E-09
LMC_EM	LMC	EM	21	36447889	rs1004164	A	G	4.004052	16.032436	-17.884759	3.14E-08
LMC_EM	LMC	EM	21	36448156	rs1571696	T	C	3.947779	15.584955	-17.388570	4.93E-08
LMC_EM	LMC	EM	21	36456189	rs2242901	T	G	4.117455	16.953436	-18.888862	1.26E-08
LMC_EM	LMC	EM	21	36461659	rs2031088	G	A	3.986352	15.891005	-17.998382	2.83E-08
LMC_ERSV	LMC	ERSV	4	55991042	rs12502008	T	G	-2.979581	8.877900	-17.371235	1.55E-08
LMC_ERSV	LMC	ERSV	4	55991731	rs7667298	C	T	-2.985844	8.915265	-16.590250	3.33E-08
LMC_ERSV	LMC	ERSV	4	55993468	rs28517654	C	T	2.236203	5.000606	-16.346721	4.22E-08
LMC_ERSV	LMC	ERSV	4	55995061	rs9992737	T	C	2.239481	5.015277	-16.377664	4.09E-08
LMC_ERSV	LMC	ERSV	4	55996712	rs73236106	T	C	2.235268	4.996421	-16.329399	4.29E-08
LMC_ERSV	LMC	ERSV	4	55996903	rs10020668	A	G	2.234459	4.992807	-16.345103	4.23E-08
LMC_ERSV	LMC	ERSV	4	55997340	rs10013228	G	A	2.236273	5.000916	-16.333651	4.27E-08
LMC_ERSV	LMC	ERSV	4	55997622	rs28584303	T	C	2.237325	5.005625	-16.362042	4.16E-08
LMC_ERSV	LMC	ERSV	4	55998086	rs12331538	C	A	2.234602	4.993446	-16.342052	4.24E-08
LMC_ERSV	LMC	ERSV	6	151700893	rs57968001	C	T	-2.658594	7.068124	-21.036136	4.37E-10
LMC_ERSV	LMC	ERSV	6	151702237	rs115805051	C	T	-2.651173	7.028719	-21.087204	4.16E-10
LMC_ERSV	LMC	ERSV	6	151704548	rs75107694	C	T	-2.647573	7.009643	-21.056397	4.29E-10
LMC_ERSV	LMC	ERSV	6	151709978	rs9383568	T	C	-2.694166	7.258529	-21.629881	2.45E-10
LMC_ERSV	LMC	ERSV	6	151712026	rs139683250	A	G	-2.695781	7.267237	-21.909887	1.87E-10
LMC_ERSV	LMC	ERSV	6	151725403	rs116621273	C	T	-2.641595	6.978023	-21.161153	3.87E-10
LMC_ERSV	LMC	ERSV	6	151725666	rs118069541	T	C	-2.638114	6.959644	-21.075825	4.21E-10
LMC_ERSV	LMC	ERSV	6	151730232	rs78375092	G	C	-2.809957	7.895856	-22.719233	8.51E-11
LMC_ERSV	LMC	ERSV	6	151730903	rs9383890	G	A	-2.840128	8.066329	-23.266695	5.00E-11
LMC_ERSV	LMC	ERSV	6	151734998	rs57689380	C	T	-3.133721	9.820208	-26.287049	2.66E-12
LMC_ERSV	LMC	ERSV	6	151737177	rs147230474	T	G	-3.222427	10.384035	-27.315398	9.80E-13
LMC_ERSV	LMC	ERSV	6	151748320	rs139696728	A	G	-3.005880	9.035314	-25.230790	7.42E-12
LMC_ERSV	LMC	ERSV	6	151762169	rs3800275	C	T	-2.758161	7.607452	-22.037358	1.65E-10
LMC_ERSV	LMC	ERSV	6	151762305	rs73783017	C	A	-2.756855	7.600249	-22.021686	1.68E-10
LMC_ERSV	LMC	ERSV	6	151762610	rs6940667	C	G	-2.785058	7.756549	-22.252649	1.34E-10
LMC_ERSV	LMC	ERSV	6	151763400	rs73783019	G	A	-2.738747	7.500738	-21.882569	1.92E-10
LMC_ERSV	LMC	ERSV	6	151764239	rs73783022	C	T	-2.882659	8.309724	-23.023841	6.33E-11
LMC_ERSV	LMC	ERSV	6	151764665	rs7748785	T	C	-2.738228	7.497895	-21.873881	1.94E-10
LMC_ERSV	LMC	ERSV	6	151764955	rs3800276	A	C	-2.877086	8.277624	-22.978954	6.61E-11
LMC_ERSV	LMC	ERSV	6	151765511	rs3800278	T	G	-2.763556	7.637239	-22.080286	1.58E-10
LMC_ERSV	LMC	ERSV	6	151766199	rs3800280	G	A	-2.727613	7.439873	-21.792002	2.10E-10
LMC_ERSV	LMC	ERSV	6	151766397	rs73783025	A	G	-2.719015	7.393043	-21.724290	2.24E-10
LMC_ERSV	LMC	ERSV	6	151773831	rs111270458	T	C	-2.589121	6.703549	-20.610609	6.62E-10
LMC_ERSV	LMC	ERSV	6	151776164	rs17081262	T	G	-2.598027	6.749742	-20.880003	5.09E-10
LMC_ERSV	LMC	ERSV	6	151778273	rs73783029	T	C	-2.504622	6.273131	-20.355182	8.48E-10
LMC_ERSV	LMC	ERSV	6	151781779	rs138584427	T	C	-2.541101	6.457193	-20.426544	7.91E-10
LMC_ERSV	LMC	ERSV	6	151782544	rs79540726	A	G	-2.545226	6.478174	-20.455824	7.69E-10
LMC_ERSV	LMC	ERSV	6	151784049	rs6557142	T	G	-2.543917	6.471515	-20.441806	7.80E-10
LMC_ERSV	LMC	ERSV	6	151785551	rs17081270	G	A	-2.545530	6.479723	-20.457983	7.67E-10
LMC_ERSV	LMC	ERSV	6	151788184	rs7748711	T	G	-2.538575	6.444363	-20.401748	8.11E-10
LMC_ERSV	LMC	ERSV	6	151788962	rs58952168	A	G	-2.578869	6.650567	-21.035662	4.37E-10
LMC_ERSV	LMC	ERSV	6	151789282	rs3734801	C	A	-2.536422	6.433437	-20.384238	8.25E-10
LMC_ERSV	LMC	ERSV	6	151799274	rs7762223	C	A	-2.646830	7.005708	-21.231545	3.62E-10
LMC_ERSV	LMC	ERSV	6	151802237	rs140993356	G	A	-3.143229	9.879886	-26.461536	2.25E-12
LMC_ERSV	LMC	ERSV	6	151814453	rs79554419	T	C	-2.742109	7.519162	-22.336909	1.23E-10
LMC_ERSV	LMC	ERSV	6	151816537	rs77600257	A	T	-2.677653	7.169826	-21.834190	2.01E-10
LMC_ERSV	LMC	ERSV	6	151819834	rs9383906	G	A	-2.209619	4.882416	-17.995297	8.45E-09
LMC_ERSV	LMC	ERSV	6	151819857	rs115429675	T	C	-2.773759	7.693737	-22.477278	1.08E-10
LMC_ERSV	LMC	ERSV	6	151821024	rs9383911	T	A	-2.147808	4.613079	-17.840032	9.83E-09
LMC_ERSV	LMC	ERSV	6	151822156	rs4869733	C	G	-2.131762	4.544407	-17.706113	1.12E-08
LMC_ERSV	LMC	ERSV	6	151823901	rs7762963	C	A	-2.671731	7.138145	-21.970761	1.76E-10
LMC_ERSV	LMC	ERSV	6	151824449	rs12173791	A	G	-2.143199	4.593303	-17.805806	1.02E-08

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_ERSV	LMC	ERSV	6	151826134	rs7753324	A	G	-2.619355	6.861019	-21.223660	3.64E-10
LMC_ERSV	LMC	ERSV	6	151826307	rs75969278	A	G	-3.148712	9.914387	-26.516769	2.13E-12
LMC_ERSV	LMC	ERSV	6	151827204	rs7453575	C	T	-2.619775	6.863219	-21.226590	3.63E-10
LMC_ERSV	LMC	ERSV	6	151828771	rs76969132	G	A	-2.851112	8.128837	-22.863142	7.40E-11
LMC_ERSV	LMC	ERSV	6	151829474	rs4870022	C	T	-2.151072	4.627111	-17.722611	1.10E-08
LMC_ERSV	LMC	ERSV	6	151829487	rs4870023	T	A	-2.167156	4.696565	-17.855126	9.69E-09
LMC_ERSV	LMC	ERSV	6	151833011	rs78588171	T	C	-2.441678	5.961792	-20.284987	9.08E-10
LMC_ERSV	LMC	ERSV	6	151833037	rs80347787	T	C	-2.441678	5.961792	-19.988891	1.21E-09
LMC_ERSV	LMC	ERSV	6	151835307	rs117595301	T	G	-2.636777	6.952595	-21.159060	3.88E-10
LMC_ERSV	LMC	ERSV	6	151839806	rs1874415	A	G	-2.638045	6.959281	-20.039864	1.15E-09
LMC_ERSV	LMC	ERSV	6	151840464	rs139951455	T	C	-2.680574	7.185479	-20.354319	8.49E-10
LMC_ERSV	LMC	ERSV	6	151840576	rs149746675	G	C	-2.682406	7.195303	-20.368257	8.38E-10
LMC_ERSV	LMC	ERSV	6	151841061	rs114137400	A	G	-2.725371	7.427650	-20.687210	6.14E-10
LMC_ERSV	LMC	ERSV	6	151842916	rs117027891	T	C	-2.748271	7.552996	-20.798322	5.51E-10
LMC_ERSV	LMC	ERSV	6	151844583	rs2001574	A	G	-2.610043	6.812325	-19.724520	1.57E-09
LMC_ERSV	LMC	ERSV	6	151844650	rs2001575	A	G	-2.714670	7.369432	-20.502151	7.35E-10
LMC_ERSV	LMC	ERSV	8	25243213	rs34068702	G	A	6.823676	46.562560	-27.021762	1.30E-12
LMC_ERSV	LMC	ERSV	8	25245432	rs931875	A	G	7.221249	52.146430	-30.560544	4.21E-14
LMC_ERSV	LMC	ERSV	8	25247181	rs4872310	A	G	7.489670	56.095161	-30.815740	3.29E-14
LMC_ERSV	LMC	ERSV	8	25248615	rs13261573	A	G	7.613560	57.966300	-31.364078	1.93E-14
LMC_ERSV	LMC	ERSV	8	25255017	rs12675289	C	A	7.065362	49.919341	-29.704942	9.65E-14
LMC_ERSV	LMC	ERSV	8	25263294	rs61490611	G	T	6.827924	46.620545	-28.973848	1.96E-13
LMC_ERSV	LMC	ERSV	8	25267103	rs4871939	A	G	7.362603	54.207919	-30.170050	6.15E-14
LMC_ERSV	LMC	ERSV	8	25269102	rs1506869	A	C	6.860558	47.067255	-28.788485	2.35E-13
LMC_ERSV	LMC	ERSV	8	25280800	rs6185	G	C	7.260856	52.720036	-29.558034	1.11E-13
LMC_ERSV	LMC	ERSV	8	25311269	rs17053711	A	G	7.103396	50.458233	-29.334331	1.38E-13
LMC_ERSV	LMC	ERSV	8	25320594	rs12675625	C	T	6.241340	38.954321	-23.385125	4.46E-11
LMC_ERSV	LMC	ERSV	8	25321845	rs35698191	A	T	6.259794	39.185021	-23.443217	4.21E-11
LMC_ERSV	LMC	ERSV	8	25389631	rs10098571	A	G	5.473128	29.955133	-17.040666	2.14E-08
LMC_ERSV	LMC	ERSV	11	30145730	rs1436098	T	C	8.461251	71.592765	-24.646962	1.31E-11
LMC_ERSV	LMC	ERSV	11	30146230	rs11030958	C	T	8.447382	71.358255	-24.531902	1.46E-11
LMC_ERSV	LMC	ERSV	11	30146407	rs1436099	T	C	8.484559	71.987745	-24.475542	1.54E-11
LMC_ERSV	LMC	ERSV	11	30147285	rs4923621	A	C	8.475397	71.832357	-24.424468	1.62E-11
LMC_ERSV	LMC	ERSV	11	30147515	rs4923622	C	T	8.450230	71.406384	-24.512962	1.49E-11
LMC_ERSV	LMC	ERSV	11	30147562	rs4923623	T	C	8.488420	72.053281	-24.471612	1.55E-11
LMC_ERSV	LMC	ERSV	11	30148871	rs979210	C	T	8.431104	71.083518	-24.346755	1.75E-11
LMC_ERSV	LMC	ERSV	11	30149602	rs892950	G	C	8.472578	71.784581	-24.406486	1.65E-11
LMC_ERSV	LMC	ERSV	11	30150000	rs892951	A	G	8.473105	71.793515	-24.408104	1.65E-11
LMC_ERSV	LMC	ERSV	11	30151117	rs892952	T	C	8.472754	71.787555	-24.403274	1.66E-11
LMC_ERSV	LMC	ERSV	11	30151444	rs12800683	T	C	8.456265	71.508425	-24.220416	1.98E-11
LMC_ERSV	LMC	ERSV	11	30152078	rs1369811	G	A	8.484134	71.980527	-24.438778	1.60E-11
LMC_ERSV	LMC	ERSV	11	30152594	rs7935077	A	G	8.489561	72.072643	-24.452842	1.58E-11
LMC_ERSV	LMC	ERSV	11	30153348	rs1865731	C	A	8.489979	72.079748	-24.454881	1.58E-11
LMC_ERSV	LMC	ERSV	11	30154037	rs11030960	C	T	8.492402	72.120885	-24.424683	1.62E-11
LMC_ERSV	LMC	ERSV	11	30154407	rs10835617	G	C	8.489995	72.080023	-24.417763	1.63E-11
LMC_ERSV	LMC	ERSV	11	30154477	rs35078732	G	A	8.501174	72.269959	-24.514793	1.49E-11
LMC_ERSV	LMC	ERSV	11	30154609	rs11030961	T	C	8.489995	72.080023	-24.417763	1.63E-11
LMC_ERSV	LMC	ERSV	11	30154930	rs11030962	C	T	8.490086	72.081563	-24.417625	1.63E-11
LMC_ERSV	LMC	ERSV	11	30155086	rs17694317	C	T	8.490474	72.088145	-24.419139	1.63E-11
LMC_ERSV	LMC	ERSV	11	30155294	rs597235	G	A	-8.519972	72.589923	-24.504611	1.50E-11
LMC_ERSV	LMC	ERSV	11	30155490	rs2117911	C	A	8.490377	72.086496	-24.481296	1.54E-11
LMC_ERSV	LMC	ERSV	11	30155829	rs10835618	T	C	8.490390	72.086729	-24.418899	1.63E-11
LMC_ERSV	LMC	ERSV	11	30157917	rs2082917	C	T	8.490348	72.086013	-24.422742	1.63E-11
LMC_ERSV	LMC	ERSV	11	30158498	rs12290734	C	T	8.478789	71.889859	-24.385565	1.69E-11
LMC_ERSV	LMC	ERSV	11	30158828	rs12270725	G	A	8.478824	71.890450	-24.385665	1.69E-11
LMC_ERSV	LMC	ERSV	11	30158907	rs12290971	C	T	8.504154	72.320643	-24.458518	1.57E-11

Supplementary Table 3. PLACO identifies shared pleiotropic SNPs between endometriosis subtypes and menstrual-cycle-related traits

trait_pair	trait1	trait2	CHR	BP	SNP	effect_allele	other_allele	Z	Z_square	T.placo	p.placo
LMC_ERSV	LMC	ERSV	11	30158908	rs12284112	A	G	8.478824	71.890450	-24.385665	1.69E-11
LMC_ERSV	LMC	ERSV	11	30159305	rs12796113	C	T	8.478840	71.890725	-24.415727	1.64E-11
LMC_ERSV	LMC	ERSV	11	30159379	rs12794770	T	C	8.478840	71.890725	-24.388640	1.68E-11
LMC_ERSV	LMC	ERSV	11	30159382	rs12796334	C	T	8.478805	71.890134	-24.388507	1.68E-11
LMC_ERSV	LMC	ERSV	11	30160204	rs12801198	G	A	8.481201	71.930766	-24.392469	1.67E-11
LMC_ERSV	LMC	ERSV	11	30160548	rs3847631	G	A	8.464221	71.643044	-24.165126	2.09E-11
LMC_ERSV	LMC	ERSV	11	30160793	rs3847632	C	T	8.486944	72.028224	-24.417371	1.63E-11
LMC_ERSV	LMC	ERSV	11	30160801	rs3886880	T	C	8.480587	71.920352	-24.399047	1.66E-11
LMC_ERSV	LMC	ERSV	11	30160908	rs12802602	G	A	8.483347	71.967171	-24.395886	1.67E-11
LMC_ERSV	LMC	ERSV	11	30161164	rs4285851	T	C	8.468497	71.715435	-24.354804	1.74E-11
LMC_ERSV	LMC	ERSV	11	30162194	rs12790814	A	C	8.510888	72.435219	-24.474651	1.55E-11
LMC_ERSV	LMC	ERSV	11	30162222	rs12792185	A	T	8.509741	72.415691	-24.471319	1.55E-11
LMC_ERSV	LMC	ERSV	11	30162744	rs72884326	G	A	8.523970	72.658068	-24.666675	1.28E-11
LMC_ERSV	LMC	ERSV	11	30162775	rs78026352	C	A	8.524164	72.661378	-24.667237	1.28E-11

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrState	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-EM	11:30154477:A:G	rs35078732	11	30154477	A	G	0.4165	1.33E-23	1	rs35078732	7	RP4-562D20.1	34232	intergenic	7.67		5	5	15	0	0	0
LMC-EM	11:30162775:A:C	rs78026352	11	30162775	A	C	0.4215	1.49E-23	0.98177	rs35078732	7	RP4-562D20.1	25934	intergenic	9.376		6	14	15	0	0	0
LMC-EM	11:30162744:A:G	rs72884326	11	30162744	A	G	0.4215	1.50E-23	0.98177	rs35078732	7	RP4-562D20.1	25965	intergenic	3.024		7	14	15	0	0	0
LMC-EM	11:30155294:A:G	rs597235	11	30155294	A	G	0.4225	1.78E-23	0.978158	rs35078732	7	RP4-562D20.1	33415	intergenic	2.802		5	5	15	0	0	0
LMC-EM	11:30145730:C:T	rs1436098	11	30145730	C	T	0.4225	1.83E-23	0.978158	rs35078732	7	RP11-624D11	39839	intergenic	0.107		7	5	15	0	0	0
LMC-EM	11:30162194:A:C	rs12790814	11	30162194	C	A	0.4215	1.85E-23	0.98177	rs35078732	7	RP4-562D20.1	26515	intergenic	0.501		7	14	15	0	0	0
LMC-EM	11:30162222:A:T	rs12792185	11	30162222	T	A	0.4215	1.87E-23	0.98177	rs35078732	7	RP4-562D20.1	26487	intergenic	4.349		6	14	15	0	0	0
LMC-EM	11:30153348:A:C	rs1865731	11	30153348	A	C	0.4215	1.95E-23	0.98177	rs35078732	7	RP4-562D20.1	35361	intergenic	2.222		4	5	15	0	0	0
LMC-EM	11:30158907:C:T	rs12290971	11	30158907	T	C	0.4225	1.96E-23	0.978251	rs35078732	7	RP4-562D20.1	29802	intergenic	6.145		7	14	15	0	0	0
LMC-EM	11:30152594:A:G	rs7935077	11	30152594	G	A	0.4215	1.96E-23	0.98177	rs35078732	7	RP4-562D20.1	36115	intergenic	3.233		5	5	15	0	0	0
LMC-EM	11:30147562:C:T	rs4923623	11	30147562	C	T	0.4215	1.99E-23	0.98177	rs35078732	7	RP4-562D20.1	41147	intergenic	0.158		7	7	15	0	0	0
LMC-EM	11:30146407:C:T	rs1436099	11	30146407	C	T	0.4225	2.03E-23	0.978158	rs35078732	7	RP11-624D11	40516	intergenic	2.886		7	5	15	0	0	0
LMC-EM	11:30152078:A:G	rs1369811	11	30152078	A	G	0.4225	2.05E-23	0.978251	rs35078732	7	RP4-562D20.1	36631	intergenic	5.442		6	5	15	0	0	0
LMC-EM	11:30154037:C:T	rs11030960	11	30154037	T	C	0.4215	2.10E-23	0.98177	rs35078732	7	RP4-562D20.1	34672	intergenic	3.656		4	5	15	0	0	0
LMC-EM	11:30157917:C:T	rs2082917	11	30157917	T	C	0.4215	2.12E-23	0.98177	rs35078732	7	RP4-562D20.1	30792	intergenic	3.257		7	9	15	0	0	0
LMC-EM	11:30155086:C:T	rs17694317	11	30155086	T	C	0.4215	2.12E-23	0.98177	rs35078732	7	RP4-562D20.1	33623	intergenic	1.619		5	5	15	0	0	0
LMC-EM	11:30155829:C:T	rs10835618	11	30155829	C	T	0.4215	2.12E-23	0.98177	rs35078732	7	RP4-562D20.1	32880	intergenic	1.839		7	5	15	0	0	0
LMC-EM	11:30154407:C:G	rs10835617	11	30154407	C	G	0.4215	2.13E-23	0.98177	rs35078732	7	RP4-562D20.1	34302	intergenic	2.59		5	5	15	0	0	0
LMC-EM	11:30154609:C:T	rs11030961	11	30154609	C	T	0.4215	2.13E-23	0.98177	rs35078732	7	RP4-562D20.1	34100	intergenic	2.105		6	5	15	0	0	0
LMC-EM	11:30154930:C:T	rs11030962	11	30154930	T	C	0.4215	2.13E-23	0.98177	rs35078732	7	RP4-562D20.1	33779	intergenic	5.285		6	5	15	0	0	0
LMC-EM	11:30159305:C:T	rs12796113	11	30159305	T	C	0.4215	2.16E-23	0.98177	rs35078732	7	RP4-562D20.1	29404	intergenic	1.844		6	14	15	0	0	0
LMC-EM	11:30160908:A:G	rs12802602	11	30160908	A	G	0.4215	2.23E-23	0.98177	rs35078732	7	RP4-562D20.1	27801	intergenic	0.408		7	14	15	0	0	0
LMC-EM	11:30147285:A:C	rs4923621	11	30147285	C	A	0.4185	2.23E-23	0.992645	rs35078732	7	RP11-624D11	41394	intergenic	1.783		4	7	15	0	0	0
LMC-EM	11:30155490:A:C	rs2117911	11	30155490	A	C	0.4215	2.24E-23	0.98177	rs35078732	7	RP4-562D20.1	33219	intergenic	0.114		7	5	15	0	0	0
LMC-EM	11:30160204:A:G	rs12801198	11	30160204	A	G	0.4215	2.24E-23	0.98177	rs35078732	7	RP4-562D20.1	28505	intergenic	4.505		7	14	15	0	0	0
LMC-EM	11:30161164:C:T	rs4285851	11	30161164	C	T	0.4195	2.26E-23	0.989038	rs35078732	7	RP4-562D20.1	27545	intergenic	0.243		7	14	15	0	0	0
LMC-EM	11:30158828:A:G	rs12270725	11	30158828	A	G	0.4215	2.28E-23	0.98177	rs35078732	7	RP4-562D20.1	29881	intergenic	1.219		6	14	15	0	0	0
LMC-EM	11:30158908:A:G	rs12284112	11	30158908	G	A	0.4225	2.28E-23	0.978251	rs35078732	7	RP4-562D20.1	29801	intergenic	3.16		7	14	15	0	0	0
LMC-EM	11:30158498:C:T	rs12290734	11	30158498	T	C	0.4215	2.28E-23	0.98177	rs35078732	7	RP4-562D20.1	30211	intergenic	5.061		6	14	15	0	0	0
LMC-EM	11:30150000:A:G	rs892951	11	30150000	G	A	0.4215	2.28E-23	0.98177	rs35078732	7	RP4-562D20.1	38709	intergenic	4.199		4	5	15	0	0	0
LMC-EM	11:30149602:C:G	rs892950	11	30149602	C	G	0.4215	2.29E-23	0.98177	rs35078732	7	RP4-562D20.1	39107	intergenic	0.741		7	5	15	0	0	0
LMC-EM	11:30160793:C:T	rs3847632	11	30160793	T	C	0.4225	2.30E-23	0.978251	rs35078732	7	RP4-562D20.1	27916	intergenic	6.739		7	14	15	0	0	0
LMC-EM	11:30151117:C:T	rs892952	11	30151117	C	T	0.4215	2.38E-23	0.98177	rs35078732	7	RP4-562D20.1	37592	intergenic	11.16		5	7	15	0	0	0
LMC-EM	11:30160801:C:T	rs3886880	11	30160801	C	T	0.4225	2.39E-23	0.978251	rs35078732	7	RP4-562D20.1	27908	intergenic	3.933		7	14	15	0	0	0
LMC-EM	11:30160548:A:G	rs3847631	11	30160548	A	G	0.4185	2.59E-23	0.992645	rs35078732	7	RP4-562D20.1	28161	intergenic	6.104		7	14	15	0	0	0
LMC-EM	11:30146230:C:T	rs11030958	11	30146230	T	C	0.4225	2.71E-23	0.978158	rs35078732	7	RP11-624D11	40339	intergenic	2.223		6	5	15	0	0	0
LMC-EM	11:30147515:C:T	rs4923622	11	30147515	T	C	0.4225	2.79E-23	0.978158	rs35078732	7	RP4-562D20.1	41194	intergenic	3.347		6	7	15	0	0	0
LMC-EM	11:30159379:C:T	rs12794770	11	30159379	C	T	0.4215	2.81E-23	0.98177	rs35078732	7	RP4-562D20.1	29330	intergenic	0.9		7	14	15	0	0	0
LMC-EM	11:30159382:C:T	rs12796334	11	30159382	T	C	0.4215	2.81E-23	0.98177	rs35078732	7	RP4-562D20.1	29327	intergenic	3.234		7	14	15	0	0	0
LMC-EM	11:30151444:C:T	rs12800683	11	30151444	C	T	0.4215	2.98E-23	0.98177	rs35078732	7	RP4-562D20.1	37265	intergenic	1.274		5	5	15	0	0	0
LMC-EM	11:30148871:C:T	rs979210	11	30148871	T	C	0.4205	3.06E-23	0.985396	rs35078732	7	RP4-562D20.1	39838	intergenic	3.773		7	5	15	0	0	0
AAM-EM	6:151840684:A:G	rs9397422	6	151840684	G	A	0.3668	3.80E-21	1	rs9397422	14	CCDC170	0	intronic	1.09		5	9	15	1	1	0
FIM-EPP	11:30226356:C:T	rs11031005	11	30226356	T	C	0.1402	6.52E-21	1	rs11031005	8	FSHB	26206	intergenic	7.276		7	7	15	0	0	0
FIM-EPP	11:30226528:A:G	rs11031006	11	30226528	G	A	0.1412	6.86E-21	0.991951	rs11031005	8	FSHB	26034	intergenic	19.91		6	5	15	0	0	0
AAM-EM	6:151845578:C:T	rs7763324	6	151845578	T	C	0.3678	7.16E-21	0.979792	rs9397422	14	CCDC170	0	intronic	3.936		5	7	15	1	1	0
AAM-EPP	6:151803754:A:C	rs6933660	6	151803754	C	A	0.331	1.16E-20	1	rs6933660	11	CCDC170	11410	intergenic	14.32	1b		1	15	0	1	0
AAM-EPP	6:151806124:A:G	rs9397413	6	151806124	A	G	0.331	1.42E-20	1	rs6933660	11	CCDC170	9040	intergenic	0.677		6	5	15	0	1	0
FIM-EPP	11:30338842:A:G	rs7947350	11	30338842	A	G	0.161	1.79E-20	0.814555	rs11031005	8	ARL14EP	5755	intergenic	0.811	2b		2	15	0	0	0
FIM-EPP	11:30339461:A:G	rs7929660	11	30339461	A	G	0.162	1.82E-20	0.808662	rs11031005	8	ARL14EP	5136	intergenic	4.161		7	5	15	0	0	0
FIM-EPP	11:30329175:A:G	rs10835649	11	30329175	A	G	0.161	1.84E-20	0.814555	rs11031005	8	ARL14EP	15422	intergenic	0.524		7	14	15	0	0	0
FIM-EPP	11:30337523:C:T	rs11031047	11	30337523	C	T	0.161	1.84E-20	0.814555	rs11031005	8	ARL14EP	7074	intergenic	0.041		6	7	15	0	0	0
FIM-EPP	11:30342495:A:G	rs6484479	11	30342495	G	A	0.161	1.85E-20	0.814555	rs11031005	8	ARL14EP	2102	intergenic	2.527		7	5	14	0	0	0
FIM-EPP	11:30336002:A:G	rs4071563	11	30336002	G	A	0.161	1.86E-20	0.814555	rs11031005	8	ARL14EP	8595	intergenic	0.968		7	5	15	0	0	0
FIM-EPP	11:30342150:A:G	rs12363824	11	30342150	G	A	0.161	1.87E-20	0.814555	rs11031005	8	ARL14EP	2447	intergenic	5.839		7	5	14	0	0	0
FIM-EPP	11:30343757:C:T	rs3858429	11	30343757	C	T	0.161	1.98E-20	0.814555	rs11031005	8	ARL14EP	840	upstream	6.516	NA		1	14	1	0	0
FIM-EPP	11:30344725:C:T	rs4071559	11	30344725	C	T	0.161	2.00E-20	0.814555	rs11031005	8	ARL14EP	0	UTR5	8.412		4	1	1	1	0	0
FIM-EPP	11:30344591:C:T	rs4071558	11	30344591	C	T	0.161	2.02E-20	0.814555	rs11031005	8	ARL14EP	6	upstream	8.951	2b		1	1	1	0	0
FIM-EPP	11:30319433:A:G	rs12271300	11	30319433	G	A	0.161	2.03E-20	0.814555	rs11031005	8	ARL14EP	25164	intergenic	12.69		7	9	15	0	0	0
FIM-EPP	11:30319259:A:G	rs12271187	11	30319259	G	A	0.161	2.05E-20	0.814555	rs11031005	8	ARL14EP	25338	intergenic	0.444		7	9	15	0	0	0
FIM-EPP	11:30316822:A:G	rs12278989	11	30316822	A	G	0.161	2.05E-20	0.814555	rs11031005	8	ARL14EP	27775	intergenic	4.855		7	7	15	0	0	0
FIM-EPP	11:30317733:G:T	rs11031040	11	30317733	T	G	0.161	2.05E-20	0.814555	rs11031005	8	ARL14EP	26864	intergenic	5.361		7	9	15	0	0	0
FIM-EPP	11:30307989:A:G	rs75525300	11	30307989	A	G	0.161	2.20E-20	0.814555	rs11031005	8	ARL14EP	36608	intergenic	8.107		5	5	15	0	0	0
FIM-EPP	11:30242287:C:T	rs74485684	11	30242287	T	C	0.161	2.94E-20	0.814555	rs11031005	8	FSHB	10275	intergenic	7.258		6	14	15	0	0	0
AAM-EPP	6:151806283:A:G	rs9397414	6	151806283	A	G	0.331	2.96E-20	1	rs6933660	11	CCDC170	8881	intergenic	0.031		7	5	15	0	1	0
AAM-EPP	6:151806102:A:G	rs9371219	6	151806102	A	G	0.331	5.77E-20	1	rs6933660	11	CCDC170	9062	intergenic	0.961		7	5	15	0	1	0
AAM-EPP	6:151826249:C:T	rs7740302	6	151826249	T	C	0.2018	5.99E-20	1	rs7740302	11	CCDC170	0	intronic	0.843		5	5	15	1	1	0
FIM-EPP	11:30349487:C:CACTCTA	rs10616649	11	30349487	CACTCTA	C	0.161	6.43E-20	0.814555	rs11031005	8	ARL14EP	0	intronic	2.084	NA		4	5	1	0	0
FIM-EO	11:30252352:G:T	rs10835638	11	30252352	G	T	0.1431	7.92E-20	1	rs10835638	9	FSHB	210	upstream	13.3		6	9	15	1	0	0
AAM-EPP	6:151830769:C:T	rs4870024	6	151830769	T	C	0.2018	1.32E-19	0.987921	rs7740302	11	CCDC170	0	intronic	4.386		7	5	15	1	1	0
AAM-EPP	6:151838245:C:T	rs7759516	6	151838245	T	C	0.2048	1.36E-19	0.970333	rs7740302	11	CCDC170	0	intronic	0.366		7	5	15	1	1	0
FIM-EO	11:30374608:A:G	rs7949790	11	30374608	A	G	0.1521	1.76E-19	0.899313	rs10835638	9	ARL14EP	14833	intergenic	4.237		4	5	15	0	0	0
FIM-EO	11:30376314:A:T	rs76959488	11	30376314	T	A	0.1521	1.88E-19	0.899313	rs10835638	9	RP4-710M3.1	13380	intergenic	0.758		6	5	15	0	0	0
FIM-EO	11:30375889:C:T	rs11031058	11	30375889	C	T	0.1521	1.89E-19	0.899313	rs10835638	9	RP4-710M3.1	13805	intergenic	0.724		7	5	15	0	0	0
FIM-EO	11:30376902:A:C	rs10835660	11	30376902	A	C	0.1521	1.95E-19	0.899313	rs10835638	9	RP4-710M3.1	12792	intergenic	2.686		7	5	15	0	0	0
AAM-EPP	6:151841594:A:G	rs7775980	6	151841594	A	G	0.2038	2.28E-19	0.964334	rs7740302	11	CCDC170	0	intronic	2.097		7	8	15	1	1	0
AAM-EPP	6:151842860:A:T	rs9371529	6	151842860	A	T	0.2048	5.65E-19	0.946791	rs7740302	11	CCDC170	0	intronic	2.001		6	9	15	1	1	0
LMC-EM	8:25248615:A:G	rs13261573	8	25248615	G	A	0.2545	5.82E-19	1	rs13261573	6	DOCK5	0	intronic	0.672		7	4	4	1	1	0
LMC-EM	8:25247181:A:G	rs4872310	8	25247181	G	A	0.2535	1.18E-18	0.995059	rs13261573	6	DOCK5	0	intronic	4.677		7	4	4	1	1	0
LMC-EM	8:25267103:A:G	rs4871939	8	25267103	G	A	0.2465	1.39E-18	0.961185	rs13261573	6	DOCK5	0	intronic	11.04		5	4	4	1	1	0
LMC-EM	8:25280800:C:G	rs6185	8	25280800	C	G	0.2425	2.69E-18	0.942505	rs13261573	6	GNRH1	0	exonic	12.21		7	4	4	1	1	0
FIM-EM	11:30382899:C:T	rs12294104	11	30382899	C	T	0.1581	2.82E-18	1	rs12294104	9	RP4-710M3.1	6795	intergenic	1.404		7	5	15	0	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EM	11:30381076:C:T	rs10835661	11	30381076	T	C	0.1571	2.89E-18	0.992254	rs12294104	9	RP4-710M3.1	8618	intergenic	8.247		7	5	15	0	0	0
LMC-EM	8:25243213:A:G	rs34068702	8	25243213	A	G	0.2922	3.83E-18	0.805191	rs13261573	6	DOCK5	0	intronic	2.503		4	4	5	1	0	0
FIM-EM	11:30395871:C:T	rs12223987	11	30395871	C	T	0.1581	6.39E-18	0.969171	rs12294104	9	RP4-710M3.1	5677	intergenic	2.426		7	5	15	0	0	0
AAM-EPP	6:151840684:A:G	rs9397422	6	151840684	G	A	0.3668	8.34E-18	0.822217	rs6933660	11	CCDC170	0	intronic	1.09		5	9	15	1	1	0
AAM-EPP	11:30226356:C:T	rs11031005	11	30226356	T	C	0.1402	8.47E-18	1	rs11031005	17	FSHB	26206	intergenic	7.276		7	7	15	0	0	0
AAM-EPP	6:151845578:C:T	rs7763324	6	151845578	T	C	0.3678	8.48E-18	0.811427	rs6933660	11	CCDC170	0	intronic	3.936		5	7	15	1	1	0
AAM-EPP	11:30226528:A:G	rs11031006	11	30226528	G	A	0.1412	1.08E-17	0.991951	rs11031005	17	FSHB	26034	intergenic	19.91		6	5	15	0	0	0
AAM-EPP	11:30317733:G:T	rs11031040	11	30317733	T	G	0.161	1.11E-17	0.814555	rs11031005	17	ARL14EP	26864	intergenic	5.361		7	9	15	0	0	0
AAM-EPP	11:30316822:A:G	rs12278989	11	30316822	A	G	0.161	1.24E-17	0.814555	rs11031005	17	ARL14EP	27775	intergenic	4.855		7	7	15	0	0	0
AAM-EPP	11:30319259:A:G	rs12271187	11	30319259	G	A	0.161	1.30E-17	0.814555	rs11031005	17	ARL14EP	25338	intergenic	0.444		7	9	15	0	0	0
AAM-EPP	11:30319433:A:G	rs12271300	11	30319433	G	A	0.161	1.33E-17	0.814555	rs11031005	17	ARL14EP	25164	intergenic	12.69		7	9	15	0	0	0
AAM-EPP	11:30307989:A:G	rs75525300	11	30307989	A	G	0.161	1.33E-17	0.814555	rs11031005	17	ARL14EP	36608	intergenic	8.107		5	5	15	0	0	0
AAM-EPP	11:30336002:A:G	rs4071563	11	30336002	G	A	0.161	1.39E-17	0.814555	rs11031005	17	ARL14EP	8595	intergenic	0.968		7	5	15	0	0	0
AAM-EPP	11:30329175:A:G	rs10835649	11	30329175	A	G	0.161	1.43E-17	0.814555	rs11031005	17	ARL14EP	15422	intergenic	0.524		7	14	15	0	0	0
AAM-EPP	11:30338842:A:G	rs7947350	11	30338842	A	G	0.161	1.44E-17	0.814555	rs11031005	17	ARL14EP	5755	intergenic	0.811	2b		2	15	0	0	0
AAM-EPP	11:30342495:A:G	rs6484479	11	30342495	G	A	0.161	1.47E-17	0.814555	rs11031005	17	ARL14EP	2102	intergenic	2.527		7	5	14	0	0	0
AAM-EPP	11:30342150:A:G	rs12363824	11	30342150	G	A	0.161	1.50E-17	0.814555	rs11031005	17	ARL14EP	2447	intergenic	5.839		7	5	14	0	0	0
AAM-EPP	11:30343757:C:T	rs3858429	11	30343757	C	T	0.161	1.51E-17	0.814555	rs11031005	17	ARL14EP	840	upstream	6.516	NA		1	14	1	0	0
AAM-EPP	11:30344591:C:T	rs4071558	11	30344591	C	T	0.161	1.78E-17	0.814555	rs11031005	17	ARL14EP	6	upstream	8.951	2b		1	1	1	0	0
AAM-EPP	11:30339461:A:G	rs7929660	11	30339461	A	G	0.162	1.85E-17	0.808662	rs11031005	17	ARL14EP	5136	intergenic	4.161		7	5	15	0	0	0
AAM-EPP	11:30337523:C:T	rs11031047	11	30337523	C	T	0.161	2.01E-17	0.814555	rs11031005	17	ARL14EP	7074	intergenic	0.041		6	7	15	0	0	0
AAM-EPP	11:30344725:C:T	rs4071559	11	30344725	C	T	0.161	2.34E-17	0.814555	rs11031005	17	ARL14EP	0	UTR5	8.412		4	1	1	1	0	0
AAM-EPP	11:30242287:C:T	rs74485684	11	30242287	T	C	0.161	3.84E-17	0.814555	rs11031005	17	FSHB	10275	intergenic	7.258		6	14	15	0	0	0
FIM-EO	1:169160458:C:T	rs144737447	1	169160458	C	T	0.01193	3.93E-17	1	rs144737447	1	NME7	0	intronic	5.355		5	5	15	1	1	0
FIM-EO	1:169324793:C:T	rs1209731	1	169324793	T	C	0.01292	6.36E-17	0.931944	rs144737447	1	NME7	0	intronic	1.752		4	5	15	1	1	0
FIM-EO	1:169467654:A:G	rs1894692	1	169467654	G	A	0.01093	8.33E-17	0.787354	rs144737447	1	AL021068.1	10807	intergenic	0.694		5	5	15	0	1	0
LMC-DE	8:25248615:A:G	rs13261573	8	25248615	G	A	0.2545	8.94E-17	1	rs13261573	3	DOCK5	0	intronic	0.672		7	4	4	1	1	0
FIM-EO	1:169216412:C:G	rs2040445	1	169216412	C	G	0.01193	1.15E-16	1	rs144737447	1	NME7	0	intronic	0.891		5	5	15	1	1	0
AAM-EM	3:127901786:A:G	rs2811479	3	127901786	G	A	0.2624	1.23E-16	1	rs2811479	9	EEFSEC	0	intronic	5.35		5	5	15	1	1	0
FIM-EO	11:30382899:C:T	rs12294104	11	30382899	C	T	0.1581	1.42E-16	0.813709	rs10835638	9	RP4-710M3.1	6795	intergenic	1.404		7	5	15	0	0	0
FIM-EO	11:30381076:C:T	rs10835661	11	30381076	T	C	0.1571	1.44E-16	0.820212	rs10835638	9	RP4-710M3.1	8618	intergenic	8.247		7	5	15	0	0	0
LMC-DE	8:25247181:A:G	rs4872310	8	25247181	G	A	0.2535	1.71E-16	0.995059	rs13261573	3	DOCK5	0	intronic	4.677		7	4	4	1	1	0
AAM-EM	3:127902091:G:T	rs2811480	3	127902091	G	T	0.2624	1.84E-16	1	rs2811479	9	EEFSEC	0	intronic	1.19		5	5	15	1	1	0
FIM-EO	1:169208179:C:T	rs2227246	1	169208179	C	T	0.01093	2.02E-16	0.927228	rs144737447	1	NME7	0	intronic	4.432	NA		5	15	1	0	0
FIM-EPP	11:30215261:A:T	rs11031002	11	30215261	T	A	0.1213	2.20E-16	0.819569	rs11031005	8	RP4-562D20.1	26407	intergenic	0.997		5	14	15	0	0	0
AAM-EM	3:127892037:C:T	rs2999052	3	127892037	T	C	0.2624	2.31E-16	1	rs2811479	9	EEFSEC	0	intronic	1.539		7	5	5	1	1	0
AAM-EM	3:127895226:A:G	rs2687729	3	127895226	A	G	0.2624	2.47E-16	1	rs2811479	9	EEFSEC	0	intronic	2.629	NA		5	5	1	1	0
AAM-EM	3:127904496:C:T	rs2811481	3	127904496	T	C	0.2624	2.48E-16	1	rs2811479	9	EEFSEC	0	intronic	0.887		6	5	15	1	1	0
FIM-EO	1:169090748:C:T	rs145163454	1	169090748	T	C	0.01093	2.54E-16	0.927228	rs144737447	1	ATP1B1	0	intronic	0.414		5	2	5	1	0	0
AAM-EM	3:127945349:A:G	rs6777054	3	127945349	G	A	0.2634	2.80E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	12.79		5	2	15	1	1	0
AAM-EM	3:127909564:A:G	rs2811513	3	127909564	G	A	0.2624	2.94E-16	1	rs2811479	9	EEFSEC	0	intronic	0.018	NA		5	15	1	1	0
AAM-EM	3:127940353:G:T	rs9845651	3	127940353	T	G	0.2634	3.04E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	1.303		5	4	15	1	1	0
AAM-EM	3:127940534:A:G	rs6439122	3	127940534	A	G	0.2644	3.05E-16	0.989048	rs2811479	9	EEFSEC	0	intronic	1.146		7	5	15	1	1	0
AAM-EM	3:127944477:C:G	rs6775988	3	127944477	C	G	0.2634	3.06E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	0.378		7	4	15	1	1	0
AAM-EM	3:127948149:C:T	rs4857878	3	127948149	T	C	0.2634	3.07E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	1.578		5	5	15	1	1	0
LMC-EM	8:25245432:A:G	rs931875	8	25245432	G	A	0.2674	3.12E-16	0.922604	rs13261573	6	DOCK5	0	intronic	1.536		7	4	5	1	1	0
AAM-EM	3:127905451:A:G	rs2811516	3	127905451	A	G	0.2624	3.13E-16	1	rs2811479	9	EEFSEC	0	intronic	3.811	NA		5	15	1	1	0
AAM-EM	3:127940440:C:G	rs7372902	3	127940440	G	C	0.2634	3.13E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	0.664		5	5	15	1	1	0
AAM-EM	3:127905518:A:G	rs2811515	3	127905518	G	A	0.2624	3.13E-16	1	rs2811479	9	EEFSEC	0	intronic	0.15	NA		5	15	1	1	0
AAM-EM	3:127934329:C:T	rs6770140	3	127934329	T	C	0.2624	3.14E-16	1	rs2811479	9	EEFSEC	0	intronic	3.142	2c		5	15	1	1	0
AAM-EM	3:127935461:C:G	rs6439121	3	127935461	G	C	0.2624	3.14E-16	1	rs2811479	9	EEFSEC	0	intronic	0.827		6	5	15	1	1	0
AAM-EM	3:127920023:C:T	rs2811508	3	127920023	T	C	0.2634	3.16E-16	0.994565	rs2811479	9	EEFSEC	0	intronic	0.946	NA		4	5	1	1	0
AAM-EM	3:127931402:A:G	rs7372439	3	127931402	A	G	0.2644	3.17E-16	0.989048	rs2811479	9	EEFSEC	0	intronic	2.633		7	5	15	1	1	0
AAM-EM	3:127934218:A:G	rs4857873	3	127934218	A	G	0.2624	3.22E-16	1	rs2811479	9	EEFSEC	0	intronic	11.28		5	5	15	1	1	0
AAM-EM	3:127941439:C:T	rs6439123	3	127941439	T	C	0.2634	3.28E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	1.695		6	5	9	1	1	0
AAM-EM	3:127923187:C:T	rs6439119	3	127923187	T	C	0.2614	3.35E-16	0.994508	rs2811479	9	EEFSEC	0	intronic	2.508		7	5	15	1	1	0
AAM-EM	3:127934774:A:C	rs4384971	3	127934774	C	A	0.2634	3.37E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	2.358		5	5	15	1	1	0
AAM-EM	3:127934269:A:T	rs4857874	3	127934269	A	T	0.2624	3.38E-16	1	rs2811479	9	EEFSEC	0	intronic	4.331	2b		5	15	1	1	0
AAM-EM	3:127939357:A:T	rs4323023	3	127939357	T	A	0.2634	3.38E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	5.943		6	4	15	1	1	0
AAM-EM	3:127943328:A:G	rs4857838	3	127943328	A	G	0.2634	3.39E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	4.183		7	5	15	1	1	0
AAM-EM	3:127937645:A:G	rs9847576	3	127937645	A	G	0.2634	3.41E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	9.43		5	4	15	1	1	0
LMC-DE	8:25267103:A:G	rs4871939	8	25267103	G	A	0.2465	3.41E-16	0.961185	rs13261573	3	DOCK5	0	intronic	11.04		5	4	4	1	1	0
AAM-EM	3:127938137:A:G	rs9814834	3	127938137	G	A	0.2634	3.42E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	3.255		5	4	15	1	1	0
AAM-EM	3:127936527:C:T	rs9879865	3	127936527	C	T	0.2634	3.42E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	0.901	2b		4	15	1	1	0
AAM-EM	3:127936532:C:T	rs9879866	3	127936532	C	T	0.2634	3.42E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	0.013	2b		4	15	1	1	0
AAM-EM	3:127933822:G:T	rs4857872	3	127933822	T	G	0.2644	3.43E-16	0.989048	rs2811479	9	EEFSEC	0	intronic	8.992		6	5	15	1	1	0
AAM-EM	3:127918000:A:G	rs2492285	3	127918000	G	A	0.2624	3.46E-16	1	rs2811479	9	EEFSEC	0	intronic	1.204		6	5	5	1	1	0
AAM-EM	3:127916551:A:G	rs2811509	3	127916551	G	A	0.2624	3.55E-16	1	rs2811479	9	EEFSEC	0	intronic	0.206	NA		5	5	1	1	0
AAM-EM	3:127878817:C:T	rs2999049	3	127878817	T	C	0.2634	3.60E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	2.222		7	4	5	1	1	0
AAM-EM	3:127934276:C:T	rs4857875	3	127934276	C	T	0.2624	3.64E-16	1	rs2811479	9	EEFSEC	0	intronic	4.973	2b		5	15	1	1	0
AAM-EM	3:127889287:A:G	rs3122173	3	127889287	A	G	0.2624	3.66E-16	1	rs2811479	9	EEFSEC	0	intronic	1.854		6	5	5	1	1	0
AAM-EM	3:127895986:A:G	rs1554535	3	127895986	G	A	0.2684	3.70E-16	0.96831	rs2811479	9	EEFSEC	0	intronic	0.587	NA		5	5	1	1	0
AAM-EM	3:127948060:A:G	rs4857877	3	127948060	A	G	0.2604	3.72E-16	0.978031	rs2811479	9	EEFSEC	0	intronic	0.341		5	5	15	1	1	0
AAM-EM	3:127898501:A:C	rs2811476	3	127898501	A	C	0.2614	3.88E-16	0.994508	rs2811479	9	EEFSEC	0	intronic	0.043		4	1	15	1	1	0
AAM-EM	3:127930459:A:G	rs9838120	3	127930459	A	G	0.2644	3.96E-16	0.989048	rs2811479	9	EEFSEC	0	intronic	0.599		7	5	15	1	1	0
AAM-EM	3:127930866:A:C	rs7374072	3	127930866	C	A	0.2644	4.00E-16	0.989048	rs2811479	9	EEFSEC	0	intronic	2.482		7	5	15	1	1	0
FIM-EO	11:30395871:C:T	rs12223987	11	30395871	C	T	0.1581	4.15E-16	0.799305	rs10835638	9	RP4-710M3.1	5677	intergenic	2.426		7	5	15	0	0	0
AAM-EM	3:127888347:G:T	rs2955120	3	127888347	T	G	0.2684	4.18E-16	0.96831	rs2811479	9	EEFSEC	0	intronic	7.116		7	5	5	1	1	0
AAM-EM	3:127939034:A:T	rs9857235	3	127939034	A	T	0.2634	4.22E-16	0.994506	rs2811479	9	EEFSEC	0	intronic	4.197		5	4	15	1	1	0
AAM-EM	3:127888067:A:G	rs872267	3	127888067	G	A	0.2684	4.24E-16	0.96831	rs2811479	9	EEFSEC	0	intronic	0.895	NA		2	5	1	1	0
AAM-EM	3:127856573:A:T	rs6414310	3	127856573	T	A	0.2634	5.63E-16	0.994506	rs2811479	9	RUVBL1	0	intronic	7.358		6	5	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	3:127963448:A:G	rs13434079	3	127963448	A	G	0.2694	5.80E-16	0.9631	rs2811479	9	EEFSEC	0	intronic	4.207		6	4	5	1	1	0
AAM-EM	3:127907929:A:G	rs2811514	3	127907929	A	G	0.2694	5.81E-16	0.9631	rs2811479	9	EEFSEC	0	intronic	3.329	NA		5	15	1	1	0
AAM-EM	3:127904943:C:T	rs2811482	3	127904943	C	T	0.2684	6.40E-16	0.96831	rs2811479	9	EEFSEC	0	intronic	2.294		5	5	15	1	1	0
AAM-EM	3:127911820:A:G	rs2811512	3	127911820	G	A	0.2694	6.67E-16	0.9631	rs2811479	9	EEFSEC	0	intronic	7.801	NA		5	15	1	1	0
AAM-EM	3:127836287:C:T	rs4857836	3	127836287	C	T	0.2654	6.96E-16	0.983624	rs2811479	9	RUVBL1	0	intronic	0.141		4	4	5	1	1	0
LMC-EM	8:25255017:A:C	rs12675289	8	25255017	A	C	0.2704	7.00E-16	0.92795	rs13261573	6	DOCK5	0	intronic	5.195		6	4	5	1	1	0
AAM-EM	3:127942379:A:G	rs9873786	3	127942379	A	G	0.2694	7.33E-16	0.9631	rs2811479	9	EEFSEC	0	intronic	4.91		6	5	9	1	1	0
AAM-EM	3:127958013:A:G	rs4074440	3	127958013	G	A	0.2694	7.46E-16	0.9631	rs2811479	9	EEFSEC	0	intronic	1.324	NA		5	5	1	1	0
AAM-EM	3:127867397:A:G	rs67451924	3	127867397	G	A	0.2634	7.46E-16	0.994506	rs2811479	9	RUVBL1	0	intronic	0.551		5	5	15	1	1	0
AAM-EM	3:127836319:A:G	rs4857837	3	127836319	A	G	0.2654	7.77E-16	0.983624	rs2811479	9	RUVBL1	0	intronic	6.99		4	4	5	1	1	0
AAM-EM	3:127933203:C:G	rs11707297	3	127933203	G	C	0.2704	7.84E-16	0.957923	rs2811479	9	EEFSEC	0	intronic	9.001		7	5	15	1	1	0
LMC-EM	8:25311269:A:G	rs17053711	8	25311269	G	A	0.2634	8.14E-16	0.858516	rs13261573	6	KCTD9	0	intronic	4.216		5	4	5	1	1	0
AAM-EM	3:127946788:A:G	rs9830294	3	127946788	G	A	0.2694	8.64E-16	0.9631	rs2811479	9	EEFSEC	0	intronic	0.531		7	5	15	1	1	0
AAM-EM	3:127819062:C:G	rs4857866	3	127819062	G	C	0.2654	8.90E-16	0.983624	rs2811479	9	RUVBL1	0	intronic	3.759		5	4	4	1	1	0
AAM-EM	3:127817508:C:T	rs7632756	3	127817508	C	T	0.2654	8.93E-16	0.983624	rs2811479	9	RUVBL1	0	intronic	8.881		5	4	4	1	1	0
AAM-EM	3:127822320:C:T	rs7641133	3	127822320	T	C	0.2654	9.12E-16	0.983624	rs2811479	9	RUVBL1	0	intronic	17.56		6	4	4	1	1	0
LMC-DE	8:25280800:C:G	rs6185	8	25280800	C	G	0.2425	9.63E-16	0.942505	rs13261573	3	GNRH1	0	exonic	12.21		7	4	4	1	1	0
AAM-EM	3:127978795:A:G	rs4555544	3	127978795	G	A	0.2694	1.00E-15	0.9631	rs2811479	9	EEFSEC	0	intronic	6.032		5	5	9	1	1	0
AAM-EM	3:127878416:A:G	rs2999048	3	127878416	G	A	0.2694	1.31E-15	0.9631	rs2811479	9	EEFSEC	0	intronic	0.073		7	4	5	1	1	0
LMC-EM	8:25263294:G:T	rs61490611	8	25263294	T	G	0.2624	1.34E-15	0.889008	rs13261573	6	DOCK5	0	intronic	6.896		6	4	5	1	1	0
AAM-EM	3:127881613:A:G	rs2955117	3	127881613	G	A	0.2724	1.34E-15	0.948117	rs2811479	9	EEFSEC	0	intronic	16.66		7	4	5	1	1	0
FIM-EPP	11:30325865:A:G	rs7123626	11	30325865	G	A	0.1421	1.37E-15	0.907212	rs7949790	8	ARL14EP	18732	intergenic	1.513		6	7	15	0	0	0
AAM-EM	3:127882064:A:G	rs2955118	3	127882064	G	A	0.2694	1.42E-15	0.9631	rs2811479	9	EEFSEC	0	intronic	10.59		6	4	5	1	0	0
FIM-EPP	11:30309905:C:T	rs10835646	11	30309905	C	T	0.1421	1.42E-15	0.907212	rs7949790	8	ARL14EP	34692	intergenic	3.408		7	5	15	0	0	0
FIM-EPP	11:30309827:C:T	rs10835644	11	30309827	C	T	0.1421	1.42E-15	0.907212	rs7949790	8	ARL14EP	34770	intergenic	1.5		6	5	15	0	0	0
FIM-EPP	11:30309869:C:T	rs10835645	11	30309869	C	T	0.1421	1.42E-15	0.907212	rs7949790	8	ARL14EP	34728	intergenic	3.384		7	5	15	0	0	0
AAM-EM	11:30382899:C:T	rs12294104	11	30382899	C	T	0.1581	1.43E-15	1	rs12294104	22	RP4-710M3.1	6795	intergenic	1.404		7	5	15	0	0	0
FIM-EPP	11:30296055:C:T	rs12364889	11	30296055	T	C	0.1421	1.44E-15	0.907212	rs7949790	8	FSHB	39246	intergenic	0.129		7	14	15	0	0	0
FIM-EPP	11:30314858:A:C	rs11031039	11	30314858	C	A	0.1421	1.45E-15	0.907212	rs7949790	8	ARL14EP	29739	intergenic	0.652		6	5	15	0	0	0
FIM-EPP	11:30312187:A:G	rs12281078	11	30312187	A	G	0.1421	1.46E-15	0.907212	rs7949790	8	ARL14EP	32410	intergenic	7.252		5	5	15	0	0	0
FIM-EPP	11:30312239:C:T	rs12294258	11	30312239	C	T	0.1421	1.46E-15	0.907212	rs7949790	8	ARL14EP	32358	intergenic	7.87		7	5	15	0	0	0
FIM-EPP	11:30308159:C:T	rs4120817	11	30308159	C	T	0.1421	1.47E-15	0.907212	rs7949790	8	ARL14EP	36438	intergenic	0.495	NA		5	15	0	0	0
FIM-EPP	11:30305675:C:T	rs11031033	11	30305675	C	T	0.1421	1.54E-15	0.907212	rs7949790	8	ARL14EP	38922	intergenic	6.786		7	5	15	0	0	0
AAM-EM	3:127808502:C:G	rs7355887	3	127808502	C	G	0.2664	1.56E-15	0.978236	rs2811479	9	RUVBL1	0	intronic	4.779		7	4	5	1	1	0
FIM-EPP	11:30306650:A:T	rs11031035	11	30306650	A	T	0.1421	1.58E-15	0.907212	rs7949790	8	ARL14EP	37947	intergenic	13.59		6	5	15	0	0	0
AAM-EM	11:30381076:C:T	rs10835661	11	30381076	T	C	0.1571	1.59E-15	0.992254	rs12294104	22	RP4-710M3.1	8618	intergenic	8.247		7	5	15	0	0	0
AAM-EM	3:127884937:A:C	rs2811473	3	127884937	A	C	0.1561	1.61E-15	1	rs2811473	9	EEFSEC	0	intronic	7.457		5	4	5	1	1	0
FIM-EPP	11:30240178:A:C	rs11031010	11	30240178	C	A	0.1421	1.67E-15	0.907212	rs7949790	8	FSHB	12384	intergenic	0.98		7	7	15	0	0	0
FIM-EPP	11:30327006:A:G	rs12361594	11	30327006	G	A	0.1421	1.69E-15	0.907212	rs7949790	8	ARL14EP	17591	intergenic	6.885		7	7	15	0	0	0
FIM-EPP	11:30306439:C:T	rs11031034	11	30306439	C	T	0.1421	1.77E-15	0.907212	rs7949790	8	ARL14EP	38158	intergenic	3.241		7	5	15	0	0	0
LMC-EM	8:25269102:A:C	rs1506869	8	25269102	C	A	0.2614	1.77E-15	0.89344	rs13261573	6	DOCK5	0	UTR3	5.15	NA		4	4	1	1	0
AAM-EM	6:151800761:G:T	rs9397412	6	151800761	G	T	0.3946	1.93E-15	1	rs9397412	14	C6orf211	9524	intergenic	8.879		6	5	15	1	1	0
FIM-EPP	11:30354857:C:T	rs12278547	11	30354857	T	C	0.1421	1.98E-15	0.907212	rs7949790	8	ARL14EP	0	intronic	4.902		6	4	4	1	0	0
FIM-EPP	11:30360225:A:G	rs141402489	11	30360225	G	A	0.1412	2.07E-15	0.915211	rs7949790	8	ARL14EP	450	downstream	0.09		6	4	5	1	0	0
FIM-EPP	11:30360794:C:T	rs11031052	11	30360794	C	T	0.1412	2.71E-15	0.915211	rs7949790	8	ARL14EP	1019	intergenic	0.611		6	4	5	0	0	0
FIM-EPP	11:30360026:C:T	rs12278112	11	30360026	T	C	0.1412	2.71E-15	0.915211	rs7949790	8	ARL14EP	251	downstream	5.961		7	4	5	1	0	0
FIM-EPP	11:30359892:A:G	rs7117691	11	30359892	A	G	0.1402	2.71E-15	0.907743	rs7949790	8	ARL14EP	117	downstream	2.712		7	4	5	1	0	0
FIM-EPP	11:30359231:A:G	rs7116893	11	30359231	A	G	0.1402	2.72E-15	0.907743	rs7949790	8	ARL14EP	0	UTR3	1.026		6	4	4	1	0	0
FIM-EPP	11:30355857:C:T	rs11512201	11	30355857	C	T	0.1412	2.75E-15	0.915211	rs7949790	8	ARL14EP	0	intronic	0.602	NA		4	4	1	0	0
FIM-EPP	11:30355903:C:T	rs10835655	11	30355903	C	T	0.1412	2.75E-15	0.915211	rs7949790	8	ARL14EP	0	intronic	0.26		6	4	4	1	0	0
FIM-EPP	11:30356420:C:T	rs12272134	11	30356420	T	C	0.1412	2.78E-15	0.915211	rs7949790	8	ARL14EP	0	intronic	4.84		5	4	4	1	0	0
FIM-EPP	11:30354904:A:C	rs7121963	11	30354904	A	C	0.1412	2.78E-15	0.915211	rs7949790	8	ARL14EP	0	intronic	8.446		5	4	4	1	0	0
FIM-EPP	11:30355197:C:T	rs7122449	11	30355197	C	T	0.1412	2.78E-15	0.915211	rs7949790	8	ARL14EP	0	intronic	3.098		4	4	4	1	0	0
AAM-EM	3:127885008:A:C	rs2687728	3	127885008	C	A	0.1531	2.98E-15	0.97711	rs2811473	9	EEFSEC	0	intronic	11.12	NA		4	5	1	1	0
FIM-EPP	11:30364183:T:TCTGGCCTTAG	rs563036352	11	30364183	TCTGGCCTT	T	0.1421	3.00E-15	0.907212	rs7949790	8	ARL14EP	4408	intergenic	7.3	NA		2	15	0	0	0
FIM-EPP	11:30354895:A:G	rs7118949	11	30354895	A	G	0.1412	3.14E-15	0.915211	rs7949790	8	ARL14EP	0	intronic	0.188		5	4	4	1	0	0
AAM-EM	6:151799355:A:T	rs1553002	6	151799355	A	T	0.3966	3.36E-15	0.983976	rs9397412	14	C6orf211	8118	intergenic	0.777		7	5	15	1	1	0
FIM-EPP	11:30363545:C:T	rs12285277	11	30363545	T	C	0.1412	3.37E-15	0.915211	rs7949790	8	ARL14EP	3770	intergenic	6.616		7	5	5	0	0	0
FIM-EPP	11:30372818:C:T	rs74331022	11	30372818	C	T	0.1412	3.41E-15	0.915211	rs7949790	8	ARL14EP	13043	intergenic	1.539		5	5	15	0	0	0
AAM-EM	3:128046643:A:G	rs4857841	3	128046643	G	A	0.2793	3.41E-15	0.88422	rs2811479	9	EEFSEC	0	intronic	0.912		5	4	5	1	1	0
FIM-EPP	11:30371313:C:T	rs10835658	11	30371313	C	T	0.1412	3.49E-15	0.915211	rs7949790	8	ARL14EP	11538	intergenic	5.608		6	5	15	0	0	0
FIM-EPP	11:30371615:C:T	rs12363432	11	30371615	C	T	0.1412	3.50E-15	0.915211	rs7949790	8	ARL14EP	11840	intergenic	3.907		6	5	15	0	0	0
FIM-EPP	11:30364200:C:CAA	rs201665959	11	30364200	CAA	C	0.1421	3.52E-15	0.907212	rs7949790	8	ARL14EP	4425	intergenic	0.408	NA		2	15	0	0	0
AAM-EM	3:128038373:A:C	rs10934853	3	128038373	C	A	0.2793	3.59E-15	0.88422	rs2811479	9	EEFSEC	0	intronic	18.77		4	4	5	1	1	0
FIM-EPP	11:30366528:A:T	rs11031056	11	30366528	T	A	0.1412	3.64E-15	0.915211	rs7949790	8	ARL14EP	6753	intergenic	3.36		4	5	15	0	0	0
FIM-EPP	11:30370218:A:G	rs12365913	11	30370218	A	G	0.1412	3.68E-15	0.915211	rs7949790	8	ARL14EP	10443	intergenic	2.599		6	5	15	0	0	0
FIM-EPP	11:30369162:G:GA	rs150144809	11	30369162	G	GA	0.1412	4.02E-15	0.915211	rs7949790	8	ARL14EP	9387	intergenic	0.606	NA		5	15	0	0	0
AAM-EM	11:30395871:C:T	rs12223987	11	30395871	C	T	0.1581	4.08E-15	0.969171	rs12294104	22	RP4-710M3.1	5677	intergenic	2.426		7	5	15	0	0	0
LMC-DE	8:25245432:A:G	rs931875	8	25245432	G	A	0.2674	4.74E-15	0.922604	rs13261573	3	DOCK5	0	intronic	1.536		7	4	5	1	1	0
AAM-EM	3:128058617:A:T	rs3849531	3	128058617	A	T	0.2783	4.88E-15	0.888156	rs2811479	9	EEFSEC	0	intronic	0.034	3a		2	5	1	1	0
AAM-EM	6:151849842:A:G	rs4870030	6	151849842	G	A	0.2634	5.26E-15	1	rs4870030	14	CCDC170	0	intronic	0.059		7	9	15	1	0	0
FIM-EPP	11:30365903:A:AAAT	rs67286303	11	30365903	AAAT	A	0.1461	5.93E-15	0.87619	rs7949790	8	ARL14EP	6128	intergenic	0.808	NA		5	15	0	0	0
LMC-EM	11:30156039:A:T	rs1561089	11	30156039	A	T	0.4046	8.46E-15	0.913004	rs35078732	7	RP4-562D20.2	32670	intergenic	5.906		7	7	15	0	0	0
LMC-EM	11:30156019:G:T	rs1561088	11	30156019	T	G	0.4046	8.50E-15	0.913004	rs35078732	7	RP4-562D20.2	32690	intergenic	2.074		6	7	15	0	0	0
LMC-EM	11:30156631:C:G	rs12362720	11	30156631	G	C	0.4085	8.51E-15	0.934229	rs35078732	7	RP4-562D20.2	32078	intergenic	3.285		7	9	15	0	0	0
FIM-EPP	11:30374608:A:G	rs7949790	11	30374608	A	G	0.1521	1.02E-14	1	rs7949790	8	ARL14EP	14833	intergenic	4.237		4	5	15	0	0	0
LMC-EM	11:30156168:C:T	rs1561090	11	30156168	T	C	0.4046	1.05E-14	0.913004	rs35078732	7	RP4-562D20.2	32541	intergenic	0.577		7	7	15	0	0	0
FIM-EPP	11:30376314:A:T	rs76959488	11	30376314	T	A	0.1521	1.06E-14	1	rs7949790	8	RP4-710M3.1	13380	intergenic	0.758		6	5	15	0	0	0
FIM-EPP	11:30375889:C:T	rs11031058	11	30375889	C	T	0.1521	1.07E-14	1	rs7949790	8	RP4-710M3.1	13805	intergenic	0.724		7	5	15	0	0	0
FIM-EPP	11:30376902:A:C	rs10835660	11	30376902	A	C	0.1521	1.09E-14	1	rs7949790	8	RP4-710M3.1	12792	intergenic	2.686		7	5	15	0	0	0
AAM-EM	3:127900522:G:T	rs2999055	3	127900522	G	T	0.1481	1.27E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	3.57		6	5	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-DE	8:25255017:A:C	rs12675289	8	25255017	A	C	0.2704	1.30E-14	0.92795	rs13261573	3	DOCK5	0	intronic	5.195		6	4	5	1	1	0
LMC-DE	8:25243213:A:G	rs34068702	8	25243213	A	G	0.2922	1.37E-14	0.805191	rs13261573	3	DOCK5	0	intronic	2.503		4	4	5	1	0	0
AAM-EM	3:127904190:C:T	rs2811517	3	127904190	T	C	0.1481	1.38E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.952	NA		5	15	1	1	0
AAM-EM	3:127903522:A:G	rs2999056	3	127903522	G	A	0.1481	1.40E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.093		6	5	15	1	1	0
AAM-EM	3:127900494:A:G	rs2999060	3	127900494	A	G	0.1481	1.41E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	7.392	NA		5	15	1	1	0
AAM-EM	3:127947032:C:T	rs2955134	3	127947032	T	C	0.1481	1.47E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.276		5	5	5	1	1	0
AAM-EM	3:127994160:A:G	rs2811529	3	127994160	G	A	0.2704	1.54E-14	0.957923	rs2811479	9	EEFSEC	0	intronic	3.578	NA		4	5	1	1	0
AAM-EM	3:127891396:C:G	rs2955121	3	127891396	C	G	0.1481	1.58E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	1.221		7	5	5	1	1	0
AAM-EM	3:127909758:C:T	rs2999057	3	127909758	C	T	0.1481	1.69E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	3.557		6	5	15	1	1	0
AAM-EM	3:127928277:C:T	rs2955128	3	127928277	C	T	0.1481	1.75E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	3.55		7	5	15	1	1	0
AAM-EM	3:127926516:A:G	rs2955127	3	127926516	A	G	0.1481	1.77E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	8.964		5	5	15	1	1	0
AAM-EM	3:127988240:C:G	rs2999064	3	127988240	C	G	0.1481	1.93E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.697		5	4	5	1	1	0
LMC-ERSV	8:25248615:A:G	rs13261573	8	25248615	G	A	0.2545	1.93E-14	1	rs13261573	3	DOCK5	0	intronic	0.672		7	4	4	1	1	0
AAM-EM	3:127726996:A:C	rs6777484	3	127726996	A	C	0.1491	1.95E-14	0.801882	rs2811473	9	KBTBD12	20481	intergenic	1.801		7	5	14	0	1	0
LMC-DE	8:25311269:A:G	rs17053711	8	25311269	G	A	0.2634	2.03E-14	0.858516	rs13261573	3	KCTD9	0	intronic	4.216		5	4	5	1	1	0
AAM-EM	3:127983209:C:T	rs2999035	3	127983209	C	T	0.1481	2.20E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.49		5	4	4	1	1	0
AAM-EM	3:127941947:A:G	rs2999088	3	127941947	A	G	0.1481	2.21E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	2.159	NA		5	9	1	1	0
AAM-EM	3:127888694:C:T	rs2687731	3	127888694	C	T	0.1481	2.22E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	8.975		6	5	5	1	1	0
AAM-EM	3:127726637:A:G	rs6777095	3	127726637	A	G	0.1491	2.28E-14	0.801882	rs2811473	9	KBTBD12	20122	intergenic	3.328	3a		5	14	0	1	0
AAM-EM	3:127730766:C:T	rs9824657	3	127730766	T	C	0.1491	2.29E-14	0.801882	rs2811473	9	KBTBD12	24251	intergenic	0.294		4	1	15	0	1	0
AAM-EM	3:127727450:C:T	rs6766665	3	127727450	T	C	0.1491	2.34E-14	0.801882	rs2811473	9	KBTBD12	20935	intergenic	0.686		6	5	14	0	1	0
AAM-EM	3:127898533:A:G	rs2999053	3	127898533	G	A	0.1481	2.38E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	19.19		4	1	15	1	1	0
AAM-EM	3:127913714:A:G	rs940061	3	127913714	A	G	0.1481	2.38E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	3.95		6	5	5	1	1	0
AAM-EM	3:127759214:A:T	rs1469658	3	127759214	T	A	0.1491	2.42E-14	0.801882	rs2811473	9	SEC61A1	11269	intergenic	3.842		7	5	15	0	1	0
AAM-EM	3:127937326:A:C	rs2254379	3	127937326	A	C	0.1481	2.43E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.516		4	4	15	1	1	0
AAM-EM	3:127899986:A:G	rs2999054	3	127899986	G	A	0.1481	2.43E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	8.478		5	5	15	1	1	0
AAM-EM	3:127877756:A:C	rs2955114	3	127877756	A	C	0.1491	2.50E-14	0.831136	rs2811473	9	EEFSEC	0	intronic	2.738		6	4	5	1	1	0
AAM-EM	3:127877385:C:T	rs2492284	3	127877385	T	C	0.1491	2.50E-14	0.831136	rs2811473	9	EEFSEC	0	intronic	3.535		6	4	5	1	1	0
FIM-EPP	11:30252352:G:T	rs10835638	11	30252352	G	T	0.1431	2.53E-14	0.899313	rs7949790	8	FSHB	210	upstream	13.3		6	9	15	1	0	0
AAM-EM	3:127763254:C:T	rs4857834	3	127763254	T	C	0.1491	2.65E-14	0.801882	rs2811473	9	SEC61A1	7229	intergenic	3.2		5	5	14	1	1	0
AAM-EM	3:127878871:A:G	rs2811472	3	127878871	A	G	0.1491	2.67E-14	0.831136	rs2811473	9	EEFSEC	0	intronic	7.177		7	4	5	1	1	0
AAM-EM	3:127914512:A:G	rs2811510	3	127914512	A	G	0.1481	2.70E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	2.595	NA		4	5	1	1	0
AAM-EM	3:127870929:C:G	rs10934849	3	127870929	C	G	0.1491	2.73E-14	0.831136	rs2811473	9	RUVBL1	0	intronic	1.184		4	2	15	1	1	0
LMC-DE	8:25263294:G:T	rs61490611	8	25263294	T	G	0.2624	2.74E-14	0.889008	rs13261573	3	DOCK5	0	intronic	6.896		6	4	5	1	1	0
AAM-EM	3:127872175:C:G	rs11920225	3	127872175	C	G	0.1491	2.79E-14	0.831136	rs2811473	9	RUVBL1	0	UTR5	8.594	2b		1	1	1	1	0
AAM-EM	3:127747841:A:G	rs6764517	3	127747841	A	G	0.1491	2.79E-14	0.801882	rs2811473	9	SEC61A1	22642	intergenic	0.752		5	13	15	0	1	0
AAM-EM	3:127867592:G:T	rs73192977	3	127867592	T	G	0.1491	2.82E-14	0.831136	rs2811473	9	RUVBL1	0	intronic	0.27		5	5	15	1	1	0
AAM-EM	3:127939444:A:G	rs2955131	3	127939444	G	A	0.1481	2.85E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.074		5	4	15	1	1	0
AAM-EM	3:127903678:C:T	rs2955123	3	127903678	T	C	0.1481	2.86E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	6.062		7	5	15	1	1	0
AAM-EM	3:127869165:A:G	rs4857870	3	127869165	G	A	0.1491	2.87E-14	0.831136	rs2811473	9	RUVBL1	0	intronic	6.493		7	5	15	1	1	0
AAM-EM	3:127941072:C:T	rs55775237	3	127941072	C	T	0.1481	2.97E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.199		7	5	15	1	1	0
AAM-EM	3:127916490:C:T	rs2955124	3	127916490	C	T	0.1481	3.00E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	3.697		5	5	5	1	1	0
AAM-EM	3:127726737:A:G	rs6777197	3	127726737	A	G	0.1491	3.12E-14	0.801882	rs2811473	9	KBTBD12	20222	intergenic	0.073	2b		5	14	0	1	0
AAM-EM	3:127914853:A:G	rs2811484	3	127914853	G	A	0.1481	3.14E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	6.424		4	2	5	1	1	0
AAM-EM	3:127914673:C:G	rs2811483	3	127914673	G	C	0.1481	3.19E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	3.835		5	2	5	1	1	0
AAM-EM	3:127759668:C:T	rs1469657	3	127759668	C	T	0.1491	3.19E-14	0.801882	rs2811473	9	SEC61A1	10815	intergenic	0.757	NA		5	15	0	1	0
AAM-EM	6:151768532:C:T	rs35143743	6	151768532	T	C	0.2833	3.21E-14	1	rs35143743	14	RMND1	0	intronic	1.372		5	4	5	1	1	0
AAM-EM	3:127890749:A:G	rs2248668	3	127890749	A	G	0.1481	3.28E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.269		6	5	5	1	1	0
LMC-ERSV	8:25247181:A:G	rs4872310	8	25247181	G	A	0.2535	3.29E-14	0.995059	rs13261573	3	DOCK5	0	intronic	4.677		7	4	4	1	1	0
AAM-EM	6:151795994:A:C	rs9478208	6	151795994	A	C	0.4046	3.31E-14	0.953353	rs9397412	14	C6orf211	4757	intergenic	0.609		7	5	5	1	1	0
AAM-EM	3:127919417:C:T	rs2140286	3	127919417	C	T	0.1481	3.40E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	2.871	NA		4	5	1	1	0
AAM-EM	3:127923810:A:G	rs2999058	3	127923810	G	A	0.1481	3.51E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	0.302	NA		5	15	1	1	0
AAM-EM	3:127775788:A:T	rs9847934	3	127775788	T	A	0.1531	3.60E-14	0.803828	rs2811473	9	SEC61A1	0	intronic	0.76		6	4	4	1	0	0
LMC-EM	3:128058617:A:T	rs3849531	3	128058617	A	T	0.2783	3.67E-14	1	rs3849531	3	EEFSEC	0	intronic	0.034	3a		2	5	1	1	0
LMC-DE	8:25269102:A:C	rs1506869	8	25269102	C	A	0.2614	3.69E-14	0.89344	rs13261573	3	DOCK5	0	UTR3	5.15	NA		4	4	1	1	0
AAM-EM	3:127925192:A:G	rs2955125	3	127925192	A	G	0.1481	3.74E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	8.676		5	5	15	1	1	0
AAM-EM	3:127824017:A:G	rs9835383	3	127824017	A	G	0.1501	3.94E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	0.815		6	4	5	1	1	0
AAM-EM	3:127731673:C:T	rs9809866	3	127731673	C	T	0.1511	3.96E-14	0.817326	rs2811473	9	KBTBD12	25158	intergenic	0.133		5	1	15	0	1	0
AAM-EM	3:127733069:A:G	rs4474992	3	127733069	A	G	0.1511	4.00E-14	0.817326	rs2811473	9	KBTBD12	26554	intergenic	0.303		7	5	15	0	1	0
AAM-EM	3:127913828:A:T	rs940062	3	127913828	T	A	0.1481	4.09E-14	0.838162	rs2811473	9	EEFSEC	0	intronic	2.407		5	5	5	1	1	0
LMC-ERSV	8:25245432:A:G	rs931875	8	25245432	G	A	0.2674	4.21E-14	0.922604	rs13261573	3	DOCK5	0	intronic	1.536		7	4	5	1	1	0
AAM-EM	3:127757422:A:G	rs2217629	3	127757422	A	G	0.1491	4.30E-14	0.801882	rs2811473	9	SEC61A1	13061	intergenic	1.95	NA		5	15	0	0	0
FIM-EO	1:169435027:C:T	rs2678166	1	169435027	C	T	0.006958	4.32E-14	0.639065	rs144737447	1	SLC19A2	0	UTR3	9.616	NA		4	5	1	0	0
LMC-EM	11:30190496:C:T	rs76821060	11	30190496	C	T	0.03579	4.46E-14	1	rs76821060	7	RP4-562D20..	1642	intergenic	0.823		7	5	15	0	0	0
AAM-EM	3:127861822:A:C	rs2955093	3	127861822	C	A	0.1501	4.47E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	9.106		7	5	15	1	1	0
LMC-EM	3:128059610:A:G	rs1735558	3	128059610	G	A	0.16	4.71E-14	1	rs1735558	3	EEFSEC	0	intronic	0.156	NA		4	5	1	1	0
AAM-EM	3:127872796:C:T	rs2999046	3	127872796	C	T	0.1491	4.81E-14	0.831136	rs2811473	9	EEFSEC	0	intronic	8.853		4	1	1	1	1	0
AAM-EM	3:127878330:A:G	rs2999047	3	127878330	A	G	0.1491	4.91E-14	0.831136	rs2811473	9	EEFSEC	0	intronic	9.653		7	4	5	1	1	0
AAM-EM	3:127835629:A:G	rs6788879	3	127835629	A	G	0.1501	5.06E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	0.858		7	4	5	1	1	0
LMC-EM	3:128046643:A:G	rs4857841	3	128046643	G	A	0.2793	5.07E-14	0.994808	rs3849531	3	EEFSEC	0	intronic	0.912		5	4	5	1	1	0
AAM-EM	3:127733091:A:G	rs4602341	3	127733091	A	G	0.1511	5.09E-14	0.817326	rs2811473	9	KBTBD12	26576	intergenic	6.195		7	5	15	0	1	0
AAM-EM	3:127838999:A:G	rs9821568	3	127838999	G	A	0.1501	5.17E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	2.664		5	4	5	1	1	0
AAM-EM	3:127815475:C:T	rs4058156	3	127815475	T	C	0.1501	5.20E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	2.69		7	4	4	1	1	0
AAM-EM	3:127835803:C:T	rs6439115	3	127835803	C	T	0.1501	5.21E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	2.017		6	4	5	1	1	0
LMC-EM	3:128038373:A:C	rs10934853	3	128038373	C	A	0.2793	5.34E-14	0.994808	rs3849531	3	EEFSEC	0	intronic	18.77		4	4	5	1	1	0
LMC-EM	3:128036786:C:T	rs13095166	3	128036786	C	T	0.161	5.45E-14	0.992764	rs1735558	3	EEFSEC	0	intronic	0.943		5	4	5	1	1	0
AAM-EM	3:127819151:C:T	rs4857867	3	127819151	T	C	0.1501	5.49E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	8.312		5	4	4	1	1	0
LMC-EM	3:128038689:A:C	rs12486127	3	128038689	C	A	0.161	5.54E-14	0.992764	rs1735558	3	EEFSEC	0	intronic	14.07	2b		4	5	1	1	0
LMC-EM	3:128038834:C:T	rs12486156	3	128038834	C	T	0.161	5.62E-14	0.992764	rs1735558	3	EEFSEC	0	intronic	4.615	2b		4	5	1	1	0
AAM-EM	3:127791708:C:T	rs7612065	3	127791708	T	C	0.1501	5.72E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	0.742		4	4	4	1	1	0
AAM-EM	3:127854684:A:G	rs2811471	3	127854684	G	A	0.1491	5.81E-14	0.831136	rs2811473	9	RUVBL1	0	intronic	4.165		7	5	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	3:127845701:C:T	rs2811475	3	127845701	C	T	0.1501	5.84E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	5.487		5	15	1	1	0
AAM-EM	3:127783442:A:G	rs6764003	3	127783442	A	G	0.1501	5.85E-14	0.824191	rs2811473	9	SEC61A1	0	intronic	0.098		7	4	4	1	1	0
AAM-EM	3:127715911:A:T	rs6795314	3	127715911	T	A	0.1571	5.90E-14	0.768022	rs2811473	9	KBTBD12	9396	intergenic	0.025		5	5	15	1	1	0
AAM-EM	3:127780082:A:G	rs759945	3	127780082	G	A	0.1501	5.91E-14	0.824191	rs2811473	9	SEC61A1	0	intronic	1.684	NA		4	4	1	1	0
AAM-EM	3:127781737:C:G	rs4857864	3	127781737	G	C	0.1501	6.03E-14	0.824191	rs2811473	9	SEC61A1	0	intronic	7.278		6	4	4	1	1	0
LMC-ERSV	8:25267103:A:G	rs4871939	8	25267103	G	A	0.2465	6.15E-14	0.961185	rs13261573	3	DOCK5	0	intronic	11.04		5	4	4	1	1	0
AAM-EM	3:127892851:C:G	rs2811474	3	127892851	G	C	0.16	6.21E-14	0.764718	rs2811473	9	EEFSEC	0	intronic	2.187	2b		5	5	1	1	0
LMC-EM	8:25321845:A:T	rs35698191	8	25321845	T	A	0.2485	6.25E-14	0.727544	rs13261573	6	CDCA2	0	intronic	4.36		7	4	15	1	1	0
AAM-EM	3:127799669:G:T	rs1554534	3	127799669	G	T	0.1501	6.28E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	0.501	NA		2	4	1	1	0
AAM-EM	3:127790606:A:G	rs2241688	3	127790606	G	A	0.1501	6.30E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	2.556	NA		4	4	1	1	0
AAM-EM	3:127816572:A:G	rs6439113	3	127816572	A	G	0.1501	6.31E-14	0.824191	rs2811473	9	RUVBL1	0	intronic	4.224		5	4	4	1	1	0
AAM-EM	3:127716262:A:G	rs4857832	3	127716262	G	A	0.1571	6.37E-14	0.768022	rs2811473	9	KBTBD12	9747	intergenic	0.006		5	5	15	1	1	0
LMC-EM	8:25320594:C:T	rs12675625	8	25320594	T	C	0.2485	6.63E-14	0.727544	rs13261573	6	CDCA2	0	intronic	9.281		7	4	15	1	1	0
AAM-EM	3:127721375:C:T	rs28520291	3	127721375	T	C	0.1571	7.00E-14	0.768022	rs2811473	9	KBTBD12	14860	intergenic	0.063		7	5	14	0	1	0
AAM-EM	3:127721543:A:T	rs11917022	3	127721543	A	T	0.1571	7.17E-14	0.768022	rs2811473	9	KBTBD12	15028	intergenic	3.449		7	5	14	0	1	0
AAM-EM	3:127720727:C:T	rs1469660	3	127720727	T	C	0.1571	7.39E-14	0.768022	rs2811473	9	KBTBD12	14212	intergenic	4.507	NA		5	14	0	1	0
AAM-EM	3:127719658:A:G	rs67986238	3	127719658	A	G	0.1571	7.62E-14	0.768022	rs2811473	9	KBTBD12	13143	intergenic	5.652		6	5	14	0	1	0
AAM-EPP	11:30306650:A:T	rs11031035	11	30306650	A	T	0.1421	7.80E-14	0.907212	rs7949790	17	ARL14EP	37947	intergenic	13.59		6	5	15	0	0	0
AAM-EM	3:127720740:C:T	rs1469659	3	127720740	C	T	0.1571	8.03E-14	0.768022	rs2811473	9	KBTBD12	14225	intergenic	3.687	NA		5	14	0	1	0
AAM-EPP	11:30309827:C:T	rs10835644	11	30309827	C	T	0.1421	8.16E-14	0.907212	rs7949790	17	ARL14EP	34770	intergenic	1.5		6	5	15	0	0	0
AAM-EPP	11:30312187:A:G	rs12281078	11	30312187	A	G	0.1421	8.16E-14	0.907212	rs7949790	17	ARL14EP	32410	intergenic	7.252		5	5	15	0	0	0
AAM-EPP	11:30314858:A:C	rs11031039	11	30314858	C	A	0.1421	8.16E-14	0.907212	rs7949790	17	ARL14EP	29739	intergenic	0.652		6	5	15	0	0	0
AAM-EPP	6:151822156:C:G	rs4869733	6	151822156	G	C	0.08449	8.16E-14	1	rs4869733	11	CCDC170	0	intronic	0.389		6	5	15	1	1	0
AAM-EPP	11:30309869:C:T	rs10835645	11	30309869	C	T	0.1421	8.20E-14	0.907212	rs7949790	17	ARL14EP	34728	intergenic	3.384		7	5	15	0	0	0
AAM-EPP	11:30312239:C:T	rs12294258	11	30312239	C	T	0.1421	8.20E-14	0.907212	rs7949790	17	ARL14EP	32358	intergenic	7.87		7	5	15	0	0	0
AAM-EM	3:127721859:A:G	rs10433341	3	127721859	G	A	0.1571	8.21E-14	0.768022	rs2811473	9	KBTBD12	15344	intergenic	7.078		5	5	14	0	1	0
AAM-EM	3:127721041:G:T	rs6781473	3	127721041	G	T	0.1571	8.25E-14	0.768022	rs2811473	9	KBTBD12	14526	intergenic	1.103		5	5	14	0	1	0
AAM-EM	3:127716585:A:G	rs9870753	3	127716585	A	G	0.1581	8.26E-14	0.761853	rs2811473	9	KBTBD12	10070	intergenic	0.656		5	5	15	0	1	0
AAM-EM	3:127723197:A:G	rs7611426	3	127723197	A	G	0.1571	8.28E-14	0.768022	rs2811473	9	KBTBD12	16682	intergenic	4.533		5	5	14	0	1	0
AAM-EM	3:128059610:A:G	rs1735558	3	128059610	G	A	0.16	8.33E-14	0.724027	rs2811473	9	EEFSEC	0	intronic	0.156	NA		4	5	1	1	0
AAM-EM	3:127721468:A:G	rs11924834	3	127721468	G	A	0.1571	8.46E-14	0.768022	rs2811473	9	KBTBD12	14953	intergenic	0.41		6	5	14	0	0	0
AAM-EM	3:128038689:A:C	rs12486127	3	128038689	C	A	0.161	8.59E-14	0.730908	rs2811473	9	EEFSEC	0	intronic	14.07	2b		4	5	1	1	0
AAM-EM	3:128038834:C:T	rs12486156	3	128038834	C	T	0.161	8.61E-14	0.730908	rs2811473	9	EEFSEC	0	intronic	4.615	2b		4	5	1	1	0
AAM-EM	3:127715133:A:G	rs1549874	3	127715133	A	G	0.1571	8.67E-14	0.768022	rs2811473	9	KBTBD12	8618	intergenic	5.844	NA		5	15	1	1	0
AAM-EPP	11:30309905:C:T	rs10835646	11	30309905	C	T	0.1421	8.68E-14	0.907212	rs7949790	17	ARL14EP	34692	intergenic	3.408		7	5	15	0	0	0
AAM-EM	3:127721603:C:G	rs11924866	3	127721603	G	C	0.1571	8.80E-14	0.768022	rs2811473	9	KBTBD12	15088	intergenic	10.25		6	5	14	0	1	0
AAM-EM	3:128036786:C:T	rs13095166	3	128036786	C	T	0.161	8.94E-14	0.730908	rs2811473	9	EEFSEC	0	intronic	0.943		5	4	5	1	1	0
AAM-EM	3:127723233:C:T	rs67464627	3	127723233	C	T	0.1571	9.01E-14	0.768022	rs2811473	9	KBTBD12	16718	intergenic	5.423		5	5	14	0	1	0
AAM-EM	3:127723017:C:T	rs7645109	3	127723017	T	C	0.1571	9.06E-14	0.768022	rs2811473	9	KBTBD12	16502	intergenic	0.936		6	5	14	0	1	0
AAM-EM	3:127721508:A:G	rs11924838	3	127721508	G	A	0.1571	9.12E-14	0.768022	rs2811473	9	KBTBD12	14993	intergenic	0.003		7	5	14	0	0	0
AAM-EPP	11:30308159:C:T	rs4120817	11	30308159	C	T	0.1421	9.21E-14	0.907212	rs7949790	17	ARL14EP	36438	intergenic	0.495	NA		5	15	0	0	0
AAM-EM	3:127717702:C:T	rs6439104	3	127717702	T	C	0.1571	9.31E-14	0.768022	rs2811473	9	KBTBD12	11187	intergenic	6.023		7	5	15	0	1	0
LMC-ERSV	8:25255017:A:C	rs12675289	8	25255017	A	C	0.2704	9.65E-14	0.92795	rs13261573	3	DOCK5	0	intronic	5.195		6	4	5	1	1	0
FIM-EM	11:30232381:C:T	rs494779	11	30232381	C	T	0.4175	9.68E-14	1	rs494779	9	FSHB	20181	intergenic	1.167	NA		5	15	0	1	0
FIM-EM	11:30236544:C:T	rs555621	11	30236544	T	C	0.4185	9.76E-14	0.995997	rs494779	9	FSHB	16018	intergenic	0.73		5	14	15	0	1	0
AAM-EPP	11:30325865:A:G	rs7123626	11	30325865	G	A	0.1421	9.86E-14	0.907212	rs7949790	17	ARL14EP	18732	intergenic	1.513		6	7	15	0	0	0
FIM-EO	11:30125619:C:G	rs11030946	11	30125619	G	C	0.1441	1.01E-13	1	rs11030946	9	RP11-624D11	19728	intergenic	0.964		6	9	15	0	0	0
FIM-EM	11:30234432:A:G	rs601640	11	30234432	G	A	0.4175	1.01E-13	1	rs494779	9	FSHB	18130	intergenic	0.97	NA		5	15	0	1	0
FIM-EM	11:30234782:C:T	rs540948	11	30234782	T	C	0.4205	1.03E-13	0.988073	rs494779	9	FSHB	17780	intergenic	4.028	NA		7	15	0	1	0
AAM-EM	3:127724145:A:G	rs6767360	3	127724145	A	G	0.1571	1.03E-13	0.768022	rs2811473	9	KBTBD12	17630	intergenic	3.638		7	5	14	0	1	0
AAM-EPP	11:30327006:A:G	rs12361594	11	30327006	G	A	0.1421	1.04E-13	0.907212	rs7949790	17	ARL14EP	17591	intergenic	6.885		7	7	15	0	0	0
AAM-EPP	11:30305675:C:T	rs11031033	11	30305675	C	T	0.1421	1.05E-13	0.907212	rs7949790	17	ARL14EP	38922	intergenic	6.786		7	5	15	0	0	0
AAM-EM	3:127723008:A:G	rs7633480	3	127723008	G	A	0.1581	1.06E-13	0.76383	rs2811473	9	KBTBD12	16493	intergenic	2.942		7	5	14	0	1	0
AAM-EPP	11:30296055:C:T	rs12364889	11	30296055	T	C	0.1421	1.06E-13	0.907212	rs7949790	17	FSHB	39246	intergenic	0.129		7	14	15	0	0	0
FIM-EM	11:30234703:A:G	rs600333	11	30234703	G	A	0.4195	1.08E-13	0.992011	rs494779	9	FSHB	17859	intergenic	3.241	NA		7	15	0	1	0
FIM-EM	11:30234394:C:T	rs601681	11	30234394	C	T	0.4145	1.08E-13	0.988042	rs494779	9	FSHB	18168	intergenic	0.317		7	5	15	0	1	0
FIM-EM	11:30232615:A:G	rs492828	11	30232615	G	A	0.4175	1.10E-13	1	rs494779	9	FSHB	19947	intergenic	2.496	NA		5	15	0	1	0
FIM-EM	11:30261968:A:G	rs7951733	11	30261968	A	G	0.05169	1.11E-13	1	rs7951733	9	FSHB	5159	intergenic	0.16		5	9	15	0	0	0
LMC-ERSV	8:25280800:C:G	rs6185	8	25280800	C	G	0.2425	1.11E-13	0.942505	rs13261573	3	GNRH1	0	exonic	12.21		7	4	4	1	1	0
FIM-EM	11:30214713:A:G	rs961605	11	30214713	G	A	0.3956	1.15E-13	0.877668	rs494779	9	RP4-562D20.2	25859	intergenic	1.294		7	14	15	0	1	0
AAM-EPP	11:30306439:C:T	rs11031034	11	30306439	C	T	0.1421	1.18E-13	0.907212	rs7949790	17	ARL14EP	38158	intergenic	3.241		7	5	15	0	0	0
FIM-EM	11:30234606:C:T	rs600768	11	30234606	C	T	0.4205	1.19E-13	0.988073	rs494779	9	FSHB	17956	intergenic	3.662	NA		7	15	0	1	0
FIM-EM	11:30235497:A:G	rs586326	11	30235497	G	A	0.4145	1.19E-13	0.988042	rs494779	9	FSHB	17065	intergenic	4.272	NA		9	15	0	1	0
FIM-EM	11:30238832:A:T	rs621448	11	30238832	T	A	0.4175	1.20E-13	1	rs494779	9	FSHB	13730	intergenic	2.261		7	9	15	0	1	0
FIM-EM	11:30237518:C:T	rs664147	11	30237518	C	T	0.4145	1.24E-13	0.988042	rs494779	9	FSHB	15044	intergenic	2.315	NA		9	15	0	1	0
AAM-EPP	6:151799355:A:T	rs1553002	6	151799355	A	T	0.3966	1.34E-13	0.872871	rs9479041	11	C6orf211	8118	intergenic	0.777		7	5	15	0	1	0
LMC-EM	3:128064118:A:C	rs4857879	3	128064118	A	C	0.166	1.34E-13	0.958163	rs1735558	3	EEFSEC	0	intronic	8.323		5	4	5	1	1	0
LMC-ERSV	8:25311269:A:G	rs17053711	8	25311269	G	A	0.2634	1.38E-13	0.858516	rs13261573	3	KCTD9	0	intronic	4.216		5	4	5	1	1	0
AAM-EPP	6:151824449:A:G	rs12173791	6	151824449	G	A	0.08449	1.41E-13	1	rs4869733	11	CCDC170	0	intronic	0.146		5	5	15	1	1	0
FIM-EM	11:30216006:C:T	rs632939	11	30216006	T	C	0.3926	1.43E-13	0.890206	rs494779	9	RP4-562D20.2	27152	intergenic	10.1	NA		14	15	0	1	0
LMC-EM	3:127994160:A:G	rs2811529	3	127994160	G	A	0.2704	1.50E-13	0.917645	rs3849531	3	EEFSEC	0	intronic	3.578	NA		4	5	1	1	0
AAM-EM	6:151773504:C:T	rs13201167	6	151773504	T	C	0.4085	1.52E-13	0.901433	rs9397412	14	C6orf211	0	UTR5	11.88	1f		1	1	1	1	0
AAM-EM	3:127782427:C:G	rs9864797	3	127782427	G	C	0.1501	1.54E-13	0.824191	rs2811473	9	SEC61A1	0	intronic	1.249		7	4	4	1	1	0
AAM-EM	6:151789355:G:T	rs963193	6	151789355	T	G	0.4095	1.56E-13	0.898256	rs9397412	14	C6orf211	0	intronic	4.122	NA		4	5	1	1	0
FIM-EM	11:30222637:C:T	rs622744	11	30222637	T	C	0.3936	1.56E-13	0.885893	rs494779	9	FSHB	29925	intergenic	1.891	NA		5	15	0	1	0
AAM-EM	6:151771839:C:T	rs9371521	6	151771839	T	C	0.4056	1.60E-13	0.88853	rs9397412	14	RMND1	0	intronic	4.614		5	1	5	1	1	0
AAM-EM	3:127721435:C:T	rs28636854	3	127721435	C	T	0.1571	1.60E-13	0.768022	rs2811473	9	KBTBD12	14920	intergenic	0.369		7	5	14	0	1	0
AAM-EPP	6:151800761:G:T	rs9397412	6	151800761	G	T	0.3946	1.60E-13	0.865503	rs9479041	11	C6orf211	9524	intergenic	8.879		6	5	15	0	1	0
FIM-EM	11:30217003:A:T	rs574096	11	30217003	A	T	0.3956	1.61E-13	0.877668	rs494779	9	RP4-562D20.2	28149	intergenic	4.203		6	2	15	0	1	0
FIM-EM	11:30225170:C:G	rs1716021	11	30225170	G	C	0.3907	1.63E-13	0.883171	rs494779	9	FSHB	27392	intergenic	1.813		6	7	15	0	1	0
AAM-EM	6:151775259:A:C	rs1825368	6	151775259	C	A	0.4085	1.67E-13	0.901433	rs9397412	14	C6orf211	0	intronic	0.154	NA		1	7	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	8:25280800:C:G	rs6185	8	25280800	C	G	0.2425	1.67E-13	1	rs6185	17	GNRH1	0	exonic	12.21		7	4	4	1	1	0
AAM-EM	6:151756070:A:G	rs9479041	6	151756070	A	G	0.4056	1.69E-13	0.865503	rs9397412	14	RMND1	0	intronic	0.794		7	4	5	1	1	0
LMC-EM	3:127978795:A:G	rs4555544	3	127978795	G	A	0.2694	1.70E-13	0.912756	rs3849531	3	EEFSEC	0	intronic	6.032		5	5	9	1	1	0
AAM-EM	3:127991149:A:C	rs2811413	3	127991149	C	A	0.3171	1.73E-13	0.762805	rs2811479	9	EEFSEC	0	intronic	0.523		5	4	5	1	1	0
AAM-EM	6:151766162:C:T	rs3800279	6	151766162	T	C	0.2833	1.74E-13	1	rs35143743	14	RMND1	0	intronic	2.525		7	4	5	1	1	0
AAM-EM	3:127826618:C:T	rs11924142	3	127826618	C	T	0.1521	1.81E-13	0.811976	rs2811473	9	RUVBL1	0	intronic	0.363		7	2	5	1	1	0
AAM-EPP	11:30356420:C:T	rs12272134	11	30356420	T	C	0.1412	1.83E-13	0.915211	rs7949790	17	ARL14EP	0	intronic	4.84		5	4	4	1	0	0
FIM-EM	11:30223866:A:G	rs606642	11	30223866	G	A	0.3936	1.85E-13	0.886224	rs494779	9	FSHB	28696	intergenic	0.592	NA		14	15	0	1	0
AAM-EM	3:127719920:C:T	rs72967027	3	127719920	T	C	0.1571	1.89E-13	0.768022	rs2811473	9	KBTBD12	13405	intergenic	2.246		7	5	14	0	1	0
LMC-ERSV	8:25263294:G:T	rs61490611	8	25263294	T	G	0.2624	1.96E-13	0.889008	rs13261573	3	DOCK5	0	intronic	6.896		6	4	5	1	1	0
FIM-EM	11:30223861:A:C	rs606651	11	30223861	C	A	0.3946	1.96E-13	0.881937	rs494779	9	FSHB	28701	intergenic	3.323	NA		14	15	0	1	0
AAM-EM	6:151774916:A:G	rs3806982	6	151774916	G	A	0.4085	1.97E-13	0.901433	rs9397412	14	C6orf211	0	intronic	3.582	NA		1	7	1	1	0
AAM-EPP	11:30240178:A:C	rs11031010	11	30240178	C	A	0.1421	2.01E-13	0.907212	rs7949790	17	FSHB	12384	intergenic	0.98		7	7	15	0	0	0
AAM-EPP	11:30355857:C:T	rs11512201	11	30355857	C	T	0.1412	2.01E-13	0.915211	rs7949790	17	ARL14EP	0	intronic	0.602	NA		4	4	1	0	0
AAM-EPP	11:30354895:A:G	rs7118949	11	30354895	A	G	0.1412	2.04E-13	0.915211	rs7949790	17	ARL14EP	0	intronic	0.188		5	4	4	1	0	0
AAM-EPP	6:151821024:A:T	rs9383911	6	151821024	A	T	0.0835	2.05E-13	0.986633	rs4869733	11	CCDC170	0	intronic	4.976		6	2	15	1	1	0
AAM-EPP	6:151849842:A:G	rs4870030	6	151849842	G	A	0.2634	2.10E-13	1	rs4870030	11	CCDC170	0	intronic	0.059		7	9	15	1	0	0
AAM-EM	6:151781404:A:T	rs13212693	6	151781404	T	A	0.4095	2.12E-13	0.898256	rs9397412	14	C6orf211	0	intronic	0.459		7	4	4	1	0	0
LMC-EM	11:30378559:A:C	rs1765142	11	30378559	C	A	0.338	2.15E-13	1	rs1765142	7	RP4-710M3.1	11135	intergenic	0.123		6	5	15	0	1	0
AAM-EPP	11:30355903:C:T	rs10835655	11	30355903	C	T	0.1412	2.17E-13	0.915211	rs7949790	17	ARL14EP	0	intronic	0.26		6	4	4	1	0	0
AAM-EPP	11:30359892:A:G	rs7117691	11	30359892	A	G	0.1402	2.18E-13	0.907743	rs7949790	17	ARL14EP	117	downstream	2.712		7	4	5	1	0	0
AAM-EPP	11:30360026:C:T	rs12278112	11	30360026	T	C	0.1412	2.19E-13	0.915211	rs7949790	17	ARL14EP	251	downstream	5.961		7	4	5	1	0	0
AAM-EM	6:151782816:A:C	rs9383900	6	151782816	A	C	0.4095	2.19E-13	0.898256	rs9397412	14	C6orf211	0	intronic	3.97		6	4	5	1	1	0
AAM-EM	6:151781363:C:T	rs13212683	6	151781363	T	C	0.4095	2.21E-13	0.898256	rs9397412	14	C6orf211	0	intronic	0.445		6	4	4	1	1	0
AAM-EM	3:127755716:A:C	rs1987633	3	127755716	C	A	0.1511	2.30E-13	0.817326	rs2811473	9	SEC61A1	14767	intergenic	2.399	NA		5	15	0	1	0
AAM-EPP	11:30355197:C:T	rs7122449	11	30355197	C	T	0.1412	2.30E-13	0.915211	rs7949790	17	ARL14EP	0	intronic	3.098		4	4	4	1	0	0
AAM-EM	8:25267103:A:G	rs4871939	8	25267103	G	A	0.2465	2.30E-13	0.980226	rs6185	17	DOCK5	0	intronic	11.04		5	4	4	1	1	0
LMC-EM	3:127926516:A:G	rs2955127	3	127926516	A	G	0.1481	2.31E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	8.964		5	5	15	1	1	0
AAM-EM	6:151792026:C:T	rs74798609	6	151792026	T	C	0.1769	2.31E-13	1	rs74798609	14	C6orf211	789	downstream	1.577		7	4	5	1	0	0
AAM-EPP	11:30359231:A:G	rs7116893	11	30359231	A	G	0.1402	2.32E-13	0.907743	rs7949790	17	ARL14EP	0	UTR3	1.026		6	4	4	1	0	0
LMC-ERSV	8:25269102:A:C	rs1506869	8	25269102	C	A	0.2614	2.35E-13	0.89344	rs13261573	3	DOCK5	0	UTR3	5.15	NA		4	4	1	1	0
LMC-EM	3:127947032:C:T	rs2955134	3	127947032	T	C	0.1481	2.39E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.276		5	5	5	1	1	0
AAM-EPP	11:30360225:A:G	rs141402489	11	30360225	G	A	0.1412	2.42E-13	0.915211	rs7949790	17	ARL14EP	450	downstream	0.09		6	4	5	1	0	0
AAM-EPP	11:30370218:A:G	rs12365913	11	30370218	A	G	0.1412	2.43E-13	0.915211	rs7949790	17	ARL14EP	10443	intergenic	2.599		6	5	15	0	0	0
AAM-EM	3:49959156:A:C	rs34034116	3	49959156	C	A	0.4215	2.45E-13	1	rs34034116	8	MON1A	0	intronic	1.775		6	4	5	1	1	0
LMC-EM	11:30230281:A:G	rs76757075	11	30230281	G	A	0.00994	2.45E-13	1	rs76757075	7	FSHB	22281	intergenic	0.094		6	5	15	0	0	0
AAM-EPP	11:30354904:A:C	rs7121963	11	30354904	A	C	0.1412	2.48E-13	0.915211	rs7949790	17	ARL14EP	0	intronic	8.446		5	4	4	1	0	0
AAM-EM	3:49959148:A:G	rs35275715	3	49959148	A	G	0.4215	2.49E-13	1	rs34034116	8	MON1A	0	intronic	3.488		6	4	5	1	1	0
AAM-EPP	11:30360794:C:T	rs11031052	11	30360794	C	T	0.1412	2.62E-13	0.915211	rs7949790	17	ARL14EP	1019	intergenic	0.611		6	4	5	0	0	0
LMC-EM	3:127983209:C:T	rs2999035	3	127983209	C	T	0.1481	2.63E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.49		5	4	4	1	1	0
AAM-EM	3:49961780:A:G	rs6774354	3	49961780	G	A	0.4215	2.74E-13	1	rs34034116	8	MON1A	0	intronic	13.15		4	4	5	1	1	0
AAM-EM	3:127808815:A:G	rs9855015	3	127808815	A	G	0.1431	2.75E-13	0.775541	rs2811473	9	RUVBL1	0	intronic	0.075		6	4	5	1	1	0
AAM-EM	12:115108907:C:T	rs8853	12	115108907	T	C	0.4901	2.79E-13	1	rs8853	30	TBX3	0	UTR3	0.78	NA		1	13	1	0	0
LMC-EM	3:127928277:C:T	rs2955128	3	127928277	C	T	0.1481	2.81E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	3.55		7	5	15	1	1	0
LMC-EM	3:127988240:C:G	rs2999064	3	127988240	C	G	0.1481	2.82E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.697		5	4	5	1	1	0
AAM-EM	3:49956628:C:T	rs11709573	3	49956628	C	T	0.4215	2.86E-13	1	rs34034116	8	MON1A	0	intronic	2.21		6	4	5	1	1	0
AAM-EPP	11:30371313:C:T	rs10835658	11	30371313	C	T	0.1412	2.87E-13	0.915211	rs7949790	17	ARL14EP	11538	intergenic	5.608		6	5	15	0	0	0
AAM-EPP	11:30363545:C:T	rs12285277	11	30363545	T	C	0.1412	2.90E-13	0.915211	rs7949790	17	ARL14EP	3770	intergenic	6.616		7	5	5	0	0	0
LMC-EM	3:127909758:C:T	rs2999057	3	127909758	C	T	0.1481	2.90E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	3.557		6	5	15	1	1	0
AAM-EPP	11:30371615:C:T	rs12363432	11	30371615	C	T	0.1412	2.93E-13	0.915211	rs7949790	17	ARL14EP	11840	intergenic	3.907		6	5	15	0	0	0
AAM-EPP	11:30366528:A:T	rs11031056	11	30366528	T	A	0.1412	2.98E-13	0.915211	rs7949790	17	ARL14EP	6753	intergenic	3.36		4	5	15	0	0	0
LMC-EM	3:127958013:A:G	rs4074440	3	127958013	G	A	0.2694	3.00E-13	0.912756	rs3849531	3	EEFSEC	0	intronic	1.324	NA		5	5	1	1	0
LMC-EM	3:127901786:A:G	rs2811479	3	127901786	G	A	0.2624	3.04E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	5.35		5	5	15	1	1	0
LMC-EM	3:128094493:C:T	rs1702119	3	128094493	T	C	0.2525	3.09E-13	0.832506	rs3849531	3	EEFSEC	0	intronic	5.356	NA		2	5	1	1	0
LMC-EM	3:127913714:A:G	rs940061	3	127913714	A	G	0.1481	3.16E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	3.95		6	5	5	1	1	0
LMC-EM	3:127948149:C:T	rs4857878	3	127948149	T	C	0.2634	3.21E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	1.578		5	5	15	1	1	0
LMC-EM	3:127963448:A:G	rs13434079	3	127963448	A	G	0.2694	3.21E-13	0.912756	rs3849531	3	EEFSEC	0	intronic	4.207		6	4	5	1	1	0
LMC-EM	3:127941947:A:G	rs2999088	3	127941947	A	G	0.1481	3.23E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	2.159	NA		5	9	1	1	0
AAM-EPP	6:151829474:C:T	rs4870022	6	151829474	T	C	0.0825	3.28E-13	0.946837	rs4869733	11	CCDC170	0	intronic	0.519		7	1	15	1	1	0
AAM-EM	3:49948728:C:T	rs2352984	3	49948728	T	C	0.4215	3.32E-13	1	rs34034116	8	CTD-2330K9	0:00	intronic	11.66		4	4	4	1	1	0
AAM-EM	3:49949071:A:G	rs868891	3	49949071	A	G	0.4215	3.35E-13	1	rs34034116	8	CTD-2330K9	0:00	exonic	12.52		5	4	4	1	1	0
LMC-EM	3:128092102:A:G	rs1735538	3	128092102	A	G	0.2535	3.36E-13	0.827104	rs3849531	3	EEFSEC	0	intronic	0.168	NA		4	5	1	1	0
LMC-EM	3:127961396:A:T	rs9843281	3	127961396	A	T	0.2694	3.36E-13	0.912756	rs3849531	3	EEFSEC	0	intronic	2.231		7	5	5	1	1	0
FIM-EPP	11:30395448:G:T	rs80268871	11	30395448	G	T	0.08052	3.38E-13	1	rs80268871	8	RP4-710M3.1	5254	intergenic	3.06		7	5	15	0	0	0
AAM-EM	6:151767907:A:G	rs2128945	6	151767907	A	G	0.4046	3.39E-13	0.884257	rs9397412	14	RMND1	0	intronic	3.961		7	4	5	1	1	0
LMC-EM	3:127907929:A:G	rs2811514	3	127907929	A	G	0.2694	3.42E-13	0.902651	rs3849531	3	EEFSEC	0	intronic	3.329	NA		5	15	1	1	0
LMC-EM	3:127941072:C:T	rs55775237	3	127941072	C	T	0.1481	3.51E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.199		7	5	15	1	1	0
LMC-EM	3:127888067:A:G	rs872267	3	127888067	G	A	0.2684	3.53E-13	0.907902	rs3849531	3	EEFSEC	0	intronic	0.895	NA		2	5	1	1	0
LMC-EM	3:127914512:A:G	rs2811510	3	127914512	A	G	0.1481	3.56E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	2.595	NA		4	5	1	1	0
LMC-EM	3:127916490:C:T	rs2955124	3	127916490	C	T	0.1481	3.59E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	3.697		5	5	5	1	1	0
LMC-EM	3:127888347:G:T	rs2955120	3	127888347	T	G	0.2684	3.64E-13	0.907902	rs3849531	3	EEFSEC	0	intronic	7.116		7	5	5	1	1	0
LMC-EM	3:127904943:C:T	rs2811482	3	127904943	C	T	0.2684	3.71E-13	0.907902	rs3849531	3	EEFSEC	0	intronic	2.294		5	5	15	1	1	0
LMC-EM	3:128083332:A:G	rs1702122	3	128083332	A	G	0.2515	3.77E-13	0.828123	rs3849531	3	EEFSEC	0	intronic	0.407	NA		4	5	1	1	0
LMC-EM	3:127895986:A:G	rs1554535	3	127895986	G	A	0.2684	3.79E-13	0.907902	rs3849531	3	EEFSEC	0	intronic	0.587	NA		5	5	1	1	0
AAM-EPP	6:151829487:A:T	rs4870023	6	151829487	A	T	0.0825	3.79E-13	0.946837	rs4869733	11	CCDC170	0	intronic	0.845		7	1	15	1	1	0
LMC-EM	3:127919417:C:T	rs2140286	3	127919417	C	T	0.1481	3.80E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	2.871	NA		4	5	1	1	0
LMC-EM	3:127923810:A:G	rs2999058	3	127923810	G	A	0.1481	3.81E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.302	NA		5	15	1	1	0
LMC-EM	3:127914673:C:G	rs2811483	3	127914673	G	C	0.1481	3.86E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	3.835		5	2	5	1	1	0
LMC-EM	3:127914853:A:G	rs2811484	3	127914853	G	A	0.1481	3.87E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	6.424		4	2	5	1	1	0
FIM-EM	11:30227534:C:T	rs568394	11	30227534	C	T	0.3966	3.91E-13	0.904216	rs494779	9	FSHB	25028	intergenic	3.643	NA		5	15	0	1	0
LMC-EM	3:127918955:C:T	rs2687720	3	127918955	C	T	0.2684	3.92E-13	0.907902	rs3849531	3	EEFSEC	0	intronic	0.698	NA		5	5	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-EM	11:30278764:C:G	rs117272068	11	30278764	C	G	0.00994	3.92E-13	1	rs76757075	7	FSHB	21955	intergenic	1.531	3a	5	15	0	0	0
LMC-EM	3:127937326:A:C	rs2254379	3	127937326	A	C	0.1481	3.94E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.516	4	4	15	1	1	0
LMC-EM	3:127948060:A:G	rs4857877	3	127948060	A	G	0.2604	3.95E-13	0.878353	rs3849531	3	EEFSEC	0	intronic	0.341	5	5	15	1	1	0
LMC-EM	3:127911820:A:G	rs2811512	3	127911820	G	A	0.2694	3.96E-13	0.902651	rs3849531	3	EEFSEC	0	intronic	7.801	NA	5	15	1	1	0
LMC-EM	3:127939444:A:G	rs2955131	3	127939444	G	A	0.1481	3.98E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.074	5	4	15	1	1	0
LMC-EM	3:127925192:A:G	rs2955125	3	127925192	A	G	0.1481	4.06E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	8.676	5	5	15	1	1	0
LMC-EM	3:127904496:C:T	rs2811481	3	127904496	T	C	0.2624	4.08E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	0.887	6	5	15	1	1	0
FIM-EM	11:30228264:C:T	rs653518	11	30228264	C	T	0.3946	4.13E-13	0.897308	rs494779	9	FSHB	24298	intergenic	4.291	NA	1	15	0	1	0
LMC-EM	3:127913828:A:T	rs940062	3	127913828	T	A	0.1481	4.15E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	2.407	5	5	5	1	1	0
LMC-EM	3:127892037:C:T	rs2999052	3	127892037	T	C	0.2624	4.16E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	1.539	7	5	5	1	1	0
LMC-EM	3:127939357:A:T	rs4323023	3	127939357	T	A	0.2634	4.16E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	5.943	6	4	15	1	1	0
LMC-EM	3:127902091:G:T	rs2811480	3	127902091	G	T	0.2624	4.21E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	1.19	5	5	15	1	1	0
LMC-EM	3:127895226:A:G	rs2687729	3	127895226	A	G	0.2624	4.22E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	2.629	NA	5	5	1	1	0
LMC-EM	3:127933203:C:G	rs11707297	3	127933203	G	C	0.2704	4.25E-13	0.90751	rs3849531	3	EEFSEC	0	intronic	9.001	7	5	15	1	1	0
LMC-EM	3:127942379:A:G	rs9873786	3	127942379	A	G	0.2694	4.31E-13	0.912756	rs3849531	3	EEFSEC	0	intronic	4.91	6	5	9	1	1	0
LMC-EM	3:127904190:C:T	rs2811517	3	127904190	T	C	0.1481	4.33E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.952	NA	5	15	1	1	0
LMC-EM	3:127920023:C:T	rs2811508	3	127920023	T	C	0.2634	4.33E-13	0.883177	rs3849531	3	EEFSEC	0	intronic	0.946	NA	4	5	1	1	0
LMC-DE	6:151826307:A:G	rs75969278	6	151826307	G	A	0.03579	4.34E-13	1	rs75969278	2	CCDC170	0	intronic	1.571	5	5	15	1	1	0
FIM-EM	11:30226286:C:T	rs683054	11	30226286	T	C	0.3956	4.38E-13	0.908505	rs494779	9	FSHB	26276	intergenic	10.42	NA	7	15	0	1	0
LMC-EM	3:127940226:A:C	rs2955132	3	127940226	A	C	0.1481	4.39E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	2.359	6	4	15	1	1	0
LMC-EM	3:127940440:C:G	rs7372902	3	127940440	G	C	0.2634	4.40E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	0.664	5	5	15	1	1	0
LMC-EM	3:127890749:A:G	rs2248668	3	127890749	A	G	0.1481	4.40E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.269	6	5	5	1	1	0
LMC-EM	3:127941439:C:T	rs6439123	3	127941439	T	C	0.2634	4.40E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	1.695	6	5	9	1	1	0
LMC-EM	3:127905451:A:G	rs2811516	3	127905451	A	G	0.2624	4.40E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	3.811	NA	5	15	1	1	0
LMC-EM	3:127905518:A:G	rs2811515	3	127905518	G	A	0.2624	4.40E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	0.15	NA	5	15	1	1	0
LMC-EM	3:127888978:C:T	rs2687732	3	127888978	C	T	0.1481	4.41E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	4.25	5	5	5	1	1	0
LMC-EM	3:127930866:A:C	rs7374072	3	127930866	C	A	0.2644	4.41E-13	0.887532	rs3849531	3	EEFSEC	0	intronic	2.482	7	5	15	1	1	0
LMC-EM	3:127900522:G:T	rs2999055	3	127900522	G	T	0.1481	4.41E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	3.57	6	5	15	1	1	0
LMC-EM	3:127943328:A:G	rs4857838	3	127943328	A	G	0.2634	4.42E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	4.183	7	5	15	1	1	0
LMC-EM	3:127900494:A:G	rs2999060	3	127900494	A	G	0.1481	4.45E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	7.392	NA	5	15	1	1	0
LMC-EM	3:127916551:A:G	rs2811509	3	127916551	G	A	0.2624	4.45E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	0.206	NA	5	5	1	1	0
LMC-EM	3:127934218:A:G	rs4857873	3	127934218	A	G	0.2624	4.46E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	11.28	5	5	15	1	1	0
LMC-EM	3:127889375:G:T	rs3122174	3	127889375	T	G	0.1481	4.51E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	2.852	7	5	5	1	1	0
LMC-EM	3:127940534:A:G	rs6439122	3	127940534	A	G	0.2644	4.51E-13	0.887532	rs3849531	3	EEFSEC	0	intronic	1.146	7	5	15	1	1	0
LMC-EM	3:127891396:C:G	rs2955121	3	127891396	C	G	0.1481	4.51E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	1.221	7	5	5	1	1	0
LMC-EM	3:127931402:A:G	rs7372439	3	127931402	A	G	0.2644	4.52E-13	0.887532	rs3849531	3	EEFSEC	0	intronic	2.633	7	5	15	1	1	0
FIM-EM	11:30229234:A:C	rs476669	11	30229234	C	A	0.3926	4.52E-13	0.897661	rs494779	9	FSHB	23328	intergenic	0.576	NA	5	15	0	1	0
LMC-EM	3:127940353:G:T	rs9845651	3	127940353	T	G	0.2634	4.55E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	1.303	5	4	15	1	1	0
LMC-EM	3:127939034:A:T	rs9857235	3	127939034	A	T	0.2634	4.57E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	4.197	5	4	15	1	1	0
LMC-EM	3:127933786:C:T	rs4857871	3	127933786	C	T	0.2644	4.58E-13	0.887532	rs3849531	3	EEFSEC	0	intronic	0.506	7	5	15	1	1	0
LMC-EM	3:127934329:C:T	rs6770140	3	127934329	T	C	0.2624	4.58E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	3.142	2c	5	15	1	1	0
LMC-EM	3:127935461:C:G	rs6439121	3	127935461	G	C	0.2624	4.58E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	0.827	6	5	15	1	1	0
FIM-EM	11:30227923:A:T	rs655183	11	30227923	A	T	0.3926	4.58E-13	0.897661	rs494779	9	FSHB	24639	intergenic	6.51	4	2	15	0	1	0
LMC-EM	3:127903522:A:G	rs2999056	3	127903522	G	A	0.1481	4.59E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.093	6	5	15	1	1	0
LMC-DE	6:151802237:A:G	rs140993356	6	151802237	A	G	0.03479	4.59E-13	0.970145	rs75969278	2	C6orf211	11000	intergenic	0.073	6	2	15	0	1	0
LMC-EM	3:127930459:A:G	rs9838120	3	127930459	A	G	0.2644	4.62E-13	0.887532	rs3849531	3	EEFSEC	0	intronic	0.599	7	5	15	1	1	0
AAM-EM	3:50217234:C:T	rs9831967	3	50217234	C	T	0.4493	4.64E-13	0.948768	rs12631337	8	SEMA3F	0	intronic	0.081	4	4	5	1	1	0
FIM-EO	11:30261968:A:G	rs7951733	11	30261968	A	G	0.05169	4.65E-13	1	rs7951733	9	FSHB	5159	intergenic	0.16	5	9	15	0	0	0
LMC-EM	3:127934269:A:T	rs4857874	3	127934269	A	T	0.2624	4.69E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	4.331	2b	5	15	1	1	0
LMC-EM	3:127944477:C:G	rs6775988	3	127944477	C	G	0.2634	4.70E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	0.378	7	4	15	1	1	0
LMC-EM	3:127938137:A:G	rs9814834	3	127938137	G	A	0.2634	4.75E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	3.255	5	4	15	1	1	0
LMC-EM	3:127933822:G:T	rs4857872	3	127933822	T	G	0.2644	4.83E-13	0.887532	rs3849531	3	EEFSEC	0	intronic	8.992	6	5	15	1	1	0
LMC-EM	3:127918000:A:G	rs2492285	3	127918000	G	A	0.2624	4.83E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	1.204	6	5	5	1	1	0
AAM-EM	3:128064118:A:C	rs4857879	3	128064118	A	C	0.166	4.84E-13	0.704694	rs2811473	9	EEFSEC	0	intronic	8.323	5	4	5	1	1	0
AAM-EPP	11:30372818:C:T	rs74331022	11	30372818	C	T	0.1412	4.84E-13	0.915211	rs7949790	17	ARL14EP	13043	intergenic	1.539	5	5	15	0	0	0
LMC-EM	3:127934276:C:T	rs4857875	3	127934276	C	T	0.2624	4.85E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	4.973	2b	5	15	1	1	0
LMC-EM	3:127909564:A:G	rs2811513	3	127909564	G	A	0.2624	4.89E-13	0.888156	rs3849531	3	EEFSEC	0	intronic	0.018	NA	5	15	1	1	0
LMC-EM	3:127913263:A:G	rs883238	3	127913263	A	G	0.2714	4.90E-13	0.892244	rs3849531	3	EEFSEC	0	intronic	5.523	6	5	5	1	1	0
LMC-EM	3:127898501:A:C	rs2811476	3	127898501	A	C	0.2614	4.95E-13	0.88343	rs3849531	3	EEFSEC	0	intronic	0.043	4	1	15	1	1	0
LMC-EM	3:127936527:C:T	rs9879865	3	127936527	C	T	0.2634	4.95E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	0.901	2b	4	15	1	1	0
LMC-EM	3:127936532:C:T	rs9879866	3	127936532	C	T	0.2634	4.95E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	0.013	2b	4	15	1	1	0
LMC-EM	3:127923187:C:T	rs6439119	3	127923187	T	C	0.2614	4.97E-13	0.88343	rs3849531	3	EEFSEC	0	intronic	2.508	7	5	15	1	1	0
LMC-EM	3:127945349:A:G	rs6777054	3	127945349	G	A	0.2634	5.08E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	12.79	5	2	15	1	1	0
LMC-EM	3:127934774:A:C	rs4384971	3	127934774	C	A	0.2634	5.10E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	2.358	5	5	15	1	1	0
LMC-EM	3:127946788:A:G	rs9830294	3	127946788	G	A	0.2694	5.21E-13	0.912756	rs3849531	3	EEFSEC	0	intronic	0.531	7	5	15	1	1	0
LMC-EM	3:127937645:A:G	rs9847576	3	127937645	A	G	0.2634	5.25E-13	0.892915	rs3849531	3	EEFSEC	0	intronic	9.43	5	4	15	1	1	0
LMC-EM	3:128095652:C:T	rs3021461	3	128095652	T	C	0.2167	5.42E-13	0.829351	rs729847	3	EEFSEC	0	intronic	3.059	NA	2	5	1	1	0
LMC-EM	3:127903678:C:T	rs2955123	3	127903678	T	C	0.1481	5.42E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	6.062	7	5	15	1	1	0
AAM-EM	6:151757327:C:T	rs9383893	6	151757327	T	C	0.4036	5.55E-13	0.872478	rs9397412	14	RMND1	0	intronic	1.211	3a	1	5	1	1	0
LMC-EM	3:127888694:C:T	rs2687731	3	127888694	C	T	0.1481	5.58E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	8.975	6	5	5	1	1	0
LMC-EM	3:127899986:A:G	rs2999054	3	127899986	G	A	0.1481	5.59E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	8.478	5	5	15	1	1	0
FIM-EM	11:30230216:A:G	rs1716025	11	30230216	G	A	0.3956	5.60E-13	0.908505	rs494779	9	FSHB	22346	intergenic	2.959	NA	5	15	0	1	0
LMC-EM	3:127898533:A:G	rs2999053	3	127898533	G	A	0.1481	5.66E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	19.19	4	1	15	1	1	0
LMC-EM	3:128095767:A:G	rs2977565	3	128095767	G	A	0.2167	5.70E-13	0.829351	rs729847	3	EEFSEC	0	intronic	8.921	NA	2	5	1	1	0
AAM-EM	6:151794704:C:T	rs6937816	6	151794704	T	C	0.2922	5.96E-13	1	rs6937816	14	C6orf211	3467	intergenic	0.564	5	5	5	1	1	0
AAM-EPP	3:49961780:A:G	rs6774354	3	49961780	G	A	0.4215	6.22E-13	1	rs6774354	7	MON1A	0	intronic	13.15	4	4	5	1	1	0
AAM-EM	8:25248615:A:G	rs13261573	8	25248615	G	A	0.2545	6.25E-13	0.942505	rs6185	17	DOCK5	0	intronic	0.672	7	4	4	1	1	0
LMC-EM	3:127905648:A:T	rs2999059	3	127905648	A	T	0.1481	6.26E-13	0.872313	rs1735558	3	EEFSEC	0	intronic	0.508	6	5	15	1	1	0
AAM-EM	3:49937505:C:T	rs7615206	3	49937505	T	C	0.4215	6.28E-13	1	rs34034116	8	MST1R:CTD·	0:00	ncRNA_intror	2.749	4	2	15	1	1	0
AAM-EM	6:151759035:C:G	rs3800273	6	151759035	G	C	0.4036	6.62E-13	0.873022	rs9397412	14	RMND1	0	intronic	6.039	6	2	5	1	1	0
AAM-EM	3:49926613:C:G	rs7627864	3	49926613	C	G	0.4215	6.62E-13	1	rs34034116	8	MST1R	0	intronic	4.787	5	4	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:49956628:C:T	rs11709573	3	49956628	C	T	0.4215	6.64E-13	1	rs6774354	7	MON1A	0	intronic	2.21		6	4	5	1	1	0
AAM-EM	3:49939503:C:T	rs3733134	3	49939503	C	T	0.4215	6.70E-13	1	rs34034116	8	MST1R:CTD·	0:00	ncRNA_introı	3.576		4	1	15	1	1	0
AAM-EPP	3:49949071:A:G	rs868891	3	49949071	A	G	0.4215	7.20E-13	1	rs6774354	7	CTD-2330K9	0:00	exonic	12.52		5	4	4	1	1	0
AAM-EPP	3:49948728:C:T	rs2352984	3	49948728	T	C	0.4215	7.24E-13	1	rs6774354	7	CTD-2330K9	0:00	intronic	11.66		4	4	4	1	1	0
LMC-EM	11:30276409:C:T	rs117182643	11	30276409	C	T	0.00994	8.25E-13	1	rs76757075	7	FSHB	19600	intergenic	1.548		5	5	15	0	0	0
AAM-EM	11:30323189:C:T	rs1933349	11	30323189	C	T	0.4433	8.32E-13	1	rs1933349	22	ARL14EP	21408	intergenic	4.075	NA		9	15	0	1	0
LMC-EM	3:128095278:G:T	rs1702118	3	128095278	T	G	0.1471	8.43E-13	0.900002	rs2999033	3	EEFSEC	0	intronic	1.34	NA		2	5	1	1	0
FIM-EM	11:30125619:C:G	rs11030946	11	30125619	G	C	0.1441	8.96E-13	1	rs11030946	9	RP11-624D11	19728	intergenic	0.964		6	9	15	0	0	0
AAM-EPP	6:151795994:A:C	rs9478208	6	151795994	A	C	0.4046	9.00E-13	0.910603	rs9479041	11	C6orf211	4757	intergenic	0.609		7	5	5	0	1	0
AAM-EM	10:90186123:C:T	rs7921352	10	90186123	T	C	0.3817	9.03E-13	1	rs7921352	20	RNLS	0	intronic	3.193		5	5	15	1	0	0
AAM-EM	11:30314253:C:T	rs11031038	11	30314253	T	C	0.4433	9.08E-13	1	rs1933349	22	ARL14EP	30344	intergenic	2.189	2c		5	15	0	1	0
AAM-EPP	3:49937505:C:T	rs7615206	3	49937505	T	C	0.4215	9.23E-13	1	rs6774354	7	MST1R:CTD·	0:00	ncRNA_introı	2.749		4	2	15	1	1	0
AAM-EM	11:30324475:A:T	rs1933348	11	30324475	T	A	0.4433	9.45E-13	1	rs1933349	22	ARL14EP	20122	intergenic	1.135		6	14	15	0	1	0
AAM-EPP	3:49926613:C:G	rs7627864	3	49926613	C	G	0.4215	9.55E-13	1	rs6774354	7	MST1R	0	intronic	4.787		5	4	15	1	1	0
AAM-EM	11:30348638:C:G	rs4427542	11	30348638	G	C	0.4423	9.57E-13	0.988581	rs1933349	22	ARL14EP	0	intronic	0.63		5	2	5	1	1	0
AAM-EM	11:30356092:A:G	rs10767839	11	30356092	G	A	0.4423	9.80E-13	0.988581	rs1933349	22	ARL14EP	0	intronic	0.58		5	4	4	1	1	0
LMC-ERSV	6:151737177:G:T	rs147230474	6	151737177	G	T	0.03777	9.80E-13	1	rs147230474	2	RMND1	0	intronic	0.235		5	4	4	1	1	0
AAM-EPP	3:49939503:C:T	rs3733134	3	49939503	C	T	0.4215	9.84E-13	1	rs6774354	7	MST1R:CTD·	0:00	ncRNA_introı	3.576		4	1	15	1	1	0
LMC-EM	3:128081260:C:G	rs1735545	3	128081260	G	C	0.2187	1.00E-12	0.785354	rs729847	3	EEFSEC	0	intronic	2.059		4	4	5	1	1	0
AAM-EM	3:50198537:A:G	rs12631337	3	50198537	A	G	0.4404	1.01E-12	1	rs12631337	8	SEMA3F	0	intronic	7.158		5	2	7	1	1	0
FIM-EPP	11:30382899:C:T	rs12294104	11	30382899	C	T	0.1581	1.01E-12	0.908774	rs7949790	8	RP4-710M3.1	6795	intergenic	1.404		7	5	15	0	0	0
FIM-EPP	11:30381076:C:T	rs10835661	11	30381076	T	C	0.1571	1.03E-12	0.915956	rs7949790	8	RP4-710M3.1	8618	intergenic	8.247		7	5	15	0	0	0
AAM-EM	11:30350192:C:T	rs2065940	11	30350192	C	T	0.4423	1.05E-12	0.988581	rs1933349	22	ARL14EP	0	UTR5	4.864	NA		5	5	1	1	0
AAM-EPP	3:49959156:A:C	rs34034116	3	49959156	C	A	0.4215	1.05E-12	1	rs6774354	7	MON1A	0	intronic	1.775		6	4	5	1	1	0
AAM-EM	3:49908023:A:G	rs952594	3	49908023	G	A	0.4155	1.09E-12	0.975015	rs34034116	8	CAMKV	367	upstream	10.12		4	1	13	1	1	0
AAM-EM	11:30309732:C:T	rs10767833	11	30309732	T	C	0.4433	1.11E-12	1	rs1933349	22	ARL14EP	34865	intergenic	1.597		7	5	15	0	1	0
LMC-EM	3:128077602:C:T	rs6785384	3	128077602	C	T	0.2187	1.12E-12	0.785354	rs729847	3	EEFSEC	0	intronic	3.416		6	4	4	1	1	0
AAM-EM	3:49911155:A:G	rs55692411	3	49911155	G	A	0.4155	1.14E-12	0.975015	rs34034116	8	ACTBP13	0	ncRNA_exoni	17.49		4	2	14	1	1	0
AAM-EM	11:30311316:A:G	rs10742238	11	30311316	A	G	0.4433	1.14E-12	1	rs1933349	22	ARL14EP	33281	intergenic	13.7		6	5	15	0	1	0
AAM-EM	6:151751908:C:G	rs9322320	6	151751908	C	G	0.4165	1.17E-12	0.819907	rs9397412	14	RMND1	0	intronic	2.624		7	4	4	1	1	0
AAM-EM	6:151753421:C:G	rs6914656	6	151753421	C	G	0.4165	1.17E-12	0.819907	rs9397412	14	RMND1	0	intronic	3.966		6	4	4	1	1	0
AAM-EM	6:151753395:A:G	rs6936936	6	151753395	A	G	0.4165	1.18E-12	0.819907	rs9397412	14	RMND1	0	intronic	4.505		6	4	4	1	1	0
AAM-EM	11:30338275:A:T	rs10767835	11	30338275	T	A	0.4433	1.22E-12	1	rs1933349	22	ARL14EP	6322	intergenic	6.122		5	7	15	1	1	0
AAM-EPP	3:49959148:A:G	rs35275715	3	49959148	A	G	0.4215	1.24E-12	1	rs6774354	7	MON1A	0	intronic	3.488		6	4	5	1	1	0
AAM-EM	6:151743629:A:C	rs6912830	6	151743629	A	C	0.4135	1.26E-12	0.800924	rs9397412	14	RMND1	0	intronic	11.74		6	4	5	1	1	0
AAM-EM	6:151744283:A:G	rs3800272	6	151744283	G	A	0.4135	1.27E-12	0.800924	rs9397412	14	RMND1	0	intronic	2.698		5	4	4	1	1	0
LMC-EM	3:128075398:G:T	rs1735546	3	128075398	T	G	0.2545	1.28E-12	0.871231	rs3849531	3	EEFSEC	0	intronic	6.983	NA		4	5	1	1	0
AAM-EM	11:30253189:G:T	rs550312	11	30253189	T	G	0.4443	1.28E-12	0.988581	rs1933349	22	FSHB	0	intronic	4.833		7	9	15	1	1	0
AAM-EM	6:151739642:A:G	rs9371516	6	151739642	G	A	0.4135	1.28E-12	0.800924	rs9397412	14	RMND1	0	intronic	1.911		7	4	5	1	1	0
AAM-EM	8:25247181:A:G	rs4872310	8	25247181	G	A	0.2535	1.30E-12	0.94713	rs6185	17	DOCK5	0	intronic	4.677		7	4	4	1	1	0
LMC-ERSV	8:25243213:A:G	rs34068702	8	25243213	A	G	0.2922	1.30E-12	0.805191	rs13261573	3	DOCK5	0	intronic	2.503		4	4	5	1	0	0
AAM-EM	3:49902160:C:T	rs2883059	3	49902160	T	C	0.4155	1.31E-12	0.958323	rs34034116	8	CAMKV	0	intronic	0.306	1d		1	13	1	1	0
AAM-EM	11:30253318:A:T	rs611246	11	30253318	A	T	0.4443	1.32E-12	0.988581	rs1933349	22	FSHB	0	intronic	0.496		6	9	15	1	1	0
AAM-EM	11:30254268:G:T	rs580646	11	30254268	T	G	0.4443	1.34E-12	0.988581	rs1933349	22	FSHB	0	intronic	7.431		7	9	15	1	1	0
AAM-EM	6:151738131:A:G	rs3778608	6	151738131	A	G	0.4135	1.34E-12	0.800924	rs9397412	14	RMND1	0	intronic	5.939		7	4	4	1	1	0
AAM-EPP	3:49908023:A:G	rs952594	3	49908023	G	A	0.4155	1.35E-12	0.975015	rs6774354	7	CAMKV	367	upstream	10.12		4	1	13	1	1	0
LMC-EM	11:30182946:A:G	rs183590314	11	30182946	G	A	0.01093	1.38E-12	0.907247	rs76757075	7	RP4-562D20.1	5763	intergenic	0.76		6	5	15	0	0	0
AAM-EM	6:151739810:G:T	rs9371517	6	151739810	G	T	0.4135	1.40E-12	0.800924	rs9397412	14	RMND1	0	intronic	6.108		6	4	5	1	1	0
AAM-EM	3:49899795:A:G	rs3796386	3	49899795	G	A	0.4145	1.41E-12	0.962469	rs34034116	8	CAMKV	0	exonic	12.49		5	4	14	1	1	0
AAM-EPP	3:49911155:A:G	rs55692411	3	49911155	G	A	0.4155	1.43E-12	0.975015	rs6774354	7	ACTBP13	0	ncRNA_exoni	17.49		4	2	14	0	1	0
AAM-EM	3:49911449:C:G	rs34654589	3	49911449	C	G	0.4145	1.45E-12	0.970838	rs34034116	8	ACTBP13	0	ncRNA_exoni	10.31		4	5	14	1	1	0
AAM-EM	6:151736084:G:T	rs9397405	6	151736084	G	T	0.4135	1.55E-12	0.800924	rs9397412	14	RMND1	0	intronic	5.908		5	4	5	1	1	0
LMC-EM	3:128071809:A:T	rs1735549	3	128071809	A	T	0.2177	1.56E-12	0.789564	rs729847	3	EEFSEC	0	intronic	0.707		5	4	5	1	1	0
AAM-EM	6:151753470:C:G	rs6913515	6	151753470	G	C	0.4155	1.56E-12	0.816205	rs9397412	14	RMND1	0	intronic	5.235		6	4	4	1	1	0
AAM-EM	11:30247886:C:T	rs939433	11	30247886	C	T	0.4443	1.60E-12	0.988581	rs1933349	22	FSHB	4676	intergenic	0.55	NA		9	15	1	1	0
AAM-EM	11:30254550:C:T	rs595496	11	30254550	T	C	0.4443	1.61E-12	0.988581	rs1933349	22	FSHB	0	intronic	5.666	NA		9	15	1	1	0
AAM-EM	11:30341210:A:G	rs10767837	11	30341210	A	G	0.4463	1.64E-12	0.988719	rs1933349	22	ARL14EP	3387	intergenic	2.627		6	5	14	1	1	0
AAM-EM	11:30240829:C:T	rs518357	11	30240829	C	T	0.4443	1.65E-12	0.988581	rs1933349	22	FSHB	11733	intergenic	5.746		7	9	15	0	1	0
AAM-EM	3:50217654:C:T	rs13085567	3	50217654	C	T	0.4602	1.65E-12	0.90785	rs12631337	8	SEMA3F	0	intronic	4.895		5	4	5	1	1	0
AAM-EM	10:90152085:A:G	rs1067839	10	90152085	A	G	0.3837	1.66E-12	0.957265	rs7921352	20	RNLS	0	intronic	2.704		4	1	15	1	0	0
AAM-EM	3:49901060:A:T	rs11130222	3	49901060	A	T	0.4145	1.66E-12	0.962469	rs34034116	8	CAMKV:RN7	0:00	ncRNA_exoni	8.669	2b		5	14	1	1	0
LMC-EM	11:30185613:C:G	rs186343328	11	30185613	G	C	0.01093	1.72E-12	0.907247	rs76757075	7	RP4-562D20.1	3096	intergenic	4.399		6	5	15	0	0	0
AAM-EM	11:30342173:A:T	rs3897026	11	30342173	A	T	0.4463	1.72E-12	0.988719	rs1933349	22	ARL14EP	2424	intergenic	1.397		6	5	14	1	1	0
AAM-EM	11:30338392:C:T	rs10767836	11	30338392	T	C	0.4443	1.76E-12	0.988645	rs1933349	22	ARL14EP	6205	intergenic	2.84		4	7	15	1	1	0
LMC-EM	3:128084164:A:T	rs4277707	3	128084164	A	T	0.1431	1.76E-12	0.880497	rs2999033	3	EEFSEC	0	intronic	1.664		5	4	5	1	1	0
AAM-EPP	3:49899795:A:G	rs3796386	3	49899795	G	A	0.4145	1.80E-12	0.962469	rs6774354	7	CAMKV	0	exonic	12.49		5	4	14	1	1	0
AAM-EPP	3:49911449:C:G	rs34654589	3	49911449	C	G	0.4145	1.81E-12	0.970838	rs6774354	7	ACTBP13	0	ncRNA_exoni	10.31		4	5	14	0	1	0
AAM-EM	3:128083332:A:G	rs1702122	3	128083332	A	G	0.2515	1.82E-12	0.797948	rs2811479	9	EEFSEC	0	intronic	0.407	NA		4	5	1	1	0
AAM-EPP	3:49902160:C:T	rs2883059	3	49902160	T	C	0.4155	1.86E-12	0.958323	rs6774354	7	CAMKV	0	intronic	0.306	1d		1	13	1	1	0
AAM-EM	6:151732385:C:T	rs6921042	6	151732385	T	C	0.4135	1.88E-12	0.800924	rs9397412	14	RMND1	0	intronic	2.43		7	4	5	1	1	0
AAM-EM	12:115092173:C:T	rs34803821	12	115092173	C	T	0.4732	1.92E-12	0.848715	rs8853	30	Y_RNA	3580	intergenic	0.074		7	5	14	0	0	0
LMC-EM	2:49385310:C:T	rs4971681	2	49385310	T	C	0.1571	1.94E-12	1	rs4971681	2	FSHR	3633	intergenic	2.73		6	9	15	0	0	0
AAM-EPP	11:30252352:G:T	rs10835638	11	30252352	G	T	0.1431	1.97E-12	0.899313	rs7949790	17	FSHB	210	upstream	13.3		6	9	15	1	0	0
AAM-EM	10:90152140:A:T	rs1067840	10	90152140	A	T	0.3837	2.06E-12	0.957265	rs7921352	20	RNLS	0	intronic	6.538	2b		1	15	1	0	0
AAM-EM	11:30250568:C:T	rs654669	11	30250568	T	C	0.4443	2.07E-12	0.988581	rs1933349	22	FSHB	1994	intergenic	7.642	NA		9	15	1	1	0
LMC-EM	3:127790544:A:G	rs10934848	3	127790544	G	A	0.1501	2.12E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	3.107		4	4	4	1	1	0
LMC-ERSV	6:151826307:A:G	rs75969278	6	151826307	G	A	0.03579	2.13E-12	0.83334	rs147230474	2	CCDC170	0	intronic	1.571		5	5	15	1	1	0
LMC-EM	3:127790606:A:G	rs2241688	3	127790606	G	A	0.1501	2.16E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	2.556	NA		4	4	1	1	0
LMC-EM	3:127799669:G:T	rs1554534	3	127799669	G	T	0.1501	2.16E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	0.501	NA		2	4	1	1	0
AAM-EPP	3:49901060:A:T	rs11130222	3	49901060	A	T	0.4145	2.16E-12	0.962469	rs6774354	7	CAMKV:RN7	0:00	ncRNA_exoni	8.669	2b		5	14	1	1	0
AAM-EM	10:90054899:C:T	rs11202704	10	90054899	T	C	0.2972	2.19E-12	1	rs11202704	20	RNLS	0	intronic	1.672		6	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	12:115099805:A:G	rs10774760	12	115099805	G	A	0.497	2.20E-12	0.780381	rs8853	30	Y_RNA	3937	intergenic	0.182		7	5	14	1	0
LMC-ERSV	6:151802237:A:G	rs140993356	6	151802237	A	G	0.03479	2.25E-12	0.859455	rs147230474	2	C6orf211	11000	intergenic	0.073		6	2	15	0	1
AAM-EM	3:50217899:G:T	rs11714799	3	50217899	T	G	0.4592	2.25E-12	0.903479	rs12631337	8	SEMA3F	0	intronic	11.37		7	4	5	1	1
AAM-EM	11:30255823:A:G	rs506197	11	30255823	A	G	0.4473	2.28E-12	0.977353	rs1933349	22	FSHB	0	UTR3	6.523		7	5	15	1	1
AAM-EM	11:30255867:C:G	rs506306	11	30255867	C	G	0.4483	2.29E-12	0.973619	rs1933349	22	FSHB	0	UTR3	2.184		7	5	15	1	1
AAM-EM	3:50216114:C:T	rs67627084	3	50216114	C	T	0.4602	2.32E-12	0.90785	rs12631337	8	SEMA3F	0	intronic	1.552		5	4	5	1	1
AAM-EPP	6:151768532:C:T	rs35143743	6	151768532	T	C	0.2833	2.34E-12	0.677813	rs6933660	11	RMND1	0	intronic	1.372		5	4	5	1	1
AAM-EM	6:151732017:C:T	rs6557138	6	151732017	C	T	0.4135	2.36E-12	0.800924	rs9397412	14	RMND1	0	intronic	6.905		7	4	5	1	1
AAM-EM	11:30251625:C:T	rs639403	11	30251625	C	T	0.4473	2.36E-12	0.977353	rs1933349	22	FSHB	937	upstream	3.678		5	7	15	1	1
LMC-EM	3:127782427:C:G	rs9864797	3	127782427	G	C	0.1501	2.38E-12	0.857978	rs1735558	3	SEC61A1	0	intronic	1.249		7	4	4	1	1
AAM-EM	11:30281330:A:G	rs6484477	11	30281330	G	A	0.4443	2.42E-12	0.988581	rs1933349	22	FSHB	24521	intergenic	1.928		7	5	15	0	1
AAM-EM	3:128094493:C:T	rs1702119	3	128094493	T	C	0.2525	2.46E-12	0.802665	rs2811479	9	EEFSEC	0	intronic	5.356	NA		2	5	1	1
AAM-EM	11:30241032:A:G	rs590833	11	30241032	G	A	0.4483	2.49E-12	0.973619	rs1933349	22	FSHB	11530	intergenic	3.989	NA		9	15	0	1
AAM-EPP	11:30374608:A:G	rs7949790	11	30374608	A	G	0.1521	2.49E-12	1	rs7949790	17	ARL14EP	14833	intergenic	4.237		4	5	15	0	0
AAM-EM	11:30271159:A:G	rs549346	11	30271159	A	G	0.4453	2.50E-12	0.984816	rs1933349	22	FSHB	14350	intergenic	0.179		6	9	15	0	1
AAM-EM	11:30257122:A:G	rs560078	11	30257122	A	G	0.4483	2.51E-12	0.973619	rs1933349	22	FSHB	313	downstream	5.281		7	5	15	1	1
AAM-EM	11:30258770:C:T	rs626869	11	30258770	C	T	0.4473	2.51E-12	0.977353	rs1933349	22	FSHB	1961	intergenic	1.071	NA		9	15	1	1
AAM-EM	11:30255982:A:G	rs676349	11	30255982	A	G	0.4473	2.51E-12	0.977353	rs1933349	22	FSHB	0	UTR3	0.039		7	5	15	1	1
FIM-EM	11:30288698:G:T	rs7944484	11	30288698	T	G	0.4453	2.54E-12	0.854772	rs494779	9	FSHB	31889	intergenic	1.007		6	14	15	0	1
AAM-EM	11:30223866:A:G	rs606642	11	30223866	G	A	0.3936	2.54E-12	0.7671	rs1933349	22	FSHB	28696	intergenic	0.592	NA		14	15	0	1
AAM-EM	11:30261910:A:C	rs622356	11	30261910	A	C	0.4473	2.55E-12	0.977353	rs1933349	22	FSHB	5101	intergenic	1.87		5	9	15	1	1
LMC-EM	3:127791708:C:T	rs7612065	3	127791708	T	C	0.1501	2.56E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	0.742		4	4	4	1	1
AAM-EM	11:30253641:C:T	rs609896	11	30253641	T	C	0.4473	2.56E-12	0.977353	rs1933349	22	FSHB	0	intronic	0.714	NA		9	15	1	1
AAM-EPP	3:127948149:C:T	rs4857878	3	127948149	T	C	0.2634	2.61E-12	1	rs4857878	8	EEFSEC	0	intronic	1.578		5	5	15	1	1
AAM-EM	11:30258989:A:G	rs615577	11	30258989	G	A	0.4473	2.63E-12	0.977353	rs1933349	22	FSHB	2180	intergenic	1.584	NA		9	15	1	1
AAM-EPP	11:30375889:C:T	rs11031058	11	30375889	C	T	0.1521	2.65E-12	1	rs7949790	17	RP4-710M3.1	13805	intergenic	0.724		7	5	15	0	0
AAM-EM	3:128092102:A:G	rs1735538	3	128092102	A	G	0.2535	2.65E-12	0.797546	rs2811479	9	EEFSEC	0	intronic	0.168	NA		4	5	1	1
FIM-EM	1:169160458:C:T	rs144737447	1	169160458	C	T	0.01193	2.65E-12	1	rs144737447	1	NME7	0	intronic	5.355		5	5	15	1	1
LMC-ERSV	6:151734998:C:T	rs57689380	6	151734998	T	C	0.03877	2.66E-12	0.972264	rs147230474	2	RMND1:HSP	0:00	ncRNA_exoni	9.569		4	2	4	1	1
AAM-EM	11:30369420:C:T	rs6484481	11	30369420	C	T	0.4463	2.66E-12	0.973566	rs1933349	22	ARL14EP	9645	intergenic	0.027		7	5	15	1	1
LMC-EM	3:127726737:A:G	rs6777197	3	127726737	A	G	0.1491	2.67E-12	0.836692	rs1735558	3	KBTBD12	20222	intergenic	0.073	2b		5	14	0	1
AAM-EM	11:30277028:C:T	rs4120820	11	30277028	C	T	0.4443	2.70E-12	0.988581	rs1933349	22	FSHB	20219	intergenic	0.894		6	1	15	0	1
FIM-EM	11:30353881:A:G	rs77055031	11	30353881	A	G	0.0507	2.71E-12	0.936266	rs7951733	9	ARL14EP	0	intronic	6.253		7	4	5	1	0
AAM-EM	11:30250359:C:T	rs537263	11	30250359	T	C	0.4473	2.71E-12	0.977353	rs1933349	22	FSHB	2203	intergenic	3.475		5	9	15	1	1
LMC-EM	3:127783442:A:G	rs6764003	3	127783442	A	G	0.1501	2.72E-12	0.857978	rs1735558	3	SEC61A1	0	intronic	0.098		7	4	4	1	1
LMC-EM	3:127731673:C:T	rs9809866	3	127731673	C	T	0.1511	2.73E-12	0.850933	rs1735558	3	KBTBD12	25158	intergenic	0.133		5	1	15	0	1
AAM-EM	11:30251351:A:C	rs640748	11	30251351	A	C	0.4483	2.77E-12	0.973619	rs1933349	22	FSHB	1211	intergenic	7.736	NA		7	15	1	1
FIM-EO	11:30238832:A:T	rs621448	11	30238832	T	A	0.4175	2.78E-12	1	rs621448	9	FSHB	13730	intergenic	2.261		7	9	15	0	1
AAM-EM	10:90167311:C:G	rs792208	10	90167311	C	G	0.3847	2.83E-12	0.961493	rs7921352	20	RNLS	0	intronic	1.009		7	5	15	1	0
FIM-EO	11:30232615:A:G	rs492828	11	30232615	G	A	0.4175	2.85E-12	1	rs621448	9	FSHB	19947	intergenic	2.496	NA		5	15	0	1
AAM-EPP	11:30376314:A:T	rs76959488	11	30376314	T	A	0.1521	2.86E-12	1	rs7949790	17	RP4-710M3.1	13380	intergenic	0.758		6	5	15	0	0
AAM-EM	11:30242325:C:T	rs572883	11	30242325	C	T	0.4473	2.89E-12	0.977353	rs1933349	22	FSHB	10237	intergenic	0.217	NA		14	15	0	1
FIM-EO	11:30234432:A:G	rs601640	11	30234432	G	A	0.4175	2.89E-12	1	rs621448	9	FSHB	18130	intergenic	0.97	NA		5	15	0	1
FIM-EO	11:30234782:C:T	rs540948	11	30234782	T	C	0.4205	2.91E-12	0.988073	rs621448	9	FSHB	17780	intergenic	4.028	NA		7	15	0	1
FIM-EO	11:30235497:A:G	rs586326	11	30235497	G	A	0.4145	2.91E-12	0.988042	rs621448	9	FSHB	17065	intergenic	4.272	NA		9	15	0	1
LMC-EM	3:127815475:C:T	rs4058156	3	127815475	T	C	0.1501	2.92E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	2.69		7	4	4	1	1
FIM-EO	11:30234394:C:T	rs601681	11	30234394	C	T	0.4145	2.96E-12	0.988042	rs621448	9	FSHB	18168	intergenic	0.317		7	5	15	0	1
AAM-EM	10:90150837:C:T	rs796945	10	90150837	C	T	0.3777	3.00E-12	0.781524	rs7921352	20	RNLS	0	intronic	7.471		7	5	15	1	0
AAM-EM	11:30250479:A:G	rs538236	11	30250479	G	A	0.4473	3.00E-12	0.977353	rs1933349	22	FSHB	2083	intergenic	2.136		7	9	15	1	1
AAM-EPP	11:30376902:A:C	rs10835660	11	30376902	A	C	0.1521	3.00E-12	1	rs7949790	17	RP4-710M3.1	12792	intergenic	2.686		7	5	15	0	0
LMC-EM	3:127780082:A:G	rs759945	3	127780082	G	A	0.1501	3.00E-12	0.857978	rs1735558	3	SEC61A1	0	intronic	1.684	NA		4	4	1	1
AAM-EM	11:30243247:G:T	rs543401	11	30243247	T	G	0.4473	3.01E-12	0.977353	rs1933349	22	FSHB	9315	intergenic	0.441		7	14	15	1	1
AAM-EM	11:30254683:A:C	rs594982	11	30254683	A	C	0.4503	3.01E-12	0.96629	rs1933349	22	FSHB	0	intronic	0.824	NA		9	15	1	1
AAM-EM	11:30249522:C:T	rs1716023	11	30249522	T	C	0.4473	3.01E-12	0.977353	rs1933349	22	FSHB	3040	intergenic	0.236	NA		9	15	1	1
FIM-EO	11:30237518:C:T	rs664147	11	30237518	C	T	0.4145	3.02E-12	0.988042	rs621448	9	FSHB	15044	intergenic	2.315	NA		9	15	0	1
AAM-EM	11:30248826:C:T	rs1782509	11	30248826	C	T	0.4473	3.04E-12	0.977353	rs1933349	22	FSHB	3736	intergenic	0.027		6	9	15	1	1
FIM-EO	11:30234703:A:G	rs600333	11	30234703	G	A	0.4195	3.04E-12	0.992011	rs621448	9	FSHB	17859	intergenic	3.241	NA		7	15	0	1
LMC-EM	3:127781737:C:G	rs4857864	3	127781737	G	C	0.1501	3.05E-12	0.857978	rs1735558	3	SEC61A1	0	intronic	7.278		6	4	4	1	1
LMC-EM	3:127870929:C:G	rs10934849	3	127870929	C	G	0.1491	3.05E-12	0.865104	rs1735558	3	RUVBL1	0	intronic	1.184		4	2	15	1	1
FIM-EO	11:30232381:C:T	rs494779	11	30232381	C	T	0.4175	3.06E-12	1	rs621448	9	FSHB	20181	intergenic	1.167	NA		5	15	0	1
LMC-EM	3:127867592:G:T	rs73192977	3	127867592	T	G	0.1491	3.06E-12	0.865104	rs1735558	3	RUVBL1	0	intronic	0.27		5	5	15	1	1
LMC-EM	3:127730766:C:T	rs9824657	3	127730766	T	C	0.1491	3.06E-12	0.836692	rs1735558	3	KBTBD12	24251	intergenic	0.294		4	1	15	0	1
AAM-EM	3:128075398:G:T	rs1735546	3	128075398	T	G	0.2545	3.07E-12	0.842247	rs2811479	9	EEFSEC	0	intronic	6.983	NA		4	5	1	1
FIM-EO	11:30236544:C:T	rs555621	11	30236544	T	C	0.4185	3.09E-12	0.995997	rs621448	9	FSHB	16018	intergenic	0.73		5	14	15	0	1
LMC-EM	3:127869165:A:G	rs4857870	3	127869165	G	A	0.1491	3.10E-12	0.865104	rs1735558	3	RUVBL1	0	intronic	6.493		7	5	15	1	1
AAM-EM	10:90175306:A:C	rs792215	10	90175306	A	C	0.3857	3.10E-12	0.957186	rs7921352	20	RNLS	0	intronic	4.688		6	5	15	1	0
LMC-EM	3:127733091:A:G	rs4602341	3	127733091	A	G	0.1511	3.16E-12	0.850933	rs1735558	3	KBTBD12	26576	intergenic	6.195		7	5	15	0	1
LMC-EM	3:127877385:C:T	rs2492284	3	127877385	T	C	0.1491	3.18E-12	0.865104	rs1735558	3	EEFSEC	0	intronic	3.535		6	4	5	1	1
LMC-EM	3:127877756:A:C	rs2955114	3	127877756	A	C	0.1491	3.22E-12	0.865104	rs1735558	3	EEFSEC	0	intronic	2.738		6	4	5	1	1
LMC-EM	3:127991149:A:C	rs2811413	3	127991149	C	A	0.3171	3.23E-12	0.718217	rs3849531	3	EEFSEC	0	intronic	0.523		5	4	5	1	1
AAM-EM	11:30250177:C:T	rs1716022	11	30250177	C	T	0.4473	3.23E-12	0.977353	rs1933349	22	FSHB	2385	intergenic	0.221	NA		9	15	1	1
LMC-EM	3:127872175:C:G	rs11920225	3	127872175	C	G	0.1491	3.25E-12	0.865104	rs1735558	3	RUVBL1	0	UTR5	8.594	2b		1	1	1	1
LMC-EM	3:127878871:A:G	rs2811472	3	127878871	A	G	0.1491	3.25E-12	0.865104	rs1735558	3	EEFSEC	0	intronic	7.177		7	4	5	1	1
LMC-EM	3:127878064:C:T	rs2955115	3	127878064	C	T	0.1491	3.26E-12	0.865104	rs1735558	3	EEFSEC	0	intronic	3.183		7	4	5	1	1
AAM-EM	3:127710474:A:G	rs16845806	3	127710474	G	A	0.163	3.27E-12	0.694224	rs2811473	9	KBTBD12	3959	intergenic	2.907		6	5	15	1	1
AAM-EM	3:50223977:C:T	rs11717349	3	50223977	C	T	0.4513	3.28E-12	0.932934	rs12631337	8	SEMA3F	0	intronic	5.839		5	4	15	1	1
AAM-EM	11:30235497:A:G	rs586326	11	30235497	G	A	0.4145	3.29E-12	0.859698	rs1933349	22	FSHB	17065	intergenic	4.272	NA		9	15	0	1
AAM-EM	11:30249550:A:C	rs1782510	11	30249550	A	C	0.4473	3.31E-12	0.977353	rs1933349	22	FSHB	3012	intergenic	1.338		6	9	15	1	1
FIM-EO	11:30234606:C:T	rs600768	11	30234606	C	T	0.4205	3.32E-12	0.988073	rs621448	9	FSHB	17956	intergenic	3.662	NA		7	15	0	1
LMC-EM	3:127819151:C:T	rs4857867	3	127819151	T	C	0.1501	3.33E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	8.312		5	4	4	1	1
AAM-EM	11:30237518:C:T	rs664147	11	30237518	C	T	0.4145	3.36E-12	0.859698	rs1933349	22	FSHB	15044	intergenic	2.315	NA		9	15	0	1

