

Supplementary Table S7: associations between cardiometabolic, allergic and autoimmune disease and cancer

group	outcome	exposure	method	nsnp	b	se
autoimmune	CD	G-CSF/CSF-3	ivw	2	-2.6386119	0.7882963
autoimmune	MS	TNF-b	ivw	4	-2.1762134	0.6038053
autoimmune	UC	CCL2/MCP-1	ivw	3	-1.6248272	0.5208471
autoimmune	CD	CXCL10/IP-10	ivw	8	-0.6675782	0.2170563
autoimmune	UC	CXCL10/IP-10	ivw	8	-0.6413201	0.2056969
CVD	stroke	RANTES	ivw	12	-0.5072168	0.1561466
autoimmune	MS	RANTES	ivw	10	-0.4328537	0.1220904
autoimmune	RA	IL-1ra	ivw	28	-0.2874474	8.3066221
autoimmune	UC	CCL3/MIP-1a	ivw	33	-0.2589592	8.3657041
autoimmune	CD	IL-1ra	ivw	33	-0.2379013	7.9825439
cancer	colorectal	IL-18	ivw	5	-1.6407362	4.0906399
CVD	DM2_suzuki	FGF-b	ivw	48	3.2730453	8.3124046
autoimmune	psoriasis	FGF-b	ivw	48	0.1490308	5.3742121
CVD	MI	IL-1ra	ivw	33	0.1498299	2.9630105
CVD	MI	TRAIL	ivw	6	0.1975297	6.1815305
autoimmune	psoriasis	CXCL12/SDF-1a	ivw	17	0.4967458	0.1574520
autoimmune	CD	CXCL12/SDF-1a	ivw	17	0.5726031	0.1788743
autoimmune	CD	IL-2ra	ivw	14	0.6382149	0.1679500
autoimmune	CD	CXCL9/MIG	ivw	8	0.7760516	0.2590354
autoimmune	UC	IL-18	ivw	8	0.8353912	0.2888080
autoimmune	psoriasis	IL-18	ivw	8	0.9367264	0.2215369
cancer	breast	IL-9	ivw	8	0.9589538	0.2229559
autoimmune	asthma	G-CSF/CSF-3	ivw	2	1.7082821	0.4714788
autoimmune	MS	IL-2ra	ivw	13	2.1068286	0.4472760
autoimmune	CD	TRAIL	ivw	6	-0.4457577	0.1666015
autoimmune	psoriasis	VEGF	ivw	63	-0.1249877	4.6553543
autoimmune	MS	CXCL10/IP-10	ivw	7	0.4219428	0.1656997
autoimmune	asthma	FGF-b	ivw	41	5.7052973	2.4191264
autoimmune	asthma	CXCL1/GROa	ivw	45	-2.6971096	1.1584033
autoimmune	CD	CCL2/MCP-1	ivw	3	-3.4324196	1.5294470
autoimmune	MS	M-CSF/CSF-1	ivw	4	0.8835985	0.3851289
autoimmune	MS	IL-1ra	ivw	30	-0.1576704	6.9975187
autoimmune	UC	IL-2ra	ivw	14	0.4877477	0.2180444
autoimmune	UC	G-CSF/CSF-3	ivw	2	-2.8040347	1.2367612
autoimmune	psoriasis	CXCL10/IP-10	ivw	8	-0.4744166	0.2124646
autoimmune	MS	CCL7/MCP-3	ivw	50	-9.1208776	4.5930820
autoimmune	asthma	RANTES	ivw	11	6.2710549	3.1829453
cancer	breast	IL-18	ivw	8	0.4360414	0.2039599
cancer	colorectal	CXCL9/MIG	ivw	8	7.2270997	3.2102302
cancer	colorectal	IL-2ra	ivw	11	6.3479923	2.2686213
cancer	lung	IL-18	ivw	8	-0.3949396	0.1459864
cancer	lung	TNF-b	ivw	2	-0.6899950	0.3193880
cancer	NHL	IL-2ra	ivw	10	0.5421361	0.2371293
cancer	NHL	RANTES	ivw	11	-0.3666616	0.1752733
cancer	skin	HGF	ivw	12	-7.9386033	4.0486238
cancer	skin	IL-1ra	ivw	30	4.0749830	1.8413241
cancer	skin	CXCL1/GROa	ivw	55	2.4241445	1.0833845

CVD	MI	M-CSF/CSF-1	ivw	4	0.3527963; 0.1352713;