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-EM	11:30009190:A:G	rs76820729	11	30009190	A	G	0.01491	3.37E-12	0.695638	rs79484066	7	RP11-215H22	5250	intergenic	4.694		6	5	15	0	0	0
LMC-EM	3:127727450:C:T	rs6766665	3	127727450	T	C	0.1491	3.39E-12	0.836692	rs1735558	3	KBTBD12	20935	intergenic	0.686		6	5	14	0	1	0
AAM-EM	11:30248392:A:G	rs1630084	11	30248392	G	A	0.4473	3.41E-12	0.977353	rs1933349	22	FSHB	4170	intergenic	1.709		7	9	15	1	1	0
AAM-EM	11:30255185:C:T	rs6169	11	30255185	C	T	0.4503	3.41E-12	0.96629	rs1933349	22	FSHB	0	exonic	0.631		7	9	15	1	1	0
AAM-EM	3:50228767:G:T	rs3755831	3	50228767	G	T	0.4583	3.42E-12	0.899122	rs12631337	8	GNAT1	277	upstream	6.559	NA		5	14	1	1	0
FIM-EM	1:169324793:C:T	rs1209731	1	169324793	T	C	0.01292	3.44E-12	0.931944	rs144737447	1	NME7	0	intronic	1.752		4	5	15	1	1	0
AAM-EM	11:30249084:C:T	rs1716024	11	30249084	C	T	0.4503	3.46E-12	0.96629	rs1933349	22	FSHB	3478	intergenic	2.604	NA		9	15	1	1	0
LMC-EM	3:127838999:A:G	rs9821568	3	127838999	G	A	0.1501	3.48E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	2.664		5	4	5	1	1	0
LMC-EM	3:127733069:A:G	rs4474992	3	127733069	A	G	0.1511	3.49E-12	0.850933	rs1735558	3	KBTBD12	26554	intergenic	0.303		7	5	15	0	1	0
LMC-EM	3:127835629:A:G	rs6788879	3	127835629	A	G	0.1501	3.50E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	0.858		7	4	5	1	1	0
LMC-EM	3:127816572:A:G	rs6439113	3	127816572	A	G	0.1501	3.53E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	4.224		5	4	4	1	1	0
AAM-EM	3:50223593:A:T	rs2073726	3	50223593	T	A	0.4513	3.53E-12	0.932721	rs12631337	8	SEMA3F	0	intronic	5.841		5	4	15	1	1	0
LMC-EM	3:127726637:A:G	rs6777095	3	127726637	A	G	0.1491	3.54E-12	0.836692	rs1735558	3	KBTBD12	20122	intergenic	3.328	3a		5	14	0	1	0
AAM-EM	3:49914397:C:T	rs11712056	3	49914397	T	C	0.4374	3.56E-12	0.889094	rs34034116	8	ACTBP13	0	ncRNA_exoni	6.897		4	5	15	1	1	0
LMC-EM	3:127824017:A:G	rs9835383	3	127824017	A	G	0.1501	3.56E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	0.815		6	4	5	1	1	0
AAM-EM	11:30225170:C:G	rs1716021	11	30225170	G	C	0.3907	3.59E-12	0.765067	rs1933349	22	FSHB	27392	intergenic	1.813		6	7	15	0	1	0
LMC-EM	3:127845701:C:T	rs2811475	3	127845701	C	T	0.1501	3.61E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	5.487		5	5	15	1	1	0
LMC-EM	3:127835803:C:T	rs6439115	3	127835803	C	T	0.1501	3.62E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	2.017		6	4	5	1	1	0
AAM-EM	11:30241731:C:T	rs489096	11	30241731	C	T	0.4473	3.71E-12	0.977353	rs1933349	22	FSHB	10831	intergenic	4.8	NA		9	15	0	1	0
LMC-EM	3:127755716:A:C	rs1987633	3	127755716	C	A	0.1511	3.73E-12	0.850933	rs1735558	3	SEC61A1	14767	intergenic	2.399	NA		5	15	0	1	0
LMC-EM	2:49371623:A:C	rs9789669	2	49371623	A	C	0.1571	3.78E-12	0.96984	rs4971681	2	FSHR	0	intronic	13.21		7	9	15	1	0	0
FIM-EPP	11:30395871:C:T	rs12223987	11	30395871	C	T	0.1581	3.79E-12	0.893893	rs7949790	8	RP4-710M3.1	5677	intergenic	2.426		7	5	15	0	0	0
AAM-EPP	3:127901786:A:G	rs2811479	3	127901786	G	A	0.2624	3.80E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	5.35		5	5	15	1	1	0
AAM-EM	11:30223861:A:C	rs606651	11	30223861	C	A	0.3946	3.81E-12	0.762769	rs1933349	22	FSHB	28701	intergenic	3.323	NA		14	15	0	1	0
AAM-EM	11:30234394:C:T	rs601681	11	30234394	C	T	0.4145	3.81E-12	0.859698	rs1933349	22	FSHB	18168	intergenic	0.317		7	5	15	0	1	0
LMC-EM	2:49381253:C:T	rs7589810	2	49381253	T	C	0.1561	3.81E-12	0.977357	rs4971681	2	FSHR	0	intronic	12.66		5	1	15	1	0	0
LMC-EM	3:127861822:A:C	rs2955093	3	127861822	C	A	0.1501	3.83E-12	0.857978	rs1735558	3	RUVBL1	0	intronic	9.106		7	5	15	1	1	0
AAM-EM	11:30229234:A:C	rs476669	11	30229234	C	A	0.3926	3.84E-12	0.777312	rs1933349	22	FSHB	23328	intergenic	0.576	NA		5	15	0	1	0
LMC-EM	3:127854684:A:G	rs2811471	3	127854684	G	A	0.1491	3.89E-12	0.865104	rs1735558	3	RUVBL1	0	intronic	4.165		7	5	15	1	1	0
AAM-EM	11:30227923:A:T	rs655183	11	30227923	A	T	0.3926	3.92E-12	0.777312	rs1933349	22	FSHB	24639	intergenic	6.51		4	2	15	0	1	0
AAM-EM	12:115098094:A:G	rs9634162	12	115098094	G	A	0.5	3.95E-12	0.792344	rs8853	30	Y_RNA	2226	intergenic	0.088		7	5	14	1	0	0
LMC-EM	3:127878416:A:G	rs2999048	3	127878416	G	A	0.2694	3.97E-12	0.902651	rs3849531	3	EEFSEC	0	intronic	0.073		7	4	5	1	1	0
LMC-EM	11:30365566:C:T	rs1228479	11	30365566	C	T	0.334	4.04E-12	0.750727	rs605765	7	ARL14EP	5791	intergenic	8.317	NA		2	15	0	1	0
LMC-EM	3:127872796:C:T	rs2999046	3	127872796	C	T	0.1491	4.04E-12	0.865104	rs1735558	3	EEFSEC	0	intronic	8.853		4	1	1	1	1	0
LMC-EM	3:127747841:A:G	rs6764517	3	127747841	A	G	0.1491	4.04E-12	0.836692	rs1735558	3	SEC61A1	22642	intergenic	0.752		5	13	15	0	1	0
LMC-EM	3:127757422:A:G	rs2217629	3	127757422	A	G	0.1491	4.06E-12	0.836692	rs1735558	3	SEC61A1	13061	intergenic	1.95	NA		5	15	0	0	0
AAM-EM	11:30234432:A:G	rs601640	11	30234432	G	A	0.4175	4.06E-12	0.848015	rs1933349	22	FSHB	18130	intergenic	0.97	NA		5	15	0	1	0
AAM-EM	12:115100714:C:T	rs1427760	12	115100714	T	C	0.4761	4.06E-12	0.835906	rs8853	30	Y_RNA	4846	intergenic	6.292	NA		2	14	1	0	0
LMC-EM	3:127759668:C:T	rs1469657	3	127759668	C	T	0.1491	4.06E-12	0.836692	rs1735558	3	SEC61A1	10815	intergenic	0.757	NA		5	15	0	1	0
LMC-EM	3:127763254:C:T	rs4857834	3	127763254	T	C	0.1491	4.13E-12	0.836692	rs1735558	3	SEC61A1	7229	intergenic	3.2		5	5	14	0	1	0
LMC-EM	3:127759214:A:T	rs1469658	3	127759214	T	A	0.1491	4.13E-12	0.836692	rs1735558	3	SEC61A1	11269	intergenic	3.842		7	5	15	0	1	0
LMC-EM	3:127878817:C:T	rs2999049	3	127878817	T	C	0.2634	4.15E-12	0.882768	rs3849531	3	EEFSEC	0	intronic	2.222		7	4	5	1	1	0
AAM-EM	8:25263294:G:T	rs61490611	8	25263294	T	G	0.2624	4.16E-12	0.910194	rs6185	17	DOCK5	0	intronic	6.896		6	4	5	1	1	0
AAM-EPP	6:151756070:A:G	rs9479041	6	151756070	A	G	0.4056	4.17E-12	1	rs9479041	11	RMND1	0	intronic	0.794		7	4	5	1	1	0
FIM-EM	11:30288255:A:T	rs11031021	11	30288255	T	A	0.4483	4.17E-12	0.852983	rs494779	9	FSHB	31446	intergenic	1.383		6	14	15	0	1	0
FIM-EM	11:30288256:A:C	rs10835641	11	30288256	C	A	0.4483	4.17E-12	0.852983	rs494779	9	FSHB	31447	intergenic	0.65		6	14	15	0	1	0
LMC-EM	2:49384585:A:T	rs11681105	2	49384585	T	A	0.1541	4.20E-12	0.977472	rs4971681	2	FSHR	2908	intergenic	1.85		6	9	15	0	0	0
LMC-DE	11:30162775:A:C	rs78026352	11	30162775	A	C	0.4215	4.28E-12	1	rs78026352	5	RP4-562D20.2	25934	intergenic	9.376		6	14	15	0	0	0
LMC-DE	11:30162744:A:G	rs72884326	11	30162744	A	G	0.4215	4.28E-12	1	rs78026352	5	RP4-562D20.2	25965	intergenic	3.024		7	14	15	0	0	0
LMC-EM	3:127878330:A:G	rs2999047	3	127878330	A	G	0.1491	4.30E-12	0.865104	rs1735558	3	EEFSEC	0	intronic	9.653		7	4	5	1	1	0
AAM-EM	11:30232381:C:T	rs494779	11	30232381	C	T	0.4175	4.32E-12	0.848015	rs1933349	22	FSHB	20181	intergenic	1.167	NA		5	15	0	1	0
AAM-EM	3:50234126:A:G	rs34877766	3	50234126	A	G	0.4573	4.33E-12	0.902868	rs12631337	8	GNAT1	176	downstream	4.441	1f		1	14	1	1	0
LMC-EM	3:127881613:A:G	rs2955117	3	127881613	G	A	0.2724	4.33E-12	0.838571	rs3849531	3	EEFSEC	0	intronic	16.66		7	4	5	1	1	0
LMC-DE	11:30145730:C:T	rs1436098	11	30145730	C	T	0.4225	4.36E-12	0.996312	rs78026352	5	RP11-624D11	39839	intergenic	0.107		7	5	15	0	0	0
FIM-EM	11:30239283:A:G	rs553406	11	30239283	A	G	0.4433	4.36E-12	0.891759	rs494779	9	FSHB	13279	intergenic	8.195	NA		9	15	0	1	0
LMC-EM	3:127856573:A:T	rs6414310	3	127856573	T	A	0.2634	4.48E-12	0.882768	rs3849531	3	RUVBL1	0	intronic	7.358		6	5	15	1	1	0
LMC-EM	3:127867397:A:G	rs67451924	3	127867397	G	A	0.2634	4.52E-12	0.882768	rs3849531	3	RUVBL1	0	intronic	0.551		5	5	15	1	1	0
AAM-EM	11:30264368:A:G	rs560109	11	30264368	G	A	0.4473	4.59E-12	0.96982	rs1933349	22	FSHB	7559	intergenic	0.31		7	13	15	1	1	0
AAM-EM	11:30263655:C:T	rs532667	11	30263655	C	T	0.4483	4.65E-12	0.973619	rs1933349	22	FSHB	6846	intergenic	0.946		6	13	15	1	1	0
AAM-EM	11:30236544:C:T	rs555621	11	30236544	T	C	0.4185	4.66E-12	0.843919	rs1933349	22	FSHB	16018	intergenic	0.73		5	14	15	0	1	0
FIM-EM	11:30239353:C:T	rs553190	11	30239353	C	T	0.4423	4.67E-12	0.887332	rs494779	9	FSHB	13209	intergenic	6.692	NA		9	15	0	1	0
LMC-EM	3:127808502:C:G	rs7355887	3	127808502	C	G	0.2664	4.69E-12	0.876866	rs3849531	3	RUVBL1	0	intronic	4.779		7	4	5	1	1	0
AAM-EPP	3:49916710:C:T	rs7613360	3	49916710	C	T	0.3837	4.69E-12	0.848366	rs6774354	7	ACTBP13	1296	intergenic	2.031		5	5	15	0	1	0
AAM-EM	10:90177991:C:T	rs10736351	10	90177991	T	C	0.3827	4.72E-12	0.953075	rs7921352	20	RNLS	0	intronic	1.544		6	5	15	1	0	0
AAM-EPP	6:151789355:G:T	rs963193	6	151789355	T	G	0.4095	4.74E-12	0.969181	rs9479041	11	C6orf211	0	intronic	4.122	NA		4	5	1	1	0
FIM-EM	11:30268544:C:G	rs1716029	11	30268544	G	C	0.4443	4.77E-12	0.851011	rs494779	9	FSHB	11735	intergenic	4.064		6	13	15	0	1	0
LMC-DE	11:30147515:C:T	rs4923622	11	30147515	T	C	0.4225	4.80E-12	0.996312	rs78026352	5	RP4-562D20.2	41194	intergenic	3.347		6	7	15	0	0	0
FIM-EM	8:25280800:C:G	rs6185	8	25280800	C	G	0.2425	4.85E-12	1	rs6185	7	GNRH1	0	exonic	12.21		7	4	4	1	1	0
LMC-DE	11:30146230:C:T	rs11030958	11	30146230	T	C	0.4225	4.87E-12	0.996312	rs78026352	5	RP11-624D11	40339	intergenic	2.223		6	5	15	0	0	0
AAM-EM	11:30222637:C:T	rs622744	11	30222637	T	C	0.3936	4.91E-12	0.766498	rs1933349	22	FSHB	29925	intergenic	1.891	NA		5	15	0	1	0
AAM-EPP	10:97877320:A:T	rs1172955	10	97877320	T	A	0.332	4.92E-12	1	rs1172955	16	RNU6-271P	4711	intergenic	8.868		6	5	14	0	0	0
FIM-EM	11:30239470:A:G	rs618611	11	30239470	G	A	0.4394	4.93E-12	0.874734	rs494779	9	FSHB	13092	intergenic	3.149	NA		9	15	0	1	0
AAM-EM	11:30288698:G:T	rs7944484	11	30288698	T	G	0.4453	4.93E-12	0.984795	rs1933349	22	FSHB	31889	intergenic	1.007		6	14	15	0	1	0
LMC-EM	2:49376206:A:T	rs6733807	2	49376206	A	T	0.162	4.94E-12	0.948573	rs4971681	2	FSHR	0	intronic	0.092		6	5	15	1	0	0
LMC-DE	11:30155294:A:G	rs597235	11	30155294	A	G	0.4225	4.95E-12	0.996312	rs78026352	5	RP4-562D20.2	33415	intergenic	2.802		5	5	15	0	0	0
LMC-DE	11:30155490:A:C	rs2117911	11	30155490	A	C	0.4215	4.98E-12	1	rs78026352	5	RP4-562D20.2	33219	intergenic	0.114		7	5	15	0	0	0
AAM-EM	3:50225029:A:G	rs11711407	3	50225029	A	G	0.4523	5.02E-12	0.93697	rs12631337	8	SEMA3F	0	intronic	3.876	1f		4	15	1	1	0
AAM-EPP	6:151773504:C:T	rs13201167	6	151773504	T	C	0.4085	5.04E-12	0.965105	rs9479041	11	C6orf211	0	UTR5	11.88	1f		1	1	1	1	0
LMC-EM	2:49383377:C:T	rs986036	2	49383377	C	T	0.1551	5.05E-12	0.984959	rs4971681	2	FSHR	1700	intergenic	1.765	NA		14	15	0	0	0
LMC-DE	11:30162194:A:C	rs12790814	11	30162194	C	A	0.4215	5.08E-12	1	rs78026352	5	RP4-562D20.2	26515	intergenic	0.501		7	14	15	0	0	0
LMC-DE	11:30147562:C:T	rs4923623	11	30147562	C	T	0.4215	5.10E-12	1	rs78026352	5	RP4-562D20.2	41147	intergenic	0.158		7	7	15	0	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-DE	11:30146407:C:T	rs1436099	11	30146407	C	T	0.4225	5.10E-12	0.996312	rs78026352	5	RP11-624D11	40516	intergenic	2.886		7	5	15	0	0	0
LMC-DE	11:30162222:A:T	rs12792185	11	30162222	T	A	0.4215	5.10E-12	1	rs78026352	5	RP4-562D20.2	26487	intergenic	4.349		6	14	15	0	0	0
AAM-EM	11:30234782:C:T	rs540948	11	30234782	T	C	0.4205	5.11E-12	0.8362	rs1933349	22	FSHB	17780	intergenic	4.028	NA		7	15	0	1	0
LMC-EM	3:127817508:C:T	rs7632756	3	127817508	C	T	0.2654	5.12E-12	0.882182	rs3849531	3	RUVBL1	0	intronic	8.881		5	4	4	1	1	0
FIM-EO	11:30214713:A:G	rs961605	11	30214713	G	A	0.3956	5.14E-12	0.877668	rs621448	9	RP4-562D20.2	25859	intergenic	1.294		7	14	15	0	1	0
LMC-DE	11:30154477:A:G	rs35078732	11	30154477	A	G	0.4165	5.15E-12	0.98177	rs78026352	5	RP4-562D20.2	34232	intergenic	7.67		5	5	15	0	0	0
FIM-EM	11:30240217:C:T	rs523875	11	30240217	C	T	0.4423	5.16E-12	0.887332	rs494779	9	FSHB	12345	intergenic	7.462	NA		7	15	0	1	0
AAM-EM	3:50227871:C:T	rs9858059	3	50227871	C	T	0.4513	5.17E-12	0.924624	rs12631337	8	GNAT1	1173	intergenic	1.949		7	5	14	1	1	0
AAM-EM	3:50216421:C:T	rs13059311	3	50216421	T	C	0.326	5.18E-12	0.910811	rs35137368	8	SEMA3F	0	intronic	3.364		7	4	5	1	1	0
LMC-DE	11:30158907:C:T	rs12290971	11	30158907	T	C	0.4225	5.19E-12	0.99633	rs78026352	5	RP4-562D20.2	29802	intergenic	6.145		7	14	15	0	0	0
AAM-EM	11:30232615:A:G	rs492828	11	30232615	G	A	0.4175	5.19E-12	0.848015	rs1933349	22	FSHB	19947	intergenic	2.496	NA		5	15	0	1	0
AAM-EM	3:50222926:A:T	rs1046956	3	50222926	T	A	0.329	5.20E-12	0.898637	rs35137368	8	SEMA3F	0	exonic	14.65		4	4	15	1	1	0
LMC-EM	3:127836287:C:T	rs4857836	3	127836287	C	T	0.2654	5.21E-12	0.882182	rs3849531	3	RUVBL1	0	intronic	0.141		4	4	5	1	1	0
LMC-DE	11:30153348:A:C	rs1865731	11	30153348	A	C	0.4215	5.23E-12	1	rs78026352	5	RP4-562D20.2	35361	intergenic	2.222		4	5	15	0	0	0
LMC-DE	11:30152594:A:G	rs7935077	11	30152594	G	A	0.4215	5.25E-12	1	rs78026352	5	RP4-562D20.2	36115	intergenic	3.233		5	5	15	0	0	0
LMC-DE	11:30147285:A:C	rs4923621	11	30147285	C	A	0.4185	5.27E-12	0.989011	rs78026352	5	RP11-624D11	41394	intergenic	1.783		4	7	15	0	0	0
LMC-DE	11:30152078:A:G	rs1369811	11	30152078	A	G	0.4225	5.32E-12	0.99633	rs78026352	5	RP4-562D20.2	36631	intergenic	5.442		6	5	15	0	0	0
AAM-EM	10:90110257:C:G	rs11202728	10	90110257	C	G	0.2972	5.36E-12	0.9707	rs11202704	20	RNLS	0	intronic	5.643		7	5	15	1	0	0
LMC-DE	11:30154037:C:T	rs11030960	11	30154037	T	C	0.4215	5.37E-12	1	rs78026352	5	RP4-562D20.2	34672	intergenic	3.656		4	5	15	0	0	0
AAM-EM	11:30217003:A:T	rs574096	11	30217003	A	T	0.3956	5.37E-12	0.758455	rs1933349	22	RP4-562D20.2	28149	intergenic	4.203		6	2	15	0	1	0
AAM-EM	3:50233215:G:T	rs11919418	3	50233215	T	G	0.325	5.38E-12	0.905632	rs35137368	8	GNAT1	0	UTR3	9.379		4	2	14	1	1	0
LMC-DE	11:30157917:C:T	rs2082917	11	30157917	T	C	0.4215	5.39E-12	1	rs78026352	5	RP4-562D20.2	30792	intergenic	3.257		7	9	15	0	0	0
AAM-EM	11:30376209:C:T	rs7929105	11	30376209	C	T	0.4592	5.40E-12	0.927592	rs1933349	22	RP4-710M3.1	13485	intergenic	14.85		6	5	15	0	1	0
LMC-DE	11:30155086:C:T	rs17694317	11	30155086	T	C	0.4215	5.40E-12	1	rs78026352	5	RP4-562D20.2	33623	intergenic	1.619		5	5	15	0	0	0
LMC-DE	11:30155829:C:T	rs10835618	11	30155829	C	T	0.4215	5.40E-12	1	rs78026352	5	RP4-562D20.2	32880	intergenic	1.839		7	5	15	0	0	0
LMC-DE	11:30154407:C:G	rs10835617	11	30154407	C	G	0.4215	5.40E-12	1	rs78026352	5	RP4-562D20.2	34302	intergenic	2.59		5	5	15	0	0	0
LMC-DE	11:30154609:C:T	rs11030961	11	30154609	C	T	0.4215	5.40E-12	1	rs78026352	5	RP4-562D20.2	34100	intergenic	2.105		6	5	15	0	0	0
AAM-EPP	3:127902091:G:T	rs2811480	3	127902091	G	T	0.2624	5.41E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	1.19		5	5	15	1	1	0
LMC-DE	11:30154930:C:T	rs11030962	11	30154930	T	C	0.4215	5.41E-12	1	rs78026352	5	RP4-562D20.2	33779	intergenic	5.285		6	5	15	0	0	0
LMC-DE	11:30160793:C:T	rs3847632	11	30160793	T	C	0.4225	5.44E-12	0.99633	rs78026352	5	RP4-562D20.2	27916	intergenic	6.739		7	14	15	0	0	0
LMC-EM	3:127819062:C:G	rs4857866	3	127819062	G	C	0.2654	5.47E-12	0.882182	rs3849531	3	RUVBL1	0	intronic	3.759		5	4	4	1	1	0
LMC-DE	11:30150000:A:G	rs892951	11	30150000	G	A	0.4215	5.49E-12	1	rs78026352	5	RP4-562D20.2	38709	intergenic	4.199		4	5	15	0	0	0
LMC-DE	11:30149602:C:G	rs892950	11	30149602	C	G	0.4215	5.49E-12	1	rs78026352	5	RP4-562D20.2	39107	intergenic	0.741		7	5	15	0	0	0
LMC-DE	11:30160908:A:G	rs12802602	11	30160908	A	G	0.4215	5.52E-12	1	rs78026352	5	RP4-562D20.2	27801	intergenic	0.408		7	14	15	0	0	0
LMC-DE	11:30151117:C:T	rs892952	11	30151117	C	T	0.4215	5.53E-12	1	rs78026352	5	RP4-562D20.2	37592	intergenic	11.16		5	7	15	0	0	0
LMC-DE	11:30160801:C:T	rs3886880	11	30160801	C	T	0.4225	5.54E-12	0.99633	rs78026352	5	RP4-562D20.2	27908	intergenic	3.933		7	14	15	0	0	0
LMC-DE	11:30160204:A:G	rs12801198	11	30160204	A	G	0.4215	5.55E-12	1	rs78026352	5	RP4-562D20.2	28505	intergenic	4.505		7	14	15	0	0	0
FIM-EM	11:30249522:C:T	rs1716023	11	30249522	T	C	0.4473	5.56E-12	0.871006	rs494779	9	FSHB	3040	intergenic	0.236	NA		9	15	0	1	0
LMC-EM	3:127836319:A:G	rs4857837	3	127836319	A	G	0.2654	5.57E-12	0.882182	rs3849531	3	RUVBL1	0	intronic	6.99		4	4	5	1	1	0
LMC-DE	11:30158828:A:G	rs12270725	11	30158828	A	G	0.4215	5.58E-12	1	rs78026352	5	RP4-562D20.2	29881	intergenic	1.219		6	14	15	0	0	0
LMC-DE	11:30158908:A:G	rs12284112	11	30158908	G	A	0.4225	5.58E-12	0.99633	rs78026352	5	RP4-562D20.2	29801	intergenic	3.16		7	14	15	0	0	0
LMC-DE	11:30158498:C:T	rs12290734	11	30158498	T	C	0.4215	5.58E-12	1	rs78026352	5	RP4-562D20.2	30211	intergenic	5.061		6	14	15	0	0	0
FIM-EM	11:30257122:A:G	rs560078	11	30257122	A	G	0.4483	5.59E-12	0.867538	rs494779	9	FSHB	313	downstream	5.281		7	5	15	1	1	0
FIM-EM	11:30249550:A:C	rs1782510	11	30249550	A	C	0.4473	5.63E-12	0.871006	rs494779	9	FSHB	3012	intergenic	1.338		6	9	15	0	1	0
FIM-EM	11:30300692:C:T	rs4120821	11	30300692	C	T	0.4453	5.63E-12	0.855459	rs494779	9	FSHB	43883	intergenic	0.196	NA		9	15	0	1	0
LMC-DE	11:30159305:C:T	rs12796113	11	30159305	T	C	0.4215	5.65E-12	1	rs78026352	5	RP4-562D20.2	29404	intergenic	1.844		6	14	15	0	0	0
AAM-EM	10:90104705:A:G	rs11202727	10	90104705	A	G	0.2972	5.65E-12	0.9707	rs11202704	20	RNLS	0	intronic	13.77		7	5	15	1	0	0
AAM-EPP	6:151775259:A:C	rs1825368	6	151775259	C	A	0.4085	5.65E-12	0.965105	rs9479041	11	C6orf211	0	intronic	0.154	NA		1	7	1	1	0
LMC-DE	11:30148871:C:T	rs979210	11	30148871	T	C	0.4205	5.69E-12	0.988967	rs78026352	5	RP4-562D20.2	39838	intergenic	3.773		7	5	15	0	0	0
AAM-EPP	3:127892037:C:T	rs2999052	3	127892037	T	C	0.2624	5.70E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	1.539		7	5	5	1	1	0
FIM-EM	11:30255823:A:G	rs506197	11	30255823	A	G	0.4473	5.72E-12	0.871006	rs494779	9	FSHB	0	UTR3	6.523		7	5	15	1	1	0
LMC-EM	2:49371607:G:T	rs9789577	2	49371607	T	G	0.1571	5.74E-12	0.96984	rs4971681	2	FSHR	0	intronic	13		6	9	15	1	0	0
FIM-EM	11:30271159:A:G	rs549346	11	30271159	A	G	0.4453	5.74E-12	0.855459	rs494779	9	FSHB	14350	intergenic	0.179		6	9	15	0	1	0
FIM-EM	11:30250177:C:T	rs1716022	11	30250177	C	T	0.4473	5.77E-12	0.871006	rs494779	9	FSHB	2385	intergenic	0.221	NA		9	15	0	1	0
LMC-DE	11:30161164:C:T	rs4285851	11	30161164	C	T	0.4195	5.79E-12	0.985344	rs78026352	5	RP4-562D20.2	27545	intergenic	0.243		7	14	15	0	0	0
AAM-EM	11:30239470:A:G	rs618611	11	30239470	G	A	0.4394	5.81E-12	0.969742	rs1933349	22	FSHB	13092	intergenic	3.149	NA		9	15	0	1	0
LMC-EM	2:49387764:C:G	rs4971561	2	49387764	C	G	0.1551	5.84E-12	0.969864	rs4971681	2	FSHR	6087	intergenic	1.245		7	7	15	0	0	0
AAM-EM	11:30238832:A:T	rs621448	11	30238832	T	A	0.4175	5.85E-12	0.848015	rs1933349	22	FSHB	13730	intergenic	2.261		7	9	15	0	1	0
LMC-DE	11:30159379:C:T	rs12794770	11	30159379	C	T	0.4215	5.90E-12	1	rs78026352	5	RP4-562D20.2	29330	intergenic	0.9		7	14	15	0	0	0
LMC-DE	11:30159382:C:T	rs12796334	11	30159382	T	C	0.4215	5.90E-12	1	rs78026352	5	RP4-562D20.2	29327	intergenic	3.234		7	14	15	0	0	0
FIM-EM	11:30253641:C:T	rs609896	11	30253641	T	C	0.4473	5.91E-12	0.871006	rs494779	9	FSHB	0	intronic	0.714	NA		9	15	1	1	0
FIM-EM	1:169216412:C:G	rs2040445	1	169216412	C	G	0.01193	5.91E-12	1	rs144737447	1	NME7	0	intronic	0.891		5	5	15	1	1	0
FIM-EM	11:30251351:A:C	rs640748	11	30251351	A	C	0.4483	5.95E-12	0.867538	rs494779	9	FSHB	1211	intergenic	7.736	NA		7	15	0	1	0
AAM-EM	12:115111318:C:T	rs484443	12	115111318	T	C	0.5	6.00E-12	0.923584	rs8853	30	TBX3	0	intronic	6.327	2b		2	13	1	0	0
LMC-EM	3:127826618:C:T	rs11924142	3	127826618	C	T	0.1521	6.01E-12	0.844793	rs1735558	3	RUVBL1	0	intronic	0.363		7	2	5	1	1	0
FIM-EM	11:30251625:C:T	rs639403	11	30251625	C	T	0.4473	6.03E-12	0.871006	rs494779	9	FSHB	937	upstream	3.678		5	7	15	1	1	0
FIM-EM	11:30242325:C:T	rs572883	11	30242325	C	T	0.4473	6.04E-12	0.871006	rs494779	9	FSHB	10237	intergenic	0.217	NA		14	15	0	1	0
LMC-DE	11:30160548:A:G	rs3847631	11	30160548	A	G	0.4185	6.05E-12	0.989011	rs78026352	5	RP4-562D20.2	28161	intergenic	6.104		7	14	15	0	0	0
AAM-EPP	3:127895226:A:G	rs2687729	3	127895226	A	G	0.2624	6.08E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	2.629	NA		5	5	1	1	0
AAM-EM	3:50243948:A:G	rs35137368	3	50243948	G	A	0.3121	6.08E-12	1	rs35137368	8	SLC38A3	0	ncRNA_intron	6.642		4	1	13	1	1	0
AAM-EM	11:30234703:A:G	rs600333	11	30234703	G	A	0.4195	6.09E-12	0.839838	rs1933349	22	FSHB	17859	intergenic	3.241	NA		7	15	0	1	0
FIM-EM	11:30243247:G:T	rs543401	11	30243247	T	G	0.4473	6.11E-12	0.871006	rs494779	9	FSHB	9315	intergenic	0.441		7	14	15	0	1	0
AAM-EM	11:30216006:C:T	rs632939	11	30216006	T	C	0.3926	6.11E-12	0.770856	rs1933349	22	RP4-562D20.2	27152	intergenic	10.1	NA		14	15	0	1	0
AAM-EPP	6:151771839:C:T	rs9371521	6	151771839	T	C	0.4056	6.18E-12	0.976353	rs9479041	11	RMND1	0	intronic	4.614		5	1	5	1	1	0
FIM-EM	11:30258770:C:T	rs626869	11	30258770	C	T	0.4473	6.19E-12	0.871006	rs494779	9	FSHB	1961	intergenic	1.071	NA		9	15	0	1	0
AAM-EPP	6:151781404:A:T	rs13212693	6	151781404	T	A	0.4095	6.20E-12	0.969181	rs9479041	11	C6orf211	0	intronic	0.459		7	4	4	1	0	0
FIM-EM	11:30255867:C:G	rs506306	11	30255867	C	G	0.4483	6.20E-12	0.867538	rs494779	9	FSHB	0	UTR3	2.184		7	5	15	1	1	0
FIM-EM	11:30258989:A:G	rs615577	11	30258989	G	A	0.4473	6.23E-12	0.871006	rs494779	9	FSHB	2180	intergenic	1.584	NA		9	15	0	1	0
AAM-EM	11:30226286:C:T	rs683054	11	30226286	T	C	0.3956	6.23E-12	0.765394	rs1933349	22	FSHB	26276	intergenic	10.42	NA		7	15	0	1	0
AAM-EM	10:90206538:C:T	rs10736354	10	90206538	T	C	0.3857	6.25E-12	0.923275	rs7921352	20	RNLS	0	intronic	0.296		7	5	15	1	0	0
AAM-EPP	3:127904496:C:T	rs2811481	3	127904496	T	C	0.2624	6.27E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	0.887		6	5	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EM	11:30261910:A:C	rs622356	11	30261910	A	C	0.4473	6.28E-12	0.871006	rs494779	9	FSHB	5101	intergenic		1.87	5	9	15	0	1	0
LMC-EM	3:127822320:C:T	rs7641133	3	127822320	T	C	0.2654	6.29E-12	0.882182	rs3849531	3	RUVBL1	0	intronic		17.56	6	4	4	1	1	0
AAM-EM	10:90092894:C:T	rs61855363	10	90092894	C	T	0.2962	6.29E-12	0.985412	rs11202704	20	RNLS	0	intronic		4.998	3a		2	15	1	0	0
AAM-EPP	6:151782816:A:C	rs9383900	6	151782816	A	C	0.4095	6.35E-12	0.969181	rs9479041	11	C6orf211	0	intronic		3.97	6	4	5	1	1	0
AAM-EM	11:30234606:C:T	rs600768	11	30234606	C	T	0.4205	6.36E-12	0.8362	rs1933349	22	FSHB	17956	intergenic		3.662	NA		7	15	0	1	0
AAM-EM	3:49916710:C:T	rs7613360	3	49916710	C	T	0.3837	6.37E-12	0.848366	rs34034116	8	ACTBP13	1296	intergenic		2.031	5	5	15	1	1	0
AAM-EM	3:50240338:C:T	rs4688745	3	50240338	T	C	0.4414	6.37E-12	0.853971	rs12631337	8	SLC38A3	2340	intergenic		0.528	NA		2	13	1	1	0
FIM-EM	11:30255982:A:G	rs676349	11	30255982	A	G	0.4473	6.41E-12	0.871006	rs494779	9	FSHB	0	UTR3		0.039	7	5	15	1	1	0
FIM-EM	11:30264368:A:G	rs560109	11	30264368	G	A	0.4473	6.45E-12	0.86371	rs494779	9	FSHB	7559	intergenic		0.31	7	13	15	0	1	0
FIM-EM	11:30263655:C:T	rs532667	11	30263655	C	T	0.4483	6.49E-12	0.867538	rs494779	9	FSHB	6846	intergenic		0.946	6	13	15	0	1	0
AAM-EM	3:50243801:C:T	rs35219849	3	50243801	C	T	0.3121	6.50E-12	1	rs35137368	8	SLC38A3	0	ncRNA_intron		9.207	2b		1	13	1	1	0
AAM-EPP	3:127881613:A:G	rs2955117	3	127881613	G	A	0.2724	6.51E-12	0.942662	rs4857878	8	EEFSEC	0	intronic		16.66	7	4	5	1	1	0
LMC-EM	2:49380886:C:T	rs7572787	2	49380886	C	T	0.1551	6.52E-12	0.984959	rs4971681	2	FSHR	0	intronic		5.538	7	1	15	1	0	0
FIM-EM	11:30250359:C:T	rs537263	11	30250359	T	C	0.4473	6.53E-12	0.871006	rs494779	9	FSHB	2203	intergenic		3.475	5	9	15	0	1	0
FIM-EM	8:25267103:A:G	rs4871939	8	25267103	G	A	0.2465	6.54E-12	0.980226	rs6185	7	DOCK5	0	intronic		11.04	5	4	4	1	1	0
AAM-EPP	6:151774916:A:G	rs3806982	6	151774916	G	A	0.4085	6.55E-12	0.965105	rs9479041	11	C6orf211	0	intronic		3.582	NA		1	7	1	1	0
LMC-DE	11:30151444:C:T	rs12800683	11	30151444	C	T	0.4215	6.57E-12	1	rs78026352	5	RP4-562D20.1	37265	intergenic		1.274	5	5	15	0	0	0
AAM-EM	11:30227534:C:T	rs568394	11	30227534	C	T	0.3966	6.57E-12	0.761085	rs1933349	22	FSHB	25028	intergenic		3.643	NA		5	15	0	1	0
FIM-EO	11:30216006:C:T	rs632939	11	30216006	T	C	0.3926	6.62E-12	0.890206	rs621448	9	RP4-562D20.1	27152	intergenic		10.1	NA		14	15	0	1	0
FIM-EM	11:30261215:C:T	rs7126848	11	30261215	C	T	0.4483	6.66E-12	0.867538	rs494779	9	FSHB	4406	intergenic		3.713	5	9	15	0	1	0
FIM-EM	11:30253189:G:T	rs550312	11	30253189	T	G	0.4443	6.67E-12	0.858277	rs494779	9	FSHB	0	intronic		4.833	7	9	15	1	1	0
FIM-EM	11:30254550:C:T	rs595496	11	30254550	T	C	0.4443	6.68E-12	0.858277	rs494779	9	FSHB	0	intronic		5.666	NA		9	15	1	1	0
FIM-EM	11:30254268:G:T	rs580646	11	30254268	T	G	0.4443	6.69E-12	0.858277	rs494779	9	FSHB	0	intronic		7.431	7	9	15	1	1	0
FIM-EO	11:30222637:C:T	rs622744	11	30222637	T	C	0.3936	6.74E-12	0.885893	rs621448	9	FSHB	29925	intergenic		1.891	NA		5	15	0	1	0
AAM-EM	10:90205199:A:C	rs4596981	10	90205199	A	C	0.3857	6.74E-12	0.923275	rs7921352	20	RNLS	0	intronic		1.742	6	5	15	1	0	0
FIM-EM	11:30241032:A:G	rs590833	11	30241032	G	A	0.4483	6.87E-12	0.867538	rs494779	9	FSHB	11530	intergenic		3.989	NA		9	15	0	1	0
AAM-EM	3:50224562:A:G	rs12637671	3	50224562	G	A	0.33	6.89E-12	0.886328	rs35137368	8	SEMA3F	0	intronic		9.026	5	4	15	1	1	0
LMC-EM	2:49374051:C:G	rs1504183	2	49374051	G	C	0.159	6.94E-12	0.985056	rs4971681	2	FSHR	0	intronic		2.966	7	5	15	1	0	0
FIM-EM	11:30250479:A:G	rs538236	11	30250479	G	A	0.4473	6.94E-12	0.871006	rs494779	9	FSHB	2083	intergenic		2.136	7	9	15	0	1	0
AAM-EM	3:50236373:A:G	rs6807194	3	50236373	A	G	0.3141	6.94E-12	0.981158	rs35137368	8	GNAT1	2423	intergenic		1.82	7	5	14	1	1	0
AAM-EM	10:90138748:A:G	rs11202735	10	90138748	G	A	0.2952	6.94E-12	0.961104	rs11202704	20	RNLS	0	intronic		2.519	6	5	15	1	0	0
AAM-EPP	3:127945349:A:G	rs6777054	3	127945349	G	A	0.2634	6.95E-12	1	rs4857878	8	EEFSEC	0	intronic		12.79	5	2	15	1	1	0
FIM-EM	11:30241731:C:T	rs489096	11	30241731	C	T	0.4473	6.95E-12	0.871006	rs494779	9	FSHB	10831	intergenic		4.8	NA		9	15	0	1	0
AAM-EPP	6:151781363:C:T	rs13212683	6	151781363	T	C	0.4095	6.98E-12	0.969181	rs9479041	11	C6orf211	0	intronic		0.445	6	4	4	1	1	0
FIM-EM	11:30248392:A:G	rs1630084	11	30248392	G	A	0.4473	7.02E-12	0.871006	rs494779	9	FSHB	4170	intergenic		1.709	7	9	15	0	1	0
FIM-EO	11:30217003:A:T	rs574096	11	30217003	A	T	0.3956	7.13E-12	0.877668	rs621448	9	RP4-562D20.1	28149	intergenic		4.203	6	2	15	0	1	0
AAM-EM	11:30230216:A:G	rs1716025	11	30230216	G	A	0.3956	7.13E-12	0.765394	rs1933349	22	FSHB	22346	intergenic		2.959	NA		5	15	0	1	0
FIM-EO	11:30225170:C:G	rs1716021	11	30225170	G	C	0.3907	7.18E-12	0.883171	rs621448	9	FSHB	27392	intergenic		1.813	6	7	15	0	1	0
FIM-EM	11:30253318:A:T	rs611246	11	30253318	A	T	0.4443	7.22E-12	0.858277	rs494779	9	FSHB	0	intronic		0.496	6	9	15	1	1	0
AAM-EPP	3:127909564:A:G	rs2811513	3	127909564	G	A	0.2624	7.23E-12	0.994506	rs4857878	8	EEFSEC	0	intronic		0.018	NA		5	15	1	1	0
AAM-EM	11:30240217:C:T	rs523875	11	30240217	C	T	0.4423	7.28E-12	0.958457	rs1933349	22	FSHB	12345	intergenic		7.462	NA		7	15	0	1	0
AAM-EPP	3:127944477:C:G	rs6775988	3	127944477	C	G	0.2634	7.31E-12	1	rs4857878	8	EEFSEC	0	intronic		0.378	7	4	15	1	1	0
FIM-EM	11:30247886:C:T	rs939433	11	30247886	C	T	0.4443	7.33E-12	0.858277	rs494779	9	FSHB	4676	intergenic		0.55	NA		9	15	0	1	0
LMC-DE	6:151730903:A:G	rs9383890	6	151730903	A	G	0.04076	7.33E-12	0.816901	rs75969278	2	RMND1	0	intronic		1.965	4	4	5	1	1	0
LMC-EM	2:49372900:C:T	rs11686783	2	49372900	T	C	0.1561	7.37E-12	0.962342	rs4971681	2	FSHR	0	intronic		4.958	7	9	15	1	0	0
AAM-EM	3:50209049:A:G	rs2624835	3	50209049	G	A	0.3231	7.39E-12	0.888294	rs35137368	8	SEMA3F	0	intronic		17.99	NA		2	5	1	1	0
AAM-EPP	3:127940353:G:T	rs9845651	3	127940353	T	G	0.2634	7.39E-12	1	rs4857878	8	EEFSEC	0	intronic		1.303	5	4	15	1	1	0
AAM-EPP	3:127940534:A:G	rs6439122	3	127940534	A	G	0.2644	7.41E-12	0.994505	rs4857878	8	EEFSEC	0	intronic		1.146	7	5	15	1	1	0
LMC-ERSV	6:151748320:A:G	rs139696728	6	151748320	G	A	0.0338	7.42E-12	0.887106	rs147230474	2	RMND1	0	intronic		0.458	7	4	5	1	1	0
FIM-EM	11:30250568:C:T	rs654669	11	30250568	T	C	0.4443	7.45E-12	0.858277	rs494779	9	FSHB	1994	intergenic		7.642	NA		9	15	0	1	0
AAM-EM	3:49997193:C:T	rs13083396	3	49997193	C	T	0.2485	7.45E-12	1	rs13083396	8	RBM6	0	intronic		0.304	7	5	5	1	1	0
AAM-EPP	3:49914397:C:T	rs11712056	3	49914397	T	C	0.4374	7.47E-12	0.889094	rs6774354	7	ACTBP13	0	ncRNA_exoni		6.897	4	5	15	0	1	0
AAM-EM	10:90115683:A:C	rs56155841	10	90115683	C	A	0.2972	7.47E-12	0.961242	rs11202704	20	RNLS	0	intronic		0.683	6	5	15	1	0	0
FIM-EM	1:169090748:C:T	rs145163454	1	169090748	T	C	0.01093	7.49E-12	0.927228	rs144737447	1	ATP1B1	0	intronic		0.414	5	2	5	1	0	0
AAM-EM	10:90126669:C:G	rs10887809	10	90126669	C	G	0.2952	7.50E-12	0.961104	rs11202704	20	RNLS	0	intronic		1.53	7	5	15	1	0	0
AAM-EPP	3:127905451:A:G	rs2811516	3	127905451	A	G	0.2624	7.54E-12	0.994506	rs4857878	8	EEFSEC	0	intronic		3.811	NA		5	15	1	1	0
AAM-EPP	3:127940440:C:G	rs7372902	3	127940440	G	C	0.2634	7.55E-12	1	rs4857878	8	EEFSEC	0	intronic		0.664	5	5	15	1	1	0
AAM-EPP	3:127905518:A:G	rs2811515	3	127905518	G	A	0.2624	7.55E-12	0.994506	rs4857878	8	EEFSEC	0	intronic		0.15	NA		5	15	1	1	0
AAM-EPP	3:127934329:C:T	rs6770140	3	127934329	T	C	0.2624	7.56E-12	0.994506	rs4857878	8	EEFSEC	0	intronic		3.142	2c		5	15	1	1	0
AAM-EPP	3:127935461:C:G	rs6439121	3	127935461	G	C	0.2624	7.56E-12	0.994506	rs4857878	8	EEFSEC	0	intronic		0.827	6	5	15	1	1	0
FIM-EM	11:30341210:A:G	rs10767837	11	30341210	A	G	0.4463	7.58E-12	0.860624	rs494779	9	ARL14EP	3387	intergenic		2.627	6	5	14	0	1	0
AAM-EPP	3:127920023:C:T	rs2811508	3	127920023	T	C	0.2634	7.59E-12	0.989094	rs4857878	8	EEFSEC	0	intronic		0.946	NA		4	5	1	1	0
AAM-EM	3:50250837:C:T	rs2282749	3	50250837	T	C	0.4473	7.61E-12	0.817207	rs12631337	8	SLC38A3	0	ncRNA_intron		1.962	5	2	15	0	1	0
FIM-EM	11:30342173:A:T	rs3897026	11	30342173	A	T	0.4463	7.61E-12	0.860624	rs494779	9	ARL14EP	2424	intergenic		1.397	6	5	14	0	1	0
AAM-EPP	3:127931402:A:G	rs7372439	3	127931402	A	G	0.2644	7.62E-12	0.994505	rs4857878	8	EEFSEC	0	intronic		2.633	7	5	15	1	1	0
FIM-EM	11:30277028:C:T	rs4120820	11	30277028	C	T	0.4443	7.64E-12	0.858277	rs494779	9	FSHB	20219	intergenic		0.894	6	1	15	0	1	0
AAM-EPP	3:127934218:A:G	rs4857873	3	127934218	A	G	0.2624	7.66E-12	0.994506	rs4857878	8	EEFSEC	0	intronic		11.28	5	5	15	1	1	0
AAM-EM	10:90188027:C:G	rs7910594	10	90188027	C	G	0.3847	7.68E-12	0.961493	rs7921352	20	RNLS	0	intronic		3.939	6	2	15	1	0	0
AAM-EM	3:50221715:A:G	rs13067082	3	50221715	A	G	0.326	7.69E-12	0.910811	rs35137368	8	SEMA3F	0	intronic		4.768	4	4	15	1	1	0
AAM-EM	11:30228264:C:T	rs653518	11	30228264	C	T	0.3946	7.70E-12	0.75585	rs1933349	22	FSHB	24298	intergenic		4.291	NA		1	15	0	1	0
FIM-EO	11:30223866:A:G	rs606642	11	30223866	G	A	0.3936	7.70E-12	0.886224	rs621448	9	FSHB	28696	intergenic		0.592	NA		14	15	0	1	0
FIM-EM	11:30323189:C:T	rs1933349	11	30323189	C	T	0.4433	7.74E-12	0.848015	rs494779	9	ARL14EP	21408	intergenic		4.075	NA		9	15	0	1	0
FIM-EM	11:30324475:A:T	rs1933348	11	30324475	T	A	0.4433	7.74E-12	0.848015	rs494779	9	ARL14EP	20122	intergenic		1.135	6	14	15	0	1	0
FIM-EM	11:30248826:C:T	rs1782509	11	30248826	C	T	0.4473	7.77E-12	0.871006	rs494779	9	FSHB	3736	intergenic		0.027	6	9	15	0	1	0
FIM-EM	11:30338275:A:T	rs10767835	11	30338275	T	A	0.4433	7.79E-12	0.848015	rs494779	9	ARL14EP	6322	intergenic		6.122	5	7	15	0	1	0
AAM-EM	10:90190619:C:T	rs10788600	10	90190619	T	C	0.3847	7.80E-12	0.961493	rs7921352	20	RNLS	0	intronic		0.253	7	5	15	1	0	0
AAM-EPP	3:127941439:C:T	rs6439123	3	127941439	T	C	0.2634	7.81E-12	1	rs4857878	8	EEFSEC	0	intronic		1.695	6	5	9	1	1	0
LMC-EM	3:127721468:A:G	rs11924834	3	127721468	G	A	0.1571	7.82E-12	0.79954	rs1735558	3	KBTBD12	14953	intergenic		0.41	6	5	14	0	0	0
AAM-EM	10:90190949:C:T	rs7911996	10	90190949	T	C	0.3847	7.83E-12	0.961493	rs7921352	20	RNLS	0	intronic		1.862	5	5	15	1	0	0
FIM-EM	11:30240829:C:T	rs518357	11	30240829	C	T	0.4443	7.86E-12	0.858277	rs494779	9	FSHB	11733	intergenic		5.746	7	9	15	0	1	0
AAM-EM	10:90218338:C:G	rs4934411	10	90218338	G	C	0.3847	7.91E-12	0.919152	rs7921352	20	RNLS	0	intronic		2.745	5	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:127889287:A:G	rs3122173	3	127889287	A	G	0.2624	7.92E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	1.854	6	5	5	1	1	0
AAM-EPP	3:127923187:C:T	rs6439119	3	127923187	T	C	0.2614	7.93E-12	0.989051	rs4857878	8	EEFSEC	0	intronic	2.508	7	5	15	1	1	0
AAM-EM	3:50212512:G:T	rs2624833	3	50212512	G	T	0.3221	7.93E-12	0.883823	rs35137368	8	SEMA3F	0	intronic	14.92	NA		3	4	1	1	0
AAM-EM	10:90208772:A:G	rs10749589	10	90208772	A	G	0.3857	7.94E-12	0.923275	rs7921352	20	RNLS	0	intronic	2.411	6	5	15	1	0	0
AAM-EM	10:90072352:C:T	rs10509543	10	90072352	T	C	0.2992	7.96E-12	0.990278	rs11202704	20	RNLS	0	intronic	1.558	7	5	15	1	0	0
AAM-EPP	3:127934774:A:C	rs4384971	3	127934774	C	A	0.2634	7.96E-12	1	rs4857878	8	EEFSEC	0	intronic	2.358	5	5	15	1	1	0
AAM-EPP	3:127934269:A:T	rs4857874	3	127934269	A	T	0.2624	7.97E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	4.331	2b		5	15	1	1	0
FIM-EM	11:30249084:C:T	rs1716024	11	30249084	C	T	0.4503	7.97E-12	0.861308	rs494779	9	FSHB	3478	intergenic	2.604	NA		9	15	0	1	0
FIM-EM	11:30338392:C:T	rs10767836	11	30338392	T	C	0.4443	7.98E-12	0.838106	rs494779	9	ARL14EP	6205	intergenic	2.84	4	7	15	0	1	0
AAM-EPP	3:127943328:A:G	rs4857838	3	127943328	A	G	0.2634	7.98E-12	1	rs4857878	8	EEFSEC	0	intronic	4.183	7	5	15	1	1	0
FIM-EM	2:11742458:A:G	rs72772088	2	11742458	A	G	0.3797	8.01E-12	1	rs72772088	2	GREB1	0	intronic	1.772	5	2	15	1	0	0
AAM-EM	10:90187924:A:G	rs10788599	10	90187924	G	A	0.3847	8.02E-12	0.961493	rs7921352	20	RNLS	0	intronic	11.67	6	5	15	1	0	0
AAM-EPP	3:127937645:A:G	rs9847576	3	127937645	A	G	0.2634	8.02E-12	1	rs4857878	8	EEFSEC	0	intronic	9.43	5	4	15	1	1	0
FIM-EM	11:30322610:T:TACC	rs75682475	11	30322610	T	TACC	0.4423	8.03E-12	0.843597	rs494779	9	ARL14EP	21987	intergenic	0.991	NA		9	15	0	1	0
FIM-EM	11:30322611:T:TAA	rs76242056	11	30322611	T	TAA	0.4423	8.03E-12	0.843597	rs494779	9	ARL14EP	21986	intergenic	1.119	NA		9	15	0	1	0
FIM-EM	11:30255185:C:T	rs6169	11	30255185	C	T	0.4503	8.03E-12	0.861308	rs494779	9	FSHB	0	exonic	0.631	7	9	15	1	1	0
AAM-EPP	3:127938137:A:G	rs9814834	3	127938137	G	A	0.2634	8.04E-12	1	rs4857878	8	EEFSEC	0	intronic	3.255	5	4	15	1	1	0
AAM-EPP	3:127936527:C:T	rs9879865	3	127936527	C	T	0.2634	8.04E-12	1	rs4857878	8	EEFSEC	0	intronic	0.901	2b		4	15	1	1	0
AAM-EPP	3:127936532:C:T	rs9879866	3	127936532	C	T	0.2634	8.04E-12	1	rs4857878	8	EEFSEC	0	intronic	0.013	2b		4	15	1	1	0
AAM-EPP	3:127933822:G:T	rs4857872	3	127933822	T	G	0.2644	8.05E-12	0.994505	rs4857878	8	EEFSEC	0	intronic	8.992	6	5	15	1	1	0
AAM-EM	3:50218879:C:T	rs9858297	3	50218879	T	C	0.326	8.05E-12	0.910811	rs35137368	8	SEMA3F	0	intronic	3.397	6	4	5	1	1	0
AAM-EM	10:90160023:A:G	rs2433340	10	90160023	A	G	0.4026	8.08E-12	0.897657	rs7921352	20	RNLS	0	intronic	2.114	7	5	15	1	0	0
FIM-EM	11:30254683:A:C	rs594982	11	30254683	A	C	0.4503	8.09E-12	0.861308	rs494779	9	FSHB	0	intronic	0.824	NA		9	15	1	1	0
FIM-EO	11:30223861:A:C	rs606651	11	30223861	C	A	0.3946	8.09E-12	0.881937	rs621448	9	FSHB	28701	intergenic	3.323	NA		14	15	0	1	0
AAM-EPP	3:127878817:C:T	rs2999049	3	127878817	T	C	0.2634	8.10E-12	0.989004	rs4857878	8	EEFSEC	0	intronic	2.222	7	4	5	1	1	0
LMC-EM	11:30217503:C:T	rs605765	11	30217503	C	T	0.3827	8.10E-12	1	rs605765	7	RP4-562D20..	28649	intergenic	2.68	7	2	15	0	1	0
AAM-EPP	3:127918000:A:G	rs2492285	3	127918000	G	A	0.2624	8.11E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	1.204	6	5	5	1	1	0
LMC-EM	3:127716262:A:G	rs4857832	3	127716262	G	A	0.1571	8.15E-12	0.79954	rs1735558	3	KBTBD12	9747	intergenic	0.006	5	5	15	0	1	0
AAM-EPP	3:127916551:A:G	rs2811509	3	127916551	G	A	0.2624	8.16E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	0.206	NA		5	5	1	1	0
AAM-EPP	3:127939357:A:T	rs4323023	3	127939357	T	A	0.2634	8.20E-12	1	rs4857878	8	EEFSEC	0	intronic	5.943	6	4	15	1	1	0
AAM-EM	10:90206298:C:T	rs10736352	10	90206298	T	C	0.3857	8.21E-12	0.923275	rs7921352	20	RNLS	0	intronic	0.054	6	5	15	1	0	0
FIM-EM	11:30322609:T:TGG	rs74640038	11	30322609	T	TGG	0.4423	8.23E-12	0.843597	rs494779	9	ARL14EP	21988	intergenic	1.007	NA		9	15	0	1	0
FIM-EM	11:30311316:A:G	rs10742238	11	30311316	A	G	0.4433	8.29E-12	0.848015	rs494779	9	ARL14EP	33281	intergenic	13.7	6	5	15	0	1	0
FIM-EM	11:30309732:C:T	rs10767833	11	30309732	T	C	0.4433	8.32E-12	0.848015	rs494779	9	ARL14EP	34865	intergenic	1.597	7	5	15	0	1	0
FIM-EM	11:30378694:G:T	rs7952660	11	30378694	T	G	0.4583	8.35E-12	0.789804	rs494779	9	RP4-710M3.1	11000	intergenic	1.86	6	5	15	0	1	0
FIM-EM	11:30281330:A:G	rs6484477	11	30281330	G	A	0.4443	8.38E-12	0.858277	rs494779	9	FSHB	24521	intergenic	1.928	7	5	15	0	1	0
AAM-EPP	3:127934276:C:T	rs4857875	3	127934276	C	T	0.2624	8.41E-12	0.994506	rs4857878	8	EEFSEC	0	intronic	4.973	2b		5	15	1	1	0
AAM-EM	3:50233317:C:T	rs13064381	3	50233317	C	T	0.3241	8.50E-12	0.918436	rs35137368	8	GNAT1	0	UTR3	5.489	2a		2	14	1	1	0
FIM-EM	11:30314253:C:T	rs11031038	11	30314253	T	C	0.4433	8.51E-12	0.848015	rs494779	9	ARL14EP	30344	intergenic	2.189	2c		5	15	0	1	0
LMC-EM	3:127882064:A:G	rs2955118	3	127882064	G	A	0.2694	8.53E-12	0.902651	rs3849531	3	EEFSEC	0	intronic	10.59	6	4	5	1	0	0
AAM-EPP	3:127948060:A:G	rs4857877	3	127948060	A	G	0.2604	8.54E-12	0.983569	rs4857878	8	EEFSEC	0	intronic	0.341	5	5	15	1	1	0
LMC-EM	3:127721543:A:T	rs11917022	3	127721543	A	T	0.1571	8.56E-12	0.79954	rs1735558	3	KBTBD12	15028	intergenic	3.449	7	5	14	0	1	0
LMC-EM	11:30343925:A:C	rs1222220	11	30343925	C	A	0.334	8.60E-12	0.757733	rs605765	7	ARL14EP	672	upstream	5.379	NA		1	14	1	1	0
AAM-EM	10:90187112:A:G	rs10788598	10	90187112	A	G	0.3847	8.60E-12	0.961493	rs7921352	20	RNLS	0	intronic	2.719	5	5	15	1	0	0
AAM-EM	10:90133576:C:T	rs792221	10	90133576	C	T	0.2972	8.62E-12	0.96103	rs11202704	20	RNLS	0	intronic	2.027	5	5	15	1	0	0
AAM-EM	11:30378694:G:T	rs7952660	11	30378694	T	G	0.4583	8.70E-12	0.923862	rs1933349	22	RP4-710M3.1	11000	intergenic	1.86	6	5	15	0	1	0
AAM-EPP	6:151730802:C:T	rs9383889	6	151730802	C	T	0.1859	8.82E-12	1	rs9383889	11	RMND1	0	intronic	0.619	5	4	5	1	0	0
AAM-EPP	3:49611666:G:T	rs11130207	3	49611666	T	G	0.1471	8.84E-12	1	rs11130207	7	BSN	0	intronic	6.614	7	5	15	1	1	0
AAM-EM	8:25269102:A:C	rs1506869	8	25269102	C	A	0.2614	8.88E-12	0.914479	rs6185	17	DOCK5	0	UTR3	5.15	NA		4	4	1	1	0
FIM-EM	1:169208179:C:T	rs2227246	1	169208179	C	T	0.01093	8.88E-12	0.927228	rs144737447	1	NME7	0	intronic	4.432	NA		5	15	1	0	0
AAM-EPP	3:127930459:A:G	rs9838120	3	127930459	A	G	0.2644	8.91E-12	0.994505	rs4857878	8	EEFSEC	0	intronic	0.599	7	5	15	1	1	0
LMC-EM	3:127723233:C:T	rs67464627	3	127723233	C	T	0.1571	8.92E-12	0.79954	rs1735558	3	KBTBD12	16718	intergenic	5.423	5	5	14	0	1	0
AAM-EPP	3:127930866:A:C	rs7374072	3	127930866	C	A	0.2644	8.93E-12	0.994505	rs4857878	8	EEFSEC	0	intronic	2.482	7	5	15	1	1	0
AAM-EM	10:90187967:A:G	rs7909697	10	90187967	G	A	0.3847	9.04E-12	0.961493	rs7921352	20	RNLS	0	intronic	1.999	7	5	15	1	0	0
AAM-EM	11:30288255:A:T	rs11031021	11	30288255	T	A	0.4483	9.05E-12	0.958589	rs1933349	22	FSHB	31446	intergenic	1.383	6	14	15	0	1	0
LMC-EM	3:127723008:A:G	rs7633480	3	127723008	G	A	0.1581	9.23E-12	0.794637	rs1735558	3	KBTBD12	16493	intergenic	2.942	7	5	14	0	1	0
LMC-EM	3:127723017:C:T	rs7645109	3	127723017	T	C	0.1571	9.23E-12	0.79954	rs1735558	3	KBTBD12	16502	intergenic	0.936	6	5	14	0	1	0
AAM-EM	11:30239353:C:T	rs553190	11	30239353	C	T	0.4423	9.29E-12	0.958457	rs1933349	22	FSHB	13209	intergenic	6.692	NA		9	15	0	1	0
AAM-EPP	3:127939034:A:T	rs9857235	3	127939034	A	T	0.2634	9.34E-12	1	rs4857878	8	EEFSEC	0	intronic	4.197	5	4	15	1	1	0
AAM-EM	8:25255017:A:C	rs12675289	8	25255017	A	C	0.2704	9.41E-12	0.877694	rs6185	17	DOCK5	0	intronic	5.195	6	4	5	1	1	0
AAM-EM	10:90131045:C:G	rs3891323	10	90131045	G	C	0.2972	9.48E-12	0.96103	rs11202704	20	RNLS	0	intronic	0.212	6	5	15	1	0	0
AAM-EM	3:50192760:C:T	rs2526390	3	50192760	C	T	0.3241	9.53E-12	0.884003	rs35137368	8	RP11-493K19	0:00	ncRNA_intron	19.09	NA		1	1	1	0	0
LMC-EM	3:127721242:C:T	rs9859280	3	127721242	C	T	0.1571	9.63E-12	0.79954	rs1735558	3	KBTBD12	14727	intergenic	1.927	6	5	14	0	1	0
LMC-EM	3:127716585:A:G	rs9870753	3	127716585	A	G	0.1581	9.65E-12	0.793214	rs1735558	3	KBTBD12	10070	intergenic	0.656	5	5	15	0	1	0
AAM-EM	10:90113168:G:T	rs4586059	10	90113168	T	G	0.2962	9.68E-12	0.965884	rs11202704	20	RNLS	0	intronic	8.47	6	9	15	1	0	0
AAM-EPP	3:49626306:A:G	rs6446285	3	49626306	G	A	0.1471	9.72E-12	1	rs11130207	7	BSN	0	intronic	2.326	6	1	15	1	1	0
AAM-EM	11:30125619:C:G	rs11030946	11	30125619	G	C	0.1441	9.77E-12	1	rs11030946	22	RP11-624D11	19728	intergenic	0.964	6	9	15	0	0	0
LMC-EM	3:127723197:A:G	rs7611426	3	127723197	A	G	0.1571	9.81E-12	0.79954	rs1735558	3	KBTBD12	16682	intergenic	4.533	5	5	14	0	1	0
LMC-EM	3:127721041:G:T	rs6781473	3	127721041	G	T	0.1571	9.84E-12	0.79954	rs1735558	3	KBTBD12	14526	intergenic	1.103	5	5	14	0	1	0
AAM-EM	10:90205339:A:C	rs4619060	10	90205339	C	A	0.3847	9.89E-12	0.927544	rs7921352	20	RNLS	0	intronic	6.981	7	5	15	1	0	0
AAM-EM	11:30288256:A:C	rs10835641	11	30288256	C	A	0.4483	9.92E-12	0.958589	rs1933349	22	FSHB	31447	intergenic	0.65	6	14	15	0	1	0
AAM-EM	11:30239283:A:G	rs553406	11	30239283	A	G	0.4433	9.92E-12	0.954815	rs1933349	22	FSHB	13279	intergenic	8.195	NA		9	15	0	1	0
LMC-EM	3:127721859:A:G	rs10433341	3	127721859	G	A	0.1571	9.96E-12	0.79954	rs1735558	3	KBTBD12	15344	intergenic	7.078	5	5	14	0	1	0
FIM-EM	1:169467654:A:G	rs1894692	1	169467654	G	A	0.01093	9.98E-12	0.787354	rs144737447	1	AL021068.1	10807	intergenic	0.694	5	5	15	0	1	0
FIM-EO	11:30353881:A:G	rs77055031	11	30353881	A	G	0.0507	9.99E-12	0.936266	rs7951733	9	ARL14EP	0	intronic	6.253	7	4	5	1	0	0
AAM-EPP	6:151767907:A:G	rs2128945	6	151767907	A	G	0.4046	1.00E-11	0.980217	rs9479041	11	RMND1	0	intronic	3.961	7	4	5	1	1	0
LMC-EM	3:127715911:A:T	rs6795314	3	127715911	T	A	0.1571	1.01E-11	0.79954	rs1735558	3	KBTBD12	9396	intergenic	0.025	5	5	15	0	1	0
FIM-EM	2:11742854:A:C	rs62118315	2	11742854	C	A	0.3201	1.01E-11	0.762059	rs2358039	2	GREB1	0	intronic	0.81	4	2	15	1	0	0
LMC-EM	3:127719658:A:G	rs67986238	3	127719658	A	G	0.1571	1.01E-11	0.79954	rs1735558	3	KBTBD12	13143	intergenic	5.652	6	5	14	0	1	0
AAM-EM	11:30214713:A:G	rs961605	11	30214713	G	A	0.3956	1.01E-11	0.758455	rs1933349	22	RP4-562D20..	25859	intergenic	1.294	7	14	15	0	1	0
LMC-EM	3:127721603:C:G	rs11924866	3	127721603	G	C	0.1571	1.02E-11	0.79954	rs1735558	3	KBTBD12	15088	intergenic	10.25	6	5	14	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-EM	3:127724145:A:G	rs6767360	3	127724145	A	G	0.1571	1.02E-11	0.79954	rs1735558	3	KBTBD12	17630	intergenic	3.638	7	5	14	0	1	0
AAM-EM	10:90208940:A:T	rs10788602	10	90208940	T	A	0.3847	1.03E-11	0.919152	rs7921352	20	RNLS	0	intronic	4.38	6	5	15	1	0	0
AAM-EPP	6:151766162:C:T	rs3800279	6	151766162	T	C	0.2833	1.04E-11	0.677813	rs6933660	11	RMND1	0	intronic	2.525	7	4	5	1	1	0
LMC-EM	3:127721508:A:G	rs11924838	3	127721508	G	A	0.1571	1.04E-11	0.79954	rs1735558	3	KBTBD12	14993	intergenic	0.003	7	5	14	0	0	0
AAM-EM	3:50248807:C:G	rs2236942	3	50248807	G	C	0.4404	1.04E-11	0.842296	rs12631337	8	SLC38A3	0	ncRNA_intror	2.685	4	2	14	0	1	0
LMC-EM	3:127721333:A:T	rs58170120	3	127721333	T	A	0.1561	1.06E-11	0.791526	rs1735558	3	KBTBD12	14818	intergenic	1.877	6	5	14	0	1	0
AAM-EM	3:50072987:C:T	rs12488521	3	50072987	T	C	0.4463	1.06E-11	0.896247	rs34034116	8	RBM6	0	intronic	1.539	7	4	5	1	1	0
LMC-EM	3:127892851:C:G	rs2811474	3	127892851	G	C	0.16	1.07E-11	0.795119	rs1735558	3	EEFSEC	0	intronic	2.187	2b		5	5	1	1	0
AAM-EM	10:90204726:C:T	rs4509673	10	90204726	T	C	0.3847	1.09E-11	0.919152	rs7921352	20	RNLS	0	intronic	0.131	6	5	15	1	0	0
LMC-EM	3:127721375:C:T	rs28520291	3	127721375	T	C	0.1571	1.09E-11	0.79954	rs1735558	3	KBTBD12	14860	intergenic	0.063	7	5	14	0	1	0
FIM-EM	11:30376209:C:T	rs7929105	11	30376209	C	T	0.4592	1.11E-11	0.793428	rs494779	9	RP4-710M3.1	13485	intergenic	14.85	6	5	15	0	1	0
AAM-EM	10:90134370:C:T	rs792220	10	90134370	T	C	0.2952	1.12E-11	0.961104	rs11202704	20	RNLS	0	intronic	4.952	NA		2	15	1	0
AAM-EM	10:90204887:C:T	rs2872092	10	90204887	T	C	0.3847	1.14E-11	0.919152	rs7921352	20	RNLS	0	intronic	2.554	7	5	15	1	0	0
AAM-EPP	3:49615624:G:T	rs11130208	3	49615624	G	T	0.1471	1.14E-11	1	rs11130207	7	BSN	0	intronic	1.262	6	5	15	1	1	0
LMC-EM	3:127715133:A:G	rs1549874	3	127715133	A	G	0.1571	1.15E-11	0.79954	rs1735558	3	KBTBD12	8618	intergenic	5.844	NA		5	15	0	1	0
AAM-EPP	3:127898501:A:C	rs2811476	3	127898501	A	C	0.2614	1.15E-11	0.989051	rs4857878	8	EEFSEC	0	intronic	0.043	4	1	15	1	1	0
AAM-EPP	3:127856573:A:T	rs6414310	3	127856573	T	A	0.2634	1.16E-11	0.989004	rs4857878	8	RUVBL1	0	intronic	7.358	6	5	15	1	1	0
LMC-EM	11:30363727:A:G	rs1765141	11	30363727	A	G	0.331	1.17E-11	0.742846	rs605765	7	ARL14EP	3952	intergenic	5.57	NA		5	5	0	1	0
AAM-EPP	3:49624095:G:T	rs9869256	3	49624095	T	G	0.1471	1.17E-11	1	rs11130207	7	BSN	0	intronic	4.536	7	13	15	1	1	0
LMC-EM	3:127720727:C:T	rs1469660	3	127720727	T	C	0.1571	1.17E-11	0.79954	rs1735558	3	KBTBD12	14212	intergenic	4.507	NA		5	14	0	1	0
AAM-EPP	3:49609794:G:T	rs6797299	3	49609794	G	T	0.1481	1.17E-11	0.99226	rs11130207	7	BSN	0	intronic	0.104	5	5	15	1	1	0
AAM-EM	3:50198415:C:T	rs2624841	3	50198415	C	T	0.3231	1.17E-11	0.888294	rs35137368	8	SEMA3F	0	intronic	11.77	NA		2	7	1	1	0
AAM-EPP	3:49609477:C:G	rs1532204	3	49609477	C	G	0.1471	1.17E-11	1	rs11130207	7	BSN	0	intronic	0.428	5	5	15	1	1	0
AAM-EM	10:90112774:C:T	rs11492684	10	90112774	C	T	0.2962	1.18E-11	0.965884	rs11202704	20	RNLS	0	intronic	0.04	7	9	15	1	0	0
AAM-EM	3:128084164:A:T	rs4277707	3	128084164	A	T	0.1431	1.18E-11	1	rs4277707	9	EEFSEC	0	intronic	1.664	5	4	5	1	1	0
LMC-EM	3:127720740:C:T	rs1469659	3	127720740	C	T	0.1571	1.19E-11	0.79954	rs1735558	3	KBTBD12	14225	intergenic	3.687	NA		5	14	0	1	0
LMC-EM	3:127717702:C:T	rs6439104	3	127717702	T	C	0.1571	1.19E-11	0.79954	rs1735558	3	KBTBD12	11187	intergenic	6.023	7	5	15	0	1	0
AAM-EPP	3:49624065:C:T	rs9869120	3	49624065	T	C	0.1471	1.20E-11	1	rs11130207	7	BSN	0	intronic	4.182	6	13	15	1	1	0
AAM-EPP	3:127895986:A:G	rs1554535	3	127895986	G	A	0.2684	1.22E-11	0.962858	rs4857878	8	EEFSEC	0	intronic	0.587	NA		5	5	1	1	0
AAM-EPP	6:151757327:C:T	rs9383893	6	151757327	T	C	0.4036	1.22E-11	0.992071	rs9479041	11	RMND1	0	intronic	1.211	3a		1	5	1	1	0
AAM-EPP	3:127888067:A:G	rs872267	3	127888067	G	A	0.2684	1.22E-11	0.962858	rs4857878	8	EEFSEC	0	intronic	0.895	NA		2	5	1	1	0
FIM-EM	2:11739368:G:T	rs10929760	2	11739368	G	T	0.3797	1.22E-11	0.963288	rs72772088	2	GREB1	0	intronic	2.543	7	4	15	1	0	0
LMC-DE	6:151730232:C:G	rs78375092	6	151730232	C	G	0.03976	1.23E-11	0.787833	rs75969278	2	RMND1	0	intronic	4.785	4	4	5	1	1	0
AAM-EM	3:50185508:A:G	rs11714286	3	50185508	G	A	0.4751	1.25E-11	0.841503	rs12631337	8	RP11-493K19	0	ncRNA_intror	13.82	2a		5	15	1	1	0
AAM-EM	10:90082400:C:T	rs1582783	10	90082400	C	T	0.2913	1.26E-11	0.971128	rs11202704	20	RNLS	0	intronic	5.67	5	7	15	1	0	0
AAM-EPP	3:127836287:C:T	rs4857836	3	127836287	C	T	0.2654	1.26E-11	0.978106	rs4857878	8	RUVBL1	0	intronic	0.141	4	4	5	1	1	0
LMC-ERSV	11:30162775:A:C	rs78026352	11	30162775	A	C	0.4215	1.28E-11	1	rs78026352	4	RP4-562D20.1	25934	intergenic	9.376	6	14	15	0	0	0
LMC-ERSV	11:30162744:A:G	rs72884326	11	30162744	A	G	0.4215	1.28E-11	1	rs78026352	4	RP4-562D20.1	25965	intergenic	3.024	7	14	15	0	0	0
AAM-EM	3:50101468:A:G	rs13097720	3	50101468	G	A	0.2505	1.29E-11	0.98904	rs13083396	8	RBM6	0	intronic	2.226	6	4	4	1	1	0
AAM-EM	10:90211815:A:T	rs7899828	10	90211815	A	T	0.3847	1.29E-11	0.927544	rs7921352	20	RNLS	0	intronic	5.054	6	5	15	1	0	0
FIM-EM	2:11727087:G:T	rs17529680	2	11727087	G	T	0.329	1.31E-11	0.874791	rs2358039	2	GREB1	0	intronic	1.278	5	4	15	1	0	0
LMC-ERSV	11:30145730:C:T	rs1436098	11	30145730	C	T	0.4225	1.31E-11	0.996312	rs78026352	4	RP11-624D11	39839	intergenic	0.107	7	5	15	0	0	0
LMC-EM	11:30361670:A:C	rs1222209	11	30361670	C	A	0.33	1.32E-11	0.753251	rs605765	7	ARL14EP	1895	intergenic	0.051	6	4	5	0	1	0
AAM-EM	10:90142203:A:T	rs11202736	10	90142203	A	T	0.3022	1.32E-11	0.928801	rs11202704	20	RNLS	0	intronic	0.603	7	5	15	1	0	0
AAM-EPP	3:127836319:A:G	rs4857837	3	127836319	A	G	0.2654	1.36E-11	0.978106	rs4857878	8	RUVBL1	0	intronic	6.99	4	4	5	1	1	0
LMC-EM	11:30356057:A:G	rs1222205	11	30356057	A	G	0.331	1.36E-11	0.742846	rs605765	7	ARL14EP	0	intronic	0.532	6	4	4	1	1	0
LMC-EM	11:30350185:C:G	rs1717774	11	30350185	G	C	0.331	1.37E-11	0.742846	rs605765	7	ARL14EP	0	UTR5	2.983	5	5	5	1	1	0
AAM-EPP	3:127888347:G:T	rs2955120	3	127888347	T	G	0.2684	1.37E-11	0.962858	rs4857878	8	EEFSEC	0	intronic	7.116	7	5	5	1	1	0
AAM-EPP	3:49621994:C:T	rs7629322	3	49621994	C	T	0.1471	1.38E-11	1	rs11130207	7	BSN	0	intronic	9.049	7	9	15	1	1	0
AAM-EPP	3:128046643:A:G	rs4857841	3	128046643	G	A	0.2793	1.38E-11	0.888925	rs4857878	8	EEFSEC	0	intronic	0.912	5	4	5	1	1	0
AAM-EPP	6:151759035:C:G	rs3800273	6	151759035	G	C	0.4036	1.39E-11	0.984207	rs9479041	11	RMND1	0	intronic	6.039	6	2	5	1	1	0
AAM-EPP	3:127867397:A:G	rs67451924	3	127867397	G	A	0.2634	1.41E-11	0.989004	rs4857878	8	RUVBL1	0	intronic	0.551	5	5	15	1	1	0
AAM-EPP	3:49619493:C:T	rs34890793	3	49619493	C	T	0.1471	1.42E-11	1	rs11130207	7	BSN	0	intronic	9.055	6	9	15	1	1	0
FIM-EM	11:30367332:C:T	rs1538109	11	30367332	T	C	0.4453	1.44E-11	0.848222	rs494779	9	ARL14EP	7557	intergenic	1.53	NA		5	15	0	1	0
AAM-EM	3:50135412:A:C	rs7648652	3	50135412	A	C	0.2565	1.45E-11	0.957626	rs13083396	8	RBM6:RBM5	0:00	intronic	4.297	7	4	4	1	1	0
AAM-EPP	3:128038373:A:C	rs10934853	3	128038373	C	A	0.2793	1.46E-11	0.888925	rs4857878	8	EEFSEC	0	intronic	18.77	4	4	5	1	1	0
LMC-ERSV	11:30146230:C:T	rs11030958	11	30146230	T	C	0.4225	1.46E-11	0.996312	rs78026352	4	RP11-624D11	40339	intergenic	2.223	6	5	15	0	0	0
LMC-EM	11:30225170:C:G	rs1716021	11	30225170	G	C	0.3907	1.47E-11	1	rs1716021	7	FSHB	27392	intergenic	1.813	6	7	15	0	1	0
AAM-EM	3:50082914:C:G	rs2526747	3	50082914	C	G	0.4314	1.48E-11	0.832296	rs34034116	8	RBM6	0	intronic	0.242	1f		4	5	1	1	0
AAM-EM	10:90210183:A:G	rs10887823	10	90210183	A	G	0.3837	1.48E-11	0.92343	rs7921352	20	RNLS	0	intronic	5.476	5	5	15	1	0	0
LMC-ERSV	11:30154477:A:G	rs35078732	11	30154477	A	G	0.4165	1.49E-11	0.98177	rs78026352	4	RP4-562D20.1	34232	intergenic	7.67	5	5	15	0	0	0
AAM-EM	10:90199209:C:T	rs10887821	10	90199209	T	C	0.3837	1.49E-11	0.957265	rs7921352	20	RNLS	0	intronic	0.323	6	5	15	1	0	0
LMC-ERSV	11:30147515:C:T	rs4923622	11	30147515	T	C	0.4225	1.49E-11	0.996312	rs78026352	4	RP4-562D20.1	41194	intergenic	3.347	6	7	15	0	0	0
AAM-EM	10:90182764:C:T	rs7907732	10	90182764	T	C	0.4036	1.50E-11	0.893696	rs7921352	20	RNLS	0	intronic	3.597	7	5	15	1	0	0
AAM-EPP	3:127817508:C:T	rs7632756	3	127817508	C	T	0.2654	1.50E-11	0.978106	rs4857878	8	RUVBL1	0	intronic	8.881	5	4	4	1	1	0
LMC-ERSV	11:30155294:A:G	rs597235	11	30155294	A	G	0.4225	1.50E-11	0.996312	rs78026352	4	RP4-562D20.1	33415	intergenic	2.802	5	5	15	0	0	0
AAM-EPP	3:127819062:C:G	rs4857866	3	127819062	G	C	0.2654	1.51E-11	0.978106	rs4857878	8	RUVBL1	0	intronic	3.759	5	4	4	1	1	0
LMC-EM	3:127721435:C:T	rs28636854	3	127721435	C	T	0.1571	1.51E-11	0.79954	rs1735558	3	KBTBD12	14920	intergenic	0.369	7	5	14	0	1	0
AAM-EM	10:90201642:A:G	rs2096194	10	90201642	G	A	0.3877	1.52E-11	0.932061	rs7921352	20	RNLS	0	intronic	1.314	NA		5	15	1	0
AAM-EM	3:50124950:A:T	rs143336190	3	50124950	T	A	0.2565	1.53E-11	0.957626	rs13083396	8	RBM6	0	intronic	5.732	7	5	5	1	1	0
LMC-ERSV	11:30155490:A:C	rs2117911	11	30155490	A	C	0.4215	1.54E-11	1	rs78026352	4	RP4-562D20.1	33219	intergenic	0.114	7	5	15	0	0	0
FIM-EO	11:30227534:C:T	rs568394	11	30227534	C	T	0.3966	1.54E-11	0.904216	rs621448	9	FSHB	25028	intergenic	3.643	NA		5	15	0	1	0
FIM-EM	11:30369420:C:T	rs6484481	11	30369420	C	T	0.4463	1.54E-11	0.845472	rs494779	9	ARL14EP	9645	intergenic	0.027	7	5	15	0	1	0
LMC-ERSV	11:30146407:C:T	rs1436099	11	30146407	C	T	0.4225	1.54E-11	0.996312	rs78026352	4	RP11-624D11	40516	intergenic	2.886	7	5	15	0	0	0
LMC-ERSV	11:30162194:A:C	rs12790814	11	30162194	C	A	0.4215	1.55E-11	1	rs78026352	4	RP4-562D20.1	26515	intergenic	0.501	7	14	15	0	0	0
LMC-ERSV	11:30147562:C:T	rs4923623	11	30147562	C	T	0.4215	1.55E-11	1	rs78026352	4	RP4-562D20.1	41147	intergenic	0.158	7	7	15	0	0	0
LMC-ERSV	11:30162222:A:T	rs12792185	11	30162222	T	A	0.4215	1.55E-11	1	rs78026352	4	RP4-562D20.1	26487	intergenic	4.349	6	14	15	0	0	0
LMC-ERSV	11:30158907:C:T	rs12290971	11	30158907	T	C	0.4225	1.57E-11	0.99633	rs78026352	4	RP4-562D20.1	29802	intergenic	6.145	7	14	15	0	0	0
LMC-ERSV	11:30153348:A:C	rs1865731	11	30153348	A	C	0.4215	1.58E-11	1	rs78026352	4	RP4-562D20.1	35361	intergenic	2.222	4	5	15	0	0	0
LMC-ERSV	11:30152594:A:G	rs7935077	11	30152594	G	A	0.4215	1.58E-11	1	rs78026352	4	RP4-562D20.1	36115	intergenic	3.233	5	5	15	0	0	0
AAM-EM	3:50174025:C:T	rs2189691	3	50174025	T	C	0.2594	1.58E-11	0.911945	rs13083396	8	RP11-493K19	0	ncRNA_intror	0.086	NA		5	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	3:50088943:A:G	rs6446197	3	50088943	A	G	0.4314	1.59E-11	0.832296	rs34034116	8	RBM6	0	intronic	0.539		6	4	5	1	1	0
FIM-EM	11:30356092:A:G	rs10767839	11	30356092	G	A	0.4423	1.59E-11	0.83566	rs494779	9	ARL14EP	0	intronic	0.58		5	4	4	1	1	0
AAM-EM	6:151756612:A:G	rs8180642	6	151756612	A	G	0.3956	1.60E-11	0.835047	rs9397412	14	RMND1	0	intronic	11.55		7	4	5	1	1	0
LMC-ERSV	11:30152078:A:G	rs1369811	11	30152078	A	G	0.4225	1.60E-11	0.99633	rs78026352	4	RP4-562D20.1	36631	intergenic	5.442		6	5	15	0	0	0
AAM-EM	3:50085153:A:G	rs17304079	3	50085153	A	G	0.2565	1.60E-11	0.957626	rs13083396	8	RBM6	0	intronic	7.756		5	4	4	1	1	0
LMC-EM	11:30222637:C:T	rs622744	11	30222637	T	C	0.3936	1.61E-11	0.979357	rs1716021	7	FSHB	29925	intergenic	1.891	NA		5	15	0	1	0
LMC-ERSV	11:30154037:C:T	rs11030960	11	30154037	T	C	0.4215	1.62E-11	1	rs78026352	4	RP4-562D20.1	34672	intergenic	3.656		4	5	15	0	0	0
LMC-ERSV	11:30147285:A:C	rs4923621	11	30147285	C	A	0.4185	1.62E-11	0.989011	rs78026352	4	RP11-624D11	41394	intergenic	1.783		4	7	15	0	0	0
LMC-ERSV	11:30157917:C:T	rs2082917	11	30157917	T	C	0.4215	1.63E-11	1	rs78026352	4	RP4-562D20.1	30792	intergenic	3.257		7	9	15	0	0	0
AAM-EM	10:90203479:A:T	rs4606392	10	90203479	A	T	0.3837	1.63E-11	0.92343	rs7921352	20	RNLS	0	intronic	1.326		7	5	15	1	0	0
FIM-EO	11:30228264:C:T	rs653518	11	30228264	C	T	0.3946	1.63E-11	0.897308	rs621448	9	FSHB	24298	intergenic	4.291	NA		1	15	0	1	0
LMC-ERSV	11:30155086:C:T	rs17694317	11	30155086	T	C	0.4215	1.63E-11	1	rs78026352	4	RP4-562D20.1	33623	intergenic	1.619		5	5	15	0	0	0
LMC-ERSV	11:30155829:C:T	rs10835618	11	30155829	C	T	0.4215	1.63E-11	1	rs78026352	4	RP4-562D20.1	32880	intergenic	1.839		7	5	15	0	0	0
LMC-ERSV	11:30154407:C:G	rs10835617	11	30154407	C	G	0.4215	1.63E-11	1	rs78026352	4	RP4-562D20.1	34302	intergenic	2.59		5	5	15	0	0	0
LMC-ERSV	11:30154609:C:T	rs11030961	11	30154609	C	T	0.4215	1.63E-11	1	rs78026352	4	RP4-562D20.1	34100	intergenic	2.105		6	5	15	0	0	0
LMC-ERSV	11:30154930:C:T	rs11030962	11	30154930	T	C	0.4215	1.63E-11	1	rs78026352	4	RP4-562D20.1	33779	intergenic	5.285		6	5	15	0	0	0
LMC-ERSV	11:30160793:C:T	rs3847632	11	30160793	T	C	0.4225	1.63E-11	0.99633	rs78026352	4	RP4-562D20.1	27916	intergenic	6.739		7	14	15	0	0	0
AAM-EM	3:50136165:A:G	rs6808044	3	50136165	A	G	0.4314	1.63E-11	0.832296	rs34034116	8	RBM6:RBM5	0:00	intronic	2.808		7	4	4	1	1	0
LMC-ERSV	11:30159305:C:T	rs12796113	11	30159305	T	C	0.4215	1.64E-11	1	rs78026352	4	RP4-562D20.1	29404	intergenic	1.844		6	14	15	0	0	0
AAM-EM	3:50144951:C:T	rs1061474	3	50144951	T	C	0.4314	1.64E-11	0.832296	rs34034116	8	RBM5	0	exonic	13.65		5	4	4	1	1	0
LMC-ERSV	11:30150000:A:G	rs892951	11	30150000	G	A	0.4215	1.65E-11	1	rs78026352	4	RP4-562D20.1	38709	intergenic	4.199		4	5	15	0	0	0
LMC-ERSV	11:30149602:C:G	rs892950	11	30149602	C	G	0.4215	1.65E-11	1	rs78026352	4	RP4-562D20.1	39107	intergenic	0.741		7	5	15	0	0	0
LMC-ERSV	11:30151117:C:T	rs892952	11	30151117	C	T	0.4215	1.66E-11	1	rs78026352	4	RP4-562D20.1	37592	intergenic	11.16		5	7	15	0	0	0
FIM-EM	11:30348638:C:G	rs4427542	11	30348638	G	C	0.4423	1.66E-11	0.83566	rs494779	9	ARL14EP	0	intronic	0.63		5	2	5	1	1	0
LMC-ERSV	11:30160801:C:T	rs3886880	11	30160801	C	T	0.4225	1.66E-11	0.99633	rs78026352	4	RP4-562D20.1	27908	intergenic	3.933		7	14	15	0	0	0
LMC-ERSV	11:30160908:A:G	rs12802602	11	30160908	A	G	0.4215	1.67E-11	1	rs78026352	4	RP4-562D20.1	27801	intergenic	0.408		7	14	15	0	0	0
LMC-ERSV	11:30160204:A:G	rs12801198	11	30160204	A	G	0.4215	1.67E-11	1	rs78026352	4	RP4-562D20.1	28505	intergenic	4.505		7	14	15	0	0	0
LMC-DE	8:25321845:A:T	rs35698191	8	25321845	T	A	0.2485	1.68E-11	0.727544	rs13261573	3	CDCA2	0	intronic	4.36		7	4	15	1	1	0
LMC-ERSV	11:30159379:C:T	rs12794770	11	30159379	C	T	0.4215	1.68E-11	1	rs78026352	4	RP4-562D20.1	29330	intergenic	0.9		7	14	15	0	0	0
LMC-ERSV	11:30159382:C:T	rs12796334	11	30159382	T	C	0.4215	1.68E-11	1	rs78026352	4	RP4-562D20.1	29327	intergenic	3.234		7	14	15	0	0	0
LMC-ERSV	11:30158828:A:G	rs12270725	11	30158828	A	G	0.4215	1.69E-11	1	rs78026352	4	RP4-562D20.1	29881	intergenic	1.219		6	14	15	0	0	0
LMC-ERSV	11:30158908:A:G	rs12284112	11	30158908	G	A	0.4225	1.69E-11	0.99633	rs78026352	4	RP4-562D20.1	29801	intergenic	3.16		7	14	15	0	0	0
LMC-ERSV	11:30158498:C:T	rs12290734	11	30158498	T	C	0.4215	1.69E-11	1	rs78026352	4	RP4-562D20.1	30211	intergenic	5.061		6	14	15	0	0	0
AAM-EM	3:50062878:A:G	rs13071931	3	50062878	G	A	0.2505	1.73E-11	0.98904	rs13083396	8	RBM6	0	intronic	0.311		5	4	5	1	1	0
AAM-EM	10:90210511:A:G	rs1935579	10	90210511	G	A	0.3837	1.73E-11	0.92343	rs7921352	20	RNLS	0	intronic	2.148	NA		5	15	1	0	0
AAM-EM	10:90089525:A:G	rs11202717	10	90089525	G	A	0.2962	1.74E-11	0.956481	rs11202704	20	RNLS	0	intronic	3.082		6	5	15	1	0	0
AAM-EPP	3:49645209:C:T	rs11130211	3	49645209	C	T	0.1461	1.74E-11	0.992236	rs11130207	7	BSN	0	intronic	5.638	1f		5	15	1	1	0
LMC-ERSV	11:30161164:C:T	rs4285851	11	30161164	C	T	0.4195	1.74E-11	0.985344	rs78026352	4	RP4-562D20.1	27545	intergenic	0.243		7	14	15	0	0	0
FIM-EM	2:11744694:C:T	rs746579	2	11744694	C	T	0.325	1.74E-11	0.763434	rs2358039	2	GREB1	0	intronic	1.114		6	4	15	1	0	0
LMC-DE	8:25320594:C:T	rs12675625	8	25320594	T	C	0.2485	1.74E-11	0.727544	rs13261573	3	CDCA2	0	intronic	9.281		7	4	15	1	1	0
FIM-EM	11:30350192:C:T	rs2065940	11	30350192	C	T	0.4423	1.75E-11	0.83566	rs494779	9	ARL14EP	0	UTR5	4.864	NA		5	5	1	1	0
LMC-ERSV	11:30148871:C:T	rs979210	11	30148871	T	C	0.4205	1.75E-11	0.988967	rs78026352	4	RP4-562D20.1	39838	intergenic	3.773	7	5	15	0	0	0
AAM-EPP	3:128058617:A:T	rs3849531	3	128058617	A	T	0.2783	1.75E-11	0.892915	rs4857878	8	EEFSEC	0	intronic	0.034	3a		2	5	1	1	0
AAM-EM	10:90211230:A:G	rs10887824	10	90211230	A	G	0.3837	1.76E-11	0.92343	rs7921352	20	RNLS	0	intronic	6.82	7	5	15	1	0	0
FIM-EO	11:30226286:C:T	rs683054	11	30226286	T	C	0.3956	1.77E-11	0.908505	rs621448	9	FSHB	26276	intergenic	10.42	NA		7	15	0	1	0
AAM-EM	10:90182467:G:T	rs6586132	10	90182467	T	G	0.4046	1.80E-11	0.889752	rs7921352	20	RNLS	0	intronic	4.201	7	5	15	1	0	0
AAM-EPP	3:49646669:A:G	rs11721148	3	49646669	G	A	0.1461	1.80E-11	0.992236	rs11130207	7	BSN	0	intronic	2.563	7	5	15	1	1	0
AAM-EPP	3:127963448:A:G	rs13434079	3	127963448	A	G	0.2694	1.80E-11	0.968297	rs4857878	8	EEFSEC	0	intronic	4.207	6	4	5	1	1	0
AAM-EPP	3:49647404:A:T	rs1463728	3	49647404	T	A	0.1471	1.81E-11	0.984491	rs11130207	7	BSN	0	intronic	5.571	5	5	15	1	1	0
LMC-EM	11:30223866:A:G	rs606642	11	30223866	G	A	0.3936	1.81E-11	0.979464	rs1716021	7	FSHB	28696	intergenic	0.592	NA		14	15	0	1	0
FIM-EO	11:30229234:A:C	rs476669	11	30229234	C	A	0.3926	1.81E-11	0.897661	rs621448	9	FSHB	23328	intergenic	0.576	NA		5	15	0	1	0
AAM-EPP	3:49645458:A:G	rs12637313	3	49645458	A	G	0.1461	1.81E-11	0.992236	rs11130207	7	BSN	0	intronic	2.848	4	5	15	1	1	0
AAM-EM	3:50031840:C:T	rs35012435	3	50031840	C	T	0.2495	1.81E-11	0.994517	rs13083396	8	RBM6	0	intronic	11.4	7	4	5	1	1	0
AAM-EPP	3:49646981:C:T	rs2029591	3	49646981	T	C	0.1461	1.81E-11	0.992236	rs11130207	7	BSN	0	intronic	0.558	1f		5	15	1	1	0
LMC-EM	11:30039588:A:G	rs79484066	11	30039588	G	A	0.0159	1.82E-11	1	rs79484066	7	KCNA4	1017	intergenic	5.149	4	5	13	0	0	0
AAM-EPP	3:50217234:C:T	rs9831967	3	50217234	C	T	0.4493	1.82E-11	0.956833	rs13085567	7	SEMA3F	0	intronic	0.081	4	4	5	1	1	0
AAM-EM	10:90115782:A:G	rs61855396	10	90115782	G	A	0.3012	1.82E-11	0.942493	rs11202704	20	RNLS	0	intronic	0.1	7	5	15	1	0	0
AAM-EM	3:50187596:C:G	rs2526398	3	50187596	G	C	0.3419	1.83E-11	0.816173	rs35137368	8	RP11-493K19	0	ncRNA_intron	1.995	2b		2	15	1	1	0
AAM-EM	10:90214072:A:G	rs1342456	10	90214072	A	G	0.3837	1.83E-11	0.92343	rs7921352	20	RNLS	0	intronic	6.029	6	5	15	1	0	0
AAM-EM	10:90223403:C:G	rs1342450	10	90223403	C	G	0.3847	1.84E-11	0.911338	rs7921352	20	RNLS	0	intronic	1.853	7	5	15	1	0	0
LMC-EM	11:30214713:A:G	rs961605	11	30214713	G	A	0.3956	1.84E-11	0.979529	rs1716021	7	RP4-562D20.1	25859	intergenic	1.294	7	14	15	0	1	0
LMC-EM	11:30340725:A:G	rs2786257	11	30340725	G	A	0.331	1.85E-11	0.749801	rs605765	7	ARL14EP	3872	intergenic	0.986	NA		5	14	0	0	0
AAM-EPP	3:127907929:A:G	rs2811514	3	127907929	A	G	0.2694	1.85E-11	0.95764	rs4857878	8	EEFSEC	0	intronic	3.329	NA		5	15	1	1	0
LMC-EM	11:30223861:A:C	rs606651	11	30223861	C	A	0.3946	1.86E-11	0.983601	rs1716021	7	FSHB	28701	intergenic	3.323	NA		14	15	0	1	0
FIM-EO	11:30227923:A:T	rs655183	11	30227923	A	T	0.3926	1.87E-11	0.897661	rs621448	9	FSHB	24639	intergenic	6.51	4	2	15	0	1	0
AAM-EM	3:50114515:C:T	rs7061	3	50114515	C	T	0.4314	1.87E-11	0.832296	rs34034116	8	RBM6	0	exonic	1.729	6	4	4	1	1	0
FIM-EM	11:30195542:G:T	rs4923626	11	30195542	T	G	0.3767	1.90E-11	1	rs4923626	9	RP4-562D20.1	6688	intergenic	2.998	6	7	15	0	1	0
AAM-EM	3:49917686:A:G	rs62262061	3	49917686	G	A	0.2097	1.90E-11	0.792397	rs13083396	8	ACTBP13	2272	intergenic	2.445	6	5	15	1	1	0
AAM-EPP	3:127904943:C:T	rs2811482	3	127904943	C	T	0.2684	1.92E-11	0.962858	rs4857878	8	EEFSEC	0	intronic	2.294	5	5	15	1	1	0
AAM-EM	8:25311269:A:G	rs17053711	8	25311269	G	A	0.2634	1.93E-11	0.906683	rs6185	17	KCTD9	0	intronic	4.216	5	4	5	1	1	0
LMC-EM	11:30328026:C:T	rs55715542	11	30328026	C	T	0.331	1.94E-11	0.749801	rs605765	7	ARL14EP	16571	intergenic	1.318	6	14	15	0	1	0
AAM-EM	10:90093298:C:T	rs11594050	10	90093298	C	T	0.3032	1.95E-11	0.952121	rs11202704	20	RNLS	0	intronic	2.164	5	2	15	1	0	0
LMC-EM	11:30344761:A:G	rs1222218	11	30344761	A	G	0.332	1.96E-11	0.752424	rs605765	7	ARL14EP	0	intronic	9.429	NA		1	1	1	1	0
AAM-EM	10:90214279:A:T	rs10749591	10	90214279	T	A	0.3837	1.97E-11	0.92343	rs7921352	20	RNLS	0	intronic	3.242	7	5	15	1	0	0
AAM-EM	3:50125219:C:T	rs9681286	3	50125219	T	C	0.4314	1.97E-11	0.832296	rs34034116	8	RBM6	0	intronic	2.338	7	5	5	1	1	0
AAM-EM	3:50046112:A:G	rs6787892	3	50046112	G	A	0.2505	1.97E-11	0.98904	rs13083396	8	RBM6	0	intronic	0.023	6	4	5	1	1	0
LMC-ERSV	11:30151444:C:T	rs12800683	11	30151444	C	T	0.4215	1.98E-11	1	rs78026352	4	RP4-562D20.1	37265	intergenic	1.274	5	5	15	0	0	0
AAM-EPP	6:151794704:C:T	rs6937816	6	151794704	T	C	0.2922	1.99E-11	0.843479	rs9322321	11	C6orf211	3467	intergenic	0.564	5	5	5	0	1	0
AAM-EPP	3:49642027:C:T	rs4241405	3	49642027	C	T	0.1461	2.00E-11	0.992236	rs11130207	7	BSN	0	intronic	0.662	NA		5	15	1	1	0
LMC-EM	11:30336613:A:G	rs1222202	11	30336613	G	A	0.33	2.02E-11	0.760278	rs605765	7	ARL14EP	7984	intergenic	2.798	NA		5	15	0	0	0
LMC-EM	11:30336334:A:G	rs1222203	11	30336334	A	G	0.331	2.02E-11	0.749801	rs605765	7	ARL14EP	8263	intergenic	11.51	NA		5	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	3:50187790:G:T	rs2526397	3	50187790	G	T	0.3419	2.03E-11	0.816173	rs35137368	8	RP11-493K19	0	ncRNA_intron	6.62	NA		2	15	1	1	0
AAM-EM	10:90156854:A:C	rs1935584	10	90156854	A	C	0.3986	2.03E-11	0.913137	rs7921352	20	RNLS	0	intronic	9.415	7	5	15	1	0	0
AAM-EM	10:90211164:C:T	rs10749590	10	90211164	C	T	0.3827	2.03E-11	0.927726	rs7921352	20	RNLS	0	intronic	2.118	7	5	15	1	0	0
LMC-EM	11:30216006:C:T	rs632939	11	30216006	T	C	0.3926	2.03E-11	0.983465	rs1716021	7	RP4-562D20.1	27152	intergenic	10.1	NA		14	15	0	1	0
AAM-EPP	3:127911820:A:G	rs2811512	3	127911820	G	A	0.2694	2.04E-11	0.95764	rs4857878	8	EEFSEC	0	intronic	7.801	NA		5	15	1	1	0
LMC-EM	11:30344799:A:G	rs1222217	11	30344799	A	G	0.331	2.04E-11	0.749801	rs605765	7	ARL14EP	0	intronic	8.333	NA		1	1	1	1	0
LMC-EM	11:30333224:C:T	rs1222204	11	30333224	T	C	0.331	2.06E-11	0.749801	rs605765	7	ARL14EP	11373	intergenic	0.873	NA		5	15	0	1	0
LMC-EM	11:30330963:A:G	rs7125524	11	30330963	G	A	0.331	2.08E-11	0.749801	rs605765	7	ARL14EP	13634	intergenic	1.34	7	9	15	0	1	0
LMC-EM	2:49372313:C:T	rs17038347	2	49372313	T	C	0.1561	2.08E-11	0.962342	rs4971681	2	FSHR	0	intronic	0.289	6	9	15	1	0	0
LMC-ERSV	11:30160548:A:G	rs3847631	11	30160548	A	G	0.4185	2.09E-11	0.989011	rs78026352	4	RP4-562D20.1	28161	intergenic	6.104	7	14	15	0	0	0
LMC-EM	11:30327162:A:G	rs12361937	11	30327162	G	A	0.33	2.09E-11	0.760278	rs605765	7	ARL14EP	17435	intergenic	4.667	7	7	15	0	1	0
AAM-EM	10:90102403:G:T	rs55894538	10	90102403	G	T	0.2932	2.09E-11	0.970908	rs11202704	20	RNLS	0	intronic	2.603	6	5	15	1	0	0
AAM-EM	10:90152369:A:G	rs792235	10	90152369	A	G	0.3976	2.10E-11	0.908856	rs7921352	20	RNLS	0	intronic	2.914	2b		1	15	1	0	0
AAM-EPP	3:49639803:G:T	rs1491983	3	49639803	G	T	0.1461	2.11E-11	0.992236	rs11130207	7	BSN	0	intronic	1.914	1d		5	15	1	1	0
AAM-EPP	3:127958013:A:G	rs4074440	3	127958013	G	A	0.2694	2.13E-11	0.968297	rs4857878	8	EEFSEC	0	intronic	1.324	NA		5	5	1	1	0
LMC-EM	11:30217003:A:T	rs574096	11	30217003	A	T	0.3956	2.13E-11	0.979529	rs1716021	7	RP4-562D20.1	28149	intergenic	4.203	6	2	15	0	1	0
LMC-EM	11:30327981:C:T	rs59475325	11	30327981	C	T	0.331	2.14E-11	0.749801	rs605765	7	ARL14EP	16616	intergenic	1.288	6	14	15	0	1	0
FIM-EO	11:30230216:A:G	rs1716025	11	30230216	G	A	0.3956	2.17E-11	0.908505	rs621448	9	FSHB	22346	intergenic	2.959	NA		5	15	0	1	0
AAM-EPP	3:127942379:A:G	rs9873786	3	127942379	A	G	0.2694	2.18E-11	0.968297	rs4857878	8	EEFSEC	0	intronic	4.91	6	5	9	1	1	0
LMC-EM	3:127885008:A:C	rs2687728	3	127885008	C	A	0.1531	2.18E-11	0.742846	rs1735558	3	EEFSEC	0	intronic	11.12	NA		4	5	1	1	0
AAM-EM	3:50153356:C:T	rs1138536	3	50153356	T	C	0.4314	2.19E-11	0.832296	rs34034116	8	RBM5	0	exonic	18.47	6	4	4	1	1	0
LMC-EM	11:30319432:C:T	rs61626579	11	30319432	C	T	0.331	2.20E-11	0.749801	rs605765	7	ARL14EP	25165	intergenic	12.46	7	9	15	0	1	0
AAM-EM	10:90203900:C:T	rs7922551	10	90203900	T	C	0.3837	2.21E-11	0.92343	rs7921352	20	RNLS	0	intronic	1.397	6	5	15	1	0	0
AAM-EPP	3:127822320:C:T	rs7641133	3	127822320	T	C	0.2654	2.21E-11	0.978106	rs4857878	8	RUVBL1	0	intronic	17.56	6	4	4	1	1	0
AAM-EPP	3:127808502:C:G	rs7355887	3	127808502	C	G	0.2664	2.22E-11	0.972709	rs4857878	8	RUVBL1	0	intronic	4.779	7	4	5	1	1	0
AAM-EM	3:50165101:C:T	rs2624848	3	50165101	T	C	0.4314	2.23E-11	0.832296	rs34034116	8	RP11-493K19	0	ncRNA_intron	3.021	NA		5	15	1	1	0
AAM-EM	3:50158774:A:G	rs2856237	3	50158774	A	G	0.4314	2.25E-11	0.832296	rs34034116	8	RP11-493K19	0	ncRNA_intron	6.358	NA		3	4	1	1	0
AAM-EM	3:50158191:C:T	rs2856238	3	50158191	T	C	0.4314	2.26E-11	0.832296	rs34034116	8	RP11-493K19	0	ncRNA_intron	2.942	NA		4	4	1	1	0
AAM-EM	3:50120257:A:G	rs55924524	3	50120257	A	G	0.2565	2.28E-11	0.957626	rs13083396	8	RBM6	0	intronic	3.272	7	2	5	1	1	0
AAM-EM	3:50156695:A:G	rs2624829	3	50156695	A	G	0.4314	2.28E-11	0.832296	rs34034116	8	RP11-493K19	0	ncRNA_intron	0.071	6	4	4	1	1	0
AAM-EPP	3:127933203:C:G	rs11707297	3	127933203	G	C	0.2704	2.28E-11	0.963085	rs4857878	8	EEFSEC	0	intronic	9.001	7	5	15	1	1	0
AAM-EM	3:50003586:A:G	rs62262118	3	50003586	G	A	0.2495	2.29E-11	0.994517	rs13083396	8	RBM6	0	intronic	0.097	7	4	5	1	1	0
LMC-EM	11:30315071:G:T	rs61886116	11	30315071	G	T	0.328	2.29E-11	0.754144	rs605765	7	ARL14EP	29526	intergenic	1.759	7	5	15	0	1	0
LMC-EM	11:30312519:A:C	rs35665615	11	30312519	C	A	0.331	2.32E-11	0.749801	rs605765	7	ARL14EP	32078	intergenic	0.678	7	8	15	0	1	0
LMC-EM	11:30314585:A:G	rs12793271	11	30314585	G	A	0.331	2.32E-11	0.749801	rs605765	7	ARL14EP	30012	intergenic	0.566	6	5	15	0	1	0
AAM-EM	3:50072152:A:C	rs9844201	3	50072152	A	C	0.4463	2.35E-11	0.896247	rs34034116	8	RBM6	0	intronic	0.819	6	4	5	1	1	0
AAM-EM	3:50126215:A:C	rs2247510	3	50126215	C	A	0.4314	2.36E-11	0.832296	rs34034116	8	RBM6	0	intronic	13.83	NA		1	1	1	1	0
AAM-EPP	3:127946788:A:G	rs9830294	3	127946788	G	A	0.2694	2.37E-11	0.968297	rs4857878	8	EEFSEC	0	intronic	0.531	7	5	15	1	1	0
AAM-EM	3:50067350:C:T	rs35849525	3	50067350	T	C	0.2565	2.37E-11	0.957626	rs13083396	8	RBM6	0	intronic	0.696	7	4	5	1	1	0
LMC-EM	11:30223574:A:G	rs607987	11	30223574	G	A	0.3787	2.38E-11	0.984167	rs605765	7	FSHB	28988	intergenic	3.246	NA		5	15	0	1	0
AAM-EM	10:90215629:C:T	rs6586139	10	90215629	T	C	0.3837	2.42E-11	0.92343	rs7921352	20	RNLS	0	intronic	1.188	5	5	15	1	0	0
AAM-EPP	6:151792026:C:T	rs74798609	6	151792026	T	C	0.1769	2.48E-11	0.623903	rs7740302	11	C6orf211	789	downstream	1.577	7	4	5	1	0	0
AAM-EM	8:25245432:A:G	rs931875	8	25245432	G	A	0.2674	2.51E-11	0.880889	rs6185	17	DOCK5	0	intronic	1.536	7	4	5	1	1	0
LMC-EM	11:30318720:C:G	rs11031041	11	30318720	G	C	0.331	2.52E-11	0.749801	rs605765	7	ARL14EP	25877	intergenic	0.056	7	9	15	0	1	0
AAM-EM	3:128095278:G:T	rs1702118	3	128095278	T	G	0.1471	2.54E-11	0.968621	rs4277707	9	EEFSEC	0	intronic	1.34	NA		2	5	1	1	0
LMC-EM	11:30312743:C:T	rs12805098	11	30312743	T	C	0.331	2.57E-11	0.749801	rs605765	7	ARL14EP	31854	intergenic	2.239	6	5	15	0	1	0
AAM-EM	3:50175348:C:G	rs2526387	3	50175348	G	C	0.2565	2.60E-11	0.915889	rs13083396	8	RP11-493K19	0	ncRNA_intron	3.84	5	2	15	0	1	0
AAM-EM	3:50032008:G:T	rs17657664	3	50032008	T	G	0.4453	2.62E-11	0.900037	rs34034116	8	RBM6	0	intronic	7.297	5	4	5	1	1	0
AAM-EM	3:50136463:A:G	rs13095697	3	50136463	G	A	0.2495	2.63E-11	0.983512	rs13083396	8	RBM6:RBM5	0:00	intronic	6.95	7	4	4	1	1	0
FIM-EM	11:30208486:A:C	rs10835634	11	30208486	A	C	0.3728	2.64E-11	0.985217	rs4923626	9	RP4-562D20.1	19632	intergenic	2.714	7	9	15	0	1	0
LMC-DE	6:151764239:C:T	rs73783022	6	151764239	T	C	0.0507	2.65E-11	0.796922	rs80347787	2	RMND1	0	intronic	2.828	7	4	5	1	1	0
AAM-EPP	3:127978795:A:G	rs4555544	3	127978795	G	A	0.2694	2.67E-11	0.968297	rs4857878	8	EEFSEC	0	intronic	6.032	5	5	9	1	1	0
AAM-EM	6:151754273:C:T	rs6904364	6	151754273	T	C	0.4076	2.68E-11	0.779833	rs9397412	14	RMND1	0	intronic	1.38	6	4	5	1	1	0
AAM-EPP	8:25280800:C:G	rs6185	8	25280800	C	G	0.2425	2.68E-11	1	rs6185	12	GNRH1	0	exonic	12.21	7	4	4	1	1	0
LMC-EM	11:30229234:A:C	rs476669	11	30229234	C	A	0.3926	2.70E-11	0.983398	rs1716021	7	FSHB	23328	intergenic	0.576	NA		5	15	0	1	0
FIM-EM	11:30208516:A:G	rs11030998	11	30208516	G	A	0.3688	2.70E-11	0.97068	rs4923626	9	RP4-562D20.1	19662	intergenic	1.242	6	9	15	0	1	0
AAM-EM	3:50119256:A:T	rs71326915	3	50119256	T	A	0.2406	2.73E-11	0.934207	rs13083396	8	RBM6	0	intronic	0.725	6	5	5	1	0	0
LMC-DE	6:151712026:A:G	rs139683250	6	151712026	G	A	0.03976	2.74E-11	0.787833	rs75969278	2	ZBTB2	0	intronic	15.14	4	1	1	1	1	0
AAM-EM	3:50033228:C:T	rs17657688	3	50033228	T	C	0.4453	2.75E-11	0.900037	rs34034116	8	RBM6	0	intronic	5.743	6	4	5	1	1	0
LMC-DE	6:151764955:A:C	rs3800276	6	151764955	C	A	0.0507	2.77E-11	0.796922	rs80347787	2	RMND1	0	intronic	0.689	5	4	5	1	1	0
AAM-EPP	6:151753421:C:G	rs6914656	6	151753421	C	G	0.4165	2.79E-11	0.94972	rs9479041	11	RMND1	0	intronic	3.966	6	4	4	1	1	0
AAM-EPP	6:151753395:A:G	rs6936936	6	151753395	A	G	0.4165	2.82E-11	0.94972	rs9479041	11	RMND1	0	intronic	4.505	6	4	4	1	1	0
AAM-EPP	6:151751908:C:G	rs9322320	6	151751908	C	G	0.4165	2.82E-11	0.94972	rs9479041	11	RMND1	0	intronic	2.624	7	4	4	1	1	0
FIM-EM	8:25263294:G:T	rs61490611	8	25263294	T	G	0.2624	2.82E-11	0.910194	rs6185	7	DOCK5	0	intronic	6.896	6	4	5	1	1	0
AAM-EM	3:49991427:A:G	rs62262106	3	49991427	A	G	0.2495	2.82E-11	0.994517	rs13083396	8	RBM6	0	intronic	1.73	7	4	5	1	1	0
AAM-EM	10:90168189:G:T	rs813782	10	90168189	T	G	0.3976	2.83E-11	0.908328	rs7921352	20	RNLS	0	intronic	3.508	5	2	15	1	0	0
AAM-EM	10:90216485:C:T	rs2312610	10	90216485	T	C	0.3837	2.84E-11	0.92343	rs7921352	20	RNLS	0	intronic	7.895	5	2	15	1	0	0
FIM-EM	8:25248615:A:G	rs13261573	8	25248615	G	A	0.2545	2.85E-11	0.942505	rs6185	7	DOCK5	0	intronic	0.672	7	4	4	1	1	0
AAM-EM	3:49991060:C:T	rs71326904	3	49991060	C	T	0.2495	2.85E-11	0.994517	rs13083396	8	RBM6	0	intronic	1.237	7	4	5	1	1	0
AAM-EM	10:90174582:C:G	rs792214	10	90174582	G	C	0.3986	2.85E-11	0.913137	rs7921352	20	RNLS	0	intronic	10.25	7	5	15	1	0	0
AAM-EM	3:50070853:A:G	rs6446195	3	50070853	A	G	0.4463	2.86E-11	0.896247	rs34034116	8	RBM6	0	intronic	2.134	6	4	5	1	1	0
FIM-EM	11:30190813:G:T	rs10501121	11	30190813	T	G	0.3738	2.90E-11	0.981441	rs4923626	9	RP4-562D20.1	1959	intergenic	1.19	6	5	15	0	1	0
AAM-EM	3:50081107:C:T	rs9682295	3	50081107	T	C	0.4463	2.91E-11	0.896247	rs34034116	8	RBM6	0	intronic	1.234	6	4	5	1	1	0
FIM-EM	8:25269102:A:C	rs1506869	8	25269102	C	A	0.2614	2.92E-11	0.914479	rs6185	7	DOCK5	0	UTR3	5.15	NA		4	4	1	1	0
AAM-EM	3:50093209:A:G	rs6762477	3	50093209	G	A	0.4463	2.93E-11	0.896247	rs34034116	8	RBM6	0	intronic	6.288	6	4	4	1	1	0
AAM-EM	10:90151021:A:G	rs792234	10	90151021	A	G	0.3767	2.96E-11	0.789304	rs7921352	20	RNLS	0	intronic	3.43	7	5	15	1	0	0
FIM-EM	11:30189761:A:G	rs17622950	11	30189761	A	G	0.3728	2.98E-11	0.977739	rs4923626	9	RP4-562D20.1	907	downstream	5.805	5	5	15	0	1	0
LMC-EM	11:30227923:A:T	rs655183	11	30227923	A	T	0.3926	2.98E-11	0.983398	rs1716021	7	FSHB	24639	intergenic	6.51	4	2	15	0	1	0
LMC-EM	3:127808815:A:G	rs9855015	3	127808815	A	G	0.1431	2.99E-11	0.81132	rs1735558	3	RUVBL1	0	intronic	0.075	6	4	5	1	1	0
AAM-EM	3:50098112:A:G	rs2624815	3	50098112	A	G	0.4463	3.02E-11	0.896247	rs34034116	8	RBM6	0	intronic	0.17	6	4	4	1	1	0
FIM-EM	11:30190076:A:G	rs1417016	11	30190076	A	G	0.3728	3.02E-11	0.977739	rs4923626	9	RP4-562D20.1	1222	intergenic	3.798	NA		5	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	3:128071809:A:T	rs1735549	3	128071809	A	T	0.2177	3.03E-11	0.789564	rs729847	9	EEFSEC	0	intronic	0.707	5	4	5	1	1	0
FIM-EM	11:30190139:A:G	rs1417015	11	30190139	G	A	0.3738	3.03E-11	0.973963	rs4923626	9	RP4-562D20.1	1285	intergenic	2.608	NA		5	15	0	1	0
AAM-EM	3:50052834:C:T	rs6446191	3	50052834	T	C	0.4463	3.07E-11	0.896247	rs34034116	8	RBM6	0	intronic	0.05	7	4	5	1	1	0
FIM-EM	8:25247181:A:G	rs4872310	8	25247181	G	A	0.2535	3.07E-11	0.94713	rs6185	7	DOCK5	0	intronic	4.677	7	4	4	1	1	0
AAM-EM	3:49996924:G:T	rs13079006	3	49996924	G	T	0.4453	3.10E-11	0.900037	rs34034116	8	RBM6	0	intronic	0.078	7	5	5	1	1	0
AAM-EM	3:50076734:A:G	rs2526749	3	50076734	A	G	0.4463	3.10E-11	0.896247	rs34034116	8	RBM6	0	intronic	3.403	NA		4	5	1	1	0
FIM-EM	11:30191237:G:T	rs7128357	11	30191237	G	T	0.3738	3.13E-11	0.981441	rs4923626	9	RP4-562D20.1	2383	intergenic	0.075	5	5	15	0	1	0
AAM-EPP	3:127878416:A:G	rs2999048	3	127878416	G	A	0.2694	3.14E-11	0.95764	rs4857878	8	EEFSEC	0	intronic	0.073	7	4	5	1	1	0
AAM-EM	3:50071279:A:C	rs7624030	3	50071279	A	C	0.4463	3.14E-11	0.896247	rs34034116	8	RBM6	0	intronic	1.234	7	4	5	1	1	0
AAM-EM	3:49898318:C:G	rs62260755	3	49898318	C	G	0.2177	3.14E-11	0.820244	rs13083396	8	CAMKV	0	intronic	14.37	7	4	14	1	1	0
LMC-EM	11:30272226:A:C	rs645161	11	30272226	A	C	0.332	3.18E-11	0.77824	rs605765	7	FSHB	15417	intergenic	4.389	NA		9	15	0	0	0
AAM-EM	3:50025006:C:T	rs13082703	3	50025006	T	C	0.4453	3.20E-11	0.900037	rs34034116	8	RBM6	0	intronic	1.939	6	4	5	1	1	0
AAM-EM	3:50108792:A:C	rs3774734	3	50108792	C	A	0.4463	3.22E-11	0.896247	rs34034116	8	RBM6	0	intronic	2.62	7	4	4	1	1	0
AAM-EM	10:90173536:A:G	rs814242	10	90173536	A	G	0.3986	3.23E-11	0.913137	rs7921352	20	RNLS	0	intronic	10.47	3a		5	15	1	0	0
AAM-EM	10:90216054:A:T	rs4934409	10	90216054	A	T	0.3837	3.25E-11	0.92343	rs7921352	20	RNLS	0	intronic	5.983	7	5	15	1	0	0
AAM-EM	3:49991167:G:T	rs11709503	3	49991167	G	T	0.4443	3.28E-11	0.895973	rs34034116	8	RBM6	0	intronic	0.758	7	4	5	1	1	0
AAM-EPP	3:50222926:A:T	rs1046956	3	50222926	T	A	0.329	3.30E-11	1	rs1046956	7	SEMA3F	0	exonic	14.65	4	4	15	1	1	0
AAM-EM	3:50065274:A:G	rs35375092	3	50065274	G	A	0.2505	3.30E-11	0.98904	rs13083396	8	RBM6	0	intronic	2.122	5	4	5	1	1	0
AAM-EPP	3:50233215:G:T	rs11919418	3	50233215	T	G	0.325	3.33E-11	0.972825	rs1046956	7	GNAT1	0	UTR3	9.379	4	2	14	1	1	0
AAM-EM	3:49988065:A:G	rs11706185	3	49988065	G	A	0.4443	3.33E-11	0.895973	rs34034116	8	RBM6	0	intronic	3.142	5	5	5	1	1	0
FIM-EM	11:30192962:C:T	rs12793581	11	30192962	T	C	0.3738	3.35E-11	0.981441	rs4923626	9	RP4-562D20.1	4108	intergenic	2.886	6	5	15	0	1	0
FIM-EM	11:30207239:A:G	rs7122731	11	30207239	G	A	0.3698	3.38E-11	0.974331	rs4923626	9	RP4-562D20.1	18385	intergenic	2.131	7	9	15	0	1	0
FIM-EM	11:30198439:C:T	rs11030993	11	30198439	T	C	0.3708	3.38E-11	0.977998	rs4923626	9	RP4-562D20.1	9585	intergenic	11.64	6	9	15	0	1	0
AAM-EM	3:50107219:C:T	rs2624822	3	50107219	T	C	0.4463	3.40E-11	0.896247	rs34034116	8	RBM6	0	intronic	7.362	NA		4	4	1	1	0
AAM-EM	3:50071677:A:G	rs7634441	3	50071677	G	A	0.4463	3.40E-11	0.896247	rs34034116	8	RBM6	0	intronic	2.844	5	4	5	1	1	0
AAM-EM	3:50100188:A:C	rs6793528	3	50100188	C	A	0.4463	3.40E-11	0.896247	rs34034116	8	RBM6	0	intronic	0.531	7	4	4	1	1	0
AAM-EM	3:50067298:A:T	rs6446194	3	50067298	T	A	0.4463	3.44E-11	0.896247	rs34034116	8	RBM6	0	intronic	0.003	6	4	5	1	1	0
FIM-EM	11:30200473:A:G	rs7123331	11	30200473	G	A	0.3708	3.44E-11	0.97052	rs4923626	9	RP4-562D20.1	11619	intergenic	0.708	5	9	15	0	1	0
FIM-EM	11:30197429:A:G	rs11030992	11	30197429	G	A	0.3708	3.47E-11	0.977998	rs4923626	9	RP4-562D20.1	8575	intergenic	6.161	7	9	15	0	1	0
AAM-EM	3:50020437:A:G	rs2681776	3	50020437	G	A	0.4453	3.49E-11	0.892172	rs34034116	8	RBM6	0	intronic	1.646	NA		4	5	1	1	0
FIM-EM	11:30192151:C:T	rs10501122	11	30192151	T	C	0.3738	3.50E-11	0.981441	rs4923626	9	RP4-562D20.1	3297	intergenic	4.787	6	5	15	0	1	0
AAM-EM	3:50074641:G:T	rs4688754	3	50074641	G	T	0.4463	3.51E-11	0.896247	rs34034116	8	RBM6	0	intronic	3.402	NA		4	5	1	1	0
FIM-EM	11:30206532:A:G	rs11030997	11	30206532	A	G	0.3698	3.51E-11	0.974331	rs4923626	9	RP4-562D20.1	17678	intergenic	0.988	5	9	15	0	1	0
AAM-EPP	3:50216421:C:T	rs13059311	3	50216421	T	C	0.326	3.52E-11	0.986414	rs1046956	7	SEMA3F	0	intronic	3.364	7	4	5	1	1	0
LMC-EM	11:30270667:A:G	rs689233	11	30270667	G	A	0.332	3.52E-11	0.77824	rs605765	7	FSHB	13858	intergenic	1.935	NA		9	15	0	1	0
LMC-DE	6:151828771:A:G	rs76969132	6	151828771	A	G	0.04871	3.52E-11	0.914325	rs80347787	2	CCDC170	0	intronic	2.79	7	5	15	1	1	0
AAM-EM	3:50244080:A:G	rs2236940	3	50244080	G	A	0.3231	3.52E-11	0.949544	rs35137368	8	SLC38A3	0	ncRNA_intron	0.386	5	1	13	0	1	0
AAM-EPP	6:151744283:A:G	rs3800272	6	151744283	G	A	0.4135	3.52E-11	0.92993	rs9479041	11	RMND1	0	intronic	2.698	5	4	4	1	1	0
AAM-EM	3:49971831:C:T	rs7627910	3	49971831	T	C	0.4602	3.58E-11	0.84979	rs34034116	8	MON1A	4224	intergenic	3.684	7	5	15	1	1	0
AAM-EPP	6:151753470:C:G	rs6913515	6	151753470	G	C	0.4155	3.61E-11	0.945739	rs9479041	11	RMND1	0	intronic	5.235	6	4	4	1	1	0
AAM-EM	8:25243213:A:G	rs34068702	8	25243213	A	G	0.2922	3.62E-11	0.762394	rs6185	17	DOCK5	0	intronic	2.503	4	4	5	1	0	0
AAM-EM	3:50074773:A:G	rs4688753	3	50074773	A	G	0.4463	3.64E-11	0.896247	rs34034116	8	RBM6	0	intronic	3.094	NA		4	5	1	1	0
AAM-EPP	3:49878264:C:G	rs1996663	3	49878264	C	G	0.167	3.64E-11	0.849745	rs11130207	7	TRAIP	0	intronic	3.968	1f		4	5	1	1	0
FIM-EM	11:30192333:C:T	rs11030991	11	30192333	C	T	0.3738	3.67E-11	0.981441	rs4923626	9	RP4-562D20.1	3479	intergenic	0.565	7	5	15	0	1	0
LMC-EM	11:30297809:C:T	rs7108615	11	30297809	T	C	0.331	3.68E-11	0.775509	rs605765	7	FSHB	41000	intergenic	0.55	NA		9	15	0	1	0
AAM-EPP	6:151739642:A:G	rs9371516	6	151739642	G	A	0.4135	3.68E-11	0.92993	rs9479041	11	RMND1	0	intronic	1.911	7	4	5	1	1	0
AAM-EM	3:50078221:C:T	rs7430334	3	50078221	T	C	0.4463	3.70E-11	0.896247	rs34034116	8	RBM6	0	intronic	1.053	7	4	5	1	1	0
FIM-EO	3:127878416:A:G	rs2999048	3	127878416	G	A	0.2694	3.70E-11	1	rs2999048	3	EEFSEC	0	intronic	0.073	7	4	5	1	1	0
AAM-EM	3:50008864:C:T	rs7648174	3	50008864	C	T	0.4453	3.74E-11	0.900037	rs34034116	8	RBM6	0	intronic	1.693	7	4	5	1	1	0
AAM-EPP	6:151738131:A:G	rs3778608	6	151738131	A	G	0.4135	3.74E-11	0.92993	rs9479041	11	RMND1	0	intronic	5.939	7	4	4	1	1	0
AAM-EPP	3:50236373:A:G	rs6807194	3	50236373	A	G	0.3141	3.79E-11	0.915991	rs1046956	7	GNAT1	2423	intergenic	1.82	7	5	14	0	1	0
AAM-EPP	6:151743629:A:C	rs6912830	6	151743629	A	C	0.4135	3.80E-11	0.92993	rs9479041	11	RMND1	0	intronic	11.74	6	4	5	1	1	0
AAM-EM	3:50010571:G:T	rs2624819	3	50010571	G	T	0.4453	3.80E-11	0.900037	rs34034116	8	RBM6	0	intronic	0.255	6	2	4	1	1	0
AAM-EM	3:49996053:A:G	rs13077403	3	49996053	G	A	0.4453	3.88E-11	0.900037	rs34034116	8	RBM6	0	intronic	2.567	5	4	5	1	1	0
FIM-EM	8:25311269:A:G	rs17053711	8	25311269	G	A	0.2634	3.89E-11	0.906683	rs6185	7	KCTD9	0	intronic	4.216	5	4	5	1	1	0
FIM-EM	11:30202285:A:G	rs11493214	11	30202285	G	A	0.3698	3.89E-11	0.974331	rs4923626	9	RP4-562D20.1	13431	intergenic	0.949	6	9	15	0	1	0
AAM-EPP	3:50198537:A:G	rs12631337	3	50198537	A	G	0.4404	3.91E-11	0.90785	rs13085567	7	SEMA3F	0	intronic	7.158	5	2	7	1	1	0
LMC-EM	11:30304726:C:G	rs11031032	11	30304726	G	C	0.331	3.96E-11	0.775509	rs605765	7	ARL14EP	39871	intergenic	1.219	5	5	15	0	1	0
AAM-EPP	6:151739810:G:T	rs9371517	6	151739810	G	T	0.4135	3.98E-11	0.92993	rs9479041	11	RMND1	0	intronic	6.108	6	4	5	1	1	0
LMC-EM	11:30293769:A:T	rs4267043	11	30293769	T	A	0.332	3.98E-11	0.77824	rs605765	7	FSHB	36960	intergenic	4.252	6	14	15	0	1	0
AAM-EPP	3:49866584:G:T	rs35129566	3	49866584	T	G	0.166	4.02E-11	0.85584	rs11130207	7	TRAIP	0	exonic	1.555	7	4	4	1	1	0
AAM-EM	3:50053111:C:T	rs6446192	3	50053111	T	C	0.4463	4.02E-11	0.896247	rs34034116	8	RBM6	0	intronic	2.272	6	4	5	1	1	0
FIM-EO	3:128094493:C:T	rs1702119	3	128094493	T	C	0.2525	4.05E-11	0.832027	rs2999048	3	EEFSEC	0	intronic	5.356	NA		2	5	1	1	0
FIM-EO	2:11733545:A:AACTC	rs10693974	2	11733545	A	AACTC	0.3877	4.05E-11	1	rs10693974	2	GREB1	0	intronic	2.644	NA		4	15	1	0	0
AAM-EM	10:90175462:C:T	rs806694	10	90175462	T	C	0.3986	4.09E-11	0.913137	rs7921352	20	RNLS	0	intronic	3.095	5	5	15	1	0	0
FIM-EM	11:30199688:A:C	rs7940816	11	30199688	A	C	0.3757	4.16E-11	0.996276	rs4923626	9	RP4-562D20.1	10834	intergenic	1.11	7	9	9	0	1	0
AAM-EM	3:49999086:A:G	rs62262114	3	49999086	G	A	0.4453	4.16E-11	0.900037	rs34034116	8	RBM6	0	intronic	1.752	7	4	5	1	1	0
AAM-EPP	3:50221715:A:G	rs13067082	3	50221715	A	G	0.326	4.17E-11	0.986414	rs1046956	7	SEMA3F	0	intronic	4.768	4	4	15	1	1	0
AAM-EPP	3:50209049:A:G	rs2624835	3	50209049	G	A	0.3231	4.19E-11	0.964141	rs1046956	7	SEMA3F	0	intronic	17.99	NA		2	5	1	1	0
LMC-ERSV	8:25321845:A:T	rs35698191	8	25321845	T	A	0.2485	4.21E-11	0.727544	rs13261573	3	CDCA2	0	intronic	4.36	7	4	15	1	1	0
AAM-EPP	3:49724808:C:T	rs3020779	3	49724808	T	C	0.166	4.29E-11	0.85584	rs11130207	7	MST1	0	exonic	13.52	NA		1	5	1	1	0
LMC-EM	3:127884937:A:C	rs2811473	3	127884937	A	C	0.1561	4.31E-11	0.724027	rs1735558	3	EEFSEC	0	intronic	7.457	5	4	5	1	1	0
AAM-EPP	6:151736084:G:T	rs9397405	6	151736084	G	T	0.4135	4.32E-11	0.92993	rs9479041	11	RMND1	0	intronic	5.908	5	4	5	1	1	0
LMC-DE	6:151709978:C:T	rs9383568	6	151709978	C	T	0.03976	4.34E-11	0.787833	rs75969278	2	ZBTB2	0	intronic	1.277	5	2	7	1	1	0
AAM-EPP	3:50224562:A:G	rs12637671	3	50224562	G	A	0.33	4.36E-11	0.995484	rs1046956	7	SEMA3F	0	intronic	9.026	5	4	15	1	1	0
LMC-ERSV	8:25320594:C:T	rs12675625	8	25320594	T	C	0.2485	4.46E-11	0.727544	rs13261573	3	CDCA2	0	intronic	9.281	7	4	15	1	1	0
AAM-EPP	3:50218879:C:T	rs9858297	3	50218879	T	C	0.326	4.47E-11	0.986414	rs1046956	7	SEMA3F	0	intronic	3.397	6	4	5	1	1	0
LMC-DE	6:151814453:C:T	rs79554419	6	151814453	C	T	0.04771	4.48E-11	0.892122	rs80347787	2	CCDC170	711	upstream	0.415	5	1	13	1	1	0
FIM-EM	11:30199020:C:T	rs10767832	11	30199020	C	T	0.3757	4.53E-11	0.996276	rs4923626	9	RP4-562D20.1	10166	intergenic	0.002	7	9	9	0	1	0
AAM-EPP	3:49868876:A:T	rs7649428	3	49868876	A	T	0.166	4.55E-11	0.840469	rs11130207	7	TRAIP	0	intronic	2.545	5	4	4	1	1	0
FIM-EM	11:30200751:C:T	rs7109221	11	30200751	T	C	0.3757	4.56E-11	0.996276	rs4923626	9	RP4-562D20.1	11897	intergenic	0.904	7	9	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	3:50247824:C:T	rs2236941	3	50247824	C	T	0.3231	4.59E-11	0.940629	rs35137368	8	SLC38A3	0	ncRNA_intron	3.428	2b	2	14	0	1	0
AAM-EM	10:90258744:C:T	rs2576170	10	90258744	T	C	0.3708	4.62E-11	0.732339	rs7921352	20	RNLS	0	intronic	1.309	NA	5	15	1	0	0
LMC-EM	11:30243795:C:G	rs1782508	11	30243795	C	G	0.331	4.64E-11	0.761222	rs605765	7	FSHB	8767	intergenic	5.899	6	7	15	0	1	0
FIM-EO	3:127882064:A:G	rs2955118	3	127882064	G	A	0.2694	4.65E-11	1	rs2999048	3	EEFSEC	0	intronic	10.59	6	4	5	1	0	0
AAM-EPP	3:50082914:C:G	rs2526747	3	50082914	C	G	0.4314	4.69E-11	0.832296	rs6774354	7	RBM6	0	intronic	0.242	1f	4	5	1	1	0
AAM-EM	3:49982765:C:T	rs11721204	3	49982765	C	T	0.4374	4.71E-11	0.858651	rs34034116	8	RBM6	0	intronic	5.905	7	4	5	1	1	0
FIM-EO	3:128092102:A:G	rs1735538	3	128092102	A	G	0.2535	4.73E-11	0.826758	rs2999048	3	EEFSEC	0	intronic	0.168	NA	4	5	1	1	0
FIM-EM	11:30203825:C:T	rs7943756	11	30203825	T	C	0.3757	4.73E-11	0.996276	rs4923626	9	RP4-562D20.1	14971	intergenic	0.902	7	9	15	0	1	0
AAM-EM	3:128081260:C:G	rs1735545	3	128081260	G	C	0.2187	4.84E-11	0.785354	rs729847	9	EEFSEC	0	intronic	2.059	4	4	5	1	1	0
AAM-EPP	3:49878395:A:G	rs1996664	3	49878395	A	G	0.167	4.86E-11	0.849745	rs11130207	7	TRAIP	0	intronic	3.87	1f	4	5	1	1	0
FIM-EO	3:128083332:A:G	rs1702122	3	128083332	A	G	0.2515	4.87E-11	0.827432	rs2999048	3	EEFSEC	0	intronic	0.407	NA	4	5	1	1	0
AAM-EM	3:49987475:C:T	rs7615318	3	49987475	C	T	0.2485	4.92E-11	1	rs13083396	8	RBM6	0	intronic	3.42	6	4	5	1	1	0
LMC-DE	6:151819857:C:T	rs115429675	6	151819857	C	T	0.04771	4.93E-11	0.892122	rs80347787	2	CCDC170	0	intronic	0.081	5	2	15	1	1	0
FIM-EM	11:30217503:C:T	rs605765	11	30217503	C	T	0.3827	4.96E-11	1	rs605765	9	RP4-562D20.1	28649	intergenic	2.68	7	2	15	0	1	0
AAM-EM	10:90261930:A:G	rs2576169	10	90261930	A	G	0.3708	4.99E-11	0.732339	rs7921352	20	RNLS	0	intronic	3.973	NA	5	15	1	0	0
LMC-ERSV	6:151730903:A:G	rs9383890	6	151730903	A	G	0.04076	5.00E-11	0.868839	rs147230474	2	RMND1	0	intronic	1.965	4	4	5	1	1	0
AAM-EM	3:49976972:A:G	rs7626952	3	49976972	A	G	0.4453	5.02E-11	0.900037	rs34034116	8	RBM6	467	upstream	0.258	6	1	15	1	1	0
AAM-EPP	6:151732385:C:T	rs6921042	6	151732385	T	C	0.4135	5.04E-11	0.92993	rs9479041	11	RMND1	0	intronic	2.43	7	4	5	1	1	0
FIM-EM	11:30223574:A:G	rs607987	11	30223574	G	A	0.3787	5.09E-11	0.984167	rs605765	9	FSHB	28988	intergenic	3.246	NA	5	15	0	1	0
AAM-EPP	3:50088943:A:G	rs6446197	3	50088943	A	G	0.4314	5.10E-11	0.832296	rs6774354	7	RBM6	0	intronic	0.539	6	4	5	1	1	0
AAM-EPP	3:50233317:C:T	rs13064381	3	50233317	C	T	0.3241	5.12E-11	0.977416	rs1046956	7	GNAT1	0	UTR3	5.489	2a	2	14	1	1	0
AAM-EM	3:50224225:A:G	rs12632110	3	50224225	A	G	0.337	5.12E-11	0.86628	rs35137368	8	SEMA3F	0	intronic	3.042	1f	4	15	1	1	0
AAM-EPP	3:49853796:A:T	rs62260720	3	49853796	T	A	0.166	5.16E-11	0.85584	rs11130207	7	UBA7	2416	intergenic	11.25	5	5	15	0	1	0
FIM-EM	11:30193060:A:G	rs623837	11	30193060	G	A	0.3767	5.16E-11	0.992535	rs4923626	9	RP4-562D20.1	4206	intergenic	0.415	NA	5	15	0	1	0
AAM-EPP	3:50136165:A:G	rs6808044	3	50136165	A	G	0.4314	5.20E-11	0.832296	rs6774354	7	RBM6:RBM5	0:00	intronic	2.808	7	4	4	1	1	0
AAM-EPP	3:49825369:A:G	rs9851930	3	49825369	G	A	0.166	5.23E-11	0.85584	rs11130207	7	IP6K1	1393	intergenic	6.414	7	5	15	0	1	0
AAM-EM	3:50175940:A:G	rs2014004	3	50175940	G	A	0.2555	5.27E-11	0.910539	rs13083396	8	RP11-493K19.1	0	ncRNA_intron	11.5	NA	1	7	0	1	0
AAM-EPP	3:50144951:C:T	rs1061474	3	50144951	T	C	0.4314	5.29E-11	0.832296	rs6774354	7	RBM5	0	exonic	13.65	5	4	4	1	1	0
AAM-EM	10:90167065:A:C	rs792207	10	90167065	A	C	0.4185	5.32E-11	0.824813	rs7921352	20	RNLS	0	intronic	5.976	7	5	15	1	0	0
AAM-EPP	8:25267103:A:G	rs4871939	8	25267103	G	A	0.2465	5.38E-11	0.980226	rs6185	12	DOCK5	0	intronic	11.04	5	4	4	1	1	0
AAM-EPP	3:49872124:C:T	rs62260723	3	49872124	T	C	0.166	5.41E-11	0.85584	rs11130207	7	TRAIP	0	intronic	1.3	6	4	5	1	1	0
AAM-EM	10:90257225:C:T	rs2576171	10	90257225	T	C	0.3708	5.51E-11	0.732339	rs7921352	20	RNLS	0	intronic	8.839	NA	5	15	1	0	0
FIM-EM	2:11718858:C:T	rs7578132	2	11718858	T	C	0.4801	5.51E-11	1	rs7578132	2	GREB1	0	intronic	0.596	3a	4	15	1	0	0
AAM-EM	6:151847647:A:G	rs12210735	6	151847647	G	A	0.4036	5.54E-11	1	rs12210735	14	CCDC170	0	intronic	0.387	7	9	15	1	0	0
AAM-EPP	3:50125219:C:T	rs9681286	3	50125219	T	C	0.4314	5.59E-11	0.832296	rs6774354	7	RBM6	0	intronic	2.338	7	5	5	1	1	0
AAM-EPP	3:49829653:A:G	rs7637711	3	49829653	A	G	0.166	5.59E-11	0.85584	rs11130207	7	CDHR4	0	intronic	5.549	1f	5	15	1	1	0
LMC-DE	6:151762610:C:G	rs6940667	6	151762610	G	C	0.04871	5.61E-11	0.832037	rs80347787	2	RMND1	0	intronic	4.86	4	3	5	1	1	0
FIM-EO	3:128058617:A:T	rs3849531	3	128058617	A	T	0.2783	5.61E-11	0.902651	rs2999048	3	EEFSEC	0	intronic	0.034	3a	2	5	1	1	0
AAM-EPP	3:49769071:C:T	rs9870858	3	49769071	C	T	0.166	5.62E-11	0.85584	rs11130207	7	IP6K1	0	intronic	9.017	6	4	4	1	1	0
FIM-EO	2:11735061:A:C	rs28689909	2	11735061	C	A	0.3857	5.65E-11	0.991217	rs10693974	2	GREB1	0	intronic	0.808	6	4	15	1	0	0
FIM-EM	8:25245432:A:G	rs931875	8	25245432	G	A	0.2674	5.74E-11	0.880889	rs6185	7	DOCK5	0	intronic	1.536	7	4	5	1	1	0
AAM-EPP	6:151732017:C:T	rs6557138	6	151732017	C	T	0.4135	5.86E-11	0.92993	rs9479041	11	RMND1	0	intronic	6.905	7	4	5	1	1	0
AAM-EM	6:151849829:C:T	rs4870029	6	151849829	C	T	0.2187	5.88E-11	0.78777	rs4870030	14	CCDC170	0	intronic	2.982	7	9	15	1	0	0
AAM-EPP	3:50114515:C:T	rs7061	3	50114515	C	T	0.4314	5.93E-11	0.832296	rs6774354	7	RBM6	0	exonic	1.729	6	4	4	1	1	0
AAM-EPP	3:49822909:A:G	rs9836756	3	49822909	G	A	0.166	5.93E-11	0.85584	rs11130207	7	IP6K1	0	intronic	1.641	6	1	2	1	1	0
AAM-EPP	3:49814949:C:T	rs62260663	3	49814949	T	C	0.166	5.97E-11	0.85584	rs11130207	7	IP6K1	0	intronic	2.208	6	4	5	1	1	0
AAM-EM	10:90264140:C:T	rs2477954	10	90264140	T	C	0.3708	5.97E-11	0.732339	rs7921352	20	RNLS	0	intronic	0.718	NA	5	15	1	0	0
AAM-EM	3:50152491:C:T	rs62263602	3	50152491	C	T	0.2475	5.99E-11	0.972264	rs13083396	8	RBM5	0	intronic	0.749	6	4	4	1	1	0
AAM-EPP	3:49655927:A:T	rs62262672	3	49655927	T	A	0.166	6.00E-11	0.85584	rs11130207	7	BSN	0	intronic	5.218	3a	5	15	1	1	0
AAM-EPP	3:49817450:C:T	rs9829155	3	49817450	T	C	0.166	6.02E-11	0.85584	rs11130207	7	IP6K1	0	intronic	4.226	1f	4	5	1	1	0
AAM-EPP	3:49652148:C:T	rs1352889	3	49652148	T	C	0.166	6.02E-11	0.85584	rs11130207	7	BSN	0	intronic	5.175	6	5	15	1	1	0
AAM-EM	3:128095767:A:G	rs2977565	3	128095767	G	A	0.2167	6.07E-11	0.829351	rs729847	9	EEFSEC	0	intronic	8.921	NA	2	5	1	1	0
AAM-EPP	3:49871201:C:T	rs61557789	3	49871201	C	T	0.163	6.10E-11	0.832953	rs11130207	7	TRAIP	0	intronic	3.175	7	4	5	1	1	0
AAM-EPP	3:49835450:C:T	rs6790568	3	49835450	C	T	0.16	6.10E-11	0.807055	rs11130207	7	CDHR4	0	intronic	1.812	7	5	15	1	1	0
LMC-EM	3:128105972:A:G	rs2999033	3	128105972	G	A	0.1342	6.11E-11	1	rs2999033	3	EEFSEC	0	intronic	4.449	NA	4	15	1	1	0
AAM-EPP	3:49874246:C:T	rs59684465	3	49874246	C	T	0.163	6.11E-11	0.832953	rs11130207	7	TRAIP	0	intronic	0.375	6	4	5	1	1	0
AAM-EM	3:127889404:C:T	rs2999051	3	127889404	T	C	0.3897	6.13E-11	1	rs2999051	9	EEFSEC	0	intronic	5.835	7	5	5	1	1	0
FIM-EO	3:127926045:C:T	rs4362738	3	127926045	C	T	0.3926	6.13E-11	1	rs4362738	3	EEFSEC	0	intronic	0.817	6	5	15	1	0	0
FIM-EO	3:127994160:A:G	rs2811529	3	127994160	G	A	0.2704	6.22E-11	0.984028	rs2999048	3	EEFSEC	0	intronic	3.578	NA	4	5	1	1	0
AAM-EPP	3:50243801:C:T	rs35219849	3	50243801	C	T	0.3121	6.23E-11	0.898637	rs1046956	7	SLC38A3	0	ncRNA_intron	9.207	2b	1	13	0	1	0
AAM-EPP	3:49753788:A:G	rs11720705	3	49753788	A	G	0.166	6.30E-11	0.85584	rs11130207	7	RNF123	0	intronic	0.033	1f	3	4	1	1	0
LMC-ERSV	6:151764239:C:T	rs73783022	6	151764239	T	C	0.0507	6.33E-11	0.693982	rs147230474	2	RMND1	0	intronic	2.828	7	4	5	1	1	0
AAM-EM	6:151848611:A:G	rs6557143	6	151848611	G	A	0.4026	6.33E-11	0.995882	rs12210735	14	CCDC170	0	intronic	9.683	6	14	15	1	0	0
AAM-EPP	3:50243948:A:G	rs35137368	3	50243948	G	A	0.3121	6.40E-11	0.898637	rs1046956	7	SLC38A3	0	ncRNA_intron	6.642	4	1	13	0	1	0
LMC-EM	11:30234394:C:T	rs601681	11	30234394	C	T	0.4145	6.40E-11	0.893009	rs1716021	7	FSHB	18168	intergenic	0.317	7	5	15	0	1	0
AAM-EPP	3:49825326:A:C	rs9851651	3	49825326	C	A	0.166	6.40E-11	0.85584	rs11130207	7	IP6K1	1350	intergenic	1.624	7	5	15	0	1	0
AAM-EPP	10:90186123:C:T	rs7921352	10	90186123	T	C	0.3817	6.46E-11	1	rs7921352	15	RNLS	0	intronic	3.193	5	5	15	1	0	0
AAM-EPP	3:49657441:A:G	rs4855833	3	49657441	A	G	0.166	6.50E-11	0.85584	rs11130207	7	BSN	0	intronic	3.143	NA	5	15	1	1	0
AAM-EPP	3:49665390:A:G	rs2131108	3	49665390	G	A	0.165	6.57E-11	0.848168	rs11130207	7	BSN	0	intronic	1.292	1f	4	15	1	1	0
AAM-EPP	3:49653378:A:G	rs4855849	3	49653378	A	G	0.166	6.58E-11	0.85584	rs11130207	7	BSN	0	intronic	3.557	NA	5	15	1	1	0
AAM-EPP	3:49653457:C:T	rs4855848	3	49653457	C	T	0.166	6.58E-11	0.85584	rs11130207	7	BSN	0	intronic	11.49	NA	5	15	1	1	0
AAM-EM	6:151847967:A:C	rs9479055	6	151847967	C	A	0.4036	6.59E-11	1	rs12210735	14	CCDC170	0	intronic	0.262	7	14	15	1	0	0
LMC-ERSV	6:151764955:A:C	rs3800276	6	151764955	C	A	0.0507	6.61E-11	0.693982	rs147230474	2	RMND1	0	intronic	0.689	5	4	5	1	1	0
AAM-EPP	3:50165101:C:T	rs2624848	3	50165101	T	C	0.4314	6.63E-11	0.832296	rs6774354	7	RP11-493K19.1	0	ncRNA_intron	3.021	NA	5	15	0	1	0
LMC-EM	11:30244235:C:T	rs653452	11	30244235	C	T	0.328	6.67E-11	0.774589	rs605765	7	FSHB	8327	intergenic	0.201	NA	7	15	0	1	0
LMC-DE	6:151765511:G:T	rs3800278	6	151765511	G	T	0.04871	6.68E-11	0.832037	rs80347787	2	RMND1	0	intronic	0.925	5	4	5	1	1	0
AAM-EM	12:115106350:A:C	rs71807	12	115106350	A	C	0.4891	6.71E-11	0.942586	rs8853	30	TBX3	1708	intergenic	7.668	NA	1	1	1	0	0
AAM-EPP	3:49797769:A:G	rs9835157	3	49797769	G	A	0.166	6.72E-11	0.85584	rs11130207	7	IP6K1	0	intronic	1.976	6	4	5	1	1	0
AAM-EM	3:128095652:C:T	rs3021461	3	128095652	T	C	0.2167	6.73E-11	0.829351	rs729847	9	EEFSEC	0	intronic	3.059	NA	2	5	1	1	0
AAM-EPP	3:49845006:A:T	rs58339610	3	49845006	T	A	0.163	6.75E-11	0.832953	rs11130207	7	UBA7	0	intronic	18.12	3a	2	7	1	1	0
LMC-EM	11:30243868:G:T	rs1782507	11	30243868	G	T	0.328	6.76E-11	0.774589	rs605765	7	FSHB	8694	intergenic	1.547	NA	7	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocu	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:50212512:G:T	rs2624833	3	50212512	G	T	0.3221	6.77E-11	0.959806	rs1046956	7	SEMA3F	0	intronic	14.92	NA	3	4	1	1	0
AAM-EPP	3:49658084:A:G	rs13096480	3	49658084	A	G	0.166	6.78E-11	0.85584	rs11130207	7	BSN	0	intronic	2.526	1f	5	15	1	1	0
FIM-EM	11:30201790:C:T	rs7113525	11	30201790	T	C	0.3757	6.78E-11	0.996276	rs4923626	9	RP4-562D20.1	12936	intergenic	0.057	6	9	15	0	1	0
LMC-EM	11:30274686:A:G	rs60781817	11	30274686	G	A	0.329	6.87E-11	0.770113	rs605765	7	FSHB	17877	intergenic	2.36	6	5	15	0	1	0
AAM-EM	3:128015236:C:T	rs2955103	3	128015236	C	T	0.3917	6.93E-11	0.991361	rs2999051	9	EEFSEC	0	intronic	1.522	5	2	15	1	1	0
AAM-EPP	3:49687043:C:T	rs4855845	3	49687043	T	C	0.166	6.93E-11	0.85584	rs11130207	7	BSN	0	intronic	2.936	NA	4	15	1	1	0
LMC-EM	11:30275141:C:T	rs35458722	11	30275141	T	C	0.326	6.93E-11	0.768474	rs605765	7	FSHB	18332	intergenic	3.837	6	5	15	0	1	0
AAM-EPP	3:50192760:C:T	rs2526390	3	50192760	C	T	0.3241	6.95E-11	0.968509	rs1046956	7	RP11-493K19	0:00	ncRNA_intron	19.09	NA	1	1	1	0	0
AAM-EPP	3:50126215:A:C	rs2247510	3	50126215	C	A	0.4314	6.98E-11	0.832296	rs6774354	7	RBM6	0	intronic	13.83	NA	1	1	1	1	0
LMC-DE	6:151762305:A:C	rs73783017	6	151762305	A	C	0.04871	6.98E-11	0.832037	rs80347787	2	RMND1	0	intronic	5.323	2b	1	5	1	1	0
LMC-EM	11:30230216:A:G	rs1716025	11	30230216	G	A	0.3956	7.00E-11	0.971316	rs1716021	7	FSHB	22346	intergenic	2.959	NA	5	15	0	1	0
LMC-DE	6:151762169:C:T	rs3800275	6	151762169	T	C	0.04871	7.00E-11	0.832037	rs80347787	2	RMND1	0	intronic	5.742	2b	2	5	1	1	0
AAM-EPP	3:49667691:C:T	rs9883000	3	49667691	T	C	0.166	7.00E-11	0.85584	rs11130207	7	BSN	0	intronic	7.556	1f	5	15	1	1	0
FIM-EM	11:30200581:C:T	rs7108968	11	30200581	T	C	0.3757	7.02E-11	0.996276	rs4923626	9	RP4-562D20.1	11727	intergenic	1.052	7	9	15	0	1	0
LMC-EM	11:30227534:C:T	rs568394	11	30227534	C	T	0.3966	7.02E-11	0.975474	rs1716021	7	FSHB	25028	intergenic	3.643	NA	5	15	0	1	0
AAM-EPP	3:127882064:A:G	rs2955118	3	127882064	G	A	0.2694	7.06E-11	0.95764	rs4857878	8	EEFSEC	0	intronic	10.59	6	4	5	1	0	0
AAM-EPP	3:50158774:A:G	rs2856237	3	50158774	A	G	0.4314	7.07E-11	0.832296	rs6774354	7	RP11-493K19	0	ncRNA_intron	6.358	NA	3	4	0	1	0
AAM-EPP	3:49754970:C:T	rs7628207	3	49754970	T	C	0.166	7.08E-11	0.85584	rs11130207	7	RNF123:AMI	0:00:00	UTR3	5.404	1f	3	5	1	1	0
LMC-EM	11:30287070:A:G	rs34609938	11	30287070	G	A	0.33	7.11E-11	0.766488	rs605765	7	FSHB	30261	intergenic	0.575	7	14	15	0	1	0
FIM-EO	3:127961396:A:T	rs9843281	3	127961396	A	T	0.2694	7.13E-11	0.989333	rs2999048	3	EEFSEC	0	intronic	2.231	7	5	5	1	1	0
FIM-EO	3:128038373:A:C	rs10934853	3	128038373	C	A	0.2793	7.16E-11	0.908431	rs2999048	3	EEFSEC	0	intronic	18.77	4	4	5	1	1	0
AAM-EPP	3:50158191:C:T	rs2856238	3	50158191	T	C	0.4314	7.20E-11	0.832296	rs6774354	7	RP11-493K19	0	ncRNA_intron	2.942	NA	4	4	0	1	0
LMC-EM	11:30235497:A:G	rs586326	11	30235497	G	A	0.4145	7.25E-11	0.893009	rs1716021	7	FSHB	17065	intergenic	4.272	NA	9	15	0	1	0
AAM-EPP	3:50153356:C:T	rs1138536	3	50153356	T	C	0.4314	7.26E-11	0.832296	rs6774354	7	RBM5	0	exonic	18.47	6	4	4	1	1	0
LMC-EM	11:30237518:C:T	rs664147	11	30237518	C	T	0.4145	7.27E-11	0.893009	rs1716021	7	FSHB	15044	intergenic	2.315	NA	9	15	0	1	0
FIM-EO	3:127978795:A:G	rs4555544	3	127978795	G	A	0.2694	7.30E-11	0.989333	rs2999048	3	EEFSEC	0	intronic	6.032	5	5	9	1	1	0
LMC-DE	6:151823901:A:C	rs7762963	6	151823901	A	C	0.04771	7.30E-11	0.892122	rs80347787	2	CCDC170	0	intronic	0.894	4	2	15	1	1	0
AAM-EM	3:127926045:C:T	rs4362738	3	127926045	C	T	0.3926	7.33E-11	0.987071	rs2999051	9	EEFSEC	0	intronic	0.817	6	5	15	1	0	0
AAM-EPP	3:49828021:C:G	rs7620848	3	49828021	G	C	0.163	7.33E-11	0.832953	rs11130207	7	CDHR4	143	downstream	0.222	5	5	15	1	1	0
FIM-EO	3:127963448:A:G	rs13434079	3	127963448	A	G	0.2694	7.34E-11	0.989333	rs2999048	3	EEFSEC	0	intronic	4.207	6	4	5	1	1	0
AAM-EM	6:151848899:A:C	rs9479056	6	151848899	C	A	0.4036	7.35E-11	1	rs12210735	14	CCDC170	0	intronic	0.112	6	14	15	1	0	0
FIM-EO	3:127933203:C:G	rs11707297	3	127933203	G	C	0.2704	7.36E-11	0.984028	rs2999048	3	EEFSEC	0	intronic	9.001	7	5	15	1	1	0
LMC-ERSV	6:151828771:A:G	rs76969132	6	151828771	A	G	0.04871	7.40E-11	0.767263	rs147230474	2	CCDC170	0	intronic	2.79	7	5	15	1	1	0
FIM-EO	3:127958013:A:G	rs4074440	3	127958013	G	A	0.2694	7.43E-11	0.989333	rs2999048	3	EEFSEC	0	intronic	1.324	NA	5	5	1	1	0
AAM-EPP	3:49683526:A:G	rs4855846	3	49683526	G	A	0.166	7.47E-11	0.85584	rs11130207	7	BSN	0	intronic	4.731	NA	5	15	1	1	0
FIM-EO	3:127913263:A:G	rs883238	3	127913263	A	G	0.2714	7.52E-11	0.978756	rs2999048	3	EEFSEC	0	intronic	5.523	6	5	5	1	1	0
LMC-DE	6:151725403:C:T	rs116621273	6	151725403	T	C	0.03976	7.61E-11	0.787833	rs75969278	2	RMND1	585	downstream	2.142	4	4	5	1	1	0
AAM-EM	10:90174202:A:C	rs792213	10	90174202	A	C	0.4185	7.64E-11	0.824813	rs7921352	20	RNLS	0	intronic	0.601	6	5	15	1	0	0
AAM-EPP	3:49798864:A:G	rs7621797	3	49798864	G	A	0.166	7.67E-11	0.85584	rs11130207	7	IP6K1	0	intronic	0.149	7	4	5	1	1	0
AAM-EPP	3:49751856:C:T	rs12715437	3	49751856	T	C	0.166	7.69E-11	0.85584	rs11130207	7	RNF123	0	intronic	0.78	1f	4	5	1	1	0
FIM-EM	11:30271433:A:AG	rs35243946	11	30271433	A	AG	0.33	7.76E-11	0.7728	rs605765	9	FSHB	14624	intergenic	3.692	NA	9	15	0	1	0
FIM-EO	3:128015236:C:T	rs2955103	3	128015236	C	T	0.3917	7.81E-11	0.99565	rs4362738	3	EEFSEC	0	intronic	1.522	5	2	15	1	1	0
FIM-EO	3:127889404:C:T	rs2999051	3	127889404	T	C	0.3897	7.82E-11	0.987071	rs4362738	3	EEFSEC	0	intronic	5.835	7	5	5	1	1	0
LMC-EM	11:30287046:A:G	rs79028439	11	30287046	A	G	0.329	7.92E-11	0.770113	rs605765	7	FSHB	30237	intergenic	0.973	7	14	15	0	1	0
AAM-EPP	3:50156695:A:G	rs2624829	3	50156695	A	G	0.4314	7.97E-11	0.832296	rs6774354	7	RP11-493K19	0	ncRNA_intron	0.071	6	4	4	1	1	0
FIM-EM	11:30203374:A:G	rs7928429	11	30203374	G	A	0.3757	7.97E-11	0.996276	rs4923626	9	RP4-562D20.1	14520	intergenic	0.525	6	9	15	0	1	0
AAM-EPP	3:49685592:A:G	rs1078341	3	49685592	A	G	0.166	7.99E-11	0.85584	rs11130207	7	BSN	0	intronic	5.346	1b	2	15	1	1	0
LMC-EM	11:30279609:C:T	rs1933347	11	30279609	T	C	0.328	8.05E-11	0.774589	rs605765	7	FSHB	22800	intergenic	0.289	7	5	15	0	1	0
LMC-EM	11:30286978:A:T	rs145052476	11	30286978	T	A	0.328	8.08E-11	0.774589	rs605765	7	FSHB	30169	intergenic	0.894	6	14	15	0	1	0
AAM-EPP	3:49710444:C:G	rs13093525	3	49710444	C	G	0.166	8.12E-11	0.85584	rs11130207	7	APEH	990	upstream	0.004	5	1	5	1	1	0
FIM-EO	2:11728388:C:T	rs59129126	2	11728388	T	C	0.3926	8.14E-11	0.969693	rs10693974	2	GREB1	0	UTR5	4.241	5	4	15	1	0	0
LMC-DE	6:151763400:A:G	rs73783019	6	151763400	A	G	0.04871	8.15E-11	0.832037	rs80347787	2	RMND1	0	intronic	5.222	5	3	5	1	1	0
LMC-DE	6:151702237:C:T	rs115805051	6	151702237	T	C	0.03976	8.16E-11	0.787833	rs75969278	2	ZBTB2	0	intronic	1.222	2b	2	5	1	1	0
AAM-EPP	3:49680973:A:G	rs10452032	3	49680973	G	A	0.166	8.19E-11	0.85584	rs11130207	7	BSN	0	intronic	1.445	6	4	15	1	1	0
AAM-EM	10:90177034:A:T	rs4933480	10	90177034	T	A	0.4185	8.20E-11	0.824813	rs7921352	20	RNLS	0	intronic	9.777	5	5	15	1	0	0
LMC-DE	6:151725666:C:T	rs118069541	6	151725666	C	T	0.03976	8.21E-11	0.787833	rs75969278	2	RMND1	322	downstream	0.331	5	4	5	1	1	0
LMC-DE	6:151764665:C:T	rs7748785	6	151764665	C	T	0.04871	8.27E-11	0.832037	rs80347787	2	RMND1	0	intronic	0.565	5	4	5	1	1	0
LMC-EM	11:30274837:A:T	rs60968445	11	30274837	A	T	0.328	8.30E-11	0.774589	rs605765	7	FSHB	18028	intergenic	0.864	6	5	15	0	0	0
LMC-EM	11:30271845:C:T	rs673740	11	30271845	C	T	0.329	8.31E-11	0.770113	rs605765	7	FSHB	15036	intergenic	0.03	NA	9	15	0	1	0
AAM-EPP	3:49687779:G:T	rs6774202	3	49687779	T	G	0.166	8.32E-11	0.85584	rs11130207	7	BSN	0	intronic	0.446	1b	4	15	1	1	0
AAM-EPP	3:49681704:A:G	rs6446286	3	49681704	A	G	0.166	8.39E-11	0.85584	rs11130207	7	BSN	0	intronic	1.652	5	4	15	1	1	0
AAM-EPP	3:50198415:C:T	rs2624841	3	50198415	C	T	0.3231	8.43E-11	0.964141	rs1046956	7	SEMA3F	0	intronic	11.77	NA	2	7	1	1	0
AAM-EPP	3:49674343:C:T	rs9824435	3	49674343	C	T	0.166	8.43E-11	0.85584	rs11130207	7	BSN	0	intronic	1.427	1f	2	15	1	1	0
LMC-DE	6:151704548:C:T	rs75107694	6	151704548	T	C	0.03976	8.43E-11	0.787833	rs75969278	2	ZBTB2	0	intronic	10.89	7	4	5	1	1	0
FIM-EO	3:127942379:A:G	rs9873786	3	127942379	A	G	0.2694	8.45E-11	0.989333	rs2999048	3	EEFSEC	0	intronic	4.91	6	5	9	1	1	0
AAM-EPP	3:50072987:C:T	rs12488521	3	50072987	T	C	0.4463	8.49E-11	0.896247	rs6774354	7	RBM6	0	intronic	1.539	7	4	5	1	1	0
FIM-EO	2:11733488:G:T	rs57439315	2	11733488	G	T	0.3877	8.50E-11	0.982446	rs10693974	2	GREB1	0	intronic	1.23	2b	4	15	1	0	0
LMC-ERSV	6:151730232:C:G	rs78375092	6	151730232	C	G	0.03976	8.51E-11	0.840834	rs147230474	2	RMND1	0	intronic	4.785	4	4	5	1	1	0
LMC-DE	6:151700893:C:T	rs57968001	6	151700893	T	C	0.03976	8.52E-11	0.787833	rs75969278	2	ZBTB2	0	intronic	0.747	6	1	5	1	1	0
LMC-EM	11:30228264:C:T	rs653518	11	30228264	C	T	0.3946	8.54E-11	0.959045	rs1716021	7	FSHB	24298	intergenic	4.291	NA	1	15	0	1	0
AAM-EM	6:151838856:C:T	rs57521493	6	151838856	C	T	0.1481	8.61E-11	1	rs57521493	14	CCDC170	0	intronic	0.656	6	5	15	1	1	0
AAM-EPP	3:49671224:C:T	rs1586827	3	49671224	T	C	0.165	8.62E-11	0.848168	rs11130207	7	BSN	0	intronic	9.883	7	5	15	1	1	0
AAM-EM	12:50280430:C:T	rs11169199	12	50280430	T	C	0.3618	8.62E-11	1	rs11169199	28	FAIM2	0	intronic	3.184	6	4	14	1	0	0
AAM-EM	10:90158608:C:T	rs1617881	10	90158608	C	T	0.4384	8.63E-11	0.760519	rs7921352	20	RNLS	0	intronic	1.409	6	5	15	1	0	0
AAM-EM	10:90255615:C:T	rs2576172	10	90255615	T	C	0.3718	8.69E-11	0.742773	rs7921352	20	RNLS	0	intronic	1.182	NA	5	15	1	0	0
LMC-EM	11:30271406:C:T	rs675635	11	30271406	C	T	0.329	8.71E-11	0.770113	rs605765	7	FSHB	14597	intergenic	2.15	NA	9	15	0	1	0
AAM-EPP	3:49745235:A:G	rs11709734	3	49745235	G	A	0.166	8.72E-11	0.85584	rs11130207	7	RNF123	0	intronic	1.054	1f	4	5	1	1	0
AAM-EPP	3:49739507:C:G	rs1491985	3	49739507	G	C	0.166	8.77E-11	0.85584	rs11130207	7	RNF123	0	intronic	1.068	5	4	4	1	1	0
AAM-EPP	3:49679072:A:G	rs2329021	3	49679072	G	A	0.166	8.78E-11	0.85584	rs11130207	7	BSN:BSN-AS	0:00	ncRNA_exoni	0.496	1f	5	15	1	1	0
AAM-EPP	3:49848414:C:T	rs28535523	3	49848414	C	T	0.163	8.79E-11	0.832953	rs11130207	7	UBA7	0	intronic	14.84	5	3	4	1	1	0
FIM-EO	3:127946788:A:G	rs9830294	3	127946788	G	A	0.2694	8.80E-11	0.989333	rs2999048	3	EEFSEC	0	intronic	0.531	7	5	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EO	3:127918955:C:T	rs2687720	3	127918955	C	T	0.2684	8.86E-11	0.994671	rs2999048	3	EEFSEC	0	intronic	0.698	NA	5	5	1	1	0
LMC-EM	11:30275351:C:T	rs34487664	11	30275351	T	C	0.329	8.91E-11	0.770113	rs605765	7	FSHB	18542	intergenic	6.04	5	5	15	0	1	0
AAM-EM	12:50246252:A:G	rs112502508	12	50246252	A	G	0.337	8.94E-11	1	rs112502508	28	RP11-70F11.7	8737	intergenic	4.801	7	5	14	1	0	0
LMC-DE	6:151766199:A:G	rs3800280	6	151766199	A	G	0.04871	8.96E-11	0.832037	rs80347787	2	RMND1	0	intronic	6.02	6	4	5	1	1	0
LMC-EM	11:30226286:C:T	rs683054	11	30226286	T	C	0.3956	8.97E-11	0.971316	rs1716021	7	FSHB	26276	intergenic	10.42	NA	7	15	0	1	0
AAM-EM	3:50242387:G:T	rs1858828	3	50242387	G	T	0.4404	9.03E-11	0.842815	rs12631337	8	SLC38A3	291	upstream	5.173	NA	1	12	1	1	0
LMC-EM	11:30279268:C:G	rs1933345	11	30279268	G	C	0.329	9.06E-11	0.770113	rs605765	7	FSHB	22459	intergenic	2.986	6	5	15	0	1	0
AAM-EPP	3:49886319:G:T	rs77941694	3	49886319	G	T	0.163	9.11E-11	0.832953	rs11130207	7	TRAIP	0	intronic	0.097	7	5	5	1	1	0
LMC-EM	11:30282779:A:C	rs4267046	11	30282779	A	C	0.329	9.11E-11	0.770113	rs605765	7	FSHB	25970	intergenic	1.915	6	7	15	0	0	0
LMC-EM	11:30289511:C:T	rs7940387	11	30289511	C	T	0.329	9.14E-11	0.770113	rs605765	7	FSHB	32702	intergenic	0.413	7	9	15	0	1	0
LMC-EM	11:30302923:A:G	rs11031028	11	30302923	G	A	0.328	9.15E-11	0.767447	rs605765	7	ARL14EP	41674	intergenic	0.28	7	7	15	0	1	0
AAM-EM	10:90157930:C:T	rs2488270	10	90157930	C	T	0.4384	9.16E-11	0.760519	rs7921352	20	RNLS	0	intronic	0.331	7	5	15	1	0	0
LMC-EM	11:30279354:C:T	rs1933346	11	30279354	C	T	0.329	9.23E-11	0.770113	rs605765	7	FSHB	22545	intergenic	0.056	6	5	15	0	1	0
LMC-EM	11:30302023:A:C	rs4923632	11	30302023	C	A	0.327	9.26E-11	0.771927	rs605765	7	ARL14EP	42574	intergenic	1.291	5	7	15	0	1	0
LMC-EM	11:30266370:A:G	rs642126	11	30266370	G	A	0.329	9.29E-11	0.770113	rs605765	7	FSHB	9561	intergenic	3.967	7	7	15	0	1	0
FIM-EO	3:128046643:A:G	rs4857841	3	128046643	G	A	0.2793	9.30E-11	0.908431	rs2999048	3	EEFSEC	0	intronic	0.912	5	4	5	1	1	0
AAM-EPP	3:49847642:A:G	rs1799844	3	49847642	G	A	0.163	9.38E-11	0.832953	rs11130207	7	UBA7	0	intronic	6.761	NA	4	4	1	1	0
LMC-EM	11:30295232:C:T	rs4923629	11	30295232	C	T	0.329	9.48E-11	0.770113	rs605765	7	FSHB	38423	intergenic	2.051	7	14	15	0	1	0
LMC-DE	6:151816537:A:T	rs77600257	6	151816537	T	A	0.04871	9.48E-11	0.872696	rs80347787	2	CCDC170	0	intronic	0.035	5	1	13	1	1	0
AAM-EM	10:90143657:C:T	rs1648520	10	90143657	T	C	0.4036	9.50E-11	0.696955	rs7921352	20	RNLS	0	intronic	6.796	NA	5	15	1	0	0
LMC-EM	11:30278829:A:G	rs4531442	11	30278829	A	G	0.329	9.51E-11	0.770113	rs605765	7	FSHB	22020	intergenic	5.69	2c	5	15	0	1	0
LMC-EM	11:30290012:A:G	rs11031022	11	30290012	G	A	0.329	9.52E-11	0.770113	rs605765	7	FSHB	33203	intergenic	0.635	7	9	15	0	1	0
FIM-EM	8:25243213:A:G	rs34068702	8	25243213	A	G	0.2922	9.53E-11	0.762394	rs6185	7	DOCK5	0	intronic	2.503	4	4	5	1	0	0
FIM-EM	8:25255017:A:C	rs12675289	8	25255017	A	C	0.2704	9.55E-11	0.877694	rs6185	7	DOCK5	0	intronic	5.195	6	4	5	1	1	0
AAM-EPP	3:49661634:C:T	rs62262673	3	49661634	C	T	0.16	9.56E-11	0.807055	rs11130207	7	BSN	0	intronic	1.661	7	5	15	1	1	0
LMC-DE	6:151766397:A:G	rs73783025	6	151766397	G	A	0.04871	9.57E-11	0.832037	rs80347787	2	RMND1	0	intronic	5.774	5	3	5	1	1	0
FIM-EO	2:11742458:A:G	rs72772088	2	11742458	A	G	0.3797	9.63E-11	0.716521	rs10693974	2	GREB1	0	intronic	1.772	5	2	15	1	0	0
AAM-EM	12:115118997:A:G	rs515746	12	115118997	G	A	0.4811	9.72E-11	0.779376	rs8853	30	TBX3	0	intronic	6.991	5	1	13	1	0	0
LMC-EM	11:30280075:C:T	rs7924960	11	30280075	C	T	0.329	9.73E-11	0.770113	rs605765	7	FSHB	23266	intergenic	1.042	7	5	15	0	1	0
LMC-EM	11:30282274:C:T	rs4244552	11	30282274	C	T	0.329	9.85E-11	0.770113	rs605765	7	FSHB	25465	intergenic	1.058	6	5	15	0	1	0
AAM-EPP	3:49809841:C:T	rs9870755	3	49809841	C	T	0.163	9.88E-11	0.832953	rs11130207	7	IP6K1	0	intronic	8.334	6	4	5	1	1	0
FIM-EO	3:127911820:A:G	rs2811512	3	127911820	G	A	0.2694	9.90E-11	0.989333	rs2999048	3	EEFSEC	0	intronic	7.801	NA	5	15	1	1	0
LMC-EM	11:30290814:G:T	rs61886090	11	30290814	G	T	0.328	9.91E-11	0.774589	rs605765	7	FSHB	34005	intergenic	0.025	6	9	15	0	1	0
LMC-EM	11:30240470:A:T	rs521271	11	30240470	T	A	0.333	9.94E-11	0.789718	rs605765	7	FSHB	12092	intergenic	3.522	7	7	15	0	1	0
AAM-EPP	3:49812866:C:T	rs7613603	3	49812866	C	T	0.163	9.96E-11	0.832953	rs11130207	7	IP6K1:RP13-3	0:00	ncRNA_exoni	4.476	6	2	5	1	1	0
FIM-EO	2:11732547:G:GAATCAC	rs58502716	2	11732547	G	GAATCAC	0.3887	9.97E-11	0.978192	rs10693974	2	GREB1	0	intronic	2.19	NA	4	15	1	0	0
LMC-EM	11:30281066:C:T	rs11031014	11	30281066	T	C	0.329	1.00E-10	0.770113	rs605765	7	FSHB	24257	intergenic	1.571	7	5	15	0	1	0
AAM-EPP	3:49834571:A:G	rs6809879	3	49834571	A	G	0.16	1.01E-10	0.807055	rs11130207	7	CDHR4	0	intronic	8.798	1f	5	15	1	1	0
LMC-EM	11:30267038:C:T	rs515997	11	30267038	T	C	0.329	1.01E-10	0.770113	rs605765	7	FSHB	10229	intergenic	1.197	7	7	15	0	1	0
LMC-EM	11:30292176:G:T	rs11031024	11	30292176	G	T	0.328	1.02E-10	0.774589	rs605765	7	FSHB	35367	intergenic	11.95	5	7	15	0	1	0
FIM-EO	3:127904943:C:T	rs2811482	3	127904943	C	T	0.2684	1.03E-10	0.994671	rs2999048	3	EEFSEC	0	intronic	2.294	5	5	15	1	1	0
AAM-EM	10:90182963:A:G	rs10887817	10	90182963	G	A	0.4195	1.04E-10	0.821153	rs7921352	20	RNLS	0	intronic	1.289	7	5	15	1	0	0
AAM-EPP	3:49811047:A:G	rs148383796	3	49811047	G	A	0.164	1.04E-10	0.826867	rs11130207	7	IP6K1	0	intronic	0.085	7	4	5	1	1	0
AAM-EM	10:90231562:A:G	rs1169043	10	90231562	A	G	0.3996	1.04E-10	0.858438	rs7921352	20	RNLS	0	intronic	3.483	NA	5	15	1	0	0
FIM-EO	3:127888347:G:T	rs2955120	3	127888347	T	G	0.2684	1.04E-10	0.994671	rs2999048	3	EEFSEC	0	intronic	7.116	7	5	5	1	1	0
FIM-EM	2:11748585:A:C	rs4669755	2	11748585	C	A	0.33	1.04E-10	0.741989	rs2358039	2	GREB1	0	intronic	0.918	5	4	15	1	0	0
AAM-EPP	3:128083332:A:G	rs1702122	3	128083332	A	G	0.2515	1.04E-10	0.803074	rs4857878	8	EEFSEC	0	intronic	0.407	NA	4	5	1	1	0
LMC-EM	11:30292350:A:G	rs11031025	11	30292350	G	A	0.329	1.05E-10	0.770113	rs605765	7	FSHB	35541	intergenic	5.92	5	14	15	0	1	0
LMC-EM	1:199891438:A:C	rs6670899	1	199891438	C	A	0.3946	1.05E-10	1	rs6670899	1	RP11-567B20	12661	intergenic	5.765	6	9	15	0	0	0
LMC-EM	11:30301607:A:G	rs12363576	11	30301607	G	A	0.328	1.05E-10	0.767447	rs605765	7	ARL14EP	42990	intergenic	2.468	5	9	15	0	1	0
AAM-EPP	3:50187596:C:G	rs2526398	3	50187596	G	C	0.3419	1.05E-10	0.892108	rs1046956	7	RP11-493K19	0	ncRNA_intron	1.995	2b	2	15	0	1	0
FIM-EO	3:127895986:A:G	rs1554535	3	127895986	G	A	0.2684	1.06E-10	0.994671	rs2999048	3	EEFSEC	0	intronic	0.587	NA	5	5	1	1	0
AAM-EM	6:151849670:C:T	rs6919923	6	151849670	T	C	0.4036	1.06E-10	1	rs12210735	14	CCDC170	0	intronic	9.585	7	9	15	1	0	0
AAM-EPP	3:49997193:C:T	rs13083396	3	49997193	C	T	0.2485	1.07E-10	1	rs13083396	7	RBM6	0	intronic	0.304	7	5	5	1	1	0
FIM-EO	3:127888067:A:G	rs872267	3	127888067	G	A	0.2684	1.08E-10	0.994671	rs2999048	3	EEFSEC	0	intronic	0.895	NA	2	5	1	1	0
LMC-ERSV	6:151819857:C:T	rs115429675	6	151819857	C	T	0.04771	1.08E-10	0.784245	rs147230474	2	CCDC170	0	intronic	0.081	5	2	15	1	1	0
LMC-EM	11:30294329:C:T	rs10835643	11	30294329	T	C	0.329	1.09E-10	0.770113	rs605765	7	FSHB	37520	intergenic	1.095	6	14	15	0	1	0
LMC-EM	11:30301868:C:T	rs4923631	11	30301868	T	C	0.328	1.09E-10	0.767447	rs605765	7	ARL14EP	42729	intergenic	8.217	5	9	15	0	1	0
LMC-EM	11:30225324:C:T	rs118175327	11	30225324	C	T	0.03579	1.10E-10	1	rs118175327	7	FSHB	27238	intergenic	0.634	7	7	15	0	0	0
AAM-EPP	3:49808274:G:T	rs62262730	3	49808274	T	G	0.163	1.10E-10	0.832953	rs11130207	7	IP6K1	0	intronic	0.143	5	4	5	1	1	0
LMC-EM	11:30297374:C:T	rs11031027	11	30297374	T	C	0.328	1.10E-10	0.767447	rs605765	7	FSHB	40565	intergenic	3.207	6	14	15	0	1	0
FIM-EO	11:30195542:G:T	rs4923626	11	30195542	T	G	0.3767	1.11E-10	1	rs4923626	9	RP4-562D20.1	6688	intergenic	2.998	6	7	15	0	1	0
LMC-EM	11:30304455:C:T	rs11031030	11	30304455	T	C	0.328	1.11E-10	0.767447	rs605765	7	ARL14EP	40142	intergenic	11.93	5	5	15	0	1	0
AAM-EM	12:50285780:G:T	rs73116335	12	50285780	T	G	0.3618	1.11E-10	0.964773	rs11169199	28	FAIM2	0	intronic	3.427	5	4	14	1	0	0
FIM-EM	2:11729606:A:G	rs2358039	2	11729606	A	G	0.3499	1.12E-10	1	rs2358039	2	GREB1	0	intronic	4.032	NA	4	15	1	0	0
FIM-EO	11:30239283:A:G	rs553406	11	30239283	A	G	0.4433	1.13E-10	0.891759	rs621448	9	FSHB	13279	intergenic	8.195	NA	9	15	0	1	0
AAM-EM	10:90235457:C:T	rs2477956	10	90235457	T	C	0.3996	1.14E-10	0.858438	rs7921352	20	RNLS	0	intronic	4.502	NA	5	15	1	0	0
FIM-EO	3:127907929:A:G	rs2811514	3	127907929	A	G	0.2694	1.14E-10	0.989333	rs2999048	3	EEFSEC	0	intronic	3.329	NA	5	15	1	1	0
AAM-EPP	3:49991167:G:T	rs11709503	3	49991167	G	T	0.4443	1.15E-10	0.895973	rs6774354	7	RBM6	0	intronic	0.758	7	4	5	1	1	0
LMC-EM	11:30303443:A:G	rs4359180	11	30303443	A	G	0.328	1.15E-10	0.767447	rs605765	7	ARL14EP	41154	intergenic	2.357	5	2	15	0	1	0
AAM-EPP	3:49673662:A:G	rs62262675	3	49673662	A	G	0.16	1.16E-10	0.807055	rs11130207	7	BSN	0	intronic	10.13	7	5	15	1	1	0
AAM-EPP	3:50187790:G:T	rs2526397	3	50187790	G	T	0.3419	1.17E-10	0.892108	rs1046956	7	RP11-493K19	0	ncRNA_intron	6.62	NA	2	15	0	1	0
AAM-EPP	3:49988065:A:G	rs11706185	3	49988065	G	A	0.4443	1.18E-10	0.895973	rs6774354	7	RBM6	0	intronic	3.142	5	5	5	1	1	0
AAM-EM	10:90154277:C:T	rs792236	10	90154277	C	T	0.4364	1.18E-10	0.767264	rs7921352	20	RNLS	0	intronic	0.061	6	5	15	1	0	0
AAM-EM	10:90233105:G:T	rs2576181	10	90233105	T	G	0.3996	1.20E-10	0.858438	rs7921352	20	RNLS	0	intronic	5.156	NA	5	15	1	0	0
FIM-EO	11:30239353:C:T	rs553190	11	30239353	C	T	0.4423	1.21E-10	0.887332	rs621448	9	FSHB	13209	intergenic	6.692	NA	9	15	0	1	0
AAM-EM	6:151852555:C:T	rs9479059	6	151852555	T	C	0.4036	1.22E-10	1	rs12210735	14	CCDC170	0	intronic	3.826	6	9	15	1	0	0
AAM-EM	10:90232512:C:T	rs2185786	10	90232512	T	C	0.3996	1.22E-10	0.858438	rs7921352	20	RNLS	0	intronic	1.763	NA	5	15	1	0	0
AAM-EPP	3:128075398:G:T	rs1735546	3	128075398	T	G	0.2545	1.23E-10	0.847459	rs4857878	8	EEFSEC	0	intronic	6.983	NA	4	5	1	1	0
AAM-EM	6:151851428:C:T	rs11753987	6	151851428	T	C	0.4036	1.23E-10	1	rs12210735	14	CCDC170	0	intronic	3.047	7	9	15	1	0	0
LMC-ERSV	6:151814453:C:T	rs79554419	6	151814453	C	T	0.04771	1.23E-10	0.784245	rs147230474	2	CCDC170	711	upstream	0.415	5	1	13	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:49737323:A:G	rs11130217	3	49737323	A	G	0.166	1.24E-10	0.85584	rs11130207	7	RNF123	0	intronic	6.583	1f	4	4	1	1	0
FIM-EM	8:25320594:C:T	rs12675625	8	25320594	T	C	0.2485	1.25E-10	0.760387	rs6185	7	CDCA2	0	intronic	9.281	7	4	15	1	1	0
LMC-EM	4:55991827:A:G	rs9994560	4	55991827	A	G	0.4841	1.26E-10	1	rs9994560	4	KDR	70	upstream	12.6	2b	1	10	1	0	0
FIM-EM	8:25321845:A:T	rs35698191	8	25321845	T	A	0.2485	1.28E-10	0.760387	rs6185	7	CDCA2	0	intronic	4.36	7	4	15	1	1	0
FIM-EPP	8:25320594:C:T	rs12675625	8	25320594	T	C	0.2485	1.29E-10	1	rs12675625	7	CDCA2	0	intronic	9.281	7	4	15	1	1	0
FIM-EO	12:95679109:A:G	rs12423799	12	95679109	G	A	0.337	1.30E-10	1	rs12423799	10	VEZT	0	intronic	2.756	6	4	5	1	1	0
FIM-EO	11:30239470:A:G	rs618611	11	30239470	G	A	0.4394	1.30E-10	0.874734	rs621448	9	FSHB	13092	intergenic	3.149	NA	9	15	0	1	0
AAM-EPP	3:49769419:C:G	rs62262722	3	49769419	G	C	0.16	1.30E-10	0.807055	rs11130207	7	IP6K1	0	intronic	2.254	7	4	4	1	1	0
FIM-EO	12:95642168:A:G	rs10161330	12	95642168	A	G	0.335	1.30E-10	0.991508	rs12423799	10	VEZT	0	intronic	3.909	5	5	5	1	1	0
FIM-EO	11:30240217:C:T	rs523875	11	30240217	C	T	0.4423	1.30E-10	0.887332	rs621448	9	FSHB	12345	intergenic	7.462	NA	7	15	0	1	0
AAM-EPP	3:49690199:A:G	rs4855885	3	49690199	G	A	0.166	1.31E-10	0.85584	rs11130207	7	BSN	0	exonic	0.23	NA	4	15	1	1	0
LMC-EM	4:55992366:A:G	rs2071559	4	55992366	A	G	0.4851	1.31E-10	0.979543	rs9994560	4	KDR	609	upstream	0.529	NA	1	10	1	0	0
LMC-ERSV	6:151762610:C:G	rs6940667	6	151762610	G	C	0.04871	1.34E-10	0.724406	rs147230474	2	RMND1	0	intronic	4.86	4	3	5	1	1	0
AAM-EM	3:50176739:A:C	rs2624846	3	50176739	C	A	0.2495	1.35E-10	0.875504	rs13083396	8	RP11-493K19	0	ncRNA_intron	9.98	NA	2	7	0	1	0
AAM-EPP	3:128094493:C:T	rs1702119	3	128094493	T	C	0.2525	1.36E-10	0.807787	rs4857878	8	EEFSEC	0	intronic	5.356	NA	2	5	1	1	0
FIM-EO	12:95678387:A:G	rs12371088	12	95678387	A	G	0.337	1.36E-10	1	rs12423799	10	VEZT	0	intronic	6.1	7	4	4	1	1	0
FIM-EM	11:30220739:A:T	rs7925930	11	30220739	A	T	0.3797	1.37E-10	0.98011	rs605765	9	FSHB	31823	intergenic	1.193	6	5	15	0	1	0
FIM-EO	2:11728080:A:G	rs4669753	2	11728080	G	A	0.3926	1.39E-10	0.969693	rs10693974	2	GREB1	0	UTR3	3.199	7	4	15	1	0	0
AAM-EPP	6:151767483:A:G	rs76363440	6	151767483	A	G	0.168	1.39E-10	0.648342	rs7740302	11	RMND1	0	intronic	1.359	4	2	5	1	1	0
AAM-EM	10:90160392:C:T	rs792230	10	90160392	C	T	0.4364	1.40E-10	0.767264	rs7921352	20	RNLS	0	intronic	8.087	5	5	15	1	0	0
FIM-EPP	8:25321845:A:T	rs35698191	8	25321845	T	A	0.2485	1.40E-10	1	rs12675625	7	CDCA2	0	intronic	4.36	7	4	15	1	1	0
FIM-EM	11:30243795:C:G	rs1782508	11	30243795	C	G	0.331	1.41E-10	0.761222	rs605765	9	FSHB	8767	intergenic	5.899	6	7	15	0	1	0
AAM-EM	3:49611666:G:T	rs11130207	3	49611666	T	G	0.1471	1.41E-10	1	rs11130207	8	BSN	0	intronic	6.614	7	5	15	1	1	0
AAM-EPP	10:90150837:C:T	rs796945	10	90150837	C	T	0.3777	1.41E-10	0.781524	rs7921352	15	RNLS	0	intronic	7.471	7	5	15	1	0	0
AAM-EPP	10:90152085:A:G	rs1067839	10	90152085	A	G	0.3837	1.42E-10	0.957265	rs7921352	15	RNLS	0	intronic	2.704	4	1	15	1	0	0
FIM-EM	11:30288532:A:G	rs140000637	11	30288532	G	A	0.329	1.42E-10	0.770113	rs605765	9	FSHB	31723	intergenic	0.662	7	14	15	0	1	0
AAM-EM	3:50205642:C:G	rs2624838	3	50205642	C	G	0.336	1.43E-10	0.83587	rs35137368	8	SEMA3F	0	intronic	1.811	5	2	7	1	1	0
FIM-EO	3:127867397:A:G	rs67451924	3	127867397	G	A	0.2634	1.44E-10	0.968297	rs2999048	3	RUVBL1	0	intronic	0.551	5	5	15	1	1	0
FIM-EO	11:30288698:G:T	rs7944484	11	30288698	T	G	0.4453	1.44E-10	0.854772	rs621448	9	FSHB	31889	intergenic	1.007	6	14	15	0	1	0
AAM-EM	12:50285562:C:T	rs17201502	12	50285562	C	T	0.339	1.44E-10	0.861297	rs11169199	28	FAIM2	0	intronic	0.977	5	4	14	1	0	0
FIM-EM	11:30207843:A:G	rs17623478	11	30207843	A	G	0.3738	1.44E-10	0.974142	rs4923626	9	RP4-562D20.1	18989	intergenic	4.781	7	9	15	0	1	0
FIM-EO	2:11739368:G:T	rs10929760	2	11739368	G	T	0.3797	1.45E-10	0.693693	rs10693974	2	GREB1	0	intronic	2.543	7	4	15	1	0	0
AAM-EPP	3:128092102:A:G	rs1735538	3	128092102	A	G	0.2535	1.46E-10	0.802632	rs4857878	8	EEFSEC	0	intronic	0.168	NA	4	5	1	1	0
FIM-EO	3:127878817:C:T	rs2999049	3	127878817	T	C	0.2634	1.48E-10	0.968297	rs2999048	3	EEFSEC	0	intronic	2.222	7	4	5	1	1	0
LMC-EM	11:30234782:C:T	rs540948	11	30234782	T	C	0.4205	1.49E-10	0.880628	rs1716021	7	FSHB	17780	intergenic	4.028	NA	7	15	0	1	0
FIM-EO	12:95661809:C:T	rs10859863	12	95661809	T	C	0.4433	1.52E-10	0.652333	rs12423799	10	VEZT	0	intronic	11.91	7	4	5	1	1	0
FIM-EM	11:30303443:A:G	rs4359180	11	30303443	A	G	0.328	1.52E-10	0.767447	rs605765	9	ARL14EP	41154	intergenic	2.357	5	2	15	0	1	0
FIM-EM	11:30284949:C:T	rs77966083	11	30284949	T	C	0.329	1.52E-10	0.770113	rs605765	9	FSHB	28140	intergenic	0.095	7	14	15	0	1	0
AAM-EPP	6:151762344:A:G	rs73783018	6	151762344	A	G	0.17	1.52E-10	0.657761	rs7740302	11	RMND1	0	intronic	4.466	2b	1	5	1	1	0
FIM-EO	12:95676053:T:TG	rs3215007	12	95676053	T	TG	0.4433	1.52E-10	0.65886	rs12423799	10	VEZT	0	intronic	10.92	NA	4	4	1	0	0
FIM-EPP	11:30261968:A:G	rs7951733	11	30261968	A	G	0.05169	1.53E-10	0.62051	rs80268871	8	FSHB	5159	intergenic	0.16	5	9	15	0	0	0
AAM-EM	12:50285061:C:T	rs297924	12	50285061	T	C	0.3757	1.53E-10	0.906772	rs11169199	28	FAIM2	0	intronic	1.062	NA	4	14	1	0	0
AAM-EPP	3:50032008:G:T	rs17657664	3	50032008	T	G	0.4453	1.53E-10	0.900037	rs6774354	7	RBM6	0	intronic	7.297	5	4	5	1	1	0
AAM-EM	3:50044006:A:T	rs7635601	3	50044006	T	A	0.2435	1.55E-10	0.950815	rs13083396	8	RBM6	0	intronic	7.237	1f	4	5	1	1	0
LMC-DE	6:151799274:A:C	rs7762223	6	151799274	A	C	0.04771	1.55E-10	0.892122	rs80347787	2	C6orf211	8037	intergenic	0.477	7	5	15	0	1	0
FIM-EM	11:30302923:A:G	rs11031028	11	30302923	G	A	0.328	1.55E-10	0.767447	rs605765	9	ARL14EP	41674	intergenic	0.28	7	7	15	0	1	0
FIM-EO	12:95675407:C:T	rs4762166	12	95675407	T	C	0.337	1.56E-10	1	rs12423799	10	VEZT	0	intronic	0.717	7	4	5	1	1	0
AAM-EM	19:18829770:A:G	rs11668587	19	18829770	A	G	0.3549	1.56E-10	1	rs11668587	33	CRTC1	0	intronic	3.473	5	4	5	1	0	0
FIM-EM	11:30295232:C:T	rs4923629	11	30295232	C	T	0.329	1.57E-10	0.770113	rs605765	9	FSHB	38423	intergenic	2.051	7	14	15	0	1	0
AAM-EPP	3:49996924:G:T	rs13079006	3	49996924	G	T	0.4453	1.57E-10	0.900037	rs6774354	7	RBM6	0	intronic	0.078	7	5	5	1	1	0
AAM-EM	6:151851339:A:G	rs11155795	6	151851339	G	A	0.4036	1.57E-10	1	rs12210735	14	CCDC170	0	intronic	0.459	7	9	15	1	0	0
AAM-EM	10:90246530:C:T	rs2148127	10	90246530	T	C	0.3718	1.57E-10	0.750091	rs7921352	20	RNLS	0	intronic	8.501	7	15	15	1	0	0
FIM-EM	11:30289511:C:T	rs7940387	11	30289511	C	T	0.329	1.58E-10	0.770113	rs605765	9	FSHB	32702	intergenic	0.413	7	9	15	0	1	0
LMC-ERSV	6:151765511:G:T	rs3800278	6	151765511	G	T	0.04871	1.58E-10	0.724406	rs147230474	2	RMND1	0	intronic	0.925	5	4	5	1	1	0
FIM-EPP	8:25280800:C:G	rs6185	8	25280800	C	G	0.2425	1.59E-10	0.762394	rs34068702	7	GNRH1	0	exonic	12.21	7	4	4	1	1	0
FIM-EM	11:30287070:A:G	rs34609938	11	30287070	G	A	0.33	1.60E-10	0.766488	rs605765	9	FSHB	30261	intergenic	0.575	7	14	15	0	1	0
FIM-EO	3:127856573:A:T	rs6414310	3	127856573	T	A	0.2634	1.60E-10	0.968297	rs2999048	3	RUVBL1	0	intronic	7.358	6	5	15	1	1	0
FIM-EO	2:11728089:C:T	rs4669754	2	11728089	C	T	0.3956	1.61E-10	0.965959	rs10693974	2	GREB1	0	UTR3	0.004	7	4	15	1	0	0
LMC-EM	4:55992105:C:G	rs28695311	4	55992105	G	C	0.4831	1.63E-10	0.987752	rs9994560	4	KDR	348	upstream	10.74	4	1	10	1	0	0
FIM-EM	11:30290012:A:G	rs11031022	11	30290012	G	A	0.329	1.63E-10	0.770113	rs605765	9	FSHB	33203	intergenic	0.635	7	9	15	0	1	0
AAM-EPP	3:50033228:C:T	rs17657688	3	50033228	T	C	0.4453	1.64E-10	0.900037	rs6774354	7	RBM6	0	intronic	5.743	6	4	5	1	1	0
AAM-EPP	10:90152140:A:T	rs1067840	10	90152140	A	T	0.3837	1.64E-10	0.957265	rs7921352	15	RNLS	0	intronic	6.538	2b	1	15	1	0	0
LMC-EM	4:55991731:C:T	rs7667298	4	55991731	T	C	0.4473	1.65E-10	0.84895	rs9994560	4	KDR	0	UTR5	10.76	4	1	10	1	1	0
LMC-ERSV	6:151762169:C:T	rs3800275	6	151762169	T	C	0.04871	1.65E-10	0.724406	rs147230474	2	RMND1	0	intronic	5.742	2b	2	5	1	1	0
AAM-EM	3:49626306:A:G	rs6446285	3	49626306	G	A	0.1471	1.67E-10	1	rs11130207	8	BSN	0	intronic	2.326	6	1	15	1	1	0
FIM-EM	11:30285107:A:G	rs190167777	11	30285107	A	G	0.329	1.67E-10	0.770113	rs605765	9	FSHB	28298	intergenic	3.48	7	14	15	0	0	0
FIM-EM	11:30286207:G:T	rs141011680	11	30286207	T	G	0.329	1.67E-10	0.770113	rs605765	9	FSHB	29398	intergenic	0.501	6	14	15	0	1	0
FIM-EO	12:95673184:A:G	rs7967299	12	95673184	G	A	0.337	1.67E-10	1	rs12423799	10	VEZT	0	intronic	0.076	6	4	5	1	1	0
FIM-EO	12:95668437:G:T	rs3816838	12	95668437	G	T	0.336	1.67E-10	0.995753	rs12423799	10	VEZT	0	intronic	5.038	NA	4	4	1	1	0
LMC-ERSV	6:151762305:A:C	rs73783017	6	151762305	A	C	0.04871	1.68E-10	0.724406	rs147230474	2	RMND1	0	intronic	5.323	2b	1	5	1	1	0
FIM-EM	11:30271845:C:T	rs673740	11	30271845	C	T	0.329	1.68E-10	0.770113	rs605765	9	FSHB	15036	intergenic	0.03	NA	9	15	0	1	0
FIM-EM	11:30274776:A:G	rs61179368	11	30274776	A	G	0.328	1.68E-10	0.774589	rs605765	9	FSHB	17967	intergenic	3.619	6	5	15	0	1	0
FIM-EM	11:30282779:A:C	rs4267046	11	30282779	A	C	0.329	1.69E-10	0.770113	rs605765	9	FSHB	25970	intergenic	1.915	6	7	15	0	0	0
FIM-EO	12:95667337:C:T	rs4471514	12	95667337	C	T	0.4443	1.69E-10	0.649873	rs12423799	10	VEZT	0	intronic	9.509	7	4	5	1	1	0
FIM-EM	11:30287896:A:C	rs200742291	11	30287896	A	C	0.329	1.69E-10	0.770113	rs605765	9	FSHB	31087	intergenic	0.92	6	14	15	0	1	0
AAM-EM	10:90245519:A:T	rs2576176	10	90245519	A	T	0.3718	1.69E-10	0.750091	rs7921352	20	RNLS	0	intronic	1.103	7	14	15	1	0	0
FIM-EO	12:95668951:C:T	rs4762326	12	95668951	C	T	0.4433	1.70E-10	0.652333	rs12423799	10	VEZT	0	intronic	0.684	6	4	4	1	1	0
FIM-EM	11:30290814:G:T	rs61886090	11	30290814	G	T	0.328	1.70E-10	0.774589	rs605765	9	FSHB	34005	intergenic	0.025	6	9	15	0	1	0
AAM-EPP	6:151764648:A:G	rs59753385	6	151764648	A	G	0.17	1.71E-10	0.657761	rs7740302	11	RMND1	0	intronic	1.247	7	4	5	1	0	0
FIM-EM	11:30292176:G:T	rs11031024	11	30292176	G	T	0.328	1.71E-10	0.774589	rs605765	9	FSHB	35367	intergenic	11.95	5	7	15	0	1	0
FIM-EM	11:30297374:C:T	rs11031027	11	30297374	T	C	0.328	1.72E-10	0.767447	rs605765	9	FSHB	40565	intergenic	3.207	6	14	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-EM	11:30236544:C:T	rs555621	11	30236544	T	C	0.4185	1.72E-10	0.887244	rs1716021	7	FSHB	16018	intergenic		0.73	5	14	15	0	1	0
AAM-EPP	8:25248615:A:G	rs13261573	8	25248615	G	A	0.2545	1.72E-10	0.942505	rs6185	12	DOCK5	0	intronic		0.672	7	4	4	1	1	0
FIM-EO	12:95687497:A:T	rs7309252	12	95687497	A	T	0.4443	1.72E-10	0.656396	rs12423799	10	VEZT	0	intronic		5.189	7	4	5	1	1	0
FIM-EO	11:30190813:G:T	rs10501121	11	30190813	T	G	0.3738	1.73E-10	0.981441	rs4923626	9	RP4-562D20..	1959	intergenic		1.19	6	5	15	0	1	0
FIM-EM	11:30240470:A:T	rs521271	11	30240470	T	A	0.333	1.73E-10	0.789718	rs605765	9	FSHB	12092	intergenic		3.522	7	7	15	0	1	0
LMC-DE	6:151827204:C:T	rs7453575	6	151827204	T	C	0.04771	1.73E-10	0.892122	rs80347787	2	CCDC170	0	intronic		0.969	7	5	15	1	1	0
LMC-DE	6:151826134:A:G	rs7753324	6	151826134	G	A	0.04771	1.74E-10	0.892122	rs80347787	2	CCDC170	0	intronic		3.463	6	5	15	1	1	0
AAM-EM	19:18826975:C:T	rs10221489	19	18826975	C	T	0.3549	1.74E-10	1	rs11668587	33	CRTC1	0	intronic		7.94	1f		4	5	1	1	0
FIM-EO	12:95659012:C:T	rs1038652	12	95659012	C	T	0.336	1.74E-10	0.995753	rs12423799	10	VEZT	0	intronic		6.617	7	4	5	1	1	0
AAM-EPP	6:151769132:A:G	rs7741193	6	151769132	G	A	0.168	1.74E-10	0.648342	rs7740302	11	RMND1	0	intronic		1.952	6	4	5	1	1	0
FIM-EO	12:95658769:A:T	rs7957257	12	95658769	A	T	0.336	1.74E-10	0.995753	rs12423799	10	VEZT	0	intronic		5.971	7	4	5	1	1	0
FIM-EM	11:30286978:A:T	rs145052476	11	30286978	T	A	0.328	1.75E-10	0.774589	rs605765	9	FSHB	30169	intergenic		0.894	6	14	15	0	1	0
FIM-EM	11:30244235:C:T	rs653452	11	30244235	C	T	0.328	1.75E-10	0.774589	rs605765	9	FSHB	8327	intergenic		0.201	NA		7	15	0	1	0
FIM-EO	11:30189761:A:G	rs17622950	11	30189761	A	G	0.3728	1.75E-10	0.977739	rs4923626	9	RP4-562D20..	907	downstream		5.805	5	5	15	0	1	0
FIM-EM	11:30287046:A:G	rs79028439	11	30287046	A	G	0.329	1.75E-10	0.770113	rs605765	9	FSHB	30237	intergenic		0.973	7	14	15	0	1	0
FIM-EO	11:30190076:A:G	rs1417016	11	30190076	A	G	0.3728	1.76E-10	0.977739	rs4923626	9	RP4-562D20..	1222	intergenic		3.798	NA		5	15	0	1	0
AAM-EPP	3:50072152:A:C	rs9844201	3	50072152	A	C	0.4463	1.76E-10	0.896247	rs6774354	7	RBM6	0	intronic		0.819	6	4	5	1	1	0
FIM-EO	11:30190139:A:G	rs1417015	11	30190139	G	A	0.3738	1.76E-10	0.973963	rs4923626	9	RP4-562D20..	1285	intergenic		2.608	NA		5	15	0	1	0
AAM-EM	3:49615624:G:T	rs11130208	3	49615624	G	T	0.1471	1.76E-10	1	rs11130207	8	BSN	0	intronic		1.262	6	5	15	1	1	0
FIM-EM	11:30301607:A:G	rs12363576	11	30301607	G	A	0.328	1.76E-10	0.767447	rs605765	9	ARL14EP	42990	intergenic		2.468	5	9	15	0	1	0
LMC-ERSV	6:151823901:A:C	rs7762963	6	151823901	A	C	0.04771	1.76E-10	0.784245	rs147230474	2	CCDC170	0	intronic		0.894	4	2	15	1	1	0
FIM-EM	11:30301868:C:T	rs4923631	11	30301868	T	C	0.328	1.76E-10	0.767447	rs605765	9	ARL14EP	42729	intergenic		8.217	5	9	15	0	1	0
FIM-EM	11:30274686:A:G	rs60781817	11	30274686	G	A	0.329	1.77E-10	0.770113	rs605765	9	FSHB	17877	intergenic		2.36	6	5	15	0	1	0
AAM-EPP	6:151847647:A:G	rs12210735	6	151847647	G	A	0.4036	1.77E-10	1	rs12210735	11	CCDC170	0	intronic		0.387	7	9	15	1	0	0
AAM-EPP	6:151765356:G:T	rs3800277	6	151765356	G	T	0.17	1.77E-10	0.657761	rs7740302	11	RMND1	0	intronic		6.87	5	4	5	1	0	0
FIM-EM	11:30302023:A:C	rs4923632	11	30302023	C	A	0.327	1.77E-10	0.771927	rs605765	9	ARL14EP	42574	intergenic		1.291	5	7	15	0	1	0
FIM-EO	12:95672642:C:T	rs11107959	12	95672642	T	C	0.4433	1.78E-10	0.652333	rs12423799	10	VEZT	0	intronic		5.721	7	4	5	1	1	0
FIM-EM	11:30292350:A:G	rs11031025	11	30292350	G	A	0.329	1.78E-10	0.770113	rs605765	9	FSHB	35541	intergenic		5.92	5	14	15	0	1	0
AAM-EPP	3:50101468:A:G	rs13097720	3	50101468	G	A	0.2505	1.78E-10	0.98904	rs13083396	7	RBM6	0	intronic		2.226	6	4	4	1	1	0
FIM-EM	11:30304455:C:T	rs11031030	11	30304455	T	C	0.328	1.79E-10	0.767447	rs605765	9	ARL14EP	40142	intergenic		11.93	5	5	15	0	1	0
AAM-EM	10:90168367:C:T	rs792209	10	90168367	C	T	0.4364	1.79E-10	0.767264	rs7921352	20	RNLS	0	intronic		0.817	6	2	15	1	0	0
FIM-EM	11:30294329:C:T	rs10835643	11	30294329	T	C	0.329	1.79E-10	0.770113	rs605765	9	FSHB	37520	intergenic		1.095	6	14	15	0	1	0
FIM-EM	11:30270667:A:G	rs689233	11	30270667	G	A	0.332	1.79E-10	0.77824	rs605765	9	FSHB	13858	intergenic		1.935	NA		9	15	0	1	0
FIM-EM	11:30243868:G:T	rs1782507	11	30243868	G	T	0.328	1.79E-10	0.774589	rs605765	9	FSHB	8694	intergenic		1.547	NA		7	15	0	1	0
FIM-EM	11:30279609:C:T	rs1933347	11	30279609	T	C	0.328	1.80E-10	0.774589	rs605765	9	FSHB	22800	intergenic		0.289	7	5	15	0	1	0
AAM-EPP	3:127994160:A:G	rs2811529	3	127994160	G	A	0.2704	1.80E-10	0.963085	rs4857878	8	EEFSEC	0	intronic		3.578	NA		4	5	1	1	0
FIM-EO	12:95658282:A:G	rs10777679	12	95658282	A	G	0.4433	1.80E-10	0.652333	rs12423799	10	VEZT	0	intronic		0.387	6	4	5	1	1	0
AAM-EM	3:49609794:G:T	rs6797299	3	49609794	G	T	0.1481	1.80E-10	0.99226	rs11130207	8	BSN	0	intronic		0.104	5	5	15	1	1	0
AAM-EM	3:49609477:C:G	rs1532204	3	49609477	C	G	0.1471	1.81E-10	1	rs11130207	8	BSN	0	intronic		0.428	5	5	15	1	1	0
FIM-EO	11:30191237:G:T	rs7128357	11	30191237	G	T	0.3738	1.81E-10	0.981441	rs4923626	9	RP4-562D20..	2383	intergenic		0.075	5	5	15	0	1	0
FIM-EO	2:11727087:G:T	rs17529680	2	11727087	G	T	0.329	1.81E-10	0.744641	rs10693974	2	GREB1	0	intronic		1.278	5	4	15	1	0	0
LMC-EM	3:128115381:A:G	rs1735527	3	128115381	A	G	0.1352	1.81E-10	0.97486	rs2999033	3	EEFSEC	0	intronic		0.75	NA		4	15	1	1	0
AAM-EPP	6:151756612:A:G	rs8180642	6	151756612	A	G	0.3956	1.82E-10	0.961343	rs9479041	11	RMND1	0	intronic		11.55	7	4	5	1	1	0
LMC-EM	11:30232381:C:T	rs494779	11	30232381	C	T	0.4175	1.82E-10	0.883171	rs1716021	7	FSHB	20181	intergenic		1.167	NA		5	15	0	1	0
FIM-EM	11:30282274:C:T	rs4244552	11	30282274	C	T	0.329	1.84E-10	0.770113	rs605765	9	FSHB	25465	intergenic		1.058	6	5	15	0	1	0
AAM-EM	16:29911260:A:G	rs7189550	16	29911260	G	A	0.33	1.84E-10	1	rs7189550	32	SEZ6L2	391	upstream		8.099	4	1	1	1	1	0
AAM-EM	10:90089426:C:T	rs10887804	10	90089426	T	C	0.4423	1.84E-10	1	rs10887804	20	RNLS	0	intronic		3.414	7	5	15	1	0	0
LMC-EM	2:49389140:C:T	rs55926033	2	49389140	C	T	0.1461	1.85E-10	0.903906	rs4971681	2	FSHR	7463	intergenic		8.61	6	5	15	0	0	0
LMC-EM	11:30338275:A:T	rs10767835	11	30338275	T	A	0.4433	1.85E-10	0.765067	rs1716021	7	ARL14EP	6322	intergenic		6.122	5	7	15	0	1	0
AAM-EM	10:90166989:C:T	rs792205	10	90166989	C	T	0.4364	1.85E-10	0.767264	rs7921352	20	RNLS	0	intronic		7.756	7	5	15	1	0	0
AAM-EPP	3:50031840:C:T	rs35012435	3	50031840	C	T	0.2495	1.85E-10	0.994517	rs13083396	7	RBM6	0	intronic		11.4	7	4	5	1	1	0
LMC-EM	11:30234432:A:G	rs601640	11	30234432	G	A	0.4175	1.86E-10	0.883171	rs1716021	7	FSHB	18130	intergenic		0.97	NA		5	15	0	1	0
AAM-EPP	3:50025006:C:T	rs13082703	3	50025006	T	C	0.4453	1.86E-10	0.900037	rs6774354	7	RBM6	0	intronic		1.939	6	4	5	1	1	0
FIM-EO	11:30208486:A:C	rs10835634	11	30208486	A	C	0.3728	1.86E-10	0.985217	rs4923626	9	RP4-562D20..	19632	intergenic		2.714	7	9	15	0	1	0
FIM-EM	11:30280075:C:T	rs7924960	11	30280075	C	T	0.329	1.86E-10	0.770113	rs605765	9	FSHB	23266	intergenic		1.042	7	5	15	0	1	0
FIM-EM	11:30288586:G:T	rs9732252	11	30288586	G	T	0.328	1.86E-10	0.766635	rs605765	9	FSHB	31777	intergenic		0.434	7	14	15	0	1	0
LMC-ERSV	6:151712026:A:G	rs139683250	6	151712026	G	A	0.03976	1.87E-10	0.840834	rs147230474	2	ZBTB2	0	intronic		15.14	4	1	1	1	1	0
AAM-EM	10:90054268:A:G	rs11202702	10	90054268	G	A	0.4493	1.88E-10	0.923089	rs10887804	20	RNLS	0	intronic		0.092	7	5	15	1	0	0
FIM-EM	11:30281066:C:T	rs11031014	11	30281066	T	C	0.329	1.89E-10	0.770113	rs605765	9	FSHB	24257	intergenic		1.571	7	5	15	0	1	0
LMC-EM	11:30338392:C:T	rs10767836	11	30338392	T	C	0.4443	1.89E-10	0.756104	rs1716021	7	ARL14EP	6205	intergenic		2.84	4	7	15	0	1	0
AAM-EPP	3:50062878:A:G	rs13071931	3	50062878	G	A	0.2505	1.89E-10	0.98904	rs13083396	7	RBM6	0	intronic		0.311	5	4	5	1	1	0
LMC-EM	11:30324475:A:T	rs1933348	11	30324475	T	A	0.4433	1.89E-10	0.765067	rs1716021	7	ARL14EP	20122	intergenic		1.135	6	14	15	0	1	0
LMC-EM	11:30323189:C:T	rs1933349	11	30323189	C	T	0.4433	1.90E-10	0.765067	rs1716021	7	ARL14EP	21408	intergenic		4.075	NA		9	15	0	1	0
FIM-EO	11:30288255:A:T	rs11031021	11	30288255	T	A	0.4483	1.90E-10	0.852983	rs621448	9	FSHB	31446	intergenic		1.383	6	14	15	0	1	0
FIM-EO	11:30288256:A:C	rs10835641	11	30288256	C	A	0.4483	1.90E-10	0.852983	rs621448	9	FSHB	31447	intergenic		0.65	6	14	15	0	1	0
AAM-EM	10:90164478:A:C	rs1342451	10	90164478	C	A	0.4364	1.90E-10	0.767264	rs7921352	20	RNLS	0	intronic		8.81	5	5	15	1	0	0
FIM-EM	11:30274837:A:T	rs60968445	11	30274837	A	T	0.328	1.90E-10	0.774589	rs605765	9	FSHB	18028	intergenic		0.864	6	5	15	0	0	0
AAM-EPP	3:50008864:C:T	rs7648174	3	50008864	C	T	0.4453	1.90E-10	0.900037	rs6774354	7	RBM6	0	intronic		1.693	7	4	5	1	1	0
FIM-EM	11:30278829:A:G	rs4531442	11	30278829	A	G	0.329	1.90E-10	0.770113	rs605765	9	FSHB	22020	intergenic		5.69	2c		5	15	0	1	0
FIM-EO	11:30208516:A:G	rs11030998	11	30208516	G	A	0.3688	1.91E-10	0.97068	rs4923626	9	RP4-562D20..	19662	intergenic		1.242	6	9	15	0	1	0
FIM-EM	11:30271406:C:T	rs675635	11	30271406	C	T	0.329	1.91E-10	0.770113	rs605765	9	FSHB	14597	intergenic		2.15	NA		9	15	0	1	0
AAM-EM	10:90248945:A:C	rs2437875	10	90248945	A	C	0.3708	1.91E-10	0.745602	rs7921352	20	RNLS	0	intronic		10.04	NA		1	15	1	0	0
LMC-ERSV	6:151763400:A:G	rs73783019	6	151763400	A	G	0.04871	1.92E-10	0.724406	rs147230474	2	RMND1	0	intronic		5.222	5	3	5	1	1	0
FIM-EM	11:30187958:A:C	rs12282076	11	30187958	C	A	0.3748	1.92E-10	0.970287	rs4923626	9	RP4-562D20..	751	upstream		0.064	5	5	15	0	1	0
FIM-EM	11:30187044:C:T	rs7102959	11	30187044	C	T	0.3748	1.92E-10	0.970287	rs4923626	9	RP4-562D20..	1665	intergenic		3.105	5	5	15	0	1	0
FIM-EM	11:30185696:C:T	rs11030988	11	30185696	C	T	0.3748	1.92E-10	0.970287	rs4923626	9	RP4-562D20..	3013	intergenic		4.328	7	5	15	0	1	0
FIM-EM	11:30186858:A:G	rs1819673	11	30186858	A	G	0.3748	1.92E-10	0.970287	rs4923626	9	RP4-562D20..	1851	intergenic		0.628	NA		5	15	0	1	0
AAM-EPP	3:50010571:G:T	rs2624819	3	50010571	G	T	0.4453	1.93E-10	0.900037	rs6774354	7	RBM6	0	intronic		0.255	6	2	4	1	1	0
FIM-EM	11:30188285:C:G	rs7930471	11	30188285	G	C	0.3748	1.93E-10	0.970287	rs4923626	9	RP4-562D20..	424	upstream		0.918	7	5	15	0	1	0
FIM-EM	11:30279268:C:G	rs1933345	11	30279268	G	C	0.329	1.94E-10	0.770113	rs605765	9	FSHB	22459	intergenic		2.986	6	5	15	0	1	0
FIM-EM	11:30272226:A:C	rs645161	11	30272226	A	C	0.332	1.94E-10	0.77824	rs605765	9	FSHB	15417	intergenic		4.389	NA		9	15	0	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-ERSV	6:151764665:C:T	rs7748785	6	151764665	C	T	0.04871	1.94E-10	0.724406	rs147230474	2	RMND1	0	intronic	0.565		5	4	5	1	1	0
AAM-EM	10:90156383:C:T	rs811558	10	90156383	T	C	0.4364	1.94E-10	0.767264	rs7921352	20	RNLS	0	intronic	10.25		7	5	15	1	0	0
AAM-EPP	11:30382899:C:T	rs12294104	11	30382899	C	T	0.1581	1.94E-10	0.908774	rs7949790	17	RP4-710M3.1	6795	intergenic	1.404		7	5	15	0	0	0
LMC-EM	11:30254268:G:T	rs580646	11	30254268	T	G	0.4443	1.95E-10	0.774782	rs1716021	7	FSHB	0	intronic	7.431		7	9	15	1	1	0
LMC-EM	11:30254550:C:T	rs595496	11	30254550	T	C	0.4443	1.95E-10	0.774782	rs1716021	7	FSHB	0	intronic	5.666	NA		9	15	1	1	0
FIM-EM	11:30188505:C:T	rs7945546	11	30188505	T	C	0.3748	1.95E-10	0.970287	rs4923626	9	RP4-562D20.2	204	upstream	10.91		7	5	15	0	1	0
FIM-EM	11:30275141:C:T	rs35458722	11	30275141	T	C	0.326	1.95E-10	0.768474	rs605765	9	FSHB	18332	intergenic	3.837		6	5	15	0	1	0
FIM-EM	11:30297809:C:T	rs7108615	11	30297809	T	C	0.331	1.95E-10	0.775509	rs605765	9	FSHB	41000	intergenic	0.55	NA		9	15	0	1	0
AAM-EPP	3:49982765:C:T	rs11721204	3	49982765	C	T	0.4374	1.95E-10	0.858651	rs6774354	7	RBM6	0	intronic	5.905		7	4	5	1	1	0
FIM-EM	11:30187905:G:T	rs12282163	11	30187905	G	T	0.3748	1.96E-10	0.970287	rs4923626	9	RP4-562D20.2	804	upstream	8.718		7	5	15	0	1	0
FIM-EM	11:30187216:C:T	rs552501	11	30187216	T	C	0.3757	1.96E-10	0.973939	rs4923626	9	RP4-562D20.2	1493	intergenic	5.808	NA		5	15	0	1	0
FIM-EM	11:30279354:C:T	rs1933346	11	30279354	C	T	0.329	1.96E-10	0.770113	rs605765	9	FSHB	22545	intergenic	0.056		6	5	15	0	1	0
FIM-EM	11:30187828:A:G	rs12282113	11	30187828	G	A	0.3748	1.96E-10	0.970287	rs4923626	9	RP4-562D20.2	881	upstream	0.082		7	5	15	0	1	0
FIM-EO	11:30192962:C:T	rs12793581	11	30192962	T	C	0.3738	1.97E-10	0.981441	rs4923626	9	RP4-562D20.2	4108	intergenic	2.886		6	5	15	0	1	0
FIM-EM	11:30275351:C:T	rs34487664	11	30275351	T	C	0.329	1.97E-10	0.770113	rs605765	9	FSHB	18542	intergenic	6.04		5	5	15	0	1	0
FIM-EO	12:95614953:C:T	rs10859853	12	95614953	T	C	0.336	1.97E-10	0.987225	rs12423799	10	VEZT	0	intronic	4.776		6	1	5	1	1	0
FIM-EM	11:30185395:G:T	rs11030985	11	30185395	G	T	0.3748	1.98E-10	0.970287	rs4923626	9	RP4-562D20.2	3314	intergenic	0.628		6	5	15	0	1	0
LMC-DE	6:151835307:G:T	rs117595301	6	151835307	G	T	0.04871	1.98E-10	0.914325	rs80347787	2	CCDC170	0	intronic	0.401	2c		5	15	1	1	0
FIM-EM	11:30185477:C:T	rs11030986	11	30185477	T	C	0.3748	1.99E-10	0.970287	rs4923626	9	RP4-562D20.2	3232	intergenic	0.093		7	5	15	0	1	0
AAM-EM	12:50270855:G:T	rs1893492	12	50270855	T	G	0.3479	1.99E-10	0.785142	rs11169199	28	FAIM2	0	intronic	7.574	NA		4	15	1	0	0
LMC-EM	11:30232615:A:G	rs492828	11	30232615	G	A	0.4175	1.99E-10	0.883171	rs1716021	7	FSHB	19947	intergenic	2.496	NA		5	15	0	1	0
AAM-EM	6:151853479:C:T	rs6939820	6	151853479	T	C	0.2187	2.00E-10	0.78777	rs4870030	14	CCDC170	0	intronic	0.111		7	5	15	1	0	0
AAM-EM	16:29911416:A:G	rs7189750	16	29911416	G	A	0.33	2.00E-10	1	rs7189550	32	ASPHD1	279	upstream	14.96		4	1	1	1	1	0
FIM-EM	11:30304726:C:G	rs11031032	11	30304726	G	C	0.331	2.00E-10	0.775509	rs605765	9	ARL14EP	39871	intergenic	1.219		5	5	15	0	1	0
LMC-ERSV	6:151816537:A:T	rs77600257	6	151816537	T	A	0.04871	2.01E-10	0.767263	rs147230474	2	CCDC170	0	intronic	0.035		5	1	13	1	1	0
AAM-EPP	3:50046112:A:G	rs6787892	3	50046112	G	A	0.2505	2.02E-10	0.98904	rs13083396	7	RBM6	0	intronic	0.023		6	4	5	1	1	0
LMC-DE	6:151788962:A:G	rs58952168	6	151788962	G	A	0.0497	2.02E-10	0.854017	rs80347787	2	C6orf211	0	intronic	0.555		7	4	5	1	1	0
FIM-EO	11:30192151:C:T	rs10501122	11	30192151	T	C	0.3738	2.02E-10	0.981441	rs4923626	9	RP4-562D20.2	3297	intergenic	4.787		6	5	15	0	1	0
FIM-EM	11:30266370:A:G	rs642126	11	30266370	G	A	0.329	2.03E-10	0.770113	rs605765	9	FSHB	9561	intergenic	3.967		7	7	15	0	1	0
FIM-EM	11:30293769:A:T	rs4267043	11	30293769	T	A	0.332	2.03E-10	0.77824	rs605765	9	FSHB	36960	intergenic	4.252		6	14	15	0	1	0
FIM-EM	11:30349694:A:T	rs2485398	11	30349694	A	T	0.331	2.04E-10	0.742846	rs605765	9	ARL14EP	0	UTR5	2.003		6	4	5	1	0	0
AAM-EM	3:49624095:G:T	rs9869256	3	49624095	T	G	0.1471	2.05E-10	1	rs11130207	8	BSN	0	intronic	4.536		7	13	15	1	1	0
FIM-EM	11:30267038:C:T	rs515997	11	30267038	T	C	0.329	2.06E-10	0.770113	rs605765	9	FSHB	10229	intergenic	1.197		7	7	15	0	1	0
LMC-EM	11:30247886:C:T	rs939433	11	30247886	C	T	0.4443	2.06E-10	0.774782	rs1716021	7	FSHB	4676	intergenic	0.55	NA		9	15	0	1	0
FIM-EO	11:30207239:A:G	rs7122731	11	30207239	G	A	0.3698	2.06E-10	0.974331	rs4923626	9	RP4-562D20.2	18385	intergenic	2.131		7	9	15	0	1	0
LMC-EM	11:30314253:C:T	rs11031038	11	30314253	T	C	0.4433	2.07E-10	0.765067	rs1716021	7	ARL14EP	30344	intergenic	2.189	2c		5	15	0	1	0
LMC-EM	11:30253189:G:T	rs550312	11	30253189	T	G	0.4443	2.07E-10	0.774782	rs1716021	7	FSHB	0	intronic	4.833		7	9	15	1	1	0
AAM-EPP	11:30381076:C:T	rs10835661	11	30381076	T	C	0.1571	2.08E-10	0.915956	rs7949790	17	RP4-710M3.1	8618	intergenic	8.247		7	5	15	0	0	0
FIM-EO	11:30197429:A:G	rs11030992	11	30197429	G	A	0.3708	2.08E-10	0.977998	rs4923626	9	RP4-562D20.2	8575	intergenic	6.161		7	9	15	0	1	0
AAM-EPP	3:49999086:A:G	rs62262114	3	49999086	G	A	0.4453	2.09E-10	0.900037	rs6774354	7	RBM6	0	intronic	1.752		7	4	5	1	1	0
FIM-EM	11:30186511:C:T	rs1361421	11	30186511	C	T	0.3748	2.09E-10	0.970287	rs4923626	9	RP4-562D20.2	2198	intergenic	1.307	NA		5	15	0	1	0
FIM-EO	11:30198439:C:T	rs11030993	11	30198439	T	C	0.3708	2.10E-10	0.977998	rs4923626	9	RP4-562D20.2	9585	intergenic	11.64		6	9	15	0	1	0
LMC-ERSV	6:151766199:A:G	rs3800280	6	151766199	A	G	0.04871	2.10E-10	0.724406	rs147230474	2	RMND1	0	intronic	6.02		6	4	5	1	1	0
FIM-EO	12:95647235:A:G	rs7954978	12	95647235	A	G	0.336	2.10E-10	0.995753	rs12423799	10	VEZT	0	intronic	0.809	3a		4	4	1	1	0
AAM-EM	3:49624065:C:T	rs9869120	3	49624065	T	C	0.1471	2.10E-10	1	rs11130207	8	BSN	0	intronic	4.182		6	13	15	1	1	0
AAM-EPP	3:50070853:A:G	rs6446195	3	50070853	A	G	0.4463	2.10E-10	0.896247	rs6774354	7	RBM6	0	intronic	2.134		6	4	5	1	1	0
FIM-EO	11:30192333:C:T	rs11030991	11	30192333	C	T	0.3738	2.10E-10	0.981441	rs4923626	9	RP4-562D20.2	3479	intergenic	0.565		7	5	15	0	1	0
FIM-EM	11:30365045:C:T	rs1222200	11	30365045	C	T	0.331	2.10E-10	0.742846	rs605765	9	ARL14EP	5270	intergenic	0.219	NA		5	15	0	1	0
AAM-EPP	3:49976972:A:G	rs7626952	3	49976972	A	G	0.4453	2.11E-10	0.900037	rs6774354	7	RBM6	467	upstream	0.258		6	1	15	1	1	0
FIM-EM	11:30340725:A:G	rs2786257	11	30340725	G	A	0.331	2.12E-10	0.749801	rs605765	9	ARL14EP	3872	intergenic	0.986	NA		5	14	0	0	0
LMC-EM	11:30240829:C:T	rs518357	11	30240829	C	T	0.4443	2.13E-10	0.774782	rs1716021	7	FSHB	11733	intergenic	5.746		7	9	15	0	1	0
AAM-EPP	3:50093209:A:G	rs6762477	3	50093209	G	A	0.4463	2.13E-10	0.896247	rs6774354	7	RBM6	0	intronic	6.288		6	4	4	1	1	0
FIM-EO	11:30206532:A:G	rs11030997	11	30206532	A	G	0.3698	2.13E-10	0.974331	rs4923626	9	RP4-562D20.2	17678	intergenic	0.988		5	9	15	0	1	0
FIM-EO	11:30200473:A:G	rs7123331	11	30200473	G	A	0.3708	2.13E-10	0.97052	rs4923626	9	RP4-562D20.2	11619	intergenic	0.708		5	9	15	0	1	0
LMC-EM	11:30250568:C:T	rs654669	11	30250568	T	C	0.4443	2.13E-10	0.774782	rs1716021	7	FSHB	1994	intergenic	7.642	NA		9	15	0	1	0
AAM-EPP	3:50081107:C:T	rs9682295	3	50081107	T	C	0.4463	2.13E-10	0.896247	rs6774354	7	RBM6	0	intronic	1.234		6	4	5	1	1	0
LMC-EM	11:30309732:C:T	rs10767833	11	30309732	T	C	0.4433	2.14E-10	0.765067	rs1716021	7	ARL14EP	34865	intergenic	1.597		7	5	15	0	1	0
AAM-EM	3:49621994:C:T	rs7629322	3	49621994	C	T	0.1471	2.14E-10	1	rs11130207	8	BSN	0	intronic	9.049		7	9	15	1	1	0
AAM-EM	10:90174153:C:T	rs792212	10	90174153	C	T	0.4364	2.19E-10	0.767264	rs7921352	20	RNLS	0	intronic	5.619		7	5	15	1	0	0
AAM-EPP	3:50175348:C:G	rs2526387	3	50175348	G	C	0.2565	2.19E-10	0.915889	rs13083396	7	RP11-493K19	0	ncRNA_intron	3.84		5	2	15	0	1	0
LMC-EM	11:30234703:A:G	rs600333	11	30234703	G	A	0.4195	2.21E-10	0.88363	rs1716021	7	FSHB	17859	intergenic	3.241	NA		7	15	0	1	0
LMC-EM	11:30253318:A:T	rs611246	11	30253318	A	T	0.4443	2.22E-10	0.774782	rs1716021	7	FSHB	0	intronic	0.496		6	9	15	1	1	0
FIM-EO	12:95628466:A:T	rs10777678	12	95628466	A	T	0.336	2.24E-10	0.987225	rs12423799	10	VEZT	0	intronic	3.799		6	4	5	1	0	0
FIM-EO	12:95645385:A:G	rs12320196	12	95645385	A	G	0.4443	2.24E-10	0.649873	rs12423799	10	VEZT	0	intronic	8.034		7	4	5	1	1	0
LMC-ERSV	6:151766397:A:G	rs73783025	6	151766397	G	A	0.04871	2.24E-10	0.724406	rs147230474	2	RMND1	0	intronic	5.774		5	3	5	1	1	0
AAM-EPP	3:50020437:A:G	rs2681776	3	50020437	G	A	0.4453	2.26E-10	0.892172	rs6774354	7	RBM6	0	intronic	1.646	NA		4	5	1	1	0
AAM-EM	3:49619493:C:T	rs34890793	3	49619493	C	T	0.1471	2.26E-10	1	rs11130207	8	BSN	0	intronic	9.055		6	9	15	1	1	0
AAM-EPP	3:50052834:C:T	rs6446191	3	50052834	T	C	0.4463	2.27E-10	0.896247	rs6774354	7	RBM6	0	intronic	0.05		7	4	5	1	1	0
AAM-EPP	3:50076734:A:G	rs2526749	3	50076734	A	G	0.4463	2.27E-10	0.896247	rs6774354	7	RBM6	0	intronic	3.403	NA		4	5	1	1	0
FIM-EO	11:30268544:C:G	rs1716029	11	30268544	G	C	0.4443	2.27E-10	0.851011	rs621448	9	FSHB	11735	intergenic	4.064		6	13	15	0	1	0
AAM-EPP	3:50098112:A:G	rs2624815	3	50098112	A	G	0.4463	2.27E-10	0.896247	rs6774354	7	RBM6	0	intronic	0.17		6	4	4	1	1	0
AAM-EPP	3:50071279:A:C	rs7624030	3	50071279	A	C	0.4463	2.29E-10	0.896247	rs6774354	7	RBM6	0	intronic	1.234		7	4	5	1	1	0
LMC-EM	11:30311316:A:G	rs10742238	11	30311316	A	G	0.4433	2.29E-10	0.765067	rs1716021	7	ARL14EP	33281	intergenic	13.7		6	5	15	0	1	0
AAM-EPP	3:49996053:A:G	rs13077403	3	49996053	G	A	0.4453	2.32E-10	0.900037	rs6774354	7	RBM6	0	intronic	2.567		5	4	5	1	1	0
FIM-EO	12:95649013:A:G	rs4762308	12	95649013	G	A	0.4433	2.32E-10	0.652333	rs12423799	10	VEZT	0	intronic	6.593		5	4	4	1	1	0
FIM-EM	11:30199907:A:C	rs7943867	11	30199907	A	C	0.3757	2.33E-10	0.996276	rs4923626	9	RP4-562D20.2	11053	intergenic	1.402		7	9	9	0	1	0
AAM-EPP	3:50108792:A:C	rs3774734	3	50108792	C	A	0.4463	2.34E-10	0.896247	rs6774354	7	RBM6	0	intronic	2.62		7	4	4	1	1	0
LMC-EM	11:30234606:C:T	rs600768	11	30234606	C	T	0.4205	2.34E-10	0.880628	rs1716021	7	FSHB	17956	intergenic	3.662	NA		7	15	0	1	0
AAM-EPP	6:151847967:A:C	rs9479055	6	151847967	C	A	0.4036	2.35E-10	1	rs12210735	11	CCDC170	0	intronic	0.262		7	14	15	1	0	0
AAM-EM	12:50270364:C:G	rs12146733	12	50270364	G	C	0.335	2.35E-10	0.840052	rs11169199	28	FAIM2	0	intronic	4.547		6	4	15	1	0	0
FIM-EO	11:30202285:A:G	rs11493214	11	30202285	G	A	0.3698	2.35E-10	0.974331	rs4923626	9	RP4-562D20.2	13431	intergenic	0.949		6	9	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrS	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-EM	11:30238832:A:T	rs621448	11	30238832	T	A	0.4175	2.35E-10	0.883171	rs1716021	7	FSHB	13730	intergenic	2.261		7	9	15	0	1	0
AAM-EM	16:29906546:C:T	rs4787484	16	29906546	C	T	0.328	2.36E-10	0.981107	rs7189550	32	SEZ6L2	0	intronic	2.443		5	4	14	1	1	0
FIM-EM	11:30361670:A:C	rs1222209	11	30361670	C	A	0.33	2.38E-10	0.753251	rs605765	9	ARL14EP	1895	intergenic	0.051		6	4	5	0	1	0
AAM-EPP	3:50003586:A:G	rs62262118	3	50003586	G	A	0.2495	2.40E-10	0.994517	rs13083396	7	RBM6	0	intronic	0.097		7	4	5	1	1	0
FIM-EO	12:95610220:A:G	rs7310833	12	95610220	G	A	0.4423	2.41E-10	0.646756	rs12423799	10	FGD6	0	intronic	3.829		4	1	1	1	1	0
LMC-EM	8:25275495:A:C	rs12155980	8	25275495	C	A	0.3569	2.41E-10	1	rs12155980	6	DOCK5	0	intergenic	3.111		7	4	4	1	0	0
FIM-EO	3:127919046:G:T	rs2811485	3	127919046	G	T	0.2674	2.41E-10	0.989347	rs2999048	3	EEFSEC	0	intronic	0.981		6	5	5	1	1	0
FIM-EM	11:30203286:T:TA	rs201618035	11	30203286	TA	T	0.3668	2.42E-10	0.963615	rs4923626	9	RP4-562D20..	14432	intergenic	0.461	NA		9	15	0	1	0
LMC-EM	11:30300692:C:T	rs4120821	11	30300692	C	T	0.4453	2.42E-10	0.772694	rs1716021	7	FSHB	43883	intergenic	0.196	NA		9	15	0	1	0
FIM-EM	6:153261120:A:T	rs117851271	6	153261120	A	T	0.0169	2.43E-10	1	rs117851271	6	RP1-101K10..	19373	intergenic	2.723		7	14	15	0	0	0
FIM-EM	11:30350185:C:G	rs1717774	11	30350185	G	C	0.331	2.45E-10	0.742846	rs605765	9	ARL14EP	0	UTR5	2.983		5	5	5	1	1	0
LMC-ERSV	6:151709978:C:T	rs9383568	6	151709978	C	T	0.03976	2.45E-10	0.840834	rs147230474	2	ZBTB2	0	intronic	1.277		5	2	7	1	1	0
FIM-EO	8:25280800:C:G	rs6185	8	25280800	C	G	0.2425	2.46E-10	1	rs6185	8	GNRH1	0	exonic	12.21		7	4	4	1	1	0
AAM-EPP	3:50107219:C:T	rs2624822	3	50107219	T	C	0.4463	2.46E-10	0.896247	rs6774354	7	RBM6	0	intronic	7.362	NA		4	4	1	1	0
AAM-EPP	3:49991427:A:G	rs62262106	3	49991427	A	G	0.2495	2.46E-10	0.994517	rs13083396	7	RBM6	0	intronic	1.73		7	4	5	1	1	0
AAM-EM	3:49645209:C:T	rs11130211	3	49645209	C	T	0.1461	2.46E-10	0.992236	rs11130207	8	BSN	0	intronic	5.638	1f		5	15	1	1	0
AAM-EPP	3:50071677:A:G	rs7634441	3	50071677	G	A	0.4463	2.46E-10	0.896247	rs6774354	7	RBM6	0	intronic	2.844		5	4	5	1	1	0
AAM-EPP	3:50100188:A:C	rs6793528	3	50100188	C	A	0.4463	2.46E-10	0.896247	rs6774354	7	RBM6	0	intronic	0.531		7	4	4	1	1	0
FIM-EO	3:127919045:A:T	rs2687733	3	127919045	T	A	0.2674	2.48E-10	0.989347	rs2999048	3	EEFSEC	0	intronic	6.815		6	5	5	1	1	0
AAM-EPP	3:49991060:C:T	rs71326904	3	49991060	C	T	0.2495	2.48E-10	0.994517	rs13083396	7	RBM6	0	intronic	1.237		7	4	5	1	1	0
AAM-EPP	3:50074641:G:T	rs4688754	3	50074641	G	T	0.4463	2.49E-10	0.896247	rs6774354	7	RBM6	0	intronic	3.402	NA		4	5	1	1	0
AAM-EPP	3:50067298:A:T	rs6446194	3	50067298	T	A	0.4463	2.49E-10	0.896247	rs6774354	7	RBM6	0	intronic	0.003		6	4	5	1	1	0
FIM-EO	11:30300692:C:T	rs4120821	11	30300692	C	T	0.4453	2.50E-10	0.855459	rs621448	9	FSHB	43883	intergenic	0.196	NA		9	15	0	1	0
FIM-EM	11:30184538:C:T	rs4396264	11	30184538	T	C	0.3767	2.51E-10	0.97769	rs4923626	9	RP4-562D20..	4171	intergenic	4.31		6	5	15	0	1	0
FIM-EM	11:30356057:A:G	rs1222205	11	30356057	A	G	0.331	2.52E-10	0.742846	rs605765	9	ARL14EP	0	intronic	0.532		6	4	4	1	1	0
AAM-EPP	10:90167311:C:G	rs792208	10	90167311	C	G	0.3847	2.54E-10	0.961493	rs7921352	15	RNLS	0	intronic	1.009		7	5	15	1	0	0
FIM-EM	11:30184483:C:T	rs11030983	11	30184483	C	T	0.3767	2.54E-10	0.97769	rs4923626	9	RP4-562D20..	4226	intergenic	8.213		7	5	15	0	1	0
FIM-EO	11:30199688:A:C	rs7940816	11	30199688	A	C	0.3757	2.55E-10	0.996276	rs4923626	9	RP4-562D20..	10834	intergenic	1.11		7	9	9	0	1	0
AAM-EM	3:49645458:A:G	rs12637313	3	49645458	A	G	0.1461	2.56E-10	0.992236	rs11130207	8	BSN	0	intronic	2.848		4	5	15	1	1	0
AAM-EM	3:49646669:A:G	rs11721148	3	49646669	G	A	0.1461	2.56E-10	0.992236	rs11130207	8	BSN	0	intronic	2.563		7	5	15	1	1	0
AAM-EM	3:49646981:C:T	rs2029591	3	49646981	T	C	0.1461	2.57E-10	0.992236	rs11130207	8	BSN	0	intronic	0.558	1f		5	15	1	1	0
FIM-EO	12:95627237:A:G	rs6538622	12	95627237	A	G	0.4423	2.57E-10	0.646756	rs12423799	10	VEZT	0	intronic	7.701		6	4	5	1	1	0
FIM-EM	11:30181778:A:G	rs11030982	11	30181778	A	G	0.3767	2.58E-10	0.97769	rs4923626	9	RP4-562D20..	6931	intergenic	0.888		6	5	15	0	1	0
FIM-EM	11:30181153:C:T	rs892949	11	30181153	C	T	0.3767	2.58E-10	0.97769	rs4923626	9	RP4-562D20..	7556	intergenic	1.106	NA		5	15	0	1	0
AAM-EM	3:49647404:A:T	rs1463728	3	49647404	T	A	0.1471	2.58E-10	0.984491	rs11130207	8	BSN	0	intronic	5.571		5	5	15	1	1	0
FIM-EM	11:30328026:C:T	rs55715542	11	30328026	C	T	0.331	2.58E-10	0.749801	rs605765	9	ARL14EP	16571	intergenic	1.318		6	14	15	0	1	0
FIM-EO	3:127933786:C:T	rs4857871	3	127933786	C	T	0.2644	2.60E-10	0.952216	rs2999048	3	EEFSEC	0	intronic	0.506		7	5	15	1	1	0
FIM-EO	3:127930866:A:C	rs7374072	3	127930866	C	A	0.2644	2.60E-10	0.952216	rs2999048	3	EEFSEC	0	intronic	2.482		7	5	15	1	1	0
FIM-EM	11:30183831:A:G	rs4922834	11	30183831	A	G	0.3767	2.60E-10	0.97769	rs4923626	9	RP4-562D20..	4878	intergenic	2.479		6	5	15	0	1	0
FIM-EM	11:30182270:A:T	rs7112118	11	30182270	A	T	0.3767	2.60E-10	0.97769	rs4923626	9	RP4-562D20..	6439	intergenic	1.879		6	5	15	0	1	0
FIM-EO	3:127934774:A:C	rs4384971	3	127934774	C	A	0.2634	2.61E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	2.358		5	5	15	1	1	0
FIM-EM	11:30181651:G:T	rs12287556	11	30181651	T	G	0.3767	2.61E-10	0.97769	rs4923626	9	RP4-562D20..	7058	intergenic	6.165		7	5	15	0	1	0
FIM-EM	11:30184860:C:G	rs4313561	11	30184860	C	G	0.3767	2.61E-10	0.97769	rs4923626	9	RP4-562D20..	3849	intergenic	0.109		6	5	15	0	1	0
FIM-EM	11:30181671:A:T	rs12293737	11	30181671	A	T	0.3767	2.61E-10	0.97769	rs4923626	9	RP4-562D20..	7038	intergenic	0.188		6	5	15	0	1	0
FIM-EM	11:30181316:A:G	rs1808771	11	30181316	G	A	0.3767	2.62E-10	0.97769	rs4923626	9	RP4-562D20..	7393	intergenic	3.581	NA		5	15	0	1	0
FIM-EO	3:127939034:A:T	rs9857235	3	127939034	A	T	0.2634	2.62E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	4.197		5	4	15	1	1	0
FIM-EO	12:95643298:A:T	rs7967229	12	95643298	A	T	0.4414	2.62E-10	0.647695	rs12423799	10	VEZT	0	intronic	3.218		5	5	5	1	1	0
FIM-EO	3:127936527:C:T	rs9879865	3	127936527	C	T	0.2634	2.62E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	0.901	2b		4	15	1	1	0
FIM-EO	3:127936532:C:T	rs9879866	3	127936532	C	T	0.2634	2.62E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	0.013	2b		4	15	1	1	0
AAM-EPP	6:151848611:A:G	rs6557143	6	151848611	G	A	0.4026	2.63E-10	0.995882	rs12210735	11	CCDC170	0	intronic	9.683		6	14	15	1	0	0
LMC-EM	11:30277028:C:T	rs4120820	11	30277028	C	T	0.4443	2.63E-10	0.774782	rs1716021	7	FSHB	20219	intergenic	0.894		6	1	15	0	1	0
LMC-DE	6:151776164:G:T	rs17081262	6	151776164	G	T	0.0507	2.64E-10	0.836044	rs80347787	2	C6orf211	0	intronic	3.673		7	1	5	1	1	0
FIM-EO	3:127934276:C:T	rs4857875	3	127934276	C	T	0.2624	2.65E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	4.973	2b		5	15	1	1	0
FIM-EO	3:127937645:A:G	rs9847576	3	127937645	A	G	0.2634	2.65E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	9.43		5	4	15	1	1	0
FIM-EM	11:30327162:A:G	rs12361937	11	30327162	G	A	0.33	2.65E-10	0.760278	rs605765	9	ARL14EP	17435	intergenic	4.667		7	7	15	0	1	0
FIM-EO	12:95617829:A:G	rs10777677	12	95617829	A	G	0.335	2.65E-10	0.991508	rs12423799	10	VEZT	0	intronic	1.748		7	4	5	1	1	0
FIM-EO	3:127933822:G:T	rs4857872	3	127933822	T	G	0.2644	2.65E-10	0.952216	rs2999048	3	EEFSEC	0	intronic	8.992		6	5	15	1	1	0
FIM-EO	3:127945349:A:G	rs6777054	3	127945349	G	A	0.2634	2.66E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	12.79		5	2	15	1	1	0
FIM-EM	11:30183344:C:T	rs10835631	11	30183344	T	C	0.3767	2.67E-10	0.97769	rs4923626	9	RP4-562D20..	5365	intergenic	8.832		7	5	15	0	1	0
FIM-EM	11:30327981:C:T	rs59475325	11	30327981	C	T	0.331	2.67E-10	0.749801	rs605765	9	ARL14EP	16616	intergenic	1.288		6	14	15	0	1	0
FIM-EO	3:127938137:A:G	rs9814834	3	127938137	G	A	0.2634	2.67E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	3.255		5	4	15	1	1	0
FIM-EO	3:127943328:A:G	rs4857838	3	127943328	A	G	0.2634	2.67E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	4.183		7	5	15	1	1	0
FIM-EO	3:127940440:C:G	rs7372902	3	127940440	G	C	0.2634	2.67E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	0.664		5	5	15	1	1	0
FIM-EO	3:127836319:A:G	rs4857837	3	127836319	A	G	0.2654	2.68E-10	0.968084	rs2999048	3	RUVBL1	0	intronic	6.99		4	4	5	1	1	0
AAM-EPP	3:49971831:C:T	rs7627910	3	49971831	T	C	0.4602	2.68E-10	0.84979	rs6774354	7	MON1A	4224	intergenic	3.684		7	5	15	0	1	0
FIM-EM	11:30182303:C:G	rs7112549	11	30182303	G	C	0.3767	2.69E-10	0.97769	rs4923626	9	RP4-562D20..	6406	intergenic	16.55		7	5	15	0	1	0
FIM-EO	3:127940534:A:G	rs6439122	3	127940534	A	G	0.2644	2.69E-10	0.952216	rs2999048	3	EEFSEC	0	intronic	1.146		7	5	15	1	1	0
FIM-EO	11:30258770:C:T	rs626869	11	30258770	C	T	0.4473	2.69E-10	0.871006	rs621448	9	FSHB	1961	intergenic	1.071	NA		9	15	0	1	0
FIM-EO	11:30258989:A:G	rs615577	11	30258989	G	A	0.4473	2.69E-10	0.871006	rs621448	9	FSHB	2180	intergenic	1.584	NA		9	15	0	1	0
FIM-EM	11:30185486:A:G	rs11030987	11	30185486	A	G	0.3767	2.70E-10	0.97769	rs4923626	9	RP4-562D20..	3223	intergenic	4.537		6	5	15	0	1	0
FIM-EM	11:30183742:A:T	rs4922833	11	30183742	T	A	0.3757	2.70E-10	0.973939	rs4923626	9	RP4-562D20..	4967	intergenic	1.361		6	5	15	0	1	0
AAM-EPP	3:50078221:C:T	rs7430334	3	50078221	T	C	0.4463	2.71E-10	0.896247	rs6774354	7	RBM6	0	intronic	1.053		7	4	5	1	1	0
FIM-EO	11:30261910:A:C	rs622356	11	30261910	A	C	0.4473	2.71E-10	0.871006	rs621448	9	FSHB	5101	intergenic	1.87		5	9	15	0	1	0
FIM-EO	3:127940353:G:T	rs9845651	3	127940353	T	G	0.2634	2.71E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	1.303		5	4	15	1	1	0
FIM-EO	12:95631276:C:T	rs10859856	12	95631276	T	C	0.4423	2.72E-10	0.646756	rs12423799	10	VEZT	0	intronic	14.5		5	5	5	1	1	0
FIM-EO	12:95639676:C:T	rs10859858	12	95639676	T	C	0.335	2.72E-10	0.991508	rs12423799	10	VEZT	0	intronic	0.875		5	2	5	1	1	0
FIM-EM	11:30333224:C:T	rs1222204	11	30333224	T	C	0.331	2.72E-10	0.749801	rs605765	9	ARL14EP	11373	intergenic	0.873	NA		5	15	0	1	0
FIM-EO	3:127836287:C:T	rs4857836	3	127836287	C	T	0.2654	2.72E-10	0.968084	rs2999048	3	RUVBL1	0	intronic	0.141		4	4	5	1	1	0
FIM-EO	11:30199020:C:T	rs10767832	11	30199020	C	T	0.3757	2.72E-10	0.996276	rs4923626	9	RP4-562D20..	10166	intergenic	0.002		7	9	9	0	1	0
FIM-EO	3:127948060:A:G	rs4857877	3	127948060	A	G	0.2604	2.73E-10	0.942121	rs2999048	3	EEFSEC	0	intronic	0.341		5	5	5	15	1	1	0
FIM-EM	11:30336613:A:G	rs1222202	11	30336613	G	A	0.33	2.73E-10	0.760278	rs605765	9	ARL14EP	7984	intergenic	2.798	NA		5	15	0	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EM	11:30336334:A:G	rs1222203	11	30336334	A	G	0.331	2.73E-10	0.749801	rs605765	9	ARL14EP	8263	intergenic	11.51	NA	5	15	0	1	0
AAM-EM	10:90091540:C:T	rs1426619	10	90091540	C	T	0.4473	2.73E-10	0.947295	rs10887804	20	RNLS	0	intronic	0.06	5	5	15	1	0	0
FIM-EM	11:30330963:A:G	rs7125524	11	30330963	G	A	0.331	2.73E-10	0.749801	rs605765	9	ARL14EP	13634	intergenic	1.34	7	9	15	0	1	0
FIM-EM	11:30180685:C:T	rs1361422	11	30180685	T	C	0.3767	2.73E-10	0.97769	rs4923626	9	RP4-562D20.1	8024	intergenic	1.534	NA	5	15	0	1	0
FIM-EO	3:127939357:A:T	rs4323023	3	127939357	T	A	0.2634	2.73E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	5.943	6	4	15	1	1	0
AAM-EPP	3:50074773:A:G	rs4688753	3	50074773	A	G	0.4463	2.73E-10	0.896247	rs6774354	7	RBM6	0	intronic	3.094	NA	4	5	1	1	0
LMC-EM	11:30271159:A:G	rs549346	11	30271159	A	G	0.4453	2.74E-10	0.772694	rs1716021	7	FSHB	14350	intergenic	0.179	6	9	15	0	1	0
FIM-EM	11:30185849:C:T	rs11030989	11	30185849	T	C	0.3738	2.74E-10	0.966666	rs4923626	9	RP4-562D20.1	2860	intergenic	5.039	7	5	15	0	1	0
FIM-EO	3:127944477:C:G	rs6775988	3	127944477	C	G	0.2634	2.75E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	0.378	7	4	15	1	1	0
LMC-EM	11:30239470:A:G	rs618611	11	30239470	G	A	0.4394	2.75E-10	0.78878	rs1716021	7	FSHB	13092	intergenic	3.149	NA	9	15	0	1	0
FIM-EO	3:127817508:C:T	rs7632756	3	127817508	C	T	0.2654	2.76E-10	0.968084	rs2999048	3	RUVBL1	0	intronic	8.881	5	4	4	1	1	0
FIM-EO	3:127819062:C:G	rs4857866	3	127819062	G	C	0.2654	2.76E-10	0.968084	rs2999048	3	RUVBL1	0	intronic	3.759	5	4	4	1	1	0
FIM-EM	11:30182068:C:T	rs1340030	11	30182068	T	C	0.3767	2.76E-10	0.97769	rs4923626	9	RP4-562D20.1	6641	intergenic	5.542	NA	5	15	0	1	0
FIM-EM	11:30180671:C:G	rs1361423	11	30180671	C	G	0.3767	2.77E-10	0.97769	rs4923626	9	RP4-562D20.1	8038	intergenic	3.306	6	5	15	0	1	0
FIM-EO	11:30264368:A:G	rs560109	11	30264368	G	A	0.4473	2.77E-10	0.86371	rs621448	9	FSHB	7559	intergenic	0.31	7	13	15	0	1	0
AAM-EPP	10:90175306:A:C	rs792215	10	90175306	A	C	0.3857	2.78E-10	0.957186	rs7921352	15	RNLS	0	intronic	4.688	6	5	15	1	0	0
FIM-EO	11:30263655:C:T	rs532667	11	30263655	C	T	0.4483	2.78E-10	0.867538	rs621448	9	FSHB	6846	intergenic	0.946	6	13	15	0	1	0
LMC-EM	11:30281330:A:G	rs6484477	11	30281330	G	A	0.4443	2.78E-10	0.774782	rs1716021	7	FSHB	24521	intergenic	1.928	7	5	15	0	1	0
FIM-EO	11:30249522:C:T	rs1716023	11	30249522	T	C	0.4473	2.79E-10	0.871006	rs621448	9	FSHB	3040	intergenic	0.236	NA	9	15	0	1	0
AAM-EPP	6:151848899:A:C	rs9479056	6	151848899	C	A	0.4036	2.79E-10	1	rs12210735	11	CCDC170	0	intronic	0.112	6	14	15	1	0	0
AAM-EM	3:49642027:C:T	rs4241405	3	49642027	C	T	0.1461	2.79E-10	0.992236	rs11130207	8	BSN	0	intronic	0.662	NA	5	15	1	1	0
FIM-EO	11:30200751:C:T	rs7109221	11	30200751	T	C	0.3757	2.80E-10	0.996276	rs4923626	9	RP4-562D20.1	11897	intergenic	0.904	7	9	15	0	1	0
FIM-EO	12:95631556:C:G	rs10859857	12	95631556	G	C	0.335	2.80E-10	0.991508	rs12423799	10	VEZT	0	intronic	1.904	6	5	5	1	1	0
AAM-EPP	6:151765296:C:T	rs3823311	6	151765296	T	C	0.17	2.80E-10	0.657761	rs7740302	11	RMND1	0	intronic	2.969	5	4	5	1	0	0
FIM-EO	11:30257122:A:G	rs560078	11	30257122	A	G	0.4483	2.80E-10	0.867538	rs621448	9	FSHB	313	downstream	5.281	7	5	15	1	1	0
FIM-EO	11:30250177:C:T	rs1716022	11	30250177	C	T	0.4473	2.81E-10	0.871006	rs621448	9	FSHB	2385	intergenic	0.221	NA	9	15	0	1	0
FIM-EO	11:30249550:A:C	rs1782510	11	30249550	A	C	0.4473	2.82E-10	0.871006	rs621448	9	FSHB	3012	intergenic	1.338	6	9	15	0	1	0
FIM-EO	11:30261215:C:T	rs7126848	11	30261215	C	T	0.4483	2.84E-10	0.867538	rs621448	9	FSHB	4406	intergenic	3.713	5	9	15	0	1	0
FIM-EO	12:95630035:A:C	rs9739396	12	95630035	C	A	0.335	2.86E-10	0.991508	rs12423799	10	VEZT	0	intronic	3.668	7	4	5	1	0	0
FIM-EO	12:95630044:C:G	rs9739397	12	95630044	C	G	0.335	2.86E-10	0.991508	rs12423799	10	VEZT	0	intronic	3.608	7	4	5	1	0	0
AAM-EPP	3:50053111:C:T	rs6446192	3	50053111	T	C	0.4463	2.87E-10	0.896247	rs6774354	7	RBM6	0	intronic	2.272	6	4	5	1	1	0
LMC-DE	6:151842916:C:T	rs117027891	6	151842916	C	T	0.0497	2.88E-10	0.819181	rs80347787	2	CCDC170	0	intronic	0.22	6	9	15	1	1	0
FIM-EO	11:30242325:C:T	rs572883	11	30242325	C	T	0.4473	2.88E-10	0.871006	rs621448	9	FSHB	10237	intergenic	0.217	NA	14	15	0	1	0
FIM-EO	11:30203825:C:T	rs7943756	11	30203825	T	C	0.3757	2.89E-10	0.996276	rs4923626	9	RP4-562D20.1	14971	intergenic	0.902	7	9	15	0	1	0
FIM-EO	12:95699240:C:T	rs7966079	12	95699240	T	C	0.4443	2.90E-10	0.656396	rs12423799	10	VEZT	2673	intergenic	4.643	5	4	5	0	1	0
AAM-EM	10:90225923:A:C	rs1750274	10	90225923	C	A	0.4016	2.91E-10	0.859402	rs7921352	20	RNLS	0	intronic	0.592	NA	5	15	1	0	0
FIM-EO	11:30271159:A:G	rs549346	11	30271159	A	G	0.4453	2.91E-10	0.855459	rs621448	9	FSHB	14350	intergenic	0.179	6	9	15	0	1	0
FIM-EM	11:30314585:A:G	rs12793271	11	30314585	G	A	0.331	2.93E-10	0.749801	rs605765	9	ARL14EP	30012	intergenic	0.566	6	5	15	0	1	0
FIM-EM	11:30312519:A:C	rs35665615	11	30312519	C	A	0.331	2.93E-10	0.749801	rs605765	9	ARL14EP	32078	intergenic	0.678	7	8	15	0	1	0
AAM-EM	3:49639803:G:T	rs1491983	3	49639803	G	T	0.1461	2.93E-10	0.992236	rs11130207	8	BSN	0	intronic	1.914	1d	5	15	1	1	0
FIM-EO	6:153225235:C:T	rs117754666	6	153225235	C	T	0.01392	2.93E-10	0.701935	rs117851271	6	TUBB4BP7	4819	intergenic	5.806	7	5	15	0	0	0
AAM-EPP	3:127991149:A:C	rs2811413	3	127991149	C	A	0.3171	2.95E-10	0.766279	rs4857878	8	EEFSEC	0	intronic	0.523	5	4	5	1	1	0
FIM-EM	11:30363727:A:G	rs1765141	11	30363727	A	G	0.331	2.96E-10	0.742846	rs605765	9	ARL14EP	3952	intergenic	5.57	NA	5	5	0	1	0
FIM-EO	11:30241731:C:T	rs489096	11	30241731	C	T	0.4473	2.97E-10	0.871006	rs621448	9	FSHB	10831	intergenic	4.8	NA	9	15	0	1	0
AAM-EPP	2:203014959:C:T	rs77251002	2	203014959	T	C	0.1252	2.98E-10	1	rs77251002	5	AC079354.1	0	intronic	18.88	2a	2	15	1	0	0
AAM-EM	12:50275385:C:T	rs73116325	12	50275385	C	T	0.335	2.98E-10	0.84069	rs11169199	28	FAIM2	0	intronic	0.187	6	4	15	1	0	0
FIM-EO	11:30248392:A:G	rs1630084	11	30248392	G	A	0.4473	2.98E-10	0.871006	rs621448	9	FSHB	4170	intergenic	1.709	7	9	15	0	1	0
FIM-EO	11:30243247:G:T	rs543401	11	30243247	T	G	0.4473	2.99E-10	0.871006	rs621448	9	FSHB	9315	intergenic	0.441	7	14	15	0	1	0
FIM-EM	11:30319432:C:T	rs61626579	11	30319432	C	T	0.331	3.00E-10	0.749801	rs605765	9	ARL14EP	25165	intergenic	12.46	7	9	15	0	1	0
FIM-EO	11:30241032:A:G	rs590833	11	30241032	G	A	0.4483	3.00E-10	0.867538	rs621448	9	FSHB	11530	intergenic	3.989	NA	9	15	0	1	0
FIM-EO	3:127941439:C:T	rs6439123	3	127941439	T	C	0.2634	3.01E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	1.695	6	5	9	1	1	0
FIM-EO	11:30193060:A:G	rs623837	11	30193060	G	A	0.3767	3.03E-10	0.992535	rs4923626	9	RP4-562D20.1	4206	intergenic	0.415	NA	5	15	0	1	0
FIM-EM	11:30318720:C:G	rs11031041	11	30318720	G	C	0.331	3.06E-10	0.749801	rs605765	9	ARL14EP	25877	intergenic	0.056	7	9	15	0	1	0
FIM-EPP	8:25267103:A:G	rs4871939	8	25267103	G	A	0.2465	3.08E-10	0.77609	rs34068702	7	DOCK5	0	intronic	11.04	5	4	4	1	1	0
FIM-EM	11:30312743:C:T	rs12805098	11	30312743	T	C	0.331	3.08E-10	0.749801	rs605765	9	ARL14EP	31854	intergenic	2.239	6	5	15	0	1	0
FIM-EO	3:127934329:C:T	rs6770140	3	127934329	T	C	0.2624	3.09E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	3.142	2c	5	15	1	1	0
FIM-EO	3:127935461:C:G	rs6439121	3	127935461	G	C	0.2624	3.09E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	0.827	6	5	15	1	1	0
FIM-EO	3:127934218:A:G	rs4857873	3	127934218	A	G	0.2624	3.10E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	11.28	5	5	15	1	1	0
FIM-EO	11:30255823:A:G	rs506197	11	30255823	A	G	0.4473	3.11E-10	0.871006	rs621448	9	FSHB	0	UTR3	6.523	7	5	15	1	1	0
FIM-EO	11:30251351:A:C	rs640748	11	30251351	A	C	0.4483	3.13E-10	0.867538	rs621448	9	FSHB	1211	intergenic	7.736	NA	7	15	0	1	0
FIM-EO	3:127931402:A:G	rs7372439	3	127931402	A	G	0.2644	3.14E-10	0.952216	rs2999048	3	EEFSEC	0	intronic	2.633	7	5	15	1	1	0
FIM-EO	12:95696420:A:G	rs3596	12	95696420	A	G	0.4443	3.14E-10	0.656396	rs12423799	10	VEZT	0	UTR3	0.552	7	4	5	1	1	0
FIM-EO	11:30255982:A:G	rs676349	11	30255982	A	G	0.4473	3.15E-10	0.871006	rs621448	9	FSHB	0	UTR3	0.039	7	5	15	1	1	0
FIM-EM	11:30343925:A:C	rs1222220	11	30343925	C	A	0.334	3.17E-10	0.757733	rs605765	9	ARL14EP	672	upstream	5.379	NA	1	14	1	1	0
FIM-EO	3:127942729:T:TA	rs35277207	3	127942729	TA	T	0.2634	3.19E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	3.567	NA	4	15	1	1	0
FIM-EO	11:30250359:C:T	rs537263	11	30250359	T	C	0.4473	3.20E-10	0.871006	rs621448	9	FSHB	2203	intergenic	3.475	5	9	15	0	1	0
AAM-EPP	3:50174025:C:T	rs2189691	3	50174025	T	C	0.2594	3.20E-10	0.911945	rs13083396	7	RP11-493K19	0	ncRNA_intron	0.086	NA	5	15	0	1	0
FIM-EO	11:30253641:C:T	rs609896	11	30253641	T	C	0.4473	3.20E-10	0.871006	rs621448	9	FSHB	0	intronic	0.714	NA	9	15	1	1	0
FIM-EO	3:127934269:A:T	rs4857874	3	127934269	A	T	0.2624	3.20E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	4.331	2b	5	15	1	1	0
FIM-EM	11:30344761:A:G	rs1222218	11	30344761	A	G	0.332	3.21E-10	0.752424	rs605765	9	ARL14EP	0	intronic	9.429	NA	1	1	1	1	0
FIM-EM	11:30344799:A:G	rs1222217	11	30344799	A	G	0.331	3.22E-10	0.749801	rs605765	9	ARL14EP	0	intronic	8.333	NA	1	1	1	1	0
FIM-EO	3:127923187:C:T	rs6439119	3	127923187	T	C	0.2614	3.22E-10	0.95794	rs2999048	3	EEFSEC	0	intronic	2.508	7	5	15	1	1	0
FIM-EO	12:95611185:C:T	rs6538618	12	95611185	T	C	0.4423	3.23E-10	0.646756	rs12423799	10	FGD6	0	UTR5	14.03	4	1	1	1	1	0
AAM-EM	16:29908777:C:G	rs12930239	16	29908777	C	G	0.331	3.23E-10	0.995307	rs7189550	32	SEZ6L2	0	intronic	1.663	5	1	14	1	0	0
AAM-EM	10:90082746:A:C	rs1582784	10	90082746	C	A	0.4364	3.24E-10	0.975811	rs10887804	20	RNLS	0	intronic	8.459	7	7	15	1	0	0
LMC-DE	6:151841061:A:G	rs114137400	6	151841061	G	A	0.0497	3.25E-10	0.819181	rs80347787	2	CCDC170	0	intronic	6.588	7	8	15	1	1	0
FIM-EO	11:30251625:C:T	rs639403	11	30251625	C	T	0.4473	3.25E-10	0.871006	rs621448	9	FSHB	937	upstream	3.678	5	7	15	1	1	0
FIM-EO	3:127930459:A:G	rs9838120	3	127930459	A	G	0.2644	3.25E-10	0.952216	rs2999048	3	EEFSEC	0	intronic	0.599	7	5	15	1	1	0
FIM-EM	6:153229045:C:T	rs117967041	6	153229045	T	C	0.01392	3.26E-10	0.701935	rs117851271	6	TUBB4BP7	8629	intergenic	2.222	7	13	15	0	0	0
AAM-EPP	3:49917686:A:G	rs62262061	3	49917686	G	A	0.2097	3.27E-10	0.792397	rs13083396	7	ACTBP13	2272	intergenic	2.445	6	5	15	0	1	0
FIM-EO	11:30277028:C:T	rs4120820	11	30277028	C	T	0.4443	3.27E-10	0.858277	rs621448	9	FSHB	20219	intergenic	0.894	6	1	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	16:29910725:A:G	rs7498372	16	29910725	A	G	0.331	3.29E-10	0.995307	rs7189550	32	SEZ6L2	0	UTR5	7.808	1f	1	1	1	1	0
FIM-EO	11:30255867:C:G	rs506306	11	30255867	C	G	0.4483	3.33E-10	0.867538	rs621448	9	FSHB	0	UTR3	2.184	7	5	15	1	1	0
FIM-EO	3:128075398:G:T	rs1735546	3	128075398	T	G	0.2545	3.34E-10	0.87143	rs2999048	3	EEFSEC	0	intronic	6.983	NA	4	5	1	1	0
FIM-EO	3:127901786:A:G	rs2811479	3	127901786	G	A	0.2624	3.35E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	5.35	5	5	15	1	1	0
FIM-EM	11:30365566:C:T	rs1228479	11	30365566	C	T	0.334	3.35E-10	0.750727	rs605765	9	ARL14EP	5791	intergenic	8.317	NA	2	15	0	1	0
FIM-EO	11:30250479:A:G	rs538236	11	30250479	G	A	0.4473	3.35E-10	0.871006	rs621448	9	FSHB	2083	intergenic	2.136	7	9	15	0	1	0
AAM-EPP	3:50136463:A:G	rs13095697	3	50136463	G	A	0.2495	3.36E-10	0.983512	rs13083396	7	RBM6:RBM5	0:00	intronic	6.95	7	4	4	1	1	0
FIM-EO	3:127905518:A:G	rs2811515	3	127905518	G	A	0.2624	3.37E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	0.15	NA	5	15	1	1	0
FIM-EO	11:30240829:C:T	rs518357	11	30240829	C	T	0.4443	3.37E-10	0.858277	rs621448	9	FSHB	11733	intergenic	5.746	7	9	15	0	1	0
FIM-EO	3:127822320:C:T	rs7641133	3	127822320	T	C	0.2654	3.38E-10	0.968084	rs2999048	3	RUVBL1	0	intronic	17.56	6	4	4	1	1	0
FIM-EO	3:127905451:A:G	rs2811516	3	127905451	A	G	0.2624	3.41E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	3.811	NA	5	15	1	1	0
FIM-EO	2:11742854:A:C	rs62118315	2	11742854	C	A	0.3201	3.41E-10	0.659708	rs10693974	2	GREB1	0	intronic	0.81	4	2	15	1	0	0
FIM-EO	3:127918000:A:G	rs2492285	3	127918000	G	A	0.2624	3.42E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	1.204	6	5	5	1	1	0
FIM-EO	3:127920023:C:T	rs2811508	3	127920023	T	C	0.2634	3.43E-10	0.957737	rs2999048	3	EEFSEC	0	intronic	0.946	NA	4	5	1	1	0
FIM-EM	11:30185850:A:G	rs72885907	11	30185850	G	A	0.3708	3.43E-10	0.955813	rs4923626	9	RP4-562D20..	2859	intergenic	3.752	7	5	15	0	1	0
FIM-EO	1:169272453:A:G	rs10800428	1	169272453	G	A	0.04076	3.43E-10	1	rs10800428	1	NME7	0	intronic	0.65	7	5	15	1	0	0
FIM-EO	11:30281330:A:G	rs6484477	11	30281330	G	A	0.4443	3.44E-10	0.858277	rs621448	9	FSHB	24521	intergenic	1.928	7	5	15	0	1	0
AAM-EM	10:90179192:C:T	rs4934403	10	90179192	C	T	0.4374	3.46E-10	0.763885	rs7921352	20	RNLS	0	intronic	2.154	7	5	15	1	0	0
FIM-EO	11:30311316:A:G	rs10742238	11	30311316	A	G	0.4433	3.48E-10	0.848015	rs621448	9	ARL14EP	33281	intergenic	13.7	6	5	15	0	1	0
FIM-EO	11:30309732:C:T	rs10767833	11	30309732	T	C	0.4433	3.48E-10	0.848015	rs621448	9	ARL14EP	34865	intergenic	1.597	7	5	15	0	1	0
LMC-EM	3:128106267:A:G	rs2977562	3	128106267	A	G	0.2535	3.49E-10	0.800277	rs729847	3	EEFSEC	0	intronic	0.687	NA	4	15	1	1	0
FIM-EO	3:127909564:A:G	rs2811513	3	127909564	G	A	0.2624	3.49E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	0.018	NA	5	15	1	1	0
FIM-EO	1:169272451:A:T	rs10800427	1	169272451	A	T	0.04076	3.52E-10	1	rs10800428	1	NME7	0	intronic	0.078	7	5	15	1	0	0
FIM-EO	11:30253318:A:T	rs611246	11	30253318	A	T	0.4443	3.53E-10	0.858277	rs621448	9	FSHB	0	intronic	0.496	6	9	15	1	1	0
FIM-EO	11:30342173:A:T	rs3897026	11	30342173	A	T	0.4463	3.53E-10	0.860624	rs621448	9	ARL14EP	2424	intergenic	1.397	6	5	14	0	1	0
FIM-EO	11:30341210:A:G	rs10767837	11	30341210	A	G	0.4463	3.54E-10	0.860624	rs621448	9	ARL14EP	3387	intergenic	2.627	6	5	14	0	1	0
AAM-EPP	3:50135412:A:C	rs7648652	3	50135412	A	C	0.2565	3.54E-10	0.957626	rs13083396	7	RBM6:RBM5	0:00	intronic	4.297	7	4	4	1	1	0
AAM-EPP	2:203017167:A:G	rs73992849	2	203017167	G	A	0.1252	3.55E-10	0.9826	rs77251002	5	AC079354.1	0	intronic	0.975	5	2	15	1	1	0
AAM-EM	10:90183102:C:T	rs10887818	10	90183102	C	T	0.4374	3.56E-10	0.763885	rs7921352	20	RNLS	0	intronic	6.068	7	5	15	1	0	0
FIM-EO	11:30247886:C:T	rs939433	11	30247886	C	T	0.4443	3.60E-10	0.858277	rs621448	9	FSHB	4676	intergenic	0.55	NA	9	15	0	1	0
AAM-EPP	3:50085153:A:G	rs17304079	3	50085153	A	G	0.2565	3.60E-10	0.957626	rs13083396	7	RBM6	0	intronic	7.756	5	4	4	1	1	0
FIM-EO	11:30253189:G:T	rs550312	11	30253189	T	G	0.4443	3.61E-10	0.858277	rs621448	9	FSHB	0	intronic	4.833	7	9	15	1	1	0
LMC-ERSV	6:151799274:A:C	rs7762223	6	151799274	A	C	0.04771	3.62E-10	0.784245	rs147230474	2	C6orf211	8037	intergenic	0.477	7	5	15	0	1	0
FIM-EO	11:30254550:C:T	rs595496	11	30254550	T	C	0.4443	3.62E-10	0.858277	rs621448	9	FSHB	0	intronic	5.666	NA	9	15	1	1	0
FIM-EO	11:30254268:G:T	rs580646	11	30254268	T	G	0.4443	3.62E-10	0.858277	rs621448	9	FSHB	0	intronic	7.431	7	9	15	1	1	0
FIM-EO	11:30314253:C:T	rs11031038	11	30314253	T	C	0.4433	3.63E-10	0.848015	rs621448	9	ARL14EP	30344	intergenic	2.189	2c	5	15	0	1	0
LMC-EM	11:30378694:G:T	rs7952660	11	30378694	T	G	0.4583	3.63E-10	0.695036	rs1716021	7	RP4-710M3.1	11000	intergenic	1.86	6	5	15	0	1	0
LMC-ERSV	6:151827204:C:T	rs7453575	6	151827204	T	C	0.04771	3.63E-10	0.784245	rs147230474	2	CCDC170	0	intronic	0.969	7	5	15	1	1	0
FIM-EO	11:30250568:C:T	rs654669	11	30250568	T	C	0.4443	3.64E-10	0.858277	rs621448	9	FSHB	1994	intergenic	7.642	NA	9	15	0	1	0
LMC-ERSV	6:151826134:A:G	rs7753324	6	151826134	G	A	0.04771	3.64E-10	0.784245	rs147230474	2	CCDC170	0	intronic	3.463	6	5	15	1	1	0
FIM-EM	1:169435027:C:T	rs2678166	1	169435027	C	T	0.006958	3.66E-10	0.639065	rs144737447	1	SLC19A2	0	UTR3	9.616	NA	4	5	1	0	0
FIM-EO	11:30254683:A:C	rs594982	11	30254683	A	C	0.4503	3.68E-10	0.861308	rs621448	9	FSHB	0	intronic	0.824	NA	9	15	1	1	0
FIM-EO	11:30338275:A:T	rs10767835	11	30338275	T	A	0.4433	3.69E-10	0.848015	rs621448	9	ARL14EP	6322	intergenic	6.122	5	7	15	0	1	0
FIM-EO	11:30323189:C:T	rs1933349	11	30323189	C	T	0.4433	3.71E-10	0.848015	rs621448	9	ARL14EP	21408	intergenic	4.075	NA	9	15	0	1	0
FIM-EO	11:30324475:A:T	rs1933348	11	30324475	T	A	0.4433	3.71E-10	0.848015	rs621448	9	ARL14EP	20122	intergenic	1.135	6	14	15	0	1	0
AAM-EPP	3:50044006:A:T	rs7635601	3	50044006	T	A	0.2435	3.72E-10	0.950815	rs13083396	7	RBM6	0	intronic	7.237	1f	4	5	1	1	0
FIM-EO	11:30248826:C:T	rs1782509	11	30248826	C	T	0.4473	3.72E-10	0.871006	rs621448	9	FSHB	3736	intergenic	0.027	6	9	15	0	1	0
FIM-EO	11:30322609:T:TGG	rs74640038	11	30322609	T	TGG	0.4423	3.74E-10	0.843597	rs621448	9	ARL14EP	21988	intergenic	1.007	NA	9	15	0	1	0
FIM-EO	11:30338392:C:T	rs10767836	11	30338392	T	C	0.4443	3.75E-10	0.838106	rs621448	9	ARL14EP	6205	intergenic	2.84	4	7	15	0	1	0
FIM-EO	3:127916551:A:G	rs2811509	3	127916551	G	A	0.2624	3.76E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	0.206	NA	5	5	1	1	0
FIM-EO	3:127902091:G:T	rs2811480	3	127902091	G	T	0.2624	3.77E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	1.19	5	5	15	1	1	0
FIM-EO	3:127904496:C:T	rs2811481	3	127904496	T	C	0.2624	3.78E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	0.887	6	5	15	1	1	0
FIM-EO	11:30249084:C:T	rs1716024	11	30249084	C	T	0.4503	3.78E-10	0.861308	rs621448	9	FSHB	3478	intergenic	2.604	NA	9	15	0	1	0
AAM-EPP	6:151764723:C:G	rs7748822	6	151764723	C	G	0.17	3.79E-10	0.657761	rs7740302	11	RMND1	0	intronic	2.771	5	4	5	1	0	0
LMC-DE	6:151773831:C:T	rs111270458	6	151773831	C	T	0.04871	3.79E-10	0.832037	rs80347787	2	C6orf211	0	intronic	12.17	3a	1	1	1	1	0
FIM-EO	11:30322610:T:TACC	rs75682475	11	30322610	T	TACC	0.4423	3.82E-10	0.843597	rs621448	9	ARL14EP	21987	intergenic	0.991	NA	9	15	0	1	0
FIM-EO	11:30322611:T:TAA	rs76242056	11	30322611	T	TAA	0.4423	3.82E-10	0.843597	rs621448	9	ARL14EP	21986	intergenic	1.119	NA	9	15	0	1	0
AAM-EPP	3:50124950:A:T	rs143336190	3	50124950	T	A	0.2565	3.83E-10	0.957626	rs13083396	7	RBM6	0	intronic	5.732	7	5	5	1	1	0
AAM-EPP	10:90177991:C:T	rs10736351	10	90177991	T	C	0.3827	3.83E-10	0.953075	rs7921352	15	RNLS	0	intronic	1.544	6	5	15	1	0	0
LMC-DE	6:151844650:A:G	rs2001575	6	151844650	G	A	0.0497	3.85E-10	0.819181	rs80347787	2	CCDC170	0	intronic	0.186	7	9	15	1	1	0
AAM-EM	10:90183038:A:G	rs7918921	10	90183038	G	A	0.4374	3.86E-10	0.763885	rs7921352	20	RNLS	0	intronic	6.083	7	5	15	1	0	0
FIM-EM	6:153210935:A:C	rs117542246	6	153210935	C	A	0.01392	3.86E-10	0.701935	rs117851271	6	TUBB4BP7	8246	intergenic	0.109	7	5	15	0	0	0
LMC-ERSV	6:151725403:C:T	rs116621273	6	151725403	T	C	0.03976	3.87E-10	0.840834	rs147230474	2	RMND1	585	downstream	2.142	4	4	5	1	1	0
FIM-EM	11:30180390:A:G	rs1361424	11	30180390	A	G	0.3757	3.88E-10	0.974029	rs4923626	9	RP4-562D20..	8319	intergenic	1.82	NA	5	15	0	1	0
LMC-ERSV	6:151835307:G:T	rs117595301	6	151835307	G	T	0.04871	3.88E-10	0.767263	rs147230474	2	CCDC170	0	intronic	0.401	2c	5	15	1	1	0
LMC-EM	11:30426237:C:T	rs869215	11	30426237	T	C	0.1193	3.91E-10	1	rs869215	7	MPPED2	0	intronic	0.406	NA	5	15	1	0	0
AAM-EM	10:90079714:G:T	rs10887801	10	90079714	G	T	0.4453	3.91E-10	0.955184	rs10887804	20	RNLS	0	intronic	0.2	7	5	9	1	0	0
AAM-EPP	6:151849670:C:T	rs6919923	6	151849670	T	C	0.4036	3.93E-10	1	rs12210735	11	CCDC170	0	intronic	9.585	7	9	15	1	0	0
AAM-EPP	6:151754273:C:T	rs6904364	6	151754273	T	C	0.4076	3.94E-10	0.907241	rs9479041	11	RMND1	0	intronic	1.38	6	4	5	1	1	0
FIM-EO	3:127892037:C:T	rs2999052	3	127892037	T	C	0.2624	3.96E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	1.539	7	5	5	1	1	0
FIM-EM	2:11718591:C:T	rs1529868	2	11718591	C	T	0.4493	3.96E-10	0.753979	rs4668732	2	GREB1	0	intronic	0.234	NA	4	15	1	0	0
LMC-EM	2:49307259:C:G	rs73931521	2	49307259	G	C	0.1769	3.97E-10	0.789298	rs4971681	2	FSHR	0	intronic	2.161	7	9	15	1	0	0
FIM-EO	11:30201790:C:T	rs7113525	11	30201790	T	C	0.3757	3.98E-10	0.996276	rs4923626	9	RP4-562D20..	12936	intergenic	0.057	6	9	15	0	1	0
FIM-EO	2:11723110:A:G	rs16857668	2	11723110	G	A	0.4006	3.99E-10	0.937977	rs10693974	2	GREB1	0	intronic	3.08	4	1	15	1	0	0
LMC-DE	6:151785551:A:G	rs17081270	6	151785551	A	G	0.0507	4.03E-10	0.836044	rs80347787	2	C6orf211	0	intronic	0.515	7	4	5	1	1	0
FIM-EO	3:127895226:A:G	rs2687729	3	127895226	A	G	0.2624	4.03E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	2.629	NA	5	5	1	1	0
LMC-DE	6:151782544:A:G	rs79540726	6	151782544	G	A	0.0507	4.04E-10	0.836044	rs80347787	2	C6orf211	0	intronic	0.441	7	4	5	1	1	0
FIM-EO	3:127889287:A:G	rs3122173	3	127889287	A	G	0.2624	4.04E-10	0.9631	rs2999048	3	EEFSEC	0	intronic	1.854	6	5	5	1	1	0
FIM-EO	3:127808502:C:G	rs7355887	3	127808502	C	G	0.2664	4.05E-10	0.962672	rs2999048	3	RUVBL1	0	intronic	4.779	7	4	5	1	1	0
FIM-EM	11:30165896:C:T	rs930321	11	30165896	T	C	0.3708	4.06E-10	0.955676	rs4923626	9	RP4-562D20..	22813	intergenic	3.673	NA	14	15	0	1	0
FIM-EM	11:30315071:G:T	rs61886116	11	30315071	G	T	0.328	4.07E-10	0.754144	rs605765	9	ARL14EP	29526	intergenic	1.759	7	5	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-DE	6:151784049:G:T	rs6557142	6	151784049	G	T	0.0507	4.10E-10	0.836044	rs80347787	2	C6orf211	0	intronic	0.972		7	4	5	1	1	0
FIM-EO	11:30255185:C:T	rs6169	11	30255185	C	T	0.4503	4.12E-10	0.861308	rs621448	9	FSHB	0	exonic	0.631		7	9	15	1	1	0
AAM-EPP	3:50065274:A:G	rs35375092	3	50065274	G	A	0.2505	4.12E-10	0.98904	rs13083396	7	RBM6	0	intronic	2.122		5	4	5	1	1	0
AAM-EPP	3:50217654:C:T	rs13085567	3	50217654	C	T	0.4602	4.13E-10	1	rs13085567	7	SEMA3F	0	intronic	4.895		5	4	5	1	1	0
FIM-EO	11:30200581:C:T	rs7108968	11	30200581	T	C	0.3757	4.15E-10	0.996276	rs4923626	9	RP4-562D20.1	11727	intergenic	1.052		7	9	15	0	1	0
LMC-DE	6:151781779:C:T	rs138584427	6	151781779	C	T	0.0507	4.16E-10	0.836044	rs80347787	2	C6orf211	0	intronic	2.031		7	4	4	1	1	0
LMC-ERSV	6:151702237:C:T	rs115805051	6	151702237	T	C	0.03976	4.16E-10	0.840834	rs147230474	2	ZBTB2	0	intronic	1.222	2b		2	5	1	1	0
AAM-EPP	3:49987475:C:T	rs7615318	3	49987475	C	T	0.2485	4.17E-10	1	rs13083396	7	RBM6	0	intronic	3.42		6	4	5	1	1	0
LMC-EM	3:128111201:G:T	rs1702134	3	128111201	G	T	0.1322	4.20E-10	0.949157	rs2999033	3	EEFSEC	0	intronic	0.77		5	4	15	1	1	0
LMC-ERSV	6:151725666:C:T	rs118069541	6	151725666	C	T	0.03976	4.21E-10	0.840834	rs147230474	2	RMND1	322	downstream	0.331		5	4	5	1	1	0
LMC-DE	6:151788184:G:T	rs7748711	6	151788184	G	T	0.0507	4.26E-10	0.836044	rs80347787	2	C6orf211	0	intronic	1.606		7	4	5	1	1	0
FIM-EO	2:11744694:C:T	rs746579	2	11744694	C	T	0.325	4.27E-10	0.65778	rs10693974	2	GREB1	0	intronic	1.114		6	4	15	1	0	0
AAM-EPP	8:25247181:A:G	rs4872310	8	25247181	G	A	0.2535	4.28E-10	0.94713	rs6185	12	DOCK5	0	intronic	4.677		7	4	4	1	1	0
LMC-ERSV	6:151704548:C:T	rs75107694	6	151704548	T	C	0.03976	4.29E-10	0.840834	rs147230474	2	ZBTB2	0	intronic	10.89		7	4	5	1	1	0
LMC-DE	6:151789282:A:C	rs3734801	6	151789282	A	C	0.0507	4.34E-10	0.836044	rs80347787	2	C6orf211	0	intronic	7.873		5	4	5	1	1	0
LMC-EM	11:30376044:C:T	rs1765134	11	30376044	C	T	0.2952	4.37E-10	0.827789	rs1765142	7	RP4-710M3.1	13650	intergenic	2.946		7	5	15	0	1	0
LMC-ERSV	6:151700893:C:T	rs57968001	6	151700893	T	C	0.03976	4.37E-10	0.840834	rs147230474	2	ZBTB2	0	intronic	0.747		6	1	5	1	1	0
LMC-ERSV	6:151788962:A:G	rs58952168	6	151788962	G	A	0.0497	4.37E-10	0.750935	rs147230474	2	C6orf211	0	intronic	0.555		7	4	5	1	1	0
AAM-EM	6:151855376:A:G	rs6923538	6	151855376	G	A	0.4105	4.38E-10	0.963566	rs12210735	14	CCDC170	0	intronic	7.985		7	5	15	1	0	0
FIM-EO	11:30378694:G:T	rs7952660	11	30378694	T	G	0.4583	4.44E-10	0.789804	rs621448	9	RP4-710M3.1	11000	intergenic	1.86		6	5	15	0	1	0
FIM-EO	1:169115022:C:T	rs77979353	1	169115022	T	C	0.04473	4.44E-10	0.912022	rs10800428	1	NME7	0	intronic	0.32		5	2	15	1	0	0
AAM-EPP	3:50175940:A:G	rs2014004	3	50175940	G	A	0.2555	4.47E-10	0.910539	rs13083396	7	RP11-493K19	0	ncRNA_intron	11.5	NA		1	7	0	1	0
LMC-EM	11:30375316:A:G	rs1235089	11	30375316	A	G	0.2962	4.54E-10	0.823733	rs1765142	7	RP4-710M3.1	14378	intergenic	7.69		6	5	15	0	1	0
LMC-EM	3:128109916:C:T	rs741925	3	128109916	C	T	0.1312	4.58E-10	0.95738	rs2999033	3	EEFSEC	0	intronic	1.995		5	4	15	1	1	0
LMC-EM	11:30376782:C:T	rs1765135	11	30376782	T	C	0.2952	4.60E-10	0.827789	rs1765142	7	RP4-710M3.1	12912	intergenic	6.096		7	5	15	0	1	0
LMC-EM	3:128112307:C:T	rs1620440	3	128112307	T	C	0.1322	4.61E-10	0.949157	rs2999033	3	EEFSEC	0	intronic	4.23		4	4	15	1	1	0
FIM-EO	11:30203374:A:G	rs7928429	11	30203374	G	A	0.3757	4.65E-10	0.996276	rs4923626	9	RP4-562D20.1	14520	intergenic	0.525		6	9	15	0	1	0
AAM-EPP	6:151852555:C:T	rs9479059	6	151852555	T	C	0.4036	4.65E-10	1	rs12210735	11	CCDC170	0	intronic	3.826		6	9	15	1	0	0
AAM-EPP	6:151851428:C:T	rs11753987	6	151851428	T	C	0.4036	4.70E-10	1	rs12210735	11	CCDC170	0	intronic	3.047		7	9	15	1	0	0
LMC-DE	6:151833011:C:T	rs78588171	6	151833011	C	T	0.04573	4.72E-10	0.977632	rs80347787	2	CCDC170	0	intronic	9.559		7	5	15	1	1	0
LMC-EM	11:30356092:A:G	rs10767839	11	30356092	G	A	0.4423	4.73E-10	0.752046	rs1716021	7	ARL14EP	0	intronic	0.58		5	4	4	1	1	0
FIM-EO	8:25267103:A:G	rs4871939	8	25267103	G	A	0.2465	4.75E-10	0.980226	rs6185	8	DOCK5	0	intronic	11.04		5	4	4	1	1	0
LMC-DE	6:151778273:C:T	rs73783029	6	151778273	C	T	0.0507	4.76E-10	0.836044	rs80347787	2	C6orf211	0	intronic	6.24		5	3	5	1	1	0
AAM-EPP	3:127884937:A:C	rs2811473	3	127884937	A	C	0.1561	4.76E-10	1	rs2811473	8	EEFSEC	0	intronic	7.457		5	4	5	1	1	0
AAM-EPP	3:50217899:G:T	rs11714799	3	50217899	T	G	0.4592	4.77E-10	0.995924	rs13085567	7	SEMA3F	0	intronic	11.37		7	4	5	1	1	0
FIM-EM	11:30177817:C:T	rs3858481	11	30177817	C	T	0.3738	4.83E-10	0.966666	rs4923626	9	RP4-562D20.1	10892	intergenic	1.075		6	5	15	0	1	0
AAM-EM	16:29896390:A:G	rs8051833	16	29896390	G	A	0.327	4.84E-10	0.97657	rs7189550	32	SEZ6L2	0	intronic	1.726		7	4	15	1	1	0
AAM-EPP	10:90206538:C:T	rs10736354	10	90206538	T	C	0.3857	4.91E-10	0.923275	rs7921352	15	RNLS	0	intronic	0.296		7	5	15	1	0	0
LMC-EM	3:128110390:C:T	rs1702131	3	128110390	T	C	0.1322	4.94E-10	0.949157	rs2999033	3	EEFSEC	0	intronic	2.077		5	4	15	1	1	0
LMC-EM	3:128106536:C:T	rs2977561	3	128106536	T	C	0.2545	4.96E-10	0.78705	rs729847	3	EEFSEC	0	intronic	0.915	NA		4	15	1	1	0
FIM-EM	11:30177821:C:T	rs3858482	11	30177821	T	C	0.3738	4.98E-10	0.966666	rs4923626	9	RP4-562D20.1	10888	intergenic	2.325		6	5	15	0	1	0
AAM-EM	10:90144950:A:G	rs701893	10	90144950	G	A	0.3847	4.98E-10	0.662256	rs11202704	20	RNLS	0	intronic	8.142		5	2	15	1	0	0
LMC-EM	3:128117573:A:G	rs1702153	3	128117573	G	A	0.1282	4.99E-10	0.949245	rs2999033	3	EEFSEC	0	intronic	0.65		5	4	15	1	1	0
AAM-EM	12:50247468:A:G	rs7138803	12	50247468	G	A	0.338	5.03E-10	0.99535	rs112502508	28	RP11-70F11.7	7521	intergenic	9.959	1f		5	14	0	0	0
LMC-EM	11:30249522:C:T	rs1716023	11	30249522	T	C	0.4473	5.05E-10	0.767484	rs1716021	7	FSHB	3040	intergenic	0.236	NA		9	15	0	1	0
FIM-EM	11:30170254:C:T	rs3858478	11	30170254	C	T	0.3738	5.08E-10	0.966666	rs4923626	9	RP4-562D20.1	18455	intergenic	1.182		7	9	15	0	1	0
LMC-ERSV	6:151776164:G:T	rs17081262	6	151776164	G	T	0.0507	5.09E-10	0.735223	rs147230474	2	C6orf211	0	intronic	3.673		7	1	5	1	1	0
FIM-EM	11:30176879:C:T	rs1340032	11	30176879	T	C	0.3688	5.13E-10	0.948617	rs4923626	9	RP4-562D20.1	11830	intergenic	7.965	NA		1	15	0	1	0
AAM-EPP	8:25263294:G:T	rs61490611	8	25263294	T	G	0.2624	5.16E-10	0.910194	rs6185	12	DOCK5	0	intronic	6.896		6	4	5	1	1	0
FIM-EM	6:127455821:A:C	rs2489623	6	127455821	A	C	0.495	5.18E-10	1	rs2489623	4	RSPO3	0	intronic	7.104		6	5	15	1	0	0
AAM-EPP	3:50223977:C:T	rs11717349	3	50223977	C	T	0.4513	5.19E-10	0.96418	rs13085567	7	SEMA3F	0	intronic	5.839		5	4	15	1	1	0
AAM-EPP	3:50216114:C:T	rs67627084	3	50216114	C	T	0.4602	5.19E-10	1	rs13085567	7	SEMA3F	0	intronic	1.552		5	4	5	1	1	0
FIM-EM	11:30166397:A:G	rs10835622	11	30166397	G	A	0.3728	5.20E-10	0.963073	rs4923626	9	RP4-562D20.1	22312	intergenic	7.51		7	14	15	0	1	0
LMC-EM	11:30248826:C:T	rs1782509	11	30248826	C	T	0.4473	5.22E-10	0.767484	rs1716021	7	FSHB	3736	intergenic	0.027		6	9	15	0	1	0
FIM-EM	6:127439297:G:T	rs2800709	6	127439297	T	G	0.4801	5.24E-10	0.924227	rs2489623	4	RSPO3	451	upstream	0.179	2b		1	10	1	0	0
AAM-EPP	10:90205199:A:C	rs4596981	10	90205199	A	C	0.3857	5.26E-10	0.923275	rs7921352	15	RNLS	0	intronic	1.742		6	5	15	1	0	0
LMC-EM	11:30251351:A:C	rs640748	11	30251351	A	C	0.4483	5.27E-10	0.771349	rs1716021	7	FSHB	1211	intergenic	7.736	NA		7	15	0	1	0
AAM-EPP	3:50120257:A:G	rs55924524	3	50120257	A	G	0.2565	5.28E-10	0.957626	rs13083396	7	RBM6	0	intronic	3.272		7	2	5	1	1	0
LMC-EM	11:30263655:C:T	rs532667	11	30263655	C	T	0.4483	5.32E-10	0.771349	rs1716021	7	FSHB	6846	intergenic	0.946		6	13	15	0	1	0
LMC-EM	11:30373982:A:G	rs140873431	11	30373982	A	G	0.0338	5.34E-10	0.888384	rs118175327	7	ARL14EP	14207	intergenic	3.388		7	2	15	0	0	0
FIM-EO	2:11723858:A:G	rs1865573	2	11723858	G	A	0.4006	5.35E-10	0.937977	rs10693974	2	GREB1	0	intronic	2.136	NA		4	15	1	0	0
AAM-EM	8:25320594:C:T	rs12675625	8	25320594	T	C	0.2485	5.37E-10	0.760387	rs6185	17	CDCA2	0	intronic	9.281		7	4	15	1	1	0
FIM-EM	11:30394949:C:T	rs571174	11	30394949	T	C	0.2982	5.40E-10	0.813768	rs1765142	9	RP4-710M3.1	4755	intergenic	11.55		7	5	15	0	1	0
FIM-EO	11:30367332:C:T	rs1538109	11	30367332	T	C	0.4453	5.41E-10	0.848222	rs621448	9	ARL14EP	7557	intergenic	1.53	NA		5	15	0	1	0
AAM-EPP	3:50067350:C:T	rs35849525	3	50067350	T	C	0.2565	5.47E-10	0.957626	rs13083396	7	RBM6	0	intronic	0.696		7	4	5	1	1	0
LMC-DE	6:151840576:C:G	rs149746679	6	151840576	C	G	0.0497	5.48E-10	0.819181	rs80347787	2	CCDC170	0	intronic	3.158		5	9	15	1	1	0
FIM-EM	11:30165710:A:G	rs475305	11	30165710	A	G	0.3748	5.49E-10	0.970287	rs4923626	9	RP4-562D20.1	22999	intergenic	2.78	NA		14	15	0	1	0
LMC-EM	11:30253641:C:T	rs609896	11	30253641	T	C	0.4473	5.49E-10	0.767484	rs1716021	7	FSHB	0	intronic	0.714	NA		9	15	1	1	0
FIM-EO	3:127948149:C:T	rs4857878	3	127948149	T	C	0.2634	5.51E-10	0.95764	rs2999048	3	EEFSEC	0	intronic	1.578		5	5	15	1	1	0
AAM-EM	12:50256063:C:T	rs12367809	12	50256063	C	T	0.339	5.51E-10	0.990723	rs112502508	28	RP11-70F11.7	0	ncRNA_intron	0.325		7	5	15	1	0	0
LMC-ERSV	6:151842916:C:T	rs117027891	6	151842916	C	T	0.0497	5.51E-10	0.679984	rs147230474	2	CCDC170	0	intronic	0.22		6	9	15	1	1	0
AAM-EPP	10:90188027:C:G	rs7910594	10	90188027	C	G	0.3847	5.52E-10	0.961493	rs7921352	15	RNLS	0	intronic	3.939		6	2	15	1	0	0
AAM-EPP	3:50223593:A:T	rs2073726	3	50223593	T	A	0.4513	5.53E-10	0.96406	rs13085567	7	SEMA3F	0	intronic	5.841		5	4	15	1	1	0
LMC-EM	3:128107020:A:C	rs7373685	3	128107020	A	C	0.2535	5.55E-10	0.800277	rs729847	3	EEFSEC	0	intronic	2.967		5	4	15	1	1	0
AAM-EPP	10:90190619:C:T	rs10788600	10	90190619	T	C	0.3847	5.55E-10	0.961493	rs7921352	15	RNLS	0	intronic	0.253		7	5	15	1	0	0
LMC-DE	6:151840464:C:T	rs139951459	6	151840464	C	T	0.0497	5.55E-10	0.819181	rs80347787	2	CCDC170	0	intronic	5.643		5	9	15	1	1	0
LMC-EM	11:30255823:A:G	rs506197	11	30255823	A	G	0.4473	5.58E-10	0.767484	rs1716021	7	FSHB	0	UTR3	6.523		7	5	15	1	1	0
LMC-EM	11:30264368:A:G	rs560109	11	30264368	G	A	0.4473	5.60E-10	0.760504	rs1716021	7	FSHB	7559	intergenic	0.31		7	13	15	0	1	0
AAM-EPP	10:90218338:C:G	rs4934411	10	90218338	G	C	0.3847	5.61E-10	0.919152	rs7921352	15	RNLS	0	intronic	2.745		5	5	15	1	0	0
AAM-EPP	10:90190949:C:T	rs7911996	10	90190949	T	C	0.3847	5.61E-10	0.961493	rs7921352	15	RNLS	0	intronic	1.862		5	5	15	1	0	0
AAM-EPP	10:90187924:A:G	rs10788599	10	90187924	G	A	0.3847	5.65E-10	0.961493	rs7921352	15	RNLS	0	intronic	11.67		6	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:49898318:C:G	rs62260755	3	49898318	C	G	0.2177	5.66E-10	0.820244	rs13083396	7	CAMKV	0	intronic	14.37		7	4	14	1	1	0
FIM-EM	11:30166109:C:T	rs930320	11	30166109	T	C	0.3738	5.73E-10	0.966666	rs4923626	9	RP4-562D20.1	22600	intergenic	2.865	NA		14	15	0	1	0
FIM-EO	11:30369420:C:T	rs6484481	11	30369420	C	T	0.4463	5.73E-10	0.845472	rs621448	9	ARL14EP	9645	intergenic	0.027		7	5	15	0	1	0
FIM-EM	11:30173187:C:T	rs12282309	11	30173187	T	C	0.3738	5.74E-10	0.966666	rs4923626	9	RP4-562D20.1	15522	intergenic	5.09		6	7	15	0	1	0
FIM-EM	11:30174438:C:T	rs10835629	11	30174438	C	T	0.3738	5.75E-10	0.966666	rs4923626	9	RP4-562D20.1	14271	intergenic	0.748		6	5	15	0	1	0
FIM-EM	11:30177120:C:T	rs3858480	11	30177120	T	C	0.3748	5.76E-10	0.963058	rs4923626	9	RP4-562D20.1	11589	intergenic	12.03		5	1	15	0	1	0
FIM-EM	11:30166391:A:G	rs637542	11	30166391	A	G	0.3738	5.78E-10	0.966666	rs4923626	9	RP4-562D20.1	22318	intergenic	2.73	NA		14	15	0	1	0
FIM-EM	11:30174019:G:T	rs10835628	11	30174019	G	T	0.3738	5.79E-10	0.966666	rs4923626	9	RP4-562D20.1	14690	intergenic	0.972		7	5	15	0	1	0
FIM-EM	11:30175950:C:G	rs11030977	11	30175950	G	C	0.3738	5.79E-10	0.966666	rs4923626	9	RP4-562D20.1	12759	intergenic	1.122		7	5	15	0	1	0
FIM-EM	11:30176085:A:T	rs4512795	11	30176085	T	A	0.3738	5.79E-10	0.966666	rs4923626	9	RP4-562D20.1	12624	intergenic	1.777		5	5	15	0	1	0
FIM-EM	11:30176106:A:G	rs2884134	11	30176106	G	A	0.3738	5.79E-10	0.966666	rs4923626	9	RP4-562D20.1	12603	intergenic	2.232		5	5	15	0	1	0
FIM-EM	11:30173987:G:T	rs10835627	11	30173987	G	T	0.3738	5.79E-10	0.966666	rs4923626	9	RP4-562D20.1	14722	intergenic	0.219		6	5	15	0	1	0
FIM-EM	11:30176241:G:T	rs2226272	11	30176241	T	G	0.3738	5.79E-10	0.966666	rs4923626	9	RP4-562D20.1	12468	intergenic	0.559		7	7	15	0	1	0
FIM-EM	11:30176743:C:T	rs1340033	11	30176743	T	C	0.3738	5.79E-10	0.966666	rs4923626	9	RP4-562D20.1	11966	intergenic	4.15	NA		1	15	0	1	0
FIM-EM	11:30176794:A:T	rs1938315	11	30176794	A	T	0.3738	5.79E-10	0.966666	rs4923626	9	RP4-562D20.1	11915	intergenic	2.739		7	1	15	0	1	0
FIM-EM	11:30163013:C:T	rs12272116	11	30163013	T	C	0.3738	5.81E-10	0.966666	rs4923626	9	RP4-562D20.1	25696	intergenic	2.964		6	14	15	0	1	0
FIM-EM	11:30168320:A:T	rs11030971	11	30168320	A	T	0.3728	5.82E-10	0.963073	rs4923626	9	RP4-562D20.1	20389	intergenic	3.237		6	13	15	0	1	0
FIM-EM	11:30172916:A:C	rs1890826	11	30172916	A	C	0.3738	5.82E-10	0.966666	rs4923626	9	RP4-562D20.1	15793	intergenic	9.079		5	7	15	0	1	0
FIM-EM	11:30177840:A:T	rs3858483	11	30177840	T	A	0.3708	5.82E-10	0.955813	rs4923626	9	RP4-562D20.1	10869	intergenic	5.431		6	5	15	0	1	0
FIM-EM	11:30174370:C:T	rs10501124	11	30174370	C	T	0.3738	5.82E-10	0.966666	rs4923626	9	RP4-562D20.1	14339	intergenic	1.278		7	5	15	0	1	0
FIM-EM	11:30172517:A:AT	rs778943787	11	30172517	A	AT	0.02087	5.83E-10	0.875317	rs4923626	9	RP4-562D20.1	16192	intergenic	1.241	NA		7	15	0	0	0
FIM-EM	11:30164732:A:G	rs10835621	11	30164732	A	G	0.3738	5.83E-10	0.966666	rs4923626	9	RP4-562D20.1	23977	intergenic	9.233		4	7	15	0	1	0
FIM-EM	11:30170373:C:T	rs3908935	11	30170373	T	C	0.3738	5.85E-10	0.966666	rs4923626	9	RP4-562D20.1	18336	intergenic	0.478		7	9	15	0	1	0
FIM-EM	11:30375316:A:G	rs1235089	11	30375316	A	G	0.2962	5.85E-10	0.823733	rs1765142	9	RP4-710M3.1	14378	intergenic	7.69		6	5	15	0	1	0
FIM-EM	11:30163183:A:T	rs11030966	11	30163183	A	T	0.3738	5.86E-10	0.966666	rs4923626	9	RP4-562D20.1	25526	intergenic	6.348		6	14	15	0	1	0
FIM-EM	11:30177267:A:G	rs7113720	11	30177267	G	A	0.3738	5.86E-10	0.966666	rs4923626	9	RP4-562D20.1	11442	intergenic	2.494		5	1	15	0	1	0
FIM-EM	11:30165272:C:T	rs1819675	11	30165272	C	T	0.3738	5.86E-10	0.966666	rs4923626	9	RP4-562D20.1	23437	intergenic	3.585	NA		14	15	0	1	0
FIM-EM	11:30162984:A:G	rs12291589	11	30162984	G	A	0.3738	5.87E-10	0.966666	rs4923626	9	RP4-562D20.1	25725	intergenic	6.22		7	14	15	0	1	0
FIM-EM	11:30167113:G:T	rs11030968	11	30167113	T	G	0.3738	5.89E-10	0.966666	rs4923626	9	RP4-562D20.1	21596	intergenic	5.275		7	14	15	0	1	0
FIM-EM	11:30167121:A:G	rs11030969	11	30167121	G	A	0.3738	5.89E-10	0.966666	rs4923626	9	RP4-562D20.1	21588	intergenic	1.317		7	14	15	0	1	0
FIM-EM	11:30168564:A:C	rs11030972	11	30168564	A	C	0.3738	5.89E-10	0.966666	rs4923626	9	RP4-562D20.1	20145	intergenic	2.097		6	13	15	0	1	0
FIM-EM	11:30168871:C:T	rs4337008	11	30168871	C	T	0.3738	5.89E-10	0.966666	rs4923626	9	RP4-562D20.1	19838	intergenic	3.908		5	9	15	0	1	0
FIM-EM	11:30169198:C:T	rs3858477	11	30169198	C	T	0.3738	5.89E-10	0.966666	rs4923626	9	RP4-562D20.1	19511	intergenic	0.574	NA		9	15	0	1	0
LMC-EM	11:30257122:A:G	rs560078	11	30257122	A	G	0.4483	5.89E-10	0.771349	rs1716021	7	FSHB	313	downstream	5.281		7	5	15	1	1	0
FIM-EM	11:30171174:C:G	rs3847633	11	30171174	C	G	0.3738	5.89E-10	0.966666	rs4923626	9	RP4-562D20.1	17535	intergenic	0.294		7	9	15	0	1	0
FIM-EM	11:30171615:A:T	rs3847635	11	30171615	A	T	0.3738	5.90E-10	0.966666	rs4923626	9	RP4-562D20.1	17094	intergenic	4.954		6	7	15	0	1	0
FIM-EM	11:30376044:C:T	rs1765134	11	30376044	C	T	0.2952	5.91E-10	0.827789	rs1765142	9	RP4-710M3.1	13650	intergenic	2.946		7	5	15	0	1	0
FIM-EM	11:30167835:C:T	rs11030970	11	30167835	C	T	0.3738	5.92E-10	0.966666	rs4923626	9	RP4-562D20.1	20874	intergenic	1.64		7	13	15	0	1	0
FIM-EO	2:11729606:A:G	rs2358039	2	11729606	A	G	0.3499	5.92E-10	0.824613	rs10693974	2	GREB1	0	intronic	4.032	NA		4	15	1	0	0
LMC-EM	11:30350192:C:T	rs2065940	11	30350192	C	T	0.4423	5.93E-10	0.752046	rs1716021	7	ARL14EP	0	UTR5	4.864	NA		5	5	1	1	0
AAM-EPP	10:90208772:A:G	rs10749589	10	90208772	A	G	0.3857	5.93E-10	0.923275	rs7921352	15	RNLS	0	intronic	2.411		6	5	15	1	0	0
FIM-EM	11:30179949:A:G	rs3858484	11	30179949	A	G	0.3738	5.93E-10	0.966666	rs4923626	9	RP4-562D20.1	8760	intergenic	16.68		7	5	15	0	1	0
FIM-EM	11:30163968:A:G	rs10835620	11	30163968	G	A	0.3738	5.93E-10	0.966666	rs4923626	9	RP4-562D20.1	24741	intergenic	1.097		7	14	15	0	1	0
LMC-EM	11:30394949:C:T	rs571174	11	30394949	T	C	0.2982	5.94E-10	0.813768	rs1765142	7	RP4-710M3.1	4755	intergenic	11.55		7	5	15	0	1	0
LMC-EM	11:30242325:C:T	rs572883	11	30242325	C	T	0.4473	5.94E-10	0.767484	rs1716021	7	FSHB	10237	intergenic	0.217	NA		14	15	0	1	0
FIM-EO	11:30376209:C:T	rs7929105	11	30376209	C	T	0.4592	5.95E-10	0.793428	rs621448	9	RP4-710M3.1	13485	intergenic	14.85		6	5	15	0	1	0
FIM-EM	11:30179758:C:T	rs3847637	11	30179758	C	T	0.3738	5.97E-10	0.966666	rs4923626	9	RP4-562D20.1	8951	intergenic	1.781		7	5	15	0	1	0
FIM-EM	11:30178465:C:T	rs10835630	11	30178465	T	C	0.3738	5.97E-10	0.966666	rs4923626	9	RP4-562D20.1	10244	intergenic	1.555		5	5	15	0	1	0
FIM-EM	11:30179203:C:T	rs12786317	11	30179203	C	T	0.3738	5.97E-10	0.966666	rs4923626	9	RP4-562D20.1	9506	intergenic	4.697		7	5	15	0	1	0
LMC-EM	11:30250359:C:T	rs537263	11	30250359	T	C	0.4473	6.00E-10	0.767484	rs1716021	7	FSHB	2203	intergenic	3.475		5	9	15	0	1	0
FIM-EM	11:30173317:C:T	rs7948109	11	30173317	C	T	0.3738	6.01E-10	0.966666	rs4923626	9	RP4-562D20.1	15392	intergenic	0.084		7	5	15	0	1	0
FIM-EO	11:30348638:C:G	rs4427542	11	30348638	G	C	0.4423	6.01E-10	0.83566	rs621448	9	ARL14EP	0	intronic	0.63		5	2	5	1	1	0
AAM-EM	3:50043341:A:T	rs12634780	3	50043341	A	T	0.4394	6.01E-10	0.867066	rs34034116	8	RBM6	0	intronic	2.652		6	4	5	1	1	0
FIM-EM	11:30166628:C:T	rs10835624	11	30166628	T	C	0.3738	6.03E-10	0.966666	rs4923626	9	RP4-562D20.1	22081	intergenic	0.437		7	14	15	0	1	0
FIM-EM	11:30376782:C:T	rs1765135	11	30376782	T	C	0.2952	6.04E-10	0.827789	rs1765142	9	RP4-710M3.1	12912	intergenic	6.096		7	5	15	0	1	0
AAM-EPP	6:151851339:A:G	rs11155795	6	151851339	G	A	0.4036	6.04E-10	1	rs12210735	11	CCDC170	0	intronic	0.459		7	9	15	1	0	0
FIM-EM	11:30166240:C:T	rs1898174	11	30166240	C	T	0.3738	6.05E-10	0.966666	rs4923626	9	RP4-562D20.1	22469	intergenic	17.85	NA		14	15	0	1	0
LMC-EM	11:30249550:A:C	rs1782510	11	30249550	A	C	0.4473	6.05E-10	0.767484	rs1716021	7	FSHB	3012	intergenic	1.338		6	9	15	0	1	0
LMC-EM	11:30243247:G:T	rs543401	11	30243247	T	G	0.4473	6.06E-10	0.767484	rs1716021	7	FSHB	9315	intergenic	0.441		7	14	15	0	1	0
FIM-EM	11:30176985:C:T	rs78330906	11	30176985	C	T	0.02883	6.08E-10	1	rs78330906	9	RP4-562D20.1	11724	intergenic	3.769		6	1	15	0	0	0
AAM-EPP	3:50225029:A:G	rs11711407	3	50225029	A	G	0.4523	6.08E-10	0.968018	rs13085567	7	SEMA3F	0	intronic	3.876	1f		4	15	1	1	0
AAM-EPP	10:90187112:A:G	rs10788598	10	90187112	A	G	0.3847	6.10E-10	0.961493	rs7921352	15	RNLS	0	intronic	2.719		5	5	15	1	0	0
LMC-ERSV	6:151841061:A:G	rs114137400	6	151841061	G	A	0.0497	6.14E-10	0.679984	rs147230474	2	CCDC170	0	intronic	6.588		7	8	15	1	1	0
AAM-EPP	3:50152491:C:T	rs62263602	3	50152491	C	T	0.2475	6.17E-10	0.972264	rs13083396	7	RBM5	0	intronic	0.749		6	4	4	1	1	0
AAM-EPP	10:90206298:C:T	rs10736352	10	90206298	T	C	0.3857	6.18E-10	0.923275	rs7921352	15	RNLS	0	intronic	0.054		6	5	15	1	0	0
LMC-EM	11:30251625:C:T	rs639403	11	30251625	C	T	0.4473	6.20E-10	0.767484	rs1716021	7	FSHB	937	upstream	3.678		5	7	15	1	1	0
LMC-EM	2:49369344:C:G	rs62162146	2	49369344	G	C	0.172	6.20E-10	0.87007	rs4971681	2	FSHR	0	intronic	6.602		7	9	15	1	0	0
AAM-EM	1:72741829:C:T	rs11584611	1	72741829	T	C	0.4831	6.22E-10	1	rs11584611	2	NEGR1	0	intronic	0.857		7	5	15	1	0	0
LMC-EM	3:128122039:C:T	rs6780368	3	128122039	C	T	0.1292	6.23E-10	0.924161	rs2999033	3	EEFSEC	0	intronic	7.906		5	4	15	1	1	0
AAM-EPP	10:90187967:A:G	rs7909697	10	90187967	G	A	0.3847	6.23E-10	0.961493	rs7921352	15	RNLS	0	intronic	1.999		7	5	15	1	0	0
FIM-EM	11:30173963:C:T	rs10835626	11	30173963	T	C	0.3738	6.25E-10	0.966666	rs4923626	9	RP4-562D20.1	14746	intergenic	4.048		6	5	15	0	1	0
FIM-EM	11:30174965:A:C	rs6484476	11	30174965	C	A	0.3738	6.26E-10	0.966666	rs4923626	9	RP4-562D20.1	13744	intergenic	4.817		6	5	15	0	1	0
FIM-EO	11:30350192:C:T	rs2065940	11	30350192	C	T	0.4423	6.27E-10	0.83566	rs621448	9	ARL14EP	0	UTR5	4.864	NA		5	5	1	1	0
FIM-EO	3:128063879:C:G	rs139071297	3	128063879	C	G	0.03181	6.29E-10	1	rs139071297	3	EEFSEC	0	intronic	0.17		4	4	5	1	0	0
FIM-EO	11:30356092:A:G	rs10767839	11	30356092	G	A	0.4423	6.29E-10	0.83566	rs621448	9	ARL14EP	0	intronic	0.58		5	4	4	1	1	0
FIM-EM	11:30169574:C:T	rs11030974	11	30169574	T	C	0.3738	6.30E-10	0.966666	rs4923626	9	RP4-562D20.1	19135	intergenic	0.745		7	9	15	0	1	0
FIM-EM	11:30170837:A:G	rs7114540	11	30170837	A	G	0.3738	6.36E-10	0.966666	rs4923626	9	RP4-562D20.1	17872	intergenic	2.522		7	9	15	0	1	0
LMC-EM	11:30255867:C:G	rs506306	11	30255867	C	G	0.4483	6.37E-10	0.764341	rs1716021	7	FSHB	0	UTR3	2.184		7	5	15	1	1	0
AAM-EM	16:29895303:C:G	rs12919612	16	29895303	G	C	0.331	6.37E-10	0.976714	rs7189550	32	SEZ6L2	0	intronic	1.569		4	4	15	1	1	0
LMC-EM	11:30261215:C:T	rs7126848	11	30261215	C	T	0.4483	6.38E-10	0.771349	rs1716021	7	FSHB	4406	intergenic	3.713		5	9	15	0	1	0
LMC-EM	2:49322965:A:G	rs11688474	2	49322965	G	A	0.173	6.38E-10	0.81222	rs4971681	2	FSHR	0	intronic	4.673		6	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-EM	11:30255982:A:G	rs676349	11	30255982	A	G	0.4473	6.44E-10	0.767484	rs1716021	7	FSHB	0	UTR3		0.039	7	5	15	1	1	0
AAM-EPP	3:49890967:A:G	rs59357103	3	49890967	G	A	0.1581	6.44E-10	0.807453	rs11130207	7	TRAIP	0	intronic		6.995	5	5	5	1	1	0
FIM-EO	3:127898501:A:C	rs2811476	3	127898501	A	C	0.2614	6.48E-10	0.95794	rs2999048	3	EEFSEC	0	intronic		0.043	4	1	15	1	1	0
AAM-EPP	6:151838856:C:T	rs57521493	6	151838856	C	T	0.1481	6.50E-10	0.698177	rs7740302	11	CCDC170	0	intronic		0.656	6	5	15	1	1	0
LMC-EM	3:128107982:A:G	rs1625296	3	128107982	G	A	0.2575	6.53E-10	0.804478	rs729847	3	EEFSEC	0	intronic		0.168	NA	4	15	1	1	0
AAM-EPP	10:90054899:C:T	rs11202704	10	90054899	T	C	0.2972	6.55E-10	1	rs11202704	15	RNLS	0	intronic		1.672	6	5	15	1	0	0
AAM-EM	1:72733841:A:T	rs1380995	1	72733841	A	T	0.4841	6.55E-10	0.995968	rs11584611	2	NEGR1	0	intronic		3.624	6	5	15	1	0	0
LMC-EM	11:30241032:A:G	rs590833	11	30241032	G	A	0.4483	6.60E-10	0.764341	rs1716021	7	FSHB	11530	intergenic		3.989	NA	9	15	0	1	0
LMC-ERSV	6:151773831:C:T	rs111270458	6	151773831	C	T	0.04871	6.62E-10	0.724406	rs147230474	2	C6orf211	0	intronic		12.17	3a	1	1	1	1	0
LMC-EM	3:128111174:C:T	rs4241495	3	128111174	T	C	0.2575	6.62E-10	0.804478	rs729847	3	EEFSEC	0	intronic		0.058	5	4	15	1	1	0
FIM-EM	6:127528104:C:T	rs6914968	6	127528104	C	T	0.4553	6.63E-10	0.73827	rs2489623	4	RSPO3	9193	intergenic		7.527	5	5	15	0	0	0
AAM-EPP	3:50234126:A:G	rs34877766	3	50234126	A	G	0.4573	6.63E-10	0.987828	rs13085567	7	GNAT1	176	downstream		4.441	1f	1	14	1	1	0
LMC-EM	11:30250479:A:G	rs538236	11	30250479	G	A	0.4473	6.64E-10	0.767484	rs1716021	7	FSHB	2083	intergenic		2.136	7	9	15	0	1	0
LMC-EM	11:30241731:C:T	rs489096	11	30241731	C	T	0.4473	6.67E-10	0.767484	rs1716021	7	FSHB	10831	intergenic		4.8	NA	9	15	0	1	0
AAM-EM	1:72742235:G:T	rs9425081	1	72742235	G	T	0.4821	6.69E-10	0.99595	rs11584611	2	NEGR1	0	intronic		4.193	6	5	15	1	0	0
FIM-EM	11:30165706:C:T	rs7101406	11	30165706	T	C	0.3708	6.70E-10	0.955813	rs4923626	9	RP4-562D20.2	23003	intergenic		4.47	6	14	15	0	1	0
LMC-EM	11:30348638:C:G	rs4427542	11	30348638	G	C	0.4423	6.70E-10	0.752046	rs1716021	7	ARL14EP	0	intronic		0.63	5	2	5	1	1	0
LMC-EM	11:30248392:A:G	rs1630084	11	30248392	G	A	0.4473	6.70E-10	0.767484	rs1716021	7	FSHB	4170	intergenic		1.709	7	9	15	0	1	0
AAM-EM	1:72740634:A:G	rs7549792	1	72740634	G	A	0.4821	6.70E-10	0.99595	rs11584611	2	NEGR1:GDI2	0:00	ncRNA_exoni		12.6	6	5	15	1	0	0
AAM-EM	12:50250111:A:G	rs7306275	12	50250111	G	A	0.339	6.72E-10	0.990723	rs112502508	28	RP11-70F11.7	4878	intergenic		0.05	7	5	14	0	0	0
FIM-EM	11:30177690:C:CTG	rs34811743	11	30177690	C	CTG	0.3738	6.74E-10	0.966666	rs4923626	9	RP4-562D20.2	11019	intergenic		5.206	NA	5	15	0	1	0
FIM-EM	11:30177010:A:G	rs3858479	11	30177010	G	A	0.3708	6.80E-10	0.955813	rs4923626	9	RP4-562D20.2	11699	intergenic		2.661	5	1	15	0	1	0
FIM-EM	11:30174667:C:T	rs10501125	11	30174667	T	C	0.3708	6.81E-10	0.955813	rs4923626	9	RP4-562D20.2	14042	intergenic		1.884	5	5	15	0	1	0
AAM-EM	1:72744144:A:G	rs3101340	1	72744144	G	A	0.4821	6.86E-10	0.99595	rs11584611	2	NEGR1	0	intronic		6.075	5	1	15	1	0	0
FIM-EM	11:30170152:C:T	rs588929	11	30170152	C	T	0.3748	6.91E-10	0.970287	rs4923626	9	RP4-562D20.2	18557	intergenic		4.391	6	9	15	0	1	0
LMC-EM	2:49324105:C:G	rs62162106	2	49324105	C	G	0.173	6.91E-10	0.81222	rs4971681	2	FSHR	0	intronic		2.628	NA	5	15	1	0	0
AAM-EM	1:72747844:C:T	rs3101341	1	72747844	C	T	0.4821	6.92E-10	0.987849	rs11584611	2	NEGR1	0	intronic		11.99	4	1	1	1	0	0
FIM-EM	11:30167587:G:T	rs2460713	11	30167587	G	T	0.3708	6.95E-10	0.955813	rs4923626	9	RP4-562D20.2	21122	intergenic		8.248	NA	14	15	0	1	0
AAM-EPP	11:30395871:C:T	rs12223987	11	30395871	C	T	0.1581	6.99E-10	0.893893	rs7949790	17	RP4-710M3.1	5677	intergenic		2.426	7	5	15	0	0	0
FIM-EM	3:127882064:A:G	rs2955118	3	127882064	G	A	0.2694	6.99E-10	1	rs2955118	3	EEFSEC	0	intronic		10.59	6	4	5	1	0	0
LMC-EM	11:30240217:C:T	rs523875	11	30240217	C	T	0.4423	7.01E-10	0.781189	rs1716021	7	FSHB	12345	intergenic		7.462	NA	7	15	0	1	0
AAM-EM	10:97877320:A:T	rs1172955	10	97877320	T	A	0.332	7.02E-10	1	rs1172955	21	RNU6-271P	4711	intergenic		8.868	6	5	14	0	0	0
LMC-DE	6:151833037:C:T	rs80347787	6	151833037	C	T	0.04672	7.04E-10	1	rs80347787	2	CCDC170	0	intronic		0.289	6	5	15	1	1	0
FIM-EM	11:30175706:C:T	rs2226016	11	30175706	C	T	0.3708	7.05E-10	0.955813	rs4923626	9	RP4-562D20.2	13003	intergenic		0.032	NA	5	15	0	1	0
AAM-EM	1:72725344:C:T	rs9424977	1	72725344	T	C	0.4841	7.07E-10	0.995968	rs11584611	2	NEGR1	0	intronic		0.181	6	5	15	1	0	0
AAM-EM	1:72717743:A:G	rs1776012	1	72717743	A	G	0.4831	7.18E-10	1	rs11584611	2	NEGR1	0	intronic		3.165	6	5	15	1	0	0
LMC-EM	3:128114587:C:T	rs7632169	3	128114587	T	C	0.2575	7.19E-10	0.804478	rs729847	3	EEFSEC	0	intronic		0.293	3a	4	15	1	1	0
AAM-EM	8:25321845:A:T	rs35698191	8	25321845	T	A	0.2485	7.20E-10	0.760387	rs6185	17	CDCA2	0	intronic		4.36	7	4	15	1	1	0
LMC-EM	11:30261910:A:C	rs622356	11	30261910	A	C	0.4473	7.24E-10	0.767484	rs1716021	7	FSHB	5101	intergenic		1.87	5	9	15	0	1	0
LMC-EM	11:30341210:A:G	rs10767837	11	30341210	A	G	0.4463	7.24E-10	0.757874	rs1716021	7	ARL14EP	3387	intergenic		2.627	6	5	14	0	1	0
LMC-EM	11:30342173:A:T	rs3897026	11	30342173	A	T	0.4463	7.26E-10	0.757874	rs1716021	7	ARL14EP	2424	intergenic		1.397	6	5	14	0	1	0
AAM-EPP	3:50119256:A:T	rs71326915	3	50119256	T	A	0.2406	7.28E-10	0.934207	rs13083396	7	RBM6	0	intronic		0.725	6	5	5	1	0	0
LMC-EM	11:30250177:C:T	rs1716022	11	30250177	C	T	0.4473	7.29E-10	0.767484	rs1716021	7	FSHB	2385	intergenic		0.221	NA	9	15	0	1	0
FIM-EO	3:128111174:C:T	rs4241495	3	128111174	T	C	0.2575	7.32E-10	0.804478	rs3887841	3	EEFSEC	0	intronic		0.058	5	4	15	1	1	0
LMC-EM	11:30258770:C:T	rs626869	11	30258770	C	T	0.4473	7.33E-10	0.767484	rs1716021	7	FSHB	1961	intergenic		1.071	NA	9	15	0	1	0
LMC-ERSV	6:151844650:A:G	rs2001575	6	151844650	G	A	0.0497	7.35E-10	0.679984	rs147230474	2	CCDC170	0	intronic		0.186	7	9	15	1	1	0
AAM-EM	10:90083345:C:T	rs11202713	10	90083345	C	T	0.4443	7.36E-10	0.959236	rs10887804	20	RNLS	0	intronic		8.836	6	7	15	1	0	0
LMC-EM	11:30258989:A:G	rs615577	11	30258989	G	A	0.4473	7.36E-10	0.767484	rs1716021	7	FSHB	2180	intergenic		1.584	NA	9	15	0	1	0
FIM-EM	6:127476717:C:T	rs2489629	6	127476717	C	T	0.4881	7.42E-10	0.924537	rs2489623	4	RSPO3	0	intronic		0.578	5	4	15	1	0	0
AAM-EPP	10:90205339:A:C	rs4619060	10	90205339	C	A	0.3847	7.44E-10	0.927544	rs7921352	15	RNLS	0	intronic		6.981	7	5	15	1	0	0
FIM-EO	1:169481121:A:T	rs6427194	1	169481121	T	A	0.06859	7.44E-10	1	rs6427194	1	F5	2282	intergenic		4.766	4	1	15	0	1	0
LMC-EM	2:49325354:C:G	rs2134812	2	49325354	C	G	0.173	7.44E-10	0.81222	rs4971681	2	FSHR	0	intronic		5.876	7	5	15	1	0	0
FIM-EM	6:127528421:C:G	rs6915525	6	127528421	C	G	0.4553	7.46E-10	0.73827	rs2489623	4	RSPO3	9510	intergenic		0.627	7	5	15	0	0	0
AAM-EM	10:90083187:A:G	rs11202712	10	90083187	G	A	0.4453	7.49E-10	0.955184	rs10887804	20	RNLS	0	intronic		2.058	7	7	15	1	0	0
FIM-EO	1:169481223:C:G	rs6427196	1	169481223	C	G	0.06859	7.56E-10	1	rs6427194	1	F5	2180	intergenic		0.101	3a	2	15	0	1	0
FIM-EM	6:127486617:C:T	rs2489630	6	127486617	C	T	0.4891	7.59E-10	0.912426	rs2489623	4	RSPO3	0	intronic		3.127	6	4	15	1	0	0
LMC-DE	6:151839806:A:G	rs1874415	6	151839806	G	A	0.0507	7.59E-10	0.802487	rs80347787	2	CCDC170	0	intronic		2.13	NA	9	15	1	1	0
FIM-EO	1:169481176:A:T	rs6427195	1	169481176	A	T	0.06859	7.60E-10	1	rs6427194	1	F5	2227	intergenic		1.988	4	1	15	0	1	0
FIM-EPP	1:169467654:A:G	rs1894692	1	169467654	G	A	0.01093	7.62E-10	1	rs1894692	2	AL021068.1	10807	intergenic		0.694	5	5	15	0	1	0
LMC-EM	2:49308467:C:G	rs11674572	2	49308467	G	C	0.175	7.64E-10	0.787756	rs4971681	2	FSHR	0	intronic		0.103	7	9	15	1	0	0
LMC-EM	11:30376209:C:T	rs7929105	11	30376209	C	T	0.4592	7.67E-10	0.698668	rs1716021	7	RP4-710M3.1	13485	intergenic		14.85	6	5	15	0	1	0
LMC-ERSV	6:151785551:A:G	rs17081270	6	151785551	A	G	0.0507	7.67E-10	0.735223	rs147230474	2	C6orf211	0	intronic		0.515	7	4	5	1	1	0
LMC-EM	2:49322127:C:G	rs2882224	2	49322127	G	C	0.1759	7.69E-10	0.809731	rs4971681	2	FSHR	0	intronic		12.11	6	5	15	1	0	0
LMC-ERSV	6:151782544:A:G	rs79540726	6	151782544	G	A	0.0507	7.69E-10	0.735223	rs147230474	2	C6orf211	0	intronic		0.441	7	4	5	1	1	0
FIM-EM	11:30169856:A:G	rs663173	11	30169856	G	A	0.3748	7.73E-10	0.970287	rs4923626	9	RP4-562D20.2	18853	intergenic		0.663	7	9	15	0	1	0
AAM-EM	12:50260264:C:T	rs7305229	12	50260264	C	T	0.4145	7.73E-10	0.697091	rs112502508	28	FAIM2	414	downstream		2.465	6	5	15	1	0	0
AAM-EM	6:151855593:G:T	rs10872673	6	151855593	G	T	0.4165	7.77E-10	0.925064	rs12210735	14	CCDC170	0	intronic		4.049	6	5	15	1	0	0
FIM-EO	1:169476052:A:G	rs10737547	1	169476052	A	G	0.06561	7.78E-10	0.954533	rs6427194	1	F5	7351	intergenic		2.958	5	5	15	0	1	0
LMC-ERSV	6:151784049:G:T	rs6557142	6	151784049	G	T	0.0507	7.80E-10	0.735223	rs147230474	2	C6orf211	0	intronic		0.972	7	4	5	1	1	0
LMC-EM	11:30239283:A:G	rs553406	11	30239283	A	G	0.4433	7.81E-10	0.78612	rs1716021	7	FSHB	13279	intergenic		8.195	NA	9	15	0	1	0
FIM-EM	2:11722468:A:G	rs11679605	2	11722468	G	A	0.327	7.84E-10	0.801116	rs2358039	2	GREB1	0	intronic		0.768	5	1	15	1	0	0
FIM-EO	1:169472899:A:G	rs6670848	1	169472899	A	G	0.06561	7.85E-10	0.954533	rs6427194	1	F5	10504	intergenic		1.675	7	5	15	0	1	0
LMC-EM	11:30239353:C:T	rs553190	11	30239353	C	T	0.4423	7.90E-10	0.781189	rs1716021	7	FSHB	13209	intergenic		6.692	NA	9	15	0	1	0
LMC-ERSV	6:151781779:C:T	rs138584427	6	151781779	C	T	0.0507	7.91E-10	0.735223	rs147230474	2	C6orf211	0	intronic		2.031	7	4	4	1	1	0
FIM-EM	11:30169998:C:T	rs7129554	11	30169998	T	C	0.3738	7.93E-10	0.966666	rs4923626	9	RP4-562D20.2	18711	intergenic		5.282	7	9	15	0	1	0
AAM-EM	1:72735458:C:T	rs12137231	1	72735458	T	C	0.4801	8.00E-10	0.987957	rs11584611	2	NEGR1	0	intronic		1.322	7	5	15	1	0	0
LMC-EM	2:49362676:C:T	rs10432668	2	49362676	T	C	0.174	8.08E-10	0.886313	rs4971681	2	FSHR	0	intronic		4.142	7	9	15	1	0	0
AAM-EPP	3:128071809:A:T	rs1735549	3	128071809	A	T	0.2177	8.08E-10	0.789564	rs729847	8	EEFSEC	0	intronic		0.707	5	4	5	1	1	0
LMC-ERSV	6:151788184:G:T	rs7748711	6	151788184	G	T	0.0507	8.11E-10	0.735223	rs147230474	2	C6orf211	0	intronic		1.606	7	4	5	1	1	0
FIM-EO	6:151769132:A:G	rs7741193	6	151769132	G	A	0.168	8.12E-10	1	rs7741193	5	RMND1	0	intronic		1.952	6	4	5	1	1	0
LMC-EM	2:49356217:C:T	rs17038310	2	49356217	T	C	0.17	8.15E-10	0.868892	rs4971681	2	FSHR	0	intronic		0.322	6	7	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:50227871:C:T	rs9858059	3	50227871	C	T	0.4513	8.24E-10	0.963973	rs13085567	7	GNAT1	1173	intergenic	1.949		7	5	14	0	1	0
LMC-ERSV	6:151789282:A:C	rs3734801	6	151789282	A	C	0.0507	8.25E-10	0.735223	rs147230474	2	C6orf211	0	intronic	7.873		5	4	5	1	1	0
LMC-EM	2:49306318:C:T	rs12622922	2	49306318	C	T	0.175	8.27E-10	0.787756	rs4971681	2	FSHR	0	intronic	8.021		6	9	15	1	0	0
FIM-EM	3:127878416:A:G	rs2999048	3	127878416	G	A	0.2694	8.28E-10	1	rs2955118	3	EEFSEC	0	intronic	0.073		7	4	5	1	1	0
AAM-EM	3:50043654:C:T	rs9812936	3	50043654	C	T	0.4394	8.35E-10	0.867066	rs34034116	8	RBM6	0	intronic	0.399		7	4	5	1	1	0
LMC-ERSV	6:151840576:C:G	rs149746679	6	151840576	C	G	0.0497	8.38E-10	0.679984	rs147230474	2	CCDC170	0	intronic	3.158		5	9	15	1	1	0
LMC-DE	6:151844583:A:G	rs2001574	6	151844583	G	A	0.0497	8.39E-10	0.819181	rs80347787	2	CCDC170	0	intronic	2.252		6	9	15	1	1	0
FIM-EM	6:127490599:A:C	rs2489631	6	127490599	C	A	0.4871	8.42E-10	0.912949	rs2489623	4	RSPO3	0	intronic	2.133		7	5	15	1	0	0
AAM-EM	3:49724808:C:T	rs3020779	3	49724808	T	C	0.166	8.45E-10	0.85584	rs11130207	8	MST1	0	exonic	13.52	NA		1	5	1	1	0
LMC-ERSV	6:151778273:C:T	rs73783029	6	151778273	C	T	0.0507	8.48E-10	0.735223	rs147230474	2	C6orf211	0	intronic	6.24		5	3	5	1	1	0
AAM-EPP	10:90235457:C:T	rs2477956	10	90235457	T	C	0.3996	8.49E-10	0.858438	rs7921352	15	RNLS	0	intronic	4.502	NA		5	15	1	0	0
LMC-ERSV	6:151840464:C:T	rs139951459	6	151840464	C	T	0.0497	8.49E-10	0.679984	rs147230474	2	CCDC170	0	intronic	5.643		5	9	15	1	1	0
FIM-EO	3:128107982:A:G	rs1625296	3	128107982	G	A	0.2575	8.51E-10	0.804478	rs3887841	3	EEFSEC	0	intronic	0.168	NA		4	15	1	1	0
AAM-EPP	3:50228767:G:T	rs3755831	3	50228767	G	T	0.4583	8.52E-10	0.991864	rs13085567	7	GNAT1	277	upstream	6.559	NA		5	14	1	1	0
AAM-EM	3:49878264:C:G	rs1996663	3	49878264	C	G	0.167	8.52E-10	0.849745	rs11130207	8	TRAIP	0	intronic	3.968	1f		4	5	1	1	0
FIM-EO	3:128114587:C:T	rs7632169	3	128114587	T	C	0.2575	8.53E-10	0.804478	rs3887841	3	EEFSEC	0	intronic	0.293	3a		4	15	1	1	0
FIM-EPP	6:151826249:C:T	rs7740302	6	151826249	T	C	0.2018	8.58E-10	1	rs7740302	5	CCDC170	0	intronic	0.843		5	5	15	1	1	0
FIM-EM	3:127867397:A:G	rs67451924	3	127867397	G	A	0.2634	8.65E-10	0.968297	rs2955118	3	RUVBL1	0	intronic	0.551		5	5	15	1	1	0
LMC-EM	2:49361804:C:G	rs62162144	2	49361804	C	G	0.171	8.75E-10	0.876302	rs4971681	2	FSHR	0	intronic	2.965		7	9	15	1	0	0
FIM-EO	1:169477574:A:C	rs6687813	1	169477574	A	C	0.06561	8.76E-10	0.954533	rs6427194	1	F5	5829	intergenic	6.395		4	2	15	0	1	0
AAM-EM	1:72744996:C:T	rs1870676	1	72744996	T	C	0.4821	8.81E-10	0.99595	rs11584611	2	NEGR1	0	intronic	14.53		5	1	15	1	0	0
AAM-EPP	10:90208940:A:T	rs10788602	10	90208940	T	A	0.3847	8.88E-10	0.919152	rs7921352	15	RNLS	0	intronic	4.38		6	5	15	1	0	0
AAM-EPP	10:90211815:A:T	rs7899828	10	90211815	A	T	0.3847	8.88E-10	0.927544	rs7921352	15	RNLS	0	intronic	5.054		6	5	15	1	0	0
AAM-EPP	2:203418537:A:G	rs1991371	2	203418537	G	A	0.1382	8.95E-10	0.756599	rs77251002	5	BMPR2	0	intronic	0.191	NA		4	5	1	0	0
LMC-EM	2:49366047:C:T	rs17038320	2	49366047	C	T	0.169	8.97E-10	0.861523	rs4971681	2	FSHR	0	intronic	0.778		6	9	15	1	0	0
FIM-EM	6:127474331:G:T	rs2489628	6	127474331	G	T	0.4891	9.03E-10	0.920133	rs2489623	4	RSPO3	0	intronic	2.563		7	4	15	1	0	0
AAM-EM	9:11813745:C:T	rs1601615	9	11813745	C	T	0.4264	9.07E-10	1	rs1601615	18	RP11-74C3.1	284914	intergenic	0.129		7	9	15	0	0	0
LMC-ERSV	6:151833011:C:T	rs78588171	6	151833011	C	T	0.04573	9.08E-10	0.68763	rs147230474	2	CCDC170	0	intronic	9.559		7	5	15	1	1	0
LMC-EM	2:49319402:C:T	rs11689334	2	49319402	T	C	0.173	9.12E-10	0.825337	rs4971681	2	FSHR	0	intronic	4.467		6	9	15	1	0	0
LMC-EM	2:49306268:C:T	rs12622916	2	49306268	C	T	0.174	9.15E-10	0.793454	rs4971681	2	FSHR	0	intronic	2.214		7	9	15	1	0	0
FIM-EM	3:127878817:C:T	rs2999049	3	127878817	T	C	0.2634	9.15E-10	0.968297	rs2955118	3	EEFSEC	0	intronic	2.222		7	4	5	1	1	0
LMC-EM	11:30254683:A:C	rs594982	11	30254683	A	C	0.4503	9.16E-10	0.76621	rs1716021	7	FSHB	0	intronic	0.824	NA		9	15	1	1	0
LMC-EM	11:30249084:C:T	rs1716024	11	30249084	C	T	0.4503	9.16E-10	0.76621	rs1716021	7	FSHB	3478	intergenic	2.604	NA		9	15	0	1	0
AAM-EPP	10:90231562:A:G	rs1169043	10	90231562	A	G	0.3996	9.21E-10	0.858438	rs7921352	15	RNLS	0	intronic	3.483	NA		5	15	1	0	0
AAM-EM	12:115114036:C:T	rs551510	12	115114036	C	T	0.5	9.23E-10	0.842187	rs8853	30	TBX3	0	intronic	5.937		5	2	13	1	0	0
AAM-EPP	2:203224161:A:C	rs12467948	2	203224161	C	A	0.1372	9.25E-10	0.78026	rs77251002	5	RN7SL40P	2020	intergenic	1.542		7	5	15	0	0	0
AAM-EPP	10:90082400:C:T	rs1582783	10	90082400	C	T	0.2913	9.29E-10	0.971128	rs11202704	15	RNLS	0	intronic	5.67		5	7	15	1	0	0
AAM-EPP	10:90092894:C:T	rs61855363	10	90092894	C	T	0.2962	9.32E-10	0.985412	rs11202704	15	RNLS	0	intronic	4.998	3a		2	15	1	0	0
LMC-EM	1:199891555:A:G	rs34777525	1	199891555	G	A	0.3728	9.33E-10	0.893415	rs6670899	1	RP11-567B20	12778	intergenic	0.028		7	9	15	0	0	0
FIM-EO	1:169470748:G:T	rs4264045	1	169470748	T	G	0.06163	9.34E-10	0.894861	rs6427194	1	F5	12655	intergenic	1.365		7	5	15	0	1	0
AAM-EPP	3:50240338:C:T	rs4688745	3	50240338	T	C	0.4414	9.40E-10	0.886834	rs13085567	7	SLC38A3	2340	intergenic	0.528	NA		2	13	0	1	0
AAM-EM	6:151759630:C:T	rs9322321	6	151759630	T	C	0.2843	9.43E-10	0.843479	rs6937816	14	RMND1	0	intronic	3.229		5	4	5	1	1	0
FIM-EM	3:127856573:A:T	rs6414310	3	127856573	T	A	0.2634	9.44E-10	0.968297	rs2955118	3	RUVBL1	0	intronic	7.358		6	5	15	1	1	0
FIM-EO	1:169490401:C:T	rs6682179	1	169490401	T	C	0.0666	9.46E-10	0.96962	rs6427194	1	F5	0	intronic	4.008		7	2	15	1	1	0
FIM-EM	3:128094493:C:T	rs1702119	3	128094493	T	C	0.2525	9.47E-10	0.832027	rs2955118	3	EEFSEC	0	intronic	5.356	NA		2	5	1	1	0
AAM-EPP	2:202991651:C:T	rs77319662	2	202991651	T	C	0.1282	9.55E-10	0.957791	rs77251002	5	AC079354.1	0	intronic	0.407		5	5	15	1	0	0
LMC-EM	11:30255185:C:T	rs6169	11	30255185	C	T	0.4503	9.62E-10	0.76621	rs1716021	7	FSHB	0	exonic	0.631		7	9	15	1	1	0
FIM-EO	6:151767483:A:G	rs76363440	6	151767483	A	G	0.168	9.64E-10	1	rs7741193	5	RMND1	0	intronic	1.359		4	2	5	1	1	0
AAM-EPP	10:90204726:C:T	rs4509673	10	90204726	T	C	0.3847	9.67E-10	0.919152	rs7921352	15	RNLS	0	intronic	0.131		6	5	15	1	0	0
LMC-EM	2:49326166:A:G	rs62162135	2	49326166	G	A	0.171	9.76E-10	0.796057	rs4971681	2	FSHR	0	intronic	4.215		6	5	15	1	0	0
AAM-EPP	10:90204887:C:T	rs2872092	10	90204887	T	C	0.3847	9.77E-10	0.919152	rs7921352	15	RNLS	0	intronic	2.554		7	5	15	1	0	0
AAM-EPP	2:203235139:A:G	rs6714523	2	203235139	G	A	0.1412	9.81E-10	0.759351	rs77251002	5	RP11-686O6.2	4515	intergenic	3.978		6	5	15	0	0	0
FIM-EPP	8:25263294:G:T	rs61490611	8	25263294	T	G	0.2624	9.93E-10	0.811597	rs12675625	7	DOCK5	0	intronic	6.896		6	4	5	1	1	0
AAM-EPP	10:90072352:C:T	rs10509543	10	90072352	T	C	0.2992	9.96E-10	0.990278	rs11202704	15	RNLS	0	intronic	1.558		7	5	15	1	0	0
FIM-EM	6:127448249:C:G	rs1936807	6	127448249	C	G	0.4851	9.98E-10	0.959704	rs2489623	4	RSPO3	0	intronic	16.5		6	2	15	1	0	0
FIM-EM	3:127994160:A:G	rs2811529	3	127994160	G	A	0.2704	1.00E-09	0.984028	rs2955118	3	EEFSEC	0	intronic	3.578	NA		4	5	1	1	0
FIM-EPP	8:25311269:A:G	rs17053711	8	25311269	G	A	0.2634	1.01E-09	0.817113	rs12675625	7	KCTD9	0	intronic	4.216		5	4	5	1	1	0
FIM-EM	6:127496512:A:G	rs2503323	6	127496512	A	G	0.4881	1.01E-09	0.916823	rs2489623	4	RSPO3	0	intronic	3.188		7	2	15	1	0	0
LMC-EM	2:49359030:A:G	rs11678373	2	49359030	A	G	0.172	1.02E-09	0.87007	rs4971681	2	FSHR	0	intronic	4.128		6	9	15	1	0	0
FIM-EO	3:128106536:C:T	rs2977561	3	128106536	T	C	0.2545	1.02E-09	0.78705	rs3887841	3	EEFSEC	0	intronic	0.915	NA		4	15	1	1	0
AAM-EPP	3:50248807:C:G	rs2236942	3	50248807	G	C	0.4404	1.03E-09	0.875261	rs13085567	7	SLC38A3	0	ncRNA_intron	2.685		4	2	14	0	1	0
FIM-EM	6:127452935:C:T	rs2745353	6	127452935	C	T	0.4841	1.03E-09	0.955721	rs2489623	4	RSPO3	0	intronic	3.557	NA		5	15	1	0	0
FIM-EM	11:30172579:A:G	rs1890825	11	30172579	G	A	0.3718	1.03E-09	0.95951	rs4923626	9	RP4-562D20.2	16130	intergenic	0.458		7	7	15	0	1	0
FIM-EO	1:169490392:C:G	rs2420370	1	169490392	G	C	0.06262	1.04E-09	0.909679	rs6427194	1	F5	0	intronic	1.857		7	4	15	1	1	0
AAM-EPP	10:90233105:G:T	rs2576181	10	90233105	T	G	0.3996	1.05E-09	0.858438	rs7921352	15	RNLS	0	intronic	5.156	NA		5	15	1	0	0
FIM-EM	6:127529209:C:T	rs9968920	6	127529209	C	T	0.4573	1.05E-09	0.737985	rs2489623	4	RSPO3	10298	intergenic	6.795		5	5	15	0	0	0
AAM-EPP	10:90160023:A:G	rs2433340	10	90160023	A	G	0.4026	1.05E-09	0.897657	rs7921352	15	RNLS	0	intronic	2.114		7	5	15	1	0	0
AAM-EM	3:49769071:C:T	rs9870858	3	49769071	C	T	0.166	1.05E-09	0.85584	rs11130207	8	IP6K1	0	intronic	9.017		6	4	4	1	1	0
FIM-EM	6:127532807:A:G	rs9482775	6	127532807	G	A	0.4592	1.06E-09	0.728659	rs2489623	4	RSPO3	13896	intergenic	0.103		7	5	15	0	0	0
LMC-EM	2:49352746:A:G	rs11688329	2	49352746	G	A	0.17	1.06E-09	0.868892	rs4971681	2	FSHR	0	intronic	1.68		6	2	15	1	0	0
AAM-EPP	8:25269102:A:C	rs1506869	8	25269102	C	A	0.2614	1.06E-09	0.914479	rs6185	12	DOCK5	0	UTR3	5.15	NA		4	4	1	1	0
FIM-EM	6:127452581:C:T	rs2800710	6	127452581	T	C	0.4841	1.07E-09	0.955721	rs2489623	4	RSPO3	0	intronic	7.05	3a		2	15	1	0	0
AAM-EPP	16:69555876:A:T	rs889400	16	69555876	A	T	0.2763	1.07E-09	1	rs889400	21	NFAT5	43120	intergenic	1.468		7	5	15	0	1	0
FIM-EO	8:25247181:A:G	rs4872310	8	25247181	G	A	0.2535	1.07E-09	0.94713	rs6185	8	DOCK5	0	intronic	4.677		7	4	4	1	1	0
LMC-EM	2:49360812:A:G	rs75673607	2	49360812	A	G	0.172	1.07E-09	0.87007	rs4971681	2	FSHR	0	intronic	1.984		7	9	15	1	0	0
FIM-EM	6:127452426:C:G	rs1967685	6	127452426	C	G	0.4841	1.07E-09	0.955721	rs2489623	4	RSPO3	0	intronic	0.047		5	2	15	1	0	0
FIM-EM	6:127455029:A:G	rs2186037	6	127455029	A	G	0.4851	1.08E-09	0.959704	rs2489623	4	RSPO3	0	intronic	0.404		6	5	15	1	0	0
FIM-EM	6:127501926:C:T	rs2503326	6	127501926	T	C	0.4871	1.08E-09	0.920664	rs2489623	4	RSPO3	0	intronic	0.578		5	4	15	1	0	0
AAM-EM	6:151761621:A:G	rs7752091	6	151761621	A	G	0.2833	1.08E-09	0.838754	rs6937816	14	RMND1	0	intronic	6.627		6	2	5	1	1	0
FIM-EM	3:128058617:A:T	rs3849531	3	128058617	A	T	0.2783	1.08E-09	0.902651	rs2955118	3	EEFSEC	0	intronic	0.034	3a		2	5	1	1	0
FIM-EM	3:128092102:A:G	rs1735538	3	128092102	A	G	0.2535	1.08E-09	0.826758	rs2955118	3	EEFSEC	0	intronic	0.168	NA		4	5	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EM	6:127452116:C:T	rs1936805	6	127452116	C	T	0.4841	1.08E-09	0.955721	rs2489623	4	RSPO3	0	intronic	9.829	NA	5	15	1	0	0
FIM-EM	3:128083332:A:G	rs1702122	3	128083332	A	G	0.2515	1.09E-09	0.827432	rs2955118	3	EEFSEC	0	intronic	0.407	NA	4	5	1	1	0
FIM-EO	3:128107020:A:C	rs7373685	3	128107020	A	C	0.2535	1.10E-09	0.800277	rs3887841	3	EEFSEC	0	intronic	2.967	5	4	15	1	1	0
AAM-EPP	3:50043341:A:T	rs12634780	3	50043341	A	T	0.4394	1.10E-09	0.867066	rs6774354	7	RBM6	0	intronic	2.652	6	4	5	1	1	0
AAM-EPP	10:90232512:C:T	rs2185786	10	90232512	T	C	0.3996	1.11E-09	0.858438	rs7921352	15	RNLS	0	intronic	1.763	NA	5	15	1	0	0
LMC-EM	2:49327460:A:C	rs60745617	2	49327460	A	C	0.173	1.12E-09	0.81222	rs4971681	2	FSHR	0	intronic	4.813	6	5	15	1	0	0
AAM-EPP	2:203421199:A:G	rs1061157	2	203421199	G	A	0.1362	1.13E-09	0.754878	rs77251002	5	BMPR2	0	exonic	11.89	5	4	4	1	0	0
AAM-EPP	3:128059610:A:G	rs1735558	3	128059610	G	A	0.16	1.13E-09	0.724027	rs2811473	8	EEFSEC	0	intronic	0.156	NA	4	5	1	1	0
FIM-EM	3:127961396:A:T	rs9843281	3	127961396	A	T	0.2694	1.13E-09	0.989333	rs2955118	3	EEFSEC	0	intronic	2.231	7	5	5	1	1	0
AAM-EPP	6:151849829:C:T	rs4870029	6	151849829	C	T	0.2187	1.13E-09	0.78777	rs4870030	11	CCDC170	0	intronic	2.982	7	9	15	1	0	0
FIM-EM	6:127449246:A:G	rs1474696	6	127449246	A	G	0.4841	1.14E-09	0.955721	rs2489623	4	RSPO3	0	intronic	4.033	NA	2	15	1	0	0
AAM-EM	12:50245706:A:G	rs10875982	12	50245706	A	G	0.4115	1.14E-09	0.719576	rs112502508	28	BCDIN3D	8793	intergenic	5.557	6	5	14	1	0	0
FIM-EPP	8:25269102:A:C	rs1506869	8	25269102	C	A	0.2614	1.14E-09	0.815694	rs12675625	7	DOCK5	0	UTR3	5.15	NA	4	4	1	1	0
AAM-EPP	3:127885008:A:C	rs2687728	3	127885008	C	A	0.1531	1.14E-09	0.97711	rs2811473	8	EEFSEC	0	intronic	11.12	NA	4	5	1	1	0
AAM-EPP	3:50224225:A:G	rs12632110	3	50224225	A	G	0.337	1.15E-09	0.937619	rs1046956	7	SEMA3F	0	intronic	3.042	1f	4	15	1	1	0
FIM-EM	3:127958013:A:G	rs4074440	3	127958013	G	A	0.2694	1.15E-09	0.989333	rs2955118	3	EEFSEC	0	intronic	1.324	NA	5	5	1	1	0
AAM-EPP	2:203238623:C:T	rs139042575	2	203238623	C	T	0.1412	1.15E-09	0.759351	rs77251002	5	RP11-686O6..	1031	intergenic	0.302	5	2	15	0	0	0
LMC-ERSV	6:151839806:A:G	rs1874415	6	151839806	G	A	0.0507	1.15E-09	0.666127	rs147230474	2	CCDC170	0	intronic	2.13	NA	9	15	1	1	0
FIM-EM	3:127978795:A:G	rs4555544	3	127978795	G	A	0.2694	1.16E-09	0.989333	rs2955118	3	EEFSEC	0	intronic	6.032	5	5	9	1	1	0
AAM-EPP	3:128038834:C:T	rs12486156	3	128038834	C	T	0.161	1.16E-09	0.730908	rs2811473	8	EEFSEC	0	intronic	4.615	2b	4	5	1	1	0
AAM-EPP	3:128038689:A:C	rs12486127	3	128038689	C	A	0.161	1.16E-09	0.730908	rs2811473	8	EEFSEC	0	intronic	14.07	2b	4	5	1	1	0
FIM-EM	2:11722575:A:G	rs11674605	2	11722575	A	G	0.4722	1.16E-09	0.783277	rs7578132	2	GREB1	0	intronic	2.614	5	1	15	1	0	0
LMC-DE	11:30190496:C:T	rs76821060	11	30190496	C	T	0.03579	1.16E-09	1	rs76821060	5	RP4-562D20..	1642	intergenic	0.823	7	5	15	0	0	0
FIM-EM	3:127963448:A:G	rs13434079	3	127963448	A	G	0.2694	1.17E-09	0.989333	rs2955118	3	EEFSEC	0	intronic	4.207	6	4	5	1	1	0
AAM-EPP	2:203369051:C:G	rs13430577	2	203369051	G	C	0.1421	1.17E-09	0.736297	rs77251002	5	BMPR2	0	intronic	1.032	7	4	5	1	0	0
LMC-EM	11:30369420:C:T	rs6484481	11	30369420	C	T	0.4463	1.18E-09	0.742894	rs1716021	7	ARL14EP	9645	intergenic	0.027	7	5	15	0	1	0
LMC-EM	11:30367332:C:T	rs1538109	11	30367332	T	C	0.4453	1.18E-09	0.744848	rs1716021	7	ARL14EP	7557	intergenic	1.53	NA	5	15	0	1	0
LMC-EM	2:49357415:A:G	rs17038315	2	49357415	G	A	0.171	1.18E-09	0.862661	rs4971681	2	FSHR	0	intronic	0.646	5	7	15	1	0	0
FIM-EO	3:128095767:A:G	rs2977565	3	128095767	G	A	0.2167	1.18E-09	0.829351	rs3887841	3	EEFSEC	0	intronic	8.921	NA	2	5	1	1	0