CVD	MI	G-CSF/CSF-3	ivw	2	0.4940517; 0.1969284;
CVD	MI	CXCL9/MIG	ivw	8	0.2097046; 0.1028956;
CVD	MI	CXCL12/SDF-1a	ivw	17	0.3823123; 0.1338920;
CVD	PAVK	IL-9	ivw	5	0.3789954; 0.1503201;
CVD	stroke	SCGF-b	ivw	27	0.1771102; 8.8586516;
CVD	DM2_suzuki	IL-18	ivw	8	9.2149058; 3.9064455;
CVD	DM2_suzuki	IL-1ra	ivw	33	3.7533298; 1.2639124;
autoimmune	psoriasis	RANTES	ivw	12	-0.2328936; 0.1207974;
autoimmune	RA	TNF-b	ivw	4	3.1109198; 1.6262086;
autoimmune	RA	VEGF	ivw	39	-9.1295733; 4.8881697;
autoimmune	RA	CXCL9/MIG	ivw	7	-0.5271050; 0.2848183;
autoimmune	asthma	IL-1ra	ivw	29	-4.0130613; 2.1381977;
autoimmune	MS	CXCL12/SDF-1a	ivw	17	-0.2808933; 0.1501247;
autoimmune	UC	IL-1ra	ivw	33	-0.1359416; 7.3659257;
autoimmune	psoriasis	G-CSF/CSF-3	ivw	2	-0.8937180; 0.4970621;
autoimmune	psoriasis	SCGF-b	ivw	27	-0.1024898; 5.9375558;
autoimmune	asthma	M-CSF/CSF-1	ivw	4	0.1279325; 7.4652359;
autoimmune	psoriasis	IL-16	ivw	57	6.8010064; 4.0066731;
autoimmune	UC	M-CSF/CSF-1	ivw	4	0.5814055; 0.3473029;
autoimmune	RA	IL-16	ivw	28	0.1154460; 7.0454546;
autoimmune	MS	CXCL8/IL-8	ivw	3	0.7253109; 0.4423696;
autoimmune	asthma	SCGF-b	ivw	22	-2.5965862; 1.6041710;
autoimmune	psoriasis	CXCL1/GROa	ivw	57	-5.7915855; 3.6387017;
autoimmune	asthma	CXCL10/IP-10	ivw	4	-0.1102322; 7.0012983;
autoimmune	MS	HGF	ivw	11	-0.2495228; 0.1660298;
autoimmune	MS	TRAIL	ivw	6	0.1815213; 0.1212645;
autoimmune	UC	SCGF-b	ivw	27	0.1047007; 7.0736448;
autoimmune	UC	CCL11/eotaxin-1	ivw	11	-0.2896979; 0.1948675;
autoimmune	psoriasis	MIF	ivw	4	0.5268790; 0.3481073;
autoimmune	psoriasis	TRAIL	ivw	6	-0.2492771; 0.1675513;
autoimmune	RA	CXCL8/IL-8	ivw	3	0.5619338; 0.3826031;
autoimmune	psoriasis	CCL7/MCP-3	ivw	49	5.5084973; 3.8390962;
autoimmune	CD	SCGF-b	ivw	27	-0.1076206; 7.5780272;
autoimmune	RA	IL-18	ivw	4	0.3861111; 0.2839872;
autoimmune	asthma	IL-16	ivw	44	1.6108857; 1.1724151;
autoimmune	CD	M-CSF/CSF-1	ivw	4	0.4852385; 0.3568354;
autoimmune	MS	CCL2/MCP-1	ivw	2	0.6374148; 0.4717790;
autoimmune	psoriasis	CXCL9/MIG	ivw	8	0.4317420; 0.3190422;
autoimmune	psoriasis	CCL3/MIP-1a	ivw	28	-0.1065245; 7.6577258;
autoimmune	psoriasis	CXCL8/IL-8	ivw	3	0.7412709; 0.5539030;
autoimmune	UC	CXCL12/SDF-1a	ivw	17	-0.2621415; 0.2021148;
autoimmune	asthma	VEGF	ivw	52	1.8947191; 1.5159774;
autoimmune	CD	CXCL1/GROa	ivw	57	-5.5322047; 4.4460200;
autoimmune	UC	FGF-b	ivw	48	8.1302918; 6.5776653;
autoimmune	asthma	CXCL9/MIG	ivw	8	7.2278750; 5.9416323;
autoimmune	UC	VEGF	ivw	66	6.7087866; 5.4779474;
autoimmune	UC	CXCL1/GROa	ivw	57	-5.8191471; 4.8727385;
autoimmune	CD	FGF-b	ivw	48	8.0946557; 6.8393217;
autoimmune	UC	TNF-b	ivw	2	1.6945937; 1.4415948;