AAM-EM	3:49866584:G:T	rs35129566	3	49866584	T	G	0.166	1.18E-09	0.85584	rs11130207	8	TRAIP	0	exonic	1.555	7	4	4	1	1	0
AAM-EM	3:49652148:C:T	rs1352889	3	49652148	T	C	0.166	1.18E-09	0.85584	rs11130207	8	BSN	0	intronic	5.175	6	5	15	1	1	0
AAM-EM	3:49655927:A:T	rs62262672	3	49655927	T	A	0.166	1.18E-09	0.85584	rs11130207	8	BSN	0	intronic	5.218	3a	5	15	1	1	0
FIM-EM	3:127933203:C:G	rs11707297	3	127933203	G	C	0.2704	1.18E-09	0.984028	rs2955118	3	EEFSEC	0	intronic	9.001	7	5	15	1	1	0
FIM-EO	3:128106267:A:G	rs2977562	3	128106267	A	G	0.2535	1.19E-09	0.800277	rs3887841	3	EEFSEC	0	intronic	0.687	NA	4	15	1	1	0
AAM-EPP	3:128036786:C:T	rs13095166	3	128036786	C	T	0.161	1.19E-09	0.730908	rs2811473	8	EEFSEC	0	intronic	0.943	5	4	5	1	1	0
AAM-EPP	2:203381135:C:T	rs7565875	2	203381135	C	T	0.1421	1.19E-09	0.736297	rs77251002	5	BMPR2	0	intronic	0.82	5	4	5	1	0	0
FIM-EO	3:128095652:C:T	rs3021461	3	128095652	T	C	0.2167	1.19E-09	0.829351	rs3887841	3	EEFSEC	0	intronic	3.059	NA	2	5	1	1	0
FIM-EM	3:127913263:A:G	rs883238	3	127913263	A	G	0.2714	1.21E-09	0.978756	rs2955118	3	EEFSEC	0	intronic	5.523	6	5	5	1	1	0
AAM-EM	3:49878395:A:G	rs1996664	3	49878395	A	G	0.167	1.21E-09	0.849745	rs11130207	8	TRAIP	0	intronic	3.87	1f	4	5	1	1	0
FIM-EM	3:127933786:C:T	rs4857871	3	127933786	C	T	0.2644	1.21E-09	0.952216	rs2955118	3	EEFSEC	0	intronic	0.506	7	5	15	1	1	0
LMC-ERSV	6:151833037:C:T	rs80347787	6	151833037	C	T	0.04672	1.21E-09	0.671933	rs147230474	2	CCDC170	0	intronic	0.289	6	5	15	1	1	0
FIM-EM	3:127930866:A:C	rs7374072	3	127930866	C	A	0.2644	1.21E-09	0.952216	rs2955118	3	EEFSEC	0	intronic	2.482	7	5	15	1	1	0
AAM-EPP	3:128081260:C:G	rs1735545	3	128081260	G	C	0.2187	1.21E-09	0.785354	rs729847	8	EEFSEC	0	intronic	2.059	4	4	5	1	1	0
FIM-EM	3:127934774:A:C	rs4384971	3	127934774	C	A	0.2634	1.22E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	2.358	5	5	15	1	1	0
AAM-EM	3:49797769:A:G	rs9835157	3	49797769	G	A	0.166	1.22E-09	0.85584	rs11130207	8	IP6K1	0	intronic	1.976	6	4	5	1	1	0
FIM-EM	3:127939034:A:T	rs9857235	3	127939034	A	T	0.2634	1.22E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	4.197	5	4	15	1	1	0
FIM-EM	3:127936527:C:T	rs9879865	3	127936527	C	T	0.2634	1.22E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	0.901	2b	4	15	1	1	0
FIM-EM	3:127936532:C:T	rs9879866	3	127936532	C	T	0.2634	1.22E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	0.013	2b	4	15	1	1	0
LMC-EM	3:127710474:A:G	rs16845806	3	127710474	G	A	0.163	1.23E-09	0.712795	rs1735558	3	KBTBD12	3959	intergenic	2.907	6	5	15	0	1	0
AAM-EPP	10:90210183:A:G	rs10887823	10	90210183	A	G	0.3837	1.23E-09	0.92343	rs7921352	15	RNLS	0	intronic	5.476	5	5	15	1	0	0
FIM-EM	6:127449447:A:G	rs2745352	6	127449447	A	G	0.4841	1.23E-09	0.955721	rs2489623	4	RSPO3	0	intronic	3.495	6	2	15	1	0	0
FIM-EM	3:127934276:C:T	rs4857875	3	127934276	C	T	0.2624	1.23E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	4.973	2b	5	15	1	1	0
FIM-EM	3:127937645:A:G	rs9847576	3	127937645	A	G	0.2634	1.23E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	9.43	5	4	15	1	1	0
FIM-EM	3:127933822:G:T	rs4857872	3	127933822	T	G	0.2644	1.24E-09	0.952216	rs2955118	3	EEFSEC	0	intronic	8.992	6	5	15	1	1	0
LMC-EM	2:49316892:C:G	rs12614425	2	49316892	C	G	0.172	1.24E-09	0.818093	rs4971681	2	FSHR	0	intronic	1.839	6	9	15	1	0	0
FIM-EM	3:127938137:A:G	rs9814834	3	127938137	G	A	0.2634	1.24E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	3.255	5	4	15	1	1	0
FIM-EM	3:127943328:A:G	rs4857838	3	127943328	A	G	0.2634	1.25E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	4.183	7	5	15	1	1	0
FIM-EM	3:127940440:C:G	rs7372902	3	127940440	G	C	0.2634	1.25E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	0.664	5	5	15	1	1	0
FIM-EO	6:151762344:A:G	rs73783018	6	151762344	A	G	0.17	1.25E-09	0.986816	rs7741193	5	RMND1	0	intronic	4.466	2b	1	5	1	1	0
FIM-EM	11:30395895:G:T	rs490937	11	30395895	T	G	0.2982	1.25E-09	0.798059	rs1765142	9	RP4-710M3.1	5701	intergenic	0.839	NA	5	15	0	1	0
AAM-EM	6:151760382:C:T	rs9397409	6	151760382	C	T	0.2833	1.25E-09	0.838754	rs6937816	14	RMND1	0	intronic	13.01	7	4	5	1	1	0
FIM-EM	3:127939357:A:T	rs4323023	3	127939357	T	A	0.2634	1.25E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	5.943	6	4	15	1	1	0
AAM-EM	6:151728714:C:T	rs6557135	6	151728714	T	C	0.336	1.25E-09	1	rs6557135	14	RMND1	0	intronic	4.175	7	4	5	1	1	0
FIM-EM	3:127940534:A:G	rs6439122	3	127940534	A	G	0.2644	1.25E-09	0.952216	rs2955118	3	EEFSEC	0	intronic	1.146	7	5	15	1	1	0
FIM-EM	3:127945349:A:G	rs6777054	3	127945349	G	A	0.2634	1.25E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	12.79	5	2	15	1	1	0
AAM-EPP	2:203347284:C:T	rs148802328	2	203347284	C	T	0.1421	1.25E-09	0.753195	rs77251002	5	BMPR2	0	intronic	1.714	6	4	5	1	0	0
FIM-EM	3:127940353:G:T	rs9845651	3	127940353	T	G	0.2634	1.26E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	1.303	5	4	15	1	1	0
AAM-EM	3:49657441:A:G	rs4855833	3	49657441	A	G	0.166	1.27E-09	0.85584	rs11130207	8	BSN	0	intronic	3.143	NA	5	15	1	1	0
FIM-EM	3:127948060:A:G	rs4857877	3	127948060	A	G	0.2604	1.27E-09	0.942121	rs2955118	3	EEFSEC	0	intronic	0.341	5	5	15	1	1	0
LMC-EM	2:49359733:A:G	rs12614875	2	49359733	A	G	0.172	1.27E-09	0.87007	rs4971681	2	FSHR	0	intronic	10.05	6	9	15	1	0	0
FIM-EO	11:30203286:T:TA	rs201618035	11	30203286	TA	T	0.3668	1.27E-09	0.963615	rs4923626	9	RP4-562D20..	14432	intergenic	0.461	NA	9	15	0	1	0
AAM-EM	3:49665390:A:G	rs2131108	3	49665390	G	A	0.165	1.28E-09	0.848168	rs11130207	8	BSN	0	intronic	1.292	1f	4	15	1	1	0
AAM-EM	3:49753788:A:G	rs11720705	3	49753788	A	G	0.166	1.28E-09	0.85584	rs11130207	8	RNF123	0	intronic	0.033	1f	3	4	1	1	0
FIM-EO	6:151764723:C:G	rs7748822	6	151764723	C	G	0.17	1.28E-09	0.986816	rs7741193	5	RMND1	0	intronic	2.771	5	4	5	1	0	0
AAM-EM	3:49653378:A:G	rs4855849	3	49653378	A	G	0.166	1.28E-09	0.85584	rs11130207	8	BSN	0	intronic	3.557	NA	5	15	1	1	0
AAM-EM	3:49653457:C:T	rs4855848	3	49653457	C	T	0.166	1.28E-09	0.85584	rs11130207	8	BSN	0	intronic	11.49	NA	5	15	1	1	0
AAM-EPP	3:128084164:A:T	rs4277707	3	128084164	A	T	0.1431	1.28E-09	1	rs4277707	8	EEFSEC	0	intronic	1.664	5	4	5	1	1	0
AAM-EPP	10:90199209:C:T	rs10887821	10	90199209	T	C	0.3837	1.28E-09	0.957265	rs7921352	15	RNLS	0	intronic	0.323	6	5	15	1	0	0
AAM-EPP	3:128095767:A:G	rs2977565	3	128095767	G	A	0.2167	1.28E-09	0.829351	rs729847	8	EEFSEC	0	intronic	8.921	NA	2	5	1	1	0
FIM-EM	3:127944477:C:G	rs6775988	3	127944477	C	G	0.2634	1.29E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	0.378	7	4	15	1	1	0
AAM-EPP	2:203278696:C:T	rs12472408	2	203278696	T	C	0.1421	1.29E-09	0.753195	rs77251002	5	BMPR2	0	intronic	8.59	6	4	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	3:49868876:A:T	rs7649428	3	49868876	A	T	0.166	1.29E-09	0.840469	rs11130207	8	TRAIP	0	intronic	2.545	5	4	4	1	1	0
AAM-EM	3:49754970:C:T	rs7628207	3	49754970	T	C	0.166	1.29E-09	0.85584	rs11130207	8	RNF123:AMI	0:00:00	UTR3	5.404	1f		3	5	1	0
AAM-EPP	2:203382013:A:G	rs74508472	2	203382013	A	G	0.1421	1.29E-09	0.753195	rs77251002	5	BMPR2	0	intronic	2.683	6	4	5	1	0	0
AAM-EM	3:49687043:C:T	rs4855845	3	49687043	T	C	0.166	1.29E-09	0.85584	rs11130207	8	BSN	0	intronic	2.936	NA	4	15	1	1	0
AAM-EPP	2:203236039:A:G	rs11899836	2	203236039	G	A	0.1412	1.30E-09	0.759351	rs77251002	5	RP11-686O6.2	3615	intergenic	1.471	6	5	15	0	0	0
FIM-EO	6:151764648:A:G	rs59753385	6	151764648	A	G	0.17	1.30E-09	0.986816	rs7741193	5	RMND1	0	intronic	1.247	7	4	5	1	0	0
AAM-EM	3:49683526:A:G	rs4855846	3	49683526	G	A	0.166	1.30E-09	0.85584	rs11130207	8	BSN	0	intronic	4.731	NA	5	15	1	1	0
FIM-EM	6:127532381:C:T	rs6919601	6	127532381	T	C	0.4563	1.30E-09	0.735494	rs2489623	4	RSPO3	13470	intergenic	8.46	5	5	15	0	0	0
AAM-EPP	10:90223403:C:G	rs1342450	10	90223403	C	G	0.3847	1.31E-09	0.911338	rs7921352	15	RNLS	0	intronic	1.853	7	5	15	1	0	0
FIM-EO	11:30223574:A:G	rs607987	11	30223574	G	A	0.3787	1.31E-09	1	rs607987	9	FSHB	28988	intergenic	3.246	NA		5	15	0	1	0
FIM-EO	11:30217503:C:T	rs605765	11	30217503	C	T	0.3827	1.31E-09	0.984167	rs607987	9	RP4-562D20.2	28649	intergenic	2.68	7	2	15	0	1	0
AAM-EM	3:49658084:A:G	rs13096480	3	49658084	A	G	0.166	1.31E-09	0.85584	rs11130207	8	BSN	0	intronic	2.526	1f		5	15	1	1	0
AAM-EM	3:49685592:A:G	rs1078341	3	49685592	A	G	0.166	1.32E-09	0.85584	rs11130207	8	BSN	0	intronic	5.346	1b		2	15	1	1	0
FIM-EM	3:127942379:A:G	rs9873786	3	127942379	A	G	0.2694	1.34E-09	0.989333	rs2955118	3	EEFSEC	0	intronic	4.91	6	5	9	1	1	0
FIM-EO	6:151765356:G:T	rs3800277	6	151765356	G	T	0.17	1.34E-09	0.986816	rs7741193	5	RMND1	0	intronic	6.87	5	4	5	1	0	0
AAM-EPP	10:90201642:A:G	rs2096194	10	90201642	G	A	0.3877	1.34E-09	0.932061	rs7921352	15	RNLS	0	intronic	1.314	NA		5	15	1	0
FIM-EO	1:169498834:C:T	rs6009	1	169498834	T	C	0.06759	1.35E-09	0.984776	rs6427194	1	F5	0	intronic	14.67	3a		2	15	1	1
FIM-EO	6:151765296:C:T	rs3823311	6	151765296	T	C	0.17	1.35E-09	0.986816	rs7741193	5	RMND1	0	intronic	2.969	5	4	5	1	0	0
AAM-EPP	2:203222966:A:G	rs16824599	2	203222966	G	A	0.1362	1.35E-09	0.786928	rs77251002	5	RN7SL40P	825	upstream	0.544	5	5	15	0	0	0
AAM-EM	3:49667691:C:T	rs9883000	3	49667691	T	C	0.166	1.35E-09	0.85584	rs11130207	8	BSN	0	intronic	7.556	1f		5	15	1	1
AAM-EPP	2:203281513:A:G	rs115170232	2	203281513	G	A	0.1421	1.35E-09	0.753195	rs77251002	5	BMPR2	0	intronic	1.484	6	4	15	1	0	0
AAM-EPP	10:90203479:A:T	rs4606392	10	90203479	A	T	0.3837	1.35E-09	0.92343	rs7921352	15	RNLS	0	intronic	1.326	7	5	15	1	0	0
FIM-EM	3:127901786:A:G	rs2811479	3	127901786	G	A	0.2624	1.36E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	5.35	5	5	15	1	1	0
AAM-EPP	2:203356996:G:T	rs6739198	2	203356996	G	T	0.1421	1.36E-09	0.738941	rs77251002	5	BMPR2	0	intronic	1.013	6	5	5	1	0	0
FIM-EPP	11:30353881:A:G	rs77055031	11	30353881	A	G	0.0507	1.36E-09	0.608275	rs80268871	8	ARL14EP	0	intronic	6.253	7	4	5	1	0	0
FIM-EO	11:30207843:A:G	rs17623478	11	30207843	A	G	0.3738	1.37E-09	0.974142	rs4923626	9	RP4-562D20.2	18989	intergenic	4.781	7	9	15	0	1	0
AAM-EM	3:49687779:G:T	rs6774202	3	49687779	T	G	0.166	1.37E-09	0.85584	rs11130207	8	BSN	0	intronic	0.446	1b		4	15	1	1
AAM-EM	3:49798864:A:G	rs7621797	3	49798864	G	A	0.166	1.37E-09	0.85584	rs11130207	8	IP6K1	0	intronic	0.149	7	4	5	1	1	0
FIM-EO	8:25248615:A:G	rs13261573	8	25248615	G	A	0.2545	1.38E-09	0.942505	rs6185	8	DOCK5	0	intronic	0.672	7	4	4	1	1	0
AAM-EM	3:49751856:C:T	rs12715437	3	49751856	T	C	0.166	1.39E-09	0.85584	rs11130207	8	RNF123	0	intronic	0.78	1f		4	5	1	1	0
AAM-EPP	10:90211230:A:G	rs10887824	10	90211230	A	G	0.3837	1.39E-09	0.92343	rs7921352	15	RNLS	0	intronic	6.82	7	5	15	1	0	0
FIM-EM	6:127468188:A:G	rs2503111	6	127468188	G	A	0.492	1.39E-09	0.923352	rs2489623	4	RSPO3	0	intronic	15.9	2a		2	15	1	0
AAM-EPP	8:25311269:A:G	rs17053711	8	25311269	G	A	0.2634	1.39E-09	0.906683	rs6185	12	KCTD9	0	intronic	4.216	5	4	5	1	1	0
AAM-EPP	8:25320594:C:T	rs12675625	8	25320594	T	C	0.2485	1.39E-09	0.760387	rs6185	12	CDCA2	0	intronic	9.281	7	4	15	1	1	0
FIM-EM	3:127941439:C:T	rs6439123	3	127941439	T	C	0.2634	1.39E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	1.695	6	5	9	1	1	0
LMC-EM	2:49313029:C:T	rs62162101	2	49313029	C	T	0.169	1.39E-09	0.794816	rs4971681	2	FSHR	0	intronic	1.097	6	15	15	1	0	0
FIM-EM	3:128038373:A:C	rs10934853	3	128038373	C	A	0.2793	1.39E-09	0.908431	rs2955118	3	EEFSEC	0	intronic	18.77	4	4	5	1	1	0
FIM-EM	3:127918955:C:T	rs2687720	3	127918955	C	T	0.2684	1.39E-09	0.994671	rs2955118	3	EEFSEC	0	intronic	0.698	NA		5	5	1	1
AAM-EPP	2:203347460:C:T	rs6720579	2	203347460	C	T	0.1431	1.39E-09	0.747112	rs77251002	5	BMPR2	0	intronic	5.965	6	4	5	1	0	0
AAM-EPP	10:90210511:A:G	rs1935579	10	90210511	G	A	0.3837	1.40E-09	0.92343	rs7921352	15	RNLS	0	intronic	2.148	NA		5	15	1	0
AAM-EPP	3:128095652:C:T	rs3021461	3	128095652	T	C	0.2167	1.41E-09	0.829351	rs729847	8	EEFSEC	0	intronic	3.059	NA		2	5	1	1	0
AAM-EM	3:49680973:A:G	rs10452032	3	49680973	G	A	0.166	1.41E-09	0.85584	rs11130207	8	BSN	0	intronic	1.445	6	4	15	1	1	0
AAM-EPP	10:90214072:A:G	rs1342456	10	90214072	A	G	0.3837	1.42E-09	0.92343	rs7921352	15	RNLS	0	intronic	6.029	6	5	15	1	0	0
AAM-EM	3:49745235:A:G	rs11709734	3	49745235	G	A	0.166	1.42E-09	0.85584	rs11130207	8	RNF123	0	intronic	1.054	1f		4	5	1	1	0
AAM-EPP	2:203366869:A:T	rs6715927	2	203366869	T	A	0.1412	1.42E-09	0.728136	rs77251002	5	BMPR2	0	intronic	0.997	7	4	5	1	0	0
AAM-EPP	10:90110257:C:G	rs11202728	10	90110257	C	G	0.2972	1.42E-09	0.9707	rs11202704	15	RNLS	0	intronic	5.643	7	5	15	1	0	0
AAM-EPP	2:203292344:C:T	rs16839149	2	203292344	T	C	0.1421	1.42E-09	0.753195	rs77251002	5	BMPR2	0	intronic	11.52	6	4	15	1	0	0
AAM-EM	3:49739507:C:G	rs1491985	3	49739507	G	C	0.166	1.42E-09	0.85584	rs11130207	8	RNF123	0	intronic	1.068	5	4	4	1	1	0
FIM-EM	3:127934329:C:T	rs6770140	3	127934329	T	C	0.2624	1.42E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	3.142	2c		5	15	1	1	0
AAM-EM	3:49825369:A:G	rs9851930	3	49825369	G	A	0.166	1.43E-09	0.85584	rs11130207	8	IP6K1	1393	intergenic	6.414	7	5	15	1	1	0
FIM-EM	3:127935461:C:G	rs6439121	3	127935461	G	C	0.2624	1.43E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	0.827	6	5	15	1	1	0
FIM-EM	3:127934218:A:G	rs4857873	3	127934218	A	G	0.2624	1.43E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	11.28	5	5	15	1	1	0
AAM-EPP	2:203360074:C:T	rs115187557	2	203360074	C	T	0.1412	1.44E-09	0.745015	rs77251002	5	BMPR2	0	intronic	3.741	5	4	5	1	0	0
AAM-EPP	2:203384712:C:G	rs3736578	2	203384712	C	G	0.1412	1.44E-09	0.742423	rs77251002	5	BMPR2	0	intronic	8.329	6	4	4	1	0	0
AAM-EM	3:49681704:A:G	rs6446286	3	49681704	A	G	0.166	1.44E-09	0.85584	rs11130207	8	BSN	0	intronic	1.652	5	4	15	1	1	0
AAM-EM	3:49853796:A:T	rs62260720	3	49853796	T	A	0.166	1.44E-09	0.85584	rs11130207	8	UBA7	2416	intergenic	11.25	5	5	15	1	1	0
AAM-EM	3:49674343:C:T	rs9824435	3	49674343	C	T	0.166	1.45E-09	0.85584	rs11130207	8	BSN	0	intronic	1.427	1f		2	15	1	1	0
FIM-EM	3:127931402:A:G	rs7372439	3	127931402	A	G	0.2644	1.45E-09	0.952216	rs2955118	3	EEFSEC	0	intronic	2.633	7	5	15	1	1	0
AAM-EPP	2:203284266:C:G	rs11889765	2	203284266	G	C	0.1431	1.45E-09	0.747112	rs77251002	5	BMPR2	0	intronic	1.145	5	5	15	1	0	0
AAM-EPP	10:90258744:C:T	rs2576170	10	90258744	T	C	0.3708	1.45E-09	0.732339	rs7921352	15	RNLS	0	intronic	1.309	NA		5	15	1	0
AAM-EPP	11:30395448:G:T	rs80268871	11	30395448	G	T	0.08052	1.45E-09	1	rs80268871	17	RP4-710M3.1	5254	intergenic	3.06	7	5	15	0	0	0
LMC-EM	1:199892279:C:T	rs11578938	1	199892279	C	T	0.3777	1.45E-09	0.898044	rs6670899	1	RP11-567B20	13502	intergenic	7.464	6	9	15	0	0	0
AAM-EPP	2:203365009:A:T	rs190286519	2	203365009	A	T	0.1421	1.46E-09	0.738941	rs77251002	5	BMPR2	0	intronic	1.458	7	4	5	1	0	0
AAM-EPP	10:90215629:C:T	rs6586139	10	90215629	T	C	0.3837	1.46E-09	0.92343	rs7921352	15	RNLS	0	intronic	1.188	5	5	15	1	0	0
FIM-EM	3:127888347:G:T	rs2955120	3	127888347	T	G	0.2684	1.47E-09	0.994671	rs2955118	3	EEFSEC	0	intronic	7.116	7	5	5	1	1	0
AAM-EM	3:49710444:C:G	rs13093525	3	49710444	C	G	0.166	1.47E-09	0.85584	rs11130207	8	APEH	990	upstream	0.004	5	1	5	1	1	0
FIM-EM	3:127934269:A:T	rs4857874	3	127934269	A	T	0.2624	1.47E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	4.331	2b		5	15	1	1	0
AAM-EM	12:50244767:A:T	rs10875980	12	50244767	A	T	0.4105	1.48E-09	0.722681	rs112502508	28	BCDIN3D	7854	intergenic	3.874	5	2	14	1	0	0
AAM-EPP	3:50250837:C:T	rs2282749	3	50250837	T	C	0.4473	1.48E-09	0.901168	rs13085567	7	SLC38A3	0	ncRNA_intron	1.962	5	2	15	0	1	0
AAM-EPP	2:203368211:C:T	rs4281883	2	203368211	C	T	0.1412	1.48E-09	0.716751	rs77251002	5	BMPR2	0	intronic	0.112	6	4	15	1	0	0
FIM-EO	1:169486641:C:G	rs9332666	1	169486641	G	C	0.06362	1.48E-09	0.924563	rs6427194	1	F5	0	intronic	0.668	7	4	15	1	1	0
FIM-EM	3:127923187:C:T	rs6439119	3	127923187	T	C	0.2614	1.48E-09	0.95794	rs2955118	3	EEFSEC	0	intronic	2.508	7	5	15	1	1	0
FIM-EPP	8:25248615:A:G	rs13261573	8	25248615	G	A	0.2545	1.48E-09	0.805191	rs34068702	7	DOCK5	0	intronic	0.672	7	4	4	1	1	0
AAM-EM	12:115116352:A:T	rs59336	12	115116352	T	A	0.4901	1.48E-09	0.829871	rs8853	30	TBX3	0	intronic	1.435	4	1	13	1	0	0
AAM-EPP	3:50176739:A:C	rs2624846	3	50176739	C	A	0.2495	1.49E-09	0.875504	rs13083396	7	RP11-493K19	0	ncRNA_intron	9.98	NA		2	7	0	1	0
FIM-EM	3:127942729:T:TA	rs35277207	3	127942729	TA	T	0.2634	1.49E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	3.567	NA		4	15	1	1	0
AAM-EM	3:49679072:A:G	rs2329021	3	49679072	G	A	0.166	1.49E-09	0.85584	rs11130207	8	BSN:BSN-AS	0:00	ncRNA_exoni	0.496	1f		5	15	1	1	0
FIM-EM	3:127930459:A:G	rs9838120	3	127930459	A	G	0.2644	1.50E-09	0.952216	rs2955118	3	EEFSEC	0	intronic	0.599	7	5	15	1	1	0
AAM-EPP	2:203394348:G:T	rs12467409	2	203394348	G	T	0.1412	1.50E-09	0.742423	rs77251002	5	BMPR2	0	intronic	5.645	2a		4	5	1	0	0
AAM-EPP	10:90214279:A:T	rs10749591	10	90214279	T	A	0.3837	1.50E-09	0.92343	rs7921352	15	RNLS	0	intronic	3.242	7	5	15	1	0	0
FIM-EM	3:127946788:A:G	rs9830294	3	127946788	G	A	0.2694	1.50E-09	0.989333	rs2955118	3	EEFSEC	0	intronic	0.531	7	5	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EO	2:11725241:A:G	rs12470971	2	11725241	G	A	0.3956	1.51E-09	0.957369	rs10693974	2	GREB1	0	intronic	1.17	5	4	15	1	0	0
AAM-EM	3:49829653:A:G	rs7637711	3	49829653	A	G	0.166	1.51E-09	0.85584	rs11130207	8	CDHR4	0	intronic	5.549	1f		5	15	1	1	0
AAM-EPP	2:203004970:C:T	rs79058237	2	203004970	C	T	0.1282	1.51E-09	0.957791	rs77251002	5	AC079354.1	0	intronic	3.369		5	5	15	1	0	0
AAM-EM	10:90139756:A:G	rs792218	10	90139756	G	A	0.3946	1.51E-09	0.634584	rs11202704	20	RNLS	0	intronic	5.062	NA		5	15	1	0	0
FIM-EM	3:127888067:A:G	rs872267	3	127888067	G	A	0.2684	1.52E-09	0.994671	rs2955118	3	EEFSEC	0	intronic	0.895	NA		2	5	1	1	0
AAM-EPP	3:50043654:C:T	rs9812936	3	50043654	C	T	0.4394	1.52E-09	0.867066	rs6774354	7	RBM6	0	intronic	0.399		7	4	5	1	1	0
AAM-EM	11:30261968:A:G	rs7951733	11	30261968	A	G	0.05169	1.52E-09	1	rs7951733	22	FSHB	5159	intergenic	0.16		5	9	15	1	0	0
AAM-EM	15:60689179:A:T	rs8033800	15	60689179	T	A	0.4175	1.52E-09	1	rs8033800	31	ANXA2	0	intronic	6.937		4	1	1	1	1	0
AAM-EM	3:49872124:C:T	rs62260723	3	49872124	T	C	0.166	1.52E-09	0.85584	rs11130207	8	TRAIP	0	intronic	1.3		6	4	5	1	1	0
AAM-EM	3:49671224:C:T	rs1586827	3	49671224	T	C	0.165	1.53E-09	0.848168	rs11130207	8	BSN	0	intronic	9.883		7	5	15	1	1	0
AAM-EPP	10:90261930:A:G	rs2576169	10	90261930	A	G	0.3708	1.53E-09	0.732339	rs7921352	15	RNLS	0	intronic	3.973	NA		5	15	1	0	0
AAM-EM	6:151727545:C:T	rs9397403	6	151727545	C	T	0.336	1.53E-09	1	rs6557135	14	RMND1	0	intronic	1.874		5	4	5	1	1	0
LMC-EM	4:55989675:A:T	rs1380057	4	55989675	T	A	0.4881	1.53E-09	0.86542	rs9994560	4	KDR	0	intronic	8.933		5	1	14	1	0	0
AAM-EPP	2:203247509:A:C	rs79919139	2	203247509	C	A	0.1412	1.53E-09	0.759351	rs77251002	5	BMPR2	0	intronic	8.554		5	3	5	1	0	0
FIM-EM	3:127895986:A:G	rs1554535	3	127895986	G	A	0.2684	1.53E-09	0.994671	rs2955118	3	EEFSEC	0	intronic	0.587	NA		5	5	1	1	0
FIM-EM	3:127948149:C:T	rs4857878	3	127948149	T	C	0.2634	1.53E-09	0.95764	rs2955118	3	EEFSEC	0	intronic	1.578		5	5	15	1	1	0
FIM-EM	3:127911820:A:G	rs2811512	3	127911820	G	A	0.2694	1.53E-09	0.989333	rs2955118	3	EEFSEC	0	intronic	7.801	NA		5	15	1	1	0
FIM-EM	3:127904943:C:T	rs2811482	3	127904943	C	T	0.2684	1.53E-09	0.994671	rs2955118	3	EEFSEC	0	intronic	2.294		5	5	15	1	1	0
AAM-EPP	10:90104705:A:G	rs11202727	10	90104705	A	G	0.2972	1.54E-09	0.9707	rs11202704	15	RNLS	0	intronic	13.77		7	5	15	1	0	0
FIM-EM	3:127905518:A:G	rs2811515	3	127905518	G	A	0.2624	1.54E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	0.15	NA		5	15	1	1	0
FIM-EO	1:169479974:C:T	rs970740	1	169479974	C	T	0.06163	1.55E-09	0.894861	rs6427194	1	F5	3429	intergenic	2.998		7	5	15	0	1	0
AAM-EPP	10:90211164:C:T	rs10749590	10	90211164	C	T	0.3827	1.56E-09	0.927726	rs7921352	15	RNLS	0	intronic	2.118		7	5	15	1	0	0
FIM-EM	3:127905451:A:G	rs2811516	3	127905451	A	G	0.2624	1.56E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	3.811	NA		5	15	1	1	0
FIM-EM	3:127918000:A:G	rs2492285	3	127918000	G	A	0.2624	1.56E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	1.204		6	5	5	1	1	0
LMC-ERSV	6:151844583:A:G	rs2001574	6	151844583	G	A	0.0497	1.57E-09	0.679984	rs147230474	2	CCDC170	0	intronic	2.252		6	9	15	1	1	0
AAM-EPP	2:203431804:A:G	rs3731696	2	203431804	A	G	0.1421	1.57E-09	0.753195	rs77251002	5	BMPR2	0	UTR3	13.15	NA		5	15	1	0	0
FIM-EM	3:127920023:C:T	rs2811508	3	127920023	T	C	0.2634	1.57E-09	0.957737	rs2955118	3	EEFSEC	0	intronic	0.946	NA		4	5	1	1	0
AAM-EM	3:49817450:C:T	rs9829155	3	49817450	T	C	0.166	1.58E-09	0.85584	rs11130207	8	IP6K1	0	intronic	4.226	1f		4	5	1	1	0
AAM-EM	3:49822909:A:G	rs9836756	3	49822909	G	A	0.166	1.59E-09	0.85584	rs11130207	8	IP6K1	0	intronic	1.641		6	1	2	1	1	0
LMC-EM	4:55991042:G:T	rs12502008	4	55991042	G	T	0.3688	1.59E-09	1	rs12502008	4	KDR	0	intronic	7.56		4	1	10	1	1	0
FIM-EM	3:127909564:A:G	rs2811513	3	127909564	G	A	0.2624	1.60E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	0.018	NA		5	15	1	1	0
AAM-EPP	2:203351696:A:G	rs75040639	2	203351696	A	G	0.1412	1.60E-09	0.745015	rs77251002	5	BMPR2	0	intronic	7.815		7	4	5	1	0	0
AAM-EM	3:49814949:C:T	rs62260663	3	49814949	T	C	0.166	1.60E-09	0.85584	rs11130207	8	IP6K1	0	intronic	2.208		6	4	5	1	1	0
FIM-EM	3:127892037:C:T	rs2999052	3	127892037	T	C	0.2624	1.61E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	1.539		7	5	5	1	1	0
FIM-EO	11:30187044:C:T	rs7102959	11	30187044	C	T	0.3748	1.61E-09	0.970287	rs4923626	9	RP4-562D20.2	1665	intergenic	3.105		5	5	15	0	1	0
FIM-EO	11:30186858:A:G	rs1819673	11	30186858	A	G	0.3748	1.61E-09	0.970287	rs4923626	9	RP4-562D20.2	1851	intergenic	0.628	NA		5	15	0	1	0
FIM-EO	1:169500590:A:C	rs6427197	1	169500590	C	A	0.06859	1.61E-09	0.969715	rs6427194	1	F5	0	intronic	0.23		7	4	15	1	1	0
FIM-EO	11:30185696:C:T	rs11030988	11	30185696	C	T	0.3748	1.61E-09	0.970287	rs4923626	9	RP4-562D20.2	3013	intergenic	4.328		7	5	15	0	1	0
FIM-EO	11:30188285:C:G	rs7930471	11	30188285	G	C	0.3748	1.62E-09	0.970287	rs4923626	9	RP4-562D20.2	424	upstream	0.918		7	5	15	0	1	0
AAM-EM	3:127724733:A:G	rs6770337	3	127724733	A	G	0.4205	1.62E-09	1	rs6770337	9	KBTBD12	18218	intergenic	0.098		5	2	14	0	1	0
AAM-EPP	2:203001990:A:G	rs34829484	2	203001990	A	G	0.1282	1.63E-09	0.957791	rs77251002	5	AC079354.1	0	intronic	16.3		5	5	15	1	1	0
AAM-EPP	2:203376547:A:G	rs57080353	2	203376547	G	A	0.1412	1.63E-09	0.742423	rs77251002	5	BMPR2	0	intronic	0.519		6	4	5	1	0	0
FIM-EM	3:127904496:C:T	rs2811481	3	127904496	T	C	0.2624	1.63E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	0.887		6	5	15	1	1	0
FIM-EO	11:30187905:G:T	rs12282163	11	30187905	G	T	0.3748	1.63E-09	0.970287	rs4923626	9	RP4-562D20.2	804	upstream	8.718		7	5	15	0	1	0
FIM-EM	3:127836319:A:G	rs4857837	3	127836319	A	G	0.2654	1.63E-09	0.968084	rs2955118	3	RUVBL1	0	intronic	6.99		4	4	5	1	1	0
FIM-EO	11:30187828:A:G	rs12282113	11	30187828	G	A	0.3748	1.64E-09	0.970287	rs4923626	9	RP4-562D20.2	881	upstream	0.082		7	5	15	0	1	0
FIM-EO	11:30188505:C:T	rs7945546	11	30188505	T	C	0.3748	1.64E-09	0.970287	rs4923626	9	RP4-562D20.2	204	upstream	10.91		7	5	15	0	1	0
AAM-EPP	2:203376199:A:G	rs76021735	2	203376199	G	A	0.1412	1.64E-09	0.742423	rs77251002	5	BMPR2	0	intronic	9.56		7	4	5	1	0	0
FIM-EO	11:30187216:C:T	rs552501	11	30187216	T	C	0.3757	1.64E-09	0.973939	rs4923626	9	RP4-562D20.2	1493	intergenic	5.808	NA		5	15	0	1	0
FIM-EO	11:30187958:A:C	rs12282076	11	30187958	C	A	0.3748	1.64E-09	0.970287	rs4923626	9	RP4-562D20.2	751	upstream	0.064		5	5	15	0	1	0
FIM-EM	6:127509157:A:G	rs7745274	6	127509157	G	A	0.492	1.64E-09	0.900045	rs2489623	4	RSPO3	0	intronic	0.515		5	5	15	1	0	0
AAM-EM	15:60687230:A:C	rs12440452	15	60687230	A	C	0.4145	1.65E-09	0.965186	rs8033800	31	ANXA2	0	intronic	6.173		4	1	5	1	0	0
FIM-EO	11:30185395:G:T	rs11030985	11	30185395	G	T	0.3748	1.65E-09	0.970287	rs4923626	9	RP4-562D20.2	3314	intergenic	0.628		6	5	15	0	1	0
FIM-EM	3:127902091:G:T	rs2811480	3	127902091	G	T	0.2624	1.65E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	1.19		5	5	15	1	1	0
FIM-EM	3:127836287:C:T	rs4857836	3	127836287	C	T	0.2654	1.66E-09	0.968084	rs2955118	3	RUVBL1	0	intronic	0.141		4	4	5	1	1	0
FIM-EO	3:127881613:A:G	rs2955117	3	127881613	G	A	0.2724	1.66E-09	0.921862	rs2999048	3	EEFSEC	0	intronic	16.66		7	4	5	1	1	0
AAM-EPP	10:90216485:C:T	rs2312610	10	90216485	T	C	0.3837	1.67E-09	0.92343	rs7921352	15	RNLS	0	intronic	7.895		5	2	15	1	0	0
FIM-EM	3:127819062:C:G	rs4857866	3	127819062	G	C	0.2654	1.67E-09	0.968084	rs2955118	3	RUVBL1	0	intronic	3.759		5	4	4	1	1	0
FIM-EM	3:127817508:C:T	rs7632756	3	127817508	C	T	0.2654	1.68E-09	0.968084	rs2955118	3	RUVBL1	0	intronic	8.881		5	4	4	1	1	0
LMC-EM	3:128110770:A:G	rs729847	3	128110770	G	A	0.2207	1.68E-09	1	rs729847	3	EEFSEC	0	intronic	2.539	NA		2	15	1	0	0
FIM-EM	3:127889287:A:G	rs3122173	3	127889287	A	G	0.2624	1.69E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	1.854		6	5	5	1	1	0
FIM-EM	3:127895226:A:G	rs2687729	3	127895226	A	G	0.2624	1.69E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	2.629	NA		5	5	1	1	0
FIM-EO	11:30185477:C:T	rs11030986	11	30185477	T	C	0.3748	1.70E-09	0.970287	rs4923626	9	RP4-562D20.2	3232	intergenic	0.093		7	5	15	0	1	0
AAM-EM	3:49825326:A:C	rs9851651	3	49825326	C	A	0.166	1.70E-09	0.85584	rs11130207	8	IP6K1	1350	intergenic	1.624		7	5	15	1	1	0
AAM-EPP	2:203216422:C:T	rs7587234	2	203216422	C	T	0.1402	1.70E-09	0.790383	rs77251002	5	RN7SL40P	5421	intergenic	0.034		7	5	15	0	0	0
FIM-EM	3:127926045:C:T	rs4362738	3	127926045	C	T	0.3926	1.71E-09	1	rs4362738	3	EEFSEC	0	intronic	0.817		6	5	15	1	0	0
AAM-EM	3:127723215:A:G	rs7611430	3	127723215	A	G	0.4205	1.72E-09	1	rs6770337	9	KBTBD12	16700	intergenic	0.071		5	5	14	0	1	0
FIM-EM	3:127916551:A:G	rs2811509	3	127916551	G	A	0.2624	1.73E-09	0.9631	rs2955118	3	EEFSEC	0	intronic	0.206	NA		5	5	1	1	0
AAM-EPP	2:203328933:C:T	rs2350809	2	203328933	T	C	0.1421	1.73E-09	0.753195	rs77251002	5	BMPR2	0	intronic	8.408		6	4	5	1	0	0
LMC-EM	3:128122396:A:G	rs2659685	3	128122396	G	A	0.2445	1.73E-09	0.840693	rs729847	3	EEFSEC	0	intronic	0.605		5	4	15	1	0	0
AAM-EPP	10:90264140:C:T	rs2477954	10	90264140	T	C	0.3708	1.73E-09	0.732339	rs7921352	15	RNLS	0	intronic	0.718	NA		5	15	1	0	0
AAM-EPP	10:90203900:C:T	rs7922551	10	90203900	T	C	0.3837	1.74E-09	0.92343	rs7921352	15	RNLS	0	intronic	1.397		6	5	15	1	0	0
AAM-EPP	10:90257225:C:T	rs2576171	10	90257225	T	C	0.3708	1.74E-09	0.732339	rs7921352	15	RNLS	0	intronic	8.839	NA		5	15	1	0	0
FIM-EO	11:30186511:C:T	rs1361421	11	30186511	C	T	0.3748	1.74E-09	0.970287	rs4923626	9	RP4-562D20.2	2198	intergenic	1.307	NA		5	15	0	1	0
AAM-EM	16:29885447:A:G	rs4787483	16	29885447	A	G	0.3141	1.74E-09	0.845731	rs7189550	32	SEZ6L2	0	intronic	0.621	1f		4	14	1	1	0
AAM-EPP	2:203309891:A:G	rs74766638	2	203309891	G	A	0.1421	1.74E-09	0.753195	rs77251002	5	BMPR2	0	intronic	3.39		5	4	15	1	0	0
AAM-EPP	2:203406855:A:C	rs77090459	2	203406855	A	C	0.1412	1.74E-09	0.742423	rs77251002	5	BMPR2	0	intronic	1.573		6	4	5	1	0	0
FIM-EM	3:127907929:A:G	rs2811514	3	127907929	A	G	0.2694	1.74E-09	0.989333	rs2955118	3	EEFSEC	0	intronic	3.329	NA		5	15	1	1	0
AAM-EPP	8:25255017:A:C	rs12675289	8	25255017	A	C	0.2704	1.75E-09	0.877694	rs6185	12	DOCK5	0	intronic	5.195		6	4	5	1	1	0
AAM-EM	3:49737323:A:G	rs11130217	3	49737323	A	G	0.166	1.75E-09	0.85584	rs11130207	8	RNF123	0	intronic	6.583	1f		4	4	1	1	0
AAM-EPP	10:90138748:A:G	rs11202735	10	90138748	G	A	0.2952	1.76E-09	0.961104	rs11202704	15	RNLS	0	intronic	2.519		6	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	2:203399999:G:T	rs193159913	2	203399999	T	G	0.1421	1.76E-09	0.736297	rs77251002	5	BMPR2	0	intronic	1.053	7	4	5	1	0	0
AAM-EPP	2:203255485:A:C	rs13426118	2	203255485	A	C	0.1421	1.76E-09	0.753195	rs77251002	5	BMPR2	0	intronic	1.983	7	4	15	1	0	0
LMC-EM	2:49304669:A:G	rs72879812	2	49304669	G	A	0.171	1.77E-09	0.770165	rs4971681	2	FSHR	0	intronic	2.493	7	9	15	1	0	0
FIM-EM	3:127822320:C:T	rs7641133	3	127822320	T	C	0.2654	1.77E-09	0.968084	rs2955118	3	RUVBL1	0	intronic	17.56	6	4	4	1	1	0
AAM-EPP	2:203007253:G:T	rs114634431	2	203007253	T	G	0.1282	1.77E-09	0.957791	rs77251002	5	AC079354.1	0	intronic	6.704	5	5	15	1	0	0
AAM-EPP	3:127900522:G:T	rs2999055	3	127900522	G	T	0.1481	1.77E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	3.57	6	5	15	1	1	0
AAM-EM	16:29882490:C:T	rs12917712	16	29882490	C	T	0.3121	1.78E-09	0.790537	rs7189550	32	SEZ6L2	0	UTR3	13.13	6	4	15	1	1	0
AAM-EPP	10:90182764:C:T	rs7907732	10	90182764	T	C	0.4036	1.78E-09	0.893696	rs7921352	15	RNLS	0	intronic	3.597	7	5	15	1	0	0
FIM-EM	3:127889404:C:T	rs2999051	3	127889404	T	C	0.3897	1.79E-09	0.987071	rs4362738	3	EEFSEC	0	intronic	5.835	7	5	5	1	1	0
LMC-EM	2:49298935:C:T	rs59743603	2	49298935	C	T	0.17	1.80E-09	0.775952	rs4971681	2	FSHR	0	intronic	0.123	6	9	15	1	0	0
AAM-EPP	10:90089525:A:G	rs11202717	10	90089525	G	A	0.2962	1.81E-09	0.956481	rs11202704	15	RNLS	0	intronic	3.082	6	5	15	1	0	0
AAM-EM	3:49835450:C:T	rs6790568	3	49835450	C	T	0.16	1.81E-09	0.807055	rs11130207	8	CDHR4	0	intronic	1.812	7	5	15	1	1	0
FIM-EM	3:128046643:A:G	rs4857841	3	128046643	G	A	0.2793	1.82E-09	0.908431	rs2955118	3	EEFSEC	0	intronic	0.912	5	4	5	1	1	0
AAM-EM	3:127724751:C:G	rs6794938	3	127724751	C	G	0.4205	1.83E-09	1	rs6770337	9	KBTBD12	18236	intergenic	2.128	5	2	14	0	1	0
FIM-EM	11:30378559:A:C	rs1765142	11	30378559	C	A	0.338	1.84E-09	1	rs1765142	9	RP4-710M3.1	11135	intergenic	0.123	6	5	15	0	1	0
FIM-EO	6:153225235:C:T	rs117754666	6	153225235	C	T	0.01392	1.84E-09	1	rs117754666	7	TUBB4BP7	4819	intergenic	5.806	7	5	15	0	0	0
AAM-EM	2:25156773:C:T	rs2384054	2	25156773	T	C	0.4702	1.84E-09	1	rs2384054	6	DNAJC27	9731	intergenic	0.103	NA		5	15	1	1	0
AAM-EM	12:50243672:A:G	rs7299134	12	50243672	A	G	0.4105	1.85E-09	0.713732	rs112502508	28	BCDIN3D	6759	intergenic	8.146	6	5	14	1	0	0
AAM-EPP	3:127904190:C:T	rs2811517	3	127904190	T	C	0.1481	1.87E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	0.952	NA		5	15	1	1	0
LMC-EM	2:49335990:A:G	rs11125214	2	49335990	G	A	0.171	1.88E-09	0.864062	rs4971681	2	FSHR	0	intronic	1.148	5	9	15	1	0	0
LMC-EM	3:128119565:A:G	rs760383	3	128119565	A	G	0.2217	1.89E-09	0.994071	rs729847	3	EEFSEC	0	intronic	14.53	NA		4	15	1	0	0
FIM-EM	2:11722082:C:T	rs10200851	2	11722082	C	T	0.4781	1.89E-09	0.816876	rs7578132	2	GREB1	0	intronic	0.031	5	4	15	1	0	0
AAM-EPP	3:127903522:A:G	rs2999056	3	127903522	G	A	0.1481	1.89E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	0.093	6	5	15	1	1	0
AAM-EPP	6:151855593:G:T	rs10872673	6	151855593	G	T	0.4165	1.89E-09	0.925064	rs12210735	11	CCDC170	0	intronic	4.049	6	5	15	1	0	0
FIM-EPP	1:169324793:C:T	rs1209731	1	169324793	T	C	0.01292	1.90E-09	0.733588	rs1894692	2	NME7	0	intronic	1.752	4	5	15	1	1	0
AAM-EPP	3:127900494:A:G	rs2999060	3	127900494	A	G	0.1481	1.90E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	7.392	NA		5	15	1	1	0
AAM-EM	16:29914142:C:T	rs28517865	16	29914142	C	T	0.4414	1.92E-09	1	rs28517865	32	ASPHD1	0	intronic	2.737	6	1	5	1	1	0
AAM-EM	3:128107982:A:G	rs1625296	3	128107982	G	A	0.2575	1.92E-09	0.804478	rs729847	9	EEFSEC	0	intronic	0.168	NA		4	15	1	1	0
AAM-EPP	8:25321845:A:T	rs35698191	8	25321845	T	A	0.2485	1.93E-09	0.760387	rs6185	12	CDCA2	0	intronic	4.36	7	4	15	1	1	0
FIM-EM	3:127898501:A:C	rs2811476	3	127898501	A	C	0.2614	1.94E-09	0.95794	rs2955118	3	EEFSEC	0	intronic	0.043	4	1	15	1	1	0
AAM-EPP	2:203214739:A:G	rs58288071	2	203214739	A	G	0.1392	1.95E-09	0.796983	rs77251002	5	RN7SL40P	7104	intergenic	14.18	7	5	15	0	0	0
AAM-EPP	10:90216054:A:T	rs4934409	10	90216054	A	T	0.3837	1.95E-09	0.92343	rs7921352	15	RNLS	0	intronic	5.983	7	5	15	1	0	0
LMC-EM	2:49298926:A:G	rs60433531	2	49298926	A	G	0.168	1.96E-09	0.772884	rs4971681	2	FSHR	0	intronic	4.003	6	9	15	1	0	0
AAM-EPP	6:151855376:A:G	rs6923538	6	151855376	G	A	0.4105	1.96E-09	0.963566	rs12210735	11	CCDC170	0	intronic	7.985	7	5	15	1	0	0
AAM-EPP	10:90115683:A:C	rs56155841	10	90115683	C	A	0.2972	1.96E-09	0.961242	rs11202704	15	RNLS	0	intronic	0.683	6	5	15	1	0	0
AAM-EM	12:15500183:A:G	rs11056439	12	15500183	G	A	0.3111	1.96E-09	1	rs11056439	26	RERG:PTPRC	0:00	intronic	0.724	6	1	15	1	0	0
AAM-EM	3:49661634:C:T	rs62262673	3	49661634	C	T	0.16	1.97E-09	0.807055	rs11130207	8	BSN	0	intronic	1.661	7	5	15	1	1	0
AAM-EPP	2:203291839:C:T	rs76284304	2	203291839	C	T	0.1441	1.98E-09	0.743814	rs77251002	5	BMPR2	0	intronic	4.994	5	4	15	1	0	0
AAM-EPP	6:74763411:A:G	rs4605844	6	74763411	A	G	0.4085	1.98E-09	1	rs4605844	9	RP11-554D15	15755	intergenic	6.516	7	5	15	0	0	0
LMC-EM	2:49344529:A:G	rs57051560	2	49344529	A	G	0.1809	1.99E-09	0.844682	rs4971681	2	FSHR	0	intronic	1.881	6	9	15	1	0	0
FIM-EO	6:153261120:A:T	rs117851271	6	153261120	A	T	0.0169	1.99E-09	0.701935	rs117754666	7	RP1-101K10.4	19373	intergenic	2.723	7	14	15	0	0	0
AAM-EM	16:29887215:C:T	rs66818723	16	29887215	T	C	0.3141	1.99E-09	0.845731	rs7189550	32	SEZ6L2	0	intronic	3.341	6	5	13	1	1	0
AAM-EPP	10:90131045:C:G	rs3891323	10	90131045	G	C	0.2972	1.99E-09	0.96103	rs11202704	15	RNLS	0	intronic	0.212	6	5	15	1	0	0
AAM-EM	6:100746305:C:T	rs9403595	6	100746305	C	T	0.2962	1.99E-09	1	rs9403595	13	SIM1	86585	intergenic	3.545	6	5	15	0	0	0
FIM-EM	2:11722012:C:G	rs10929759	2	11722012	C	G	0.4811	2.00E-09	0.819429	rs7578132	2	GREB1	0	intronic	0.131	5	4	15	1	0	0
AAM-EM	12:15500176:C:T	rs11056438	12	15500176	T	C	0.3111	2.02E-09	1	rs11056439	26	RERG:PTPRC	0:00	intronic	6.047	7	1	15	1	0	0
AAM-EPP	10:90113168:G:T	rs4586059	10	90113168	T	G	0.2962	2.02E-09	0.965884	rs11202704	15	RNLS	0	intronic	8.47	6	9	15	1	0	0
AAM-EPP	2:203337001:A:G	rs12468226	2	203337001	A	G	0.1421	2.03E-09	0.753195	rs77251002	5	BMPR2	0	intronic	0.576	7	4	5	1	0	0
AAM-EPP	10:90126669:C:G	rs10887809	10	90126669	C	G	0.2952	2.03E-09	0.961104	rs11202704	15	RNLS	0	intronic	1.53	7	5	15	1	0	0
AAM-EPP	3:127891396:C:G	rs2955121	3	127891396	C	G	0.1481	2.03E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	1.221	7	5	5	1	1	0
AAM-EM	3:49690199:A:G	rs4855885	3	49690199	G	A	0.166	2.03E-09	0.85584	rs11130207	8	BSN	0	exonic	0.23	NA		4	15	1	1	0
FIM-EO	6:153229045:C:T	rs117967041	6	153229045	T	C	0.01392	2.03E-09	1	rs117754666	7	TUBB4BP7	8629	intergenic	2.222	7	13	15	0	0	0
AAM-EPP	2:203439034:A:G	rs111826399	2	203439034	A	G	0.1441	2.04E-09	0.741101	rs77251002	5	BMPR2	6559	intergenic	2.658	7	5	15	0	0	0
LMC-EM	6:152471588:C:T	rs73632499	6	152471588	C	T	0.06461	2.04E-09	1	rs73632499	5	SYNE1	0	intronic	3.502	5	4	4	1	0	0
FIM-EO	1:169498056:A:G	rs2420372	1	169498056	A	G	0.06262	2.05E-09	0.909679	rs6427194	1	F5	0	intronic	6.813	4	1	15	1	1	0
AAM-EPP	10:90182467:G:T	rs6586132	10	90182467	T	G	0.4046	2.06E-09	0.889752	rs7921352	15	RNLS	0	intronic	4.201	7	5	15	1	0	0
AAM-EPP	3:128095278:G:T	rs1702118	3	128095278	T	G	0.1471	2.06E-09	0.968621	rs4277707	8	EEFSEC	0	intronic	1.34	NA		2	5	1	1	0
FIM-EM	2:11722102:A:T	rs10165819	2	11722102	A	T	0.4781	2.07E-09	0.816876	rs7578132	2	GREB1	0	intronic	4.734	5	4	15	1	0	0
AAM-EM	15:60687676:G:T	rs3940746	15	60687676	G	T	0.4155	2.07E-09	0.968942	rs8033800	31	ANXA2	0	intronic	12.24	3a		1	3	1	1	0
AAM-EPP	2:203213093:C:T	rs13389798	2	203213093	T	C	0.1392	2.07E-09	0.796983	rs77251002	5	RN7SL40P	8750	intergenic	8.96	5	5	15	0	0	0
FIM-EM	3:128015236:C:T	rs2955103	3	128015236	C	T	0.3917	2.08E-09	0.99565	rs4362738	3	EEFSEC	0	intronic	1.522	5	2	15	1	1	0
FIM-EO	11:30199907:A:C	rs7943867	11	30199907	A	C	0.3757	2.09E-09	0.996276	rs4923626	9	RP4-562D20.2	11053	intergenic	1.402	7	9	9	0	1	0
AAM-EPP	10:90102403:G:T	rs55894538	10	90102403	G	T	0.2932	2.10E-09	0.970908	rs11202704	15	RNLS	0	intronic	2.603	6	5	15	1	0	0
LMC-EM	2:49300163:A:G	rs11692426	2	49300163	G	A	0.171	2.11E-09	0.770165	rs4971681	2	FSHR	0	intronic	0.588	7	9	15	1	0	0
FIM-EPP	1:169160458:C:T	rs144737447	1	169160458	C	T	0.01193	2.12E-09	0.787354	rs1894692	2	NME7	0	intronic	5.355	5	5	15	1	1	0
AAM-EM	3:49673662:A:G	rs62262675	3	49673662	A	G	0.16	2.12E-09	0.807055	rs11130207	8	BSN	0	intronic	10.13	7	5	15	1	1	0
FIM-EO	11:30184538:C:T	rs4396264	11	30184538	T	C	0.3767	2.13E-09	0.97769	rs4923626	9	RP4-562D20.2	4171	intergenic	4.31	6	5	15	0	1	0
FIM-EO	3:128095278:G:T	rs1702118	3	128095278	T	G	0.1471	2.14E-09	1	rs1702118	3	EEFSEC	0	intronic	1.34	NA		2	5	1	1	0
FIM-EO	11:30184483:C:T	rs11030983	11	30184483	C	T	0.3767	2.15E-09	0.97769	rs4923626	9	RP4-562D20.2	4226	intergenic	8.213	7	5	15	0	1	0
FIM-EPP	8:25247181:A:G	rs4872310	8	25247181	G	A	0.2535	2.15E-09	0.810158	rs34068702	7	DOCK5	0	intronic	4.677	7	4	4	1	1	0
FIM-EO	11:30181778:A:G	rs11030982	11	30181778	A	G	0.3767	2.16E-09	0.97769	rs4923626	9	RP4-562D20.2	6931	intergenic	0.888	6	5	15	0	1	0
FIM-EO	11:30181153:C:T	rs892949	11	30181153	C	T	0.3767	2.16E-09	0.97769	rs4923626	9	RP4-562D20.2	7556	intergenic	1.106	NA		5	15	0	1	0
AAM-EPP	3:127947032:C:T	rs2955134	3	127947032	T	C	0.1481	2.17E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	0.276	5	5	5	1	1	0
FIM-EO	11:30181651:G:T	rs12287556	11	30181651	T	G	0.3767	2.17E-09	0.97769	rs4923626	9	RP4-562D20.2	7058	intergenic	6.165	7	5	15	0	1	0
FIM-EO	11:30181671:A:T	rs12293737	11	30181671	A	T	0.3767	2.19E-09	0.97769	rs4923626	9	RP4-562D20.2	7038	intergenic	0.188	6	5	15	0	1	0
FIM-EO	11:30181316:A:G	rs1808771	11	30181316	G	A	0.3767	2.19E-09	0.97769	rs4923626	9	RP4-562D20.2	7393	intergenic	3.581	NA		5	15	0	1	0
FIM-EPP	6:151830769:C:T	rs4870024	6	151830769	T	C	0.2018	2.19E-09	0.987921	rs7740302	5	CCDC170	0	intronic	4.386	7	5	15	1	1	0
FIM-EO	11:30182270:A:T	rs7112118	11	30182270	A	T	0.3767	2.19E-09	0.97769	rs4923626	9	RP4-562D20.2	6439	intergenic	1.879	6	5	15	0	1	0
FIM-EO	11:30183831:A:G	rs4922834	11	30183831	A	G	0.3767	2.20E-09	0.97769	rs4923626	9	RP4-562D20.2	4878	intergenic	2.479	6	5	15	0	1	0
FIM-EO	11:30184860:C:G	rs4313561	11	30184860	C	G	0.3767	2.21E-09	0.97769	rs4923626	9	RP4-562D20.2	3849	intergenic	0.109	6	5	15	0	1	0
AAM-EM	3:128111174:C:T	rs4241495	3	128111174	T	C	0.2575	2.21E-09	0.804478	rs729847	9	EEFSEC	0	intronic	0.058	5	4	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	2:203447875:A:G	rs148566631	2	203447875	G	A	0.1431	2.21E-09	0.747112	rs77251002	5	BMPR2	15400	intergenic	2.622		6	5	15	0	0	0
FIM-EO	11:30185849:C:T	rs11030989	11	30185849	T	C	0.3738	2.22E-09	0.966666	rs4923626	9	RP4-562D20.1	2860	intergenic	5.039		7	5	15	0	1	0
AAM-EM	3:49871201:C:T	rs61557789	3	49871201	C	T	0.163	2.24E-09	0.832953	rs11130207	8	TRAIP	0	intronic	3.175		7	4	5	1	1	0
AAM-EM	3:49874246:C:T	rs59684465	3	49874246	C	T	0.163	2.24E-09	0.832953	rs11130207	8	TRAIP	0	intronic	0.375		6	4	5	1	1	0
FIM-EO	2:11748585:A:C	rs4669755	2	11748585	C	A	0.33	2.25E-09	0.635772	rs10693974	2	GREB1	0	intronic	0.918		5	4	15	1	0	0
FIM-EO	11:30182303:C:G	rs7112549	11	30182303	G	C	0.3767	2.25E-09	0.97769	rs4923626	9	RP4-562D20.1	6406	intergenic	16.55		7	5	15	0	1	0
FIM-EO	11:30183344:C:T	rs10835631	11	30183344	T	C	0.3767	2.26E-09	0.97769	rs4923626	9	RP4-562D20.1	5365	intergenic	8.832		7	5	15	0	1	0
FIM-EO	3:128105972:A:G	rs2999033	3	128105972	G	A	0.1342	2.26E-09	0.900002	rs1702118	3	EEFSEC	0	intronic	4.449	NA		4	15	1	1	0
FIM-EO	11:30180685:C:T	rs1361422	11	30180685	T	C	0.3767	2.28E-09	0.97769	rs4923626	9	RP4-562D20.1	8024	intergenic	1.534	NA		5	15	0	1	0
FIM-EO	11:30183742:A:T	rs4922833	11	30183742	T	A	0.3757	2.29E-09	0.973939	rs4923626	9	RP4-562D20.1	4967	intergenic	1.361		6	5	15	0	1	0
FIM-EO	11:30180671:C:G	rs1361423	11	30180671	C	G	0.3767	2.30E-09	0.97769	rs4923626	9	RP4-562D20.1	8038	intergenic	3.306		6	5	15	0	1	0
FIM-EO	11:30182068:C:T	rs1340030	11	30182068	T	C	0.3767	2.31E-09	0.97769	rs4923626	9	RP4-562D20.1	6641	intergenic	5.542	NA		5	15	0	1	0
FIM-EO	2:11724580:G:T	rs9789525	2	11724580	G	T	0.3986	2.31E-09	0.936977	rs10693974	2	GREB1	0	intronic	5.589		4	4	15	1	0	0
FIM-EO	11:30185486:A:G	rs11030987	11	30185486	A	G	0.3767	2.31E-09	0.97769	rs4923626	9	RP4-562D20.1	3223	intergenic	4.537		6	5	15	0	1	0
AAM-EPP	10:90255615:C:T	rs2576172	10	90255615	T	C	0.3718	2.31E-09	0.742773	rs7921352	15	RNLS	0	intronic	1.182	NA		5	15	1	0	0
AAM-EM	3:128107020:A:C	rs7373685	3	128107020	A	C	0.2535	2.32E-09	0.800277	rs729847	9	EEFSEC	0	intronic	2.967		5	4	15	1	1	0
AAM-EPP	10:90151021:A:G	rs792234	10	90151021	A	G	0.3767	2.32E-09	0.789304	rs7921352	15	RNLS	0	intronic	3.43		7	5	15	1	0	0
AAM-EM	6:100746390:C:T	rs9386079	6	100746390	T	C	0.2962	2.33E-09	1	rs9403595	13	SIM1	86500	intergenic	3.106		7	5	15	0	0	0
AAM-EPP	2:203213061:C:T	rs16839090	2	203213061	T	C	0.1392	2.33E-09	0.796983	rs77251002	5	RN7SL40P	8782	intergenic	7.707	1f		5	15	0	0	0
AAM-EM	6:151721749:A:G	rs7771156	6	151721749	G	A	0.336	2.33E-09	0.991185	rs6557135	14	RMND1	4239	intergenic	1.038		5	4	5	1	1	0
AAM-EM	3:128106267:A:G	rs2977562	3	128106267	A	G	0.2535	2.34E-09	0.800277	rs729847	9	EEFSEC	0	intronic	0.687	NA		4	15	1	1	0
AAM-EPP	3:127909758:C:T	rs2999057	3	127909758	C	T	0.1481	2.36E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	3.557		6	5	15	1	1	0
AAM-EPP	10:90133576:C:T	rs792221	10	90133576	C	T	0.2972	2.36E-09	0.96103	rs11202704	15	RNLS	0	intronic	2.027		5	5	15	1	0	0
LMC-EM	2:49297762:G:T	rs62162087	2	49297762	T	G	0.168	2.36E-09	0.772884	rs4971681	2	FSHR	0	intronic	2.799		7	9	15	1	0	0
FIM-EO	1:169491555:A:G	rs2420371	1	169491555	G	A	0.06362	2.37E-09	0.924563	rs6427194	1	F5	0	intronic	0.896		6	4	15	1	1	0
FIM-EO	6:153210935:A:C	rs117542246	6	153210935	C	A	0.01392	2.38E-09	1	rs117754666	7	TUBB4BP7	8246	intergenic	0.109		7	5	15	0	0	0
LMC-EM	11:30344883:C:G	rs11826681	11	30344883	G	C	0.2823	2.38E-09	1	rs11826681	7	ARL14EP	0	intronic	9.279	1a		1	1	1	1	0
LMC-EM	4:56017274:C:T	rs1580217	4	56017274	C	T	0.4891	2.40E-09	0.947662	rs9994560	4	KDR	25517	intergenic	1.259	NA		5	15	0	0	0
FIM-EM	3:127808502:C:G	rs7355887	3	127808502	C	G	0.2664	2.41E-09	0.962672	rs2955118	3	RUVBL1	0	intronic	4.779		7	4	5	1	1	0
AAM-EPP	3:127928277:C:T	rs2955128	3	127928277	C	T	0.1481	2.41E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	3.55		7	5	15	1	1	0
LMC-EM	11:30335633:A:T	rs7950187	11	30335633	T	A	0.2823	2.42E-09	1	rs11826681	7	ARL14EP	8964	intergenic	5.841		6	5	15	0	1	0
LMC-EM	11:30318470:A:G	rs1933339	11	30318470	A	G	0.2823	2.42E-09	1	rs11826681	7	ARL14EP	26127	intergenic	0.756	NA		9	15	0	1	0
AAM-EPP	3:127926516:A:G	rs2955127	3	127926516	A	G	0.1481	2.43E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	8.964		5	5	15	1	1	0
LMC-EM	4:56023445:C:G	rs2412637	4	56023445	C	G	0.4881	2.43E-09	0.951474	rs9994560	4	KDR	31688	intergenic	1.754		5	1	15	0	0	0
LMC-EM	11:30346097:G:T	rs56340204	11	30346097	G	T	0.2833	2.44E-09	0.995658	rs11826681	7	ARL14EP	0	intronic	0.695		5	1	7	1	1	0
FIM-EO	3:128081260:C:G	rs1735545	3	128081260	G	C	0.2187	2.48E-09	0.785354	rs3887841	3	EEFSEC	0	intronic	2.059		4	4	5	1	1	0
AAM-EM	6:100757711:A:G	rs9497097	6	100757711	G	A	0.2803	2.48E-09	0.916868	rs9403595	13	SIM1	75179	intergenic	0.232		7	5	15	0	0	0
FIM-EO	8:25243213:A:G	rs34068702	8	25243213	A	G	0.2922	2.48E-09	0.762394	rs6185	8	DOCK5	0	intronic	2.503		4	4	5	1	0	0
AAM-EM	12:50244043:C:T	rs7302855	12	50244043	C	T	0.4105	2.49E-09	0.713732	rs112502508	28	BCDIN3D	7130	intergenic	0.597		6	5	14	1	0	0
LMC-EM	6:152471912:A:G	rs7743748	6	152471912	G	A	0.06461	2.49E-09	0.966162	rs73632499	5	SYNE1	0	intronic	2.523		6	4	4	1	0	0
LMC-EM	11:30335654:A:T	rs11031046	11	30335654	T	A	0.2823	2.49E-09	1	rs11826681	7	ARL14EP	8943	intergenic	2.132		7	5	15	0	1	0
AAM-EM	12:49705661:A:G	rs12313488	12	49705661	A	G	0.2545	2.49E-09	1	rs12313488	27	RP11-161H23	0	ncRNA_intron	3.688		6	5	14	0	0	0
AAM-EPP	3:127913714:A:G	rs940061	3	127913714	A	G	0.1481	2.50E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	3.95		6	5	5	1	1	0
AAM-EM	3:49845006:A:T	rs58339610	3	49845006	T	A	0.163	2.51E-09	0.832953	rs11130207	8	UBA7	0	intronic	18.12	3a		2	7	1	1	0
AAM-EPP	3:127888694:C:T	rs2687731	3	127888694	C	T	0.1481	2.51E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	8.975		6	5	5	1	1	0
AAM-EPP	3:50244080:A:G	rs2236940	3	50244080	G	A	0.3231	2.52E-09	0.848791	rs1046956	7	SLC38A3	0	ncRNA_intron	0.386		5	1	13	0	1	0
LMC-EM	11:30340362:C:T	rs4112796	11	30340362	T	C	0.2823	2.52E-09	1	rs11826681	7	ARL14EP	4235	intergenic	3.973		6	5	15	0	1	0
LMC-EM	11:30329232:A:C	rs1933337	11	30329232	C	A	0.2823	2.52E-09	1	rs11826681	7	ARL14EP	15365	intergenic	0.495		7	14	15	0	1	0
AAM-EPP	3:127988240:C:G	rs2999064	3	127988240	C	G	0.1481	2.52E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	0.697		5	4	5	1	1	0
LMC-EM	11:30335691:C:T	rs7950221	11	30335691	T	C	0.2823	2.52E-09	1	rs11826681	7	ARL14EP	8906	intergenic	2.426		6	5	15	0	1	0
AAM-EM	3:49828021:C:G	rs7620848	3	49828021	G	C	0.163	2.53E-09	0.832953	rs11130207	8	CDHR4	143	downstream	0.222		5	5	15	1	1	0
LMC-EM	11:30337470:C:T	rs3904779	11	30337470	C	T	0.2823	2.54E-09	1	rs11826681	7	ARL14EP	7127	intergenic	0.342	NA		7	15	0	1	0
LMC-EM	2:49340133:C:G	rs1126076	2	49340133	C	G	0.1799	2.55E-09	0.837237	rs4971681	2	FSHR	0	intronic	2.867		5	9	15	1	0	0
AAM-EM	12:15500036:C:T	rs11056436	12	15500036	C	T	0.3111	2.56E-09	1	rs11056439	26	RERG:PTPRG	0:00	intronic	7.785		6	1	15	1	0	0
AAM-EM	3:49769419:C:G	rs62262722	3	49769419	G	C	0.16	2.57E-09	0.807055	rs11130207	8	IP6K1	0	intronic	2.254		7	4	4	1	1	0
LMC-EM	4:56022968:A:C	rs2899031	4	56022968	C	A	0.4871	2.57E-09	0.947309	rs9994560	4	KDR	31211	intergenic	0.042		7	5	14	0	0	0
AAM-EPP	2:203199824:A:G	rs7592692	2	203199824	A	G	0.1392	2.57E-09	0.796983	rs77251002	5	AC064836.3	922	downstream	2.282		7	5	15	0	0	0
AAM-EM	6:151702442:C:G	rs6557132	6	151702442	C	G	0.335	2.58E-09	0.995571	rs6557135	14	ZBTB2	0	intronic	5.793		6	5	5	1	1	0
FIM-EPP	12:95661809:C:T	rs10859863	12	95661809	T	C	0.4433	2.59E-09	1	rs10859863	9	VEZT	0	intronic	11.91		7	4	5	1	1	0
AAM-EPP	3:127898533:A:G	rs2999053	3	127898533	G	A	0.1481	2.59E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	19.19		4	1	15	1	1	0
LMC-EM	11:30336425:A:T	rs3904780	11	30336425	A	T	0.2823	2.59E-09	1	rs11826681	7	ARL14EP	8172	intergenic	6.028	2b		5	15	0	1	0
FIM-EPP	12:95676053:T:TG	rs3215007	12	95676053	T	TG	0.4433	2.61E-09	0.992397	rs10859863	9	VEZT	0	intronic	10.92	NA		4	4	1	0	0
LMC-EM	3:128109941:C:T	rs3887841	3	128109941	T	C	0.2207	2.61E-09	1	rs729847	3	EEFSEC	0	intronic	0.929	NA		4	15	1	1	0
LMC-EM	4:56023617:C:T	rs7679993	4	56023617	T	C	0.4881	2.63E-09	0.951474	rs9994560	4	KDR	31860	intergenic	3.057		5	1	13	0	0	0
AAM-EPP	10:90142203:A:T	rs11202736	10	90142203	A	T	0.3022	2.63E-09	0.928801	rs11202704	15	RNLS	0	intronic	0.603		7	5	15	1	0	0
LMC-EM	3:128118711:A:G	rs1702136	3	128118711	G	A	0.2197	2.64E-09	0.98223	rs729847	3	EEFSEC	0	intronic	0.414		5	2	15	1	0	0
FIM-EO	3:128101344:C:G	rs74924715	3	128101344	G	C	0.03777	2.65E-09	0.840673	rs139071297	3	EEFSEC	0	intronic	16.38	3a		2	5	1	0	0
AAM-EPP	3:127899986:A:G	rs2999054	3	127899986	G	A	0.1481	2.66E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	8.478		5	5	15	1	1	0
AAM-EM	2:430975:C:T	rs77165542	2	430975	C	T	0.02883	2.66E-09	1	rs77165542	5	AC105393.2	8671	intergenic	2.047		4	1	15	0	0	0
AAM-EM	3:49886319:G:T	rs77941694	3	49886319	G	T	0.163	2.66E-09	0.832953	rs11130207	8	TRAIP	0	intronic	0.097		7	5	5	1	1	0
LMC-EM	2:49329179:C:T	rs1504165	2	49329179	C	T	0.17	2.67E-09	0.800269	rs4971681	2	FSHR	0	intronic	0.09		7	5	15	1	0	0
AAM-EM	12:15463417:A:C	rs1479410	12	15463417	A	C	0.3101	2.68E-09	0.995552	rs11056439	26	RERG	0	intronic	8.963	NA		13	15	1	0	0
AAM-EM	2:25145173:A:T	rs59086897	2	25145173	T	A	0.4662	2.69E-09	0.966942	rs2384054	6	ADCY3	2464	intergenic	2.647		7	5	5	1	1	0
LMC-EM	11:30347828:C:T	rs10835653	11	30347828	T	C	0.2823	2.69E-09	0.991291	rs11826681	7	ARL14EP	0	intronic	3.185	1f		2	5	1	1	0
AAM-EPP	3:50247824:C:T	rs2236941	3	50247824	C	T	0.3231	2.71E-09	0.849331	rs1046956	7	SLC38A3	0	ncRNA_intron	3.428	2b		2	14	0	1	0
AAM-EPP	10:90112774:C:T	rs11492684	10	90112774	C	T	0.2962	2.74E-09	0.965884	rs11202704	15	RNLS	0	intronic	0.04		7	9	15	1	0	0
AAM-EM	12:15500105:C:T	rs11056437	12	15500105	T	C	0.3111	2.75E-09	1	rs11056439	26	RERG:PTPRG	0:00	intronic	2.448		7	1	15	1	0	0
AAM-EM	12:50241013:A:G	rs11169176	12	50241013	G	A	0.4095	2.76E-09	0.709413	rs112502508	28	BCDIN3D	4100	intergenic	0.476		7	2	14	1	0	0
AAM-EM	6:100748397:C:T	rs6570643	6	100748397	C	T	0.2962	2.76E-09	1	rs9403595	13	SIM1	84493	intergenic	4.575		4	2	15	0	0	0
AAM-EPP	3:127941947:A:G	rs2999088	3	127941947	A	G	0.1481	2.76E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	2.159	NA		5	9	1	1	0
AAM-EPP	3:127983209:C:T	rs2999035	3	127983209	C	T	0.1481	2.76E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	0.49		5	4	4	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EO	11:30220739:A:T	rs7925930	11	30220739	A	T	0.3797	2.76E-09	0.996015	rs607987	9	FSHB	31823	intergenic	1.193	6	5	15	0	1	0
FIM-EO	8:25263294:G:T	rs61490611	8	25263294	T	G	0.2624	2.77E-09	0.910194	rs6185	8	DOCK5	0	intronic	6.896	6	4	5	1	1	0
LMC-EM	11:30348973:A:G	rs3858430	11	30348973	G	A	0.2823	2.78E-09	0.991291	rs11826681	7	ARL14EP	0	intronic	5.343	6	4	5	1	1	0
FIM-EO	11:30185850:A:G	rs72885907	11	30185850	G	A	0.3708	2.78E-09	0.955813	rs4923626	9	RP4-562D20.1	2859	intergenic	3.752	7	5	15	0	1	0
FIM-EM	6:152567983:A:G	rs75730028	6	152567983	A	G	0.09046	2.80E-09	1	rs75730028	5	SYNE1	0	intronic	13.33	2b	1	5	1	0	0
LMC-EM	11:30354707:G:T	rs1879671	11	30354707	G	T	0.2823	2.80E-09	0.991291	rs11826681	7	ARL14EP	0	intronic	0.975	NA	4	4	1	1	0
LMC-EM	2:49329178:G:T	rs1504164	2	49329178	G	T	0.17	2.82E-09	0.800269	rs4971681	2	FSHR	0	intronic	0.574	7	5	15	1	0	0
AAM-EM	3:128114587:C:T	rs7632169	3	128114587	T	C	0.2575	2.82E-09	0.804478	rs729847	9	EEFSEC	0	intronic	0.293	3a	4	15	1	1	0
AAM-EPP	2:203195171:A:G	rs113021930	2	203195171	G	A	0.1392	2.82E-09	0.796983	rs77251002	5	RN7SL753P	2990	intergenic	3.61	6	4	15	0	0	0
AAM-EPP	10:90225923:A:C	rs1750274	10	90225923	C	A	0.4016	2.83E-09	0.859402	rs7921352	15	RNLS	0	intronic	0.592	NA	5	15	1	0	0
FIM-EPP	12:95667337:C:T	rs4471514	12	95667337	C	T	0.4443	2.84E-09	0.996199	rs10859863	9	VEZT	0	intronic	9.509	7	4	5	1	1	0
FIM-EPP	12:95668951:C:T	rs4762326	12	95668951	C	T	0.4433	2.85E-09	1	rs10859863	9	VEZT	0	intronic	0.684	6	4	4	1	1	0
LMC-EM	11:30334223:C:T	rs1856142	11	30334223	C	T	0.2823	2.86E-09	1	rs11826681	7	ARL14EP	10374	intergenic	1.779	NA	5	15	0	1	0
AAM-EPP	2:203208345:A:G	rs138478681	2	203208345	G	A	0.1392	2.86E-09	0.796983	rs77251002	5	RP11-686O6.	6421	intergenic	2.179	7	5	15	0	0	0
AAM-EM	6:100744157:A:G	rs12529274	6	100744157	G	A	0.2962	2.87E-09	1	rs9403595	13	SIM1	88733	intergenic	2.118	5	5	15	0	0	0
FIM-EM	3:127881613:A:G	rs2955117	3	127881613	G	A	0.2724	2.88E-09	0.921862	rs2955118	3	EEFSEC	0	intronic	16.66	7	4	5	1	1	0
AAM-EPP	2:203208693:A:G	rs16839077	2	203208693	A	G	0.1392	2.89E-09	0.796983	rs77251002	5	RP11-686O6.	6769	intergenic	3.596	6	5	15	0	0	0
LMC-EM	2:49298764:A:G	rs57260003	2	49298764	G	A	0.167	2.92E-09	0.778832	rs4971681	2	FSHR	0	intronic	6.089	7	9	15	1	0	0
LMC-EM	2:49343172:C:T	rs4971642	2	49343172	C	T	0.1779	2.92E-09	0.835605	rs4971681	2	FSHR	0	intronic	0.327	5	9	15	1	0	0
AAM-EPP	3:50185508:A:G	rs11714286	3	50185508	G	A	0.4751	2.93E-09	0.886538	rs13085567	7	RP11-493K19	0	ncRNA_intron	13.82	2a	5	15	0	1	0
AAM-EPP	3:127903678:C:T	rs2955123	3	127903678	T	C	0.1481	2.94E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	6.062	7	5	15	1	1	0
AAM-EPP	2:203200960:A:G	rs113188021	2	203200960	G	A	0.1392	2.94E-09	0.796983	rs77251002	5	AC064836.3	0	ncRNA_exoni	6.051	4	4	15	0	0	0
AAM-EM	6:100748384:A:G	rs6570642	6	100748384	G	A	0.2962	2.94E-09	1	rs9403595	13	SIM1	84506	intergenic	0.411	2b	2	15	0	0	0
AAM-EPP	10:90134370:C:T	rs792220	10	90134370	T	C	0.2952	2.94E-09	0.961104	rs11202704	15	RNLS	0	intronic	4.952	NA	2	15	1	0	0
AAM-EPP	3:127937326:A:C	rs2254379	3	127937326	A	C	0.1481	2.95E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	0.516	4	4	15	1	1	0
AAM-EM	3:128105972:A:G	rs2999033	3	128105972	G	A	0.1342	2.95E-09	0.880497	rs4277707	9	EEFSEC	0	intronic	4.449	NA	4	15	1	1	0
LMC-EM	2:49298647:A:G	rs55943184	2	49298647	A	G	0.167	2.97E-09	0.778832	rs4971681	2	FSHR	0	intronic	1.283	7	9	15	1	0	0
AAM-EPP	2:203247137:C:T	rs144942499	2	203247137	C	T	0.1412	2.97E-09	0.759351	rs77251002	5	BMPR2	0	intronic	2.822	7	3	5	1	0	0
AAM-EPP	2:203202166:A:G	rs6731027	2	203202166	A	G	0.1392	2.97E-09	0.796983	rs77251002	5	RP11-686O6.	242	upstream	3.351	5	4	15	0	0	0
FIM-EPP	12:95672642:C:T	rs11107959	12	95672642	T	C	0.4433	2.99E-09	1	rs10859863	9	VEZT	0	intronic	5.721	7	4	5	1	1	0
LMC-EM	2:49344187:A:T	rs62162138	2	49344187	A	T	0.1769	2.99E-09	0.826557	rs4971681	2	FSHR	0	intronic	0.78	7	9	15	1	0	0
LMC-EM	2:49298703:C:G	rs57825020	2	49298703	G	C	0.167	3.00E-09	0.778832	rs4971681	2	FSHR	0	intronic	5.474	7	9	15	1	0	0
AAM-EM	6:100755613:A:G	rs1506090	6	100755613	A	G	0.2962	3.00E-09	1	rs9403595	13	SIM1	77277	intergenic	6.376	3a	2	15	0	0	0
LMC-EM	4:56016721:C:G	rs7686613	4	56016721	C	G	0.4881	3.00E-09	0.951474	rs9994560	4	KDR	24964	intergenic	3.399	7	5	15	0	0	0
FIM-EPP	12:95658282:A:G	rs10777679	12	95658282	A	G	0.4433	3.01E-09	1	rs10859863	9	VEZT	0	intronic	0.387	6	4	5	1	1	0
AAM-EPP	2:203196447:C:T	rs113491584	2	203196447	T	C	0.1392	3.01E-09	0.796983	rs77251002	5	RN7SL753P	1714	intergenic	2.154	6	5	15	0	0	0
AAM-EM	3:49848414:C:T	rs28535523	3	49848414	C	T	0.163	3.02E-09	0.832953	rs11130207	8	UBA7	0	intronic	14.84	5	3	4	1	1	0
LMC-EM	11:30315627:C:T	rs7102836	11	30315627	C	T	0.2823	3.03E-09	1	rs11826681	7	ARL14EP	28970	intergenic	0.17	6	5	15	0	1	0
AAM-EPP	2:203199219:C:T	rs112753638	2	203199219	C	T	0.1392	3.03E-09	0.796983	rs77251002	5	RN7SL753P	767	downstream	10.2	7	5	15	0	0	0
LMC-DE	6:151819834:A:G	rs9383906	6	151819834	A	G	0.09046	3.03E-09	1	rs9383906	2	CCDC170	0	intronic	5.576	5	2	15	1	1	0
AAM-EM	6:100743942:A:T	rs7762259	6	100743942	A	T	0.2962	3.04E-09	1	rs9403595	13	SIM1	88948	intergenic	4.02	7	5	15	0	0	0
LMC-EM	2:49299633:A:G	rs11125207	2	49299633	A	G	0.167	3.05E-09	0.778832	rs4971681	2	FSHR	0	intronic	8.337	7	9	15	1	0	0
AAM-EM	6:100750221:A:G	rs9390218	6	100750221	G	A	0.2962	3.05E-09	1	rs9403595	13	SIM1	82669	intergenic	1.11	6	5	15	0	0	0
AAM-EM	6:100752967:C:T	rs2135356	6	100752967	C	T	0.2962	3.06E-09	1	rs9403595	13	SIM1	79923	intergenic	2.442	6	5	15	0	0	0
FIM-EM	6:127463376:A:C	rs2503107	6	127463376	C	A	0.4911	3.06E-09	0.927711	rs2489623	4	RSPO3	0	intronic	2.279	6	5	15	1	0	0
AAM-EPP	2:203198918:A:C	rs112306637	2	203198918	C	A	0.1392	3.07E-09	0.796983	rs77251002	5	RN7SL753P	466	downstream	1.796	5	5	15	0	0	0
AAM-EM	6:100753889:A:G	rs9390229	6	100753889	A	G	0.2962	3.08E-09	1	rs9403595	13	SIM1	79001	intergenic	9.545	5	5	15	0	0	0
FIM-EM	6:127458308:A:G	rs2489625	6	127458308	G	A	0.4911	3.08E-09	0.927711	rs2489623	4	RSPO3	0	intronic	0.393	5	5	15	1	0	0
AAM-EPP	2:203199188:A:G	rs111252524	2	203199188	G	A	0.1392	3.08E-09	0.796983	rs77251002	5	RN7SL753P	736	downstream	10.59	7	4	15	0	0	0
LMC-EM	2:49345463:A:G	rs62162140	2	49345463	G	A	0.1779	3.08E-09	0.848839	rs4971681	2	FSHR	0	intronic	1.134	6	9	15	1	0	0
FIM-EO	11:30165896:C:T	rs930321	11	30165896	T	C	0.3708	3.09E-09	0.955676	rs4923626	9	RP4-562D20.1	22813	intergenic	3.673	NA	14	15	0	1	0
AAM-EM	6:100750194:A:G	rs9390217	6	100750194	G	A	0.2962	3.10E-09	1	rs9403595	13	SIM1	82696	intergenic	7.791	7	5	15	0	0	0
AAM-EM	3:127732271:A:G	rs6801467	3	127732271	G	A	0.3936	3.10E-09	0.888861	rs6770337	9	KBTBD12	25756	intergenic	1.078	7	5	15	0	1	0
AAM-EPP	2:203194270:G:T	rs7597469	2	203194270	G	T	0.1392	3.10E-09	0.796983	rs77251002	5	RN7SL753P	3891	intergenic	0.202	5	5	15	0	0	0
AAM-EM	3:127711997:C:T	rs9839080	3	127711997	C	T	0.4215	3.11E-09	0.987799	rs6770337	9	KBTBD12	5482	intergenic	1.509	6	5	15	1	1	0
AAM-EM	6:100752963:C:T	rs2135355	6	100752963	C	T	0.2962	3.11E-09	1	rs9403595	13	SIM1	79927	intergenic	3.843	6	5	15	0	0	0
AAM-EPP	3:127914512:A:G	rs2811510	3	127914512	A	G	0.1481	3.11E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	2.595	NA	4	5	1	1	0
FIM-EM	6:127459004:G:T	rs2489626	6	127459004	G	T	0.4911	3.12E-09	0.927711	rs2489623	4	RSPO3	0	intronic	0.212	6	5	15	1	0	0
AAM-EPP	2:203195835:C:T	rs143368288	2	203195835	C	T	0.1392	3.12E-09	0.796983	rs77251002	5	RN7SL753P	2326	intergenic	2.833	7	5	15	0	0	0
AAM-EPP	2:203194721:A:T	rs113877751	2	203194721	A	T	0.1392	3.12E-09	0.796983	rs77251002	5	RN7SL753P	3440	intergenic	6.372	7	4	15	0	0	0
FIM-EO	11:30180390:A:G	rs1361424	11	30180390	A	G	0.3757	3.12E-09	0.974029	rs4923626	9	RP4-562D20.1	8319	intergenic	1.82	NA	5	15	0	1	0
AAM-EM	12:15498466:C:T	rs11056434	12	15498466	T	C	0.3111	3.12E-09	1	rs11056439	26	RERG:PTPRG	0:00	intronic	2.058	6	5	15	1	0	0
AAM-EM	6:100745235:A:G	rs4373369	6	100745235	G	A	0.2972	3.13E-09	0.99528	rs9403595	13	SIM1	87655	intergenic	6.108	3a	1	15	0	0	0
AAM-EPP	3:127890749:A:G	rs2248668	3	127890749	A	G	0.1481	3.14E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	0.269	6	5	5	1	1	0
AAM-EM	12:15468046:C:T	rs12317475	12	15468046	T	C	0.3101	3.14E-09	0.995552	rs11056439	26	RERG	0	intronic	9.131	7	13	14	1	0	0
AAM-EM	6:100744281:C:T	rs10499030	6	100744281	C	T	0.2962	3.15E-09	1	rs9403595	13	SIM1	88609	intergenic	6.699	4	2	15	0	0	0
FIM-EO	3:128077602:C:T	rs6785384	3	128077602	C	T	0.2187	3.16E-09	0.785354	rs3887841	3	EEFSEC	0	intronic	3.416	6	4	4	1	1	0
FIM-EM	6:127460349:A:G	rs1892171	6	127460349	G	A	0.4911	3.16E-09	0.927711	rs2489623	4	RSPO3	0	intronic	2.766	NA	1	15	1	0	0
FIM-EM	6:127461152:C:T	rs2489627	6	127461152	T	C	0.4901	3.17E-09	0.932086	rs2489623	4	RSPO3	0	intronic	1.778	7	5	15	1	0	0
FIM-EO	8:25269102:A:C	rs1506869	8	25269102	C	A	0.2614	3.17E-09	0.914479	rs6185	8	DOCK5	0	UTR3	5.15	NA	4	4	1	1	0
AAM-EM	3:49809841:C:T	rs9870755	3	49809841	C	T	0.163	3.17E-09	0.832953	rs11130207	8	IP6K1	0	intronic	8.334	6	4	5	1	1	0
AAM-EM	6:100754406:A:T	rs1506089	6	100754406	T	A	0.2962	3.18E-09	1	rs9403595	13	SIM1	78484	intergenic	5.632	6	5	15	0	0	0
AAM-EM	6:152052215:A:G	rs2982564	6	152052215	A	G	0.2396	3.18E-09	1	rs2982564	14	ESR1	0	intronic	0.792	NA	5	15	1	0	0
FIM-EPP	12:95649013:A:G	rs4762308	12	95649013	G	A	0.4433	3.18E-09	1	rs10859863	9	VEZT	0	intronic	6.593	5	4	4	1	1	0
AAM-EM	6:100751499:C:T	rs1827854	6	100751499	T	C	0.2962	3.18E-09	1	rs9403595	13	SIM1	81391	intergenic	0.947	6	5	15	0	0	0
FIM-EM	6:127462149:C:T	rs2503106	6	127462149	T	C	0.4901	3.18E-09	0.932086	rs2489623	4	RSPO3	0	intronic	4.719	4	5	15	1	0	0
LMC-EM	11:30347927:A:G	rs10767838	11	30347927	A	G	0.2823	3.18E-09	0.991291	rs11826681	7	ARL14EP	0	intronic	0.313	1f	2	5	1	1	0
AAM-EM	3:49847642:A:G	rs1799844	3	49847642	G	A	0.163	3.19E-09	0.832953	rs11130207	8	UBA7	0	intronic	6.761	NA	4	4	1	1	0
AAM-EM	2:25158008:C:T	rs713586	2	25158008	T	C	0.4702	3.19E-09	1	rs2384054	6	DNAJC27	8496	intergenic	0.236	1f	5	15	1	1	0
FIM-EM	6:127464754:C:T	rs2503320	6	127464754	C	T	0.4911	3.19E-09	0.927711	rs2489623	4	RSPO3	0	intronic	4.247	7	5	15	1	0	0
FIM-EM	6:127465044:C:T	rs2503109	6	127465044	T	C	0.4911	3.19E-09	0.927711	rs2489623	4	RSPO3	0	intronic	0.496	7	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EPP	3:128111174:C:T	rs4241495	3	128111174	T	C	0.2575	3.20E-09	1	rs4241495	4	EEFSEC	0	intronic		0.058	5	4	15	1	1	0
FIM-EM	6:127461682:A:C	rs1936802	6	127461682	A	C	0.4901	3.20E-09	0.932086	rs2489623	4	RSPO3	0	intronic		14.32	NA		5	15	1	0	0
FIM-EPP	12:95687497:A:T	rs7309252	12	95687497	A	T	0.4443	3.21E-09	0.996199	rs10859863	9	VEZT	0	intronic		5.189	7	4	5	1	1	0
AAM-EM	6:100755083:C:T	rs9399504	6	100755083	T	C	0.2962	3.21E-09	1	rs9403595	13	SIM1	77807	intergenic		4.684	7	5	15	0	0	0
LMC-EM	11:30201133:A:G	rs681993	11	30201133	A	G	0.3499	3.21E-09	1	rs681993	7	RP4-562D20.1	12279	intergenic		0.905	7	9	15	0	1	0
FIM-EM	3:127919046:G:T	rs2811485	3	127919046	G	T	0.2674	3.22E-09	0.989347	rs2955118	3	EEFSEC	0	intronic		0.981	6	5	5	1	1	0
AAM-EPP	2:203197601:A:G	rs111620073	2	203197601	G	A	0.1392	3.23E-09	0.796983	rs77251002	5	RN7SL753P	560	upstream		1.182	7	5	15	0	0	0
FIM-EPP	3:128114587:C:T	rs7632169	3	128114587	T	C	0.2575	3.25E-09	1	rs4241495	4	EEFSEC	0	intronic		0.293	3a		4	15	1	1	0
AAM-EM	2:25150758:C:T	rs10185143	2	25150758	T	C	0.4702	3.25E-09	0.950259	rs2384054	6	ADCY3	8049	intergenic		0.654	7	5	15	1	1	0
LMC-EM	2:49341056:C:G	rs6760923	2	49341056	G	C	0.1809	3.25E-09	0.831518	rs4971681	2	FSHR	0	intronic		1.945	5	9	15	1	0	0
AAM-EPP	3:127939444:A:G	rs2955131	3	127939444	G	A	0.1481	3.25E-09	0.838162	rs2811473	8	EEFSEC	0	intronic		0.074	5	4	15	1	1	0
AAM-EPP	2:203168235:C:G	rs16841867	2	203168235	C	G	0.1402	3.26E-09	0.807502	rs77251002	5	NOP58	0	UTR3		1.891	5	4	4	1	0	0
LMC-EM	4:56014393:C:T	rs1350542	4	56014393	C	T	0.4891	3.26E-09	0.947662	rs9994560	4	KDR	22636	intergenic		5.77	NA		5	15	0	0	0
AAM-EM	6:100746217:C:T	rs9403594	6	100746217	C	T	0.2962	3.26E-09	1	rs9403595	13	SIM1	86673	intergenic		4.349	7	5	15	0	0	0
AAM-EM	6:100747089:C:G	rs11756118	6	100747089	C	G	0.2962	3.26E-09	1	rs9403595	13	SIM1	85801	intergenic		0.024	5	5	15	0	0	0
AAM-EM	3:49834571:A:G	rs6809879	3	49834571	A	G	0.16	3.27E-09	0.807055	rs11130207	8	CDHR4	0	intronic		8.798	1f		5	15	1	1	0
AAM-EM	12:15481326:C:T	rs13313237	12	15481326	T	C	0.3111	3.27E-09	1	rs11056439	26	RERG:PTPR(	0:00	intronic		13.82	7	5	14	1	0	0
AAM-EM	2:25158281:C:T	rs713587	2	25158281	C	T	0.4682	3.27E-09	0.991651	rs2384054	6	DNAJC27	8223	intergenic		1.928	1f		5	15	1	1	0
AAM-EM	3:49812866:C:T	rs7613603	3	49812866	C	T	0.163	3.28E-09	0.832953	rs11130207	8	IP6K1:RP13-3	0:00	ncRNA_exoni		4.476	6	2	5	1	1	0
AAM-EM	9:11862641:A:G	rs9969696	9	11862641	A	G	0.2654	3.28E-09	1	rs9969696	18	RP11-74C3.1	236018	intergenic		14.05	6	9	15	0	0	0
LMC-EM	2:49340913:G:T	rs28513867	2	49340913	T	G	0.1809	3.29E-09	0.831518	rs4971681	2	FSHR	0	intronic		5.832	5	9	15	1	0	0
FIM-EM	3:127919045:A:T	rs2687733	3	127919045	T	A	0.2674	3.29E-09	0.989347	rs2955118	3	EEFSEC	0	intronic		6.815	6	5	5	1	1	0
AAM-EM	6:100751666:G:T	rs1827857	6	100751666	T	G	0.2962	3.29E-09	1	rs9403595	13	SIM1	81224	intergenic		3.683	5	5	15	0	0	0
AAM-EM	6:100748829:G:T	rs6933158	6	100748829	G	T	0.2962	3.29E-09	1	rs9403595	13	SIM1	84061	intergenic		7.563	5	5	15	0	0	0
LMC-EM	4:56017283:C:T	rs1580216	4	56017283	C	T	0.4891	3.30E-09	0.947662	rs9994560	4	KDR	25526	intergenic		1.878	NA		5	15	0	0	0
AAM-EM	12:15447714:A:G	rs10082839	12	15447714	G	A	0.3121	3.30E-09	0.986741	rs11056439	26	RERG	0	intronic		1.598	7	13	15	1	0	0
LMC-EM	8:25389631:A:G	rs10098571	8	25389631	G	A	0.2584	3.31E-09	0.649198	rs13261573	6	CDCA2	24194	intergenic		0.303	6	14	15	0	1	0
AAM-EM	6:100751145:C:T	rs9390220	6	100751145	T	C	0.2962	3.31E-09	1	rs9403595	13	SIM1	81745	intergenic		4.385	7	5	15	0	0	0
AAM-EM	6:100747999:A:G	rs7763138	6	100747999	G	A	0.2962	3.31E-09	1	rs9403595	13	SIM1	84891	intergenic		4.205	3a		2	15	0	0	0
AAM-EM	12:50244024:A:G	rs7303074	12	50244024	G	A	0.4105	3.31E-09	0.713732	rs112502508	28	BCDIN3D	7111	intergenic		0.811	7	5	14	1	0	0
AAM-EM	6:100751595:A:T	rs1827855	6	100751595	A	T	0.2962	3.31E-09	1	rs9403595	13	SIM1	81295	intergenic		2.903	5	5	15	0	0	0
AAM-EPP	3:127941072:C:T	rs55775237	3	127941072	C	T	0.1481	3.32E-09	0.838162	rs2811473	8	EEFSEC	0	intronic		0.199	7	5	15	1	1	0
AAM-EPP	2:203180956:A:G	rs77261109	2	203180956	G	A	0.1402	3.33E-09	0.807502	rs77251002	5	NOP58	12566	intergenic		2.73	7	4	5	0	0	0
AAM-EPP	2:203173497:C:T	rs16839065	2	203173497	C	T	0.1402	3.33E-09	0.807502	rs77251002	5	NOP58	5107	intergenic		6.376	4	4	5	0	0	0
AAM-EM	6:100744948:G:T	rs4357144	6	100744948	T	G	0.2962	3.33E-09	1	rs9403595	13	SIM1	87942	intergenic		3.095	4	1	15	0	0	0
AAM-EM	6:100748027:C:T	rs7764243	6	100748027	C	T	0.2962	3.34E-09	1	rs9403595	13	SIM1	84863	intergenic		0.46	4	2	15	0	0	0
AAM-EM	16:29892184:A:G	rs113443718	16	29892184	G	A	0.2833	3.34E-09	0.731602	rs7189550	32	SEZ6L2	0	intronic		0.481	7	4	14	1	1	0
AAM-EPP	2:203182040:A:G	rs12466003	2	203182040	G	A	0.1402	3.35E-09	0.807502	rs77251002	5	NOP58	13650	intergenic		6.643	4	1	5	0	0	0
AAM-EPP	3:127916490:C:T	rs2955124	3	127916490	C	T	0.1481	3.36E-09	0.838162	rs2811473	8	EEFSEC	0	intronic		3.697	5	5	5	1	1	0
LMC-EM	21:36445121:G:T	rs2834747	21	36445121	T	G	0.3211	3.36E-09	1	rs2834747	10	RUNX1	0	intronic		19.42	5	2	15	1	0	0
AAM-EM	3:49811047:A:G	rs148383796	3	49811047	G	A	0.164	3.39E-09	0.826867	rs11130207	8	IP6K1	0	intronic		0.085	7	4	5	1	1	0
AAM-EM	6:100745579:C:T	rs4129688	6	100745579	T	C	0.2962	3.39E-09	1	rs9403595	13	SIM1	87311	intergenic		2.378	3a		1	15	0	0	0
AAM-EM	6:100749267:A:G	rs13201666	6	100749267	G	A	0.2962	3.39E-09	1	rs9403595	13	SIM1	83623	intergenic		0.444	6	5	15	0	0	0
AAM-EM	6:100749847:A:G	rs1354684	6	100749847	G	A	0.2962	3.40E-09	1	rs9403595	13	SIM1	83043	intergenic		5.133	5	5	15	0	0	0
LMC-EM	4:56017967:A:G	rs13143757	4	56017967	G	A	0.4881	3.40E-09	0.951474	rs9994560	4	KDR	26210	intergenic		1.385	7	5	15	0	0	0
AAM-EM	6:100747539:A:G	rs13193512	6	100747539	G	A	0.2962	3.42E-09	1	rs9403595	13	SIM1	85351	intergenic		1.687	6	5	15	0	0	0
AAM-EM	16:29922011:C:T	rs12933766	16	29922011	C	T	0.4414	3.43E-09	0.984752	rs28517865	32	ASPHD1:KC7	0:00	intronic		4.198	5	3	5	1	1	0
AAM-EM	6:100751606:C:T	rs1827856	6	100751606	T	C	0.2962	3.43E-09	1	rs9403595	13	SIM1	81284	intergenic		0.733	5	5	15	0	0	0
AAM-EPP	2:203166364:C:T	rs12464254	2	203166364	T	C	0.1402	3.44E-09	0.807502	rs77251002	5	NOP58	0	intronic		3.823	6	4	4	1	0	0
AAM-EPP	2:203180681:C:G	rs114922024	2	203180681	C	G	0.1402	3.44E-09	0.807502	rs77251002	5	NOP58	12291	intergenic		4.429	6	4	5	0	0	0
AAM-EM	6:100741893:A:T	rs9403583	6	100741893	T	A	0.2962	3.44E-09	1	rs9403595	13	SIM1	90997	intergenic		5.411	5	5	15	0	0	0
AAM-EPP	3:127914853:A:G	rs2811484	3	127914853	G	A	0.1481	3.45E-09	0.838162	rs2811473	8	EEFSEC	0	intronic		6.424	4	2	5	1	1	0
AAM-EPP	3:127877756:A:C	rs2955114	3	127877756	A	C	0.1491	3.46E-09	0.831136	rs2811473	8	EEFSEC	0	intronic		2.738	6	4	5	1	1	0
AAM-EPP	3:127877385:C:T	rs2492284	3	127877385	T	C	0.1491	3.46E-09	0.831136	rs2811473	8	EEFSEC	0	intronic		3.535	6	4	5	1	1	0
AAM-EM	6:100742895:G:T	rs9321986	6	100742895	G	T	0.2962	3.47E-09	1	rs9403595	13	SIM1	89995	intergenic		1.862	7	5	15	0	0	0
AAM-EM	6:100746088:A:G	rs9403591	6	100746088	G	A	0.2962	3.48E-09	1	rs9403595	13	SIM1	86802	intergenic		3.187	6	5	15	0	0	0
AAM-EPP	2:203182765:C:T	rs76501067	2	203182765	C	T	0.1402	3.48E-09	0.807502	rs77251002	5	NOP58	14375	intergenic		0.026	5	2	5	0	0	0
LMC-EM	11:30205523:A:G	rs621220	11	30205523	G	A	0.3489	3.48E-09	0.995809	rs681993	7	RP4-562D20.1	16669	intergenic		1.237	6	9	15	0	1	0
AAM-EM	6:100747759:C:T	rs9390205	6	100747759	T	C	0.2962	3.48E-09	1	rs9403595	13	SIM1	85131	intergenic		6.892	5	5	15	0	0	0
AAM-EM	6:100743615:G:T	rs7765823	6	100743615	T	G	0.2962	3.48E-09	1	rs9403595	13	SIM1	89275	intergenic		2.912	7	5	15	0	0	0
AAM-EPP	3:127914673:C:G	rs2811483	3	127914673	G	C	0.1481	3.48E-09	0.838162	rs2811473	8	EEFSEC	0	intronic		3.835	5	2	5	1	1	0
LMC-EM	2:49343763:G:T	rs4971643	2	49343763	G	T	0.1789	3.49E-09	0.84301	rs4971681	2	FSHR	0	intronic		3.281	5	9	15	1	0	0
AAM-EM	6:100747764:A:G	rs9386080	6	100747764	G	A	0.2962	3.50E-09	1	rs9403595	13	SIM1	85126	intergenic		6.454	5	5	15	0	0	0
AAM-EM	12:15491164:A:G	rs11833467	12	15491164	G	A	0.3111	3.50E-09	1	rs11056439	26	RERG:PTPR(	0:00	intronic		0.332	6	5	15	1	0	0
AAM-EM	6:100750261:A:T	rs9403602	6	100750261	A	T	0.2962	3.52E-09	1	rs9403595	13	SIM1	82629	intergenic		8.25	7	5	15	0	0	0
AAM-EM	6:100752593:A:T	rs1506086	6	100752593	T	A	0.2962	3.52E-09	1	rs9403595	13	SIM1	80297	intergenic		4.344	2b		5	15	0	0	0
LMC-EM	11:30395895:G:T	rs490937	11	30395895	T	G	0.2982	3.52E-09	0.798059	rs1765142	7	RP4-710M3.1	5701	intergenic		0.839	NA		5	15	0	1	0
FIM-EO	3:127815320:A:G	rs940060	3	127815320	A	G	0.04871	3.52E-09	1	rs940060	3	RUVBL1	0	intronic		5.444	5	4	4	1	1	0
AAM-EPP	3:50205642:C:G	rs2624838	3	50205642	C	G	0.336	3.53E-09	0.906845	rs1046956	7	SEMA3F	0	intronic		1.811	5	2	7	1	1	0
AAM-EM	12:15472354:C:T	rs12306807	12	15472354	C	T	0.3101	3.55E-09	0.995552	rs11056439	26	RERG	0	intronic		3.155	5	13	14	1	0	0
FIM-EPP	8:25245432:A:G	rs931875	8	25245432	G	A	0.2674	3.55E-09	0.784119	rs12675625	7	DOCK5	0	intronic		1.536	7	4	5	1	1	0
AAM-EPP	2:203085644:C:T	rs7599049	2	203085644	T	C	0.1372	3.55E-09	0.827625	rs77251002	5	SUMO1	0	intronic		0.393	7	4	5	1	0	0
AAM-EM	12:15480908:C:T	rs113575405	12	15480908	T	C	0.3111	3.56E-09	1	rs11056439	26	RERG:PTPR(	0:00	intronic		1.8	7	5	14	1	0	0
AAM-EM	3:49808274:G:T	rs62262730	3	49808274	T	G	0.163	3.56E-09	0.832953	rs11130207	8	IP6K1	0	intronic		0.143	5	4	5	1	1	0
AAM-EM	6:100752002:A:C	rs9390223	6	100752002	A	C	0.2793	3.56E-09	0.921871	rs9403595	13	SIM1	80888	intergenic		3.246	7	5	15	0	0	0
LMC-EM	4:56019253:C:T	rs11936364	4	56019253	T	C	0.4881	3.57E-09	0.951474	rs9994560	4	KDR	27496	intergenic		6.028	7	5	15	0	0	0
AAM-EM	6:100741738:C:T	rs9390192	6	100741738	C	T	0.2793	3.57E-09	0.921871	rs9403595	13	SIM1	91152	intergenic		0.521	7	5	15	0	0	0
LMC-EM	4:56016071:A:G	rs1458829	4	56016071	G	A	0.4881	3.58E-09	0.951474	rs9994560	4	KDR	24314	intergenic		4.692	NA		5	15	0	0	0
AAM-EM	9:11821654:A:C	rs10960280	9	11821654	C	A	0.4483	3.59E-09	0.888911	rs1601615	18	RP11-74C3.1	277005	intergenic		5.018	5	2	15	0	0	0
AAM-EM	12:15476069:C:T	rs56354312	12	15476069	T	C	0.3101	3.59E-09	0.995552	rs11056439	26	RERG:PTPR(	0:00	intronic		12.95	4	1	11	1	0	0
AAM-EPP	2:203174320:A:G	rs12471060	2	203174320	A	G	0.1402	3.60E-09	0.807502	rs77251002	5	NOP58	5930	intergenic		4.228	5	4	5	0	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:127878871:A:G	rs2811472	3	127878871	A	G	0.1491	3.60E-09	0.831136	rs2811473	8	EEFSEC	0	intronic	7.177		7	4	5	1	1	0
AAM-EM	12:15474585:C:T	rs73057218	12	15474585	T	C	0.3101	3.60E-09	0.995552	rs11056439	26	RERG	0	intronic	0.629		6	5	14	1	0	0
AAM-EM	3:127727752:C:T	rs11717102	3	127727752	C	T	0.3936	3.60E-09	0.888861	rs6770337	9	KBTBD12	21237	intergenic	0.73		7	5	15	0	1	0
AAM-EPP	3:127923810:A:G	rs2999058	3	127923810	G	A	0.1481	3.61E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	0.302	NA		5	15	1	1	0
AAM-EM	6:100741699:G:T	rs9390191	6	100741699	G	T	0.2962	3.62E-09	1	rs9403595	13	SIM1	91191	intergenic	8.729		7	5	15	0	0	0
FIM-EO	11:30177817:C:T	rs3858481	11	30177817	C	T	0.3738	3.62E-09	0.966666	rs4923626	9	RP4-562D20.1	10892	intergenic	1.075		6	5	15	0	1	0
LMC-EM	4:56019139:A:T	rs11935409	4	56019139	A	T	0.4881	3.62E-09	0.951474	rs9994560	4	KDR	27382	intergenic	2.121		7	5	15	0	0	0
AAM-EPP	3:127919417:C:T	rs2140286	3	127919417	C	T	0.1481	3.63E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	2.871	NA		4	5	1	1	0
AAM-EM	12:15474108:C:T	rs73057216	12	15474108	C	T	0.3101	3.63E-09	0.995552	rs11056439	26	RERG	0	intronic	7.5		5	5	14	1	0	0
AAM-EM	12:15475227:A:G	rs73057219	12	15475227	G	A	0.3101	3.63E-09	0.995552	rs11056439	26	RERG	0	intronic	6.39		4	1	13	1	0	0
FIM-EM	2:11716919:A:T	rs4668732	2	11716919	A	T	0.3946	3.64E-09	1	rs4668732	2	GREB1	0	intronic	2.756		7	4	15	1	0	0
FIM-EPP	12:95645385:A:G	rs12320196	12	95645385	A	G	0.4443	3.64E-09	0.996199	rs10859863	9	VEZT	0	intronic	8.034		7	4	5	1	1	0
AAM-EPP	3:127870929:C:G	rs10934849	3	127870929	C	G	0.1491	3.65E-09	0.831136	rs2811473	8	RUVBL1	0	intronic	1.184		4	2	15	1	1	0
AAM-EPP	2:203194062:A:G	rs7597156	2	203194062	G	A	0.1392	3.66E-09	0.796983	rs77251002	5	RN7SL753P	4099	intergenic	4.547		5	5	15	0	1	0
AAM-EPP	2:203156284:C:G	rs148585524	2	203156284	C	G	0.1392	3.66E-09	0.814127	rs77251002	5	NOP58	0	intronic	1.246		4	4	4	1	0	0
AAM-EPP	3:127872175:C:G	rs11920225	3	127872175	C	G	0.1491	3.67E-09	0.831136	rs2811473	8	RUVBL1	0	UTR5	8.594	2b		1	1	1	1	0
AAM-EM	6:100750512:A:G	rs13206155	6	100750512	G	A	0.2962	3.67E-09	1	rs9403595	13	SIM1	82378	intergenic	1.497		6	5	15	0	0	0
AAM-EM	9:11860372:A:T	rs68079409	9	11860372	T	A	0.2644	3.69E-09	0.995048	rs9969696	18	RP11-74C3.1	238287	intergenic	0.245		6	9	15	0	0	0
AAM-EPP	2:203182767:C:T	rs80315897	2	203182767	C	T	0.1402	3.69E-09	0.807502	rs77251002	5	NOP58	14377	intergenic	1.635		5	2	5	0	0	0
AAM-EM	3:127756718:C:T	rs6439110	3	127756718	C	T	0.3936	3.71E-09	0.881336	rs6770337	9	SEC61A1	13765	intergenic	0.611		6	5	15	0	1	0
AAM-EM	6:100741783:A:C	rs9403582	6	100741783	A	C	0.2962	3.71E-09	1	rs9403595	13	SIM1	91107	intergenic	2.363		5	5	15	0	0	0
AAM-EPP	2:203122778:C:G	rs12467111	2	203122778	G	C	0.1402	3.71E-09	0.807502	rs77251002	5	NOP58	7660	intergenic	6.464		6	5	15	0	0	0
AAM-EM	12:115119903:A:G	rs545076	12	115119903	G	A	0.4871	3.72E-09	0.748905	rs8853	30	TBX3	0	intronic	10.65		5	1	13	1	0	0
FIM-EO	11:30177821:C:T	rs3858482	11	30177821	T	C	0.3738	3.72E-09	0.966666	rs4923626	9	RP4-562D20.1	10888	intergenic	2.325		6	5	15	0	1	0
AAM-EPP	3:127867592:G:T	rs73192977	3	127867592	T	G	0.1491	3.72E-09	0.831136	rs2811473	8	RUVBL1	0	intronic	0.27		5	5	15	1	1	0
AAM-EPP	3:127869165:A:G	rs4857870	3	127869165	G	A	0.1491	3.73E-09	0.831136	rs2811473	8	RUVBL1	0	intronic	6.493		7	5	15	1	1	0
AAM-EM	12:15480619:A:G	rs73057222	12	15480619	G	A	0.3111	3.73E-09	1	rs11056439	26	RERG:PTPRC	0:00	intronic	6.608		6	2	14	1	0	0
AAM-EM	12:15497573:A:G	rs73057230	12	15497573	G	A	0.3111	3.74E-09	1	rs11056439	26	RERG:PTPRC	0:00	intronic	10.12		7	5	15	1	0	0
FIM-EPP	1:169090748:C:T	rs145163454	1	169090748	T	C	0.01093	3.76E-09	0.849396	rs1894692	2	ATP1B1	0	intronic	0.414		5	2	5	1	0	0
AAM-EM	6:100750944:A:G	rs9376853	6	100750944	G	A	0.2962	3.76E-09	1	rs9403595	13	SIM1	81946	intergenic	2.362		7	5	15	0	0	0
AAM-EM	2:25150296:A:G	rs10182181	2	25150296	A	G	0.4662	3.77E-09	0.966942	rs2384054	6	ADCY3	7587	intergenic	5.931	1f		2	7	1	1	0
AAM-EPP	2:203198618:C:T	rs112849283	2	203198618	T	C	0.1392	3.77E-09	0.796983	rs77251002	5	RN7SL753P	166	downstream	9.152		7	5	15	0	0	0
FIM-EO	11:30176879:C:T	rs1340032	11	30176879	T	C	0.3688	3.77E-09	0.948617	rs4923626	9	RP4-562D20.1	11830	intergenic	7.965	NA		1	15	0	1	0
AAM-EPP	2:203158947:A:C	rs143590081	2	203158947	C	A	0.1392	3.78E-09	0.814127	rs77251002	5	NOP58	0	intronic	3.625		6	4	4	1	0	0
AAM-EM	12:15497636:A:G	rs16910766	12	15497636	G	A	0.3111	3.78E-09	1	rs11056439	26	RERG:PTPRC	0:00	intronic	17.74		5	5	15	1	0	0
FIM-EO	11:30170254:C:T	rs3858478	11	30170254	C	T	0.3738	3.79E-09	0.966666	rs4923626	9	RP4-562D20.1	18455	intergenic	1.182		7	9	15	0	1	0
AAM-EM	12:15459404:C:T	rs1600334	12	15459404	T	C	0.3101	3.79E-09	0.995552	rs11056439	26	RERG	0	intronic	3.137	NA		9	15	1	0	0
FIM-EO	8:25311269:A:G	rs17053711	8	25311269	G	A	0.2634	3.79E-09	0.906683	rs6185	8	KCTD9	0	intronic	4.216		5	4	5	1	1	0
AAM-EM	6:100749058:C:T	rs13190996	6	100749058	T	C	0.2793	3.80E-09	0.921871	rs9403595	13	SIM1	83832	intergenic	0.247		6	5	15	0	0	0
AAM-EM	2:25143649:C:G	rs6746013	2	25143649	C	G	0.4662	3.81E-09	0.966942	rs2384054	6	ADCY3	940	upstream	2.646		4	1	1	1	1	0
AAM-EM	6:100744684:A:G	rs4357140	6	100744684	G	A	0.2962	3.81E-09	1	rs9403595	13	SIM1	88206	intergenic	3.906	2b		1	15	0	0	0
AAM-EPP	2:203172413:A:C	rs79117531	2	203172413	A	C	0.1402	3.81E-09	0.807502	rs77251002	5	NOP58	4023	intergenic	0.1	3a		4	4	0	0	0
AAM-EM	6:100751934:A:T	rs9403608	6	100751934	T	A	0.2962	3.83E-09	1	rs9403595	13	SIM1	80956	intergenic	3.599		6	5	15	0	0	0
AAM-EPP	3:127925192:A:G	rs2955125	3	127925192	A	G	0.1481	3.85E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	8.676		5	5	15	1	1	0
AAM-EPP	6:151853479:C:T	rs6939820	6	151853479	T	C	0.2187	3.85E-09	0.78777	rs4870030	11	CCDC170	0	intronic	0.111		7	5	15	1	0	0
AAM-EM	12:15491823:G:T	rs11831965	12	15491823	T	G	0.3111	3.86E-09	1	rs11056439	26	RERG:PTPRC	0:00	intronic	1.973		6	5	15	1	0	0
FIM-EO	3:127991149:A:C	rs2811413	3	127991149	C	A	0.3171	3.86E-09	0.780017	rs2999048	3	EEFSEC	0	intronic	0.523		5	4	5	1	1	0
FIM-EO	11:30166397:A:G	rs10835622	11	30166397	G	A	0.3728	3.87E-09	0.963073	rs4923626	9	RP4-562D20.1	22312	intergenic	7.51		7	14	15	0	1	0
AAM-EM	9:11861406:C:T	rs72706168	9	11861406	T	C	0.2664	3.88E-09	0.995047	rs9969696	18	RP11-74C3.1	237253	intergenic	6.343		6	9	15	0	0	0
FIM-EM	3:128111174:C:T	rs4241495	3	128111174	T	C	0.2575	3.89E-09	0.693348	rs2955118	3	EEFSEC	0	intronic	0.058		5	4	15	1	1	0
FIM-EO	3:128084164:A:T	rs4277707	3	128084164	A	T	0.1431	3.89E-09	0.968621	rs1702118	3	EEFSEC	0	intronic	1.664		5	4	5	1	1	0
AAM-EM	12:15474823:G:T	rs11056429	12	15474823	T	G	0.3101	3.89E-09	0.995552	rs11056439	26	RERG	0	intronic	2.623		4	1	13	1	0	0
FIM-EO	11:30240470:A:T	rs521271	11	30240470	T	A	0.333	3.91E-09	0.795036	rs607987	9	FSHB	12092	intergenic	3.522		7	7	15	0	1	0
LMC-EM	4:56015841:A:G	rs4864956	4	56015841	G	A	0.4881	3.96E-09	0.951474	rs9994560	4	KDR	24084	intergenic	0.523		7	5	15	0	0	0
FIM-EM	6:127482362:A:G	rs4566896	6	127482362	A	G	0.499	3.96E-09	0.872419	rs2489623	4	RSPO3	0	intronic	1.654		6	4	15	1	0	0
AAM-EM	6:100744097:C:T	rs12528089	6	100744097	T	C	0.2972	3.97E-09	0.99528	rs9403595	13	SIM1	88793	intergenic	3.306		7	5	15	0	0	0
AAM-EPP	2:203154251:C:T	rs56684065	2	203154251	C	T	0.1392	3.98E-09	0.814127	rs77251002	5	NOP58	0	intronic	3.658		4	4	4	1	0	0
AAM-EPP	2:203156984:G:T	rs143719010	2	203156984	G	T	0.1392	3.98E-09	0.814127	rs77251002	5	NOP58	0	intronic	6.859		4	4	4	1	0	0
FIM-EO	11:30165710:A:G	rs475305	11	30165710	A	G	0.3748	4.00E-09	0.970287	rs4923626	9	RP4-562D20.1	22999	intergenic	2.78	NA		14	15	0	1	0
LMC-DE	6:151821024:A:T	rs9383911	6	151821024	A	T	0.0835	4.00E-09	0.912345	rs9383906	2	CCDC170	0	intronic	4.976		6	2	15	1	1	0
AAM-EPP	2:203154953:A:G	rs1474001	2	203154953	G	A	0.1392	4.00E-09	0.814127	rs77251002	5	NOP58	0	intronic	2.745	NA		4	4	1	0	0
FIM-EO	11:30177120:C:T	rs3858480	11	30177120	T	C	0.3748	4.02E-09	0.963058	rs4923626	9	RP4-562D20.1	11589	intergenic	12.03		5	1	15	0	1	0
AAM-EPP	2:203175409:A:T	rs146671566	2	203175409	T	A	0.1402	4.03E-09	0.807502	rs77251002	5	NOP58	7019	intergenic	0.006		6	4	5	0	0	0
AAM-EM	3:127745697:A:G	rs4857833	3	127745697	G	A	0.3986	4.03E-09	0.899173	rs6770337	9	SEC61A1	24786	intergenic	4.442		7	13	15	0	1	0
FIM-EM	6:127523602:C:T	rs9491709	6	127523602	C	T	0.4722	4.04E-09	0.768772	rs2489623	4	RSPO3	4691	intergenic	0.025		7	5	15	0	0	0
LMC-EM	4:56014425:C:T	rs2219469	4	56014425	C	T	0.4881	4.05E-09	0.951474	rs9994560	4	KDR	22668	intergenic	0.837		7	5	15	0	0	0
AAM-EPP	2:203179868:A:G	rs115418918	2	203179868	A	G	0.1402	4.05E-09	0.807502	rs77251002	5	NOP58	11478	intergenic	0.126		5	4	5	0	0	0
AAM-EPP	2:203181516:C:T	rs146226790	2	203181516	C	T	0.1402	4.06E-09	0.807502	rs77251002	5	NOP58	13126	intergenic	0.404		7	5	5	0	0	0
AAM-EPP	3:127913828:A:T	rs940062	3	127913828	T	A	0.1481	4.07E-09	0.838162	rs2811473	8	EEFSEC	0	intronic	2.407		5	5	5	1	1	0
LMC-DE	6:151829487:A:T	rs4870023	6	151829487	A	T	0.0825	4.07E-09	0.875226	rs9383906	2	CCDC170	0	intronic	0.845		7	1	15	1	1	0
AAM-EPP	2:203198888:C:G	rs77435512	2	203198888	G	C	0.1402	4.07E-09	0.790383	rs77251002	5	RN7SL753P	436	downstream	1.698		5	5	15	0	1	0
AAM-EM	2:25150116:A:C	rs6752378	2	25150116	C	A	0.4662	4.07E-09	0.966942	rs2384054	6	ADCY3	7407	intergenic	3.508	1f		1	7	1	1	0
FIM-EM	6:127476516:A:G	rs1892172	6	127476516	G	A	0.5	4.07E-09	0.875939	rs2489623	4	RSPO3	0	exonic	11.09	NA		4	15	1	0	0
AAM-EPP	10:90246530:C:T	rs2148127	10	90246530	T	C	0.3718	4.08E-09	0.750091	rs7921352	15	RNLS	0	intronic	8.501		7	15	15	1	0	0
FIM-EPP	1:169216412:C:G	rs2040445	1	169216412	C	G	0.01193	4.09E-09	0.787354	rs1894692	2	NME7	0	intronic	0.891		5	5	15	1	1	0
AAM-EM	12:15497942:A:C	rs11056433	12	15497942	C	A	0.3111	4.09E-09	1	rs11056439	26	RERG:PTPRC	0:00	intronic	6.81		7	5	15	1	0	0
LMC-EM	6:152470293:C:T	rs17082233	6	152470293	T	C	0.06362	4.11E-09	0.982974	rs73632499	5	SYNE1	0	intronic	2.023		6	4	4	1	0	0
FIM-EPP	12:95627237:A:G	rs6538622	12	95627237	A	G	0.4423	4.11E-09	0.996199	rs10859863	9	VEZT	0	intronic	7.701		6	4	5	1	1	0
AAM-EM	6:100748896:C:T	rs71539016	6	100748896	T	C	0.2962	4.12E-09	1	rs9403595	13	SIM1	83994	intergenic	8.055		5	5	15	0	0	0
LMC-DE	6:151824449:A:G	rs12173791	6	151824449	G	A	0.08449	4.12E-09	0.89974	rs9383906	2	CCDC170	0	intronic	0.146		5	5	15	1	1	0
AAM-EM	12:15361715:G:T	rs7965989	12	15361715	G	T	0.3479	4.12E-09	0.823687	rs11056439	26	RERG	0	intronic	0.799		6	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EO	3:127948958:T:TC	rs34834087	3	127948958	TC	T	0.2644	4.14E-09	0.96291	rs2999048	3	EEFSEC	0	intronic	0.901	NA	5	5	1	1	0
FIM-EPP	12:95610220:A:G	rs7310833	12	95610220	G	A	0.4423	4.14E-09	0.996199	rs10859863	9	FGD6	0	intronic	3.829	4	1	1	1	1	0
LMC-DE	4:55991042:G:T	rs12502008	4	55991042	G	T	0.3688	4.14E-09	1	rs12502008	1	KDR	0	intronic	7.56	4	1	10	1	1	0
AAM-EPP	10:90115782:A:G	rs61855396	10	90115782	G	A	0.3012	4.16E-09	0.942493	rs11202704	15	RNLS	0	intronic	0.1	7	5	15	1	0	0
FIM-EPP	12:95643298:A:T	rs7967229	12	95643298	A	T	0.4414	4.18E-09	0.992413	rs10859863	9	VEZT	0	intronic	3.218	5	5	5	1	1	0
AAM-EM	12:15460015:C:T	rs73055297	12	15460015	T	C	0.3101	4.19E-09	0.995552	rs11056439	26	RERG	0	intronic	6.324	6	9	15	1	0	0
AAM-EM	3:127715018:A:G	rs6803110	3	127715018	A	G	0.4225	4.19E-09	0.99188	rs6770337	9	KBTBD12	8503	intergenic	1.923	5	5	15	1	1	0
FIM-EM	6:127481154:A:C	rs4644087	6	127481154	A	C	0.5	4.19E-09	0.875939	rs2489623	4	RSPO3	0	intronic	0.779	7	4	15	1	0	0
LMC-EM	1:199882001:C:T	rs1559750	1	199882001	C	T	0.496	4.19E-09	0.634313	rs6670899	1	RP11-567B20	3224	intergenic	0.999	7	5	15	0	0	0
AAM-EM	6:100744436:C:T	rs13211600	6	100744436	C	T	0.2962	4.21E-09	1	rs9403595	13	SIM1	88454	intergenic	4.92	5	2	15	0	0	0
FIM-EO	11:30173187:C:T	rs12282309	11	30173187	T	C	0.3738	4.23E-09	0.966666	rs4923626	9	RP4-562D20.2	15522	intergenic	5.09	6	7	15	0	1	0
FIM-EO	11:30166109:C:T	rs930320	11	30166109	T	C	0.3738	4.23E-09	0.966666	rs4923626	9	RP4-562D20.2	22600	intergenic	2.865	NA	14	15	0	1	0
FIM-EO	11:30174438:C:T	rs10835629	11	30174438	C	T	0.3738	4.23E-09	0.966666	rs4923626	9	RP4-562D20.2	14271	intergenic	0.748	6	5	15	0	1	0
FIM-EO	11:30166391:A:G	rs637542	11	30166391	A	G	0.3738	4.25E-09	0.966666	rs4923626	9	RP4-562D20.2	22318	intergenic	2.73	NA	14	15	0	1	0
AAM-EM	12:15465378:A:T	rs10161274	12	15465378	T	A	0.3101	4.25E-09	0.995552	rs11056439	26	RERG	0	intronic	5.068	7	13	15	1	0	0
AAM-EPP	3:128111174:C:T	rs4241495	3	128111174	T	C	0.2575	4.25E-09	0.804478	rs729847	8	EEFSEC	0	intronic	0.058	5	4	15	1	1	0
FIM-EPP	3:128107982:A:G	rs1625296	3	128107982	G	A	0.2575	4.26E-09	1	rs4241495	4	EEFSEC	0	intronic	0.168	NA	4	15	1	1	0
FIM-EO	11:30174019:G:T	rs10835628	11	30174019	G	T	0.3738	4.26E-09	0.966666	rs4923626	9	RP4-562D20.2	14690	intergenic	0.972	7	5	15	0	1	0
FIM-EO	11:30175950:C:G	rs11030977	11	30175950	G	C	0.3738	4.26E-09	0.966666	rs4923626	9	RP4-562D20.2	12759	intergenic	1.122	7	5	15	0	1	0
FIM-EO	11:30176085:A:T	rs4512795	11	30176085	T	A	0.3738	4.26E-09	0.966666	rs4923626	9	RP4-562D20.2	12624	intergenic	1.777	5	5	15	0	1	0
FIM-EO	11:30176106:A:G	rs2884134	11	30176106	G	A	0.3738	4.26E-09	0.966666	rs4923626	9	RP4-562D20.2	12603	intergenic	2.232	5	5	15	0	1	0
FIM-EO	11:30173987:G:T	rs10835627	11	30173987	G	T	0.3738	4.26E-09	0.966666	rs4923626	9	RP4-562D20.2	14722	intergenic	0.219	6	5	15	0	1	0
FIM-EO	11:30176241:G:T	rs2226272	11	30176241	T	G	0.3738	4.26E-09	0.966666	rs4923626	9	RP4-562D20.2	12468	intergenic	0.559	7	7	15	0	1	0
FIM-EO	11:30176743:C:T	rs1340033	11	30176743	T	C	0.3738	4.26E-09	0.966666	rs4923626	9	RP4-562D20.2	11966	intergenic	4.15	NA	1	15	0	1	0
FIM-EO	11:30176794:A:T	rs1938315	11	30176794	A	T	0.3738	4.26E-09	0.966666	rs4923626	9	RP4-562D20.2	11915	intergenic	2.739	7	1	15	0	1	0
AAM-EM	3:127713448:C:T	rs7630727	3	127713448	T	C	0.4274	4.27E-09	0.963973	rs6770337	9	KBTBD12	6933	intergenic	0.861	6	5	15	1	1	0
AAM-EPP	3:128107982:A:G	rs1625296	3	128107982	G	A	0.2575	4.27E-09	0.804478	rs729847	8	EEFSEC	0	intronic	0.168	NA	4	15	1	1	0
FIM-EM	6:127475433:C:T	rs4382293	6	127475433	T	C	0.5	4.27E-09	0.875939	rs2489623	4	RSPO3	0	intronic	2.569	5	5	15	1	0	0
FIM-EO	11:30163013:C:T	rs12272116	11	30163013	T	C	0.3738	4.28E-09	0.966666	rs4923626	9	RP4-562D20.2	25696	intergenic	2.964	6	14	15	0	1	0
FIM-EO	11:30168320:A:T	rs11030971	11	30168320	A	T	0.3728	4.28E-09	0.963073	rs4923626	9	RP4-562D20.2	20389	intergenic	3.237	6	13	15	0	1	0
AAM-EM	6:100701917:A:C	rs6915780	6	100701917	A	C	0.2783	4.28E-09	0.908189	rs9403595	13	RP3-344J20.1	75848	intergenic	1.625	7	5	15	0	0	0
FIM-EO	11:30172916:A:C	rs1890826	11	30172916	A	C	0.3738	4.28E-09	0.966666	rs4923626	9	RP4-562D20.2	15793	intergenic	9.079	5	7	15	0	1	0
AAM-EPP	8:25245432:A:G	rs931875	8	25245432	G	A	0.2674	4.28E-09	0.880889	rs6185	12	DOCK5	0	intronic	1.536	7	4	5	1	1	0
FIM-EO	11:30174370:C:T	rs10501124	11	30174370	C	T	0.3738	4.29E-09	0.966666	rs4923626	9	RP4-562D20.2	14339	intergenic	1.278	7	5	15	0	1	0
FIM-EO	11:30164732:A:G	rs10835621	11	30164732	A	G	0.3738	4.29E-09	0.966666	rs4923626	9	RP4-562D20.2	23977	intergenic	9.233	4	7	15	0	1	0
FIM-EO	11:30170373:C:T	rs3908935	11	30170373	T	C	0.3738	4.30E-09	0.966666	rs4923626	9	RP4-562D20.2	18336	intergenic	0.478	7	9	15	0	1	0
FIM-EM	3:128114587:C:T	rs7632169	3	128114587	T	C	0.2575	4.30E-09	0.693348	rs2955118	3	EEFSEC	0	intronic	0.293	3a	4	15	1	1	0
AAM-EPP	10:90245519:A:T	rs2576176	10	90245519	A	T	0.3718	4.30E-09	0.750091	rs7921352	15	RNLS	0	intronic	1.103	7	14	15	1	0	0
AAM-EM	6:100714695:A:G	rs9386068	6	100714695	A	G	0.2793	4.31E-09	0.912513	rs9403595	13	RP3-344J20.1	88626	intergenic	19.04	4	5	15	0	0	0
FIM-EPP	3:128101344:C:G	rs74924715	3	128101344	G	C	0.03777	4.31E-09	1	rs74924715	4	EEFSEC	0	intronic	16.38	3a	2	5	1	0	0
FIM-EO	11:30163183:A:T	rs11030966	11	30163183	A	T	0.3738	4.31E-09	0.966666	rs4923626	9	RP4-562D20.2	25526	intergenic	6.348	6	14	15	0	1	0
FIM-EO	11:30165272:C:T	rs1819675	11	30165272	C	T	0.3738	4.31E-09	0.966666	rs4923626	9	RP4-562D20.2	23437	intergenic	3.585	NA	14	15	0	1	0
FIM-EO	11:30177267:A:G	rs7113720	11	30177267	G	A	0.3738	4.31E-09	0.966666	rs4923626	9	RP4-562D20.2	11442	intergenic	2.494	5	1	15	0	1	0
AAM-EPP	3:128107020:A:C	rs7373685	3	128107020	A	C	0.2535	4.31E-09	0.800277	rs729847	8	EEFSEC	0	intronic	2.967	5	4	15	1	1	0
AAM-EM	12:15362066:C:G	rs7969197	12	15362066	G	C	0.3479	4.32E-09	0.823687	rs11056439	26	RERG	0	intronic	2.852	5	2	15	1	0	0
FIM-EO	11:30162984:A:G	rs12291589	11	30162984	G	A	0.3738	4.32E-09	0.966666	rs4923626	9	RP4-562D20.2	25725	intergenic	6.22	7	14	15	0	1	0
AAM-EPP	2:203155936:A:C	rs3731700	2	203155936	A	C	0.1402	4.32E-09	0.807502	rs77251002	5	NOP58	0	exonic	14.9	2b	4	4	1	0	0
FIM-EPP	12:95631276:C:T	rs10859856	12	95631276	T	C	0.4423	4.33E-09	0.996199	rs10859863	9	VEZT	0	intronic	14.5	5	5	5	1	1	0
FIM-EO	11:30167113:G:T	rs11030968	11	30167113	T	G	0.3738	4.33E-09	0.966666	rs4923626	9	RP4-562D20.2	21596	intergenic	5.275	7	14	15	0	1	0
FIM-EO	11:30167121:A:G	rs11030969	11	30167121	G	A	0.3738	4.33E-09	0.966666	rs4923626	9	RP4-562D20.2	21588	intergenic	1.317	7	14	15	0	1	0
FIM-EO	11:30168564:A:C	rs11030972	11	30168564	A	C	0.3738	4.33E-09	0.966666	rs4923626	9	RP4-562D20.2	20145	intergenic	2.097	6	13	15	0	1	0
FIM-EO	11:30168871:C:T	rs4337008	11	30168871	C	T	0.3738	4.33E-09	0.966666	rs4923626	9	RP4-562D20.2	19838	intergenic	3.908	5	9	15	0	1	0
FIM-EO	11:30169198:C:T	rs3858477	11	30169198	C	T	0.3738	4.33E-09	0.966666	rs4923626	9	RP4-562D20.2	19511	intergenic	0.574	NA	9	15	0	1	0
FIM-EO	11:30171174:C:G	rs3847633	11	30171174	C	G	0.3738	4.33E-09	0.966666	rs4923626	9	RP4-562D20.2	17535	intergenic	0.294	7	9	15	0	1	0
FIM-EO	11:30171615:A:T	rs3847635	11	30171615	A	T	0.3738	4.33E-09	0.966666	rs4923626	9	RP4-562D20.2	17094	intergenic	4.954	6	7	15	0	1	0
FIM-EO	11:30173963:C:T	rs10835626	11	30173963	T	C	0.3738	4.33E-09	0.966666	rs4923626	9	RP4-562D20.2	14746	intergenic	4.048	6	5	15	0	1	0
FIM-EO	11:30167835:C:T	rs11030970	11	30167835	C	T	0.3738	4.34E-09	0.966666	rs4923626	9	RP4-562D20.2	20874	intergenic	1.64	7	13	15	0	1	0
AAM-EPP	10:90248945:A:C	rs2437875	10	90248945	A	C	0.3708	4.34E-09	0.745602	rs7921352	15	RNLS	0	intronic	10.04	NA	1	15	1	0	0
FIM-EM	6:127477268:C:T	rs1936809	6	127477268	T	C	0.5	4.35E-09	0.875939	rs2489623	4	RSPO3	0	intronic	5.803	NA	4	15	1	0	0
AAM-EM	6:100700834:A:C	rs9376816	6	100700834	A	C	0.2783	4.35E-09	0.908189	rs9403595	13	RP3-344J20.1	74765	intergenic	4.588	6	5	15	0	0	0
FIM-EO	11:30179949:A:G	rs3858484	11	30179949	A	G	0.3738	4.35E-09	0.966666	rs4923626	9	RP4-562D20.2	8760	intergenic	16.68	7	5	15	0	1	0
FIM-EO	11:30163968:A:G	rs10835620	11	30163968	G	A	0.3738	4.36E-09	0.966666	rs4923626	9	RP4-562D20.2	24741	intergenic	1.097	7	14	15	0	1	0
AAM-EM	12:15461785:A:G	rs11056422	12	15461785	A	G	0.3101	4.36E-09	0.995552	rs11056439	26	RERG	0	intronic	0.503	6	13	15	1	0	0
FIM-EO	11:30176985:C:T	rs78330906	11	30176985	C	T	0.02883	4.36E-09	1	rs78330906	9	RP4-562D20.2	11724	intergenic	3.769	6	1	15	0	0	0
AAM-EPP	3:128106267:A:G	rs2977562	3	128106267	A	G	0.2535	4.37E-09	0.800277	rs729847	8	EEFSEC	0	intronic	0.687	NA	4	15	1	1	0
FIM-EO	11:30271433:A:AG	rs35243946	11	30271433	A	AG	0.33	4.37E-09	0.778034	rs607987	9	FSHB	14624	intergenic	3.692	NA	9	15	0	1	0
FIM-EO	11:30177840:A:T	rs3858483	11	30177840	T	A	0.3708	4.38E-09	0.955813	rs4923626	9	RP4-562D20.2	10869	intergenic	5.431	6	5	15	0	1	0
FIM-EO	11:30179758:C:T	rs3847637	11	30179758	C	T	0.3738	4.38E-09	0.966666	rs4923626	9	RP4-562D20.2	8951	intergenic	1.781	7	5	15	0	1	0
FIM-EO	11:30178465:C:T	rs10835630	11	30178465	T	C	0.3738	4.38E-09	0.966666	rs4923626	9	RP4-562D20.2	10244	intergenic	1.555	5	5	15	0	1	0
FIM-EO	11:30179203:C:T	rs12786317	11	30179203	C	T	0.3738	4.38E-09	0.966666	rs4923626	9	RP4-562D20.2	9506	intergenic	4.697	7	5	15	0	1	0
FIM-EM	6:127493611:A:T	rs6569474	6	127493611	A	T	0.5	4.39E-09	0.86876	rs2489623	4	RSPO3	0	intronic	14.02	7	5	15	1	0	0
LMC-DE	9:344711:A:G	rs117608810	9	344711	G	A	0.0159	4.40E-09	1	rs117608810	4	DOCK8	0	intronic	1.977	7	4	15	1	0	0
AAM-EPP	10:90143657:C:T	rs1648520	10	90143657	T	C	0.4036	4.41E-09	0.696955	rs7921352	15	RNLS	0	intronic	6.796	NA	5	15	1	0	0
AAM-EPP	2:203324750:A:G	rs116635509	2	203324750	A	G	0.1421	4.41E-09	0.753195	rs77251002	5	BMPR2	0	intronic	3.324	7	4	15	1	0	0
AAM-EM	16:29918034:C:T	rs1129700	16	29918034	T	C	0.4394	4.41E-09	0.992349	rs28517865	32	ASPHD1:KCT	0:00	UTR3	5.076	NA	4	5	1	1	0
FIM-EO	11:30173317:C:T	rs7948109	11	30173317	C	T	0.3738	4.41E-09	0.966666	rs4923626	9	RP4-562D20.2	15392	intergenic	0.084	7	5	15	0	1	0
AAM-EM	12:15465854:A:C	rs10161242	12	15465854	A	C	0.3101	4.42E-09	0.995552	rs11056439	26	RERG	0	intronic	5.021	7	9	15	1	0	0
AAM-EPP	2:203195092:G:T	rs111542497	2	203195092	G	T	0.1402	4.42E-09	0.790383	rs77251002	5	RN7SL753P	3069	intergenic	1.228	7	4	15	0	1	0
AAM-EPP	3:50242387:G:T	rs1858828	3	50242387	G	T	0.4404	4.42E-09	0.875683	rs13085567	7	SLC38A3	291	upstream	5.173	NA	1	12	0	1	0
FIM-EO	11:30166628:C:T	rs10835624	11	30166628	T	C	0.3738	4.42E-09	0.966666	rs4923626	9	RP4-562D20.2	22081	intergenic	0.437	7	14	15	0	1	0
AAM-EPP	2:203138645:A:G	rs138758738	2	203138645	A	G	0.1382	4.42E-09	0.803666	rs77251002	5	NOP58	0	intronic	0.171	7	3	5	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	10:90167065:A:C	rs792207	10	90167065	A	C	0.4185	4.43E-09	0.824813	rs7921352	15	RNLS	0	intronic	5.976		7	5	15	1	0	0
AAM-EM	6:100701244:A:G	rs9376817	6	100701244	G	A	0.2783	4.43E-09	0.908189	rs9403595	13	RP3-344J20.1	75175	intergenic	0.906		6	5	15	0	0	0
AAM-EM	3:127714611:A:G	rs1549876	3	127714611	A	G	0.4225	4.43E-09	0.99188	rs6770337	9	KBTBD12	8096	intergenic	2.919		5	5	15	1	1	0
FIM-EPP	1:169208179:C:T	rs2227246	1	169208179	C	T	0.01093	4.45E-09	0.849396	rs1894692	2	NME7	0	intronic	4.432	NA		5	15	1	0	0
FIM-EM	6:127523608:C:T	rs9491710	6	127523608	T	C	0.4722	4.46E-09	0.768772	rs2489623	4	RSPO3	4697	intergenic	2.527		7	5	15	0	0	0
AAM-EM	3:127806218:A:G	rs3732402	3	127806218	G	A	0.3897	4.46E-09	0.867258	rs6770337	9	RUVBL1	0	intronic	4.197		4	4	4	1	1	0
FIM-EM	3:128107982:A:G	rs1625296	3	128107982	G	A	0.2575	4.49E-09	0.693348	rs2955118	3	EEFSEC	0	intronic	0.168	NA		4	15	1	1	0
FIM-EO	11:30166240:C:T	rs1898174	11	30166240	C	T	0.3738	4.52E-09	0.966666	rs4923626	9	RP4-562D20.1	22469	intergenic	17.85	NA		14	15	0	1	0
FIM-EO	11:30172517:A:AT	rs778943787	11	30172517	A	AT	0.02087	4.52E-09	0.875317	rs4923626	9	RP4-562D20.1	16192	intergenic	1.241	NA		7	15	0	0	0
AAM-EPP	2:203146720:C:T	rs57571703	2	203146720	T	C	0.1382	4.53E-09	0.803666	rs77251002	5	NOP58	0	intronic	9.767		7	4	4	1	0	0
AAM-EPP	2:203156319:A:G	rs114177656	2	203156319	A	G	0.1402	4.54E-09	0.807502	rs77251002	5	NOP58	0	intronic	6.526	3a		4	4	1	0	0
AAM-EM	12:15449761:C:T	rs2417434	12	15449761	T	C	0.3101	4.54E-09	0.995552	rs11056439	26	RERG	0	intronic	3.508		6	9	15	1	0	0
FIM-EPP	12:95699240:C:T	rs7966079	12	95699240	T	C	0.4443	4.54E-09	0.996199	rs10859863	9	VEZT	2673	intergenic	4.643		5	4	5	0	1	0
AAM-EPP	10:90093298:C:T	rs11594050	10	90093298	C	T	0.3032	4.55E-09	0.952121	rs11202704	15	RNLS	0	intronic	2.164		5	2	15	1	0	0
AAM-EPP	2:203174611:A:G	rs12463995	2	203174611	G	A	0.1402	4.55E-09	0.807502	rs77251002	5	NOP58	6221	intergenic	2.54		5	4	5	0	0	0
AAM-EPP	2:203150362:C:T	rs77062060	2	203150362	T	C	0.1382	4.56E-09	0.803666	rs77251002	5	NOP58	0	intronic	0.409		5	4	4	1	0	0
AAM-EM	16:29919792:A:G	rs8050576	16	29919792	A	G	0.4394	4.56E-09	0.992349	rs28517865	32	ASPHD1:KC	0:00	intronic	0.319		5	4	5	1	1	0
AAM-EM	3:127740453:C:G	rs35546672	3	127740453	C	G	0.3936	4.56E-09	0.888861	rs6770337	9	SEC61A1	30030	intergenic	5.556		7	7	15	0	1	0
LMC-DE	6:151822156:C:G	rs4869733	6	151822156	G	C	0.08449	4.57E-09	0.89974	rs9383906	2	CCDC170	0	intronic	0.389		6	5	15	1	1	0
FIM-EO	11:30174965:A:C	rs6484476	11	30174965	C	A	0.3738	4.58E-09	0.966666	rs4923626	9	RP4-562D20.1	13744	intergenic	4.817		6	5	15	0	1	0
AAM-EPP	2:203146783:A:G	rs60722019	2	203146783	G	A	0.1382	4.58E-09	0.778271	rs77251002	5	NOP58	0	intronic	6.446		5	4	4	1	0	0
FIM-EO	11:30170837:A:G	rs7114540	11	30170837	A	G	0.3738	4.58E-09	0.966666	rs4923626	9	RP4-562D20.1	17872	intergenic	2.522		7	9	15	0	1	0
AAM-EM	2:408713:A:G	rs62106252	2	408713	G	A	0.04473	4.59E-09	1	rs62106252	5	AC105393.1	0	ncRNA_intron	10.19		7	5	15	0	0	0
AAM-EPP	2:203152716:A:T	rs78175596	2	203152716	A	T	0.1372	4.60E-09	0.810432	rs77251002	5	NOP58	0	intronic	8.285		6	4	4	1	0	0
FIM-EM	6:127484851:C:CAT	rs4053254	6	127484851	C	CAT	0.499	4.60E-09	0.872419	rs2489623	4	RSPO3	0	intronic	1.532	NA		4	15	1	0	0
LMC-EM	2:49295975:C:G	rs62162086	2	49295975	G	C	0.167	4.60E-09	0.778832	rs4971681	2	FSHR	0	intronic	2.986		5	9	15	1	0	0
FIM-EO	11:30169574:C:T	rs11030974	11	30169574	T	C	0.3738	4.60E-09	0.966666	rs4923626	9	RP4-562D20.1	19135	intergenic	0.745		7	9	15	0	1	0
AAM-EPP	2:203152079:A:G	rs116109808	2	203152079	A	G	0.1372	4.61E-09	0.810432	rs77251002	5	NOP58	0	intronic	5.469		6	4	4	1	0	0
LMC-EM	4:56024063:C:G	rs17712245	4	56024063	G	C	0.492	4.61E-09	0.928001	rs9994560	4	KDR	32306	intergenic	2.226		5	1	15	0	0	0
AAM-EM	3:127715049:C:T	rs1549875	3	127715049	T	C	0.4235	4.62E-09	0.987845	rs6770337	9	KBTBD12	8534	intergenic	5.582	NA		5	15	1	1	0
FIM-EPP	6:151842860:A:T	rs9371529	6	151842860	A	T	0.2048	4.63E-09	0.946791	rs7740302	5	CCDC170	0	intronic	2.001		6	9	15	1	1	0
AAM-EM	6:100744446:C:T	rs13211682	6	100744446	C	T	0.2793	4.65E-09	0.921871	rs9403595	13	SIM1	88444	intergenic	1.189		5	2	15	0	0	0
LMC-DE	6:151829474:C:T	rs4870022	6	151829474	T	C	0.0825	4.66E-09	0.875226	rs9383906	2	CCDC170	0	intronic	0.519		7	1	15	1	1	0
FIM-EPP	3:128106536:C:T	rs2977561	3	128106536	T	C	0.2545	4.67E-09	0.983653	rs4241495	4	EEFSEC	0	intronic	0.915	NA		4	15	1	1	0
FIM-EM	6:127437617:C:T	rs2800708	6	127437617	C	T	0.4911	4.67E-09	0.887269	rs2489623	4	RSPO3	2131	intergenic	5.586		5	1	13	0	0	0
FIM-EM	6:127487806:C:T	rs2154167	6	127487806	T	C	0.499	4.71E-09	0.864563	rs2489623	4	RSPO3	0	intronic	4.242		6	4	15	1	0	0
FIM-EM	6:127456122:A:G	rs9491697	6	127456122	A	G	0.4205	4.71E-09	0.834573	rs10457487	4	RSPO3	0	intronic	3.499		6	5	15	1	0	0
LMC-EM	11:30195757:G:T	rs676217	11	30195757	G	T	0.3479	4.74E-09	0.975126	rs681993	7	RP4-562D20.1	6903	intergenic	0.014	NA		7	15	0	1	0
FIM-EPP	8:25255017:A:C	rs12675289	8	25255017	A	C	0.2704	4.77E-09	0.789241	rs12675625	7	DOCK5	0	intronic	5.195		6	4	5	1	1	0
LMC-EM	4:56023747:A:G	rs7696256	4	56023747	G	A	0.4881	4.79E-09	0.951474	rs9994560	4	KDR	31990	intergenic	6.973		5	1	13	0	0	0
AAM-EPP	2:203102398:C:T	rs6761131	2	203102398	C	T	0.1372	4.84E-09	0.827625	rs77251002	5	SUMO1	0	intronic	7.841	3a		1	1	1	0	0
AAM-EM	12:15496734:A:G	rs10083121	12	15496734	G	A	0.3111	4.86E-09	1	rs11056439	26	RERG:PTPR(	0:00	intronic	0.309	3a		1	15	1	0	0
FIM-EPP	12:95696420:A:G	rs3596	12	95696420	A	G	0.4443	4.88E-09	0.996199	rs10859863	9	VEZT	0	UTR3	0.552		7	4	5	1	1	0
LMC-EM	1:199886499:C:T	rs6702350	1	199886499	C	T	0.492	4.88E-09	0.642307	rs6670899	1	RP11-567B20	7722	intergenic	0.447		5	5	15	0	0	0
FIM-EO	11:30165706:C:T	rs7101406	11	30165706	T	C	0.3708	4.89E-09	0.955813	rs4923626	9	RP4-562D20.1	23003	intergenic	4.47		6	14	15	0	1	0
LMC-EM	1:199883741:C:T	rs4915187	1	199883741	T	C	0.493	4.89E-09	0.641016	rs6670899	1	RP11-567B20	4964	intergenic	0.785		5	5	15	0	0	0
FIM-EO	11:30177690:C:CTG	rs34811743	11	30177690	C	CTG	0.3738	4.89E-09	0.966666	rs4923626	9	RP4-562D20.1	11019	intergenic	5.206	NA		5	15	0	1	0
FIM-EM	3:128105972:A:G	rs2999033	3	128105972	G	A	0.1342	4.91E-09	1	rs2999033	3	EEFSEC	0	intronic	4.449	NA		4	15	1	1	0
AAM-EPP	3:127861822:A:C	rs2955093	3	127861822	C	A	0.1501	4.92E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	9.106		7	5	15	1	1	0
LMC-EM	4:56024179:A:G	rs17081840	4	56024179	A	G	0.4861	4.92E-09	0.935168	rs9994560	4	KDR	32422	intergenic	5.869		5	1	15	0	0	0
LMC-EM	1:199890307:C:T	rs12402435	1	199890307	C	T	0.492	4.94E-09	0.642307	rs6670899	1	RP11-567B20	11530	intergenic	1.431		7	9	15	0	0	0
AAM-EPP	3:128114587:C:T	rs7632169	3	128114587	T	C	0.2575	4.94E-09	0.804478	rs729847	8	EEFSEC	0	intronic	0.293	3a		4	15	1	1	0
FIM-EPP	3:128106267:A:G	rs2977562	3	128106267	A	G	0.2535	4.95E-09	0.978186	rs4241495	4	EEFSEC	0	intronic	0.687	NA		4	15	1	1	0
AAM-EM	12:15454217:A:T	rs12299598	12	15454217	A	T	0.3111	4.95E-09	1	rs11056439	26	RERG	0	intronic	1.293		7	9	15	1	0	0
FIM-EPP	3:128107020:A:C	rs7373685	3	128107020	A	C	0.2535	4.99E-09	0.978186	rs4241495	4	EEFSEC	0	intronic	2.967		5	4	15	1	1	0
AAM-EPP	3:127838999:A:G	rs9821568	3	127838999	G	A	0.1501	4.99E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	2.664		5	4	5	1	1	0
AAM-EPP	3:127845701:C:T	rs2811475	3	127845701	C	T	0.1501	4.99E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	5.487		5	5	15	1	1	0
FIM-EO	11:30170152:C:T	rs588929	11	30170152	C	T	0.3748	5.00E-09	0.970287	rs4923626	9	RP4-562D20.1	18557	intergenic	4.391		6	9	15	0	1	0
FIM-EPP	12:95611185:C:T	rs6538618	12	95611185	T	C	0.4423	5.00E-09	0.996199	rs10859863	9	FGD6	0	UTR5	14.03		4	1	1	1	1	0
AAM-EPP	3:127835803:C:T	rs6439115	3	127835803	C	T	0.1501	5.01E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	2.017		6	4	5	1	1	0
FIM-EO	11:30177010:A:G	rs3858479	11	30177010	G	A	0.3708	5.02E-09	0.955813	rs4923626	9	RP4-562D20.1	11699	intergenic	2.661		5	1	15	0	1	0
AAM-EM	1:72848682:A:T	rs2815781	1	72848682	A	T	0.3738	5.04E-09	1	rs2815781	2	RPL31P12	81169	intergenic	0.311		7	15	15	0	0	0
FIM-EO	11:30175706:C:T	rs2226016	11	30175706	C	T	0.3708	5.04E-09	0.955813	rs4923626	9	RP4-562D20.1	13003	intergenic	0.032	NA		5	15	0	1	0
AAM-EM	16:29994922:C:T	rs3814883	16	29994922	C	T	0.4602	5.05E-09	1	rs3814883	32	TAOK2	0	exonic	5.488	NA		3	4	1	1	0
AAM-EM	3:127713943:A:G	rs7432496	3	127713943	A	G	0.4215	5.06E-09	0.987799	rs6770337	9	KBTBD12	7428	intergenic	0.233		7	5	15	1	1	0
FIM-EO	11:30174667:C:T	rs10501125	11	30174667	T	C	0.3708	5.07E-09	0.955813	rs4923626	9	RP4-562D20.1	14042	intergenic	1.884		5	5	15	0	1	0
AAM-EM	6:100742969:A:T	rs9399491	6	100742969	T	A	0.2962	5.09E-09	1	rs9403595	13	SIM1	89921	intergenic	1.015		7	5	15	0	0	0
AAM-EPP	2:203165433:C:T	rs6753044	2	203165433	C	T	0.1421	5.11E-09	0.794492	rs77251002	5	NOP58	0	intronic	3.142		7	4	4	1	1	0
AAM-EPP	2:203114985:C:T	rs10166594	2	203114985	C	T	0.1412	5.11E-09	0.800958	rs77251002	5	AC079354.2	10549	intergenic	6.068	1b		1	15	0	0	0
FIM-EO	11:30167587:G:T	rs2460713	11	30167587	G	T	0.3708	5.12E-09	0.955813	rs4923626	9	RP4-562D20.1	21122	intergenic	8.248	NA		14	15	0	1	0
LMC-EM	1:199883124:A:T	rs1559752	1	199883124	A	T	0.493	5.15E-09	0.641016	rs6670899	1	RP11-567B20	4347	intergenic	1.627		6	5	15	0	0	0
AAM-EPP	3:127872796:C:T	rs2999046	3	127872796	C	T	0.1491	5.16E-09	0.831136	rs2811473	8	EEFSEC	0	intronic	8.853		4	1	1	1	1	0
AAM-EPP	2:203153126:G:T	rs140481340	2	203153126	G	T	0.1372	5.17E-09	0.810432	rs77251002	5	NOP58	0	intronic	0.299		6	4	4	1	0	0
AAM-EPP	3:127892851:C:G	rs2811474	3	127892851	G	C	0.16	5.22E-09	0.764718	rs2811473	8	EEFSEC	0	intronic	2.187	2b		5	5	1	1	0
AAM-EPP	3:127878330:A:G	rs2999047	3	127878330	A	G	0.1491	5.23E-09	0.831136	rs2811473	8	EEFSEC	0	intronic	9.653		7	4	5	1	1	0
AAM-EPP	2:203110825:C:T	rs3843338	2	203110825	C	T	0.1412	5.24E-09	0.800958	rs77251002	5	AC079354.2	6389	intergenic	2.229	NA		5	15	0	0	0
AAM-EM	12:15456242:A:G	rs10466856	12	15456242	A	G	0.3111	5.24E-09	1	rs11056439	26	RERG	0	intronic	2.119		7	9	15	1	0	0
AAM-EPP	3:24718337:A:C	rs9853608	3	24718337	C	A	0.2992	5.24E-09	1	rs9853608	6	AC133680.1	11072	intergenic	1.049		7	5	15	0	0	0
AAM-EM	6:100717723:G:T	rs6914044	6	100717723	G	T	0.2952	5.25E-09	0.985744	rs9403595	13	RP3-344J20.1	91654	intergenic	1.052		6	5	15	0	0	0
LMC-EM	1:199891001:C:T	rs1895817	1	199891001	C	T	0.492	5.27E-09	0.634148	rs6670899	1	RP11-567B20	12224	intergenic	12.26		7	9	15	0	0	0
AAM-EPP	3:127835629:A:G	rs6788879	3	127835629	A	G	0.1501	5.28E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	0.858		7	4	5	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	2:203086693:A:G	rs12472035	2	203086693	G	A	0.1362	5.29E-09	0.8345	rs77251002	5	SUMO1	0	intronic		0.833	4	2	5	1	0
AAM-EM	3:127753730:A:G	rs981446	3	127753730	G	A	0.3986	5.29E-09	0.899173	rs6770337	9	SEC61A1	16753	intergenic		0.216	NA	13	15	0	1
AAM-EM	3:127745765:C:G	rs6439108	3	127745765	G	C	0.3946	5.30E-09	0.884736	rs6770337	9	SEC61A1	24718	intergenic		10.95	5	13	15	0	1
AAM-EM	6:100743074:C:T	rs6941605	6	100743074	C	T	0.2793	5.34E-09	0.921871	rs9403595	13	SIM1	89816	intergenic		0.629	6	5	15	0	0
AAM-EM	16:29932691:C:T	rs9936474	16	29932691	T	C	0.4881	5.36E-09	0.751444	rs12932403	32	KCTD13:CTI	0:00	ncRNA_exoni		1.457	6	2	4	1	1
LMC-EM	4:56015840:C:T	rs6837695	4	56015840	C	T	0.4881	5.37E-09	0.951474	rs9994560	4	KDR	24083	intergenic		0.219	7	5	15	0	0
AAM-EM	6:151876252:C:T	rs7740522	6	151876252	C	T	0.4076	5.38E-09	0.827287	rs12210735	14	CCDC170	0	intronic		2.294	6	5	15	1	0
AAM-EM	3:49890967:A:G	rs59357103	3	49890967	G	A	0.1581	5.40E-09	0.807453	rs11130207	8	TRAIP	0	intronic		6.995	5	5	5	1	1
FIM-EM	6:127446790:C:T	rs9482772	6	127446790	T	C	0.4105	5.41E-09	0.803842	rs10457487	4	RSPO3	0	intronic		1.578	6	2	14	1	0
AAM-EPP	2:203079580:A:G	rs6435134	2	203079580	G	A	0.1372	5.41E-09	0.827625	rs77251002	5	SUMO1	0	intronic		0.608	6	4	5	1	0
AAM-EPP	2:203152767:C:G	rs74454549	2	203152767	G	C	0.1352	5.41E-09	0.793681	rs77251002	5	NOP58	0	intronic		0.503	7	4	4	1	0
AAM-EM	2:25150641:A:G	rs10182458	2	25150641	A	G	0.4652	5.42E-09	0.962984	rs2384054	6	ADCY3	7932	intergenic		0.128	7	5	15	1	1
LMC-EM	1:199883846:C:T	rs4915394	1	199883846	C	T	0.493	5.43E-09	0.641016	rs6670899	1	RP11-567B20	5069	intergenic		13.89	4	5	15	0	0
AAM-EPP	2:203101159:A:G	rs12470401	2	203101159	G	A	0.1362	5.44E-09	0.8345	rs77251002	5	SUMO1	0	intronic		11.44	6	5	5	1	0
FIM-EM	6:127457260:A:G	rs2503322	6	127457260	A	G	0.4911	5.45E-09	0.927711	rs2489623	4	RSPO3	0	intronic		3.086	5	5	15	1	0
AAM-EM	3:127773676:C:T	rs1030655	3	127773676	T	C	0.3897	5.46E-09	0.867258	rs6770337	9	SEC61A1	0	intronic		1.391	6	1	6	1	1
LMC-EM	4:56023737:A:T	rs7680198	4	56023737	T	A	0.4881	5.47E-09	0.951474	rs9994560	4	KDR	31980	intergenic		8.788	5	1	13	0	0
AAM-EM	9:11857930:A:G	rs2068183	9	11857930	G	A	0.2624	5.48E-09	0.985245	rs9969696	18	RP11-74C3.1	240729	intergenic		2.295	NA	9	15	0	0
AAM-EPP	2:203107868:C:T	rs4675274	2	203107868	C	T	0.1412	5.49E-09	0.800958	rs77251002	5	AC079354.2	3432	intergenic		2.53	6	5	15	0	0
AAM-EM	3:127730319:A:C	rs10934838	3	127730319	C	A	0.3986	5.50E-09	0.898905	rs6770337	9	KBTBD12	23804	intergenic		0.479	4	1	15	0	1
AAM-EM	3:127760928:A:G	rs11721312	3	127760928	G	A	0.3976	5.51E-09	0.895687	rs6770337	9	SEC61A1	9555	intergenic		2.531	6	5	14	1	1
AAM-EM	3:127783236:C:G	rs59766347	3	127783236	C	G	0.3897	5.53E-09	0.867258	rs6770337	9	SEC61A1	0	intronic		3.187	5	4	4	1	1
FIM-EO	11:30169856:A:G	rs663173	11	30169856	G	A	0.3748	5.54E-09	0.970287	rs4923626	9	RP4-562D20.:	18853	intergenic		0.663	7	9	15	0	1
AAM-EM	12:115110571:G:T	rs567223	12	115110571	G	T	0.4334	5.54E-09	0.722111	rs8853	30	TBX3	0	intronic		5.808	5	1	13	1	0
AAM-EPP	10:90156854:A:C	rs1935584	10	90156854	A	C	0.3986	5.55E-09	0.913137	rs7921352	15	RNLS	0	intronic		9.415	7	5	15	1	0
AAM-EM	11:86715654:A:G	rs6592324	11	86715654	G	A	0.2227	5.55E-09	1	rs6592324	24	RP11-736K20	3652	intergenic		0.142	6	5	15	0	0
LMC-EM	1:199882780:A:G	rs16845684	1	199882780	A	G	0.493	5.55E-09	0.641016	rs6670899	1	RP11-567B20	4003	intergenic		7.066	7	5	15	0	0
LMC-EM	1:199883516:G:T	rs4915186	1	199883516	G	T	0.493	5.55E-09	0.641016	rs6670899	1	RP11-567B20	4739	intergenic		3.839	7	5	15	0	0
AAM-EPP	2:203079307:C:T	rs3769817	2	203079307	T	C	0.1372	5.56E-09	0.827625	rs77251002	5	SUMO1	0	intronic		10.25	NA	4	5	1	0
AAM-EPP	2:203107740:A:G	rs10931993	2	203107740	A	G	0.1412	5.58E-09	0.800958	rs77251002	5	AC079354.2	3304	intergenic		4.768	1f	5	15	0	0
LMC-EM	1:199884929:C:G	rs1559753	1	199884929	C	G	0.493	5.59E-09	0.641016	rs6670899	1	RP11-567B20	6152	intergenic		3.672	5	5	15	0	0
LMC-EM	1:199885509:A:G	rs4915395	1	199885509	G	A	0.493	5.59E-09	0.641016	rs6670899	1	RP11-567B20	6732	intergenic		1.258	6	5	15	0	0
AAM-EPP	2:203117496:C:T	rs12693967	2	203117496	T	C	0.1402	5.60E-09	0.792574	rs77251002	5	NOP58	12942	intergenic		2.094	5	14	15	0	0
AAM-EPP	2:203069878:G:T	rs3181153	2	203069878	T	G	0.1372	5.62E-09	0.827625	rs77251002	5	SUMO1	1024	intergenic		12.73	NA	4	5	0	0
AAM-EPP	2:203099033:A:G	rs6435138	2	203099033	A	G	0.1372	5.65E-09	0.827625	rs77251002	5	SUMO1	0	intronic		3.248	6	4	5	1	0
FIM-EO	11:30169998:C:T	rs7129554	11	30169998	T	C	0.3738	5.67E-09	0.966666	rs4923626	9	RP4-562D20.:	18711	intergenic		5.282	7	9	15	0	1
AAM-EPP	3:127726996:A:C	rs6777484	3	127726996	A	C	0.1491	5.70E-09	0.801882	rs2811473	8	KBTBD12	20481	intergenic		1.801	7	5	14	0	1
FIM-EO	3:128071809:A:T	rs1735549	3	128071809	A	T	0.2177	5.71E-09	0.789564	rs3887841	3	EEFSEC	0	intronic		0.707	5	4	5	1	1
AAM-EPP	3:127790606:A:G	rs2241688	3	127790606	G	A	0.1501	5.72E-09	0.824191	rs2811473	8	RUVBL1	0	intronic		2.556	NA	4	4	1	1
FIM-EM	3:128075398:G:T	rs1735546	3	128075398	T	G	0.2545	5.72E-09	0.87143	rs2955118	3	EEFSEC	0	intronic		6.983	NA	4	5	1	1
AAM-EM	6:100699272:A:G	rs6930495	6	100699272	A	G	0.2962	5.73E-09	0.980994	rs9403595	13	RP3-344J20.1	73203	intergenic		7.248	7	5	15	0	0
AAM-EM	6:100712884:C:T	rs4576252	6	100712884	C	T	0.2962	5.74E-09	0.990474	rs9403595	13	RP3-344J20.1	86815	intergenic		1.971	5	5	15	0	0
AAM-EPP	10:90152369:A:G	rs792235	10	90152369	A	G	0.3976	5.77E-09	0.908856	rs7921352	15	RNLS	0	intronic		2.914	2b	1	15	1	0
AAM-EPP	3:127854684:A:G	rs2811471	3	127854684	G	A	0.1491	5.80E-09	0.831136	rs2811473	8	RUVBL1	0	intronic		4.165	7	5	15	1	1
AAM-EPP	2:203055831:C:T	rs6753802	2	203055831	T	C	0.1342	5.80E-09	0.819687	rs77251002	5	AC079354.1	0	intronic		1.134	6	5	15	1	0
FIM-EM	3:128106536:C:T	rs2977561	3	128106536	T	C	0.2545	5.82E-09	0.707751	rs2955118	3	EEFSEC	0	intronic		0.915	NA	4	15	1	1
FIM-EO	2:11718858:C:T	rs7578132	2	11718858	T	C	0.4801	5.82E-09	1	rs7578132	2	GREB1	0	intronic		0.596	3a	4	15	1	0
AAM-EPP	2:203128958:A:G	rs149963203	2	203128958	A	G	0.1402	5.82E-09	0.807502	rs77251002	5	NOP58	1480	intergenic		0.284	6	5	15	0	0
AAM-EM	2:658550:A:G	rs2867121	2	658550	A	G	0.08847	5.84E-09	1	rs2867121	5	TMEM18	8784	intergenic		8.402	NA	5	14	1	0
AAM-EPP	2:203078792:C:T	rs59293950	2	203078792	C	T	0.1362	5.85E-09	0.8345	rs77251002	5	SUMO1	0	intronic		0.852	7	4	5	1	0
LMC-EM	1:199883176:G:T	rs5025935	1	199883176	T	G	0.493	5.85E-09	0.641016	rs6670899	1	RP11-567B20	4399	intergenic		3.341	6	5	15	0	0
AAM-EPP	2:203147991:C:T	rs58670031	2	203147991	T	C	0.1392	5.89E-09	0.796983	rs77251002	5	NOP58	0	intronic		0.915	5	4	4	1	1
AAM-EM	16:29995880:A:G	rs4787489	16	29995880	G	A	0.4423	5.92E-09	0.914422	rs3814883	32	TAOK2	0	intronic		3.636	1f	4	4	1	1
AAM-EPP	2:203057120:A:G	rs79860867	2	203057120	G	A	0.1332	5.95E-09	0.82657	rs77251002	5	AC079354.1	0	intronic		1.24	6	5	15	1	0
AAM-EM	3:127784262:C:T	rs2075402	3	127784262	C	T	0.3946	5.96E-09	0.885067	rs6770337	9	SEC61A1:RU	0:00	intronic		2.029	NA	4	4	1	1
AAM-EM	6:151745522:C:T	rs6557139	6	151745522	C	T	0.2634	5.96E-09	0.758249	rs6937816	14	RMND1	0	intronic		0.987	7	4	5	1	1
AAM-EM	3:127753688:A:G	rs981447	3	127753688	G	A	0.3986	5.97E-09	0.899173	rs6770337	9	SEC61A1	16795	intergenic		0.044	NA	13	15	0	1
AAM-EPP	10:90174202:A:C	rs792213	10	90174202	A	C	0.4185	5.97E-09	0.824813	rs7921352	15	RNLS	0	intronic		0.601	6	5	15	1	0
AAM-EPP	2:203064494:C:G	rs2350358	2	203064494	C	G	0.1372	5.98E-09	0.827625	rs77251002	5	DAZAP2P1	1608	intergenic		3.193	1f	5	5	0	0
AAM-EPP	2:203085649:A:G	rs35530837	2	203085649	A	G	0.1372	6.00E-09	0.827625	rs77251002	5	SUMO1	0	intronic		2.267	6	4	5	1	0
AAM-EM	11:86717987:C:T	rs7102513	11	86717987	T	C	0.2217	6.01E-09	0.994407	rs6592324	24	RP11-736K20	5985	intergenic		0.242	6	5	15	0	0
AAM-EPP	2:203056243:A:G	rs79071680	2	203056243	G	A	0.1332	6.02E-09	0.82657	rs77251002	5	AC079354.1	0	intronic		1.961	7	5	15	1	0
AAM-EM	6:100719911:C:T	rs12524392	6	100719911	C	T	0.2952	6.02E-09	0.985744	rs9403595	13	RP3-344J20.1	93842	intergenic		0.494	7	5	15	0	0
AAM-EM	3:127713993:C:T	rs9849853	3	127713993	C	T	0.4175	6.03E-09	0.971572	rs6770337	9	KBTBD12	7478	intergenic		2.402	6	5	15	1	1
LMC-DE	4:55991731:C:T	rs7667298	4	55991731	T	C	0.4473	6.05E-09	1	rs7667298	1	KDR	0	UTR5		10.76	4	1	10	1	1
AAM-EM	3:128109916:C:T	rs741925	3	128109916	C	T	0.1312	6.06E-09	0.888634	rs4277707	9	EEFSEC	0	intronic		1.995	5	4	15	1	1
AAM-EPP	3:127759214:A:T	rs1469658	3	127759214	T	A	0.1491	6.07E-09	0.801882	rs2811473	8	SEC61A1	11269	intergenic		3.842	7	5	15	0	1
AAM-EPP	2:203140271:C:T	rs76658848	2	203140271	C	T	0.1362	6.07E-09	0.786928	rs77251002	5	NOP58	0	intronic		3.628	5	4	4	1	0
FIM-EO	2:11736037:A:G	rs11679686	2	11736037	A	G	0.4791	6.08E-09	0.680856	rs7578132	2	GREB1	0	intronic		0.136	6	4	15	1	0
LMC-EM	1:199883178:G:T	rs1974950	1	199883178	T	G	0.493	6.11E-09	0.641016	rs6670899	1	RP11-567B20	4401	intergenic		3.275	6	5	15	0	0
AAM-EM	2:455477:C:T	rs76111507	2	455477	C	T	0.03082	6.12E-09	0.864331	rs77165542	5	AC105393.2	33173	intergenic		0.096	5	5	15	0	0
FIM-EM	3:128106267:A:G	rs2977562	3	128106267	A	G	0.2535	6.15E-09	0.702143	rs2955118	3	EEFSEC	0	intronic		0.687	NA	4	15	1	1
LMC-EM	1:199824908:C:G	rs4915390	1	199824908	G	C	0.3728	6.18E-09	0.815723	rs6670899	1	RP11-567B20	21197	intergenic		1.268	4	1	15	0	0
AAM-EM	16:30011618:C:T	rs12921996	16	30011618	C	T	0.4414	6.19E-09	0.910926	rs3814883	32	INO80E	0	intronic		5.104	1f	4	4	1	1
AAM-EPP	3:127824017:A:G	rs9835383	3	127824017	A	G	0.1501	6.19E-09	0.824191	rs2811473	8	RUVBL1	0	intronic		0.815	6	4	5	1	1
AAM-EM	11:86716236:C:T	rs7108556	11	86716236	C	T	0.2227	6.22E-09	1	rs6592324	24	RP11-736K20	4234	intergenic		0.536	4	1	15	0	0
AAM-EM	3:127779944:A:G	rs2335771	3	127779944	A	G	0.3897	6.22E-09	0.867258	rs6770337	9	SEC61A1	0	intronic		3.515	NA	4	4	1	1
FIM-EM	3:128107020:A:C	rs7373685	3	128107020	A	C	0.2535	6.22E-09	0.702143	rs2955118	3	EEFSEC	0	intronic		2.967	5	4	15	1	1
AAM-EPP	3:127726637:A:G	rs6777095	3	127726637	A	G	0.1491	6.23E-09	0.801882	rs2811473	8	KBTBD12	20122	intergenic		3.328	3a	5	14	0	1
AAM-EPP	3:127730766:C:T	rs9824657	3	127730766	T	C	0.1491	6.24E-09	0.801882	rs2811473	8	KBTBD12	24251	intergenic		0.294	4	1	15	0	1
AAM-EPP	3:128064118:A:C	rs4857879	3	128064118	A	C	0.166	6.25E-09	0.704694	rs2811473	8	EEFSEC	0	intronic		8.323	5	4	5	1	1

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	10:90177034:A:T	rs4933480	10	90177034	T	A	0.4185	6.25E-09	0.824813	rs7921352	15	RNLS	0	intronic	9.777		5	5	15	1	0	0
AAM-EPP	2:203139290:A:G	rs116601501	2	203139290	A	G	0.1362	6.25E-09	0.786928	rs77251002	5	NOP58	0	intronic	0.269		6	4	5	1	0	0
AAM-EM	9:11852453:C:T	rs10448180	9	11852453	T	C	0.2634	6.29E-09	0.98027	rs9969696	18	RP11-74C3.1	246206	intergenic	3.435		6	9	15	0	0	0
LMC-EM	4:55992067:A:G	rs55713360	4	55992067	A	G	0.4225	6.32E-09	0.748855	rs9994560	4	KDR	310	upstream	12.5	3a		1	10	1	0	0
AAM-EPP	3:127727450:C:T	rs6766665	3	127727450	T	C	0.1491	6.32E-09	0.801882	rs2811473	8	KBTBD12	20935	intergenic	0.686		6	5	14	0	1	0
AAM-EPP	2:203119191:C:T	rs187232961	2	203119191	T	C	0.1412	6.35E-09	0.800958	rs77251002	5	NOP58	11247	intergenic	11.27		6	14	15	0	0	0
AAM-EM	9:11852846:A:G	rs1843720	9	11852846	G	A	0.2624	6.37E-09	0.985245	rs9969696	18	RP11-74C3.1	245813	intergenic	1.346	NA		9	15	0	0	0
LMC-EM	21:36446597:C:G	rs1003473	21	36446597	G	C	0.3221	6.37E-09	0.995725	rs2834747	10	RUNX1	0	intronic	1.163		7	5	15	1	0	0
AAM-EPP	3:127763254:C:T	rs4857834	3	127763254	T	C	0.1491	6.40E-09	0.801882	rs2811473	8	SEC61A1	7229	intergenic	3.2		5	5	14	0	1	0
AAM-EPP	2:203062502:A:G	rs9917128	2	203062502	A	G	0.1382	6.40E-09	0.838013	rs77251002	5	AC079354.1	0	intergenic	0.799		7	5	15	1	0	0
AAM-EM	19:18806668:C:T	rs2003476	19	18806668	T	C	0.4225	6.42E-09	1	rs2003476	33	CRTC1	0	intronic	2.785	NA		4	15	1	0	0
FIM-EO	11:30284949:C:T	rs77966083	11	30284949	T	C	0.329	6.45E-09	0.775285	rs607987	9	FSHB	28140	intergenic	0.095		7	14	15	0	1	0
FIM-EPP	6:151841594:A:G	rs7775980	6	151841594	A	G	0.2038	6.46E-09	0.964334	rs7740302	5	CCDC170	0	intronic	2.097		7	8	15	1	1	0
AAM-EM	12:15368093:C:G	rs12322836	12	15368093	G	C	0.3479	6.46E-09	0.823687	rs11056439	26	RERG	0	intronic	3.181		4	5	15	1	0	0
AAM-EPP	2:203150949:C:T	rs7568159	2	203150949	C	T	0.1392	6.49E-09	0.796983	rs77251002	5	NOP58	0	intronic	0.466		7	4	4	1	1	0
FIM-EO	3:128109916:C:T	rs741925	3	128109916	C	T	0.1312	6.49E-09	0.877596	rs1702118	3	EEFSEC	0	intronic	1.995		5	4	15	1	1	0
AAM-EM	9:11864855:C:T	rs9969829	9	11864855	C	T	0.2644	6.51E-09	0.995048	rs9969696	18	RP11-74C3.1	233804	intergenic	2.461		6	9	15	0	0	0
LMC-EM	2:49305470:C:T	rs55911208	2	49305470	C	T	0.167	6.53E-09	0.751025	rs4971681	2	FSHR	0	intronic	0.068		7	9	15	1	0	0
AAM-EPP	2:203161021:C:T	rs76664732	2	203161021	C	T	0.1392	6.53E-09	0.814127	rs77251002	5	NOP58	0	intronic	1.72		7	4	4	1	0	0
AAM-EM	6:100707145:C:T	rs6908458	6	100707145	T	C	0.2783	6.55E-09	0.908189	rs9403595	13	RP3-344J20.1	81076	intergenic	5.258		5	5	15	0	0	0
AAM-EM	6:151874122:A:G	rs9478217	6	151874122	A	G	0.4085	6.55E-09	0.830886	rs12210735	14	CCDC170	0	intronic	8.228		7	5	15	1	0	0
AAM-EPP	2:203111266:C:T	rs12463937	2	203111266	T	C	0.1402	6.56E-09	0.807502	rs77251002	5	AC079354.2	6830	intergenic	0.731		6	5	15	0	0	0
AAM-EPP	2:203124004:A:G	rs147851075	2	203124004	A	G	0.1402	6.58E-09	0.807502	rs77251002	5	NOP58	6434	intergenic	8.079		7	5	15	0	0	0
AAM-EM	6:100723855:G:T	rs7742131	6	100723855	T	G	0.2952	6.60E-09	0.985744	rs9403595	13	RP3-344J20.1	97786	intergenic	3.594		7	5	15	0	0	0
AAM-EPP	3:127747841:A:G	rs6764517	3	127747841	A	G	0.1491	6.60E-09	0.801882	rs2811473	8	SEC61A1	22642	intergenic	0.752		5	13	15	0	1	0
AAM-EM	16:30017895:C:T	rs3814880	16	30017895	T	C	0.4423	6.63E-09	0.914422	rs3814883	32	DOC2A	0	intronic	0.298	NA		3	5	1	1	0
AAM-EPP	2:203139844:C:T	rs80282360	2	203139844	T	C	0.1362	6.66E-09	0.786928	rs77251002	5	NOP58	0	exonic	21		5	4	5	1	0	0
LMC-EM	2:49358409:A:C	rs62162141	2	49358409	A	C	0.17	6.67E-09	0.855293	rs4971681	2	FSHR	0	intronic	6.142		6	9	15	1	0	0
AAM-EM	9:11854933:C:T	rs10960321	9	11854933	T	C	0.2624	6.68E-09	0.985245	rs9969696	18	RP11-74C3.1	243726	intergenic	0.792		6	9	15	0	0	0
AAM-EM	9:11826851:C:G	rs10960290	9	11826851	C	G	0.2634	6.71E-09	0.99013	rs9969696	18	RP11-74C3.1	271808	intergenic	0.175		7	5	15	0	0	0
AAM-EM	16:30014564:C:T	rs11150580	16	30014564	C	T	0.4414	6.73E-09	0.918752	rs3814883	32	INO80E	0	intronic	0.475	NA		4	4	1	1	0
AAM-EM	9:11858044:A:G	rs10960326	9	11858044	G	A	0.2624	6.74E-09	0.985245	rs9969696	18	RP11-74C3.1	240615	intergenic	2.157		7	9	15	0	0	0
AAM-EM	12:15473696:C:T	rs12580434	12	15473696	C	T	0.3111	6.74E-09	0.991081	rs11056439	26	RERG	0	intronic	1.069		6	5	14	1	0	0
AAM-EM	9:11829232:A:G	rs10960295	9	11829232	G	A	0.2624	6.74E-09	0.985245	rs9969696	18	RP11-74C3.1	269427	intergenic	3.319		7	5	15	0	0	0
AAM-EM	9:86716873:A:G	rs10868097	9	86716873	A	G	0.1451	6.75E-09	1	rs10868097	19	RP11-158D2.3	7380	intergenic	4.959		7	1	13	0	0	0
FIM-EO	11:30243795:C:G	rs1782508	11	30243795	C	G	0.331	6.75E-09	0.76653	rs607987	9	FSHB	8767	intergenic	5.899		6	7	15	0	1	0
LMC-EM	1:199888666:A:G	rs59743652	1	199888666	G	A	0.492	6.78E-09	0.642307	rs6670899	1	RP11-567B20	9889	intergenic	0.017		7	14	15	0	0	0
AAM-EPP	2:203098927:A:T	rs6435137	2	203098927	A	T	0.1372	6.78E-09	0.827625	rs77251002	5	SUMO1	0	intronic	1.813		7	4	5	1	0	0
FIM-EO	12:95602319:A:T	rs10777675	12	95602319	A	T	0.4483	6.80E-09	0.623999	rs12423799	10	FGD6	0	intronic	5.121		6	4	15	1	0	0
AAM-EM	16:29954654:G:T	rs4402589	16	29954654	T	G	0.4821	6.81E-09	0.729307	rs12932403	32	TMEM219	0	intronic	8.258	NA		5	15	1	1	0
FIM-EO	11:30303443:A:G	rs4359180	11	30303443	A	G	0.328	6.84E-09	0.772557	rs607987	9	ARL14EP	41154	intergenic	2.357		5	2	15	0	1	0
AAM-EM	9:11809441:C:G	rs10756291	9	11809441	G	C	0.4433	6.88E-09	1	rs10756291	18	RP11-74C3.1	289218	intergenic	8.01		7	9	15	0	0	0
AAM-EM	16:30013266:C:T	rs4788209	16	30013266	C	T	0.4414	6.90E-09	0.918752	rs3814883	32	INO80E	0	intronic	2.374	1f		4	4	1	1	0
LMC-EM	1:199888044:A:G	rs12409183	1	199888044	A	G	0.492	6.90E-09	0.642307	rs6670899	1	RP11-567B20	9267	intergenic	2.841		5	7	15	0	0	0
AAM-EPP	2:203154918:A:C	rs1474002	2	203154918	A	C	0.1402	6.91E-09	0.807502	rs77251002	5	NOP58	0	intronic	3.273	NA		4	4	1	1	0
AAM-EM	16:29993686:C:G	rs9925915	16	29993686	G	C	0.4443	6.96E-09	0.906156	rs3814883	32	TAOK2	0	intronic	0.732		6	4	4	1	1	0
FIM-EPP	1:22371065:G:T	rs10917130	1	22371065	T	G	0.1521	6.97E-09	1	rs10917130	1	CDC42	8054	intergenic	4.496		6	5	15	0	0	0
AAM-EM	12:15365558:A:G	rs11056400	12	15365558	G	A	0.3479	6.99E-09	0.823687	rs11056439	26	RERG	0	intronic	4.684		7	5	15	1	0	0
AAM-EPP	2:203115333:C:G	rs146961085	2	203115333	G	C	0.1402	7.00E-09	0.807502	rs77251002	5	AC079354.2	10897	intergenic	1.142		7	1	15	0	0	0
AAM-EM	16:30000330:G:T	rs11150579	16	30000330	T	G	0.4423	7.02E-09	0.914422	rs3814883	32	TAOK2	0	intronic	7.902	1f		3	4	1	1	0
LMC-EM	1:199888335:C:T	rs4915396	1	199888335	C	T	0.492	7.03E-09	0.642307	rs6670899	1	RP11-567B20	9558	intergenic	5.665		7	7	15	0	0	0
AAM-EM	6:100709892:A:G	rs9403561	6	100709892	G	A	0.2783	7.07E-09	0.908189	rs9403595	13	RP3-344J20.1	83823	intergenic	0.193		7	5	15	0	0	0
LMC-EM	4:56024199:C:T	rs62304733	4	56024199	T	C	0.493	7.07E-09	0.93224	rs9994560	4	KDR	32442	intergenic	6.728		5	1	15	0	0	0
FIM-EM	3:127815320:A:G	rs940060	3	127815320	A	G	0.04871	7.14E-09	1	rs940060	3	RUVBL1	0	intronic	5.444		5	4	4	1	1	0
AAM-EPP	3:127759668:C:T	rs1469657	3	127759668	C	T	0.1491	7.15E-09	0.801882	rs2811473	8	SEC61A1	10815	intergenic	0.757	NA		5	15	0	1	0
AAM-EM	16:29988349:A:G	rs4283241	16	29988349	G	A	0.4423	7.16E-09	0.914422	rs3814883	32	TAOK2	0	intronic	0.573	1d		1	7	1	1	0
LMC-EM	1:199888707:A:G	rs4915397	1	199888707	A	G	0.492	7.17E-09	0.642307	rs6670899	1	RP11-567B20	9930	intergenic	2.775		7	14	15	0	0	0
AAM-EM	16:29986205:C:G	rs10871451	16	29986205	C	G	0.4433	7.17E-09	0.910448	rs3814883	32	TAOK2	0	intronic	11.19	2b		1	2	1	1	0
AAM-EM	16:30013674:C:G	rs4788210	16	30013674	C	G	0.4414	7.18E-09	0.918752	rs3814883	32	INO80E	0	intronic	1.332		5	4	4	1	1	0
LMC-EM	1:199888665:C:T	rs12408064	1	199888665	T	C	0.492	7.18E-09	0.642307	rs6670899	1	RP11-567B20	9888	intergenic	0.19		7	14	15	0	0	0
AAM-EM	16:29994736:A:T	rs3814884	16	29994736	T	A	0.4423	7.19E-09	0.914422	rs3814883	32	TAOK2	0	intronic	5.681	1f		3	4	1	1	0
FIM-EO	11:30274776:A:G	rs61179368	11	30274776	A	G	0.328	7.21E-09	0.779692	rs607987	9	FSHB	17967	intergenic	3.619		6	5	15	0	1	0
FIM-EO	11:30279609:C:T	rs1933347	11	30279609	T	C	0.328	7.21E-09	0.779692	rs607987	9	FSHB	22800	intergenic	0.289		7	5	15	0	1	0
AAM-EM	11:86708628:C:T	rs12800615	11	86708628	T	C	0.2217	7.26E-09	0.994407	rs6592324	24	RP11-736K20	0	ncRNA_intron	1.223		4	5	15	0	0	0
AAM-EPP	2:203051886:C:T	rs6722588	2	203051886	C	T	0.1382	7.27E-09	0.838013	rs77251002	5	AC079354.1	0	intronic	0.278		7	5	15	1	0	0
AAM-EM	9:11853376:A:G	rs34804069	9	11853376	A	G	0.2624	7.27E-09	0.985245	rs9969696	18	RP11-74C3.1	245283	intergenic	4.883		6	9	15	0	0	0
AAM-EPP	10:90182963:A:G	rs10887817	10	90182963	G	A	0.4195	7.28E-09	0.821153	rs7921352	15	RNLS	0	intronic	1.289		7	5	15	1	0	0
AAM-EM	9:11826101:A:G	rs12376115	9	11826101	A	G	0.2763	7.28E-09	0.919604	rs9969696	18	RP11-74C3.1	272558	intergenic	2.867		7	5	15	0	0	0
AAM-EPP	3:127731673:C:T	rs9809866	3	127731673	C	T	0.1511	7.32E-09	0.817326	rs2811473	8	KBTBD12	25158	intergenic	0.133		5	1	15	0	1	0
FIM-EO	11:30172579:A:G	rs1890825	11	30172579	G	A	0.3718	7.35E-09	0.95951	rs4923626	9	RP4-562D20.2	16130	intergenic	0.458		7	7	15	0	1	0
AAM-EPP	3:127733069:A:G	rs4474992	3	127733069	A	G	0.1511	7.35E-09	0.817326	rs2811473	8	KBTBD12	26554	intergenic	0.303		7	5	15	0	1	0
FIM-EO	2:11718591:C:T	rs1529868	2	11718591	C	T	0.4493	7.36E-09	0.634965	rs7578132	2	GREB1	0	intronic	0.234	NA		4	15	1	0	0
AAM-EM	3:127769408:A:G	rs1473246	3	127769408	G	A	0.3907	7.37E-09	0.870937	rs6770337	9	SEC61A1	1075	intergenic	0.218	NA		5	15	1	1	0
FIM-EO	11:30288532:A:G	rs140000637	11	30288532	G	A	0.329	7.37E-09	0.775285	rs607987	9	FSHB	31723	intergenic	0.662		7	14	15	0	1	0
AAM-EPP	10:90168189:G:T	rs813782	10	90168189	T	G	0.3976	7.38E-09	0.908328	rs7921352	15	RNLS	0	intronic	3.508		5	2	15	1	0	0
FIM-EO	11:30285107:A:G	rs190167777	11	30285107	A	G	0.329	7.39E-09	0.775285	rs607987	9	FSHB	28298	intergenic	3.48		7	14	15	0	0	0
FIM-EO	11:30290814:G:T	rs61886090	11	30290814	G	T	0.328	7.39E-09	0.779692	rs607987	9	FSHB	34005	intergenic	0.025		6	9	15	0	1	0
FIM-EO	11:30286207:G:T	rs141011680	11	30286207	T	G	0.329	7.40E-09	0.775285	rs607987	9	FSHB	29398	intergenic	0.501		6	14	15	0	1	0
FIM-EPP	3:128063879:C:G	rs139071297	3	128063879	C	G	0.03181	7.40E-09	0.840673	rs74924715	4	EEFSEC	0	intronic	0.17		4	4	5	1	0	0
AAM-EPP	3:127815475:C:T	rs4058156	3	127815475	T	C	0.1501	7.41E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	2.69		7	4	4	1	1	0
FIM-EO	11:30287896:A:C	rs200742291	11	30287896	A	C	0.329	7.42E-09	0.775285	rs607987	9	FSHB	31087	intergenic	0.92		6	14	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	11:86711087:C:T	rs10898569	11	86711087	T	C	0.2217	7.44E-09	0.994407	rs6592324	24	RP11-736K20	0	ncRNA_exoni	5.078	3a	2	15	0	0	0
AAM-EM	16:29993108:C:G	rs11642046	16	29993108	C	G	0.4423	7.44E-09	0.914422	rs3814883	32	TAOK2	0	intronic	10.77	5	4	4	1	1	0
AAM-EM	9:11799620:A:G	rs10809600	9	11799620	G	A	0.4374	7.46E-09	0.967491	rs10756291	18	RP11-74C3.1	299039	intergenic	0.577	6	9	15	0	0	0
FIM-EO	11:30282779:A:C	rs4267046	11	30282779	A	C	0.329	7.47E-09	0.775285	rs607987	9	FSHB	25970	intergenic	1.915	6	7	15	0	0	0
FIM-EO	8:25255017:A:C	rs12675289	8	25255017	A	C	0.2704	7.47E-09	0.877694	rs6185	8	DOCK5	0	intronic	5.195	6	4	5	1	1	0
AAM-EM	16:29983148:C:T	rs9925102	16	29983148	T	C	0.4414	7.50E-09	0.918752	rs3814883	32	TMEM219	0	UTR3	5.111	6	4	5	1	1	0
AAM-EM	12:15455927:A:G	rs10466855	12	15455927	G	A	0.3191	7.50E-09	0.965569	rs11056439	26	RERG	0	intronic	0.852	7	9	15	1	0	0
AAM-EPP	10:90174582:C:G	rs792214	10	90174582	G	C	0.3986	7.52E-09	0.913137	rs7921352	15	RNLS	0	intronic	10.25	7	5	15	1	0	0
AAM-EM	16:29988941:A:G	rs4583255	16	29988941	A	G	0.4433	7.53E-09	0.910109	rs3814883	32	TAOK2	0	intronic	18	1f	1	5	1	1	0
AAM-EM	12:50248052:C:T	rs11169182	12	50248052	C	T	0.4225	7.54E-09	0.69406	rs112502508	28	RP11-70F11.7	6937	intergenic	0.329	7	5	14	0	0	0
FIM-EO	11:30297374:C:T	rs11031027	11	30297374	T	C	0.328	7.57E-09	0.772557	rs607987	9	FSHB	40565	intergenic	3.207	6	14	15	0	1	0
AAM-EM	16:29983119:G:T	rs9932196	16	29983119	G	T	0.4414	7.61E-09	0.918752	rs3814883	32	TMEM219	0	UTR3	1.049	6	4	5	1	1	0
AAM-EM	16:29982484:A:G	rs12445982	16	29982484	G	A	0.4414	7.61E-09	0.918752	rs3814883	32	TMEM219	0	intronic	0.335	7	4	5	1	1	0
FIM-EM	2:11723021:C:T	rs7576826	2	11723021	C	T	0.4702	7.62E-09	0.784592	rs7578132	2	GREB1	0	intronic	3.865	2a	1	15	1	0	0
FIM-EO	11:30292176:G:T	rs11031024	11	30292176	G	T	0.328	7.62E-09	0.779692	rs607987	9	FSHB	35367	intergenic	11.95	5	7	15	0	1	0
LMC-EM	1:199889037:A:G	rs6687938	1	199889037	A	G	0.492	7.63E-09	0.642307	rs6670899	1	RP11-567B20	10260	intergenic	0.03	6	14	15	0	0	0
AAM-EM	11:86714234:A:G	rs4944655	11	86714234	A	G	0.2217	7.65E-09	0.994407	rs6592324	24	RP11-736K20	2232	intergenic	3.574	3a	5	15	0	0	0
AAM-EM	16:30018500:C:T	rs3935873	16	30018500	C	T	0.4414	7.67E-09	0.918752	rs3814883	32	DOC2A	0	exonic	18.17	1f	3	5	1	1	0
AAM-EM	11:86709891:C:T	rs55965748	11	86709891	T	C	0.2217	7.67E-09	0.994407	rs6592324	24	RP11-736K20	0	ncRNA_intron	2.767	6	5	15	0	0	0
AAM-EPP	3:127819151:C:T	rs4857867	3	127819151	T	C	0.1501	7.69E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	8.312	5	4	4	1	1	0
AAM-EM	11:86715856:A:G	rs6592325	11	86715856	A	G	0.2227	7.69E-09	1	rs6592324	24	RP11-736K20	3854	intergenic	4.614	5	5	15	0	0	0
AAM-EPP	2:203174628:A:G	rs7588835	2	203174628	A	G	0.1412	7.69E-09	0.800958	rs77251002	5	NOP58	6238	intergenic	2.503	5	4	5	0	1	0
AAM-EPP	2:203060148:A:G	rs147392259	2	203060148	G	A	0.1372	7.72E-09	0.844826	rs77251002	5	AC079354.1	0	intergenic	2.047	7	5	15	1	0	0
FIM-EO	11:30301607:A:G	rs12363576	11	30301607	G	A	0.328	7.74E-09	0.772557	rs607987	9	ARL14EP	42990	intergenic	2.468	5	9	15	0	1	0
FIM-EO	11:30301868:C:T	rs4923631	11	30301868	T	C	0.328	7.75E-09	0.772557	rs607987	9	ARL14EP	42729	intergenic	8.217	5	9	15	0	1	0
AAM-EPP	3:127726737:A:G	rs6777197	3	127726737	A	G	0.1491	7.75E-09	0.801882	rs2811473	8	KBTBD12	20222	intergenic	0.073	2b	5	14	0	1	0
AAM-EPP	3:127808815:A:G	rs9855015	3	127808815	A	G	0.1431	7.76E-09	0.775541	rs2811473	8	RUVBL1	0	intronic	0.075	6	4	5	1	1	0
FIM-EO	2:11734905:A:G	rs13016186	2	11734905	G	A	0.4821	7.77E-09	0.66978	rs7578132	2	GREB1	0	intronic	1.025	6	4	15	1	0	0
AAM-EM	11:86713340:C:T	rs7111944	11	86713340	T	C	0.2217	7.77E-09	0.994407	rs6592324	24	RP11-736K20	1338	intergenic	0.542	6	5	15	0	0	0
FIM-EO	11:30280075:C:T	rs7924960	11	30280075	C	T	0.329	7.77E-09	0.775285	rs607987	9	FSHB	23266	intergenic	1.042	7	5	15	0	1	0
AAM-EPP	2:203059431:A:G	rs78798541	2	203059431	G	A	0.1372	7.78E-09	0.844826	rs77251002	5	AC079354.1	0	downstream	9.244	5	5	15	1	0	0
AAM-EPP	2:203134839:A:G	rs13392645	2	203134839	A	G	0.1412	7.79E-09	0.800958	rs77251002	5	NOP58	0	intronic	2.012	4	1	5	1	1	0
AAM-EM	11:86713995:A:G	rs4944653	11	86713995	A	G	0.2217	7.79E-09	0.994407	rs6592324	24	RP11-736K20	1993	intergenic	0.065	5	5	15	0	0	0
FIM-EO	11:30304455:C:T	rs11031030	11	30304455	T	C	0.328	7.79E-09	0.772557	rs607987	9	ARL14EP	40142	intergenic	11.93	5	5	15	0	1	0
FIM-EO	11:30292350:A:G	rs11031025	11	30292350	G	A	0.329	7.80E-09	0.775285	rs607987	9	FSHB	35541	intergenic	5.92	5	14	15	0	1	0
AAM-EM	11:86712933:A:T	rs10736773	11	86712933	T	A	0.2217	7.80E-09	0.994407	rs6592324	24	RP11-736K20	931	downstream	1.986	7	5	15	0	0	0
FIM-EO	11:30302023:A:C	rs4923632	11	30302023	C	A	0.327	7.83E-09	0.776969	rs607987	9	ARL14EP	42574	intergenic	1.291	5	7	15	0	1	0
AAM-EM	12:15365510:C:T	rs11056399	12	15365510	C	T	0.3469	7.83E-09	0.81844	rs11056439	26	RERG	0	intronic	7.454	5	5	15	1	0	0
FIM-EO	11:30294329:C:T	rs10835643	11	30294329	T	C	0.329	7.83E-09	0.775285	rs607987	9	FSHB	37520	intergenic	1.095	6	14	15	0	1	0
AAM-EM	9:11824873:G:T	rs10960286	9	11824873	G	T	0.2624	7.83E-09	0.985245	rs9969696	18	RP11-74C3.1	273786	intergenic	0.362	6	5	15	0	0	0
AAM-EM	11:86712229:C:T	rs10898571	11	86712229	T	C	0.2217	7.83E-09	0.994407	rs6592324	24	RP11-736K20	227	downstream	5.793	7	5	15	0	0	0
AAM-EM	11:86712464:G:T	rs12791285	11	86712464	T	G	0.2217	7.83E-09	0.994407	rs6592324	24	RP11-736K20	462	downstream	0.838	5	5	15	0	0	0
AAM-EM	11:86711494:C:T	rs2187160	11	86711494	T	C	0.2217	7.83E-09	0.994407	rs6592324	24	RP11-736K20	0	ncRNA_exoni	14.47	4	2	15	0	0	0
AAM-EPP	3:127775788:A:T	rs9847934	3	127775788	T	A	0.1531	7.85E-09	0.803828	rs2811473	8	SEC61A1	0	intronic	0.76	6	4	4	1	0	0
AAM-EM	11:86709404:C:T	rs61663753	11	86709404	C	T	0.2217	7.86E-09	0.994407	rs6592324	24	RP11-736K20	0	ncRNA_intron	3.115	6	5	15	0	0	0
AAM-EM	16:30003076:A:G	rs9924686	16	30003076	G	A	0.4423	7.87E-09	0.914422	rs3814883	32	TAOK2	0	UTR3	18.16	1f	3	4	1	1	0
FIM-EPP	6:151838245:C:T	rs7759516	6	151838245	T	C	0.2048	7.89E-09	0.970333	rs7740302	5	CCDC170	0	intronic	0.366	7	5	15	1	1	0
AAM-EM	9:11810095:A:G	rs7028261	9	11810095	A	G	0.4423	7.89E-09	0.995885	rs10756291	18	RP11-74C3.1	288564	intergenic	0.383	7	9	15	0	0	0
FIM-EO	2:11734909:C:G	rs13017593	2	11734909	C	G	0.4821	7.90E-09	0.66978	rs7578132	2	GREB1	0	intronic	0.702	6	4	15	1	0	0
FIM-EO	11:30302923:A:G	rs11031028	11	30302923	G	A	0.328	7.90E-09	0.772557	rs607987	9	ARL14EP	41674	intergenic	0.28	7	7	15	0	1	0
AAM-EPP	16:69554585:A:T	rs2311380	16	69554585	T	A	0.2386	7.91E-09	0.822194	rs889400	21	NFAT5	44411	intergenic	1.529	5	2	15	0	1	0
AAM-EM	9:11833169:A:G	rs36113263	9	11833169	A	G	0.2634	7.92E-09	0.99013	rs9969696	18	RP11-74C3.1	265490	intergenic	4.545	7	5	15	0	0	0
FIM-EO	11:30271406:C:T	rs675635	11	30271406	C	T	0.329	7.92E-09	0.775285	rs607987	9	FSHB	14597	intergenic	2.15	NA	9	15	0	1	0
AAM-EPP	2:203119868:G:T	rs6435139	2	203119868	T	G	0.1402	7.95E-09	0.792574	rs77251002	5	NOP58	10570	intergenic	5.579	6	14	15	0	0	0
LMC-EM	1:199889671:G:T	rs6677214	1	199889671	T	G	0.493	7.97E-09	0.641016	rs6670899	1	RP11-567B20	10894	intergenic	1.636	6	9	15	0	0	0
AAM-EPP	3:127791708:C:T	rs7612065	3	127791708	T	C	0.1501	7.97E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	0.742	4	4	4	1	1	0
AAM-EM	11:86710921:A:T	rs10898568	11	86710921	A	T	0.2217	7.98E-09	0.994407	rs6592324	24	RP11-736K20	0	ncRNA_exoni	7.165	4	2	15	0	0	0
FIM-EO	11:30295232:C:T	rs4923629	11	30295232	C	T	0.329	7.98E-09	0.775285	rs607987	9	FSHB	38423	intergenic	2.051	7	14	15	0	1	0
FIM-EO	11:30281066:C:T	rs11031014	11	30281066	T	C	0.329	7.99E-09	0.775285	rs607987	9	FSHB	24257	intergenic	1.571	7	5	15	0	1	0
FIM-EO	11:30274837:A:T	rs60968445	11	30274837	A	T	0.328	7.99E-09	0.779692	rs607987	9	FSHB	18028	intergenic	0.864	6	5	15	0	0	0
FIM-EO	11:30282274:C:T	rs4244552	11	30282274	C	T	0.329	8.00E-09	0.775285	rs607987	9	FSHB	25465	intergenic	1.058	6	5	15	0	1	0
FIM-EPP	11:30125619:C:G	rs11030946	11	30125619	G	C	0.1441	8.01E-09	1	rs11030946	8	RP11-624D11	19728	intergenic	0.964	6	9	15	0	0	0
AAM-EM	10:97773115:A:G	rs12266567	10	97773115	G	A	0.2396	8.01E-09	1	rs12266567	21	ENTPD1-AS1	0:00:00	ncRNA_intron	0.68	7	5	15	1	0	0
AAM-EM	16:29986525:A:G	rs11150577	16	29986525	G	A	0.4414	8.02E-09	0.918752	rs3814883	32	TAOK2	0	intronic	1.498	1d	1	2	1	1	0
FIM-EO	11:30289511:C:T	rs7940387	11	30289511	C	T	0.329	8.02E-09	0.775285	rs607987	9	FSHB	32702	intergenic	0.413	7	9	15	0	1	0
AAM-EM	11:86709298:C:T	rs34403796	11	86709298	C	T	0.2227	8.04E-09	0.988811	rs6592324	24	RP11-736K20	0	ncRNA_intron	1.34	5	5	15	0	0	0
AAM-EM	9:11728121:A:G	rs7466633	9	11728121	G	A	0.4264	8.04E-09	0.901194	rs10756291	18	RP11-74C3.1	370538	intergenic	0.196	5	9	15	0	0	0
AAM-EM	11:86712639:C:T	rs10898572	11	86712639	C	T	0.2217	8.05E-09	0.994407	rs6592324	24	RP11-736K20	637	downstream	10.51	7	5	15	0	0	0
FIM-EO	11:30278829:A:G	rs4531442	11	30278829	A	G	0.329	8.06E-09	0.775285	rs607987	9	FSHB	22020	intergenic	5.69	2c	5	15	0	1	0
AAM-EPP	3:127783442:A:G	rs6764003	3	127783442	A	G	0.1501	8.07E-09	0.824191	rs2811473	8	SEC61A1	0	intronic	0.098	7	4	4	1	1	0
AAM-EM	6:151872448:G:T	rs9479068	6	151872448	G	T	0.4076	8.08E-09	0.827287	rs12210735	14	CCDC170	0	intronic	6.997	3a	4	15	1	0	0
AAM-EM	9:11833446:A:G	rs35829516	9	11833446	A	G	0.2634	8.10E-09	0.99013	rs9969696	18	RP11-74C3.1	265213	intergenic	0.206	6	5	15	0	0	0
FIM-EO	11:30287070:A:G	rs34609938	11	30287070	G	A	0.33	8.10E-09	0.77168	rs607987	9	FSHB	30261	intergenic	0.575	7	14	15	0	1	0
FIM-EO	11:30244235:C:T	rs653452	11	30244235	C	T	0.328	8.10E-09	0.779692	rs607987	9	FSHB	8327	intergenic	0.201	NA	7	15	0	1	0
AAM-EM	16:29982961:C:T	rs9932702	16	29982961	C	T	0.4414	8.12E-09	0.918752	rs3814883	32	TMEM219	0	UTR3	8.931	1f	4	5	1	1	0
LMC-EM	1:199889022:A:G	rs6663866	1	199889022	G	A	0.492	8.14E-09	0.642307	rs6670899	1	RP11-567B20	10245	intergenic	0.344	7	14	15	0	0	0
FIM-EO	11:30243868:G:T	rs1782507	11	30243868	G	T	0.328	8.16E-09	0.779692	rs607987	9	FSHB	8694	intergenic	1.547	NA	7	15	0	1	0
AAM-EPP	10:90173536:A:G	rs814242	10	90173536	A	G	0.3986	8.17E-09	0.913137	rs7921352	15	RNLS	0	intronic	10.47	3a	5	15	1	0	0
AAM-EM	16:29984070:C:G	rs11901	16	29984070	C	G	0.4423	8.19E-09	0.914422	rs3814883	32	TMEM219	0	intronic	8.892	6	2	5	1	1	0
FIM-EO	11:30279268:C:G	rs1933345	11	30279268	G	C	0.329	8.19E-09	0.775285	rs607987	9	FSHB	22459	intergenic	2.986	6	5	15	0	1	0
FIM-EO	11:30271845:C:T	rs673740	11	30271845	C	T	0.329	8.20E-09	0.775285	rs607987	9	FSHB	15036	intergenic	0.03	NA	9	15	0	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	11:101584172:C:T	rs10791519	11	101584172	T	C	0.335	8.20E-09	1	rs10791519	25	TRPC6	0	intergenic	12.07		7	5	15	1	0	0
FIM-EO	11:30290012:A:G	rs11031022	11	30290012	G	A	0.329	8.21E-09	0.775285	rs607987	9	FSHB	33203	intergenic	0.635		7	9	15	0	1	0
FIM-EO	11:30266370:A:G	rs642126	11	30266370	G	A	0.329	8.23E-09	0.775285	rs607987	9	FSHB	9561	intergenic	3.967		7	7	15	0	1	0
FIM-EO	11:30275141:C:T	rs35458722	11	30275141	T	C	0.326	8.23E-09	0.780663	rs607987	9	FSHB	18332	intergenic	3.837		6	5	15	0	1	0
FIM-EO	3:128122039:C:T	rs6780368	3	128122039	C	T	0.1292	8.23E-09	0.847855	rs1702118	3	EEFSEC	0	intronic	7.906		5	4	15	1	1	0
FIM-EO	11:30279354:C:T	rs1933346	11	30279354	C	T	0.329	8.26E-09	0.775285	rs607987	9	FSHB	22545	intergenic	0.056		6	5	15	0	1	0
AAM-EM	9:11839805:A:C	rs10960303	9	11839805	C	A	0.2644	8.29E-09	0.985162	rs9969696	18	RP11-74C3.1	258854	intergenic	0.919		6	9	15	0	0	0
AAM-EM	16:29936654:A:G	rs12716972	16	29936654	A	G	0.4821	8.29E-09	0.773038	rs12932403	32	KCTD13	0	intronic	11.19	1f		1	2	1	1	0
FIM-EO	11:30275351:C:T	rs34487664	11	30275351	T	C	0.329	8.29E-09	0.775285	rs607987	9	FSHB	18542	intergenic	6.04		5	5	15	0	1	0
AAM-EPP	3:127816572:A:G	rs6439113	3	127816572	A	G	0.1501	8.33E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	4.224		5	4	4	1	1	0
AAM-EPP	2:203037846:A:G	rs76552560	2	203037846	G	A	0.1372	8.35E-09	0.84677	rs77251002	5	AC079354.1	0	intronic	1.212	2a		5	15	1	0	0
LMC-EM	4:56023763:A:G	rs7675314	4	56023763	A	G	0.4881	8.38E-09	0.951474	rs9994560	4	KDR	32006	intergenic	8.494		5	1	13	0	0	0
FIM-EO	11:30267038:C:T	rs515997	11	30267038	T	C	0.329	8.38E-09	0.775285	rs607987	9	FSHB	10229	intergenic	1.197		7	7	15	0	1	0
AAM-EM	16:29995218:A:G	rs4788204	16	29995218	G	A	0.4423	8.41E-09	0.914422	rs3814883	32	TAOK2	0	intronic	3.874	1f		4	4	1	1	0
AAM-EPP	3:127799669:G:T	rs1554534	3	127799669	G	T	0.1501	8.43E-09	0.824191	rs2811473	8	RUVBL1	0	intronic	0.501	NA		2	4	1	1	0
LMC-ERSV	6:151819834:A:G	rs9383906	6	151819834	A	G	0.09046	8.45E-09	1	rs9383906	2	CCDC170	0	intronic	5.576		5	2	15	1	1	0
AAM-EM	12:15363407:A:G	rs10846159	12	15363407	A	G	0.3479	8.45E-09	0.823687	rs11056439	26	RERG	0	intronic	1.595		7	5	15	1	0	0
LMC-EM	1:199889400:C:T	rs6676879	1	199889400	T	C	0.493	8.46E-09	0.641016	rs6670899	1	RP11-567B20	10623	intergenic	2.337		6	14	15	0	0	0
FIM-EO	11:30274686:A:G	rs60781817	11	30274686	G	A	0.329	8.48E-09	0.775285	rs607987	9	FSHB	17877	intergenic	2.36		6	5	15	0	1	0
AAM-EPP	3:127733091:A:G	rs4602341	3	127733091	A	G	0.1511	8.50E-09	0.817326	rs2811473	8	KBTBD12	26576	intergenic	6.195		7	5	15	0	1	0
AAM-EM	2:25141538:A:G	rs11676272	2	25141538	A	G	0.4642	8.52E-09	0.958865	rs2384054	6	ADCY3	0	exonic	12.07	1f		1	7	1	1	0
AAM-EPP	3:127757422:A:G	rs2217629	3	127757422	A	G	0.1491	8.54E-09	0.801882	rs2811473	8	SEC61A1	13061	intergenic	1.95	NA		5	15	0	0	0
FIM-EO	11:30297809:C:T	rs7108615	11	30297809	T	C	0.331	8.60E-09	0.759441	rs607987	9	FSHB	41000	intergenic	0.55	NA		9	15	0	1	0
FIM-EPP	3:128105972:A:G	rs2999033	3	128105972	G	A	0.1342	8.65E-09	1	rs2999033	4	EEFSEC	0	intronic	4.449	NA		4	15	1	1	0
AAM-EM	9:11816870:A:G	rs36043248	9	11816870	G	A	0.2634	8.66E-09	0.980394	rs9969696	18	RP11-74C3.1	281789	intergenic	1.113		6	9	15	0	0	0
AAM-EPP	6:74624442:A:C	rs12209746	6	74624442	A	C	0.336	8.66E-09	1	rs12209746	9	CD109	86401	intergenic	2.825		6	9	15	0	0	0
AAM-EPP	2:203043319:A:G	rs1474267	2	203043319	A	G	0.1372	8.67E-09	0.844826	rs77251002	5	AC079354.1	0	intronic	0.021	NA		5	15	1	0	0
AAM-EM	1:204161591:C:T	rs2510	1	204161591	T	C	0.2555	8.69E-09	1	rs2510	4	KISS1	0	intronic	3.666		5	5	14	1	0	0
AAM-EM	12:15371606:A:G	rs12312583	12	15371606	A	G	0.3449	8.70E-09	0.833616	rs11056439	26	RERG	0	intronic	5.431		7	1	14	1	0	0
AAM-EM	12:15370878:A:G	rs767201	12	15370878	G	A	0.3459	8.71E-09	0.830005	rs11056439	26	RERG	0	UTR5	3.167		7	5	14	1	0	0
FIM-EO	11:30286978:A:T	rs145052476	11	30286978	T	A	0.328	8.73E-09	0.779692	rs607987	9	FSHB	30169	intergenic	0.894		6	14	15	0	1	0
AAM-EPP	2:203119508:C:G	rs6751314	2	203119508	C	G	0.1402	8.74E-09	0.792574	rs77251002	5	NOP58	10930	intergenic	0.07		7	14	15	0	0	0
FIM-EO	11:30287046:A:G	rs79028439	11	30287046	A	G	0.329	8.74E-09	0.775285	rs607987	9	FSHB	30237	intergenic	0.973		7	14	15	0	1	0
AAM-EM	6:100704146:A:G	rs8180548	6	100704146	G	A	0.2783	8.76E-09	0.908189	rs9403595	13	RP3-344J20.1	78077	intergenic	0.247		5	5	15	0	0	0
FIM-EO	11:30304726:C:G	rs11031032	11	30304726	G	C	0.331	8.79E-09	0.759441	rs607987	9	ARL14EP	39871	intergenic	1.219		5	5	15	0	1	0
FIM-EPP	6:151769132:A:G	rs7741193	6	151769132	G	A	0.168	8.81E-09	0.648342	rs7740302	5	RMND1	0	intronic	1.952		6	4	5	1	1	0
AAM-EPP	3:127780082:A:G	rs759945	3	127780082	G	A	0.1501	8.86E-09	0.824191	rs2811473	8	SEC61A1	0	intronic	1.684	NA		4	4	1	1	0
AAM-EPP	3:127781737:C:G	rs4857864	3	127781737	G	C	0.1501	8.86E-09	0.824191	rs2811473	8	SEC61A1	0	intronic	7.278		6	4	4	1	1	0
FIM-EO	11:30293769:A:T	rs4267043	11	30293769	T	A	0.332	8.88E-09	0.762182	rs607987	9	FSHB	36960	intergenic	4.252		6	14	15	0	1	0
FIM-EO	11:30270667:A:G	rs689233	11	30270667	G	A	0.332	8.89E-09	0.762182	rs607987	9	FSHB	13858	intergenic	1.935	NA		9	15	0	1	0
AAM-EM	12:15452087:A:T	rs28832932	12	15452087	A	T	0.3111	8.97E-09	1	rs11056439	26	RERG	0	intronic	2.287		5	9	15	1	0	0
FIM-EO	3:128122396:A:G	rs2659685	3	128122396	G	A	0.2445	9.02E-09	0.840693	rs3887841	3	EEFSEC	0	intronic	0.605		5	4	15	1	0	0
AAM-EM	9:11819319:C:T	rs10960274	9	11819319	T	C	0.2763	9.17E-09	0.919604	rs9969696	18	RP11-74C3.1	279340	intergenic	10.13		7	5	15	0	0	0
FIM-EO	11:30288586:G:T	rs9732252	11	30288586	G	T	0.328	9.18E-09	0.771794	rs607987	9	FSHB	31777	intergenic	0.434		7	14	15	0	1	0
AAM-EM	6:151872567:C:T	rs7761420	6	151872567	C	T	0.4056	9.20E-09	0.818755	rs12210735	14	CCDC170	0	intronic	0.624		4	4	15	1	0	0
AAM-EM	16:29937652:A:G	rs12716973	16	29937652	G	A	0.4821	9.26E-09	0.773038	rs12932403	32	KCTD13	0	UTR5	9.843	2b		1	1	1	1	0
AAM-EM	11:86712340:A:G	rs11234902	11	86712340	A	G	0.2217	9.33E-09	0.994407	rs6592324	24	RP11-736K20	338	downstream	2.299		6	5	15	0	0	0
LMC-EM	6:152470752:A:C	rs17082236	6	152470752	C	A	0.06461	9.40E-09	1	rs73632499	5	SYNE1	0	exonic	21		6	4	4	1	0	0
FIM-EPP	3:128094493:C:T	rs1702119	3	128094493	T	C	0.2525	9.46E-09	0.836906	rs4241495	4	EEFSEC	0	intronic	5.356	NA		2	5	1	1	0
FIM-EPP	6:151767483:A:G	rs76363440	6	151767483	A	G	0.168	9.50E-09	0.648342	rs7740302	5	RMND1	0	intronic	1.359		4	2	5	1	1	0
AAM-EM	9:11840417:A:G	rs10960304	9	11840417	G	A	0.2644	9.51E-09	0.985162	rs9969696	18	RP11-74C3.1	258242	intergenic	1.54		7	9	15	0	0	0
AAM-EM	6:151857594:A:G	rs6931664	6	151857594	A	G	0.4076	9.52E-09	0.827287	rs12210735	14	CCDC170	0	intronic	3.742		5	2	15	1	0	0
AAM-EM	10:90202725:A:G	rs6586134	10	90202725	G	A	0.4443	9.56E-09	0.686387	rs7921352	20	RNLS	0	intronic	0.312		5	1	15	1	0	0
AAM-EM	12:15360454:C:T	rs7973089	12	15360454	T	C	0.3479	9.59E-09	0.823687	rs11056439	26	RERG	0	intronic	5.957		7	5	15	1	0	0
AAM-EM	1:72902776:A:T	rs1084440	1	72902776	T	A	0.3748	9.60E-09	0.987454	rs2815781	2	RPL31P12	135263	intergenic	2.673		6	5	15	0	0	0
AAM-EM	1:72916538:C:T	rs782243	1	72916538	C	T	0.3748	9.60E-09	0.987454	rs2815781	2	RPL31P12	149025	intergenic	3.161	NA		5	9	0	0	0
AAM-EM	12:15367715:A:T	rs7980227	12	15367715	T	A	0.3479	9.61E-09	0.823687	rs11056439	26	RERG	0	intronic	0.684		5	2	15	1	0	0
AAM-EM	9:11813305:A:G	rs67040713	9	11813305	A	G	0.2763	9.66E-09	0.919604	rs9969696	18	RP11-74C3.1	285354	intergenic	2.03		6	9	15	0	0	0
FIM-EO	11:30272226:A:C	rs645161	11	30272226	A	C	0.332	9.66E-09	0.762182	rs607987	9	FSHB	15417	intergenic	4.389	NA		9	15	0	0	0
LMC-ERSV	6:151829487:A:T	rs4870023	6	151829487	A	T	0.0825	9.69E-09	0.875226	rs9383906	2	CCDC170	0	intronic	0.845		7	1	15	1	1	0
AAM-EM	12:15366321:C:T	rs73065457	12	15366321	C	T	0.3479	9.69E-09	0.823687	rs11056439	26	RERG	0	intronic	1.483	3a		1	15	1	0	0
FIM-EPP	1:22367073:G:T	rs72665317	1	22367073	T	G	0.1531	9.73E-09	0.99226	rs10917130	1	LINC00339	9356	intergenic	1.315		7	2	5	0	0	0
AAM-EM	1:72902623:A:G	rs1084441	1	72902623	G	A	0.3748	9.77E-09	0.987454	rs2815781	2	RPL31P12	135110	intergenic	0.263	NA		5	15	0	0	0
AAM-EM	3:49878078:C:T	rs2271960	3	49878078	T	C	0.4712	9.78E-09	1	rs2271960	8	TRAIP	0	intronic	1.828	1f		4	5	1	1	0
AAM-EM	9:11813401:A:G	rs66803120	9	11813401	A	G	0.2763	9.78E-09	0.919604	rs9969696	18	RP11-74C3.1	285258	intergenic	2.612		6	9	15	0	0	0
AAM-EPP	10:90175462:C:T	rs806694	10	90175462	T	C	0.3986	9.79E-09	0.913137	rs7921352	15	RNLS	0	intronic	3.095		5	5	15	1	0	0
AAM-EM	9:11815585:C:T	rs7036415	9	11815585	T	C	0.2753	9.79E-09	0.914735	rs9969696	18	RP11-74C3.1	283074	intergenic	2.204		7	9	15	0	0	0
AAM-EM	9:11815934:A:G	rs7020713	9	11815934	G	A	0.2753	9.82E-09	0.914735	rs9969696	18	RP11-74C3.1	282725	intergenic	0.008		7	9	15	0	0	0
LMC-ERSV	6:151821024:A:T	rs9383911	6	151821024	A	T	0.0835	9.83E-09	0.912345	rs9383906	2	CCDC170	0	intronic	4.976		6	2	15	1	1	0
FIM-EM	6:127451665:C:T	rs1936806	6	127451665	C	T	0.4095	9.83E-09	0.807621	rs10457487	4	RSPO3	0	intronic	7.25	NA		5	15	1	0	0
AAM-EM	1:72911829:C:T	rs782252	1	72911829	C	T	0.3748	9.88E-09	0.987454	rs2815781	2	RPL31P12	144316	intergenic	0.412	NA		5	15	0	0	0
AAM-EM	1:72850425:A:G	rs2815778	1	72850425	G	A	0.3757	9.89E-09	0.991667	rs2815781	2	RPL31P12	82912	intergenic	0.125		7	15	15	0	0	0
AAM-EPP	9:7174673:A:G	rs913588	9	7174673	G	A	0.4751	9.91E-09	1	rs913588	13	KDM4C	0	exonic	16.97		7	4	5	1	0	0
AAM-EM	9:11834251:G:T	rs34323896	9	11834251	G	T	0.2634	9.91E-09	0.99013	rs9969696	18	RP11-74C3.1	264408	intergenic	1.656		6	9	15	0	0	0
AAM-EM	1:72866971:A:G	rs2613473	1	72866971	G	A	0.3757	9.93E-09	0.991667	rs2815781	2	RPL31P12	99458	intergenic	1.461	NA		5	15	0	0	0
AAM-EM	12:15477683:C:T	rs7304487	12	15477683	T	C	0.3141	9.94E-09	0.986891	rs11056439	26	RERG:PTPR(	0:00	intronic	6.311		6	1	14	1	0	0
AAM-EM	9:11812824:C:T	rs10960266	9	11812824	T	C	0.2763	9.94E-09	0.919604	rs9969696	18	RP11-74C3.1	285835	intergenic	0.767		6	7	15	0	0	0
AAM-EPP	10:90158608:C:T	rs1617881	10	90158608	C	T	0.4384	9.99E-09	0.760519	rs7921352	15	RNLS	0	intronic	1.409		6	5	15	1	0	0
FIM-EO	3:128115381:A:G	rs1735527	3	128115381	A	G	0.1352	1.00E-08	0.892249	rs1702118	3	EEFSEC	0	intronic	0.75	NA		4	15	1	1	0
AAM-EM	1:72908137:C:T	rs782239	1	72908137	T	C	0.3748	1.00E-08	0.987454	rs2815781	2	RPL31P12	140624	intergenic	12.44	NA		5	15	0	0	0
AAM-EM	9:11818552:A:G	rs10960271	9	11818552	A	G	0.2763	1.00E-08	0.919604	rs9969696	18	RP11-74C3.1	280107	intergenic	0.014		6	9	15	0	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	16:29948401:A:G	rs4788190	16	29948401	G	A	0.4821	1.01E-08	0.729307	rs12932403	32	TMEM219	3804	intergenic	3.924		7	5	15	1	1	0
LMC-ERSV	6:151824449:A:G	rs12173791	6	151824449	G	A	0.08449	1.02E-08	0.89974	rs9383906	2	CCDC170	0	intronic	0.146		5	5	15	1	1	0
AAM-EPP	16:69555247:A:G	rs2311381	16	69555247	A	G	0.2376	1.02E-08	0.818074	rs889400	21	NFAT5	43749	intergenic	19.8		4	2	15	0	1	0
LMC-DE	11:30230281:A:G	rs76757075	11	30230281	G	A	0.00994	1.03E-08	1	rs76757075	5	FSHB	22281	intergenic	0.094		6	5	15	0	0	0
AAM-EM	6:151857713:C:G	rs1832727	6	151857713	C	G	0.4085	1.03E-08	0.830886	rs12210735	14	CCDC170	0	intronic	0.314		7	5	15	1	0	0
AAM-EM	12:15367769:A:G	rs7977262	12	15367769	A	G	0.3479	1.03E-08	0.823687	rs11056439	26	RERG	0	intronic	1.849		5	2	15	1	0	0
FIM-EO	8:25245432:A:G	rs931875	8	25245432	G	A	0.2674	1.04E-08	0.880889	rs6185	8	DOCK5	0	intronic	1.536		7	4	5	1	1	0
AAM-EM	9:11795994:A:G	rs10756285	9	11795994	G	A	0.4394	1.04E-08	0.967256	rs10756291	18	RP11-74C3.1	302665	intergenic	1.142		7	9	15	0	0	0
AAM-EM	1:72865045:A:G	rs1903372	1	72865045	A	G	0.3757	1.04E-08	0.991667	rs2815781	2	RPL31P12	97532	intergenic	1.819	NA		5	15	0	0	0
AAM-EPP	10:90157930:C:T	rs2488270	10	90157930	C	T	0.4384	1.04E-08	0.760519	rs7921352	15	RNLS	0	intronic	0.331		7	5	15	1	0	0
AAM-EM	3:128111201:G:T	rs1702134	3	128111201	G	T	0.1322	1.04E-08	0.880859	rs4277707	9	EEFSEC	0	intronic	0.77		5	4	15	1	1	0
AAM-EM	1:204161026:A:G	rs7538038	1	204161026	A	G	0.2545	1.05E-08	0.994454	rs2510	4	KISS1	0	intronic	5.15		4	5	14	1	0	0
AAM-EM	9:11820083:A:G	rs10960278	9	11820083	A	G	0.2763	1.05E-08	0.919604	rs9969696	18	RP11-74C3.1	278576	intergenic	0.49		6	7	15	0	0	0
AAM-EM	1:204161490:C:T	rs4951316	1	204161490	T	C	0.2555	1.05E-08	1	rs2510	4	KISS1	0	intronic	2.752		5	5	14	1	0	0
AAM-EM	1:72850392:C:T	rs2613480	1	72850392	T	C	0.3757	1.05E-08	0.991667	rs2815781	2	RPL31P12	82879	intergenic	1.518	NA		15	15	0	0	0
AAM-EPP	6:74678611:A:C	rs3003182	6	74678611	A	C	0.3449	1.06E-08	0.773324	rs12209746	9	TXNP7	35624	intergenic	3.318		6	5	15	0	0	0
AAM-EM	1:72934826:A:G	rs782236	1	72934826	A	G	0.3738	1.06E-08	0.983277	rs2815781	2	RPL31P12	167313	intergenic	0.82		7	9	15	0	0	0
AAM-EPP	2:203137889:A:T	rs77018809	2	203137889	A	T	0.1362	1.06E-08	0.786928	rs77251002	5	NOP58	0	intronic	3.742		4	2	5	1	1	0
AAM-EM	9:11795313:A:G	rs10960237	9	11795313	A	G	0.4394	1.06E-08	0.967358	rs10756291	18	RP11-74C3.1	303346	intergenic	3.006		7	9	15	0	0	0
FIM-EPP	3:128083332:A:G	rs1702122	3	128083332	A	G	0.2515	1.07E-08	0.831992	rs4241495	4	EEFSEC	0	intronic	0.407	NA		4	5	1	1	0
FIM-EO	2:11734880:A:G	rs12993278	2	11734880	A	G	0.4811	1.07E-08	0.672973	rs7578132	2	GREB1	0	intronic	1.659		7	4	15	1	0	0
AAM-EM	16:29939877:A:G	rs12691307	16	29939877	A	G	0.4781	1.07E-08	0.759057	rs12932403	32	CTD-2574D22	0	ncRNA_exoni	3.26		7	5	15	1	1	0
AAM-EM	9:11794905:C:T	rs2382304	9	11794905	C	T	0.4384	1.07E-08	0.971441	rs10756291	18	RP11-74C3.1	303754	intergenic	4.056	NA		9	15	0	0	0
FIM-EPP	3:128092102:A:G	rs1735538	3	128092102	A	G	0.2535	1.07E-08	0.831783	rs4241495	4	EEFSEC	0	intronic	0.168	NA		4	5	1	1	0
AAM-EM	9:11804718:A:G	rs10809604	9	11804718	G	A	0.4016	1.08E-08	1	rs10809604	18	RP11-74C3.1	293941	intergenic	1.368		7	9	15	0	0	0
AAM-EM	9:11819199:C:T	rs10960273	9	11819199	C	T	0.2763	1.08E-08	0.919604	rs9969696	18	RP11-74C3.1	279460	intergenic	2.085		6	9	15	0	0	0
AAM-EPP	6:74623372:G:T	rs7752254	6	74623372	G	T	0.336	1.08E-08	1	rs12209746	9	CD109	85331	intergenic	0.852		5	9	15	0	0	0
FIM-EM	6:153475561:A:C	rs9322410	6	153475561	C	A	0.2455	1.09E-08	1	rs9322410	6	RNA5SP224	4793	intergenic	1.065		7	7	15	0	0	0
FIM-EO	6:152564994:C:G	rs17082381	6	152564994	G	C	0.09145	1.09E-08	1	rs17082381	6	SYNE1	0	intronic	2.407		7	4	5	1	0	0
FIM-EO	6:152564752:A:G	rs74636305	6	152564752	G	A	0.09145	1.09E-08	1	rs17082381	6	SYNE1	0	intronic	8.008		7	4	5	1	0	0
AAM-EPP	3:49745822:C:T	rs4855867	3	49745822	C	T	0.4761	1.10E-08	1	rs4855867	7	RNF123	0	intronic	2.18	NA		4	5	1	1	0
LMC-ERSV	6:151829474:C:T	rs4870022	6	151829474	T	C	0.0825	1.10E-08	0.875226	rs9383906	2	CCDC170	0	intronic	0.519		7	1	15	1	1	0
FIM-EO	11:30349694:A:T	rs2485398	11	30349694	A	T	0.331	1.10E-08	0.748025	rs607987	9	ARL14EP	0	UTR5	2.003		6	4	5	1	0	0
AAM-EM	16:29924905:A:G	rs7201384	16	29924905	A	G	0.4801	1.11E-08	0.766958	rs12932403	32	ASPHD1:KC	0:00	intronic	0.447	1f		4	5	1	1	0
AAM-EM	9:11795401:C:G	rs10960238	9	11795401	C	G	0.4394	1.12E-08	0.967358	rs10756291	18	RP11-74C3.1	303258	intergenic	2.295		7	9	15	0	0	0
AAM-EM	6:74763411:A:G	rs4605844	6	74763411	A	G	0.4085	1.12E-08	1	rs4605844	12	RP11-554D15	15755	intergenic	6.516		7	5	15	0	0	0
LMC-ERSV	6:151822156:C:G	rs4869733	6	151822156	G	C	0.08449	1.12E-08	0.89974	rs9383906	2	CCDC170	0	intronic	0.389		6	5	15	1	1	0
AAM-EM	3:49881134:A:T	rs2246832	3	49881134	A	T	0.4732	1.13E-08	0.991767	rs2271960	8	TRAIP	0	intronic	0.717		6	4	5	1	1	0
AAM-EM	9:11819429:A:G	rs10960275	9	11819429	G	A	0.2763	1.13E-08	0.919604	rs9969696	18	RP11-74C3.1	279230	intergenic	0.957		7	5	15	0	0	0
AAM-EM	9:11796169:A:C	rs10809596	9	11796169	A	C	0.4394	1.14E-08	0.967358	rs10756291	18	RP11-74C3.1	302490	intergenic	1.68		6	9	15	0	0	0
AAM-EM	9:11874502:G:T	rs10448181	9	11874502	G	T	0.2664	1.14E-08	0.985158	rs9969696	18	RP11-74C3.1	224157	intergenic	2.255		5	7	15	0	0	0
AAM-EM	1:204162230:C:T	rs4951319	1	204162230	T	C	0.2555	1.15E-08	1	rs2510	4	KISS1	0	intronic	7.159		4	5	14	1	0	0
AAM-EM	6:100680260:A:G	rs2281425	6	100680260	G	A	0.2922	1.15E-08	0.943772	rs9403595	13	RP3-344J20.1	54191	intergenic	0.891	NA		5	15	0	0	0
AAM-EM	1:72866847:A:G	rs2815767	1	72866847	A	G	0.3757	1.15E-08	0.991667	rs2815781	2	RPL31P12	99334	intergenic	1.615	NA		5	15	0	0	0
AAM-EM	12:15437905:C:T	rs1117153	12	15437905	T	C	0.3191	1.15E-08	0.965569	rs11056439	26	RERG	0	intronic	2.991	NA		9	15	1	0	0
AAM-EM	9:11801962:A:G	rs10756288	9	11801962	A	G	0.4414	1.16E-08	0.975425	rs10756291	18	RP11-74C3.1	296697	intergenic	1.839		6	9	15	0	0	0
FIM-EM	6:127471533:C:T	rs9491699	6	127471533	C	T	0.4354	1.16E-08	0.891512	rs10457487	4	RSPO3	0	intronic	1.101		7	4	15	1	0	0
AAM-EM	9:11875357:A:C	rs7019378	9	11875357	A	C	0.2664	1.16E-08	0.985158	rs9969696	18	RP11-74C3.1	223302	intergenic	1.312		7	5	15	0	0	0
FIM-EO	2:11734335:A:C	rs9678410	2	11734335	A	C	0.4791	1.17E-08	0.680856	rs7578132	2	GREB1	0	intronic	4.005		5	4	15	1	0	0
FIM-EO	6:127455821:A:C	rs2489623	6	127455821	A	C	0.495	1.17E-08	1	rs2489623	4	RSPO3	0	intronic	7.104		6	5	15	1	0	0
AAM-EM	3:128122396:A:G	rs2659685	3	128122396	G	A	0.2445	1.17E-08	0.840693	rs729847	9	EEFSEC	0	intronic	0.605		5	4	15	1	0	0
AAM-EPP	3:128105972:A:G	rs2999033	3	128105972	G	A	0.1342	1.18E-08	0.880497	rs4277707	8	EEFSEC	0	intronic	4.449	NA		4	15	1	1	0
AAM-EM	1:204161069:A:G	rs7538055	1	204161069	A	G	0.2545	1.18E-08	0.994454	rs2510	4	KISS1	0	intronic	2.168		4	5	14	1	0	0
AAM-EM	9:11804849:A:G	rs10756290	9	11804849	G	A	0.4026	1.18E-08	0.995991	rs10809604	18	RP11-74C3.1	293810	intergenic	10.08		6	9	15	0	0	0
AAM-EM	9:11801386:A:G	rs10756287	9	11801386	G	A	0.4404	1.19E-08	0.979505	rs10756291	18	RP11-74C3.1	297273	intergenic	4.671		7	9	15	0	0	0
AAM-EM	12:15370010:C:T	rs16910692	12	15370010	T	C	0.3459	1.19E-08	0.830005	rs11056439	26	RERG	0	intronic	3.958		7	5	14	1	0	0
AAM-EM	16:29925445:C:T	rs8059619	16	29925445	C	T	0.4861	1.19E-08	0.745305	rs12932403	32	ASPHD1:KC	0:00	intronic	4.754		7	4	5	1	1	0
FIM-EO	11:30365045:C:T	rs1222200	11	30365045	C	T	0.331	1.20E-08	0.748025	rs607987	9	ARL14EP	5270	intergenic	0.219	NA		5	15	0	1	0
AAM-EM	1:204157973:C:T	rs11240694	1	204157973	C	T	0.2515	1.21E-08	0.977949	rs2510	4	KISS1	1495	intergenic	11.51		5	5	13	1	0	0
FIM-EM	8:25310042:A:C	rs11995050	8	25310042	A	C	0.2237	1.21E-08	1	rs11995050	7	KCTD9	0	intronic	5.002		7	4	5	1	0	0
AAM-EM	9:11875926:C:T	rs10960335	9	11875926	T	C	0.2664	1.21E-08	0.985158	rs9969696	18	RP11-74C3.1	222733	intergenic	2.96		6	9	15	0	0	0
LMC-DE	4:55991827:A:G	rs9994560	4	55991827	A	G	0.4841	1.21E-08	0.84895	rs7667298	1	KDR	70	upstream	12.6	2b		1	10	1	0	0
AAM-EM	12:15369665:A:G	rs17835113	12	15369665	G	A	0.3459	1.22E-08	0.830005	rs11056439	26	RERG	0	intronic	2.05		4	5	14	1	0	0
AAM-EPP	2:203085653:C:T	rs7585027	2	203085653	C	T	0.1372	1.23E-08	0.827625	rs77251002	5	SUMO1	0	intronic	2.529		6	4	5	1	0	0
AAM-EM	3:49818555:C:T	rs9814765	3	49818555	C	T	0.4732	1.23E-08	0.991767	rs2271960	8	IP6K1	0	intronic	0.006	2c		4	5	1	1	0
LMC-DE	11:30278764:C:G	rs117272068	11	30278764	C	G	0.00994	1.23E-08	1	rs76757075	5	FSHB	21955	intergenic	1.531	3a		5	15	0	0	0
AAM-EM	1:204162212:C:T	rs12097666	1	204162212	T	C	0.2555	1.23E-08	1	rs2510	4	KISS1	0	intronic	0.837		4	5	14	1	0	0
AAM-EM	12:15359063:A:T	rs7303595	12	15359063	T	A	0.3479	1.24E-08	0.823687	rs11056439	26	RERG	0	intronic	4.045		7	5	15	1	0	0
AAM-EM	9:11773304:C:T	rs10429527	9	11773304	T	C	0.4344	1.25E-08	0.915728	rs10756291	18	RP11-74C3.1	325355	intergenic	0.348		7	9	15	0	0	0
AAM-EM	6:151882362:G:T	rs9478219	6	151882362	T	G	0.4076	1.25E-08	0.826601	rs12210735	14	CCDC170	0	intronic	1.471		5	5	15	1	0	0
LMC-EM	21:36445050:C:T	rs6517273	21	36445050	C	T	0.3201	1.25E-08	0.978813	rs2834747	10	RUNX1	0	intronic	8.016		5	2	15	1	0	0
AAM-EPP	2:203137347:A:G	rs16824590	2	203137347	G	A	0.1362	1.26E-08	0.786928	rs77251002	5	NOP58	0	intronic	1.449		4	2	5	1	1	0
AAM-EPP	2:203080347:A:G	rs2350359	2	203080347	A	G	0.1372	1.26E-08	0.827625	rs77251002	5	SUMO1	0	intronic	2.281		6	4	5	1	0	0
FIM-EO	11:30356057:A:G	rs1222205	11	30356057	A	G	0.331	1.26E-08	0.748025	rs607987	9	ARL14EP	0	intronic	0.532		6	4	4	1	1	0
LMC-EM	21:36456189:G:T	rs2242901	21	36456189	G	T	0.3121	1.26E-08	0.944811	rs2834747	10	RUNX1	0	intronic	2.11		6	5	15	1	0	0
AAM-EPP	2:203092429:A:G	rs13003810	2	203092429	A	G	0.1372	1.27E-08	0.827625	rs77251002	5	SUMO1	0	intronic	0.817		7	4	5	1	0	0
AAM-EM	9:11772767:C:G	rs10809586	9	11772767	C	G	0.4324	1.27E-08	0.91566	rs10756291	18	RP11-74C3.1	325892	intergenic	0.318		7	9	15	0	0	0
AAM-EM	12:15368644:A:G	rs7965695	12	15368644	G	A	0.3459	1.27E-08	0.830005	rs11056439	26	RERG	0	intronic	3.402		7	2	15	1	0	0
AAM-EM	16:29927702:A:G	rs10083738	16	29927702	G	A	0.4881	1.28E-08	0.751444	rs12932403	32	ASPHD1:KC	0:00	intronic	2.779		6	4	5	1	1	0
AAM-EM	9:11799232:C:T	rs10960246	9	11799232	T	C	0.4414	1.28E-08	0.975534	rs10756291	18	RP11-74C3.1	299427	intergenic	2.46		6	9	15	0	0	0
AAM-EPP	3:49744392:A:G	rs3749241	3	49744392	A	G	0.4761	1.28E-08	1	rs4855867	7	RNF123	0	intronic	2.758	NA		3	4	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
FIM-EO	11:30350185:C:G	rs1717774	11	30350185	G	C	0.331	1.29E-08	0.748025	rs607987	9	ARL14EP	0	UTR5	2.983	5	5	5	1	1	0
FIM-EPP	6:151762344:A:G	rs73783018	6	151762344	A	G	0.17	1.29E-08	0.657761	rs7740302	5	RMND1	0	intronic	4.466	2b		1	5	1	1	0
AAM-EM	12:15359047:A:C	rs58368403	12	15359047	C	A	0.3479	1.29E-08	0.823687	rs11056439	26	RERG	0	intronic	0.388		7	5	15	1	0	0
FIM-EM	6:127443092:C:T	rs9482770	6	127443092	T	C	0.4105	1.30E-08	0.803842	rs10457487	4	RSPO3	0	intronic	2.335		5	1	14	1	0	0
AAM-EM	16:29931899:A:G	rs4407079	16	29931899	G	A	0.4881	1.30E-08	0.751444	rs12932403	32	KCTD13:CTI	0:00	ncRNA_exoni	13.7	NA		2	4	1	1	0
FIM-EO	3:127857144:C:T	rs76464926	3	127857144	T	C	0.0338	1.31E-08	0.815751	rs139071297	3	RUVBL1	0	intronic	0.296		6	5	15	1	0	0
FIM-EO	11:30361670:A:C	rs1222209	11	30361670	C	A	0.33	1.31E-08	0.758406	rs607987	9	ARL14EP	1895	intergenic	0.051		6	4	5	0	1	0
LMC-EM	11:30613995:A:G	rs11031141	11	30613995	A	G	0.3241	1.31E-08	1	rs11031141	7	RP5-1024C24	0	ncRNA_exoni	2.724		7	5	15	0	0	0
AAM-EM	9:11794575:A:G	rs10756284	9	11794575	G	A	0.4384	1.31E-08	0.971441	rs10756291	18	RP11-74C3.1	304084	intergenic	1.153		7	9	15	0	0	0
LMC-EM	11:30613013:C:G	rs10835689	11	30613013	G	C	0.3241	1.32E-08	1	rs11031141	7	RP5-1024C24	0	ncRNA_introı	2.1		5	5	15	0	0	0
AAM-EPP	6:74608903:G:T	rs1529992	6	74608903	G	T	0.336	1.32E-08	1	rs12209746	9	CD109	70862	intergenic	2.06		7	13	15	0	0	0
FIM-EPP	6:151764723:C:G	rs7748822	6	151764723	C	G	0.17	1.32E-08	0.657761	rs7740302	5	RMND1	0	intronic	2.771		5	4	5	1	0	0
AAM-EM	3:49869631:A:G	rs13085679	3	49869631	G	A	0.4742	1.32E-08	0.987666	rs2271960	8	TRAIP	0	intronic	7.673		7	4	5	1	1	0
LMC-EM	12:115109223:C:G	rs3741698	12	115109223	C	G	0.3032	1.32E-08	1	rs3741698	9	TBX3	0	UTR3	1.806	3a		1	13	1	0	0
FIM-EO	11:30340725:A:G	rs2786257	11	30340725	G	A	0.331	1.32E-08	0.754975	rs607987	9	ARL14EP	3872	intergenic	0.986	NA		5	14	0	0	0
AAM-EM	1:204160938:A:G	rs7524621	1	204160938	G	A	0.2535	1.33E-08	0.988914	rs2510	4	KISS1	0	intronic	1.191	2b		5	14	1	0	0
AAM-EM	1:204148168:C:T	rs12040580	1	204148168	T	C	0.2475	1.33E-08	0.956673	rs2510	4	RP11-203F10	3965	intergenic	6.129		4	5	14	0	0	0
FIM-EO	11:30314585:A:G	rs12793271	11	30314585	G	A	0.331	1.34E-08	0.754975	rs607987	9	ARL14EP	30012	intergenic	0.566		6	5	15	0	1	0
FIM-EO	11:30312519:A:C	rs35665615	11	30312519	C	A	0.331	1.34E-08	0.754975	rs607987	9	ARL14EP	32078	intergenic	0.678		7	8	15	0	1	0
FIM-EPP	6:151764648:A:G	rs59753385	6	151764648	A	G	0.17	1.34E-08	0.657761	rs7740302	5	RMND1	0	intronic	1.247		7	4	5	1	0	0
AAM-EM	3:128112307:C:T	rs1620440	3	128112307	T	C	0.1322	1.34E-08	0.880859	rs4277707	9	EEFSEC	0	intronic	4.23		4	4	15	1	1	0
FIM-EM	6:127487902:A:G	rs2154168	6	127487902	G	A	0.4354	1.34E-08	0.899314	rs10457487	4	RSPO3	0	intronic	0.27		6	4	15	1	0	0
AAM-EPP	6:74621193:A:G	rs2917884	6	74621193	A	G	0.336	1.34E-08	1	rs12209746	9	CD109	83152	intergenic	8.243		6	9	15	0	0	0
AAM-EPP	6:74621505:A:C	rs2917885	6	74621505	A	C	0.336	1.34E-08	1	rs12209746	9	CD109	83464	intergenic	2.366		5	9	15	0	0	0
AAM-EM	1:204147186:C:T	rs7513165	1	204147186	T	C	0.2535	1.35E-08	0.978062	rs2510	4	RP11-203F10	4947	intergenic	0.503		5	5	14	0	0	0
AAM-EPP	10:90154277:C:T	rs792236	10	90154277	C	T	0.4364	1.35E-08	0.767264	rs7921352	15	RNLS	0	intronic	0.061		6	5	15	1	0	0
AAM-EM	9:11796292:G:T	rs10809598	9	11796292	T	G	0.4394	1.35E-08	0.967358	rs10756291	18	RP11-74C3.1	302367	intergenic	1.115		6	9	15	0	0	0
AAM-EM	9:11796276:G:T	rs10960243	9	11796276	T	G	0.4394	1.35E-08	0.967358	rs10756291	18	RP11-74C3.1	302383	intergenic	0.166		6	9	15	0	0	0
AAM-EM	16:29924422:A:T	rs12444978	16	29924422	A	T	0.4861	1.36E-08	0.745305	rs12932403	32	ASPHD1:KC	0:00	intronic	2.96		6	4	5	1	1	0
AAM-EM	6:151876413:C:T	rs6557149	6	151876413	C	T	0.4056	1.36E-08	0.818755	rs12210735	14	CCDC170	0	intronic	0.26		7	5	15	1	0	0
FIM-EO	11:30319432:C:T	rs61626579	11	30319432	C	T	0.331	1.36E-08	0.754975	rs607987	9	ARL14EP	25165	intergenic	12.46		7	9	15	0	1	0
FIM-EO	6:127439297:G:T	rs2800709	6	127439297	T	G	0.4801	1.37E-08	0.924227	rs2489623	4	RSPO3	451	upstream	0.179	2b		1	10	1	0	0
FIM-EO	6:152567983:A:G	rs75730028	6	152567983	A	G	0.09046	1.37E-08	0.988556	rs17082381	6	SYNE1	0	intronic	13.33	2b		1	5	1	0	0
AAM-EM	3:49960388:C:T	rs62262093	3	49960388	T	C	0.497	1.37E-08	0.731635	rs34034116	8	MON1A	0	intronic	4.003		7	4	5	1	1	0
FIM-EO	11:30328026:C:T	rs55715542	11	30328026	C	T	0.331	1.37E-08	0.754975	rs607987	9	ARL14EP	16571	intergenic	1.318		6	14	15	0	1	0
FIM-EO	11:30327162:A:G	rs12361937	11	30327162	G	A	0.33	1.37E-08	0.765428	rs607987	9	ARL14EP	17435	intergenic	4.667		7	7	15	0	1	0
FIM-EPP	3:127815320:A:G	rs940060	3	127815320	A	G	0.04871	1.38E-08	1	rs940060	4	RUVBL1	0	intronic	5.444		5	4	4	1	1	0
FIM-EM	6:153503386:C:T	rs9478395	6	153503386	C	T	0.2455	1.38E-08	0.978943	rs9322410	6	RNA5SP224	22905	intergenic	4.185		5	13	15	0	0	0
FIM-EPP	6:151765356:G:T	rs3800277	6	151765356	G	T	0.17	1.38E-08	0.657761	rs7740302	5	RMND1	0	intronic	6.87		5	4	5	1	0	0
FIM-EO	11:30327981:C:T	rs59475325	11	30327981	C	T	0.331	1.38E-08	0.754975	rs607987	9	ARL14EP	16616	intergenic	1.288		6	14	15	0	1	0
FIM-EPP	6:151765296:C:T	rs3823311	6	151765296	T	C	0.17	1.38E-08	0.657761	rs7740302	5	RMND1	0	intronic	2.969		5	4	5	1	0	0
FIM-EM	6:127509139:C:G	rs7744964	6	127509139	C	G	0.4364	1.39E-08	0.902985	rs10457487	4	RSPO3	0	intronic	2.488		5	5	15	1	0	0
AAM-EM	3:49819102:C:G	rs11130221	3	49819102	C	G	0.4732	1.39E-08	0.991767	rs2271960	8	IP6K1	0	intronic	2.429		4	1	6	1	1	0
AAM-EM	12:15372062:G:T	rs12320285	12	15372062	G	T	0.3449	1.39E-08	0.833616	rs11056439	26	RERG	0	intronic	1.583		5	1	14	1	0	0
FIM-EO	3:128117573:A:G	rs1702153	3	128117573	G	A	0.1282	1.39E-08	0.855477	rs1702118	3	EEFSEC	0	intronic	0.65		5	4	15	1	1	0
AAM-EM	9:11794539:G:T	rs10809594	9	11794539	T	G	0.4384	1.39E-08	0.971441	rs10756291	18	RP11-74C3.1	304120	intergenic	5.415		6	9	15	0	0	0
FIM-EO	11:30312743:C:T	rs12805098	11	30312743	T	C	0.331	1.40E-08	0.754975	rs607987	9	ARL14EP	31854	intergenic	2.239		6	5	15	0	1	0
FIM-EO	11:30333224:C:T	rs1222204	11	30333224	T	C	0.331	1.40E-08	0.754975	rs607987	9	ARL14EP	11373	intergenic	0.873	NA		5	15	0	1	0
FIM-EO	11:30336613:A:G	rs1222202	11	30336613	G	A	0.33	1.41E-08	0.765428	rs607987	9	ARL14EP	7984	intergenic	2.798	NA		5	15	0	0	0
FIM-EO	11:30336334:A:G	rs1222203	11	30336334	A	G	0.331	1.41E-08	0.754975	rs607987	9	ARL14EP	8263	intergenic	11.51	NA		5	15	0	1	0
FIM-EO	11:30330963:A:G	rs7125524	11	30330963	G	A	0.331	1.41E-08	0.754975	rs607987	9	ARL14EP	13634	intergenic	1.34		7	9	15	0	1	0
AAM-EM	3:128110390:C:T	rs1702131	3	128110390	T	C	0.1322	1.41E-08	0.880859	rs4277707	9	EEFSEC	0	intronic	2.077		5	4	15	1	1	0
AAM-EM	9:11802674:A:G	rs36011602	9	11802674	A	G	0.4394	1.41E-08	0.975433	rs10756291	18	RP11-74C3.1	295985	intergenic	2.608		7	9	15	0	0	0
AAM-EM	16:29934819:C:T	rs11150574	16	29934819	C	T	0.4881	1.41E-08	0.751444	rs12932403	32	KCTD13	0	intronic	6.146		7	4	5	1	1	0
AAM-EM	6:151876815:A:G	rs7753676	6	151876815	G	A	0.4056	1.41E-08	0.818755	rs12210735	14	CCDC170	0	intronic	6.449		7	5	15	1	0	0
FIM-EO	11:30318720:C:G	rs11031041	11	30318720	G	C	0.331	1.42E-08	0.754975	rs607987	9	ARL14EP	25877	intergenic	0.056		7	9	15	0	1	0
AAM-EM	11:86714197:C:G	rs4944654	11	86714197	C	G	0.2276	1.42E-08	0.961443	rs6592324	24	RP11-736K20	2195	intergenic	7.873		4	5	15	0	0	0
AAM-EM	11:101583073:A:G	rs12282604	11	101583073	A	G	0.3698	1.43E-08	0.825795	rs10791519	25	TRPC6	0	intergenic	5.842		7	5	15	1	0	0
FIM-EO	8:25320594:C:T	rs12675625	8	25320594	T	C	0.2485	1.43E-08	0.760387	rs6185	8	CDCA2	0	intronic	9.281		7	4	15	1	1	0
AAM-EM	16:29950829:C:T	rs12716975	16	29950829	C	T	0.4821	1.44E-08	0.731265	rs12932403	32	TMEM219	1376	intergenic	13.8		7	5	15	1	1	0
AAM-EM	12:15430956:A:C	rs2417432	12	15430956	A	C	0.3181	1.44E-08	0.960903	rs11056439	26	RERG	0	intronic	0.271		6	5	15	1	0	0
AAM-EM	2:25161386:C:T	rs4430895	2	25161386	C	T	0.4463	1.44E-08	0.89044	rs2384054	6	DNAJC27	5118	intergenic	0.161		7	5	15	1	1	0
FIM-EO	3:128111201:G:T	rs1702134	3	128111201	G	T	0.1322	1.44E-08	0.869701	rs1702118	3	EEFSEC	0	intronic	0.77		5	4	15	1	1	0
AAM-EPP	3:127782427:C:G	rs9864797	3	127782427	G	C	0.1501	1.44E-08	0.824191	rs2811473	8	SEC61A1	0	intronic	1.249		7	4	4	1	1	0
AAM-EM	16:29932064:C:T	rs4609871	16	29932064	C	T	0.4881	1.45E-08	0.751444	rs12932403	32	KCTD13:CTI	0:00	ncRNA_exoni	3.773	NA		2	4	1	1	0
AAM-EM	3:49951316:C:T	rs9848497	3	49951316	T	C	0.497	1.45E-08	0.731635	rs34034116	8	CTD-2330K9	0:00	intronic	3.59		6	4	5	1	1	0
AAM-EM	12:115206320:A:G	rs1566643	12	115206320	A	G	0.4185	1.46E-08	1	rs1566643	30	RP4-601P9.1	158	upstream	19.02	2b		5	15	0	0	0
AAM-EM	3:49813169:A:C	rs57648519	3	49813169	C	A	0.4732	1.46E-08	0.991767	rs2271960	8	IP6K1	0	intronic	5.034		5	4	5	1	1	0
AAM-EM	12:15429864:G:T	rs11056414	12	15429864	T	G	0.3181	1.46E-08	0.960903	rs11056439	26	RERG	0	intronic	4.525		6	5	15	1	0	0
AAM-EM	9:11801690:C:G	rs10738250	9	11801690	C	G	0.4414	1.46E-08	0.975425	rs10756291	18	RP11-74C3.1	296969	intergenic	0.626		6	9	15	0	0	0
LMC-DE	4:55992105:C:G	rs28695311	4	55992105	G	C	0.4831	1.47E-08	0.83739	rs7667298	1	KDR	348	upstream	10.74		4	1	10	1	0	0
AAM-EM	9:11774040:A:C	rs10960205	9	11774040	A	C	0.4344	1.47E-08	0.907495	rs10756291	18	RP11-74C3.1	324619	intergenic	1.303		7	9	15	0	0	0
FIM-EO	3:127988219:C:T	rs4470541	3	127988219	C	T	0.03181	1.47E-08	0.809785	rs139071297	3	EEFSEC	0	intronic	0.272		5	4	5	1	0	0
FIM-EM	6:127489818:C:T	rs7763784	6	127489818	C	T	0.4364	1.48E-08	0.895542	rs10457487	4	RSPO3	0	intronic	4.013		7	5	15	1	0	0
AAM-EM	3:49949834:A:T	rs7634084	3	49949834	A	T	0.496	1.48E-08	0.734706	rs34034116	8	CTD-2330K9	0:00	intronic	0.628		7	4	4	1	1	0
FIM-EO	3:128112307:C:T	rs1620440	3	128112307	T	C	0.1322	1.48E-08	0.869701	rs1702118	3	EEFSEC	0	intronic	4.23		4	4	15	1	1	0
AAM-EM	9:11790536:A:C	rs7867311	9	11790536	A	C	0.4384	1.48E-08	0.963294	rs10756291	18	RP11-74C3.1	308123	intergenic	1.148		7	9	15	0	0	0
FIM-EO	1:169514006:A:G	rs1018827	1	169514006	A	G	0.06262	1.48E-08	0.849293	rs6427194	1	F5	0	intronic	0.707		6	4	15	1	1	0
AAM-EPP	3:127721468:A:G	rs11924834	3	127721468	G	A	0.1571	1.49E-08	0.768022	rs2811473	8	KBTBD12	14953	intergenic	0.41		6	5	14	0	0	0
AAM-EM	19:18812785:A:G	rs8112818	19	18812785	A	G	0.4165	1.49E-08	0.902705	rs2003476	33	CRTC1	0	intronic	2.76		7	5	15	1	0	0
FIM-EO	3:128110390:C:T	rs1702131	3	128110390	T	C	0.1322	1.50E-08	0.869701	rs1702118	3	EEFSEC	0	intronic	2.077		5	4	15	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	6:74610844:G:T	rs3005517	6	74610844	T	G	0.336	1.50E-08	1	rs12209746	9	CD109	72803	intergenic		0.1	7	8	15	0	0
LMC-DE	4:55992366:A:G	rs2071559	4	55992366	A	G	0.4851	1.50E-08	0.830381	rs7667298	1	KDR	609	upstream		0.529	NA	1	10	1	0
AAM-EPP	3:49748833:C:T	rs4855862	3	49748833	C	T	0.4761	1.51E-08	1	rs4855867	7	RNF123	0	intronic		5.655	7	2	5	1	1
AAM-EM	6:151893073:G:T	rs4391273	6	151893073	T	G	0.4076	1.51E-08	0.826601	rs12210735	14	CCDC170	0	intronic		0.233	7	5	15	1	0
AAM-EPP	3:127715911:A:T	rs6795314	3	127715911	T	A	0.1571	1.51E-08	0.768022	rs2811473	8	KBTBD12	9396	intergenic		0.025	5	5	15	0	1
AAM-EM	7:121990361:C:T	rs79565496	7	121990361	T	C	0.1382	1.52E-08	1	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı		4.006	6	5	15	1	0
FIM-EO	8:25310042:A:C	rs11995050	8	25310042	A	C	0.2237	1.53E-08	1	rs11995050	8	KCTD9	0	intronic		5.002	7	4	5	1	0
AAM-EM	4:130851720:A:G	rs13149087	4	130851720	G	A	0.2187	1.53E-08	1	rs13149087	11	RP11-422J15.	0	ncRNA_introı		3.772	7	5	15	0	0
AAM-EM	3:49813013:C:T	rs34451146	3	49813013	C	T	0.4732	1.53E-08	0.991767	rs2271960	8	IP6K1:RP13-3	0:00	ncRNA_exoni		9.719	5	4	5	1	1
AAM-EM	16:29958216:A:G	rs8054556	16	29958216	G	A	0.4523	1.53E-08	0.84395	rs3814883	32	TMEM219	0	intronic		2.762	6	5	15	1	1
AAM-EM	12:50289667:A:G	rs73116339	12	50289667	G	A	0.3072	1.54E-08	0.740866	rs11169199	28	FAIM2	0	intronic		2.678	2c	4	14	1	0
AAM-EM	2:25161265:G:T	rs4459693	2	25161265	G	T	0.4473	1.54E-08	0.894302	rs2384054	6	DNAJC27	5239	intergenic		0.98	6	5	15	1	1
AAM-EPP	3:127826618:C:T	rs11924142	3	127826618	C	T	0.1521	1.54E-08	0.811976	rs2811473	8	RUVBL1	0	intronic		0.363	7	2	5	1	1
AAM-EM	3:49930215:C:T	rs6795703	3	49930215	C	T	0.496	1.54E-08	0.734706	rs34034116	8	MST1R	0	intronic		1.062	7	4	15	1	1
AAM-EM	3:49809063:G:T	rs6446295	3	49809063	G	T	0.4732	1.55E-08	0.991767	rs2271960	8	IP6K1	0	intronic		4.45	4	4	5	1	1
AAM-EPP	3:49746819:C:T	rs12381242	3	49746819	C	T	0.4761	1.55E-08	1	rs4855867	7	RNF123	0	intronic		0.874	6	4	5	1	1
LMC-ERSV	4:55991042:G:T	rs12502008	4	55991042	G	T	0.3688	1.55E-08	1	rs12502008	1	KDR	0	intronic		7.56	4	1	10	1	1
FIM-EM	3:128095278:G:T	rs1702118	3	128095278	T	G	0.1471	1.56E-08	0.900002	rs2999033	3	EEFSEC	0	intronic		1.34	NA	2	5	1	1
AAM-EPP	10:90160392:C:T	rs792230	10	90160392	C	T	0.4364	1.57E-08	0.767264	rs7921352	15	RNLS	0	intronic		8.087	5	5	15	1	0
AAM-EM	3:49936102:C:T	rs2230590	3	49936102	T	C	0.497	1.57E-08	0.731635	rs34034116	8	MST1R	0	exonic		1.469	NA	3	15	1	1
AAM-EM	2:25159780:A:G	rs10865320	2	25159780	A	G	0.4473	1.57E-08	0.894302	rs2384054	6	DNAJC27	6724	intergenic		1.602	6	5	15	1	1
AAM-EM	12:15427487:G:T	rs73055272	12	15427487	G	T	0.3191	1.57E-08	0.965569	rs11056439	26	RERG	0	intronic		1.377	2b	2	15	1	0
AAM-EPP	3:127716262:A:G	rs4857832	3	127716262	G	A	0.1571	1.57E-08	0.768022	rs2811473	8	KBTBD12	9747	intergenic		0.006	5	5	15	0	1
FIM-EO	11:30363727:A:G	rs1765141	11	30363727	A	G	0.331	1.57E-08	0.748025	rs607987	9	ARL14EP	3952	intergenic		5.57	NA	5	5	0	1
AAM-EM	12:15512137:A:T	rs11056448	12	15512137	A	T	0.3091	1.57E-08	0.991117	rs11056439	26	PTPRO	0	intronic		0.434	6	5	15	1	0
AAM-EM	16:29881482:A:G	rs60447887	16	29881482	A	G	0.3042	1.58E-08	0.694116	rs7189550	32	SEZ6L2	997	downstream		1.514	6	5	15	1	1
AAM-EM	3:49924940:C:T	rs1062633	3	49924940	T	C	0.498	1.58E-08	0.729686	rs34034116	8	MST1R	0	exonic		1.937	NA	4	15	1	1
FIM-EO	3:128109941:C:T	rs3887841	3	128109941	T	C	0.2207	1.58E-08	1	rs3887841	3	EEFSEC	0	intronic		0.929	NA	4	15	1	1
LMC-EM	2:49291991:A:G	rs11686941	2	49291991	G	A	0.1561	1.58E-08	0.71389	rs4971681	2	FSHR	0	intronic		2.877	7	9	15	1	0
FIM-EO	2:11734315:C:T	rs9798272	2	11734315	T	C	0.4811	1.59E-08	0.672973	rs7578132	2	GREB1	0	intronic		3.165	5	4	15	1	0
AAM-EM	19:18812024:A:G	rs4808845	19	18812024	A	G	0.4175	1.59E-08	0.898878	rs2003476	33	CRTC1	0	intronic		7.497	2a	1	2	1	0
FIM-EO	2:11728381:C:T	rs6746291	2	11728381	T	C	0.4751	1.60E-08	0.69691	rs7578132	2	GREB1	0	intronic		3.79		5	4	15	1	0
LMC-EM	1:199821515:A:G	rs9782959	1	199821515	G	A	0.3847	1.60E-08	0.859372	rs6670899	1	RP11-567B20	24590	intergenic		1.923		6	5	15	0	0
AAM-EM	9:11801667:C:T	rs1601612	9	11801667	C	T	0.4016	1.60E-08	0.991984	rs10809604	18	RP11-74C3.1	296992	intergenic		5.416		6	9	15	0	0
AAM-EM	3:49821625:C:T	rs13063621	3	49821625	T	C	0.4732	1.60E-08	0.991767	rs2271960	8	IP6K1	0	intronic		0.591		7	4	5	1	1
FIM-EO	11:30344761:A:G	rs1222218	11	30344761	A	G	0.332	1.61E-08	0.757659	rs607987	9	ARL14EP	0	intronic		9.429	NA	1	1	1	1
AAM-EPP	3:49744890:A:G	rs11716575	3	49744890	A	G	0.4761	1.61E-08	1	rs4855867	7	RNF123	0	intronic		3.781		5	4	5	1	1
LMC-EM	11:30618816:A:C	rs1374612	11	30618816	A	C	0.3241	1.61E-08	1	rs11031141	7	RP5-1024C24	0	ncRNA_exoni		6.91	NA	5	15	0	0
FIM-EO	11:30344799:A:G	rs1222217	11	30344799	A	G	0.331	1.61E-08	0.754975	rs607987	9	ARL14EP	0	intronic		8.333	NA	1	1	1	1
FIM-EO	3:128064118:A:C	rs4857879	3	128064118	A	C	0.166	1.61E-08	0.835336	rs58170120	3	EEFSEC	0	intronic		8.323		5	4	5	1	1
AAM-EM	2:25161236:A:G	rs4343432	2	25161236	A	G	0.4473	1.62E-08	0.894302	rs2384054	6	DNAJC27	5268	intergenic		1.843		7	5	15	1	1
AAM-EM	16:29939293:C:T	rs4424923	16	29939293	T	C	0.4781	1.62E-08	0.759057	rs12932403	32	CTD-2574D22	0	ncRNA_introı		0.543	NA	1	15	1	1
AAM-EM	12:15503405:A:G	rs56195914	12	15503405	A	G	0.3091	1.62E-08	0.991117	rs11056439	26	PTPRO	0	intronic		8.051		6	5	15	1	0
FIM-EO	11:30343925:A:C	rs1222220	11	30343925	C	A	0.334	1.62E-08	0.742185	rs607987	9	ARL14EP	672	upstream		5.379	NA	1	14	1	1
AAM-EM	16:29938820:A:G	rs4420550	16	29938820	A	G	0.4791	1.63E-08	0.763001	rs12932403	32	CTD-2574D22	0	ncRNA_exoni		11.18	NA	1	15	1	1
LMC-EM	1:199822101:C:T	rs4915185	1	199822101	T	C	0.3847	1.64E-08	0.859372	rs6670899	1	RP11-567B20	24004	intergenic		1.021		7	5	15	0	0
AAM-EM	3:49808374:A:G	rs7431106	3	49808374	G	A	0.4732	1.64E-08	0.991767	rs2271960	8	IP6K1	0	intronic		6.852		5	4	5	1	1
AAM-EM	9:11776151:C:T	rs12378615	9	11776151	T	C	0.4334	1.65E-08	0.911719	rs10756291	18	RP11-74C3.1	322508	intergenic		2.943		6	7	15	0	0
FIM-EPP	1:22436446:C:G	rs7412010	1	22436446	G	C	0.1481	1.65E-08	0.817736	rs10917130	1	WNT4	7351	intergenic		2.849		7	4	5	0	0
AAM-EPP	3:127721543:A:T	rs11917022	3	127721543	A	T	0.1571	1.66E-08	0.768022	rs2811473	8	KBTBD12	15028	intergenic		3.449		7	5	14	0	1
AAM-EPP	3:49745188:C:T	rs11709680	3	49745188	C	T	0.4761	1.66E-08	1	rs4855867	7	RNF123	0	intronic		2.393		5	4	5	1	1
FIM-EO	8:25321845:A:T	rs35698191	8	25321845	T	A	0.2485	1.66E-08	0.760387	rs6185	8	CDCA2	0	intronic		4.36		7	4	15	1	1
FIM-EM	3:127991149:A:C	rs2811413	3	127991149	C	A	0.3171	1.67E-08	0.780017	rs2955118	3	EEFSEC	0	intronic		0.523		5	4	5	1	1
AAM-EM	16:29954955:A:G	rs3924855	16	29954955	A	G	0.4821	1.67E-08	0.729307	rs12932403	32	TMEM219	0	intronic		5.989	NA	2	15	1	1
AAM-EPP	3:127720727:C:T	rs1469660	3	127720727	T	C	0.1571	1.67E-08	0.768022	rs2811473	8	KBTBD12	14212	intergenic		4.507	NA	5	14	0	1
AAM-EPP	3:127721375:C:T	rs28520291	3	127721375	T	C	0.1571	1.68E-08	0.768022	rs2811473	8	KBTBD12	14860	intergenic		0.063		7	5	14	0	1
AAM-EM	9:11801703:C:T	rs1601613	9	11801703	T	C	0.4016	1.68E-08	0.991984	rs10809604	18	RP11-74C3.1	296956	intergenic		2.526		7	9	15	0	0
AAM-EM	3:49807085:G:T	rs9859153	3	49807085	G	T	0.4732	1.68E-08	0.991767	rs2271960	8	IP6K1	0	intronic		1.887		5	4	5	1	1
AAM-EPP	6:151728714:C:T	rs6557135	6	151728714	T	C	0.336	1.68E-08	0.645076	rs9479041	11	RMND1	0	intronic		4.175		7	4	5	1	1
AAM-EPP	3:49878078:C:T	rs2271960	3	49878078	T	C	0.4712	1.68E-08	0.979514	rs4855867	7	TRAIP	0	intronic		1.828	1f	4	5	1	1
AAM-EPP	3:127721603:C:G	rs11924866	3	127721603	G	C	0.1571	1.68E-08	0.768022	rs2811473	8	KBTBD12	15088	intergenic		10.25		6	5	14	0	1
AAM-EPP	1:204161591:C:T	rs2510	1	204161591	T	C	0.2555	1.68E-08	1	rs2510	3	KISS1	0	intronic		3.666		5	5	14	1	0
AAM-EM	3:128115381:A:G	rs1735527	3	128115381	A	G	0.1352	1.69E-08	0.857932	rs4277707	9	EEFSEC	0	intronic		0.75	NA	4	15	1	1
AAM-EM	12:15422843:A:T	rs9788092	12	15422843	A	T	0.3171	1.69E-08	0.964846	rs11056439	26	RERG	0	intronic		1.425		6	5	15	1	0
AAM-EPP	6:74609732:A:G	rs1437569	6	74609732	G	A	0.336	1.70E-08	1	rs12209746	9	CD109	71691	intergenic		6.272		5	14	15	0	0
AAM-EPP	3:127719658:A:G	rs67986238	3	127719658	A	G	0.1571	1.71E-08	0.768022	rs2811473	8	KBTBD12	13143	intergenic		5.652		6	5	14	0	1
FIM-EO	6:127476717:C:T	rs2489629	6	127476717	C	T	0.4881	1.71E-08	0.924537	rs2489623	4	RSPO3	0	intronic		0.578		5	4	15	1	0
AAM-EPP	6:74613060:C:T	rs4540228	6	74613060	C	T	0.335	1.71E-08	0.995571	rs12209746	9	CD109	75019	intergenic		0.095		5	8	9	0	0
AAM-EM	12:15424108:A:G	rs12315037	12	15424108	G	A	0.3161	1.71E-08	0.969165	rs11056439	26	RERG	0	intronic		1.02		6	5	15	1	0
AAM-EM	12:15505731:C:T	rs16910770	12	15505731	C	T	0.3101	1.72E-08	0.986637	rs11056439	26	PTPRO	0	intronic		0.867		4	5	15	1	0
AAM-EPP	6:151759630:C:T	rs9322321	6	151759630	T	C	0.2843	1.72E-08	1	rs9322321	11	RMND1	0	intronic		3.229		5	4	5	1	1
AAM-EM	12:115094260:A:G	rs11067228	12	115094260	A	G	0.4414	1.72E-08	0.623894	rs8853	30	Y_RNA	1493	intergenic		22.2	2b	2	14	0	0
LMC-DE	8:25389631:A:G	rs10098571	8	25389631	G	A	0.2584	1.73E-08	0.649198	rs13261573	3	CDCA2	24194	intergenic		0.303		6	14	15	0	1
AAM-EM	3:128117573:A:G	rs1702153	3	128117573	G	A	0.1282	1.73E-08	0.881522	rs4277707	9	EEFSEC	0	intronic		0.65		5	4	15	1	1
AAM-EPP	6:74611047:A:G	rs3005519	6	74611047	G	A	0.336	1.74E-08	1	rs12209746	9	CD109	73006	intergenic		7.69		5	8	9	0	0
FIM-EM	3:128115381:A:G	rs1735527	3	128115381	A	G	0.1352	1.74E-08	0.97486	rs2999033	3	EEFSEC	0	intronic		0.75	NA	4	15	1	1
FIM-EO	6:127486617:C:T	rs2489630	6	127486617	C	T	0.4891	1.74E-08	0.912426	rs2489623	4	RSPO3	0	intronic		3.127		6	4	15	1	0
AAM-EPP	3:49745677:A:G	rs4855841	3	49745677	G	A	0.4761	1.74E-08	1	rs4855867	7	RNF123	0	intronic		1.66	NA	4	5	1	1
AAM-EM	6:152513757:C:T	rs2635451	6	152513757	T	C	0.3439	1.75E-08	1	rs2635451	15	SYNE1	0	intronic		2.359	NA	4	5	1	0
AAM-EPP	6:74605806:A:G	rs3005511	6	74605806	A	G	0.336	1.75E-08	1	rs12209746	9	CD109	67765	intergenic		7.078		5	9	15	0	0
AAM-EPP	1:204161490:C:T	rs4951316	1	204161490	T	C	0.2555	1.75E-08	1	rs2510	3	KISS1	0	intronic		2.752		5	5	14	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrS	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	3:49799475:A:C	rs9882639	3	49799475	A	C	0.4732	1.76E-08	0.991767	rs2271960	8	IP6K1	0	intronic	5.262		5	4	5	1	1	0
AAM-EPP	3:127721508:A:G	rs11924838	3	127721508	G	A	0.1571	1.76E-08	0.768022	rs2811473	8	KBTBD12	14993	intergenic	0.003		7	5	14	0	0	0
AAM-EPP	3:127720740:C:T	rs1469659	3	127720740	C	T	0.1571	1.76E-08	0.768022	rs2811473	8	KBTBD12	14225	intergenic	3.687	NA		5	14	0	1	0
AAM-EM	12:15512617:C:T	rs11056449	12	15512617	C	T	0.3101	1.76E-08	0.986637	rs11056439	26	PTPRO	0	intronic	2.094		6	5	15	1	0	0
FIM-EO	11:30315071:G:T	rs61886116	11	30315071	G	T	0.328	1.76E-08	0.766263	rs607987	9	ARL14EP	29526	intergenic	1.759		7	5	15	0	1	0
AAM-EPP	6:74612582:C:G	rs2917871	6	74612582	G	C	0.336	1.76E-08	1	rs12209746	9	CD109	74541	intergenic	0.324		4	9	9	0	0	0
FIM-EM	3:128095767:A:G	rs2977565	3	128095767	G	A	0.2167	1.76E-08	0.685603	rs2955118	3	EEFSEC	0	intronic	8.921	NA		2	5	1	1	0
AAM-EM	3:49800272:C:T	rs60205400	3	49800272	C	T	0.4732	1.76E-08	0.991767	rs2271960	8	IP6K1	0	intronic	2.525		7	4	5	1	1	0
AAM-EPP	6:74607842:A:C	rs1370438	6	74607842	A	C	0.336	1.76E-08	1	rs12209746	9	CD109	69801	intergenic	0.307		7	14	15	0	0	0
FIM-EM	3:128095652:C:T	rs3021461	3	128095652	T	C	0.2167	1.77E-08	0.685603	rs2955118	3	EEFSEC	0	intronic	3.059	NA		2	5	1	1	0
AAM-EM	3:49789664:A:T	rs7429353	3	49789664	T	A	0.4742	1.77E-08	0.987666	rs2271960	8	IP6K1	0	intronic	0.183		6	4	5	1	1	0
FIM-EO	11:30365566:C:T	rs1228479	11	30365566	C	T	0.334	1.77E-08	0.735281	rs607987	9	ARL14EP	5791	intergenic	8.317	NA		2	15	0	1	0
AAM-EPP	3:128109916:C:T	rs741925	3	128109916	C	T	0.1312	1.78E-08	0.888634	rs4277707	8	EEFSEC	0	intronic	1.995		5	4	15	1	1	0
AAM-EPP	3:127721859:A:G	rs10433341	3	127721859	G	A	0.1571	1.78E-08	0.768022	rs2811473	8	KBTBD12	15344	intergenic	7.078		5	5	14	0	1	0
AAM-EPP	1:204161026:A:G	rs7538038	1	204161026	A	G	0.2545	1.78E-08	0.994454	rs2510	3	KISS1	0	intronic	5.15		4	5	14	1	0	0
AAM-EPP	3:127721041:G:T	rs6781473	3	127721041	G	T	0.1571	1.78E-08	0.768022	rs2811473	8	KBTBD12	14526	intergenic	1.103		5	5	14	0	1	0
AAM-EPP	6:74610360:A:G	rs3005516	6	74610360	A	G	0.336	1.78E-08	1	rs12209746	9	CD109	72319	intergenic	4.146		5	9	15	0	0	0
AAM-EM	3:49858142:A:G	rs10865958	3	49858142	A	G	0.4732	1.79E-08	0.991767	rs2271960	8	AC139451.1	1655	intergenic	2.873		6	5	15	1	1	0
AAM-EM	9:11755491:A:G	rs7868878	9	11755491	G	A	0.2763	1.79E-08	0.801331	rs9969696	18	RP11-74C3.1	343168	intergenic	0.833		6	9	15	0	0	0
FIM-EM	3:128063879:C:G	rs139071297	3	128063879	C	G	0.03181	1.79E-08	1	rs139071297	3	EEFSEC	0	intronic	0.17		4	4	5	1	0	0
AAM-EM	3:49924424:A:G	rs11713193	3	49924424	G	A	0.497	1.79E-08	0.732745	rs34034116	8	MST1R	10	downstream	7.191		5	4	15	1	1	0
AAM-EPP	3:127723197:A:G	rs7611426	3	127723197	A	G	0.1571	1.79E-08	0.768022	rs2811473	8	KBTBD12	16682	intergenic	4.533		5	5	14	0	1	0
AAM-EM	12:15506641:C:T	rs1304738	12	15506641	T	C	0.3101	1.80E-08	0.986637	rs11056439	26	PTPRO	0	intronic	3.991		5	5	15	1	0	0
LMC-EM	2:49290520:G:T	rs73931507	2	49290520	G	T	0.1561	1.80E-08	0.71389	rs4971681	2	FSHR	0	intronic	0.367		5	7	15	1	0	0
AAM-EM	2:653623:C:G	rs10188118	2	653623	C	G	0.3101	1.81E-08	1	rs10188118	5	TMEM18	13711	intergenic	1.138		5	5	14	0	0	0
AAM-EPP	3:49881134:A:T	rs2246832	3	49881134	A	T	0.4732	1.82E-08	0.987655	rs4855867	7	TRAIP	0	intronic	0.717		6	4	5	1	1	0
AAM-EM	12:15383037:C:T	rs17347323	12	15383037	C	T	0.335	1.82E-08	0.876886	rs11056439	26	RERG	0	intronic	0.41		7	1	14	1	0	0
FIM-EO	2:11731846:C:T	rs2884374	2	11731846	T	C	0.4751	1.82E-08	0.69691	rs7578132	2	GREB1	0	UTR3	5.624		4	4	15	1	0	0
FIM-EO	2:11727507:A:G	rs13394619	2	11727507	G	A	0.4722	1.82E-08	0.708566	rs7578132	2	GREB1	0	splicing	1.243		7	4	15	1	0	0
FIM-EO	2:11735115:C:T	rs12473442	2	11735115	T	C	0.4781	1.82E-08	0.677216	rs7578132	2	GREB1	0	intronic	2.099		6	4	15	1	0	0
AAM-EM	6:151890789:C:T	rs9479072	6	151890789	C	T	0.4085	1.82E-08	0.830886	rs12210735	14	CCDC170	0	intronic	6.037		5	5	15	1	0	0
AAM-EM	3:128122039:C:T	rs6780368	3	128122039	C	T	0.1292	1.82E-08	0.858083	rs4277707	9	EEFSEC	0	intronic	7.906		5	4	15	1	1	0
AAM-EPP	6:74606325:G:T	rs1437568	6	74606325	T	G	0.336	1.83E-08	1	rs12209746	9	CD109	68284	intergenic	4.168		6	9	15	0	0	0
FIM-EM	6:153502539:A:C	rs9479539	6	153502539	C	A	0.2475	1.84E-08	0.97918	rs9322410	6	RNA5SP224	22058	intergenic	0.473		5	13	15	0	0	0
AAM-EM	19:18811966:A:G	rs4808844	19	18811966	A	G	0.4175	1.84E-08	0.898878	rs2003476	33	CRTC1	0	intronic	6.317		4	1	2	1	0	0
AAM-EPP	6:74611632:A:G	rs1595344	6	74611632	A	G	0.335	1.85E-08	0.995571	rs12209746	9	CD109	73591	intergenic	3.105		6	9	9	0	0	0
AAM-EPP	6:74613447:A:T	rs2118333	6	74613447	T	A	0.335	1.85E-08	0.995571	rs12209746	9	CD109	75406	intergenic	1.854		7	5	15	0	0	0
FIM-EO	6:127490599:A:C	rs2489631	6	127490599	C	A	0.4871	1.85E-08	0.912949	rs2489623	4	RSPO3	0	intronic	2.133		7	5	15	1	0	0
AAM-EPP	3:127715133:A:G	rs1549874	3	127715133	A	G	0.1571	1.85E-08	0.768022	rs2811473	8	KBTBD12	8618	intergenic	5.844	NA		5	15	0	1	0
AAM-EM	2:25159172:C:T	rs6728219	2	25159172	T	C	0.4473	1.87E-08	0.894302	rs2384054	6	DNAJC27	7332	intergenic	0.035		6	5	15	1	1	0
AAM-EM	3:49762662:G:T	rs7634902	3	49762662	G	T	0.4742	1.87E-08	0.987666	rs2271960	8	IP6K1	0	UTR3	4.68		5	2	5	1	1	0
FIM-EO	6:152570274:A:G	rs17215781	6	152570274	A	G	0.08847	1.87E-08	0.965829	rs17082381	6	SYNE1	0	intronic	7.716		5	2	5	1	0	0
AAM-EPP	3:127721435:C:T	rs28636854	3	127721435	C	T	0.1571	1.87E-08	0.768022	rs2811473	8	KBTBD12	14920	intergenic	0.369		7	5	14	0	1	0
LMC-EM	11:30621981:A:G	rs400581	11	30621981	A	G	0.327	1.88E-08	0.965764	rs11031141	7	RP5-1024C24	0	ncRNA_intron	3.207	NA		5	15	0	0	0
AAM-EPP	10:90195149:C:T	rs1935581	10	90195149	C	T	0.3946	1.88E-08	1	rs1935581	15	RNLS	0	intronic	0.496	NA		5	15	1	1	0
AAM-EPP	3:127723017:C:T	rs7645109	3	127723017	T	C	0.1571	1.89E-08	0.768022	rs2811473	8	KBTBD12	16502	intergenic	0.936		6	5	14	0	1	0
AAM-EM	12:15501428:C:G	rs11056441	12	15501428	G	C	0.3101	1.89E-08	0.986637	rs11056439	26	RERG:PTPR(	0:00	UTR5	3.18		5	1	15	1	0	0
AAM-EM	3:49939587:A:G	rs3733135	3	49939587	G	A	0.497	1.90E-08	0.731635	rs34034116	8	MST1R:CTD-	0:00	ncRNA_intron	8.415		4	1	15	1	1	0
AAM-EM	9:11782931:A:G	rs9918981	9	11782931	G	A	0.4294	1.90E-08	0.928243	rs10756291	18	RP11-74C3.1	315728	intergenic	0.866		6	9	15	0	0	0
AAM-EM	3:49783211:A:C	rs9853458	3	49783211	A	C	0.4742	1.90E-08	0.987666	rs2271960	8	IP6K1	0	intronic	0.776		7	4	5	1	1	0
FIM-EO	2:11735135:A:T	rs11686429	2	11735135	A	T	0.4871	1.90E-08	0.649883	rs7578132	2	GREB1	0	intronic	1.13		6	4	15	1	0	0
LMC-EM	11:30620829:A:G	rs7127318	11	30620829	G	A	0.3231	1.91E-08	0.994988	rs11031141	7	RP5-1024C24	0	ncRNA_intron	0.2		7	5	15	0	0	0
AAM-EPP	6:74608139:G:T	rs3005514	6	74608139	G	T	0.335	1.91E-08	0.995571	rs12209746	9	CD109	70098	intergenic	4.881		7	13	15	0	0	0
AAM-EM	12:15428939:A:G	rs12317051	12	15428939	A	G	0.3191	1.92E-08	0.965569	rs11056439	26	RERG	0	intronic	2.205		7	5	15	1	0	0
FIM-EO	6:153495323:C:G	rs9478393	6	153495323	C	G	0.3748	1.92E-08	1	rs9478393	7	RNA5SP224	14842	intergenic	1.153		7	5	15	0	0	0
FIM-EM	10:90157930:C:T	rs2488270	10	90157930	C	T	0.4384	1.92E-08	1	rs2488270	8	RNLS	0	intronic	0.331		7	5	15	1	0	0
AAM-EM	3:49866392:C:T	rs1128535	3	49866392	C	T	0.4742	1.92E-08	0.987666	rs2271960	8	TRAIP	0	UTR3	3.378	NA		4	4	1	1	0
AAM-EM	9:11782807:A:G	rs9919059	9	11782807	A	G	0.4304	1.93E-08	0.924199	rs10756291	18	RP11-74C3.1	315852	intergenic	6.707		5	9	15	0	0	0
FIM-EM	10:90183038:A:G	rs7918921	10	90183038	G	A	0.4374	1.93E-08	0.987162	rs2488270	8	RNLS	0	intronic	6.083		7	5	15	1	0	0
AAM-EM	9:11782926:G:T	rs9919029	9	11782926	T	G	0.4294	1.93E-08	0.928243	rs10756291	18	RP11-74C3.1	315733	intergenic	4.354		5	9	15	0	0	0
AAM-EM	16:29880874:C:T	rs35330978	16	29880874	C	T	0.3002	1.93E-08	0.687128	rs7189550	32	CDIPT-AS1	1502	intergenic	1.04	NA		5	15	1	1	0
FIM-EO	8:25275495:A:C	rs12155980	8	25275495	C	A	0.3569	1.94E-08	1	rs12155980	8	DOCK5	0	intergenic	3.111		7	4	4	1	0	0
AAM-EM	16:29943367:C:T	rs12919683	16	29943367	T	C	0.4841	1.94E-08	0.737281	rs12932403	32	CTD-2574D2	3112	intergenic	8.148		6	5	15	1	1	0
AAM-EM	11:30554476:C:T	rs559519	11	30554476	T	C	0.1481	1.94E-08	1	rs559519	22	MPPED2	0	intronic	8.203	3a		4	15	1	0	0
FIM-EPP	12:95642168:A:G	rs10161330	12	95642168	A	G	0.335	1.94E-08	0.654521	rs10859863	9	VEZT	0	intronic	3.909		5	5	5	1	1	0
AAM-EM	3:49772375:A:G	rs7649348	3	49772375	G	A	0.4742	1.95E-08	0.987666	rs2271960	8	IP6K1	0	intronic	5.161		5	4	4	1	1	0
AAM-EPP	10:90168367:C:T	rs792209	10	90168367	C	T	0.4364	1.96E-08	0.767264	rs7921352	15	RNLS	0	intronic	0.817		6	2	15	1	0	0
AAM-EM	3:49788969:C:T	rs7372966	3	49788969	T	C	0.4742	1.96E-08	0.987666	rs2271960	8	IP6K1	0	intronic	0.833		7	4	5	1	1	0
AAM-EM	3:49790682:C:G	rs7372730	3	49790682	T	G	0.4742	1.96E-08	0.987666	rs2271960	8	IP6K1	0	intronic	2.739		5	4	5	1	1	0
AAM-EM	3:49938227:C:G	rs3774758	3	49938227	C	G	0.497	1.96E-08	0.731635	rs34034116	8	MST1R:CTD-	0:00	ncRNA_intron	5.142		4	1	15	1	1	0
FIM-EM	8:25275495:A:C	rs12155980	8	25275495	C	A	0.3569	1.96E-08	1	rs12155980	7	DOCK5	0	intergenic	3.111		7	4	4	1	0	0
FIM-EM	10:90183102:C:T	rs10887818	10	90183102	C	T	0.4374	1.96E-08	0.987162	rs2488270	8	RNLS	0	intronic	6.068		7	5	15	1	0	0
LMC-DE	11:30276409:C:T	rs117182643	11	30276409	C	T	0.00994	1.97E-08	1	rs76757075	5	FSHB	19600	intergenic	1.548		5	5	15	0	0	0
AAM-EM	12:15512044:A:G	rs11056447	12	15512044	G	A	0.3101	1.97E-08	0.986637	rs11056439	26	PTPRO	0	intronic	0.147		7	5	15	1	0	0
AAM-EPP	3:127755716:A:C	rs1987633	3	127755716	C	A	0.1511	1.98E-08	0.817326	rs2811473	8	SEC61A1	14767	intergenic	2.399	NA		5	15	0	1	0
FIM-EPP	12:95679109:A:G	rs12423799	12	95679109	G	A	0.337	1.98E-08	0.652333	rs10859863	9	VEZT	0	intronic	2.756		6	4	5	1	1	0
AAM-EPP	10:90192003:C:T	rs1578696	10	90192003	C	T	0.3956	1.99E-08	0.996003	rs1935581	15	RNLS	0	intronic	10.35		7	5	15	1	1	0
AAM-EPP	6:151727545:C:T	rs9397403	6	151727545	C	T	0.336	1.99E-08	0.645076	rs9479041	11	RMND1	0	intronic	1.874		5	4	5	1	1	0
AAM-EPP	3:127724733:A:G	rs6770337	3	127724733	A	G	0.4205	2.00E-08	1	rs6770337	8	KBTBD12	18218	intergenic	0.098		5	2	14	0	1	0
AAM-EM	3:49790544:A:C	rs7372725	3	49790544	C	A	0.4742	2.00E-08	0.987666	rs2271960	8	IP6K1	0	intronic	0.156		7	4	5	1	1	0
AAM-EPP	1:204161069:A:G	rs7538055	1	204161069	A	G	0.2545	2.01E-08	0.994454	rs2510	3	KISS1	0	intronic	2.168		4	5	14	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	12:15411810:A:G	rs28410854	12	15411810	A	G	0.336	2.01E-08	0.8902	rs11056439	26	RERG	0	intronic	2.736		5	1	15	1	0	0
FIM-EPP	3:128115381:A:G	rs1735527	3	128115381	A	G	0.1352	2.01E-08	0.97486	rs2999033	4	EEFSEC	0	intronic	0.75	NA		4	15	1	1	0
AAM-EPP	3:127723233:C:T	rs67464627	3	127723233	C	T	0.1571	2.01E-08	0.768022	rs2811473	8	KBTBD12	16718	intergenic	5.423		5	5	14	0	1	0
AAM-EPP	10:90166989:C:T	rs792205	10	90166989	C	T	0.4364	2.01E-08	0.767264	rs7921352	15	RNLS	0	intronic	7.756		7	5	15	1	0	0
AAM-EM	12:15406228:A:T	rs56090796	12	15406228	T	A	0.335	2.02E-08	0.885758	rs11056439	26	RERG	0	intronic	12.89		7	7	15	1	0	0
FIM-EO	6:127474331:G:T	rs2489628	6	127474331	G	T	0.4891	2.02E-08	0.920133	rs2489623	4	RSPO3	0	intronic	2.563		7	4	15	1	0	0
AAM-EM	3:49752427:C:T	rs11130219	3	49752427	C	T	0.4751	2.03E-08	0.983582	rs2271960	8	RNF123	0	intronic	12.2		4	3	5	1	1	0
AAM-EPP	6:74680513:G:T	rs3003188	6	74680513	G	T	0.3449	2.03E-08	0.773324	rs12209746	9	TXNP7	33722	intergenic	3.652		6	5	15	0	0	0
AAM-EM	3:49780844:A:G	rs9876508	3	49780844	G	A	0.4742	2.03E-08	0.987666	rs2271960	8	IP6K1	0	intronic	2.33		7	4	5	1	1	0
AAM-EM	9:11731570:C:T	rs4416919	9	11731570	C	T	0.2584	2.03E-08	0.879634	rs9969696	18	RP11-74C3.1	367089	intergenic	0.342		7	9	15	0	0	0
AAM-EPP	10:90156383:C:T	rs811558	10	90156383	T	C	0.4364	2.03E-08	0.767264	rs7921352	15	RNLS	0	intronic	10.25		7	5	15	1	0	0
FIM-EM	10:90179192:C:T	rs4934403	10	90179192	C	T	0.4374	2.04E-08	0.987162	rs2488270	8	RNLS	0	intronic	2.154		7	5	15	1	0	0
AAM-EPP	3:49818555:C:T	rs9814765	3	49818555	C	T	0.4732	2.04E-08	0.987655	rs4855867	7	IP6K1	0	intronic	0.006	2c		4	5	1	1	0
FIM-EM	6:127436313:A:G	rs1936801	6	127436313	A	G	0.4801	2.04E-08	0.847751	rs2489623	4	RSPO3	3435	intergenic	9.018		5	5	14	0	0	0
FIM-EM	6:127436064:C:T	rs1936800	6	127436064	C	T	0.4801	2.04E-08	0.847751	rs2489623	4	RSPO3	3684	intergenic	17.77		7	5	14	0	0	0
AAM-EM	3:49936910:A:T	rs11130224	3	49936910	T	A	0.494	2.04E-08	0.725362	rs34034116	8	MST1R:CTD-	0:00	ncRNA_exoni	4.907		5	2	15	1	1	0
AAM-EM	3:49783103:C:T	rs9815766	3	49783103	C	T	0.4742	2.05E-08	0.987666	rs2271960	8	IP6K1	0	intronic	2.485		6	4	5	1	1	0
FIM-EO	2:11727988:C:G	rs4669752	2	11727988	G	C	0.4732	2.05E-08	0.703787	rs7578132	2	GREB1	0	UTR3	2.56		7	4	15	1	0	0
AAM-EPP	10:90164478:A:C	rs1342451	10	90164478	C	A	0.4364	2.05E-08	0.767264	rs7921352	15	RNLS	0	intronic	8.81		5	5	15	1	0	0
AAM-EM	3:49773236:A:G	rs35261599	3	49773236	G	A	0.4742	2.05E-08	0.987666	rs2271960	8	IP6K1	0	intronic	5.167		5	4	4	1	1	0
AAM-EM	3:49842625:A:G	rs2234391	3	49842625	A	G	0.4732	2.05E-08	0.991767	rs2271960	8	UBA7	14	downstream	6.805	NA		1	7	1	1	0
AAM-EM	16:29946708:A:G	rs11642933	16	29946708	G	A	0.4831	2.06E-08	0.733288	rs12932403	32	TMEM219	5497	intergenic	1.674		5	5	15	1	1	0
FIM-EM	10:90158608:C:T	rs1617881	10	90158608	C	T	0.4384	2.06E-08	1	rs2488270	8	RNLS	0	intronic	1.409		6	5	15	1	0	0
AAM-EPP	3:127710474:A:G	rs16845806	3	127710474	G	A	0.163	2.06E-08	0.694224	rs2811473	8	KBTBD12	3959	intergenic	2.907		6	5	15	0	1	0
AAM-EM	9:11784454:C:T	rs9919005	9	11784454	C	T	0.4294	2.06E-08	0.928243	rs10756291	18	RP11-74C3.1	314205	intergenic	1.888		7	9	15	0	0	0
FIM-EPP	12:95678387:A:G	rs12371088	12	95678387	A	G	0.337	2.06E-08	0.652333	rs10859863	9	VEZT	0	intronic	6.1		7	4	4	1	1	0
AAM-EPP	3:127723215:A:G	rs7611430	3	127723215	A	G	0.4205	2.06E-08	1	rs6770337	8	KBTBD12	16700	intergenic	0.071		5	5	14	0	1	0
AAM-EPP	3:127723008:A:G	rs7633480	3	127723008	G	A	0.1581	2.06E-08	0.76383	rs2811473	8	KBTBD12	16493	intergenic	2.942		7	5	14	0	1	0
AAM-EM	3:49868455:A:G	rs7648987	3	49868455	A	G	0.4742	2.07E-08	0.987666	rs2271960	8	TRAIP	0	intronic	1.362		6	4	4	1	1	0
AAM-EPP	1:204162230:C:T	rs4951319	1	204162230	T	C	0.2555	2.07E-08	1	rs2510	3	KISS1	0	intronic	7.159		4	5	14	1	0	0
AAM-EM	9:11782803:C:T	rs9918980	9	11782803	C	T	0.4294	2.07E-08	0.928243	rs10756291	18	RP11-74C3.1	315856	intergenic	6.463		5	9	15	0	0	0
FIM-EM	3:128109916:C:T	rs741925	3	128109916	C	T	0.1312	2.07E-08	0.95738	rs2999033	3	EEFSEC	0	intronic	1.995		5	4	15	1	1	0
AAM-EM	3:49772647:A:G	rs7618501	3	49772647	A	G	0.4742	2.07E-08	0.987666	rs2271960	8	IP6K1	0	intronic	10.62		6	4	4	1	1	0
AAM-EM	3:49772708:A:T	rs7618519	3	49772708	A	T	0.4742	2.07E-08	0.987666	rs2271960	8	IP6K1	0	intronic	1.654		7	4	4	1	1	0
AAM-EM	9:11731076:C:T	rs72702265	9	11731076	C	T	0.2594	2.08E-08	0.875416	rs9969696	18	RP11-74C3.1	367583	intergenic	10.18		7	9	15	0	0	0
AAM-EM	3:49763338:C:T	rs1049256	3	49763338	T	C	0.4742	2.09E-08	0.987666	rs2271960	8	IP6K1	0	UTR3	0.336		5	3	4	1	1	0
AAM-EM	12:15502404:A:G	rs1870695	12	15502404	A	G	0.3091	2.09E-08	0.982227	rs11056439	26	PTPRO	0	intronic	3.666		7	5	15	1	0	0
FIM-EM	10:90174153:C:T	rs792212	10	90174153	C	T	0.4364	2.09E-08	0.991483	rs2488270	8	RNLS	0	intronic	5.619		7	5	15	1	0	0
AAM-EM	3:49853073:A:G	rs6775384	3	49853073	G	A	0.4732	2.10E-08	0.991767	rs2271960	8	UBA7	1693	intergenic	1.423		6	5	15	1	1	0
FIM-EO	3:128110770:A:G	rs729847	3	128110770	G	A	0.2207	2.10E-08	1	rs3887841	3	EEFSEC	0	intronic	2.539	NA		2	15	1	0	0
LMC-EM	1:199879616:C:G	rs12748835	1	199879616	G	C	0.3867	2.10E-08	0.875387	rs6670899	1	RP11-567B20	839	downstream	1.811		6	5	15	0	0	0
AAM-EM	3:49792023:A:G	rs9872864	3	49792023	A	G	0.4742	2.11E-08	0.987666	rs2271960	8	IP6K1	0	intronic	3.103		6	5	5	1	1	0
AAM-EPP	9:96276910:C:G	rs10992769	9	96276910	C	G	0.2913	2.11E-08	1	rs10992769	14	FAM120A	0	intronic	0.51		5	4	5	1	0	0
FIM-EO	6:153493694:A:C	rs9479532	6	153493694	C	A	0.3748	2.12E-08	1	rs9478393	7	RNA5SP224	13213	intergenic	0.479		6	5	15	0	0	0
AAM-EM	12:15411547:A:G	rs73055254	12	15411547	A	G	0.336	2.12E-08	0.8902	rs11056439	26	RERG	0	intronic	7.84		7	1	15	1	0	0
AAM-EM	9:11732375:A:G	rs4433241	9	11732375	A	G	0.2584	2.12E-08	0.879634	rs9969696	18	RP11-74C3.1	366284	intergenic	1.22		6	9	15	0	0	0
AAM-EM	12:15407185:C:T	rs12578517	12	15407185	T	C	0.335	2.13E-08	0.885758	rs11056439	26	RERG	0	intronic	3.988	3a		7	15	1	0	0
AAM-EM	3:49868842:C:T	rs7645061	3	49868842	C	T	0.4742	2.13E-08	0.987666	rs2271960	8	TRAIP	0	intronic	1.17		5	4	4	1	1	0
AAM-EM	3:49799729:C:T	rs9865480	3	49799729	T	C	0.4742	2.14E-08	0.987666	rs2271960	8	IP6K1	0	intronic	2.323		6	4	5	1	1	0
FIM-EO	6:153475561:A:C	rs9322410	6	153475561	C	A	0.2455	2.14E-08	1	rs9322410	7	RNA5SP224	4793	intergenic	1.065		7	7	15	0	0	0
LMC-ERSV	8:25389631:A:G	rs10098571	8	25389631	G	A	0.2584	2.14E-08	0.649198	rs13261573	3	CDCA2	24194	intergenic	0.303		6	14	15	0	1	0
AAM-EM	12:15508743:A:G	rs55716164	12	15508743	G	A	0.3101	2.14E-08	0.986637	rs11056439	26	PTPRO	0	intronic	7.794		6	5	15	1	0	0
AAM-EM	6:151734051:A:C	rs9383891	6	151734051	C	A	0.1759	2.15E-08	1	rs9383891	14	RMND1:HSP	0:00	ncRNA_intror	0.366		5	4	4	1	0	0
AAM-EM	12:15501355:A:C	rs11056440	12	15501355	C	A	0.3091	2.15E-08	0.991117	rs11056439	26	RERG:PTPRC	0:00	UTR5	1.26		5	1	15	1	0	0
AAM-EM	6:152513858:C:T	rs2813531	6	152513858	C	T	0.3439	2.15E-08	1	rs2635451	15	SYNE1	0	intronic	10.65		6	4	5	1	0	0
AAM-EPP	3:127724145:A:G	rs6767360	3	127724145	A	G	0.1571	2.15E-08	0.768022	rs2811473	8	KBTBD12	17630	intergenic	3.638		7	5	14	0	1	0
AAM-EM	3:49785133:A:G	rs7374183	3	49785133	G	A	0.4742	2.15E-08	0.987666	rs2271960	8	IP6K1	0	intronic	8.928		6	4	4	1	1	0
AAM-EM	6:74624442:A:C	rs12209746	6	74624442	A	C	0.336	2.15E-08	1	rs12209746	12	CD109	86401	intergenic	2.825		6	9	15	0	0	0
LMC-EM	2:49324109:A:G	rs6744698	2	49324109	A	G	0.2276	2.15E-08	1	rs6744698	2	FSHR	0	intronic	4.98		7	5	15	1	0	0
AAM-EM	16:29943459:A:C	rs12933498	16	29943459	C	A	0.4841	2.15E-08	0.737281	rs12932403	32	CTD-2574D22	3204	intergenic	4.716		7	5	15	1	1	0
AAM-EM	9:11752509:C:T	rs35066064	9	11752509	C	T	0.2584	2.15E-08	0.879634	rs9969696	18	RP11-74C3.1	346150	intergenic	3.625		7	9	15	0	0	0
AAM-EM	16:29946670:C:T	rs11649612	16	29946670	T	C	0.4831	2.16E-08	0.733288	rs12932403	32	TMEM219	5535	intergenic	5.753		5	5	15	1	1	0
AAM-EPP	6:74679490:C:T	rs3003183	6	74679490	T	C	0.3449	2.16E-08	0.773324	rs12209746	9	TXNP7	34745	intergenic	1.866		6	5	15	0	0	0
AAM-EM	1:44029353:C:G	rs11210871	1	44029353	C	G	0.331	2.17E-08	1	rs11210871	1	PTPRF	0	intronic	0.207		5	5	5	1	0	0
FIM-EO	6:127496512:A:G	rs2503323	6	127496512	A	G	0.4881	2.17E-08	0.916823	rs2489623	4	RSPO3	0	intronic	3.188		7	2	15	1	0	0
AAM-EM	12:15508221:A:C	rs1461034	12	15508221	C	A	0.3101	2.17E-08	0.986637	rs11056439	26	PTPRO	0	intronic	2.686		6	5	15	1	0	0
AAM-EM	3:49784777:C:T	rs7374277	3	49784777	T	C	0.4742	2.18E-08	0.987666	rs2271960	8	IP6K1	0	intronic	4.667		6	4	5	1	1	0
FIM-EM	6:127511523:A:G	rs6569475	6	127511523	G	A	0.493	2.19E-08	0.895338	rs2489623	4	RSPO3	0	intronic	0.268		7	5	15	1	0	0
AAM-EM	9:11800439:C:G	rs35782699	9	11800439	C	G	0.2604	2.19E-08	0.870056	rs9969696	18	RP11-74C3.1	298220	intergenic	0.576		6	9	15	0	0	0
AAM-EM	3:49761605:C:T	rs3811696	3	49761605	C	T	0.4742	2.20E-08	0.987666	rs2271960	8	IP6K1	121	upstream	10.59	NA		1	1	1	1	0
AAM-EM	12:15386448:A:G	rs12303992	12	15386448	A	G	0.335	2.21E-08	0.876886	rs11056439	26	RERG	0	intronic	2.155		5	9	14	1	0	0
AAM-EM	3:49832261:A:G	rs6802890	3	49832261	A	G	0.4732	2.21E-08	0.991767	rs2271960	8	CDHR4	0	intronic	6.037		4	5	15	1	1	0
AAM-EM	1:204159787:C:G	rs4889	1	204159787	G	C	0.2545	2.21E-08	0.994454	rs2510	4	KISS1	0	exonic	12.03		4	1	14	1	0	0
AAM-EM	12:15395548:A:G	rs12580862	12	15395548	A	G	0.335	2.21E-08	0.876886	rs11056439	26	RERG	0	intronic	1.872		7	5	15	1	0	0
AAM-EPP	1:204162212:C:T	rs12097666	1	204162212	T	C	0.2555	2.22E-08	1	rs2510	3	KISS1	0	intronic	0.837		4	5	14	1	0	0
LMC-EM	2:49279672:C:T	rs62162081	2	49279672	T	C	0.1551	2.22E-08	0.707172	rs4971681	2	FSHR	0	intronic	8.131		7	7	15	1	0	0
FIM-EO	6:127501926:C:T	rs2503326	6	127501926	T	C	0.4871	2.23E-08	0.920664	rs2489623	4	RSPO3	0	intronic	0.578		5	4	15	1	0	0
LMC-EM	2:49324685:A:G	rs61296268	2	49324685	G	A	0.2296	2.23E-08	0.989227	rs6744698	2	FSHR	0	intronic	9.302		7	5	15	1	0	0
FIM-EM	10:90168367:C:T	rs792209	10	90168367	C	T	0.4364	2.23E-08	0.991483	rs2488270	8	RNLS	0	intronic	0.817		6	2	15	1	0	0
FIM-EO	2:11724684:A:G	rs9789414	2	11724684	A	G	0.4662	2.24E-08	0.73511	rs7578132	2	GREB1	0	intronic	4.586		4	4	15	1	0	0
AAM-EM	9:11778684:A:G	rs12380715	9	11778684	A	G	0.4294	2.24E-08	0.928243	rs10756291	18	RP11-74C3.1	319975	intergenic	3.624		7	9	15	0	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	1:204160938:A:G	rs7524621	1	204160938	G	A	0.2535	2.25E-08	0.988914	rs2510	3	KISS1	0	intronic	1.191	2b	5	14	1	0	0
AAM-EPP	11:101590923:A:G	rs4754019	11	101590923	G	A	0.3946	2.25E-08	1	rs4754019	18	TRPC6	0	intergenic	0.793	7	5	15	1	0	0
AAM-EM	12:15377717:G:T	rs11056403	12	15377717	T	G	0.335	2.25E-08	0.876886	rs11056439	26	RERG	0	intronic	2.676	7	5	14	1	0	0
LMC-EM	2:49325023:A:T	rs11898451	2	49325023	T	A	0.2276	2.25E-08	1	rs6744698	2	FSHR	0	intronic	5.445	6	5	15	1	0	0
FIM-EPP	12:95675407:C:T	rs4762166	12	95675407	T	C	0.337	2.26E-08	0.652333	rs10859863	9	VEZT	0	intronic	0.717	7	4	5	1	1	0
LMC-EM	2:49322616:A:G	rs6730592	2	49322616	G	A	0.2266	2.26E-08	0.994545	rs6744698	2	FSHR	0	intronic	0.498	6	5	15	1	0	0
AAM-EM	9:11779583:C:G	rs35093033	9	11779583	C	G	0.4294	2.26E-08	0.928243	rs10756291	18	RP11-74C3.1	319076	intergenic	1.423	6	9	15	0	0	0
AAM-EPP	3:127724751:C:G	rs6794938	3	127724751	C	G	0.4205	2.26E-08	1	rs6770337	8	KBTBD12	18236	intergenic	2.128	5	2	14	0	1	0
AAM-EM	3:49753003:G:T	rs34614773	3	49753003	T	G	0.4751	2.27E-08	0.983582	rs2271960	8	RNF123	0	intronic	14.7	3a	4	4	1	1	0
FIM-EO	3:128119565:A:G	rs760383	3	128119565	A	G	0.2217	2.27E-08	0.994071	rs3887841	3	EEFSEC	0	intronic	14.53	NA	4	15	1	0	0
AAM-EM	3:49750188:A:T	rs3749240	3	49750188	T	A	0.4751	2.27E-08	0.983582	rs2271960	8	RNF123	0	UTR3	1.39	5	2	5	1	1	0
AAM-EM	11:86707651:A:G	rs4944651	11	86707651	A	G	0.3539	2.28E-08	1	rs4944651	24	RP11-736K20	0	ncRNA_intron	3.841	7	5	15	0	0	0
AAM-EPP	3:49819102:C:G	rs11130221	3	49819102	C	G	0.4732	2.28E-08	0.987655	rs4855867	7	IP6K1	0	intronic	2.429	4	1	6	1	1	0
AAM-EPP	10:90174153:C:T	rs792212	10	90174153	C	T	0.4364	2.29E-08	0.767264	rs7921352	15	RNLS	0	intronic	5.619	7	5	15	1	0	0
AAM-EM	6:152514601:C:T	rs9918328	6	152514601	C	T	0.3181	2.29E-08	0.874361	rs2635451	15	SYNE1	0	intronic	0.065	6	4	5	1	0	0
AAM-EM	9:11778766:G:T	rs12379444	9	11778766	T	G	0.4304	2.30E-08	0.932181	rs10756291	18	RP11-74C3.1	319893	intergenic	2.275	6	9	15	0	0	0
AAM-EM	16:30018720:C:T	rs12921753	16	30018720	C	T	0.3817	2.30E-08	0.716915	rs3814883	32	DOC2A	0	intronic	4.329	5	1	5	1	1	0
AAM-EM	16:29946945:C:T	rs4527039	16	29946945	T	C	0.4841	2.30E-08	0.737281	rs12932403	32	TMEM219	5260	intergenic	2.475	NA	5	15	1	1	0
AAM-EPP	1:204157973:C:T	rs11240694	1	204157973	C	T	0.2515	2.31E-08	0.977949	rs2510	3	KISS1	1495	intergenic	11.51	5	5	13	0	0	0
LMC-EM	2:49276646:C:T	rs62162080	2	49276646	C	T	0.1571	2.31E-08	0.72261	rs4971681	2	FSHR	0	intronic	2.331	5	9	15	1	0	0
AAM-EM	9:11752581:A:G	rs35622491	9	11752581	G	A	0.2584	2.32E-08	0.879634	rs9969696	18	RP11-74C3.1	346078	intergenic	0.016	6	9	15	0	0	0
AAM-EM	9:11729532:G:T	rs72702261	9	11729532	G	T	0.2515	2.32E-08	0.838695	rs9969696	18	RP11-74C3.1	369127	intergenic	12.09	6	9	15	0	0	0
AAM-EM	12:15381210:A:G	rs12300553	12	15381210	G	A	0.335	2.32E-08	0.876886	rs11056439	26	RERG	0	intronic	3.893	6	5	14	1	0	0
AAM-EM	9:11733220:A:T	rs7038777	9	11733220	T	A	0.2594	2.33E-08	0.87483	rs9969696	18	RP11-74C3.1	365439	intergenic	4.506	6	9	15	0	0	0
AAM-EPP	6:74688446:A:G	rs3003197	6	74688446	A	G	0.341	2.33E-08	0.771646	rs12209746	9	TXNP7	25789	intergenic	7.739	5	5	15	0	0	0
FIM-EM	10:90166989:C:T	rs792205	10	90166989	C	T	0.4364	2.33E-08	0.991483	rs2488270	8	RNLS	0	intronic	7.756	7	5	15	1	0	0
AAM-EM	3:49798920:A:G	rs7634886	3	49798920	A	G	0.4732	2.33E-08	0.991767	rs2271960	8	IP6K1	0	intronic	0.14	7	4	5	1	1	0
FIM-EM	6:127468274:A:C	rs7741021	6	127468274	A	C	0.4344	2.33E-08	0.887856	rs10457487	4	RSPO3	0	intronic	19.91	4	2	15	1	0	0
AAM-EPP	3:127716585:A:G	rs9870753	3	127716585	A	G	0.1581	2.34E-08	0.761853	rs2811473	8	KBTBD12	10070	intergenic	0.656	5	5	15	0	1	0
AAM-EM	9:11738713:G:T	rs72702282	9	11738713	T	G	0.2594	2.34E-08	0.87483	rs9969696	18	RP11-74C3.1	359946	intergenic	1.741	7	9	15	0	0	0
AAM-EM	9:11739277:A:G	rs67385235	9	11739277	A	G	0.2594	2.34E-08	0.87483	rs9969696	18	RP11-74C3.1	359382	intergenic	2.737	7	9	15	0	0	0
AAM-EM	9:11846006:A:G	rs10960314	9	11846006	A	G	0.2823	2.34E-08	0.893544	rs9969696	18	RP11-74C3.1	252653	intergenic	12.76	6	9	15	0	0	0
AAM-EM	3:49792158:G:T	rs9855505	3	49792158	T	G	0.4742	2.35E-08	0.987666	rs2271960	8	IP6K1	0	intronic	17.96	7	5	5	1	1	0
FIM-EPP	12:95668437:G:T	rs3816838	12	95668437	G	T	0.336	2.35E-08	0.657149	rs10859863	9	VEZT	0	intronic	5.038	NA	4	4	1	1	0
AAM-EM	3:49752372:C:T	rs11130218	3	49752372	C	T	0.4751	2.35E-08	0.983582	rs2271960	8	RNF123	0	intronic	4.564	7	4	5	1	1	0
AAM-EPP	6:151761621:A:G	rs7752091	6	151761621	A	G	0.2833	2.36E-08	0.995496	rs9322321	11	RMND1	0	intronic	6.627	6	2	5	1	1	0
LMC-EM	2:49276771:C:T	rs17038169	2	49276771	C	T	0.1581	2.36E-08	0.718705	rs4971681	2	FSHR	0	intronic	2.216	5	9	15	1	0	0
AAM-EM	12:15402932:C:T	rs12307681	12	15402932	C	T	0.334	2.36E-08	0.880736	rs11056439	26	RERG	0	intronic	1.186	6	9	15	1	0	0
AAM-EM	12:15406943:C:T	rs11056412	12	15406943	T	C	0.335	2.36E-08	0.885758	rs11056439	26	RERG	0	intronic	0.728	5	7	15	1	0	0
AAM-EM	9:11733621:G:T	rs10960136	9	11733621	T	G	0.2594	2.37E-08	0.87483	rs9969696	18	RP11-74C3.1	365038	intergenic	0.945	6	9	15	0	0	0
AAM-EM	9:11731919:G:T	rs7030979	9	11731919	T	G	0.2594	2.37E-08	0.87483	rs9969696	18	RP11-74C3.1	366740	intergenic	2.598	6	9	15	0	0	0
FIM-EPP	12:95673184:A:G	rs7967299	12	95673184	G	A	0.337	2.38E-08	0.652333	rs10859863	9	VEZT	0	intronic	0.076	6	4	5	1	1	0
AAM-EPP	6:74633850:A:G	rs1898487	6	74633850	A	G	0.337	2.38E-08	0.995596	rs12209746	9	TXNP7	80385	intergenic	9.792	3a	7	15	0	0	0
AAM-EM	11:86716726:A:G	rs1456274	11	86716726	A	G	0.3539	2.38E-08	0.965226	rs4944651	24	RP11-736K20	4724	intergenic	5.842	NA	1	15	0	0	0
AAM-EM	9:11733031:C:G	rs7022134	9	11733031	C	G	0.2594	2.39E-08	0.87483	rs9969696	18	RP11-74C3.1	365628	intergenic	1.698	5	9	15	0	0	0
AAM-EM	3:49761613:C:T	rs3811695	3	49761613	C	T	0.4742	2.39E-08	0.987666	rs2271960	8	IP6K1	113	upstream	9.033	NA	1	1	1	1	0
AAM-EM	3:49804119:A:G	rs6809431	3	49804119	A	G	0.4732	2.39E-08	0.991767	rs2271960	8	IP6K1	0	intronic	2.351	6	4	5	1	1	0
AAM-EM	11:86711141:C:T	rs10898570	11	86711141	C	T	0.3529	2.39E-08	0.995633	rs4944651	24	RP11-736K20	0	ncRNA_exoni	3.594	3a	2	15	0	0	0
AAM-EM	9:11779202:C:T	rs10809587	9	11779202	C	T	0.4294	2.39E-08	0.928243	rs10756291	18	RP11-74C3.1	319457	intergenic	0.719	7	9	15	0	0	0
AAM-EM	9:11770392:C:T	rs10960201	9	11770392	C	T	0.2594	2.39E-08	0.87483	rs9969696	18	RP11-74C3.1	328267	intergenic	2.564	7	9	15	0	0	0
AAM-EM	3:49736565:A:G	rs6785549	3	49736565	G	A	0.4751	2.39E-08	0.983582	rs2271960	8	RNF123	0	intronic	15.38	4	4	4	1	1	0
FIM-EPP	8:25243213:A:G	rs34068702	8	25243213	A	G	0.2922	2.39E-08	1	rs34068702	7	DOCK5	0	intronic	2.503	4	4	5	1	0	0
AAM-EM	9:11736154:A:G	rs7035402	9	11736154	A	G	0.2584	2.40E-08	0.879634	rs9969696	18	RP11-74C3.1	362505	intergenic	8.165	6	9	15	0	0	0
FIM-EO	6:127448249:C:G	rs1936807	6	127448249	C	G	0.4851	2.40E-08	0.959704	rs2489623	4	RSPO3	0	intronic	16.5	6	2	15	1	0	0
AAM-EM	12:15501860:G:T	rs73057240	12	15501860	T	G	0.3091	2.40E-08	0.991117	rs11056439	26	PTPRO	0	intronic	0.711	5	1	15	1	0	0
AAM-EM	16:29960468:A:G	rs8056535	16	29960468	G	A	0.4443	2.41E-08	0.882927	rs3814883	32	TMEM219	0	intronic	2.369	6	5	15	1	1	0
AAM-EPP	6:74679757:C:T	rs3003184	6	74679757	T	C	0.3449	2.41E-08	0.773324	rs12209746	9	TXNP7	34478	intergenic	8.068	4	5	15	0	0	0
FIM-EM	10:90156383:C:T	rs811558	10	90156383	T	C	0.4364	2.41E-08	0.991483	rs2488270	8	RNLS	0	intronic	10.25	7	5	15	1	0	0
AAM-EPP	3:49813169:A:C	rs57648519	3	49813169	C	A	0.4732	2.41E-08	0.987655	rs4855867	7	IP6K1	0	intronic	5.034	5	4	5	1	1	0
AAM-EM	7:121971996:G:T	rs6963586	7	121971996	G	T	0.1382	2.41E-08	0.946078	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intron	7.199	6	5	15	1	0	0
AAM-EPP	6:74679826:C:T	rs3012530	6	74679826	C	T	0.3449	2.41E-08	0.773324	rs12209746	9	TXNP7	34409	intergenic	7.288	2a	5	15	0	0	0
AAM-EM	9:11786029:G:T	rs12380402	9	11786029	T	G	0.4314	2.41E-08	0.936135	rs10756291	18	RP11-74C3.1	312630	intergenic	6.043	6	9	15	0	0	0
FIM-EPP	12:95659012:C:T	rs1038652	12	95659012	C	T	0.336	2.42E-08	0.657149	rs10859863	9	VEZT	0	intronic	6.617	7	4	5	1	1	0
FIM-EPP	12:95658769:A:T	rs7957257	12	95658769	A	T	0.336	2.43E-08	0.657149	rs10859863	9	VEZT	0	intronic	5.971	7	4	5	1	1	0
AAM-EM	9:11738476:A:G	rs1948078	9	11738476	G	A	0.2594	2.44E-08	0.87483	rs9969696	18	RP11-74C3.1	360183	intergenic	0.055	6	9	15	0	0	0
AAM-EM	12:15382815:C:T	rs11056410	12	15382815	T	C	0.335	2.44E-08	0.876886	rs11056439	26	RERG	0	intronic	5.435	6	1	14	1	0	0
AAM-EM	12:15376420:A:G	rs7297771	12	15376420	A	G	0.335	2.45E-08	0.876886	rs11056439	26	RERG	0	intronic	3.517	7	5	14	1	0	0
AAM-EM	9:11748620:A:G	rs71505187	9	11748620	A	G	0.2584	2.45E-08	0.879634	rs9969696	18	RP11-74C3.1	350039	intergenic	2.45	6	9	15	0	0	0
AAM-EM	12:15394463:C:T	rs7302643	12	15394463	T	C	0.336	2.45E-08	0.881925	rs11056439	26	RERG	0	intronic	0.443	7	5	15	1	0	0
FIM-EM	10:90164478:A:C	rs1342451	10	90164478	C	A	0.4364	2.45E-08	0.991483	rs2488270	8	RNLS	0	intronic	8.81	5	5	15	1	0	0
LMC-EM	6:152472210:C:T	rs2103809	6	152472210	T	C	0.04871	2.45E-08	0.702457	rs73632499	5	SYNE1	0	intronic	0.006	6	4	4	1	0	0
AAM-EM	11:86715034:C:T	rs10898574	11	86715034	C	T	0.3539	2.45E-08	0.965226	rs4944651	24	RP11-736K20	3032	intergenic	0.601	7	5	15	0	0	0
FIM-EM	10:90160392:C:T	rs792230	10	90160392	C	T	0.4364	2.46E-08	0.991483	rs2488270	8	RNLS	0	intronic	8.087	5	5	15	1	0	0
AAM-EM	9:11733274:C:T	rs7022402	9	11733274	C	T	0.2594	2.46E-08	0.87483	rs9969696	18	RP11-74C3.1	365385	intergenic	0.926	6	9	15	0	0	0
AAM-EM	12:15417595:A:C	rs73055263	12	15417595	A	C	0.336	2.46E-08	0.881324	rs11056439	26	RERG	0	intronic	2.256	7	5	15	1	0	0
AAM-EM	19:18834514:C:T	rs10404726	19	18834514	C	T	0.4871	2.46E-08	0.60944	rs2003476	33	CRTC1	0	intronic	0.777	5	3	5	1	0	0
AAM-EM	9:11727056:C:T	rs10960129	9	11727056	C	T	0.2505	2.46E-08	0.834377	rs9969696	18	RP11-74C3.1	371603	intergenic	1.285	7	9	15	0	0	0
AAM-EM	2:25159855:C:T	rs10865321	2	25159855	T	C	0.4493	2.46E-08	0.88581	rs2384054	6	DNAJC27	6649	intergenic	0.541	7	5	15	1	1	0
AAM-EM	12:15384217:C:T	rs12301533	12	15384217	T	C	0.335	2.46E-08	0.876886	rs11056439	26	RERG	0	intronic	2.113	7	7	14	1	0	0
AAM-EM	12:15382567:C:T	rs11056409	12	15382567	T	C	0.335	2.47E-08	0.876886	rs11056439	26	RERG	0	intronic	0.429	7	5	14	1	0	0
AAM-EM	12:15383650:A:C	rs56269213	12	15383650	A	C	0.335	2.47E-08	0.876886	rs11056439	26	RERG	0	intronic	3.371	5	2	14	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	9:11781469:A:G	rs12552353	9	11781469	G	A	0.4294	2.47E-08	0.928243	rs10756291	18	RP11-74C3.1	317190	intergenic		0.151	6	9	15	0	0	0
AAM-EM	11:101581644:A:T	rs6590916	11	101581644	T	A	0.3688	2.47E-08	0.828708	rs10791519	25	TRPC6	0	intergenic		3.249	7	5	15	1	0	0
AAM-EM	9:11745572:C:T	rs10960158	9	11745572	C	T	0.2584	2.48E-08	0.879634	rs9969696	18	RP11-74C3.1	353087	intergenic		0.475	6	9	15	0	0	0
FIM-EPP	1:22422721:A:G	rs10917151	1	22422721	G	A	0.1471	2.48E-08	0.810413	rs10917130	1	CDC42	3283	intergenic		2.461	5	4	4	0	0	0
AAM-EM	12:15372662:A:G	rs1382803	12	15372662	A	G	0.3449	2.48E-08	0.833616	rs11056439	26	RERG	0	intronic		10.94	NA	1	14	1	0	0
AAM-EM	12:15382293:G:T	rs7358676	12	15382293	T	G	0.335	2.49E-08	0.876886	rs11056439	26	RERG	0	intronic		6.395	6	5	15	1	0	0
FIM-EO	3:127719920:C:T	rs72967027	3	127719920	T	C	0.1571	2.49E-08	0.992707	rs58170120	3	KBTBD12	13405	intergenic		2.246	7	5	14	0	1	0
AAM-EPP	3:128122396:A:G	rs2659685	3	128122396	G	A	0.2445	2.50E-08	0.840693	rs729847	8	EEFSEC	0	intronic		0.605	5	4	15	1	0	0
AAM-EM	9:11778476:A:C	rs12377944	9	11778476	C	A	0.4294	2.50E-08	0.928243	rs10756291	18	RP11-74C3.1	320183	intergenic		0.814	7	9	15	0	0	0
FIM-EPP	11:30214713:A:G	rs961605	11	30214713	G	A	0.3956	2.50E-08	1	rs961605	8	RP4-562D20.1	25859	intergenic		1.294	7	14	15	0	1	0
AAM-EPP	3:127717702:C:T	rs6439104	3	127717702	T	C	0.1571	2.50E-08	0.768022	rs2811473	8	KBTBD12	11187	intergenic		6.023	7	5	15	0	1	0
AAM-EM	9:11732555:C:T	rs10960135	9	11732555	T	C	0.2604	2.50E-08	0.870056	rs9969696	18	RP11-74C3.1	366104	intergenic		0.866	7	9	15	0	0	0
AAM-EM	9:11778314:A:C	rs10960207	9	11778314	A	C	0.4304	2.50E-08	0.924199	rs10756291	18	RP11-74C3.1	320345	intergenic		2.655	6	9	15	0	0	0
FIM-EM	2:11744573:A:G	rs7571803	2	11744573	G	A	0.4165	2.51E-08	1	rs7571803	2	GREB1	0	intronic		0.229	7	4	15	1	0	0
AAM-EPP	1:22116812:A:G	rs10753520	1	22116812	G	A	0.2684	2.51E-08	1	rs10753520	1	USP48	6712	intergenic		0.162	6	5	15	0	1	0
FIM-EPP	3:128122039:C:T	rs6780368	3	128122039	C	T	0.1292	2.51E-08	0.924161	rs2999033	4	EEFSEC	0	intronic		7.906	5	4	15	1	1	0
AAM-EM	9:11734433:A:G	rs1906114	9	11734433	G	A	0.2575	2.51E-08	0.875109	rs9969696	18	RP11-74C3.1	364226	intergenic		3.256	7	9	15	0	0	0
AAM-EM	9:11734891:A:G	rs1906116	9	11734891	A	G	0.2584	2.51E-08	0.870301	rs9969696	18	RP11-74C3.1	363768	intergenic		1.39	6	9	15	0	0	0
AAM-EPP	8:25243213:A:G	rs34068702	8	25243213	A	G	0.2922	2.51E-08	0.762394	rs6185	12	DOCK5	0	intronic		2.503	4	4	5	1	0	0
LMC-EM	6:152472660:A:T	rs2348080	6	152472660	T	A	0.04871	2.51E-08	0.702457	rs73632499	5	SYNE1	0	intronic		6.933	6	2	4	1	0	0
AAM-EM	12:15415874:C:T	rs7132318	12	15415874	T	C	0.3469	2.51E-08	0.833634	rs11056439	26	RERG	0	intronic		1.213	6	5	15	1	0	0
FIM-EO	6:127452935:C:T	rs2745353	6	127452935	C	T	0.4841	2.51E-08	0.955721	rs2489623	4	RSPO3	0	intronic		3.557	NA	5	15	1	0	0
AAM-EM	9:11780448:A:G	rs34574178	9	11780448	G	A	0.4294	2.52E-08	0.928243	rs10756291	18	RP11-74C3.1	318211	intergenic		0.042	7	7	15	0	0	0
AAM-EPP	3:49813013:C:T	rs34451146	3	49813013	C	T	0.4732	2.52E-08	0.987655	rs4855867	7	IP6K1:RP13-3	0:00	ncRNA_exoni		9.719	5	4	5	1	1	0
AAM-EM	9:11780588:A:T	rs12379427	9	11780588	A	T	0.4294	2.52E-08	0.928243	rs10756291	18	RP11-74C3.1	318071	intergenic		3.628	6	7	15	0	0	0
FIM-EM	6:127477021:G:GTATA	rs139087942	6	127477021	G	GTATA	0.4443	2.52E-08	0.667829	rs2489623	4	RSPO3	0	intronic		0.943	NA	4	15	1	0	0
AAM-EPP	3:49869631:A:G	rs13085679	3	49869631	G	A	0.4742	2.52E-08	0.983433	rs4855867	7	TRAIP	0	intronic		7.673	7	4	5	1	1	0
AAM-EM	9:11738661:G:T	rs72702281	9	11738661	T	G	0.2594	2.53E-08	0.87483	rs9969696	18	RP11-74C3.1	359998	intergenic		0.639	6	9	15	0	0	0
AAM-EPP	6:151760382:C:T	rs9397409	6	151760382	C	T	0.2833	2.54E-08	0.995496	rs9322321	11	RMND1	0	intronic		13.01	7	4	5	1	1	0
AAM-EM	6:152510750:A:G	rs2813523	6	152510750	A	G	0.3439	2.54E-08	1	rs2635451	15	SYNE1	0	intronic		0.804	6	4	5	1	0	0
AAM-EPP	3:49809063:G:T	rs6446295	3	49809063	G	T	0.4732	2.54E-08	0.987655	rs4855867	7	IP6K1	0	intronic		4.45	4	4	5	1	1	0
AAM-EM	9:11753744:A:C	rs10960175	9	11753744	A	C	0.2584	2.55E-08	0.879634	rs9969696	18	RP11-74C3.1	344915	intergenic		2.945	7	9	15	0	0	0
AAM-EM	9:11736515:A:C	rs12380853	9	11736515	C	A	0.2594	2.55E-08	0.87483	rs9969696	18	RP11-74C3.1	362144	intergenic		1.11	7	9	15	0	0	0
FIM-EM	3:128122039:C:T	rs6780368	3	128122039	C	T	0.1292	2.55E-08	0.924161	rs2999033	3	EEFSEC	0	intronic		7.906	5	4	15	1	1	0
AAM-EM	9:11736618:C:T	rs12376871	9	11736618	T	C	0.2584	2.56E-08	0.879634	rs9969696	18	RP11-74C3.1	362041	intergenic		1.627	6	9	15	0	0	0
AAM-EM	3:49869158:A:C	rs695238	3	49869158	A	C	0.4742	2.56E-08	0.987666	rs2271960	8	TRAIP	0	intronic		0.436	6	4	4	1	1	0
AAM-EM	12:15505312:C:T	rs56060060	12	15505312	T	C	0.3072	2.57E-08	0.973388	rs11056439	26	PTPRO	0	intronic		0.352	7	5	15	1	0	0
FIM-EO	6:127452581:C:T	rs2800710	6	127452581	T	C	0.4841	2.58E-08	0.955721	rs2489623	4	RSPO3	0	intronic		7.05	3a	2	15	1	0	0
AAM-EPP	6:74631732:C:G	rs181258027	6	74631732	C	G	0.337	2.58E-08	0.995564	rs12209746	9	TXNP7	82503	intergenic		0.275	6	9	15	0	0	0
LMC-EM	2:49321645:A:T	rs62162105	2	49321645	T	A	0.2276	2.58E-08	1	rs6744698	2	FSHR	0	intronic		1.458	6	5	15	1	0	0
AAM-EM	12:15388204:A:G	rs12307666	12	15388204	A	G	0.335	2.59E-08	0.876886	rs11056439	26	RERG	0	intronic		0.67	6	9	15	1	0	0
AAM-EM	9:11782247:C:T	rs10809589	9	11782247	T	C	0.4294	2.59E-08	0.928243	rs10756291	18	RP11-74C3.1	316412	intergenic		0.056	7	9	15	0	0	0
AAM-EPP	10:97773115:A:G	rs12266567	10	97773115	G	A	0.2396	2.59E-08	1	rs12266567	16	ENTPD1-AS1	0:00:00	ncRNA_introı		0.68	7	5	15	1	0	0
FIM-EO	6:127452426:C:G	rs1967685	6	127452426	C	G	0.4841	2.59E-08	0.955721	rs2489623	4	RSPO3	0	intronic		0.047	5	2	15	1	0	0
AAM-EM	9:11747333:A:G	rs10960163	9	11747333	A	G	0.2594	2.59E-08	0.87483	rs9969696	18	RP11-74C3.1	351326	intergenic		3.592	7	9	15	0	0	0
FIM-EO	2:11722468:A:G	rs11679605	2	11722468	G	A	0.327	2.60E-08	0.67964	rs10693974	2	GREB1	0	intronic		0.768	5	1	15	1	0	0
FIM-EO	6:127455029:A:G	rs2186037	6	127455029	A	G	0.4851	2.60E-08	0.959704	rs2489623	4	RSPO3	0	intronic		0.404	6	5	15	1	0	0
AAM-EM	9:11783978:A:G	rs7860873	9	11783978	A	G	0.4235	2.60E-08	0.906742	rs10756291	18	RP11-74C3.1	314681	intergenic		5.401	7	9	15	0	0	0
AAM-EM	6:152513525:C:T	rs2635452	6	152513525	T	C	0.3439	2.60E-08	1	rs2635451	15	SYNE1	0	intronic		3.803	NA	4	5	1	0	0
LMC-EM	2:49328471:C:G	rs17038224	2	49328471	G	C	0.2266	2.61E-08	0.994545	rs6744698	2	FSHR	0	intronic		2.834	5	5	15	1	0	0
AAM-EPP	3:128111201:G:T	rs1702134	3	128111201	G	T	0.1322	2.61E-08	0.880859	rs4277707	8	EEFSEC	0	intronic		0.77	5	4	15	1	1	0
AAM-EM	9:11739358:A:T	rs10960148	9	11739358	T	A	0.2584	2.61E-08	0.879634	rs9969696	18	RP11-74C3.1	359301	intergenic		1.707	7	9	15	0	0	0
AAM-EPP	6:74690742:C:T	rs3003200	6	74690742	C	T	0.341	2.61E-08	0.771646	rs12209746	9	TXNP7	23493	intergenic		0.267	7	5	15	0	0	0
FIM-EO	6:127452116:C:T	rs1936805	6	127452116	C	T	0.4841	2.62E-08	0.955721	rs2489623	4	RSPO3	0	intronic		9.829	NA	5	15	1	0	0
AAM-EPP	10:90192530:A:T	rs1935582	10	90192530	T	A	0.3956	2.62E-08	0.996003	rs1935581	15	RNLS	0	intronic		5.599	6	5	15	1	1	0
AAM-EM	9:11783050:G:T	rs9919039	9	11783050	T	G	0.4294	2.62E-08	0.928243	rs10756291	18	RP11-74C3.1	315609	intergenic		2.427	6	9	15	0	0	0
AAM-EM	6:74623372:G:T	rs7752254	6	74623372	G	T	0.336	2.62E-08	1	rs12209746	12	CD109	85331	intergenic		0.852	5	9	15	0	0	0
AAM-EM	3:49810961:A:G	rs6766836	3	49810961	A	G	0.4732	2.62E-08	0.991767	rs2271960	8	IP6K1	0	intronic		0.309	7	4	5	1	1	0
AAM-EM	9:11761616:A:T	rs10960196	9	11761616	A	T	0.2604	2.63E-08	0.870056	rs9969696	18	RP11-74C3.1	337043	intergenic		0.269	6	9	15	0	0	0
FIM-EO	2:11731774:G:T	rs2358040	2	11731774	T	G	0.4761	2.63E-08	0.693534	rs7578132	2	GREB1	0	UTR3		3.807	5	4	15	1	0	0
AAM-EM	12:15388131:A:C	rs12307658	12	15388131	A	C	0.335	2.63E-08	0.876886	rs11056439	26	RERG	0	intronic		1.907	7	9	15	1	0	0
AAM-EM	7:121983205:A:T	rs9656292	7	121983205	T	A	0.1382	2.64E-08	0.963503	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı		15.1	6	5	15	1	0	0
FIM-EO	6:151819857:C:T	rs115429675	6	151819857	C	T	0.04771	2.64E-08	1	rs115429675	5	CCDC170	0	intronic		0.081	5	2	15	1	1	0
AAM-EM	9:11744080:A:G	rs35314276	9	11744080	G	A	0.2584	2.65E-08	0.879634	rs9969696	18	RP11-74C3.1	354579	intergenic		0.114	7	9	15	0	0	0
AAM-EM	9:11754268:C:T	rs36088670	9	11754268	T	C	0.2575	2.65E-08	0.875109	rs9969696	18	RP11-74C3.1	344391	intergenic		0.036	7	9	15	0	0	0
AAM-EM	9:11779061:C:T	rs12553512	9	11779061	C	T	0.4294	2.66E-08	0.928243	rs10756291	18	RP11-74C3.1	319598	intergenic		0.134	7	9	15	0	0	0
AAM-EM	9:11786682:C:T	rs7873121	9	11786682	C	T	0.4294	2.66E-08	0.928243	rs10756291	18	RP11-74C3.1	311977	intergenic		0.73	6	9	15	0	0	0
AAM-EM	9:11789900:C:T	rs10960224	9	11789900	C	T	0.4294	2.66E-08	0.928243	rs10756291	18	RP11-74C3.1	308759	intergenic		15.9	7	9	15	0	0	0
AAM-EM	16:29878161:A:T	rs4474709	16	29878161	A	T	0.3042	2.66E-08	0.695299	rs7189550	32	CDIPT-AS1	0	ncRNA_introı		1.014	6	5	15	1	0	0
AAM-EM	9:11781165:C:T	rs10960213	9	11781165	C	T	0.4294	2.67E-08	0.928243	rs10756291	18	RP11-74C3.1	317494	intergenic		11.59	7	9	15	0	0	0
AAM-EM	9:11788893:A:G	rs9695672	9	11788893	A	G	0.4294	2.67E-08	0.928243	rs10756291	18	RP11-74C3.1	309766	intergenic		2.656	6	9	15	0	0	0
AAM-EM	16:29878468:C:T	rs7198022	16	29878468	T	C	0.3042	2.67E-08	0.695299	rs7189550	32	CDIPT-AS1	0	ncRNA_introı		0.204	7	5	15	1	1	0
AAM-EM	9:11789706:C:T	rs12380203	9	11789706	C	T	0.4294	2.67E-08	0.928243	rs10756291	18	RP11-74C3.1	308953	intergenic		0.281	6	9	15	0	0	0
AAM-EM	9:11768548:A:G	rs11523721	9	11768548	A	G	0.2594	2.68E-08	0.87483	rs9969696	18	RP11-74C3.1	330111	intergenic		2.386	7	9	15	0	0	0
AAM-EM	9:11750380:A:G	rs7847864	9	11750380	A	G	0.2584	2.68E-08	0.879634	rs9969696	18	RP11-74C3.1	348279	intergenic		1.518	7	9	15	0	0	0
FIM-EO	6:127449246:A:G	rs1474696	6	127449246	A	G	0.4841	2.68E-08	0.955721	rs2489623	4	RSPO3	0	intronic		4.033	NA	2	15	1	0	0
AAM-EM	12:15409959:A:G	rs12579002	12	15409959	A	G	0.3479	2.68E-08	0.838874	rs11056439	26	RERG	0	intronic		5.267	3a	7	15	1	0	0
AAM-EM	9:11789284:G:T	rs10960223	9	11789284	G	T	0.4294	2.68E-08	0.928243	rs10756291	18	RP11-74C3.1	309375	intergenic		0.891	6	9	15	0	0	0
AAM-EM	9:11735041:G:T	rs10960139	9	11735041	G	T	0.2594	2.68E-08	0.87483	rs9969696	18	RP11-74C3.1	363618	intergenic		1.655	6	9	15	0	0	0
AAM-EM	12:15412898:A:G	rs9787983	12	15412898	A	G	0.3469	2.70E-08	0.842472	rs11056439	26	RERG	0	intronic		2.408	6	5	15	1	0	0
AAM-EM	12:15420288:A:G	rs12317636	12	15420288	G	A	0.335	2.70E-08	0.885167	rs11056439	26	RERG	0	intronic		10.37	7	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	6:152510957:A:G	rs2813524	6	152510957	A	G	0.3439	2.70E-08	1	rs2635451	15	SYNE1	0	intronic	0.997		5	4	5	1	0	0
AAM-EPP	1:204147186:C:T	rs7513165	1	204147186	T	C	0.2535	2.70E-08	0.978062	rs2510	3	RP11-203F10	4947	intergenic	0.503		5	5	14	0	0	0
AAM-EM	9:11751995:G:T	rs10960171	9	11751995	T	G	0.2594	2.71E-08	0.87483	rs9969696	18	RP11-74C3.1	346664	intergenic	1.944		5	9	15	0	0	0
FIM-EPP	12:95614953:C:T	rs10859853	12	95614953	T	C	0.336	2.71E-08	0.656224	rs10859863	9	VEZT	0	intronic	4.776		6	1	5	1	1	0
FIM-EO	3:128118711:A:G	rs1702136	3	128118711	G	A	0.2197	2.71E-08	0.98223	rs3887841	3	EEFSEC	0	intronic	0.414		5	2	15	1	0	0
AAM-EPP	1:204148168:C:T	rs12040580	1	204148168	T	C	0.2475	2.72E-08	0.956673	rs2510	3	RP11-203F10	3965	intergenic	6.129		4	5	14	0	0	0
AAM-EM	6:152509985:C:T	rs7745102	6	152509985	T	C	0.3449	2.73E-08	0.995546	rs2635451	15	SYNE1	0	intronic	1.026		6	4	5	1	0	0
FIM-EPP	3:128109916:C:T	rs741925	3	128109916	C	T	0.1312	2.73E-08	0.95738	rs2999033	4	EEFSEC	0	intronic	1.995		5	4	15	1	1	0
AAM-EPP	3:49808374:A:G	rs7431106	3	49808374	G	A	0.4732	2.73E-08	0.987655	rs4855867	7	IP6K1	0	intronic	6.852		5	4	5	1	1	0
AAM-EM	9:11740814:C:G	rs13295519	9	11740814	C	G	0.2584	2.74E-08	0.879634	rs9969696	18	RP11-74C3.1	357845	intergenic	8.152		7	9	15	0	0	0
FIM-EO	3:127923177:A:G	rs7653755	3	127923177	A	G	0.0338	2.74E-08	0.815751	rs139071297	3	EEFSEC	0	intronic	3.935		6	5	15	1	0	0
AAM-EM	9:11749261:A:G	rs10960166	9	11749261	A	G	0.2594	2.75E-08	0.87483	rs9969696	18	RP11-74C3.1	349398	intergenic	3.824		6	7	15	0	0	0
AAM-EM	9:11782178:A:G	rs10809588	9	11782178	G	A	0.4294	2.75E-08	0.928243	rs10756291	18	RP11-74C3.1	316481	intergenic	5.097		7	9	15	0	0	0
AAM-EM	9:11737002:A:G	rs35233568	9	11737002	G	A	0.2594	2.76E-08	0.87483	rs9969696	18	RP11-74C3.1	361657	intergenic	0.811		7	9	15	0	0	0
AAM-EM	9:11736462:A:G	rs7035775	9	11736462	A	G	0.2594	2.76E-08	0.87483	rs9969696	18	RP11-74C3.1	362197	intergenic	3.259		7	9	15	0	0	0
AAM-EPP	3:127756718:C:T	rs6439110	3	127756718	C	T	0.3936	2.76E-08	0.881336	rs6770337	8	SEC61A1	13765	intergenic	0.611		6	5	15	0	1	0
AAM-EM	9:11755197:A:G	rs10960181	9	11755197	G	A	0.2594	2.78E-08	0.87483	rs9969696	18	RP11-74C3.1	343462	intergenic	4.243		7	9	15	0	0	0
AAM-EM	12:15390019:A:T	rs12310061	12	15390019	A	T	0.335	2.78E-08	0.876886	rs11056439	26	RERG	0	intronic	4.128		6	13	15	1	0	0
AAM-EM	12:15387519:C:T	rs1479405	12	15387519	C	T	0.336	2.78E-08	0.873056	rs11056439	26	RERG	0	intronic	0.478		7	9	15	1	0	0
FIM-EM	10:90154277:C:T	rs792236	10	90154277	C	T	0.4364	2.78E-08	0.991483	rs2488270	8	RNLS	0	intronic	0.061		6	5	15	1	0	0
AAM-EM	9:11735126:C:T	rs10960141	9	11735126	T	C	0.2594	2.78E-08	0.87483	rs9969696	18	RP11-74C3.1	363533	intergenic	7.953		7	9	15	0	0	0
AAM-EM	9:11791989:A:C	rs36088434	9	11791989	A	C	0.2634	2.79E-08	0.867892	rs9969696	18	RP11-74C3.1	306670	intergenic	0.015		6	15	15	0	0	0
AAM-EPP	3:49807085:G:T	rs9859153	3	49807085	G	T	0.4732	2.79E-08	0.987655	rs4855867	7	IP6K1	0	intronic	1.887		5	4	5	1	1	0
AAM-EM	12:15391524:G:T	rs1479407	12	15391524	G	T	0.335	2.79E-08	0.876886	rs11056439	26	RERG	0	intronic	3.675		7	13	15	1	0	0
AAM-EM	12:15389637:C:T	rs12311304	12	15389637	T	C	0.335	2.80E-08	0.876886	rs11056439	26	RERG	0	intronic	4.037		6	13	15	1	0	0
FIM-EPP	2:11735061:A:C	rs28689909	2	11735061	C	A	0.3857	2.81E-08	1	rs28689909	3	GREB1	0	intronic	0.808		6	4	15	1	0	0
AAM-EM	12:15391157:A:G	rs56148413	12	15391157	G	A	0.335	2.81E-08	0.876886	rs11056439	26	RERG	0	intronic	2.32		7	13	15	1	0	0
AAM-EM	12:15388361:C:T	rs12309210	12	15388361	T	C	0.335	2.81E-08	0.876886	rs11056439	26	RERG	0	intronic	0.676		6	9	15	1	0	0
AAM-EM	9:11736693:C:T	rs12376875	9	11736693	T	C	0.2594	2.81E-08	0.87483	rs9969696	18	RP11-74C3.1	361966	intergenic	11.25		6	9	15	0	0	0
FIM-EPP	12:95647235:A:G	rs7954978	12	95647235	A	G	0.336	2.81E-08	0.657149	rs10859863	9	VEZT	0	intronic	0.809	3a		4	4	1	1	0
AAM-EM	9:11788593:C:T	rs9695120	9	11788593	T	C	0.4294	2.81E-08	0.928243	rs10756291	18	RP11-74C3.1	310066	intergenic	5.129		5	7	15	0	0	0
AAM-EM	6:152511318:A:T	rs2635458	6	152511318	T	A	0.3449	2.82E-08	0.995578	rs2635451	15	SYNE1	0	intronic	1.41		6	4	5	1	0	0
AAM-EPP	6:74603664:A:G	rs3005507	6	74603664	G	A	0.336	2.82E-08	1	rs12209746	9	CD109	65623	intergenic	5.934		5	9	15	0	0	0
AAM-EM	9:11778059:A:G	rs7860951	9	11778059	A	G	0.4304	2.82E-08	0.924199	rs10756291	18	RP11-74C3.1	320600	intergenic	2.723		7	9	15	0	0	0
AAM-EM	9:11787339:G:T	rs66964574	9	11787339	T	G	0.4294	2.82E-08	0.928243	rs10756291	18	RP11-74C3.1	311320	intergenic	3.712		7	9	15	0	0	0
LMC-EM	2:49272770:A:G	rs17038141	2	49272770	G	A	0.1571	2.82E-08	0.712013	rs4971681	2	FSHR	0	intronic	6.296		6	5	15	1	0	0
AAM-EM	9:11733783:A:G	rs13285871	9	11733783	G	A	0.2654	2.83E-08	0.837457	rs9969696	18	RP11-74C3.1	364876	intergenic	1.354		6	9	15	0	0	0
AAM-EM	9:11735088:C:T	rs10960140	9	11735088	T	C	0.2594	2.83E-08	0.87483	rs9969696	18	RP11-74C3.1	363571	intergenic	0.083		6	9	15	0	0	0
AAM-EM	9:11736985:A:C	rs35094746	9	11736985	C	A	0.2575	2.83E-08	0.874562	rs9969696	18	RP11-74C3.1	361674	intergenic	1.877		7	9	15	0	0	0
LMC-EM	21:36461659:A:G	rs2031088	21	36461659	A	G	0.337	2.83E-08	0.848553	rs2834747	10	RUNX1	0	intronic	1.15	NA		5	15	1	0	0
AAM-EPP	6:74680038:A:G	rs3003187	6	74680038	A	G	0.3449	2.84E-08	0.773324	rs12209746	9	TXNP7	34197	intergenic	19.68	2b		5	15	0	0	0
FIM-EO	6:127449447:A:G	rs2745352	6	127449447	A	G	0.4841	2.84E-08	0.955721	rs2489623	4	RSPO3	0	intronic	3.495		6	2	15	1	0	0
AAM-EM	6:100750852:A:G	rs12111503	6	100750852	G	A	0.2962	2.84E-08	1	rs9403595	13	SIM1	82038	intergenic	0.907		7	5	15	0	0	0
AAM-EM	9:11762597:A:G	rs35172165	9	11762597	A	G	0.2594	2.84E-08	0.87483	rs9969696	18	RP11-74C3.1	336062	intergenic	0.001		7	9	15	0	0	0
AAM-EM	9:11762410:A:G	rs10756278	9	11762410	A	G	0.4374	2.85E-08	0.911735	rs10756291	18	RP11-74C3.1	336249	intergenic	1.808		6	9	15	0	0	0
AAM-EM	9:11742877:A:G	rs10960152	9	11742877	G	A	0.2594	2.85E-08	0.87483	rs9969696	18	RP11-74C3.1	355782	intergenic	0.897		7	9	15	0	0	0
FIM-EO	1:169032877:C:T	rs114964168	1	169032877	C	T	0.01789	2.86E-08	1	rs114964168	1	LINC00970	0	ncRNA_intron	1.22		7	5	15	0	0	0
AAM-EM	9:11737404:A:T	rs10960145	9	11737404	T	A	0.2584	2.86E-08	0.879634	rs9969696	18	RP11-74C3.1	361255	intergenic	4.671		7	9	15	0	0	0
AAM-EM	9:11752940:A:G	rs10960173	9	11752940	A	G	0.2594	2.87E-08	0.87483	rs9969696	18	RP11-74C3.1	345719	intergenic	5.387		6	9	15	0	0	0
AAM-EPP	3:49799475:A:C	rs9882639	3	49799475	A	C	0.4732	2.87E-08	0.987655	rs4855867	7	IP6K1	0	intronic	5.262		5	4	5	1	1	0
AAM-EM	9:11787691:A:G	rs75966800	9	11787691	G	A	0.4294	2.87E-08	0.928243	rs10756291	18	RP11-74C3.1	310968	intergenic	1.729		6	9	15	0	0	0
AAM-EPP	6:74679978:G:T	rs3003186	6	74679978	T	G	0.3449	2.87E-08	0.773324	rs12209746	9	TXNP7	34257	intergenic	8.078	2b		5	15	0	0	0
AAM-EM	9:11750690:A:G	rs7848257	9	11750690	A	G	0.2594	2.88E-08	0.87483	rs9969696	18	RP11-74C3.1	347969	intergenic	1.143		7	9	15	0	0	0
AAM-EPP	3:49800272:C:T	rs60205400	3	49800272	C	T	0.4732	2.88E-08	0.987655	rs4855867	7	IP6K1	0	intronic	2.525		7	4	5	1	1	0
FIM-EPP	2:11733545:A:AACTC	rs10693974	2	11733545	A	AACTC	0.3877	2.88E-08	0.991217	rs28689909	3	GREB1	0	intronic	2.644	NA		4	15	1	0	0
AAM-EPP	6:151721749:A:G	rs7771156	6	151721749	G	A	0.336	2.89E-08	0.639389	rs9479041	11	RMND1	4239	intergenic	1.038		5	4	5	0	1	0
FIM-EPP	11:30216006:C:T	rs632939	11	30216006	T	C	0.3926	2.89E-08	0.987662	rs961605	8	RP4-562D20.1	27152	intergenic	10.1	NA		14	15	0	1	0
AAM-EPP	3:127732271:A:G	rs6801467	3	127732271	G	A	0.3936	2.89E-08	0.888861	rs6770337	8	KBTBD12	25756	intergenic	1.078		7	5	15	0	1	0
AAM-EM	9:11788519:A:G	rs12001029	9	11788519	A	G	0.4304	2.89E-08	0.923943	rs10756291	18	RP11-74C3.1	310140	intergenic	1.158		6	7	15	0	0	0
AAM-EPP	3:127719920:C:T	rs72967027	3	127719920	T	C	0.1571	2.89E-08	0.768022	rs2811473	8	KBTBD12	13405	intergenic	2.246		7	5	14	0	1	0
AAM-EPP	3:49789664:A:T	rs7429353	3	49789664	T	A	0.4742	2.90E-08	0.991723	rs4855867	7	IP6K1	0	intronic	0.183		6	4	5	1	1	0
AAM-EM	1:43919413:A:G	rs6692611	1	43919413	A	G	0.3638	2.90E-08	1	rs6692611	1	HYI	0	exonic	12.97		4	1	1	1	0	0
AAM-EM	6:152509822:A:G	rs7758071	6	152509822	G	A	0.3439	2.91E-08	1	rs2635451	15	SYNE1	0	intronic	0.396		7	4	5	1	0	0
AAM-EM	9:11770240:A:G	rs12377578	9	11770240	A	G	0.2594	2.91E-08	0.87483	rs9969696	18	RP11-74C3.1	328419	intergenic	2.517		7	9	15	0	0	0
AAM-EM	7:121972034:A:G	rs6963328	7	121972034	A	G	0.1382	2.91E-08	0.946078	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intron	13.09		6	5	15	1	0	0
AAM-EM	9:11794977:A:C	rs10960236	9	11794977	C	A	0.4304	2.92E-08	0.932181	rs10756291	18	RP11-74C3.1	303682	intergenic	8.559		5	9	15	0	0	0
FIM-EO	2:11721535:G:T	rs11674184	2	11721535	T	G	0.4423	2.93E-08	0.716669	rs10693974	2	GREB1	0	intronic	14.54		5	4	15	1	0	0
AAM-EM	9:11762493:A:C	rs71505191	9	11762493	C	A	0.2594	2.93E-08	0.87483	rs9969696	18	RP11-74C3.1	336166	intergenic	0.057		6	9	15	0	0	0
AAM-EM	12:15412945:A:G	rs12296735	12	15412945	A	G	0.3469	2.94E-08	0.842472	rs11056439	26	RERG	0	intronic	5.022		7	5	15	1	0	0
AAM-EM	9:11741181:A:G	rs7861493	9	11741181	A	G	0.2584	2.94E-08	0.879634	rs9969696	18	RP11-74C3.1	357478	intergenic	0.213		6	9	15	0	0	0
AAM-EM	16:30023786:C:G	rs12325400	16	30023786	C	G	0.3847	2.94E-08	0.72373	rs3814883	32	DOC2A	0	intronic	5.325		4	1	13	1	1	0
AAM-EM	9:11761892:A:C	rs10960197	9	11761892	C	A	0.2594	2.95E-08	0.865522	rs9969696	18	RP11-74C3.1	336767	intergenic	0.636		6	9	15	0	0	0
FIM-EM	1:169272453:A:G	rs10800428	1	169272453	G	A	0.04076	2.95E-08	1	rs10800428	1	NME7	0	intronic	0.65		7	5	15	1	0	0
AAM-EM	9:11786470:A:T	rs7872741	9	11786470	A	T	0.4294	2.95E-08	0.928243	rs10756291	18	RP11-74C3.1	312189	intergenic	0.952		6	9	15	0	0	0
AAM-EM	9:11739533:C:T	rs10960149	9	11739533	C	T	0.2594	2.95E-08	0.87483	rs9969696	18	RP11-74C3.1	359126	intergenic	0.543		6	9	15	0	0	0
AAM-EM	9:11755162:C:G	rs10960180	9	11755162	C	G	0.2604	2.95E-08	0.870056	rs9969696	18	RP11-74C3.1	343497	intergenic	0.516		6	9	15	0	0	0
AAM-EM	9:11755255:A:G	rs10960182	9	11755255	A	G	0.2604	2.95E-08	0.870056	rs9969696	18	RP11-74C3.1	343404	intergenic	0.745		6	9	15	0	0	0
FIM-EPP	1:22462111:A:G	rs12037376	1	22462111	G	A	0.1421	2.96E-08	0.730692	rs10917130	1	WNT4	0	intronic	6.212		5	5	14	1	0	0
AAM-EM	9:11793643:G:T	rs10960233	9	11793643	T	G	0.4304	2.96E-08	0.932181	rs10756291	18	RP11-74C3.1	305016	intergenic	0.146		6	9	15	0	0	0
AAM-EM	9:11786376:A:T	rs7858903	9	11786376	T	A	0.4294	2.96E-08	0.928243	rs10756291	18	RP11-74C3.1	312283	intergenic	1.607		6	9	15	0	0	0
FIM-EPP	2:11744694:C:T	rs746579	2	11744694	C	T	0.325	2.97E-08	0.664515	rs28689909	3	GREB1	0	intronic	1.114		6	4	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	19:18819060:A:T	rs60021783	19	18819060	T	A	0.2396	2.97E-08	1	rs60021783	33	CRTC1	0	intronic	6.38		5	5	15	1	0	0
AAM-EM	9:11742001:A:T	rs1352195	9	11742001	A	T	0.2594	2.97E-08	0.87483	rs9969696	18	RP11-74C3.1	356658	intergenic	8.655		5	9	15	0	0	0
AAM-EM	9:11743343:G:T	rs10809574	9	11743343	T	G	0.2594	2.97E-08	0.87483	rs9969696	18	RP11-74C3.1	355316	intergenic	3.988		6	7	15	0	0	0
FIM-EO	3:127867592:G:T	rs73192977	3	127867592	T	G	0.1491	2.98E-08	0.919185	rs58170120	3	RUVBL1	0	intronic	0.27		5	5	15	1	1	0
FIM-EO	3:127869165:A:G	rs4857870	3	127869165	G	A	0.1491	2.98E-08	0.919185	rs58170120	3	RUVBL1	0	intronic	6.493		7	5	15	1	1	0
AAM-EM	9:11741707:C:G	rs7862308	9	11741707	C	G	0.2594	2.98E-08	0.87483	rs9969696	18	RP11-74C3.1	356952	intergenic	2.048		7	9	15	0	0	0
AAM-EPP	6:74680590:A:G	rs3003189	6	74680590	A	G	0.3449	2.98E-08	0.773324	rs12209746	9	TXNP7	33645	intergenic	1.772		6	5	15	0	0	0
AAM-EM	9:11790689:G:T	rs7867801	9	11790689	G	T	0.4294	2.99E-08	0.928243	rs10756291	18	RP11-74C3.1	307970	intergenic	0.082		6	9	15	0	0	0
FIM-EPP	11:30222637:C:T	rs622744	11	30222637	T	C	0.3936	2.99E-08	0.983484	rs961605	8	FSHB	29925	intergenic	1.891	NA		5	15	0	1	0
AAM-EM	16:30016022:C:T	rs12928610	16	30016022	C	T	0.4781	2.99E-08	0.655281	rs11647753	32	INO80E	0	intronic	14.18		5	3	5	1	1	0
FIM-EPP	11:30217003:A:T	rs574096	11	30217003	A	T	0.3956	2.99E-08	1	rs961605	8	RP4-562D20.1	28149	intergenic	4.203		6	2	15	0	1	0
AAM-EM	9:11748821:A:G	rs66777182	9	11748821	A	G	0.2584	2.99E-08	0.879634	rs9969696	18	RP11-74C3.1	349838	intergenic	12.27		6	7	15	0	0	0
AAM-EM	9:11741320:C:T	rs7861814	9	11741320	C	T	0.2594	2.99E-08	0.87483	rs9969696	18	RP11-74C3.1	357339	intergenic	0.323		7	9	15	0	0	0
AAM-EPP	3:49821625:C:T	rs13063621	3	49821625	T	C	0.4732	2.99E-08	0.987655	rs4855867	7	IP6K1	0	intronic	0.591		7	4	5	1	1	0
AAM-EM	9:11764983:C:G	rs71505193	9	11764983	C	G	0.2594	2.99E-08	0.87483	rs9969696	18	RP11-74C3.1	333676	intergenic	4.102		7	9	15	0	0	0
AAM-EM	9:11746740:C:T	rs13290359	9	11746740	T	C	0.2584	2.99E-08	0.879634	rs9969696	18	RP11-74C3.1	351919	intergenic	3.362		7	9	15	0	0	0
AAM-EM	3:49761571:A:G	rs4855850	3	49761571	G	A	0.4742	2.99E-08	0.987666	rs2271960	8	IP6K1	155	upstream	15.82	NA		1	1	1	1	0
AAM-EM	9:11794224:C:G	rs10960235	9	11794224	G	C	0.4304	3.00E-08	0.932181	rs10756291	18	RP11-74C3.1	304435	intergenic	0.486		6	9	15	0	0	0
FIM-EPP	12:95628466:A:T	rs10777678	12	95628466	A	T	0.336	3.00E-08	0.656224	rs10859863	9	VEZT	0	intronic	3.799		6	4	5	1	0	0
FIM-EM	1:169272451:A:T	rs10800427	1	169272451	A	T	0.04076	3.01E-08	1	rs10800428	1	NME7	0	intronic	0.078		7	5	15	1	0	0
FIM-EPP	2:11742854:A:C	rs62118315	2	11742854	C	A	0.3201	3.02E-08	0.66626	rs28689909	3	GREB1	0	intronic	0.81		4	2	15	1	0	0
AAM-EPP	3:127806218:A:G	rs3732402	3	127806218	G	A	0.3897	3.02E-08	0.867258	rs6770337	8	RUVBL1	0	intronic	4.197		4	4	4	1	1	0
FIM-EPP	2:11718858:C:T	rs7578132	2	11718858	T	C	0.4801	3.03E-08	1	rs7578132	3	GREB1	0	intronic	0.596	3a		4	15	1	0	0
FIM-EO	3:127878330:A:G	rs2999047	3	127878330	A	G	0.1491	3.03E-08	0.919185	rs58170120	3	EEFSEC	0	intronic	9.653		7	4	5	1	1	0
AAM-EM	3:49941436:A:G	rs2280406	3	49941436	G	A	0.4911	3.03E-08	0.710957	rs34034116	8	CTD-2330K9.3	0	UTR5	11.37	NA		1	2	1	1	0
LMC-EM	6:152472284:C:G	rs2092753	6	152472284	G	C	0.04871	3.03E-08	0.702457	rs73632499	5	SYNE1	0	intronic	1.869		7	4	4	1	0	0
AAM-EM	12:15375619:A:C	rs961176	12	15375619	A	C	0.335	3.04E-08	0.876886	rs11056439	26	RERG	0	intronic	1.512		4	5	14	1	0	0
FIM-EPP	11:30225170:C:G	rs1716021	11	30225170	G	C	0.3907	3.04E-08	0.979529	rs961605	8	FSHB	27392	intergenic	1.813		6	7	15	0	1	0
FIM-EO	3:127870929:C:G	rs10934849	3	127870929	C	G	0.1491	3.05E-08	0.919185	rs58170120	3	RUVBL1	0	intronic	1.184		4	2	15	1	1	0
AAM-EM	9:11792791:A:T	rs9695463	9	11792791	A	T	0.4314	3.06E-08	0.927897	rs10756291	18	RP11-74C3.1	305868	intergenic	2.324		5	9	15	0	0	0
FIM-EM	3:128081260:C:G	rs1735545	3	128081260	G	C	0.2187	3.06E-08	0.711101	rs2955118	3	EEFSEC	0	intronic	2.059		4	4	5	1	1	0
LMC-EM	2:49324064:G:T	rs6749906	2	49324064	T	G	0.2286	3.07E-08	0.994548	rs6744698	2	FSHR	0	intronic	0.503		7	5	15	1	0	0
AAM-EM	9:11763150:A:G	rs1486811	9	11763150	A	G	0.2594	3.07E-08	0.87483	rs9969696	18	RP11-74C3.1	335509	intergenic	4.869		6	9	15	0	0	0
AAM-EM	3:185618532:C:G	rs6781387	3	185618532	C	G	0.3191	3.07E-08	1	rs6781387	10	TRA2B	15161	intergenic	3.29		5	5	15	0	0	0
AAM-EM	12:15383683:C:G	rs56232194	12	15383683	G	C	0.336	3.08E-08	0.873056	rs11056439	26	RERG	0	intronic	0.214		4	2	14	1	0	0
AAM-EM	6:151895777:C:T	rs12197879	6	151895777	C	T	0.4145	3.08E-08	0.792927	rs12210735	14	CCDC170	0	intronic	0.43	3a		5	15	1	0	0
AAM-EM	12:15381505:C:T	rs7299887	12	15381505	T	C	0.335	3.08E-08	0.876886	rs11056439	26	RERG	0	intronic	2.31		7	5	14	1	0	0
AAM-EM	6:152511420:C:T	rs2813526	6	152511420	C	T	0.3439	3.09E-08	1	rs2635451	15	SYNE1	0	intronic	0.736		7	4	5	1	0	0
AAM-EM	6:74608903:G:T	rs1529992	6	74608903	G	T	0.336	3.10E-08	1	rs12209746	12	CD109	70862	intergenic	2.06		7	13	15	0	0	0
AAM-EPP	3:49762662:G:T	rs7634902	3	49762662	G	T	0.4742	3.10E-08	0.991723	rs4855867	7	IP6K1	0	UTR3	4.68		5	2	5	1	1	0
AAM-EM	7:121983719:C:G	rs873376	7	121983719	C	G	0.1372	3.10E-08	0.972529	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı	2.164		6	5	15	1	0	0
AAM-EM	12:15422505:A:T	rs7956696	12	15422505	A	T	0.327	3.10E-08	0.923137	rs11056439	26	RERG	0	intronic	4.978		7	5	15	1	0	0
AAM-EM	9:11779723:C:T	rs12379819	9	11779723	T	C	0.4294	3.11E-08	0.928243	rs10756291	18	RP11-74C3.1	318936	intergenic	1.839		7	7	15	0	0	0
AAM-EM	12:15401796:A:T	rs1120565	12	15401796	T	A	0.334	3.11E-08	0.880736	rs11056439	26	RERG	0	intronic	3.278		7	9	15	1	0	0
AAM-EPP	3:49842625:A:G	rs2234391	3	49842625	A	G	0.4732	3.11E-08	0.987655	rs4855867	7	UBA7	14	downstream	6.805	NA		1	7	1	1	0
AAM-EM	9:11741954:A:C	rs1352194	9	11741954	C	A	0.2594	3.11E-08	0.87483	rs9969696	18	RP11-74C3.1	356705	intergenic	7.625		5	9	15	0	0	0
AAM-EM	9:11745919:A:G	rs10960161	9	11745919	G	A	0.2584	3.12E-08	0.879634	rs9969696	18	RP11-74C3.1	352740	intergenic	1.696		6	9	15	0	0	0
AAM-EM	12:15375929:A:G	rs34562067	12	15375929	A	G	0.335	3.12E-08	0.876886	rs11056439	26	RERG	0	intronic	0.578	NA		5	14	1	0	0
AAM-EM	9:11740248:A:T	rs72702286	9	11740248	A	T	0.2594	3.12E-08	0.87483	rs9969696	18	RP11-74C3.1	358411	intergenic	2.364		7	9	15	0	0	0
AAM-EM	9:11797972:C:G	rs10960245	9	11797972	C	G	0.4314	3.12E-08	0.936135	rs10756291	18	RP11-74C3.1	300687	intergenic	1.881		7	9	15	0	0	0
AAM-EM	12:15374630:C:T	rs6488766	12	15374630	T	C	0.336	3.13E-08	0.87369	rs11056439	26	RERG	0	intronic	7.777		4	1	14	1	0	0
AAM-EM	9:11740546:A:G	rs1906117	9	11740546	A	G	0.2594	3.13E-08	0.87483	rs9969696	18	RP11-74C3.1	358113	intergenic	4.527		6	9	15	0	0	0
AAM-EPP	3:49858142:A:G	rs10865958	3	49858142	A	G	0.4732	3.14E-08	0.987655	rs4855867	7	AC139451.1	1655	intergenic	2.873		6	5	15	0	1	0
AAM-EPP	3:49772375:A:G	rs7649348	3	49772375	G	A	0.4742	3.14E-08	0.991723	rs4855867	7	IP6K1	0	intronic	5.161		5	4	4	1	1	0
AAM-EM	9:11740740:C:G	rs36100946	9	11740740	C	G	0.2594	3.14E-08	0.87483	rs9969696	18	RP11-74C3.1	357919	intergenic	3.199		7	9	15	0	0	0
FIM-EO	3:127878064:C:T	rs2955115	3	127878064	C	T	0.1491	3.14E-08	0.919185	rs58170120	3	EEFSEC	0	intronic	3.183		7	4	5	1	1	0
LMC-EM	21:36447889:A:G	rs1004164	21	36447889	G	A	0.3201	3.14E-08	0.995698	rs2834747	10	RUNX1	0	intronic	3.94	NA		5	15	1	0	0
AAM-EM	9:11789555:G:T	rs34539190	9	11789555	T	G	0.4294	3.14E-08	0.928243	rs10756291	18	RP11-74C3.1	309104	intergenic	1.613		7	9	15	0	0	0
AAM-EM	16:30008644:C:T	rs11649149	16	30008644	C	T	0.4742	3.14E-08	0.663848	rs11647753	32	INO80E	0	intronic	4.684		5	1	5	1	1	0
FIM-EO	3:127877756:A:C	rs2955114	3	127877756	A	C	0.1491	3.15E-08	0.919185	rs58170120	3	EEFSEC	0	intronic	2.738		6	4	5	1	1	0
AAM-EM	9:11783939:A:G	rs7861176	9	11783939	G	A	0.4235	3.15E-08	0.906742	rs10756291	18	RP11-74C3.1	314720	intergenic	1.837		7	9	15	0	0	0
AAM-EM	7:121983517:A:G	rs873378	7	121983517	A	G	0.1392	3.16E-08	0.955122	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı	5.715	NA		5	15	1	0	0
AAM-EM	9:11740781:C:T	rs35946441	9	11740781	C	T	0.2594	3.16E-08	0.87483	rs9969696	18	RP11-74C3.1	357878	intergenic	8.457		7	9	15	0	0	0
AAM-EM	12:15395799:C:T	rs16910711	12	15395799	C	T	0.335	3.16E-08	0.876886	rs11056439	26	RERG	0	intronic	0.355		6	5	15	1	0	0
FIM-EO	3:127878871:A:G	rs2811472	3	127878871	A	G	0.1491	3.16E-08	0.919185	rs58170120	3	EEFSEC	0	intronic	7.177		7	4	5	1	1	0
FIM-EO	3:127872175:C:G	rs11920225	3	127872175	C	G	0.1491	3.17E-08	0.919185	rs58170120	3	RUVBL1	0	UTR5	8.594	2b		1	1	1	1	0
AAM-EM	9:11761121:A:G	rs13292892	9	11761121	A	G	0.2604	3.17E-08	0.870056	rs9969696	18	RP11-74C3.1	337538	intergenic	0.547		6	9	15	0	0	0
AAM-EM	9:11782345:A:G	rs10809590	9	11782345	G	A	0.4294	3.17E-08	0.928243	rs10756291	18	RP11-74C3.1	316314	intergenic	0.425		6	9	15	0	0	0
AAM-EM	9:11756486:A:T	rs10960187	9	11756486	T	A	0.2594	3.17E-08	0.87483	rs9969696	18	RP11-74C3.1	342173	intergenic	4.747		7	9	15	0	0	0
AAM-EM	16:29928115:A:G	rs11647753	16	29928115	A	G	0.3956	3.17E-08	1	rs11647753	32	ASPHD1:KC	0:00	intronic	7.469	1f		2	5	1	1	0
AAM-EPP	3:127740453:C:G	rs35546672	3	127740453	C	G	0.3936	3.17E-08	0.888861	rs6770337	8	SEC61A1	30030	intergenic	5.556		7	7	15	0	1	0
AAM-EM	16:30021402:C:T	rs1140239	16	30021402	C	T	0.3847	3.17E-08	0.716503	rs3814883	32	DOC2A	0	exonic	11.45	NA		1	13	1	1	0
FIM-EO	3:127877385:C:T	rs2492284	3	127877385	T	C	0.1491	3.17E-08	0.919185	rs58170120	3	EEFSEC	0	intronic	3.535		6	4	5	1	1	0
AAM-EM	9:11757283:A:T	rs10960189	9	11757283	T	A	0.2604	3.18E-08	0.870056	rs9969696	18	RP11-74C3.1	341376	intergenic	4.32		6	9	15	0	0	0
AAM-EM	9:11783657:A:C	rs7860511	9	11783657	A	C	0.4294	3.18E-08	0.928243	rs10756291	18	RP11-74C3.1	315002	intergenic	4.659		6	9	15	0	0	0
AAM-EPP	3:128117573:A:G	rs1702153	3	128117573	G	A	0.1282	3.18E-08	0.881522	rs4277707	8	EEFSEC	0	intronic	0.65		5	4	15	1	1	0
AAM-EM	12:57376840:C:T	rs3894415	12	57376840	C	T	0.1282	3.18E-08	1	rs3894415	29	GPR182	11389	intergenic	0.938		5	5	15	0	0	0
AAM-EPP	12:15500183:A:G	rs11056439	12	15500183	G	A	0.3111	3.18E-08	1	rs11056439	19	RERG:PTPRC	0:00	intronic	0.724		6	1	15	1	0	0
AAM-EM	9:11760452:A:G	rs67589545	9	11760452	G	A	0.2594	3.18E-08	0.87483	rs9969696	18	RP11-74C3.1	338207	intergenic	0.627		7	9	15	0	0	0
AAM-EM	9:11782763:A:C	rs9919057	9	11782763	A	C	0.4304	3.18E-08	0.924199	rs10756291	18	RP11-74C3.1	315896	intergenic	4.558		7	9	15	0	0	0
AAM-EM	12:15381237:A:G	rs7310253	12	15381237	G	A	0.335	3.19E-08	0.876886	rs11056439	26	RERG	0	intronic	0.754		6	5	14	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:49788969:C:T	rs7372966	3	49788969	T	C	0.4742	3.19E-08	0.991723	rs4855867	7	IP6K1	0	intronic	0.833		7	4	5	1	1	0
AAM-EPP	3:49790682:C:G	rs7372730	3	49790682	C	G	0.4742	3.19E-08	0.991723	rs4855867	7	IP6K1	0	intronic	2.739		5	4	5	1	1	0
AAM-EM	9:11761235:C:T	rs34514190	9	11761235	C	T	0.2604	3.19E-08	0.870056	rs9969696	18	RP11-74C3.1	337424	intergenic	4.146		5	9	15	0	0	0
AAM-EM	9:11755685:A:G	rs7869159	9	11755685	G	A	0.2584	3.19E-08	0.879634	rs9969696	18	RP11-74C3.1	342974	intergenic	2.303		6	9	15	0	0	0
AAM-EM	7:121981921:C:T	rs17461878	7	121981921	T	C	0.1372	3.19E-08	0.972529	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı	6.17		7	5	15	1	0	0
FIM-EO	6:127468188:A:G	rs2503111	6	127468188	G	A	0.492	3.19E-08	0.923352	rs2489623	4	RSPO3	0	intronic	15.9	2a		2	15	1	0	0
AAM-EM	9:11793635:A:G	rs10960232	9	11793635	G	A	0.4304	3.19E-08	0.932181	rs10756291	18	RP11-74C3.1	305024	intergenic	1.018		7	9	15	0	0	0
LMC-EM	2:49330545:C:T	rs7590213	2	49330545	C	T	0.2207	3.19E-08	0.940475	rs6744698	2	FSHR	0	intronic	0.159		7	5	15	1	0	0
AAM-EPP	3:127711997:C:T	rs9839080	3	127711997	C	T	0.4215	3.20E-08	0.987799	rs6770337	8	KBTBD12	5482	intergenic	1.509		6	5	15	0	1	0
AAM-EM	9:11787456:A:G	rs35981805	9	11787456	A	G	0.4294	3.20E-08	0.928243	rs10756291	18	RP11-74C3.1	311203	intergenic	4.05		6	9	15	0	0	0
FIM-EO	3:127872796:C:T	rs2999046	3	127872796	C	T	0.1491	3.22E-08	0.919185	rs58170120	3	EEFSEC	0	intronic	8.853		4	1	1	1	1	0
AAM-EPP	3:127727752:C:T	rs11717102	3	127727752	C	T	0.3936	3.22E-08	0.888861	rs6770337	8	KBTBD12	21237	intergenic	0.73		7	5	15	0	1	0
LMC-EM	11:30104841:A:G	rs7933948	11	30104841	A	G	0.341	3.22E-08	1	rs7933948	7	RP11-624D11	0	ncRNA_introı	6.467		6	14	15	0	0	0
AAM-EM	9:11759666:A:G	rs10960193	9	11759666	A	G	0.2594	3.22E-08	0.87483	rs9969696	18	RP11-74C3.1	338993	intergenic	7.254		6	9	15	0	0	0
AAM-EM	9:11759590:A:G	rs10960192	9	11759590	G	A	0.2594	3.22E-08	0.87483	rs9969696	18	RP11-74C3.1	339069	intergenic	0.837		6	9	15	0	0	0
AAM-EM	6:152513874:G:T	rs7766507	6	152513874	T	G	0.3171	3.22E-08	0.887305	rs2635451	15	SYNE1	0	intronic	11.08		6	4	5	1	0	0
AAM-EM	9:11741178:C:T	rs7861596	9	11741178	C	T	0.2594	3.22E-08	0.87483	rs9969696	18	RP11-74C3.1	357481	intergenic	0.242		6	9	15	0	0	0
AAM-EM	2:203014959:C:T	rs77251002	2	203014959	T	C	0.1252	3.22E-08	1	rs77251002	7	AC079354.1	0	intronic	18.88	2a		2	15	1	0	0
AAM-EM	7:121972281:C:T	rs6945851	7	121972281	T	C	0.1382	3.23E-08	0.946078	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı	5.238		6	5	15	1	0	0
LMC-EM	11:30135595:C:T	rs1369810	11	30135595	T	C	0.3419	3.24E-08	0.995568	rs7933948	7	RP11-624D11	29704	intergenic	5.274		6	5	15	0	0	0
AAM-EPP	6:74762145:A:G	rs9341445	6	74762145	A	G	0.3728	3.24E-08	0.857232	rs4605844	9	RP11-554D15	17021	intergenic	4.41		7	7	15	0	0	0
AAM-EM	9:11755046:C:T	rs10960178	9	11755046	T	C	0.2584	3.24E-08	0.879634	rs9969696	18	RP11-74C3.1	343613	intergenic	0.915		7	9	15	0	0	0
AAM-EM	9:11790500:A:G	rs7867629	9	11790500	G	A	0.4294	3.25E-08	0.928243	rs10756291	18	RP11-74C3.1	308159	intergenic	2.123		7	9	15	0	0	0
AAM-EM	9:11792029:A:G	rs10960229	9	11792029	G	A	0.4364	3.25E-08	0.908884	rs10756291	18	RP11-74C3.1	306630	intergenic	2.85		7	9	15	0	0	0
AAM-EM	9:11763818:A:C	rs12376993	9	11763818	A	C	0.2594	3.25E-08	0.87483	rs9969696	18	RP11-74C3.1	334841	intergenic	2.772		7	9	15	0	0	0
AAM-EM	3:49890613:C:T	rs2352974	3	49890613	C	T	0.4662	3.26E-08	0.979609	rs2271960	8	TRAIP	0	intronic	4.282		6	5	5	1	1	0
AAM-EPP	12:15500176:C:T	rs11056438	12	15500176	T	C	0.3111	3.26E-08	1	rs11056439	19	RERG:PTPR(	0:00	intronic	6.047		7	1	15	1	0	0
FIM-EPP	2:11739368:G:T	rs10929760	2	11739368	G	T	0.3797	3.26E-08	0.701803	rs28689909	3	GREB1	0	intronic	2.543		7	4	15	1	0	0
AAM-EPP	3:49790544:A:C	rs7372725	3	49790544	C	A	0.4742	3.26E-08	0.991723	rs4855867	7	IP6K1	0	intronic	0.156		7	4	5	1	1	0
AAM-EPP	3:49783211:A:C	rs9853458	3	49783211	A	C	0.4742	3.26E-08	0.991723	rs4855867	7	IP6K1	0	intronic	0.776		7	4	5	1	1	0
FIM-EPP	2:11742458:A:G	rs72772088	2	11742458	A	G	0.3797	3.27E-08	0.724707	rs28689909	3	GREB1	0	intronic	1.772		5	2	15	1	0	0
AAM-EPP	6:74761908:C:T	rs6914017	6	74761908	T	C	0.3728	3.27E-08	0.857232	rs4605844	9	RP11-554D15	17258	intergenic	3.499		6	7	15	0	0	0
AAM-EM	16:30026748:C:T	rs12935701	16	30026748	C	T	0.3847	3.28E-08	0.72373	rs3814883	32	DOC2A	0	intronic	1.649		7	5	14	1	1	0
AAM-EM	6:74621193:A:G	rs2917884	6	74621193	A	G	0.336	3.28E-08	1	rs12209746	12	CD109	83152	intergenic	8.243		6	9	15	0	0	0
AAM-EM	6:74621505:A:C	rs2917885	6	74621505	A	C	0.336	3.28E-08	1	rs12209746	12	CD109	83464	intergenic	2.366		5	9	15	0	0	0
AAM-EPP	10:90179192:C:T	rs4934403	10	90179192	C	T	0.4374	3.28E-08	0.763885	rs7921352	15	RNLS	0	intronic	2.154		7	5	15	1	0	0
AAM-EM	9:11768112:C:T	rs11523720	9	11768112	C	T	0.2594	3.28E-08	0.87483	rs9969696	18	RP11-74C3.1	330547	intergenic	7.984		7	9	15	0	0	0
AAM-EM	16:29934050:A:G	rs12932403	16	29934050	A	G	0.4533	3.28E-08	1	rs12932403	32	KCTD13	0	UTR3	6.937		6	4	4	1	0	0
AAM-EM	9:11749855:C:G	rs10511570	9	11749855	C	G	0.2594	3.28E-08	0.87483	rs9969696	18	RP11-74C3.1	348804	intergenic	0.032		7	7	15	0	0	0
AAM-EPP	3:49773236:A:G	rs35261599	3	49773236	G	A	0.4742	3.29E-08	0.991723	rs4855867	7	IP6K1	0	intronic	5.167		5	4	4	1	1	0
AAM-EM	16:30026469:A:G	rs11649274	16	30026469	G	A	0.3847	3.30E-08	0.72373	rs3814883	32	DOC2A	0	intronic	6.269		5	5	14	1	1	0
AAM-EM	9:11761975:A:G	rs10960198	9	11761975	G	A	0.2604	3.30E-08	0.870056	rs9969696	18	RP11-74C3.1	336684	intergenic	1.266		6	9	15	0	0	0
AAM-EPP	6:74760775:C:T	rs4529263	6	74760775	C	T	0.3728	3.30E-08	0.857232	rs4605844	9	RP11-554D15	18391	intergenic	0.773	3a		7	15	0	0	0
AAM-EM	9:11756342:C:T	rs10960186	9	11756342	T	C	0.2584	3.30E-08	0.879634	rs9969696	18	RP11-74C3.1	342317	intergenic	6.721		7	9	15	0	0	0
AAM-EPP	3:128112307:C:T	rs1620440	3	128112307	T	C	0.1322	3.30E-08	0.880859	rs4277707	8	EEFSEC	0	intronic	4.23		4	4	15	1	1	0
AAM-EM	7:121983707:A:T	rs873377	7	121983707	A	T	0.1392	3.31E-08	0.955122	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı	1.564		7	5	15	1	0	0
FIM-EPP	11:30223866:A:G	rs606642	11	30223866	G	A	0.3936	3.31E-08	0.983555	rs961605	8	FSHB	28696	intergenic	0.592	NA		14	15	0	1	0
AAM-EM	9:11738565:A:G	rs7470179	9	11738565	A	G	0.2584	3.31E-08	0.879634	rs9969696	18	RP11-74C3.1	360094	intergenic	2.531		7	9	15	0	0	0
AAM-EM	3:49789814:A:G	rs7426497	3	49789814	G	A	0.4742	3.32E-08	0.987666	rs2271960	8	IP6K1	0	intronic	11.48		6	4	5	1	1	0
LMC-ERSV	4:55991731:C:T	rs7667298	4	55991731	T	C	0.4473	3.33E-08	1	rs7667298	1	KDR	0	UTR5	10.76		4	1	10	1	1	0
AAM-EM	10:90078723:A:T	rs7091066	10	90078723	T	A	0.2962	3.33E-08	0.97572	rs11202704	20	RNLS	0	intronic	0.006	3a		8	9	1	0	0
AAM-EPP	3:49783103:C:T	rs9815766	3	49783103	C	T	0.4742	3.33E-08	0.991723	rs4855867	7	IP6K1	0	intronic	2.485		6	4	5	1	1	0
AAM-EPP	10:90183102:C:T	rs10887818	10	90183102	C	T	0.4374	3.33E-08	0.763885	rs7921352	15	RNLS	0	intronic	6.068		7	5	15	1	0	0
AAM-EM	12:15417022:C:T	rs9787991	12	15417022	C	T	0.3469	3.33E-08	0.833634	rs11056439	26	RERG	0	intronic	0.954		5	5	15	1	0	0
AAM-EPP	3:49772647:A:G	rs7618501	3	49772647	A	G	0.4742	3.34E-08	0.991723	rs4855867	7	IP6K1	0	intronic	10.62		6	4	4	1	1	0
AAM-EPP	3:49772708:A:T	rs7618519	3	49772708	A	T	0.4742	3.34E-08	0.991723	rs4855867	7	IP6K1	0	intronic	1.654		7	4	4	1	1	0
AAM-EPP	3:49780844:A:G	rs9876508	3	49780844	G	A	0.4742	3.34E-08	0.991723	rs4855867	7	IP6K1	0	intronic	2.33		7	4	5	1	1	0
AAM-EM	16:30010274:A:G	rs4788207	16	30010274	A	G	0.4742	3.34E-08	0.663848	rs11647753	32	INO80E	0	intronic	2.466		6	4	5	1	1	0
AAM-EM	9:11754031:A:T	rs1486808	9	11754031	A	T	0.2575	3.35E-08	0.875109	rs9969696	18	RP11-74C3.1	344628	intergenic	0.189		7	9	15	0	0	0
AAM-EM	9:11758871:A:G	rs71505188	9	11758871	G	A	0.2604	3.35E-08	0.870056	rs9969696	18	RP11-74C3.1	339788	intergenic	1.611		7	9	15	0	0	0
AAM-EM	6:152511675:C:T	rs2763016	6	152511675	T	C	0.3439	3.36E-08	1	rs2635451	15	SYNE1	0	intronic	2.777		6	4	5	1	0	0
AAM-EM	9:11756301:A:C	rs10960185	9	11756301	A	C	0.2594	3.36E-08	0.87483	rs9969696	18	RP11-74C3.1	342358	intergenic	0.837		6	9	15	0	0	0
AAM-EM	7:121965266:A:G	rs62473063	7	121965266	A	G	0.1362	3.37E-08	0.963441	rs79565496	16	CADPS2	0	intronic	6.565		6	5	15	1	0	0
AAM-EPP	3:49784777:C:T	rs7374277	3	49784777	T	C	0.4742	3.37E-08	0.991723	rs4855867	7	IP6K1	0	intronic	4.667		6	4	5	1	1	0
AAM-EM	9:11792032:A:G	rs10960230	9	11792032	G	A	0.4364	3.37E-08	0.908884	rs10756291	18	RP11-74C3.1	306627	intergenic	0.779		7	9	15	0	0	0
FIM-EPP	12:95617829:A:G	rs10777677	12	95617829	A	G	0.335	3.37E-08	0.654521	rs10859863	9	VEZT	0	intronic	1.748		7	4	5	1	1	0
AAM-EM	6:152510712:A:G	rs2635459	6	152510712	A	G	0.3459	3.37E-08	0.991159	rs2635451	15	SYNE1	0	intronic	1.024	NA		4	5	1	0	0
AAM-EPP	3:49763338:C:T	rs1049256	3	49763338	T	C	0.4742	3.37E-08	0.991723	rs4855867	7	IP6K1	0	UTR3	0.336		5	3	4	1	1	0
AAM-EM	9:11746364:A:G	rs72702297	9	11746364	A	G	0.2594	3.38E-08	0.87483	rs9969696	18	RP11-74C3.1	352295	intergenic	8.978		7	9	15	0	0	0
FIM-EM	12:102767892:A:G	rs1980236	12	102767892	G	A	0.499	3.38E-08	1	rs1980236	10	IGF1	21752	intergenic	0.9		6	5	15	0	1	0
AAM-EM	9:11777918:A:C	rs7857944	9	11777918	A	C	0.4304	3.39E-08	0.924199	rs10756291	18	RP11-74C3.1	320741	intergenic	0.403		7	9	15	0	0	0
AAM-EM	7:121968547:A:G	rs10216012	7	121968547	G	A	0.1362	3.39E-08	0.945874	rs79565496	16	CADPS2:RP5	0:00	ncRNA_exoni	6.192		5	2	15	1	0	0
AAM-EM	9:11787966:A:C	rs10960221	9	11787966	C	A	0.4294	3.39E-08	0.928243	rs10756291	18	RP11-74C3.1	310693	intergenic	3.293		7	9	15	0	0	0
AAM-EM	7:121990735:A:G	rs17365158	7	121990735	A	G	0.1531	3.39E-08	0.883493	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı	3.202		6	5	15	1	0	0
FIM-EO	6:153496718:G:T	rs4870173	6	153496718	T	G	0.3748	3.39E-08	1	rs9478393	7	RNA5SP224	16237	intergenic	5.442		5	5	15	0	0	0
AAM-EPP	3:49832261:A:G	rs6802890	3	49832261	A	G	0.4732	3.40E-08	0.987655	rs4855867	7	CDHR4	0	intronic	6.037		4	5	15	1	1	0
AAM-EM	7:121978267:A:G	rs62473069	7	121978267	G	A	0.1372	3.42E-08	0.954869	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı	0.31		6	5	15	1	0	0
AAM-EM	7:121968769:C:T	rs17144227	7	121968769	T	C	0.1362	3.42E-08	0.945874	rs79565496	16	CADPS2:RP5	0:00	ncRNA_introı	19.08		5	1	15	1	0	0
FIM-EPP	11:30223861:A:C	rs606651	11	30223861	C	A	0.3946	3.42E-08	0.987619	rs961605	8	FSHB	28701	intergenic	3.323	NA		14	15	0	1	0
AAM-EM	9:11754666:A:C	rs995281	9	11754666	C	A	0.2584	3.42E-08	0.879634	rs9969696	18	RP11-74C3.1	343993	intergenic	2.728		6	9	15	0	0	0
AAM-EPP	2:203060179:A:G	rs2350357	2	203060179	A	G	0.1382	3.42E-08	0.838013	rs77251002	5	AC079354.1	0	intergenic	3.465		6	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EM	9:11756605:C:T	rs1906118	9	11756605	C	T	0.2584	3.43E-08	0.879634	rs9969696	18	RP11-74C3.1	342054	intergenic	5.042		6	9	15	0	0	0
FIM-EO	6:127509157:A:G	rs7745274	6	127509157	G	A	0.492	3.43E-08	0.900045	rs2489623	4	RSPO3	0	intronic	0.515		5	5	15	1	0	0
FIM-EO	6:153496654:G:T	rs4869781	6	153496654	G	T	0.3748	3.43E-08	1	rs9478393	7	RNA5SP224	16173	intergenic	0.833		7	5	15	0	0	0
AAM-EM	16:30013066:A:G	rs12931955	16	30013066	A	G	0.4742	3.43E-08	0.663848	rs11647753	32	INO80E	0	intronic	3.242		5	3	4	1	1	0
AAM-EM	3:49907111:A:C	rs6446187	3	49907111	C	A	0.4901	3.44E-08	0.694128	rs34034116	8	CAMKV	0	intronic	9.891		4	1	11	1	1	0
FIM-EM	3:128101344:C:G	rs74924715	3	128101344	G	C	0.03777	3.44E-08	0.840673	rs139071297	3	EEFSEC	0	intronic	16.38	3a		2	5	1	0	0
AAM-EPP	3:49792023:A:G	rs9872864	3	49792023	A	G	0.4742	3.44E-08	0.991723	rs4855867	7	IP6K1	0	intronic	3.103		6	5	5	1	1	0
AAM-EM	16:30027694:A:G	rs12444108	16	30027694	G	A	0.3847	3.44E-08	0.72373	rs3814883	32	DOC2A	0	intronic	9.708		7	5	14	1	1	0
FIM-EPP	12:95639676:C:T	rs10859858	12	95639676	T	C	0.335	3.44E-08	0.654521	rs10859863	9	VEZT	0	intronic	0.875		5	2	5	1	1	0
AAM-EM	12:15378291:C:T	rs11056404	12	15378291	C	T	0.335	3.44E-08	0.876886	rs11056439	26	RERG	0	intronic	0.721		5	5	14	1	0	0
AAM-EPP	3:128110390:C:T	rs1702131	3	128110390	T	C	0.1322	3.44E-08	0.880859	rs4277707	8	EEFSEC	0	intronic	2.077		5	4	15	1	1	0
AAM-EPP	3:49804119:A:G	rs6809431	3	49804119	A	G	0.4732	3.47E-08	0.987655	rs4855867	7	IP6K1	0	intronic	2.351		6	4	5	1	1	0
AAM-EPP	3:49799729:C:T	rs9865480	3	49799729	T	C	0.4742	3.47E-08	0.991723	rs4855867	7	IP6K1	0	intronic	2.323		6	4	5	1	1	0
AAM-EM	7:121968563:A:G	rs10216014	7	121968563	G	A	0.1362	3.48E-08	0.945874	rs79565496	16	CADPS2:RP5	0:00	ncRNA_exoni	0.853		5	2	15	1	0	0
FIM-EO	3:128122820:C:T	rs1735537	3	128122820	T	C	0.2276	3.48E-08	0.926488	rs3887841	3	EEFSEC	0	intronic	5.961	NA		2	15	1	0	0
AAM-EPP	3:49785133:A:G	rs7374183	3	49785133	G	A	0.4742	3.49E-08	0.991723	rs4855867	7	IP6K1	0	intronic	8.928		6	4	4	1	1	0
AAM-EPP	2:25156773:C:T	rs2384054	2	25156773	T	C	0.4702	3.49E-08	1	rs2384054	4	DNAJC27	9731	intergenic	0.103	NA		5	15	0	1	0
AAM-EPP	3:49752427:C:T	rs11130219	3	49752427	C	T	0.4751	3.49E-08	0.995837	rs4855867	7	RNF123	0	intronic	12.2		4	3	5	1	1	0
AAM-EPP	6:74762082:C:T	rs6914381	6	74762082	T	C	0.3728	3.50E-08	0.857232	rs4605844	9	RP11-554D15	17084	intergenic	1.673		7	7	15	0	0	0
AAM-EM	7:121972559:A:C	rs6967924	7	121972559	C	A	0.1372	3.50E-08	0.954869	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intror	2.368		7	5	15	1	0	0
AAM-EM	6:74610844:G:T	rs3005517	6	74610844	T	G	0.336	3.51E-08	1	rs12209746	12	CD109	72803	intergenic	0.1		7	8	15	0	0	0
AAM-EM	7:121979064:C:T	rs10229985	7	121979064	C	T	0.1372	3.51E-08	0.954869	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intror	2.262		6	5	15	1	0	0
FIM-EPP	12:95631556:C:G	rs10859857	12	95631556	G	C	0.335	3.51E-08	0.654521	rs10859863	9	VEZT	0	intronic	1.904		6	5	5	1	1	0
AAM-EM	9:11760770:A:G	rs67141366	9	11760770	G	A	0.2594	3.52E-08	0.87483	rs9969696	18	RP11-74C3.1	337889	intergenic	1.586		7	9	15	0	0	0
LMC-EM	2:49320324:C:T	rs6736924	2	49320324	T	C	0.2276	3.52E-08	0.978378	rs6744698	2	FSHR	0	intronic	3.695		7	5	15	1	0	0
AAM-EM	9:11763706:C:G	rs12379701	9	11763706	C	G	0.2594	3.52E-08	0.87483	rs9969696	18	RP11-74C3.1	334953	intergenic	0.498		7	9	15	0	0	0
AAM-EM	9:11747025:C:T	rs16928070	9	11747025	C	T	0.2584	3.53E-08	0.879634	rs9969696	18	RP11-74C3.1	351634	intergenic	0.457		7	9	15	0	0	0
AAM-EM	6:152512902:C:T	rs2813529	6	152512902	C	T	0.3439	3.53E-08	1	rs2635451	15	SYNE1	0	intronic	7.074		6	4	5	1	0	0
AAM-EPP	3:49761605:C:T	rs3811696	3	49761605	C	T	0.4742	3.53E-08	0.991723	rs4855867	7	IP6K1	121	upstream	10.59	NA		1	1	1	1	0
FIM-EPP	3:128109941:C:T	rs3887841	3	128109941	T	C	0.2207	3.53E-08	0.804478	rs4241495	4	EEFSEC	0	intronic	0.929	NA		4	15	1	1	0
AAM-EM	9:11746299:C:T	rs16928065	9	11746299	C	T	0.2594	3.53E-08	0.87483	rs9969696	18	RP11-74C3.1	352360	intergenic	0.225		7	9	15	0	0	0
AAM-EPP	3:49792158:G:T	rs9855505	3	49792158	T	G	0.4742	3.54E-08	0.991723	rs4855867	7	IP6K1	0	intronic	17.96		7	5	5	1	1	0
AAM-EPP	10:90183038:A:G	rs7918921	10	90183038	G	A	0.4374	3.54E-08	0.763885	rs7921352	15	RNLS	0	intronic	6.083		7	5	15	1	0	0
AAM-EM	9:11788189:C:G	rs10960222	9	11788189	C	G	0.4304	3.54E-08	0.932181	rs10756291	18	RP11-74C3.1	310470	intergenic	4.161		6	9	15	0	0	0
AAM-EPP	3:49866392:C:T	rs1128535	3	49866392	C	T	0.4742	3.55E-08	0.983433	rs4855867	7	TRAIP	0	UTR3	3.378	NA		4	4	1	1	0
AAM-EM	3:49916044:A:G	rs9838987	3	49916044	A	G	0.4861	3.55E-08	0.656136	rs2271960	8	ACTBP13	630	upstream	0.139		6	5	15	1	1	0
AAM-EM	7:121972566:C:T	rs6950106	7	121972566	T	C	0.1372	3.56E-08	0.954869	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intror	2.45		7	5	15	1	0	0
AAM-EM	9:11750858:A:G	rs7848788	9	11750858	G	A	0.2584	3.56E-08	0.879634	rs9969696	18	RP11-74C3.1	347801	intergenic	2.23		7	9	15	0	0	0
FIM-EPP	12:95630035:A:C	rs9739396	12	95630035	C	A	0.335	3.57E-08	0.654521	rs10859863	9	VEZT	0	intronic	3.668		7	4	5	1	0	0
FIM-EPP	12:95630044:C:G	rs9739397	12	95630044	C	G	0.335	3.57E-08	0.654521	rs10859863	9	VEZT	0	intronic	3.608		7	4	5	1	0	0
FIM-EPP	3:128117573:A:G	rs1702153	3	128117573	G	A	0.1282	3.58E-08	0.949245	rs2999033	4	EEFSEC	0	intronic	0.65		5	4	15	1	1	0
AAM-EM	9:11760995:C:T	rs35533389	9	11760995	T	C	0.2594	3.58E-08	0.87483	rs9969696	18	RP11-74C3.1	337664	intergenic	3.913		6	9	15	0	0	0
AAM-EM	9:11754635:G:T	rs995280	9	11754635	G	T	0.2594	3.58E-08	0.87483	rs9969696	18	RP11-74C3.1	344024	intergenic	2.683		6	9	15	0	0	0
AAM-EM	9:11759536:A:G	rs10960191	9	11759536	G	A	0.2604	3.58E-08	0.870056	rs9969696	18	RP11-74C3.1	339123	intergenic	0.019		7	9	15	0	0	0
AAM-EM	9:11761048:C:G	rs13292875	9	11761048	C	G	0.2594	3.61E-08	0.87483	rs9969696	18	RP11-74C3.1	337611	intergenic	1.246		7	9	15	0	0	0
LMC-EM	11:100984417:G:T	rs571925	11	100984417	G	T	0.1789	3.61E-08	1	rs571925	8	PGR	0	intronic	5.606	2b		5	15	1	0	0
AAM-EM	7:121976842:G:T	rs10280555	7	121976842	G	T	0.1382	3.61E-08	0.963913	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intror	1.686		7	5	15	1	0	0
AAM-EM	9:11767921:A:G	rs11523222	9	11767921	G	A	0.2584	3.62E-08	0.879634	rs9969696	18	RP11-74C3.1	330738	intergenic	0.77		7	9	15	0	0	0
AAM-EPP	3:49853073:A:G	rs6775384	3	49853073	G	A	0.4732	3.62E-08	0.987655	rs4855867	7	UBA7	1693	intergenic	1.423		6	5	15	0	1	0
LMC-EM	2:49319146:C:T	rs6717598	2	49319146	C	T	0.2266	3.63E-08	0.983773	rs6744698	2	FSHR	0	intronic	1.328		6	9	15	1	0	0
AAM-EM	9:11750868:A:T	rs7848498	9	11750868	A	T	0.2584	3.63E-08	0.879634	rs9969696	18	RP11-74C3.1	347791	intergenic	3.447		7	9	15	0	0	0
AAM-EPP	3:49753003:G:T	rs34614773	3	49753003	T	G	0.4751	3.63E-08	0.995837	rs4855867	7	RNF123	0	intronic	14.7	3a		4	4	1	1	0
FIM-EPP	11:30232381:C:T	rs494779	11	30232381	C	T	0.4175	3.64E-08	0.877668	rs961605	8	FSHB	20181	intergenic	1.167	NA		5	15	0	1	0
FIM-EO	6:153499921:C:T	rs4869783	6	153499921	T	C	0.3748	3.64E-08	1	rs9478393	7	RNA5SP224	19440	intergenic	0.759		5	7	15	0	0	0
FIM-EPP	11:30236544:C:T	rs555621	11	30236544	T	C	0.4185	3.64E-08	0.88164	rs961605	8	FSHB	16018	intergenic	0.73		5	14	15	0	1	0
AAM-EPP	3:49750188:A:T	rs3749240	3	49750188	T	A	0.4751	3.65E-08	0.995837	rs4855867	7	RNF123	0	UTR3	1.39		5	2	5	1	1	0
AAM-EM	6:152511974:G:T	rs2813528	6	152511974	T	G	0.3439	3.65E-08	1	rs2635451	15	SYNE1	0	intronic	12.91		6	4	5	1	0	0
LMC-EM	2:49324567:G:T	rs73931542	2	49324567	T	G	0.2256	3.68E-08	0.989124	rs6744698	2	FSHR	0	intronic	6.202		7	5	15	1	0	0
AAM-EM	9:11780875:A:G	rs12376787	9	11780875	G	A	0.4294	3.69E-08	0.928243	rs10756291	18	RP11-74C3.1	317784	intergenic	0.168		7	9	15	0	0	0
AAM-EM	9:11762138:G:T	rs67776961	9	11762138	T	G	0.2594	3.69E-08	0.87483	rs9969696	18	RP11-74C3.1	336521	intergenic	0.213		6	9	15	0	0	0
AAM-EM	16:29968015:C:T	rs7204797	16	29968015	C	T	0.4443	3.69E-08	0.882927	rs3814883	32	TMEM219	0	intronic	2.656		6	5	15	1	1	0
LMC-EM	11:100998771:C:G	rs3740753	11	100998771	C	G	0.1769	3.71E-08	0.986526	rs571925	8	PGR	0	exonic	17.6	2b		1	10	1	0	0
AAM-EM	12:15417254:C:T	rs9788111	12	15417254	T	C	0.3469	3.72E-08	0.833634	rs11056439	26	RERG	0	intronic	6.735		6	5	15	1	0	0
AAM-EM	9:11747929:C:G	rs16928075	9	11747929	G	C	0.2614	3.72E-08	0.86594	rs9969696	18	RP11-74C3.1	350730	intergenic	0.672		5	9	15	0	0	0
AAM-EM	9:11756684:C:G	rs1906119	9	11756684	C	G	0.2594	3.72E-08	0.87483	rs9969696	18	RP11-74C3.1	341975	intergenic	0.893		7	9	15	0	0	0
LMC-EM	11:100984413:A:G	rs571923	11	100984413	A	G	0.1789	3.72E-08	1	rs571925	8	PGR	0	intronic	7.747		4	5	15	1	0	0
AAM-EM	3:49916018:C:T	rs9821433	3	49916018	T	C	0.4861	3.73E-08	0.656136	rs2271960	8	ACTBP13	604	upstream	1.251		6	5	15	1	1	0
AAM-EM	7:121972419:A:G	rs6967614	7	121972419	A	G	0.1372	3.73E-08	0.954869	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intror	3.626		7	5	15	1	0	0
AAM-EM	16:30019375:A:C	rs11863174	16	30019375	A	C	0.4751	3.74E-08	0.661048	rs11647753	32	DOC2A	0	intronic	5.649	1f		4	5	1	1	0
FIM-EO	3:127826618:C:T	rs11924142	3	127826618	C	T	0.1521	3.75E-08	0.941117	rs58170120	3	RUVBL1	0	intronic	0.363		7	2	5	1	1	0
FIM-EO	3:128059610:A:G	rs1735558	3	128059610	G	A	0.16	3.75E-08	0.791526	rs58170120	3	EEFSEC	0	intronic	0.156	NA		4	5	1	1	0
AAM-EPP	3:128122039:C:T	rs6780368	3	128122039	C	T	0.1292	3.76E-08	0.858083	rs4277707	8	EEFSEC	0	intronic	7.906		5	4	15	1	1	0
FIM-EPP	3:128075398:G:T	rs1735546	3	128075398	T	G	0.2545	3.76E-08	0.796938	rs4241495	4	EEFSEC	0	intronic	6.983	NA		4	5	1	1	0
AAM-EM	9:11792860:C:G	rs9696632	9	11792860	C	G	0.4304	3.77E-08	0.932181	rs10756291	18	RP11-74C3.1	305799	intergenic	0.218		5	9	15	0	0	0
FIM-EPP	1:169435027:C:T	rs2678166	1	169435027	C	T	0.006958	3.77E-08	0.689027	rs1894692	2	SLC19A2	0	UTR3	9.616	NA		4	5	1	0	0
AAM-EPP	3:49798920:A:G	rs7634886	3	49798920	A	G	0.4732	3.77E-08	0.987655	rs4855867	7	IP6K1	0	intronic	0.14		7	4	5	1	1	0
FIM-EO	6:153496061:A:T	rs9479534	6	153496061	A	T	0.3748	3.79E-08	1	rs9478393	7	RNA5SP224	15580	intergenic	0.558		5	5	15	0	0	0
AAM-EPP	3:49752372:C:T	rs11130218	3	49752372	C	T	0.4751	3.79E-08	0.995837	rs4855867	7	RNF123	0	intronic	4.564		7	4	5	1	1	0
AAM-EM	2:203017167:A:G	rs73992849	2	203017167	G	A	0.1252	3.80E-08	0.9826	rs77251002	7	AC079354.1	0	intronic	0.975		5	2	15	1	1	0
LMC-DE	11:30426237:C:T	rs869215	11	30426237	T	C	0.1193	3.80E-08	1	rs869215	5	MPPED2	0	intronic	0.406	NA		5	15	1	0	0
AAM-EPP	3:49761613:C:T	rs3811695	3	49761613	C	T	0.4742	3.83E-08	0.991723	rs4855867	7	IP6K1	113	upstream	9.033	NA		1	1	1	1	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:49736565:A:G	rs6785549	3	49736565	G	A	0.4751	3.83E-08	0.995837	rs4855867	7	RNF123	0	intronic	15.38	4	4	4	1	1	0
LMC-EM	11:101003112:A:G	rs507141	11	101003112	G	A	0.1769	3.84E-08	0.973285	rs571925	8	PGR	1856	intergenic	0.995	NA		5	14	0	0	0
AAM-EM	12:15416115:A:G	rs7132337	12	15416115	A	G	0.3469	3.87E-08	0.833634	rs11056439	26	RERG	0	intronic	6.995		7	5	15	1	0	0
AAM-EPP	3:49868455:A:G	rs7648987	3	49868455	A	G	0.4742	3.87E-08	0.983433	rs4855867	7	TRAIP	0	intronic	1.362		6	4	4	1	1	0
AAM-EM	9:11794276:A:C	rs12005306	9	11794276	C	A	0.4304	3.88E-08	0.932181	rs10756291	18	RP11-74C3.1	304383	intergenic	0.338		7	9	15	0	0	0
AAM-EM	9:11672095:A:T	rs1596337	9	11672095	T	A	0.2545	3.89E-08	0.771598	rs9969696	18	RP11-23D5.1	395780	intergenic	3.838		6	9	15	0	0	0
LMC-DE	4:55995061:C:T	rs9992737	4	55995061	C	T	0.2664	3.89E-08	1	rs9992737	1	KDR	3304	intergenic	6.691		6	5	14	0	0	0
FIM-EM	11:30201133:A:G	rs681993	11	30201133	A	G	0.3499	3.90E-08	1	rs681993	9	RP4-562D20.2	12279	intergenic	0.905		7	9	15	0	1	0
AAM-EPP	2:25150758:C:T	rs10185143	2	25150758	T	C	0.4702	3.90E-08	0.950259	rs2384054	4	ADCY3	8049	intergenic	0.654		7	5	15	0	1	0
AAM-EM	7:121971057:C:G	rs10277721	7	121971057	C	G	0.1352	3.91E-08	0.936926	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intron	1.043		6	5	15	1	0	0
AAM-EM	9:11790743:A:T	rs7867573	9	11790743	A	T	0.4294	3.92E-08	0.928243	rs10756291	18	RP11-74C3.1	307916	intergenic	1.505		6	9	15	0	0	0
AAM-EM	9:11766273:C:G	rs1843712	9	11766273	C	G	0.2584	3.92E-08	0.879634	rs9969696	18	RP11-74C3.1	332386	intergenic	1.71		5	9	15	0	0	0
AAM-EM	16:29995803:A:C	rs4787488	16	29995803	A	C	0.4742	3.92E-08	0.663848	rs11647753	32	TAOK2	0	intronic	1.471	1f		4	4	1	1	0
AAM-EPP	3:49868842:C:T	rs7645061	3	49868842	C	T	0.4742	3.92E-08	0.983433	rs4855867	7	TRAIP	0	intronic	1.17		5	4	4	1	1	0
AAM-EPP	6:74629114:A:G	rs112859933	6	74629114	G	A	0.336	3.93E-08	1	rs12209746	9	TXNP7	85121	intergenic	1.252		7	14	15	0	0	0
AAM-EPP	9:96314397:A:T	rs10821159	9	96314397	A	T	0.3658	3.93E-08	0.731287	rs10992769	14	FAM120A	0	intronic	18.33		7	4	4	1	0	0
LMC-DE	4:55997622:C:T	rs28584303	4	55997622	C	T	0.2664	3.95E-08	1	rs9992737	1	KDR	5865	intergenic	0.937		7	7	15	0	0	0
FIM-EPP	11:30232615:A:G	rs492828	11	30232615	G	A	0.4175	3.96E-08	0.877668	rs961605	8	FSHB	19947	intergenic	2.496	NA		5	15	0	1	0
AAM-EM	16:30029548:C:T	rs12598856	16	30029548	C	T	0.3827	3.96E-08	0.719163	rs3814883	32	DOC2A	0	intronic	1.18		7	5	14	1	1	0
AAM-EM	7:121973934:A:G	rs62473065	7	121973934	A	G	0.1352	3.97E-08	0.954786	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intron	4.193		6	5	15	1	0	0
AAM-EM	6:74609732:A:G	rs1437569	6	74609732	G	A	0.336	3.97E-08	1	rs12209746	12	CD109	71691	intergenic	6.272		5	14	15	0	0	0
FIM-EPP	3:127857144:C:T	rs76464926	3	127857144	T	C	0.0338	3.97E-08	0.839321	rs74924715	4	RUVBL1	0	intronic	0.296		6	5	15	1	0	0
AAM-EM	16:29971265:G:T	rs4788200	16	29971265	G	T	0.4443	3.97E-08	0.882927	rs3814883	32	TMEM219	0	intronic	0.962		6	5	15	1	1	0
FIM-EM	6:127521127:A:G	rs4318902	6	127521127	A	G	0.4652	3.98E-08	0.805354	rs2489623	4	RSPO3	2216	intergenic	0.304		6	5	15	0	0	0
AAM-EPP	9:96326127:C:T	rs10821160	9	96326127	T	C	0.3668	3.98E-08	0.728302	rs10992769	14	FAM120A	0	intronic	2.59		7	4	4	1	0	0
AAM-EPP	12:15500036:C:T	rs11056436	12	15500036	C	T	0.3111	3.99E-08	1	rs11056439	19	RERG:PTPR(	0:00	intronic	7.785		6	1	15	1	0	0
AAM-EM	6:74605806:A:G	rs3005511	6	74605806	A	G	0.336	3.99E-08	1	rs12209746	12	CD109	67765	intergenic	7.078		5	9	15	0	0	0
AAM-EM	2:203324750:A:G	rs116635509	2	203324750	A	G	0.1421	4.00E-08	0.753195	rs77251002	7	BMPR2	0	intronic	3.324		7	4	15	1	0	0
AAM-EM	9:11620693:C:G	rs28465187	9	11620693	C	G	0.2485	4.00E-08	0.786362	rs9969696	18	RP11-23D5.1	344378	intergenic	0.322		6	9	15	0	0	0
FIM-EPP	6:152638239:C:T	rs931423	6	152638239	T	C	0.3052	4.01E-08	1	rs931423	6	SYNE1	0	intronic	5.597		7	4	15	1	0	0
FIM-EM	10:90155155:G:T	rs10887813	10	90155155	T	G	0.4324	4.01E-08	0.974807	rs2488270	8	RNLS	0	intronic	6.284		6	5	15	1	0	0
AAM-EM	6:74613060:C:T	rs4540228	6	74613060	C	T	0.335	4.01E-08	0.995571	rs12209746	12	CD109	75019	intergenic	0.095		5	8	9	0	0	0
LMC-DE	4:55996903:A:G	rs10020668	4	55996903	G	A	0.2664	4.01E-08	1	rs9992737	1	KDR	5146	intergenic	1.612		7	5	15	0	0	0
AAM-EM	6:152512869:A:C	rs2635454	6	152512869	C	A	0.3439	4.02E-08	1	rs2635451	15	SYNE1	0	intronic	4.168	NA		4	5	1	0	0
LMC-DE	4:55993468:C:T	rs28517654	4	55993468	T	C	0.2664	4.03E-08	1	rs9992737	1	KDR	1711	intergenic	2.804		7	5	14	0	0	0
LMC-DE	4:55998086:A:C	rs12331538	4	55998086	A	C	0.2664	4.03E-08	1	rs9992737	1	KDR	6329	intergenic	0.981		7	5	15	0	0	0
AAM-EPP	6:151702442:C:G	rs6557132	6	151702442	C	G	0.335	4.03E-08	0.642822	rs9479041	11	ZBTB2	0	intronic	5.793		6	5	5	1	1	0
FIM-EPP	11:30235497:A:G	rs586326	11	30235497	G	A	0.4145	4.04E-08	0.887676	rs961605	8	FSHB	17065	intergenic	4.272	NA		9	15	0	1	0
AAM-EM	3:49734229:A:G	rs9873183	3	49734229	G	A	0.4751	4.05E-08	0.983582	rs2271960	8	RNF123	0	intronic	0.004		6	4	5	1	1	0
LMC-DE	4:55997340:A:G	rs10013228	4	55997340	A	G	0.2664	4.05E-08	1	rs9992737	1	KDR	5583	intergenic	5.239		6	5	15	0	0	0
AAM-EM	6:152514055:A:G	rs7741849	6	152514055	G	A	0.3171	4.06E-08	0.887305	rs2635451	15	SYNE1	0	intronic	3.15		6	4	5	1	0	0
AAM-EPP	3:128115381:A:G	rs1735527	3	128115381	A	G	0.1352	4.07E-08	0.857932	rs4277707	8	EEFSEC	0	intronic	0.75	NA		4	15	1	1	0
AAM-EPP	3:128110770:A:G	rs729847	3	128110770	G	A	0.2207	4.09E-08	1	rs729847	8	EEFSEC	0	intronic	2.539	NA		2	15	1	0	0
AAM-EM	6:74611047:A:G	rs3005519	6	74611047	G	A	0.336	4.09E-08	1	rs12209746	12	CD109	73006	intergenic	7.69		5	8	9	0	0	0
LMC-DE	4:55996712:C:T	rs73236106	4	55996712	C	T	0.2664	4.09E-08	1	rs9992737	1	KDR	4955	intergenic	0.311		7	5	15	0	0	0
FIM-EM	3:128117573:A:G	rs1702153	3	128117573	G	A	0.1282	4.09E-08	0.949245	rs2999033	3	EEFSEC	0	intronic	0.65		5	4	15	1	1	0
LMC-ERSV	4:55995061:C:T	rs9992737	4	55995061	C	T	0.2664	4.09E-08	1	rs9992737	1	KDR	3304	intergenic	6.691		6	5	14	0	0	0
AAM-EM	1:204158228:A:G	rs12040249	1	204158228	G	A	0.2962	4.09E-08	0.783617	rs2510	4	KISS1	1240	intergenic	3.713		5	1	13	1	0	0
AAM-EPP	1:204159787:C:G	rs4889	1	204159787	G	C	0.2545	4.10E-08	0.994454	rs2510	3	KISS1	0	exonic	12.03		4	1	14	1	0	0
FIM-EO	3:127721333:A:T	rs58170120	3	127721333	T	A	0.1561	4.11E-08	1	rs58170120	3	KBTBD12	14818	intergenic	1.877		6	5	14	0	1	0
AAM-EM	6:74607842:A:C	rs1370438	6	74607842	A	C	0.336	4.11E-08	1	rs12209746	12	CD109	69801	intergenic	0.307		7	14	15	0	0	0
AAM-EPP	12:115777452:A:G	rs10774806	12	115777452	G	A	0.335	4.11E-08	1	rs10774806	20	RP11-116D17	23364	intergenic	1.426		7	5	15	0	0	0
AAM-EM	16:29972690:C:T	rs4788201	16	29972690	C	T	0.4443	4.12E-08	0.882927	rs3814883	32	TMEM219	0	intronic	9.256	1d		1	2	1	1	0
FIM-EPP	11:30237518:C:T	rs664147	11	30237518	C	T	0.4145	4.13E-08	0.887676	rs961605	8	FSHB	15044	intergenic	2.315	NA		9	15	0	1	0
AAM-EPP	3:127745765:C:G	rs6439108	3	127745765	G	C	0.3946	4.13E-08	0.884736	rs6770337	8	SEC61A1	24718	intergenic	10.95		5	13	15	0	1	0
AAM-EM	6:74612582:C:G	rs2917871	6	74612582	G	C	0.336	4.14E-08	1	rs12209746	12	CD109	74541	intergenic	0.324		4	9	9	0	0	0
FIM-EPP	11:30234782:C:T	rs540948	11	30234782	T	C	0.4205	4.14E-08	0.89024	rs961605	8	FSHB	17780	intergenic	4.028	NA		7	15	0	1	0
AAM-EM	16:29977562:A:T	rs4787486	16	29977562	A	T	0.4443	4.14E-08	0.882927	rs3814883	32	TMEM219	0	intronic	2.835	1f		4	5	1	1	0
AAM-EM	16:29978003:C:T	rs4788202	16	29978003	C	T	0.4433	4.15E-08	0.88677	rs3814883	32	TMEM219	0	intronic	2.442		7	4	5	1	1	0
FIM-EM	6:127523603:A:G	rs62438503	6	127523603	A	G	0.4722	4.16E-08	0.768772	rs2489623	4	RSPO3	4692	intergenic	3.124		7	5	15	0	0	0
AAM-EM	6:74610360:A:G	rs3005516	6	74610360	A	G	0.336	4.16E-08	1	rs12209746	12	CD109	72319	intergenic	4.146		5	9	15	0	0	0
AAM-EPP	3:127773676:C:T	rs1030655	3	127773676	T	C	0.3897	4.16E-08	0.867258	rs6770337	8	SEC61A1	0	intronic	1.391		6	1	6	1	1	0
LMC-ERSV	4:55997622:C:T	rs28584303	4	55997622	C	T	0.2664	4.16E-08	1	rs9992737	1	KDR	5865	intergenic	0.937		7	7	15	0	0	0
FIM-EPP	11:30234432:A:G	rs601640	11	30234432	G	A	0.4175	4.16E-08	0.877668	rs961605	8	FSHB	18130	intergenic	0.97	NA		5	15	0	1	0
LMC-EM	11:30771782:A:G	rs12419067	11	30771782	G	A	0.1322	4.16E-08	1	rs12419067	7	DCDC1	80133	intergenic	6.471		6	5	15	0	0	0
LMC-EM	2:49274423:A:G	rs62162079	2	49274423	G	A	0.1581	4.16E-08	0.718705	rs4971681	2	FSHR	0	intronic	2.044		6	5	15	1	0	0
AAM-EPP	6:74682934:A:G	rs3012532	6	74682934	G	A	0.3469	4.17E-08	0.765515	rs12209746	9	TXNP7	31301	intergenic	0.182		7	5	15	0	0	0
AAM-EPP	12:15463417:A:C	rs1479410	12	15463417	A	C	0.3101	4.19E-08	0.995552	rs11056439	19	RERG	0	intronic	8.963	NA		13	15	1	0	0
AAM-EPP	2:25145173:A:T	rs59086897	2	25145173	T	A	0.4662	4.19E-08	0.966942	rs2384054	4	ADCY3	2464	intergenic	2.647		7	5	5	0	1	0
FIM-EPP	3:128110770:A:G	rs729847	3	128110770	G	A	0.2207	4.19E-08	0.804478	rs4241495	4	EEFSEC	0	intronic	2.539	NA		2	15	1	0	0
AAM-EM	16:30030699:C:T	rs11150581	16	30030699	T	C	0.3847	4.19E-08	0.72373	rs3814883	32	DOC2A	0	intronic	1.876	2c		5	14	1	1	0
LMC-EM	11:100983629:C:T	rs565186	11	100983629	T	C	0.1789	4.19E-08	1	rs571925	8	PGR	0	intronic	2.609		6	5	15	1	0	0
AAM-EPP	3:49869158:A:C	rs695238	3	49869158	A	C	0.4742	4.19E-08	0.983433	rs4855867	7	TRAIP	0	intronic	0.436		6	4	4	1	1	0
FIM-EPP	3:128118711:A:G	rs1702136	3	128118711	G	A	0.2197	4.20E-08	0.810349	rs4241495	4	EEFSEC	0	intronic	0.414		5	2	15	1	0	0
LMC-EM	11:100983340:A:G	rs541463	11	100983340	G	A	0.1789	4.20E-08	1	rs571925	8	PGR	0	intronic	7.734		7	4	15	1	0	0
AAM-EM	12:15438032:G:T	rs1117152	12	15438032	T	G	0.3221	4.21E-08	0.953548	rs11056439	26	RERG	0	intronic	5.118	NA		9	15	1	0	0
LMC-EM	11:100986597:C:T	rs471715	11	100986597	T	C	0.1789	4.21E-08	1	rs571925	8	PGR	0	intronic	6.897		5	5	15	1	0	0
LMC-EM	11:100982183:C:T	rs520017	11	100982183	T	C	0.1789	4.21E-08	1	rs571925	8	PGR	0	intronic	7.514		5	5	15	1	0	0
AAM-EM	16:29998200:A:G	rs4077410	16	29998200	A	G	0.4751	4.21E-08	0.662323	rs11647753	32	TAOK2	0	exonic	1.218		4	4	4	1	1	0
LMC-EM	11:100979145:C:T	rs495210	11	100979145	C	T	0.1789	4.22E-08	1	rs571925	8	PGR	0	intronic	0.209		7	5	15	1	0	0
LMC-EM	11:100983724:C:G	rs673943	11	100983724	G	C	0.1789	4.22E-08	1	rs571925	8	PGR	0	intronic	1.081		7	5	15	1	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
LMC-ERSV	4:55993468:C:T	rs28517654	4	55993468	T	C	0.2664	4.22E-08	1	rs9992737	1	KDR	1711	intergenic	2.804		7	5	14	0	0	0
AAM-EPP	3:127783236:C:G	rs59766347	3	127783236	C	G	0.3897	4.22E-08	0.867258	rs6770337	8	SEC61A1	0	intronic	3.187		5	4	4	1	1	0
AAM-EPP	3:127713993:C:T	rs9849853	3	127713993	C	T	0.4175	4.22E-08	0.971572	rs6770337	8	KBTBD12	7478	intergenic	2.402		6	5	15	0	1	0
LMC-ERSV	4:55996903:A:G	rs10020668	4	55996903	G	A	0.2664	4.23E-08	1	rs9992737	1	KDR	5146	intergenic	1.612		7	5	15	0	0	0
LMC-EM	11:100993690:A:G	rs502471	11	100993690	G	A	0.1789	4.23E-08	1	rs571925	8	PGR	0	intronic	7.032		5	5	14	1	0	0
AAM-EPP	3:49810961:A:G	rs6766836	3	49810961	A	G	0.4732	4.23E-08	0.987655	rs4855867	7	IP6K1	0	intronic	0.309		7	4	5	1	1	0
FIM-EM	11:30205523:A:G	rs621220	11	30205523	G	A	0.3489	4.23E-08	0.995809	rs681993	9	RP4-562D20.1	16669	intergenic	1.237		6	9	15	0	1	0
FIM-EO	3:127861822:A:C	rs2955093	3	127861822	C	A	0.1501	4.24E-08	0.911811	rs58170120	3	RUVBL1	0	intronic	9.106		7	5	15	1	1	0
LMC-EM	11:100990788:A:G	rs548711	11	100990788	A	G	0.1789	4.24E-08	1	rs571925	8	PGR	0	intronic	8.131		5	5	15	1	0	0
LMC-ERSV	4:55998086:A:C	rs12331538	4	55998086	A	C	0.2664	4.24E-08	1	rs9992737	1	KDR	6329	intergenic	0.981		7	5	15	0	0	0
AAM-EPP	12:15500105:C:T	rs11056437	12	15500105	T	C	0.3111	4.24E-08	1	rs11056439	19	RERG:PTPRC	0:00	intronic	2.448		7	1	15	1	0	0
FIM-EM	3:128084164:A:T	rs4277707	3	128084164	A	T	0.1431	4.24E-08	0.880497	rs2999033	3	EEFSEC	0	intronic	1.664		5	4	5	1	1	0
AAM-EM	6:74606325:G:T	rs1437568	6	74606325	T	G	0.336	4.24E-08	1	rs12209746	12	CD109	68284	intergenic	4.168		6	9	15	0	0	0
LMC-EM	11:100991685:C:T	rs562894	11	100991685	T	C	0.1789	4.25E-08	1	rs571925	8	PGR	0	intronic	3.023	NA		5	15	1	0	0
FIM-EPP	11:30234703:A:G	rs600333	11	30234703	G	A	0.4195	4.25E-08	0.88565	rs961605	8	FSHB	17859	intergenic	3.241	NA		7	15	0	1	0
FIM-EM	6:127459552:C:G	rs9482773	6	127459552	G	C	0.4344	4.26E-08	0.887856	rs10457487	4	RSPO3	0	intronic	1.278		5	5	15	1	0	0
FIM-EM	3:128077602:C:T	rs6785384	3	128077602	C	T	0.2187	4.26E-08	0.711101	rs2955118	3	EEFSEC	0	intronic	3.416		6	4	4	1	1	0
LMC-EM	11:100984260:A:C	rs570885	11	100984260	C	A	0.1789	4.26E-08	1	rs571925	8	PGR	0	intronic	3.383		7	5	15	1	0	0
LMC-EM	11:30118507:A:G	rs72882325	11	30118507	A	G	0.341	4.27E-08	1	rs7933948	7	RP11-624D11	12616	intergenic	0.682		5	14	15	0	0	0
LMC-ERSV	4:55997340:A:G	rs10013228	4	55997340	A	G	0.2664	4.27E-08	1	rs9992737	1	KDR	5583	intergenic	5.239		6	5	15	0	0	0
LMC-EM	11:100975985:C:T	rs482765	11	100975985	T	C	0.1789	4.28E-08	1	rs571925	8	PGR	0	intronic	7.66	NA		5	15	1	0	0
AAM-EPP	9:96328303:C:T	rs564	9	96328303	T	C	0.3668	4.28E-08	0.728302	rs10992769	14	FAM120A	0	UTR3	17.04	2b		5	5	1	0	0
AAM-EM	16:29967434:A:G	rs4788196	16	29967434	A	G	0.4443	4.29E-08	0.882927	rs3814883	32	TMEM219	0	intronic	2.468		6	5	15	1	1	0
FIM-EPP	11:30234394:C:T	rs601681	11	30234394	C	T	0.4145	4.29E-08	0.887676	rs961605	8	FSHB	18168	intergenic	0.317		7	5	15	0	1	0
LMC-ERSV	4:55996712:C:T	rs73236106	4	55996712	C	T	0.2664	4.29E-08	1	rs9992737	1	KDR	4955	intergenic	0.311		7	5	15	0	0	0
AAM-EM	3:128110770:A:G	rs729847	3	128110770	G	A	0.2207	4.31E-08	1	rs729847	9	EEFSEC	0	intronic	2.539	NA		2	15	1	0	0
AAM-EM	10:90192003:C:T	rs1578696	10	90192003	C	T	0.3956	4.32E-08	1	rs1578696	20	RNLS	0	intronic	10.35		7	5	15	1	1	0
AAM-EM	11:78116959:A:G	rs7941639	11	78116959	G	A	0.1899	4.33E-08	1	rs7941639	23	GAB2:RP11-4	0:00	ncRNA_intron	0.129		5	4	15	1	1	0
AAM-EM	6:74611632:A:G	rs1595344	6	74611632	A	G	0.335	4.33E-08	0.995571	rs12209746	12	CD109	73591	intergenic	3.105		6	9	9	0	0	0
AAM-EM	6:74613447:A:T	rs2118333	6	74613447	T	A	0.335	4.33E-08	0.995571	rs12209746	12	CD109	75406	intergenic	1.854		7	5	15	0	0	0
AAM-EM	3:49910084:C:T	rs1317154	3	49910084	T	C	0.4911	4.36E-08	0.70627	rs34034116	8	ACTBP13	695	downstream	9.246		5	5	14	1	1	0
FIM-EM	3:128111201:G:T	rs1702134	3	128111201	G	T	0.1322	4.36E-08	0.949157	rs2999033	3	EEFSEC	0	intronic	0.77		5	4	15	1	1	0
AAM-EM	1:44026180:A:C	rs68191270	1	44026180	A	C	0.2594	4.37E-08	0.684839	rs11210871	1	PTPRF	0	intronic	3.723		5	1	5	1	1	0
AAM-EM	11:78126754:C:G	rs11237487	11	78126754	G	C	0.1899	4.37E-08	1	rs7941639	23	GAB2:RP11-4	0:00	ncRNA_intron	2.936		4	1	15	1	1	0
LMC-EM	3:128015236:C:T	rs2955103	3	128015236	C	T	0.3917	4.37E-08	1	rs2955103	3	EEFSEC	0	intronic	1.522		5	2	15	1	1	0
AAM-EM	9:11759418:G:T	rs10960190	9	11759418	G	T	0.2594	4.38E-08	0.87483	rs9969696	18	RP11-74C3.1	339241	intergenic	0.132		6	9	15	0	0	0
AAM-EM	1:44037685:A:G	rs3001723	1	44037685	G	A	0.326	4.38E-08	0.906438	rs11210871	1	PTPRF	0	intronic	2.712		5	4	4	1	0	0
AAM-EM	6:152513105:C:T	rs2635453	6	152513105	T	C	0.3439	4.38E-08	1	rs2635451	15	SYNE1	0	intronic	12.15		6	4	5	1	0	0
FIM-EO	3:127854684:A:G	rs2811471	3	127854684	G	A	0.1491	4.39E-08	0.919185	rs58170120	3	RUVBL1	0	intronic	4.165		7	5	15	1	1	0
AAM-EM	6:152509954:A:G	rs7740884	6	152509954	A	G	0.3459	4.40E-08	0.991159	rs2635451	15	SYNE1	0	intronic	1.209		6	4	5	1	0	0
AAM-EM	9:11769246:C:T	rs72704137	9	11769246	C	T	0.2584	4.42E-08	0.869731	rs9969696	18	RP11-74C3.1	329413	intergenic	1.829		7	9	15	0	0	0
AAM-EM	16:30068354:C:T	rs9939774	16	30068354	C	T	0.3827	4.43E-08	0.69063	rs3814883	32	ALDOA	0	intronic	12.11		6	4	5	1	1	0
AAM-EPP	6:151876252:C:T	rs7740522	6	151876252	C	T	0.4076	4.43E-08	0.827287	rs12210735	11	CCDC170	0	intronic	2.294		6	5	15	1	0	0
AAM-EPP	9:96341357:C:T	rs10992790	9	96341357	C	T	0.3668	4.43E-08	0.7193	rs10992769	14	PHF2	0	intronic	1.35		5	2	7	1	0	0
LMC-EM	11:30554476:C:T	rs559519	11	30554476	T	C	0.1481	4.44E-08	1	rs559519	7	MPPED2	0	intronic	8.203	3a		4	15	1	0	0
AAM-EM	6:74608139:G:T	rs3005514	6	74608139	G	T	0.335	4.44E-08	0.995571	rs12209746	12	CD109	70098	intergenic	4.881		7	13	15	0	0	0
FIM-EM	3:128112307:C:T	rs1620440	3	128112307	T	C	0.1322	4.44E-08	0.949157	rs2999033	3	EEFSEC	0	intronic	4.23		4	4	15	1	1	0
FIM-EPP	11:30234606:C:T	rs600768	11	30234606	C	T	0.4205	4.46E-08	0.89024	rs961605	8	FSHB	17956	intergenic	3.662	NA		7	15	0	1	0
LMC-DE	6:151764539:C:T	rs55747952	6	151764539	C	T	0.05467	4.46E-08	0.734086	rs80347787	2	RMND1	0	intronic	0.72		7	4	5	1	0	0
AAM-EM	2:203418537:A:G	rs1991371	2	203418537	G	A	0.1382	4.47E-08	0.756599	rs77251002	7	BMPR2	0	intronic	0.191	NA		4	5	1	0	0
AAM-EM	9:11666175:A:T	rs77790266	9	11666175	A	T	0.2525	4.47E-08	0.78082	rs9969696	18	RP11-23D5.1	389860	intergenic	0.687	NA		9	15	0	0	0
AAM-EM	6:152509865:A:G	rs7758220	6	152509865	G	A	0.3439	4.48E-08	1	rs2635451	15	SYNE1	0	intronic	1.165		7	4	5	1	0	0
AAM-EM	11:78121978:C:T	rs10431155	11	78121978	T	C	0.1918	4.49E-08	0.987331	rs7941639	23	GAB2:RP11-4	0:00	ncRNA_intron	5.489		7	4	15	1	1	0
LMC-EM	11:100965666:C:T	rs512846	11	100965666	T	C	0.1789	4.49E-08	1	rs571925	8	PGR	0	intronic	1.311		7	5	15	1	0	0
LMC-EM	11:100998076:A:T	rs3740752	11	100998076	T	A	0.1779	4.50E-08	0.993244	rs571925	8	PGR	0	intronic	2.226	2b		1	10	1	0	0
AAM-EM	16:30048553:C:T	rs35467921	16	30048553	C	T	0.3787	4.51E-08	0.70941	rs3814883	32	FAM57B	0	intronic	4.344	NA		5	14	1	1	0
FIM-EPP	3:128119565:A:G	rs760383	3	128119565	A	G	0.2217	4.52E-08	0.819237	rs4241495	4	EEFSEC	0	intronic	14.53	NA		4	15	1	0	0
AAM-EPP	2:25150296:A:G	rs10182181	2	25150296	A	G	0.4662	4.54E-08	0.966942	rs2384054	4	ADCY3	7587	intergenic	5.931	1f		2	7	0	1	0
AAM-EM	9:11622644:A:G	rs10960031	9	11622644	A	G	0.2485	4.55E-08	0.786362	rs9969696	18	RP11-23D5.1	346329	intergenic	1.526		7	9	15	0	0	0
FIM-EPP	11:30238832:A:T	rs621448	11	30238832	T	A	0.4175	4.56E-08	0.877668	rs961605	8	FSHB	13730	intergenic	2.261		7	9	15	0	1	0
AAM-EM	1:44026656:C:G	rs12076635	1	44026656	G	C	0.2604	4.56E-08	0.687721	rs11210871	1	PTPRF	0	intronic	4.644		5	4	5	1	1	0
FIM-EM	6:127519234:A:C	rs10457487	6	127519234	C	A	0.4543	4.56E-08	1	rs10457487	4	RSPO3	323	downstream	0.614		6	2	15	1	0	0
AAM-EM	7:121982909:G:T	rs886497	7	121982909	T	G	0.1392	4.57E-08	0.955122	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intron	0.555	NA		5	15	1	0	0
FIM-EM	3:128110390:C:T	rs1702131	3	128110390	T	C	0.1322	4.58E-08	0.949157	rs2999033	3	EEFSEC	0	intronic	2.077		5	4	15	1	1	0
AAM-EPP	3:127715018:A:G	rs6803110	3	127715018	A	G	0.4225	4.59E-08	0.99188	rs6770337	8	KBTBD12	8503	intergenic	1.923		5	5	15	0	1	0
FIM-EPP	3:127988219:C:T	rs4470541	3	127988219	C	T	0.03181	4.60E-08	0.786595	rs74924715	4	EEFSEC	0	intronic	0.272		5	4	5	1	0	0
AAM-EM	16:30030195:A:C	rs11642612	16	30030195	A	C	0.3847	4.61E-08	0.72373	rs3814883	32	DOC2A	0	intronic	0.089		4	5	14	1	1	0
AAM-EM	6:151895456:C:G	rs6909279	6	151895456	G	C	0.4105	4.61E-08	0.800033	rs12210735	14	CCDC170	0	intronic	0.016		7	5	15	1	0	0
AAM-EM	9:11627541:C:G	rs10960035	9	11627541	G	C	0.2495	4.62E-08	0.782363	rs9969696	18	RP11-23D5.1	351226	intergenic	0.665		7	8	9	0	0	0
AAM-EM	7:121990196:C:T	rs17462508	7	121990196	T	C	0.1531	4.65E-08	0.883493	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intron	6.178		7	5	15	1	0	0
AAM-EPP	3:127745697:A:G	rs4857833	3	127745697	G	A	0.3986	4.66E-08	0.899173	rs6770337	8	SEC61A1	24786	intergenic	4.442		7	13	15	0	1	0
AAM-EPP	3:127779944:A:G	rs2335771	3	127779944	A	G	0.3897	4.68E-08	0.867258	rs6770337	8	SEC61A1	0	intronic	3.515	NA		4	4	1	1	0
LMC-EM	2:49330142:C:T	rs11675903	2	49330142	T	C	0.2286	4.69E-08	0.983786	rs6744698	2	FSHR	0	intronic	2.006		6	5	15	1	0	0
LMC-EM	3:127815320:A:G	rs940060	3	127815320	A	G	0.04871	4.69E-08	1	rs940060	3	RUVBL1	0	intronic	5.444		5	4	4	1	1	0
AAM-EM	1:199883741:C:T	rs4915187	1	199883741	T	C	0.493	4.71E-08	1	rs4915187	3	RP11-567B20	4964	intergenic	0.785		5	5	15	0	0	0
AAM-EM	1:44026089:C:T	rs3000761	1	44026089	C	T	0.2594	4.71E-08	0.684839	rs11210871	1	PTPRF	0	intronic	1.685		5	1	5	1	1	0
AAM-EM	11:78117534:C:T	rs10899493	11	78117534	T	C	0.1928	4.72E-08	0.981266	rs7941639	23	GAB2:RP11-4	0:00	ncRNA_intron	2.825		7	4	15	1	1	0
AAM-EM	16:29962802:A:G	rs7193532	16	29962802	G	A	0.4443	4.72E-08	0.882927	rs3814883	32	TMEM219	0	intronic	0.786		6	5	15	1	1	0
AAM-EPP	12:15498466:C:T	rs11056434	12	15498466	T	C	0.3111	4.73E-08	1	rs11056439	19	RERG:PTPRC	0:00	intronic	2.058		6	5	15	1	0	0
AAM-EM	9:11672086:A:G	rs1596338	9	11672086	A	G	0.2545	4.75E-08	0.771598	rs9969696	18	RP11-23D5.1	395771	intergenic	6.143	NA		9	15	0	0	0
AAM-EM	9:11704718:C:T	rs13299412	9	11704718	C	T	0.2535	4.75E-08	0.792058	rs9969696	18	RP11-74C3.1	393941	intergenic	9.472		6	7	15	0	0	0