autoimmune	CD	CCL3/MIP-1a	ivw	33	-0.10605449	0.1196113
autoimmune	CD	CCL4/MIP-1b	ivw	20	-0.1344148	0.1205013
autoimmune	RA	CCL3/MIP-1a	ivw	14	0.1052056	0.09064795
autoimmune	MS	FGF-b	ivw	34	-5.0418263	4.7341429
autoimmune	RA	M-CSF/CSF-1	ivw	4	0.5231211	0.4991112
autoimmune	RA	TRAIL	ivw	5	-0.1565693	0.1724396
autoimmune	asthma	CCL7/MCP-3	ivw	39	8.9156628	9.7089385
autoimmune	asthma	CCL2/MCP-1	ivw	3	-0.1714605	0.1739778
autoimmune	CD	CCL7/MCP-3	ivw	51	-6.1260661	6.6615168
autoimmune	CD	IL-16	ivw	58	5.3223582	5.5250004
autoimmune	CD	IL-9	ivw	8	-0.3354017	0.3466176
autoimmune	MS	VEGF	ivw	59	-4.5498852	4.9871406
autoimmune	MS	SCGF-b	ivw	23	4.9659470	5.4337911
autoimmune	MS	IL-18	ivw	6	-0.1943056	0.2091941
autoimmune	MS	CXCL9/MIG	ivw	7	-0.1938676	0.2119411
autoimmune	MS	CCL4/MIP-1b	ivw	16	9.5988746	0.1023418
autoimmune	UC	MIF	ivw	6	-0.4542355	0.4723672
autoimmune	UC	IL-16	ivw	58	-4.8871900	5.2874248
autoimmune	UC	CXCL9/MIG	ivw	8	0.3208976	0.3584316
autoimmune	UC	CXCL8/IL-8	ivw	3	0.4058507	0.4040291
autoimmune	UC	IL-9	ivw	8	0.2347130	0.2616931
autoimmune	CD	IL-18	ivw	8	0.2132846	0.2544119
autoimmune	MS	MIF	ivw	5	-0.2428928	0.2898512
autoimmune	psoriasis	HGF	ivw	12	-0.1335320	0.1578812
autoimmune	psoriasis	TNF-b	ivw	4	2.1042819	2.4875309
autoimmune	RA	CXCL10/IP-10	ivw	4	0.3998571	0.4816835
autoimmune	psoriasis	IL-2ra	ivw	13	-0.1293927	0.1607195
autoimmune	asthma	IL-18	ivw	8	4.9060500	6.3206473
autoimmune	asthma	IL-9	ivw	8	4.1121153	5.4475541
autoimmune	MS	G-CSF/CSF-3	ivw	2	-0.4742411	0.6222419
autoimmune	MS	IL-16	ivw	44	3.5929347	4.7324379
autoimmune	CD	TNF-b	ivw	2	0.4645038	0.6438052
autoimmune	RA	FGF-b	ivw	35	4.4707340	6.2618643
autoimmune	asthma	TNF-b	ivw	4	0.2145460	0.3042827
autoimmune	asthma	MIF	ivw	6	4.9125687	7.3804946
autoimmune	CD	HGF	ivw	12	0.1325461	0.1981040
autoimmune	RA	SCGF-b	ivw	18	-6.3018957	9.8055119
autoimmune	CD	RANTES	ivw	12	9.4721111	0.1501463
autoimmune	UC	HGF	ivw	12	0.1172823	0.1804425
autoimmune	UC	TRAIL	ivw	6	9.9464252	0.1576466
autoimmune	MS	CXCL1/GROa	ivw	33	-2.3858208	3.8996879
autoimmune	RA	CCL7/MCP-3	ivw	37	-2.3560838	4.0382622
autoimmune	RA	CCL4/MIP-1b	ivw	9	-6.9304427	0.1175557
autoimmune	UC	RANTES	ivw	12	-8.5927057	0.1485538
autoimmune	RA	CXCL12/SDF-1a	ivw	14	-7.6620519	0.1401822
autoimmune	asthma	TRAIL	ivw	5	4.3510101	8.4368781
autoimmune	asthma	CCL4/MIP-1b	ivw	15	1.3562377	2.7888318
autoimmune	CD	VEGF	ivw	64	3.3022694	6.7521349
autoimmune	psoriasis	IL-9	ivw	7	-0.1150429	0.2589463
autoimmune	psoriasis	CCL11/eotaxin-1	ivw	11	8.1544596	0.1994530

autoimmune	RA	MIF	ivw	2	0.2421288 0.6341132