Supplementary Table 4. Functional annotation of PLACO-significant pleiotropic SNPs using FUMA.

TP	uniqID	rsID	chr	pos	non_effect_allele	effect_allele	MAF	gwasP	r2	IndSigSNP	GenomicLocus	nearestGene	dist	func	CADD	RDB	minChrState	commonChrSt	posMapFilt	eqtlMapFilt	ciMapFilt
AAM-EPP	3:49761571:A:G	rs4855850	3	49761571	G	A	0.4742	4.76E-08	0.991723	rs4855867	7	IP6K1	155	upstream	15.82	NA	1	1	1	1	0
LMC-EM	11:100963509:C:T	rs559700	11	100963509	T	C	0.1789	4.77E-08	1	rs571925	8	PGR	0	intronic	1.061	NA	5	15	1	0	0
AAM-EPP	1:199884929:C:G	rs1559753	1	199884929	C	G	0.493	4.77E-08	1	rs1559753	2	RP11-567B20	6152	intergenic	3.672	5	5	15	0	0	0
FIM-EM	10:90154174:A:T	rs4934399	10	90154174	A	T	0.4324	4.78E-08	0.974807	rs2488270	8	RNLS	0	intronic	9.704	7	5	15	1	0	0
AAM-EM	16:29960593:C:T	rs4788195	16	29960593	T	C	0.4443	4.78E-08	0.882927	rs3814883	32	TMEM219	0	intronic	3.836	6	5	15	1	1	0
LMC-EM	11:100955250:A:G	rs509015	11	100955250	G	A	0.1789	4.78E-08	0.986495	rs571925	8	PGR	0	intronic	0.208	7	5	15	1	0	0
AAM-EM	3:49745822:C:T	rs4855867	3	49745822	C	T	0.4761	4.78E-08	0.979514	rs2271960	8	RNF123	0	intronic	2.18	NA	4	5	1	1	0
FIM-EM	10:90182963:A:G	rs10887817	10	90182963	G	A	0.4195	4.78E-08	0.914913	rs2488270	8	RNLS	0	intronic	1.289	7	5	15	1	0	0
AAM-EPP	6:100746305:C:T	rs9403595	6	100746305	C	T	0.2962	4.78E-08	1	rs9403595	10	SIM1	86585	intergenic	3.545	6	5	15	0	0	0
AAM-EPP	10:90144950:A:G	rs701893	10	90144950	G	A	0.3847	4.80E-08	0.662256	rs11202704	15	RNLS	0	intronic	8.142	5	2	15	1	0	0
FIM-EO	3:127759668:C:T	rs1469657	3	127759668	C	T	0.1491	4.80E-08	0.93363	rs58170120	3	SEC61A1	10815	intergenic	0.757	NA	5	15	0	1	0
AAM-EM	11:78123293:C:T	rs10899495	11	78123293	C	T	0.1918	4.81E-08	0.987331	rs7941639	23	GAB2:RP11-4	0:00	ncRNA_intron	3.075	7	4	15	1	1	0
FIM-EPP	1:169115022:C:T	rs77979353	1	169115022	T	C	0.04473	4.81E-08	1	rs77979353	2	NME7	0	intronic	0.32	5	2	15	1	0	0
AAM-EM	1:44026053:G:T	rs10789435	1	44026053	T	G	0.2594	4.81E-08	0.684839	rs11210871	1	PTPRF	0	intronic	0.732	5	1	5	1	1	0
LMC-DE	9:374823:A:G	rs144668877	9	374823	G	A	0.01491	4.82E-08	0.935579	rs117608810	4	DOCK8	0	intronic	0.331	5	4	15	1	0	0
FIM-EO	6:127528104:C:T	rs6914968	6	127528104	C	T	0.4553	4.82E-08	0.73827	rs2489623	4	RSPO3	9193	intergenic	7.527	5	5	15	0	0	0
AAM-EPP	3:127714611:A:G	rs1549876	3	127714611	A	G	0.4225	4.83E-08	0.99188	rs6770337	8	KBTBD12	8096	intergenic	2.919	5	5	15	0	1	0
AAM-EM	2:203347284:C:T	rs148802328	2	203347284	C	T	0.1421	4.83E-08	0.753195	rs77251002	7	BMPR2	0	intronic	1.714	6	4	5	1	0	0
AAM-EM	7:121988980:A:G	rs17462307	7	121988980	G	A	0.1531	4.83E-08	0.883493	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intron	15.05	7	5	15	1	0	0
AAM-EM	1:44022534:C:T	rs2842176	1	44022534	C	T	0.2565	4.83E-08	0.673718	rs11210871	1	PTPRF	0	intronic	1.346	NA	3	5	1	1	0
FIM-EO	3:127747841:A:G	rs6764517	3	127747841	A	G	0.1491	4.84E-08	0.93363	rs58170120	3	SEC61A1	22642	intergenic	0.752	5	13	15	0	1	0
AAM-EM	11:78117875:A:G	rs7110387	11	78117875	A	G	0.1899	4.85E-08	1	rs7941639	23	GAB2:RP11-4	0:00	ncRNA_intron	12.71	3a	4	15	1	1	0
AAM-EM	1:43793214:A:G	rs4660731	1	43793214	G	A	0.3887	4.85E-08	0.840918	rs6692611	1	TIE1	4434	intergenic	0.144	3a	5	15	1	0	0
LMC-EM	11:100956659:C:T	rs523081	11	100956659	T	C	0.1779	4.85E-08	0.993244	rs571925	8	PGR	0	intronic	13.95	7	5	15	1	0	0
AAM-EM	9:11672216:C:G	rs1596336	9	11672216	G	C	0.2525	4.86E-08	0.78082	rs9969696	18	RP11-23D5.1	395901	intergenic	1.5	7	9	15	0	0	0
AAM-EM	9:11667205:A:G	rs71502912	9	11667205	A	G	0.2525	4.86E-08	0.78082	rs9969696	18	RP11-23D5.1	390890	intergenic	2.492	7	15	15	0	0	0
AAM-EM	2:203421199:A:G	rs1061157	2	203421199	G	A	0.1362	4.88E-08	0.754878	rs77251002	7	BMPR2	0	exonic	11.89	5	4	4	1	0	0
AAM-EM	10:90195149:C:T	rs1935581	10	90195149	C	T	0.3946	4.89E-08	0.996003	rs1578696	20	RNLS	0	intronic	0.496	NA	5	15	1	1	0
FIM-EO	3:127757422:A:G	rs2217629	3	127757422	A	G	0.1491	4.89E-08	0.93363	rs58170120	3	SEC61A1	13061	intergenic	1.95	NA	5	15	0	0	0
FIM-EO	3:127759214:A:T	rs1469658	3	127759214	T	A	0.1491	4.89E-08	0.93363	rs58170120	3	SEC61A1	11269	intergenic	3.842	7	5	15	0	1	0
AAM-EPP	3:128119565:A:G	rs760383	3	128119565	A	G	0.2217	4.90E-08	0.994071	rs729847	8	EEFSEC	0	intronic	14.53	NA	4	15	1	0	0
FIM-EO	3:127763254:C:T	rs4857834	3	127763254	T	C	0.1491	4.90E-08	0.93363	rs58170120	3	SEC61A1	7229	intergenic	3.2	5	5	14	0	1	0
AAM-EM	7:121989787:C:T	rs17462418	7	121989787	T	C	0.1531	4.91E-08	0.883493	rs79565496	16	CADPS2:RP5	0:00	ncRNA_intron	17.3	3a	5	15	1	0	0
AAM-EM	16:29966277:C:G	rs11646127	16	29966277	G	C	0.4443	4.93E-08	0.882927	rs3814883	32	TMEM219	0	intronic	1.013	7	5	15	1	1	0
LMC-EM	21:36448156:C:T	rs1571696	21	36448156	C	T	0.3221	4.93E-08	0.987261	rs2834747	10	RUNX1	0	intronic	13.77	1f	5	15	1	0	0
FIM-EPP	2:11733488:G:T	rs57439315	2	11733488	G	T	0.3877	4.93E-08	0.991254	rs28689909	3	GREB1	0	intronic	1.23	2b	4	15	1	0	0
FIM-EM	6:153735302:C:T	rs55821059	6	153735302	T	C	0.07157	4.94E-08	1	rs55821059	6	AL358134.2	4853	intergenic	7.233	6	9	15	0	0	0
AAM-EPP	12:15472354:C:T	rs12306807	12	15472354	C	T	0.3101	4.95E-08	0.995552	rs11056439	19	RERG	0	intronic	3.155	5	13	14	1	0	0
AAM-EPP	3:128118711:A:G	rs1702136	3	128118711	G	A	0.2197	4.95E-08	0.98223	rs729847	8	EEFSEC	0	intronic	0.414	5	2	15	1	0	0
AAM-EM	1:199884929:C:G	rs1559753	1	199884929	C	G	0.493	4.96E-08	1	rs4915187	3	RP11-567B20	6152	intergenic	3.672	5	5	15	0	0	0
FIM-EM	6:152585213:A:G	rs111407432	6	152585213	G	A	0.09543	4.97E-08	0.947304	rs75730028	5	SYNE1	0	intronic	2.133	6	4	5	1	0	0
AAM-EPP	12:15481326:C:T	rs13313237	12	15481326	T	C	0.3111	4.97E-08	1	rs11056439	19	RERG:PTPRC	0:00	intronic	13.82	7	5	14	1	0	0
AAM-EPP	2:25150116:A:C	rs6752378	2	25150116	C	A	0.4662	4.97E-08	0.966942	rs2384054	4	ADCY3	7407	intergenic	3.508	1f	1	7	0	1	0
FIM-EM	6:153735879:C:CAG	rs148904038	6	153735879	CAG	C	0.07157	4.97E-08	1	rs55821059	6	AL358134.2	4276	intergenic	1.048	NA	9	15	0	0	0
AAM-EPP	3:127715049:C:T	rs1549875	3	127715049	T	C	0.4235	5.00E-08	0.987845	rs6770337	8	KBTBD12	8534	intergenic	5.582	NA	5	15	0	1	0

Supplementary Table 5. 96 pleiotropic loci identified by PLACO between endometriosis subtypes and menstrual-cycle-related traits.

GenomicLocus	uniqID	rsID	chr	pos	p	start	end	nSNPs	nGWASSNPs	nIndSigSNPs	IndSigSNPs	nLeadSNPs	LeadSNPs	nsnps	PP.H0.abf	PP.H1.abf	PP.H2.abf	PP.H3.abf	PP.H4.abf	phen1	phen2	Region	Nearest_genes
5	6:152567915	rs7573002	6	152567983	2.7984383	152538985	152598464	13	9	1	rs7573002	1	rs75730028	175	2.8330493	7.5202830	0.9994524	0.0002650	0.000282578667067207	EFIM	EM	6q25.2	SYNE1 RGS17
6	6:152564991	rs1708238	6	152564994	1.0885634	152538985	152598464	13	12	1	rs1708238	1	rs17082381	175	1.2751094	3.3847572	0.9994524	0.0002650	0.00028257866730861	EFIM	EM (ovary)	6q25.2	SYNE1 MTRF1L RGS17
10	12:102767892	rs1980236	12	102767892	3.3833244	102401065	102785569	24	23	1	rs1980236	1	rs1980236	845	4.0644526	6.8198819	0.9975099	0.0016729	0.000816668620970542	EFIM	EM	12q23.2	DRAM1 CCDC53 NUP37 PARPBP
1	1:22371065	rs1091713	1	22371065	6.9697131	22347396	22470451	42	27	1	rs1091713	1	rs10917130	443	3.9354930	11.045190	0.9985819	0.0002640	0.00115395101126934	EFIM	EM (pelvic peritoneum)	1p36.12	CDC42 WNT4
6	6:152638239	rs931423	6	152638239	4.0088289	152638209	152643965	7	7	1	rs931423	1	rs931423	24	5.1428882	11.108487	0.9987579	2.0305232	0.00122179412967 93	EFIM	EM (pelvic peritoneum)	6q25.2	SYNE1
14	6:151840684	rs9397422	6	151840684	3.7959986	151702442	152052215	297	174	11	rs9397422;	2	rs9397422;rs2982564	1208	1.3645073	11.785056	7.6318389	0.9984001	0.00159913098049317	AAM	EM	6q25.1	ZBTB2 RMND1 C6orf211 CCDC170 ESR1
5	6:151826249	rs7740302	6	151826249	8.5784525	151762344	151844443	26	15	1	rs7740302	1	rs7740302	271	2.7551112	11.521873	0.9973184	0.0005487	0.00213274222695893	EFIM	EM (pelvic peritoneum)	6q25.1	RMND1 C6orf211 CCDC170
5	6:151769132	rs7741193	6	151769132	8.1170014	151699457	151844650	122	69	2	rs7741193;	1	rs7741193	475	2.3087021	12.130326	0.9968003	0.0009175	0.0022821036438587	EFIM	EM (ovary)	6q25.1	ZBTB2 RMND1 C6orf211 CCDC170
2	2:11742458	rs7277208	2	11742458	8.0114405	11708833	11750101	64	29	5	rs7277208	1	rs72772088	104	4.6343264	6.1250464	0.9958745	0.0013134	0.00281201679220206	EFIM	EM	2p25.1	GREB1
3	2:11735061	rs2868990	2	11735061	2.8061388	11712075	11748585	50	44	2	rs28689909	1	rs28689909	95	5.0578114	6.4809670	0.9959045	0.0012733	0.00281709485747244	EFIM	EM (pelvic peritoneum)	2p25.1	GREB1
8	10:90157930	rs2488270	10	90157930	1.9213348	90136806	90235457	91	85	1	rs2488270	1	rs2488270	312	4.6343132	11.579408	0.9967366	0.0003367	0.00292610989459479	EFIM	EM	10q23.31	RNLS
8	3:49959156	rs3403411	3	49959156	2.4459029	49404775	50399695	494	365	6	rs3403411	1	rs34034116	1479	1.6861002	10.063148	2.4931436	0.9337372	0.00311435083245308	AAM	EM	3p21.31	NCKIPSD P4HTM WDR6 QRICH1 CCDC71 KLH
10	12:95679109	rs1242379	12	95679109	1.2957508	95523654	95699240	59	48	1	rs1242379	1	rs12423799	558	3.8599304	14.167130	0.9930845	0.0010662	0.00584919987646902	EFIM	EM (ovary)	12q22	NDUFA12 FGD6 VEZT
9	12:95661809	rs1085986	12	95661809	2.5882189	95602319	95741862	45	34	1	rs1085986	1	rs10859863	372	4.5835715	13.497305	0.9928790	0.0007512	0.00636971780822193	EFIM	EM (pelvic peritoneum)	12q22	NDUFA12 FGD6 VEZT
12	6:74763411	rs4605844	6	74763411	1.1196556	74587976	74779091	115	63	2	rs4605844;	1	rs4605844	823	8.8062946	13.237035	0.9583575	0.0352210	0.00642133618317578	AAM	EM	6q13	
3	3:127878416	rs2999048	3	127878416	3.6973316	127710474	128122820	270	237	7	rs2999048;	2	rs2999048;rs13907129	899	1.0446853	13.605978	0.9573326	0.0330349	0.00963240786859364	EFIM	EM (ovary)	3q21.3	SEC61A1 RUVBL1 EEFSEC EFCC1
2	2:11733545	rs1069397	2	11733545	4.0536231	11712075	11748585	50	44	2	rs10693974	1	rs10693974	95	1.5767510	12.020413	0.9883161	0.0012559	0.0104279116270612	EFIM	EM (ovary)	2p25.1	GREB1
3	3:127882064	rs2955118	3	127882064	6.9918509	127808502	128122396	131	112	5	rs2955118;	2	rs2955118;rs13907129	618	5.1203517	11.563556	0.9599298	0.0293017	0.0107678690486671	EFIM	EM	3q21.3	RUVBL1 EEFSEC
21	16:69555876	rs889400	16	69555876	1.0667720	69554585	69564669	6	3	1	rs889400	1	rs889400	32	7.7638698	10.983056	4.3871105	0.0055435	0.0114002369045786	AAM	EM (pelvic peritoneum)	16q22.1	CLEC18A CLEC18C EXOSC6
25	11:101584172	rs1079151	11	101584172	8.2038369	101412927	101590923	207	12	1	rs1079151	1	rs10791519	786	4.4527338	10.764832	1.2947376	0.2223801	0.0127877863088911	AAM	EM	11q22.1	TRPC6
7	3:49961780	rs6774354	3	49961780	6.2191229	49404775	50250837	491	363	6	rs6774354;	1	rs6774354	1288	4.0931119	10.153385	2.2199391	0.8318871	0.0147272561776533	AAM	EM (pelvic peritoneum)	3p21.31	NCKIPSD P4HTM WDR6 QRICH1 CCDC71 KLH
2	6:151737177	rs1472304	6	151737177	9.8039372	151685594	151844650	82	69	2	rs1472304	1	rs147230474	456	1.2988767	6.9876442	0.9341692	0.0502404	0.0155902538672609	LMC	EM (rectovaginal septum and vagina)	6q25.1	ZBTB2 RMND1 C6orf211 CCDC170
4	2:25156773	rs2384054	2	25156773	3.4921293	25075281	25291539	147	112	1	rs2384054	1	rs2384054	576	1.5506245	10.039272	3.7102779	0.9396856	0.021002841120631	AAM	EM (pelvic peritoneum)	2p23.3	NCOA1 PTRHD1 CENPO ADCY3 DNAJC27 EFR
9	12:115109223	rs3741698	12	115109223	1.3229231	115092018	115117029	9	4	1	rs3741698	1	rs3741698	53	3.3949953	9.6916621	0.9753283	0.0027623	0.0218752317141782	LMC	EM	12q24.21	TBX3
10	6:100746305	rs9403595	6	100746305	4.7830294	100674018	100769875	102	84	1	rs9403595	1	rs9403595	258	4.2269653	10.937749	1.7856016	0.0395907	0.0226599079918568	AAM	EM (pelvic peritoneum)	6q16.3	
13	6:100746346	rs9403595	6	100746305	1.9911468	100674018	100769875	102	84	1	rs9403595	1	rs9403595	258	3.7946956	10.841850	6.0741591	0.1347313	0.0234180489121481	AAM	EM	6q16.3	
4	6:127455821	rs2489623	6	127455821	5.1834580	127413222	127532807	112	96	2	rs2489623;	1	rs2489623	245	7.9062817	14.497023	0.9695976	0.0054900	0.0249114593948429	EFIM	EM	6q22.33	RSPO3
4	6:127455821	rs2489623	6	127455821	1.1700245	127413222	127532807	111	95	1	rs2489623	1	rs2489623	245	0.0015152	8.6183625	0.9654477	0.0054638	0.0275645876486292	EFIM	EM (ovary)	6q22.33	RSPO3
9	6:74763411	rs4605844	6	74763411	1.9809354	74587976	74779091	115	63	2	rs4605844;	1	rs4605844	823	9.5856109	13.523497	0.9374705	0.0344316	0.0280977393543586	AAM	EM (pelvic peritoneum)	6q13	
15	6:152513757	rs2635451	6	152513757	1.7483460	152502351	152517608	36	28	1	rs2635451	1	rs2635451	116	3.6545385	7.4611409	0.9626121	0.0019298	0.0354580747882302	AAM	EM	6q25.2	SYNE1
4	4:55991827	rs9994560	4	55991827	1.2631993	55989675	56025616	48	38	2	rs9994560;	1	rs9994560	133	1.5062024	11.255158	0.9442950	0.0078211	0.0478837861735548	AAM	EM	4q12	KDR SRD5A3
1	4:55991042	rs1250200	4	55991042	4.1398421	55988082	56025616	103	83	3	rs1250200	1	rs12502008	134	1.4647071	11.222296	0.9393941	0.0077864	0.0528194043334906	LMC	EM (deep)	4q12	KDR SRD5A3
1	4:55991042	rs1250200	4	55991042	1.5525712	55988082	56025616	103	83	3	rs1250200	1	rs12502008	133	1.6376188	11.365300	0.9386797	0.0077723	0.053547858732079	LMC	EM (rectovaginal septum and vagina)	4q12	KDR SRD5A3
2	1:72741829	rs1158461	1	72741829	6.2156065	72618544	72956535	165	134	2	rs1158461	1	rs11584611	652	5.3015572	10.873103	4.3794020	0.0720687	0.0548279419925447	AAM	EM	1p31.1	NEGR1
11	6:151803754	rs6933660	6	151803754	1.1615185	151702442	151910404	179	129	8	rs6933660;	1	rs6933660	671	2.2056032	2.8661565	0.7773473	0.9196129	0.0803863863881431	AAM	EM (pelvic peritoneum)	6q25.1	ZBTB2 RMND1 C6orf211 CCDC170
8	11:100984417	rs571925	11	100984417	3.6104586	100873355	101152003	180	141	1	rs571925	1	rs571925	861	0.0002837	0.0737897	0.0032347	0.8409711	0.0817205131345805	LMC	EM	11q22.1	PGR
18	9:11813745	rs1601615	9	11813745	9.0686664	11337361	11961285	676	529	4	rs1601615;	1	rs1601615	2779	6.8959206	10.071730	6.8077529	0.8422340	0.086026487822414	AAM	EM	9p23	
18	11:101590923	rs4754019	11	101590923	2.2512346	101581644	101590923	6	4	1	rs4754019	1	rs4754019	32	1.8234462	10.910364	3.4148447	0.0016168	0.0880186503367058	AAM	EM (pelvic peritoneum)	11q22.1	TRPC6
1	1:44029353	rs1121087	1	44029353	2.1658002	43788172	44109749	71	56	2	rs1121087	1	rs11210871	618	3.9777110	10.775972	6.8867934	0.1342578	0.0897697327069164	AAM	EM	1p34.2	TIE1 MPL CDC20 ELOVL1 MED8 SZT2 HYI PTP
21	10:97877320	rs1172955	10	97877320	7.0169756	97773115	97948606	5	5	2	rs1172955;	1	rs1172955	444	1.1974473	10.879176	2.7889000	0.0203758	0.10044808336242	AAM	EM	10q24.1	CC2D2B RP11-690P14.4 BLNK
16	7:121990361	rs7956549	7	121990361	1.5241408	121954105	122018598	65	50	1	rs7956549	1	rs79565496	229	6.6888828	10.637001	6.2127574	0.2487062	0.1141990419739 84	AAM	EM	7q31.32	FEZF1 CADPS2
4	3:128111174	rs4241495	3	128111174	3.1970812	127808502	128122820	127	113	4	rs7492471	2	rs74924715;rs4241495	620	0.0160241	0.0004908	0.8024248	0.0244214	0.156638781432045	EFIM	EM (pelvic peritoneum)	3q21.3	RUVBL1 EEFSEC
13	9:7174673	rs913588	9	7174673	9.9053141	7171606	7186363	22	16	1	rs913588	1	rs913588	75	2.8841906	10.828294	7	5.4619692	0.0013982	0.17030700319564	AAM	EM (pelvic peritoneum)	9p24.1	KDM4C
32	16:29911260	rs7189550	16	29911260	1.8438091	29878161	30141913	162	118	5	rs7189550;	2	rs7189550;rs11647753	340	2.5262078	10.718688	3.4581709	0.0981994	0.183111826654954	AAM	EM	16p11.2	BOLA2 MVP CDIPT SEZ6L2 ASPHD1 KCTD13 T
7	2:203014959	rs7725100	2	203014959	3.2233778	202968809	203447875	210	153	1	rs7725100	1	rs77251002	863	4.9845265	10.752515	3.6898148	0.0555132	0.191971602177125	AAM	EM	2q33.1	AC079354.1 SUMO1 AC079354.2 NOP58 BMF
19	12:15500183	rs1105643	12	15500183	3.1818886	15358593	15561799	222	167	1	rs1105643	1	rs11056439	385	6.1764557	12.700255	0.7630223	0.0331543	0.203816827633799	AAM	EM (pelvic peritoneum)	12p12.3	RERG PTPRO
26	12:15500183	rs1105643	12	15500183	1.9635031	15358593	15561799	222	167	1	rs1105643	1	rs11056439	385	5.5906769	12.444161	0.7547506	0.0327841	0.212465212336242	AAM	EM	12p12.3	RERG PTPRO
1	1:199891438	rs6670899	1	199891438	1.0476019	199805370	199916450	49	38	1	rs6670899	1	rs6670899	371	7.4766969	10.419952	5.7402542	0.3221618	0.257885438702921	LMC	EM	1q32.1	
20	10:90186123	rs7921352	10	90186123	9.0307926	90054268	90264140	153	125	4	rs7921352;	1	rs7921352	619	1.9281287	13.742593	0.0034955	0.6781865	0.318317474423872	AAM	EM	10q23.31	RNLS LIPN
2	6:151826307	rs7596927	6	151826307	4.3385440	151693516	151844650	69	57	3	rs7596927	1	rs75969278	440	2.8044681	11.482500	0.6035014	0.0315373	0.364961152402628	LMC	EM (deep)	6q25.1	ZBTB2 RMND1 C6orf211 CCDC170
3	3:128058617	rs3849531	3	128058617	3.6679302	127710474	128122820	268	218	6	rs3849531;	1	rs3849531	839	8.5915757	12.751022	0.0019686	0.6299843	0.368046798447302	LMC	EM	3q21.3	SEC61A1 RUVBL1 EEFSEC EFCC1
11	4:130851720	rs1314908	4	130851720	1.5288348	130771240	130950008	128	108	1	rs1314908	1	rs13149087	656	0.0087762	0.1453725	0.0256268	0.4240972	0.396127109688044	AAM	EM	4q28.2	
15	10:90186123	rs7921352	10	90186123	6.4588947	90054899	90264140	132	108	3	rs7921352;	1	rs7921352	615	2.1931219	10.000424	7	0.0030843	0.5969919	0.399496738364001	AAM	EM (pelvic peritoneum)	10q23.31	RNLS LIPN
31	15:60689179	rs8033800	15	60689179	1.5226867	60687230	60693558	5	4	1	rs8033800	1	rs8033800	17	5.4544282	10.592195	3	2.9358437	0.0027824	0.405022165789458	AAM	EM	15q22.2	ANXA2
14	9:96276910	rs1099276	9	96276910	2.1141625	96141072	96358301	113	95	1	rs1099276	1	rs10992769	677	1.0379888	10.391779	7	4.9804811	0.1875632	0.420641638292371	AAM	EM (pelvic peritoneum)	9q22.31	NINJ1 FAM120AOS FAM120A PHF2
4	11:30162775	rs7802635	11	30162775	1.2820583	30145730	30208516	207	45	1	rs7802635	1	rs78026352	207	6.9039266	10.482526	1.0598222	0.0736287	0.443844915585754	LMC	EM (rectovaginal septum and vagina)	11p14.1	ARL14EP
28	12:50280430	rs1116919	12	50280430	8.6196015	50179021	50289667	56	35	2	rs11169199	1	rs11169199	336	4.3470981	10.482915	0	2.3274485	0.0253636	0.491721291071622	AAM	EM	12q13.12	NCKAP5L BCDIN3D FAIM2
3	1:204161591	rs2510	1	204161591	1.6848297	204147186	204162230	22	14	1	rs2510	1	rs2510	58	4.3956722	10.364542	3	1.6221177	0.1340242	0.501427396681435	AAM	EM (pelvic peritoneum)	1q32.1	KISS1
1	1:22116812	rs1075352	1	22116812	2.5067378	22049937	22130063	30	25	1	rs1075352	1	rs10753520	255	0.0037514	0.0002882	0.4109542	0.0310268	0.55397918959222	AAM	EM (pelvic peritoneum)	1p36.12	RAP1GAP USP48
4	1:204161591	rs2510	1	204161591	8.6872366	204147186	204162230	22	14	1	rs2510	1	rs2510	58	5.0282768	10.417005	6	1.5272907	0.0120952	0.570893960250746	AAM	EM	1q32.1	KISS1 GOLT1A
8	8:25280800	rs6185	8	25280800	2.4550397	25243213	25439538	352	312	3	rs6185;rs1	2	rs6185;rs11995050	521	0.0206324	0.0039687	0.3378373	0.0644109	0.573150438895996	EFIM	EM (ovary)	8p21.2	DOCK5 GNRH1 KCTD9 CDCA2
16	10:97877320	rs1172955	10	97877320	4.9187683	97773115	97948606	5	5	2	rs1172955;	1	rs1172955	444	5.4065179	10.396951	1	3.6121626	0.0259437	0.577105152641424	AAM	EM (pelvic peritoneum)	10q24.1	CC2D2B RP11-690P14.4
6	3:24718337	rs9853608	3	24718337	5.2418503	24717994	24718439	3	3	1	rs9853608	1	rs9853608	4	3.6355792	10.420056	6	1.9889184	0.0017198	0.578187016247608	AAM	EM (pelvic peritoneum)	3p24.2	
6	2:25156773	rs2384054	2	25156773	1.8431759	25075281	25291539	147	112	1	rs2384054	1	rs2384054	576	1.2845463	10.325338	6	3.0026656	0.0754496	0.599195827524306	AAM	EM	2p23.3	NCOA1 PTRHD1 CENPO ADCY3 DNAJC27 EFR
20	12:115777452	rs1077480	12	115777452	4.1086813	115755543	115783539	26	15	1	rs1077480	1	rs10774806	88	0.0439875	0.0121367	0.2685643	0.0734984	0.601813016673449	AAM	EM (pelvic peritoneum)	12q24.21	
7	8:25280800	rs6185	8	25280800	4.8478923	25243213	25439538	349	309	3	rs6185;rs1	2	rs6185;rs11995050	521	7.0276979	11.351800	7	0.3289113	0.0626588	0.608346009369597	EFIM	EM	8p21.2	DOCK5 GNRH1 KCTD9 CDCA2
5	2:203014959	rs7725100	2	203014959	2.9779377	202968809	203447875	210	153	1	rs7725100	1	rs77251002	863	1.3742984	10.207478	1	8.1970790	0.1230820	0.669439782708048	AAM	EM (pelvic peritoneum)	2q33.1	AC079354.1 SUMO1 AC079354.2 NOP58 BMF
27	12:49705661	rs1231348	12	49705661	2.4944285	49678529	49713839	56	44	1	rs1231348	1	rs12313488	116	0.0002952	0.3167710	7	2.2130084	0.0070625	0.675863932701138	AAM	EM	12q13.12	ARF3 PRPH TROAP
9	3:127901786	rs2811479	3	127901786	1.2284559	127710474	128122820	296	229	6	rs2811479;	1	rs2811479	876	8.2122786	14.661942	11.773466	0.3159450	0.684054608113481	AAM	EM	3q21.3	KBTBD12 SEC61A1 RUVBL1 EEFSEC EFCC1
24	11:86715654	rs6592324	11	86715654	5.5508796	86652861	86718096	46	30	2	rs6592324;	1	rs6592324	215	1.8074275	10.196297	6	9.8482933	0.1062610	0.697413375066702	AAM	EM	11q14.2	PRSS23 FZD4
29	12:57376840	rs3894415	12	57376840	3.1794944	57331087	57478708	160	122	1	rs3894415	1	rs3894415	283	0.0153980	0.0169448	0.0984047	0.1075283	0.76172397737282	AAM	EM	12q13.3	SDR9C7 RDH16 GPR182 HBCBP ZBTB39 TAC
8	3:127948149	rs4857878	3	127948149	2.6122970	127710474	128122820	289	226	5	rs4857878;	1	rs4857878	877	2.0414718	10.003644	7	9.7731482	0.1736639	0.822691159154762	AAM	EM (pelvic peritoneum)	3q21.3	SEC61A1 RUVBL1 EEFSEC EFCC1
33	19:18829770	rs1166858	19	18829770	1.5581278	18750269	18898681	39	28	3	rs1166858	1	rs11668587	387	1.3205028	10.146946	4	1.3170623	0.0138171	0.839236326267083	AAM	EM	19p13.11	LRRC25 C19orf60 KLHL26 CRTC1 COMP
7	8:25320594	rs1267562	8	25320594	1.2911845	25243213	25437363	17	14	2	rs1267562	1	rs12675625	517	0.0153437	0.0029166	0.1154791	0.0211062	0.8451541512655	EFIM	EM (pelvic peritoneum)	8p21.2	DOCK5 GNRH1 KCTD9 CDCA2
4	9:344711	rs1176088	9	344711	4.3969172	343138	374823	3	3	1	rs1176088	1	rs117608810	195	0.0457462	0.0039778	0.0252159	0.0012688	0.923791120163113	LMC	EM (deep)	9p24.3	DOCK8
2	1:169467654	rs1894692	1	169467654	7.6159868	169090748	169519049	18	16	2	rs1894692;	1	rs1894692	1495	0.0251427	0.0205279	0.0153287	0.0115878	0.927412747851646	EFIM	EM (pelvic peritoneum)	1q24.2	ATP1B1 NME7 BLZF1 CCDC181 SLC19A2 F5
22	11:30382899	rs1229410	11	30382899	1.4343530	30125619	30554476	175	90	5	rs1229410	1	rs12294104	1092	9.5175167	14.154682	9	1.3561434	0.0582580	0.941728417967433	AAM	EM	11p14.1	FSHB ARL14EP MPPED2 NDUFC2 KCTD21 USI
10	21:36445121	rs2834747	21	36445121	3.3616025	36445050	36461659	10	7	1	rs2834747	1	rs2834747	37	0.0205012	0.0037498	0.0295098	0.0044557	0.941783300779282	LMC	EM	21q22.12	RUNX1
2	2:49385310	rs4971681	2	49385310	1.9352718	49245408	49389140	131	103	2	rs4971681;	1	rs4971681	584	1.7561803	10.000163	1	0.0005821	0.0531521	0.946100694405837	LMC	EM	2p16.3	FSHR
9	11:30382899	rs1229410	11	30382899	2.8238977	30125619	30542688	485	364	9	rs78330906	3	rs78330906;rs4923626;	1109	1.4482776	2.7677791	0	0.0002064	0.0384861	0.96130741541419	EFIM	EM	11p14.1	FSHB ARL14EP MPPED2
17	11:30226356	rs1103100	11	30226356	8.4744302	30215261	30395871	73	60	3	rs1103100	1	rs11031005	425	4.8606625	12.125508	2	8.7772517	0.0374192	0.962571946865217	AAM	EM (pelvic peritoneum)	11p14.1	FSHB ARL14EP
9	11:30252352	rs1083563	11	30252352	7.9240992	30125619	30542688	478	361	7	rs78330906	3	rs78330906;rs607987;r	1109	4.5623115	8.7189568	0	0.0001673	0.0310119	0.968820724956235	EFIM	EM (ovary)	11p14.1	FSHB ARL14EP MPPED2
8	11:30226356	rs1103100	11	30226356	6.5239109	30125619	30395871	176	157	5	rs1103100	1	rs11031005	712	8.7992178	11.681594	9	0.0001617	0.0299325	0.969905781677599	EFIM	EM (pelvic peritoneum)	11p14.1	FSHB ARL14EP

Supplementary Table 5. 96 pleiotropic loci identified by PLACO between endometriosis subtypes and menstrual-cycle-related traits.

GenomicLocuniqID	rsID	chr	pos	p	start	end	nSNPs	nGWASSNPs	nIndSigSNPs	IndSigSNPs	nLeadSNPs	LeadSNPs	nsnps	PP.H0.abf	PP.H1.abf	PP.H2.abf	PP.H3.abf	PP.H4.abf	phen1	phen2	Region	Nearest_genes
3 8:25248615:	rs1326157	8	25248615	1.9324406	25243213	25389631	14	13	1	rs1326157	1	rs13261573	343	5.1657002e-	0.0166623	3.6800691e-	0.0108978	0.972439788685901	LMC	EM (rectovaginal septum and vagina)	8p21.2	DOCK5 GNRH1 KCTD9 CDCA2
1 1:169160458:	rs1447374	1	169160458	2.6513175(	169090748	169519049	19	16	2	rs1447374	1	rs144737447	1495	2.1108878(	1.7234471e-	0.0112527	0.0082068	0.980502044313373	EFIM	EM	1q24.2	ATP1B1 NME7 BLZF1 CCDC181 SLC19A2 F5
17 8:25280800:	rs6185	8	25280800	1.6704570(	25243213	25389631	14	13	1	rs6185	1	rs6185	344	9.8667864(	4.3449275e-	4.6173862e-	0.0193524	0.980596995496219	AAM	EM	8p21.2	DOCK5 GNRH1 KCTD9 CDCA2
1 1:169160458:	rs1447374	1	169160458	3.9282579(	169026054	169521553	39	35	4	rs1447374	1	rs144737447	1751	4.2634544e-	3.4905857e-	0.0110956	0.0081034	0.9808008775658	EFIM	EM (ovary)	1q24.2	ATP1B1 NME7 BLZF1 CCDC181 SLC19A2 F5
6 8:25248615:	rs1326157	8	25248615	5.8249732e-	25243213	25432214	285	242	3	rs1326157	1	rs13261573	465	9.7188193e-	3.1356026e-	4.5484376e-	0.0136884	0.986308454552278	LMC	EM	8p21.2	DOCK5 GNRH1 KCTD9 CDCA2
30 12:115108:	rs8853	12	115108907	2.7911007e-	115092173	115206320	17	14	2	rs8853;rs1	2	rs8853;rs1566643	349	2.1889663e-	4.2373614e-	0.0006377	0.0113567	0.988005106136109	AAM	EM	12q24.21	TBX3
12 8:25280800:	rs6185	8	25280800	2.6822357e-	25243213	25389631	14	13	1	rs6185	1	rs6185	344	3.2156191e-	0.0014160	2.4178280e-	0.0096582	0.988898356148009	AAM	EM (pelvic peritoneum)	8p21.2	DOCK5 GNRH1 KCTD9 CDCA2
3 8:25248615:	rs1326157	8	25248615	8.9382175(	25243213	25389631	14	13	1	rs1326157	1	rs13261573	342	2.5651387e-	0.0008274	1.6541570e-	0.0043407	0.994831823975687	LMC	EM (deep)	8p21.2	DOCK5 GNRH1 KCTD9 CDCA2
5 11:301627:	rs7802635	11	30162775	4.2801617e-	30009190	30457967	218	53	4	rs7802635	4	rs78026352;rs7682106(	1051	5.5567105e-	8.6418657e-	1.9550728e-	0.0020425	0.997957317112491	LMC	EM (deep)	11p14.1	ARL14EP MPPED2
7 11:301544:	rs3507873	11	30154477	1.3292700(	29982667	30771782	512	280	15	rs3507873	8	rs35078732;rs7682106(	1914	1.2785690e-	1.9884804e-	1.8218228e-	0.0018352	0.998164794776782	LMC	EM	11p14.1	FSHB ARL14EP MPPED2
10 3:1856185:	rs6781387	3	185618532	3.0734119e-	185614979	185618532	2	1	1	rs6781387	1	rs6781387	NA	NA	NA	NA	NA	NA	AAM	EM	3q27.2	
19 9:8671687:	rs1086809	9	86716873	6.7478507e-	86716873	86717077	2	2	1	rs1086809	1	rs10868097	NA	NA	NA	NA	NA	NA	AAM	EM	9q21.32	

Supplementary Table 6. Pleiotropic genes shared between the subtypes of endometriosis and menstrual-cycle-related traits were identified

GENE	CHR	START	STOP	NSNPS	NPARAM	N	ZSTAT	P	SYMBOL	TP
ENSG00000138031	2	25041038	25143708	397	28	130350	4.8739	5.47E-07	ADCY3	AAM-EM
ENSG00000149925	16	30063411	30082778	20	7	130350	4.7902	8.33E-07	ALDOA	AAM-EM
ENSG00000176020	3	49753267	49762349	10	4	130350	6.4295	6.40E-11	AMIGO3	AAM-EM
ENSG00000145020	3	49453211	49461186	13	3	130350	4.7295	1.13E-06	AMT	AAM-EM
ENSG00000198720	17	27915787	27942779	32	9	138038	4.7006	1.30E-06	ANKRD13B	FIM-EO
ENSG00000164062	3	49710435	49722396	12	3	137777	4.7186	1.19E-06	APEH	AAM-EPP
ENSG00000152219	11	30343598	30360774	36	10	130350	5.0211	2.57E-07	ARL14EP	AAM-EM
ENSG00000214435	10	104628273	104662656	116	15	130350	4.4345	4.62E-06	AS3MT	AAM-EM
ENSG00000174939	16	29910696	29932185	27	6	130350	6.7979	5.31E-12	ASPHD1	AAM-EM
ENSG00000176697	11	27675440	27744605	129	22	130350	4.5502	2.68E-06	BDNF	AAM-EM
ENSG00000138696	4	95678119	96080599	1378	53	130350	4.6918	1.35E-06	BMPR1B	FIM-EM
ENSG00000164061	3	49590922	49709978	169	20	130350	6.3884	8.38E-11	BSN	AAM-EM
ENSG00000166275	10	104612980	104625718	33	8	130350	4.1849	1.43E-05	C10orf32	AAM-EM
ENSG00000270316	10	104613029	104662656	153	18	130350	4.497	3.45E-06	C10orf32-ASMT	AAM-EM
ENSG00000120029	10	103604356	103816950	317	31	130350	4.1512	1.65E-05	C10orf76	AAM-EM
ENSG00000179008	14	60862187	60983261	200	18	130350	4.1868	1.41E-05	C14orf39	AAM-EM
ENSG00000167194	16	30033655	30040057	10	5	130350	4.5337	2.90E-06	C16orf92	AAM-EM
ENSG00000197183	20	31029862	31173876	268	26	130350	4.9592	3.54E-07	C20orf112	AAM-EM
ENSG00000146476	6	151772422	151792236	49	9	130350	5.4111	3.13E-08	C6orf211	AAM-EM
ENSG00000081803	7	121957481	122527813	1520	70	130350	4.6001	2.11E-06	CADPS2	AAM-EM
ENSG00000064989	2	188206856	188314187	261	18	130350	4.7444	1.05E-06	CALCRL	FIM-EM

Supplementary Table 6. Pleiotropic genes shared between the subtypes of endometriosis and menstrual-cycle-related traits were identified

GENE	CHR	START	STOP	NSNPS	NPARAM	N	ZSTAT	P	SYMBOL	TP
ENSG00000164076	3	49894421	49908655	23	6	130350	6.5539	2.80E-11	CAMKV	AAM-EM
ENSG00000108468	17	46146414	46179883	92	14	130350	4.1675	1.54E-05	CBX1	AAM-EM
ENSG00000120262	6	151814165	151943328	483	41	130350	6.3329	1.20E-10	CCDC170	AAM-EM
ENSG00000107443	10	97802151	97821627	46	17	130350	4.6039	2.07E-06	CCNJ	AAM-EM
ENSG00000187492	3	49827165	49838268	21	8	130350	5.6948	6.18E-09	CDHR4	AAM-EM
ENSG00000103502	16	29868678	29876057	6	2	130350	4.4871	3.61E-06	CDIPT	AAM-EM
ENSG00000074201	11	77224981	77349850	266	24	130350	4.1811	1.45E-05	CLNS1A	AAM-EM
ENSG00000148842	10	104677050	104850978	458	30	130350	4.0957	2.10E-05	CNNM2	AAM-EM
ENSG00000005243	17	46102533	46116392	31	11	130350	4.7263	1.14E-06	COPZ2	AAM-EM
ENSG00000167549	17	27940774	27950925	11	4	137777	4.3085	8.22E-06	CORO6	FIM-EPP
ENSG00000105662	19	18793487	18894004	267	34	130350	5.1574	1.25E-07	CRTC1	AAM-EM
ENSG00000140577	15	91072157	91189577	360	21	137777	4.1855	1.42E-05	CRTC3	FIM-EPP
ENSG00000228008	3	49940278	49955370	16	6	130350	6.4757	4.72E-11	CTD-2330K9.3	AAM-EM
ENSG00000173402	3	49505146	49574048	109	15	130350	5.0356	2.38E-07	DAG1	AAM-EM
ENSG00000181418	12	49387932	49394092	8	4	130350	4.1239	1.86E-05	DDN	AAM-EM
ENSG00000149927	16	30015830	30035591	33	5	130350	5.5661	1.30E-08	DOC2A	AAM-EM
ENSG00000147459	8	25041238	25276598	612	55	130350	4.8032	7.81E-07	DOCK5	LMC-EM
ENSG00000132394	3	127871297	128128485	553	24	130350	6.3099	1.40E-10	EEFSEC	AAM-EM
ENSG00000091831	6	151976826	152451754	1620	107	130350	4.863	5.78E-07	ESR1	AAM-EM
ENSG00000135472	12	50259679	50299000	113	27	130350	5.3251	5.05E-08	FAIM2	AAM-EM
ENSG00000048828	9	96213004	96329397	343	24	137777	5.1044	1.66E-07	FAM120A	AAM-EPP

Supplementary Table 6. Pleiotropic genes shared between the subtypes of endometriosis and menstrual-cycle-related traits were identified

GENE	CHR	START	STOP	NSNPS	NPARAM	N	ZSTAT	P	SYMBOL	TP
ENSG00000185614	3	49839687	49843463	6	4	130350	4.9549	3.62E-07	FAM212A	AAM-EM
ENSG00000149926	16	30034748	30065299	49	10	130350	5.1786	1.12E-07	FAM57B	AAM-EM
ENSG00000180263	12	95469525	95612258	456	30	138038	4.6401	1.74E-06	FGD6	FIM-EO
ENSG00000131808	11	30251563	30257808	18	3	130350	6.7118	9.61E-12	FSHB	AAM-EM
ENSG00000170820	2	49188296	49382676	732	35	130350	5.8145	3.04E-09	FSHR	LMC-EM
ENSG00000033327	11	77925343	78130394	376	10	130350	5.1696	1.17E-07	GAB2	AAM-EM
ENSG00000102886	16	30115131	30126177	21	8	130350	4.6577	1.60E-06	GDPD3	AAM-EM
ENSG00000173540	3	49753277	49762384	10	4	130350	6.4295	6.40E-11	GMPPB	AAM-EM
ENSG00000114349	3	50228045	50234949	6	2	130350	7.2955	1.49E-13	GNAT1	AAM-EM
ENSG00000147437	8	25275776	25283170	7	3	130350	4.7984	8.00E-07	GNRH1	AAM-EM
ENSG00000166856	12	57387230	57391468	9	2	130350	4.543	2.77E-06	GPR182	AAM-EM
ENSG00000233276	3	49393609	49397033	4	2	130350	5.0627	2.07E-07	GPX1	AAM-EM
ENSG00000196208	2	11673242	11783914	338	50	130350	4.2747	9.57E-06	GREB1	AAM-EM
ENSG00000268162	12	57389745	57392335	8	3	130350	4.4744	3.83E-06	HBCBP	AAM-EM
ENSG00000149929	16	30002645	30008757	5	3	130350	5.4119	3.12E-08	HIRIP3	AAM-EM
ENSG00000178922	1	43915824	43920660	11	6	130350	4.8916	5.00E-07	HYI	AAM-EM
ENSG00000115008	2	113530492	113543167	35	4	138038	5.0559	2.14E-07	IL1A	FIM-EO
ENSG00000169592	16	30005615	30018114	29	6	130350	4.7195	1.18E-06	INO80E	AAM-EM
ENSG00000176095	3	49760727	49824975	105	13	130350	5.729	5.05E-09	IP6K1	AAM-EM
ENSG00000171988	10	64925981	65226722	669	32	130350	4.5394	2.82E-06	JMJD1C	AAM-EM
ENSG00000174943	16	29915333	29939356	38	7	130350	6.1209	4.65E-10	KCTD13	AAM-EM

Supplementary Table 6. Pleiotropic genes shared between the subtypes of endometriosis and menstrual-cycle-related traits were identified

GENE	CHR	START	STOP	NSNPS	NPARAM	N	ZSTAT	P	SYMBOL	TP
ENSG00000104756	8	25284366	25316992	85	5	130350	4.5644	2.50E-06	KCTD9	FIM-EM
ENSG00000128052	4	55943644	55992756	124	26	130350	4.5489	2.70E-06	KDR	LMC-EM
ENSG00000170498	1	204158469	204166614	31	8	130350	5.6473	8.15E-09	KISS1	AAM-EM
ENSG00000118922	13	74259226	74709394	1485	135	130350	5.0458	2.26E-07	KLF12	AAM-EM
ENSG00000104826	19	49518237	49521338	23	4	130350	4.308	8.24E-06	LHB	AAM-EM
ENSG00000187772	6	105403923	105532207	151	32	137777	4.8203	7.17E-07	LIN28B	AAM-EPP
ENSG00000100030	22	22107789	22222970	286	24	137777	4.6341	1.79E-06	MAPK1	AAM-EPP
ENSG00000139793	13	97872688	98047374	392	42	130350	4.1827	1.44E-05	MBNL2	AAM-EM
ENSG00000198408	10	103543200	103579696	52	13	130350	4.0764	2.29E-05	MGEA5	AAM-EM
ENSG00000164077	3	49945302	49968606	30	9	130350	6.9954	1.32E-12	MON1A	AAM-EM
ENSG00000066382	11	30405040	30609419	509	34	130350	5.9447	1.39E-09	MPPED2	LMC-EM
ENSG00000173531	3	49720380	49727934	10	5	130350	4.8935	4.95E-07	MST1	AAM-EM
ENSG00000164078	3	49923435	49942299	29	6	130350	6.0201	8.72E-10	MST1R	AAM-EM
ENSG00000166866	12	57421301	57445982	62	10	130350	4.8277	6.91E-07	MYO1A	AAM-EM
ENSG00000137513	11	78146007	78286919	339	9	130350	4.6768	1.46E-06	NARS2	AAM-EM
ENSG00000167566	12	50183929	50223533	138	19	130350	5.1699	1.17E-07	NCKAP5L	AAM-EM
ENSG00000145029	3	49459379	49467759	9	4	130350	5.2757	6.61E-08	NICN1	AAM-EM
ENSG00000166197	10	103910933	103924627	15	4	130350	4.0394	2.68E-05	NOLC1	AAM-EM
ENSG00000055044	2	203129439	203169389	78	10	130350	4.741	1.06E-06	NOP58	AAM-EM
ENSG00000076685	10	104844940	104954056	251	24	130350	4.2159	1.24E-05	NT5C2	AAM-EM
ENSG00000175426	5	95725119	95770847	78	14	130350	4.1934	1.37E-05	PCSK1	AAM-EM

Supplementary Table 6. Pleiotropic genes shared between the subtypes of endometriosis and menstrual-cycle-related traits were identified

GENE	CHR	START	STOP	NSNPS	NPARAM	N	ZSTAT	P	SYMBOL	TP
ENSG00000082175	11	100899355	101002255	308	21	130350	5.5919	1.12E-08	PGR	LMC-EM
ENSG00000149923	16	30086299	30097698	17	6	130350	5.0495	2.21E-07	PPP4C	AAM-EM
ENSG00000106853	9	114311002	114363135	184	36	137777	4.7497	1.02E-06	PTGR1	AAM-EPP
ENSG00000144407	2	209223438	209720227	1457	83	137777	4.6254	1.87E-06	PTH2R	AAM-EPP
ENSG00000142949	1	43989858	44090343	265	21	130350	4.0855	2.20E-05	PTPRF	AAM-EM
ENSG00000003756	3	50125341	50157454	37	9	130350	6.4902	4.28E-11	RBM5	AAM-EM
ENSG00000004534	3	49976440	50138478	294	17	130350	6.5434	3.01E-11	RBM6	AAM-EM
ENSG00000139547	12	57344219	57354158	21	7	130350	4.5211	3.08E-06	RDH16	AAM-EM
ENSG00000134533	12	15259717	15502609	543	37	130350	5.6059	1.04E-08	RERG	AAM-EM
ENSG00000079313	19	1814248	1849452	74	11	130350	4.0872	2.18E-05	REXO1	AAM-EM
ENSG00000144468	2	227699297	227864931	326	16	133386	5.0579	2.12E-07	RHBDD1	LMC-ERSV
ENSG00000067560	3	49395578	49451431	99	13	130350	5.3932	3.46E-08	RHOA	AAM-EM
ENSG00000155906	6	151724989	151774259	158	18	130350	6.3804	8.83E-11	RMND1	AAM-EM
ENSG00000164068	3	49725932	49759962	53	10	130350	5.7423	4.67E-09	RNF123	AAM-EM
ENSG00000184719	10	90032621	90345287	867	52	130350	7.3547	9.57E-14	RNLS	AAM-EM
ENSG00000261130	16	15488611	15610205	265	34	137777	4.7892	8.37E-07	RP11-1021N1.1	AAM-EPP
ENSG00000259164	14	77563654	77692805	432	44	137777	4.0462	2.60E-05	RP11-463C8.4	FIM-EPP
ENSG00000146374	6	127438749	127519910	154	12	130350	5.7413	4.70E-09	RSPO3	FIM-EM
ENSG00000175792	3	127782621	127873757	211	18	130350	4.8082	7.62E-07	RUVBL1	AAM-EM
ENSG00000183207	19	49495705	49520252	72	8	130350	4.6525	1.64E-06	RUVBL2	AAM-EM
ENSG00000058262	3	127769484	127791526	52	6	130350	4.089	2.17E-05	SEC61A1	AAM-EM

Supplementary Table 6. Pleiotropic genes shared between the subtypes of endometriosis and menstrual-cycle-related traits were identified

GENE	CHR	START	STOP	NSNPS	NPARAM	N	ZSTAT	P	SYMBOL	TP
ENSG00000001617	3	50191478	50227508	74	14	130350	6.6718	1.26E-11	SEMA3F	AAM-EM
ENSG00000174938	16	29881480	29911868	42	9	130350	5.6523	7.92E-09	SEZ6L2	AAM-EM
ENSG00000141293	17	46209802	46508637	720	33	130350	4.2959	8.70E-06	SKAP1	AAM-EM
ENSG00000166949	15	67355101	67488533	381	53	130350	4.9479	3.75E-07	SMAD3	LMC-EM
ENSG00000163104	4	95127762	95213443	203	18	130350	4.4105	5.16E-06	SMARCAD1	AAM-EM
ENSG00000123352	12	49759367	49922205	344	26	130350	4.0956	2.10E-05	SPATS2	AAM-EM
ENSG00000116030	2	203069903	203104331	69	12	130350	4.0808	2.24E-05	SUMO1	AAM-EM
ENSG00000131018	6	152441819	152959936	1781	141	130350	5.742	4.68E-09	SYNE1	AAM-EM
ENSG00000198198	1	43854553	43919321	115	16	130350	4.5864	2.25E-06	SZT2	AAM-EM
ENSG00000166863	12	57402784	57423667	34	6	130350	4.7844	8.57E-07	TAC3	AAM-EM
ENSG00000169836	4	104506188	104641973	424	37	137777	4.5497	2.69E-06	TACR3	AAM-EPP
ENSG00000149930	16	29983962	30004582	29	5	130350	5.6575	7.68E-09	TAOK2	AAM-EM
ENSG00000135111	12	115107059	115122969	36	14	130350	6.3397	1.15E-10	TBX3	AAM-EM
ENSG00000149922	16	30096114	30104208	9	4	130350	4.8674	5.65E-07	TBX6	AAM-EM
ENSG00000145022	3	49448639	49454908	11	3	130350	5.6923	6.27E-09	TCTA	AAM-EM
ENSG00000003436	2	188327957	188431487	265	27	130350	4.7785	8.83E-07	TFPI	FIM-EM
ENSG00000166881	12	57448426	57482846	66	12	130350	4.5127	3.20E-06	TMEM194A	AAM-EM
ENSG00000149932	16	29951206	29985373	48	8	130350	5.5378	1.53E-08	TMEM219	AAM-EM
ENSG00000183763	3	49865034	49895007	48	9	130350	5.855	2.39E-09	TRAIP	AAM-EM
ENSG00000137672	11	101321295	101744293	1636	59	130350	5.5441	1.48E-08	TRPC6	AAM-EM
ENSG00000182179	3	49841640	49852379	11	4	130350	5.7782	3.78E-09	UBA7	AAM-EM

Supplementary Table 6. Pleiotropic genes shared between the subtypes of endometriosis and menstrual-cycle-related traits were identified

GENE	CHR	START	STOP	NSNPS	NPARAM	N	ZSTAT	P	SYMBOL	TP
ENSG00000118369	11	77898858	77926757	55	10	130350	4.8677	5.65E-07	USP35	AAM-EM
ENSG00000028203	12	95610522	95697566	237	29	130350	4.6883	1.38E-06	VEZT	FIM-EM
ENSG00000146469	6	153070933	153081900	11	4	130350	4.5479	2.71E-06	VIP	LMC-EM
ENSG00000166272	10	104502727	104577021	217	26	130350	4.2251	1.19E-05	WBP1L	AAM-EM
ENSG00000176473	14	100841755	100997640	286	34	130350	4.1152	1.93E-05	WDR25	AAM-EM
ENSG00000143816	1	228105357	228136599	113	17	130350	4.0406	2.67E-05	WNT9A	AAM-EM
ENSG00000090238	16	30102635	30109236	8	4	130350	4.6827	1.42E-06	YPEL3	AAM-EM
ENSG00000181472	6	151684252	151713683	56	14	130350	5.2057	9.66E-08	ZBTB2	AAM-EM
ENSG00000166860	12	57391618	57401230	18	9	130350	4.771	9.16E-07	ZBTB39	AAM-EM
ENSG00000130749	19	47566444	47618009	56	19	130350	4.7646	9.46E-07	ZC3H4	AAM-EM

Supplementary Table 7. GTEx v8 whole-blood eQTL evidence for prioritized pleiotropic genes

uniqID	db	tissue	gene	testedAllele	p	signed_stats	FDR	RiskIncAllele	alignedDirect	chr	pos	symbol	eqtlMapFilt	TP
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000135	A	9.70955e-86	0.795401	4.79824e-94	NA	NA	2	25075281	ADCY3	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	5.52555e-38	0.35654	4.35484e-40	NA	NA	3	49609477	AMT	1	AAM-EMs
15:60687676:	GTEx/v8	Whole_Blood	ENSG00000182	T	5.91679e-05	-0.0672433	0.000208954	NA	NA	15	60687676	ANXA2	1	AAM-EMs
12:49709427	GTEx/v8	Whole_Blood	ENSG00000184	G	0.000256781	-0.0611956	6.58463e-16	NA	NA	12	49709427	ARF3	1	AAM-EMs
11:30214713	GTEx/v8	Whole_Blood	ENSG00000149	A	8.50922e-14	-0.186055	5.5656e-25	NA	NA	11	30214713	ARL14EP	1	AAM-EMs
1:44086831:C	GTEx/v8	Whole_Blood	ENSG00000135	T	9.17259e-05	-0.0488552	1.73253e-11	NA	NA	1	44086831	ATP6V0B	1	AAM-EMs
2:202974032	GTEx/v8	Whole_Blood	ENSG00000278	A	0.000262497	0.123685	3.88474e-12	NA	NA	2	202974032	BMPR2	1	AAM-EMs
16:29924422:	GTEx/v8	Whole_Blood	ENSG00000103	T	2.51136e-05	-0.183295	1.63572e-21	NA	NA	16	29924422	BOLA2	1	AAM-EMs
19:18806631:	GTEx/v8	Whole_Blood	ENSG00000067	T	5.62341e-05	-0.0868634	6.72485e-39	NA	NA	19	18806631	C19orf60	1	AAM-EMs
6:151759986:	GTEx/v8	Whole_Blood	ENSG00000130	T	5.11702e-05	-0.0855859	1.61413e-05	NA	NA	6	151759986	C6orf211	1	AAM-EMs
6:151762344	GTEx/v8	Whole_Blood	ENSG00000130	G	3.09804e-05	0.170225	6.32138e-12	NA	NA	6	151762344	CCDC170	1	AAM-EMs
1:44018604:C	GTEx/v8	Whole_Blood	ENSG00000135	T	1.42345e-05	0.207599	8.71064e-54	NA	NA	1	44018604	CCDC24	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	0.000502153	-0.081855	1.44369e-06	NA	NA	3	49609477	CCDC71	1	AAM-EMs
16:29878249:	GTEx/v8	Whole_Blood	ENSG00000103	T	0.000110408	0.0626931	0.0142722	NA	NA	16	29878249	CDIPT	1	AAM-EMs
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000135	A	1.32696e-54	0.597862	1.38492e-53	NA	NA	2	25075281	CENPO	1	AAM-EMs
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000135	A	9.03544e-35	0.408954	1.85351e-33	NA	NA	2	25075281	DNAJC27	1	AAM-EMs
3:127710474	GTEx/v8	Whole_Blood	ENSG00000114	A	8.58267e-07	-0.103163	4.06812e-10	NA	NA	3	127710474	EEFSEC	1	AAM-EMs
3:127720727:	GTEx/v8	Whole_Blood	ENSG00000114	C	0.000180239	-0.223174	0.0284719	NA	NA	3	127720727	EFCC1	1	AAM-EMs
11:77909014	GTEx/v8	Whole_Blood	ENSG00000070	A	0.000161902	0.098816	0.0363191	NA	NA	11	77909014	GAB2	1	AAM-EMs
16:29923510	GTEx/v8	Whole_Blood	ENSG00000103	A	1.61513e-06	-0.112756	2.10437e-27	NA	NA	16	29923510	GDPD3	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	1.2147e-11	-0.206316	6.13445e-10	NA	NA	3	49609477	GMPPB	1	AAM-EMs
3:50216114:C	GTEx/v8	Whole_Blood	ENSG00000114	T	0.000586473	0.0387946	1.00215e-05	NA	NA	3	50216114	GNAI2	1	AAM-EMs
8:25245432:	GTEx/v8	Whole_Blood	ENSG00000104	A	5.94734e-05	0.16233	0.0022028	NA	NA	8	25245432	GNRH1	1	AAM-EMs
3:49649873:	GTEx/v8	Whole_Blood	ENSG00000163	G	0.000286379	-0.0934825	1.02463e-05	NA	NA	3	49649873	HEMK1	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	4.43527e-07	0.174535	5.98031e-46	NA	NA	3	49609477	HYAL3	1	AAM-EMs
16:29902414:	GTEx/v8	Whole_Blood	ENSG00000103	T	0.00026708	-0.0892974	9.35032e-13	NA	NA	16	29902414	INO80E	1	AAM-EMs
10:90192003:	GTEx/v8	Whole_Blood	ENSG00000278	T	8.38228e-06	-0.145968	2.42594e-117	NA	NA	10	90192003	LIPN	1	AAM-EMs
19:18872917	GTEx/v8	Whole_Blood	ENSG00000167	G	6.77077e-05	-0.0849585	5.69002e-34	NA	NA	19	18872917	LRRC25	1	AAM-EMs
16:29878249:	GTEx/v8	Whole_Blood	ENSG00000103	T	0.000225865	-0.0596636	7.40601e-45	NA	NA	16	29878249	MAPK3	1	AAM-EMs
3:49734229:	GTEx/v8	Whole_Blood	ENSG00000114	A	6.13099e-07	0.103672	1.16113e-05	NA	NA	3	49734229	MON1A	1	AAM-EMs
3:49897830:C	GTEx/v8	Whole_Blood	ENSG00000082	T	1.06646e-05	-0.2243	6.12906e-05	NA	NA	3	49897830	MST1R	1	AAM-EMs
16:29878468:	GTEx/v8	Whole_Blood	ENSG00000103	C	2.13752e-05	0.0570923	1.82984e-08	NA	NA	16	29878468	MVP	1	AAM-EMs
11:77909014	GTEx/v8	Whole_Blood	ENSG00000070	A	1.60351e-06	-0.22267	2.70081e-20	NA	NA	11	77909014	NARS2	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000278	G	1.1634e-05	0.12272	1.25925e-22	NA	NA	3	49609477	NCKIPSD	1	AAM-EMs
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000085	A	0.000123591	0.0490921	0.0433627	NA	NA	2	25075281	NCOA1	1	AAM-EMs
11:78048524	GTEx/v8	Whole_Blood	ENSG00000110	C	0.000164208	-0.0816197	2.6751e-13	NA	NA	11	78048524	NDUFC2	1	AAM-EMs
3:49649873:	GTEx/v8	Whole_Blood	ENSG00000163	G	0.000209355	-0.0883123	2.3101e-05	NA	NA	3	49649873	P4HTM	1	AAM-EMs
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000135	A	1.55466e-06	0.105099	0.00144399	NA	NA	2	25075281	PTRHD1	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	3.61237e-06	-0.107154	6.23749e-12	NA	NA	3	49609477	QRICH1	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	1.76933e-08	0.212155	3.30235e-109	NA	NA	3	49609477	RBM6	1	AAM-EMs
6:151702442	GTEx/v8	Whole_Blood	ENSG00000130	G	9.9047e-10	-0.207709	7.57086e-08	NA	NA	6	151702442	RMND1	1	AAM-EMs
16:29878249:	GTEx/v8	Whole_Blood	ENSG00000103	T	1.28822e-06	0.192534	3.03682e-33	NA	NA	16	29878249	TBX6	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	7.85027e-08	0.12477	2.47495e-51	NA	NA	3	49609477	UBA7	1	AAM-EMs
11:77912883	GTEx/v8	Whole_Blood	ENSG00000110	GC	2.06498e-05	0.149627	0.000180416	NA	NA	11	77912883	USP35	1	AAM-EMs
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	2.56554e-10	-0.187961	4.18785e-66	NA	NA	3	49609477	WDR6	1	AAM-EMs
16:29914142:	GTEx/v8	Whole_Blood	ENSG00000103	T	0.00010231	0.0570955	6.74107e-17	NA	NA	16	29914142	YPEL3	1	AAM-EMs
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000135	A	9.71E-86	0.795401	4.80E-94	NA	NA	2	25075281	ADCY3	1	AAM-EPP
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	5.53E-38	0.35654	4.35E-40	NA	NA	3	49609477	AMT	1	AAM-EPP
2:202974032	GTEx/v8	Whole_Blood	ENSG00000278	A	0.000262497	0.123685	3.88E-12	NA	NA	2	202974032	BMPR2	1	AAM-EPP
6:151773320:	GTEx/v8	Whole_Blood	ENSG00000130	A	1.38E-05	-0.0618969	1.61E-05	NA	NA	6	151773320	C6orf211	1	AAM-EPP
6:151762344	GTEx/v8	Whole_Blood	ENSG00000130	G	3.10E-05	0.170225	6.32E-12	NA	NA	6	151762344	CCDC170	1	AAM-EPP
3:49609477:C	GTEx/v8	Whole_Blood	ENSG00000163	G	0.000502153	-0.081855	1.44E-06	NA	NA	3	49609477	CCDC71	1	AAM-EPP
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000135	A	1.33E-54	0.597862	1.38E-53	NA	NA	2	25075281	CENPO	1	AAM-EPP
16:69554585:	GTEx/v8	Whole_Blood	ENSG00000167	A	2.19E-12	0.283139	7.91E-101	NA	NA	16	69554585	CLEC18A	1	AAM-EPP
16:69554585:	GTEx/v8	Whole_Blood	ENSG00000167	A	1.16E-11	-0.367126	5.76E-61	NA	NA	16	69554585	CLEC18C	1	AAM-EPP

Supplementary Table 7. GTEx v8 whole-blood eQTL evidence for prioritized pleiotropic genes

uniqID	db	tissue	gene	testedAllele	p	signed_stats	FDR	RiskIncAllele	alignedDirect	chr	pos	symbol	eqtlMapFilt	TP
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000131	A	9.04E-35	0.408954	1.85E-33	NA	NA	2	25075281	DNAJC27	1	AAM-EPP
3:127710474	GTEx/v8	Whole_Blood	ENSG00000114	A	8.58E-07	-0.103163	4.07E-10	NA	NA	3	127710474	EEFSEC	1	AAM-EPP
3:127720727:	GTEx/v8	Whole_Blood	ENSG00000114	C	0.000180239	-0.223174	0.0284719	NA	NA	3	127720727	EFCC1	1	AAM-EPP
16:69559315	GTEx/v8	Whole_Blood	ENSG00000262	G	7.70E-05	0.113287	2.12E-74	NA	NA	16	69559315	EXOSC6	1	AAM-EPP
3:49609477:(	GTEx/v8	Whole_Blood	ENSG00000114	G	1.21E-11	-0.206316	6.13E-10	NA	NA	3	49609477	GMPPB	1	AAM-EPP
3:50216114:(	GTEx/v8	Whole_Blood	ENSG00000114	T	0.000586473	0.0387946	1.00E-05	NA	NA	3	50216114	GNAI2	1	AAM-EPP
8:25245432:	GTEx/v8	Whole_Blood	ENSG00000104	A	5.95E-05	0.16233	0.0022028	NA	NA	8	25245432	GNRH1	1	AAM-EPP
3:49649873:	GTEx/v8	Whole_Blood	ENSG00000114	G	0.000286379	-0.0934825	1.02E-05	NA	NA	3	49649873	HEMK1	1	AAM-EPP
3:49609477:(	GTEx/v8	Whole_Blood	ENSG00000114	G	4.44E-07	0.174535	5.98E-46	NA	NA	3	49609477	HYAL3	1	AAM-EPP
10:90192003:	GTEx/v8	Whole_Blood	ENSG00000229	T	8.38E-06	-0.145968	2.43E-117	NA	NA	10	90192003	LIPN	1	AAM-EPP
3:49734229:	GTEx/v8	Whole_Blood	ENSG00000114	A	6.13E-07	0.103672	1.16E-05	NA	NA	3	49734229	MON1A	1	AAM-EPP
3:49897830:(	GTEx/v8	Whole_Blood	ENSG00000114	T	1.07E-05	-0.2243	6.13E-05	NA	NA	3	49897830	MST1R	1	AAM-EPP
3:49609477:(	GTEx/v8	Whole_Blood	ENSG00000229	G	1.16E-05	0.12272	1.26E-22	NA	NA	3	49609477	NCKIPSD	1	AAM-EPP
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000085	A	0.000123591	0.0490921	0.0433627	NA	NA	2	25075281	NCOA1	1	AAM-EPP
9:96183521:	GTEx/v8	Whole_Blood	ENSG00000148	A	7.24E-05	0.0827322	2.33E-20	NA	NA	9	96183521	NINJ1	1	AAM-EPP
3:49649873:	GTEx/v8	Whole_Blood	ENSG00000114	G	0.000209355	-0.0883123	2.31E-05	NA	NA	3	49649873	P4HTM	1	AAM-EPP
2:25075281:	GTEx/v8	Whole_Blood	ENSG00000131	A	1.55E-06	0.105099	0.00144399	NA	NA	2	25075281	PTRHD1	1	AAM-EPP
3:49609477:(	GTEx/v8	Whole_Blood	ENSG00000114	G	3.61E-06	-0.107154	6.24E-12	NA	NA	3	49609477	QRICH1	1	AAM-EPP
1:22049937:(	GTEx/v8	Whole_Blood	ENSG00000085	T	1.01E-18	0.372099	9.42E-56	NA	NA	1	22049937	RAP1GAP	1	AAM-EPP
3:49609477:(	GTEx/v8	Whole_Blood	ENSG00000114	G	1.77E-08	0.212155	3.30E-109	NA	NA	3	49609477	RBM6	1	AAM-EPP
6:151702442	GTEx/v8	Whole_Blood	ENSG00000112	G	9.90E-10	-0.207709	7.57E-08	NA	NA	6	151702442	RMND1	1	AAM-EPP
3:49609477:(	GTEx/v8	Whole_Blood	ENSG00000114	G	7.85E-08	0.12477	2.47E-51	NA	NA	3	49609477	UBA7	1	AAM-EPP
3:49609477:(	GTEx/v8	Whole_Blood	ENSG00000114	G	2.57E-10	-0.187961	4.19E-66	NA	NA	3	49609477	WDR6	1	AAM-EPP
11:30162984	GTEx/v8	Whole_Blood	ENSG00000110	A	0.000113466	0.0999914	5.5656e-25	NA	NA	11	30162984	ARL14EP	1	FIM-EMs
12:10240106:	GTEx/v8	Whole_Blood	ENSG00000111	C	3.78269e-07	-0.0924095	7.21792e-24	NA	NA	12	102401065	CCDC53	1	FIM-EMs
3:127808502	GTEx/v8	Whole_Blood	ENSG00000114	G	7.92025e-14	0.125252	4.06812e-10	NA	NA	3	127808502	EEFSEC	1	FIM-EMs
8:25245432:	GTEx/v8	Whole_Blood	ENSG00000104	A	5.94734e-05	0.16233	0.0022028	NA	NA	8	25245432	GNRH1	1	FIM-EMs
1:169160458:	GTEx/v8	Whole_Blood	ENSG00000116	T	4.54703e-05	0.303248	5.75912e-05	NA	NA	1	169160458	SLC19A2	1	FIM-EMs
11:30162984	GTEx/v8	Whole_Blood	ENSG00000110	A	0.000113466	0.0999914	5.5656e-25	NA	NA	11	30162984	ARL14EP	1	FIM-EO
6:151734998:	GTEx/v8	Whole_Blood	ENSG00000112	C	1.08211e-05	0.151421	1.61413e-05	NA	NA	6	151734998	C6orf211	1	FIM-EO
6:151699457	GTEx/v8	Whole_Blood	ENSG00000112	T	1.83236e-06	0.481891	6.32138e-12	NA	NA	6	151699457	CCDC170	1	FIM-EO
3:127710474	GTEx/v8	Whole_Blood	ENSG00000114	A	8.58267e-07	-0.103163	4.06812e-10	NA	NA	3	127710474	EEFSEC	1	FIM-EO
3:127720727:	GTEx/v8	Whole_Blood	ENSG00000114	C	0.000180239	-0.223174	0.0284719	NA	NA	3	127720727	EFCC1	1	FIM-EO
8:25245432:	GTEx/v8	Whole_Blood	ENSG00000104	A	5.94734e-05	0.16233	0.0022028	NA	NA	8	25245432	GNRH1	1	FIM-EO
6:153455994	GTEx/v8	Whole_Blood	ENSG00000112	A	2.91524e-06	-0.165877	3.35177e-55	NA	NA	6	153455994	MTRF1L	1	FIM-EO
12:95523654:	GTEx/v8	Whole_Blood	ENSG00000111	T	7.29363e-08	0.137501	1.47519e-34	NA	NA	12	95523654	NDUFA12	1	FIM-EO
6:153465230	GTEx/v8	Whole_Blood	ENSG00000112	A	0.000107439	-0.126454	0.000952849	NA	NA	6	153465230	RGS17	1	FIM-EO
6:151778026:	GTEx/v8	Whole_Blood	ENSG00000112	C	8.87218e-05	-0.188643	7.57086e-08	NA	NA	6	151778026	RMND1	1	FIM-EO
1:169160458:	GTEx/v8	Whole_Blood	ENSG00000116	T	4.54703e-05	0.303248	5.75912e-05	NA	NA	1	169160458	SLC19A2	1	FIM-EO
11:30214713	GTEx/v8	Whole_Blood	ENSG00000110	A	8.50922e-14	-0.186055	5.5656e-25	NA	NA	11	30214713	ARL14EP	1	FIM-EPP
6:151762344	GTEx/v8	Whole_Blood	ENSG00000112	G	3.09804e-05	0.170225	6.32138e-12	NA	NA	6	151762344	CCDC170	1	FIM-EPP
3:127808502	GTEx/v8	Whole_Blood	ENSG00000114	G	7.92025e-14	0.125252	4.06812e-10	NA	NA	3	127808502	EEFSEC	1	FIM-EPP
8:25245432:	GTEx/v8	Whole_Blood	ENSG00000104	A	5.94734e-05	0.16233	0.0022028	NA	NA	8	25245432	GNRH1	1	FIM-EPP
12:95610220	GTEx/v8	Whole_Blood	ENSG00000111	A	9.30657e-05	-0.0930046	1.47519e-34	NA	NA	12	95610220	NDUFA12	1	FIM-EPP
6:151838856:	GTEx/v8	Whole_Blood	ENSG00000112	T	6.63604e-05	-0.185041	7.57086e-08	NA	NA	6	151838856	RMND1	1	FIM-EPP
1:169160458:	GTEx/v8	Whole_Blood	ENSG00000116	T	4.54703e-05	0.303248	5.75912e-05	NA	NA	1	169160458	SLC19A2	1	FIM-EPP
11:30162984	GTEx/v8	Whole_Blood	ENSG00000110	A	0.000113466	0.0999914	5.5656e-25	NA	NA	11	30162984	ARL14EP	1	LMC-DE
6:151734998:	GTEx/v8	Whole_Blood	ENSG00000112	C	1.08211e-05	0.151421	1.61413e-05	NA	NA	6	151734998	C6orf211	1	LMC-DE
6:151699457	GTEx/v8	Whole_Blood	ENSG00000112	T	1.83236e-06	0.481891	6.32138e-12	NA	NA	6	151699457	CCDC170	1	LMC-DE
8:25245432:	GTEx/v8	Whole_Blood	ENSG00000104	A	5.94734e-05	0.16233	0.0022028	NA	NA	8	25245432	GNRH1	1	LMC-DE
4:55990954:(	GTEx/v8	Whole_Blood	ENSG00000111	C	0.000124723	-0.187922	6.53468e-123	NA	NA	4	55990954	SRD5A3	1	LMC-DE
11:30162984	GTEx/v8	Whole_Blood	ENSG00000110	A	0.000113466	0.0999914	5.5656e-25	NA	NA	11	30162984	ARL14EP	1	LMC-EMs
3:127710474	GTEx/v8	Whole_Blood	ENSG00000114	A	8.58267e-07	-0.103163	4.06812e-10	NA	NA	3	127710474	EEFSEC	1	LMC-EMs
3:127720727:	GTEx/v8	Whole_Blood	ENSG00000114	C	0.000180239	-0.223174	0.0284719	NA	NA	3	127720727	EFCC1	1	LMC-EMs
8:25245432:	GTEx/v8	Whole_Blood	ENSG00000104	A	5.94734e-05	0.16233	0.0022028	NA	NA	8	25245432	GNRH1	1	LMC-EMs

Supplementary Table 7. GTEx v8 whole-blood eQTL evidence for prioritized pleiotropic genes

uniqID	db	tissue	gene	testedAllele	p	signed_stats	FDR	RiskIncAllele	alignedDirect	chr	pos	symbol	eqtlMapFilt	TP
4:55991042:C	GTEx/v8	Whole_Blood	ENSG00000109	T	7.29261e-08	0.230147	6.53468e-123	NA	NA	4	55991042	SRD5A3	1	LMC-EMs
11:30162984	GTEx/v8	Whole_Blood	ENSG00000149	A	0.000113466	0.0999914	5.5656e-25	NA	NA	11	30162984	ARL14EP	1	LMC-ERSV
6:151734998:	GTEx/v8	Whole_Blood	ENSG00000130	C	1.08211e-05	0.151421	1.61413e-05	NA	NA	6	151734998	C6orf211	1	LMC-ERSV
6:151693409	GTEx/v8	Whole_Blood	ENSG00000130	A	4.77737e-05	0.407673	6.32138e-12	NA	NA	6	151693409	CCDC170	1	LMC-ERSV
8:25245432:	GTEx/v8	Whole_Blood	ENSG00000147	A	5.94734e-05	0.16233	0.0022028	NA	NA	8	25245432	GNRH1	1	LMC-ERSV
4:55990954:C	GTEx/v8	Whole_Blood	ENSG00000109	C	0.000124723	-0.187922	6.53468e-123	NA	NA	4	55990954	SRD5A3	1	LMC-ERSV

Supplementary Table 8. Colocalization of sex hormone–related traits

traits	posterior_prob	regional_pr	candidate_s	posterior_e	loci
FIM-EM , ieu-b-4869.vcf	0.905	0.9995	rs11031005	0.6088	rs12294104
FIM-EM , ieu-b-4864.vcf	0.9026	0.9994	rs11031005	0.5937	rs12294104
FIM-EO, ieu-b-4869.vcf	0.9016	0.9995	rs11031005	0.593	rs10835638
FIM-EPP, ieu-b-4869.vcf	0.9008	0.9995	rs11031005	0.5954	rs11031005
FIM-EO, ieu-b-4864.vcf	0.8991	0.9994	rs11031005	0.571	rs10835638
FIM-EPP, ieu-b-4864.vcf	0.8982	0.9994	rs11031005	0.5717	rs11031005
LMC-EM , ieu-b-4869.vcf	0.9923	1	rs11031005	0.5662	rs35078732
LMC-DE, ieu-b-4869.vcf	0.9919	1	rs11031005	0.5469	rs78026352
LMC-EM , ieu-b-4864.vcf	0.9913	1	rs11031005	0.5507	rs35078732
LMC-DE, ieu-b-4864.vcf	0.9909	1	rs11031005	0.5313	rs78026352