autoimmune	RA	IL-9	ivw	5	-0.1226376 0.3246593
autoimmune	CD	CCL11/eotaxin-1	ivw	11	-0.1336193 0.3636765
autoimmune	RA	IL-2ra	ivw	13	8.3502636 0.2458786
autoimmune	RA	CCL2/MCP-1	ivw	2	-0.1548083 0.4955769
autoimmune	asthma	CCL11/eotaxin-1	ivw	10	1.6722138 5.4476782
autoimmune	RA	HGF	ivw	10	-4.8560910 0.1837697
autoimmune	psoriasis	M-CSF/CSF-1	ivw	4	-8.4417596 0.3383392
autoimmune	CD	CXCL8/IL-8	ivw	3	9.0512276 0.4190213
autoimmune	psoriasis	IL-1ra	ivw	33	2.0311939 9.3033324
autoimmune	asthma	HGF	ivw	9	1.0183955 5.4396452
autoimmune	CD	MIF	ivw	6	6.2260054 0.3333769
autoimmune	psoriasis	CCL2/MCP-1	ivw	3	-8.6232980 0.5100519
autoimmune	RA	RANTES	ivw	8	-1.9576545 0.1433834
autoimmune	RA	CXCL1/GROa	ivw	22	9.5858790 7.7635402
autoimmune	RA	CCL11/eotaxin-1	ivw	9	2.0402026 0.1503460
autoimmune	asthma	CXCL12/SDF-1a	ivw	15	-5.6004027 4.8576672
autoimmune	asthma	CXCL8/IL-8	ivw	3	2.1900159 0.1573410
autoimmune	UC	CCL7/MCP-3	ivw	51	-4.8488702 4.5007184
autoimmune	UC	CCL4/MIP-1b	ivw	20	1.1952114 0.1056019
autoimmune	MS	IL-9	ivw	6	1.5175943 0.2368140
autoimmune	psoriasis	CCL4/MIP-1b	ivw	16	-7.2060239 0.1053158
autoimmune	MS	CCL3/MIP-1a	ivw	25	-3.1135077 6.8129443
autoimmune	MS	CCL11/eotaxin-1	ivw	10	-9.7380348 0.2054348
autoimmune	asthma	IL-2ra	ivw	12	-1.5046411 5.3470132
autoimmune	asthma	CCL3/MIP-1a	ivw	27	-7.0294285 2.3513250
cancer	breast	VEGF	ivw	65	-5.6858843 4.2746859
cancer	breast	CCL3/MIP-1a	ivw	33	-6.6989371 7.1823392
cancer	breast	MIF	ivw	6	-0.3618765 0.2526188
cancer	breast	FGF-b	ivw	48	4.8829952 4.1495231
cancer	breast	IL-1ra	ivw	33	-5.9552410 6.1115207
cancer	breast	CCL2/MCP-1	ivw	3	0.4262064 0.5057997
cancer	breast	TNF-b	ivw	4	5.4890673 0.2971527
cancer	breast	CXCL8/IL-8	ivw	3	-0.3556627 0.3515317
cancer	breast	CCL4/MIP-1b	ivw	20	3.3660656 8.8139888
cancer	breast	TRAIL	ivw	6	-0.1986537 0.1935070
cancer	breast	CCL11/eotaxin-1	ivw	11	7.1384451 0.1687607
cancer	breast	CXCL12/SDF-1a	ivw	17	0.2355877 0.1379581
cancer	breast	CXCL1/GROa	ivw	57	-1.2310144 3.4707896
cancer	breast	G-CSF/CSF-3	ivw	2	0.1144285 0.5821706
cancer	breast	IL-16	ivw	56	5.7237257 4.7482191
cancer	breast	SCGF-b	ivw	27	-5.0101196 7.1220989
cancer	breast	IL-2ra	ivw	14	4.2560543 0.1348826
cancer	breast	CCL7/MCP-3	ivw	51	-3.0459491 3.5598175
cancer	breast	M-CSF/CSF-1	ivw	4	0.5268003 0.2931183
cancer	breast	HGF	ivw	12	1.3637726 0.1504251
cancer	breast	CXCL9/MIG	ivw	8	-0.1001420 0.2894696
cancer	breast	CXCL10/IP-10	ivw	8	-0.3420045 0.2192582
cancer	breast	RANTES	ivw	12	0.1228819 0.1128524
cancer	colorectal	IL-9	ivw	7	6.3185648 3.3364835

cancer	colorectal	CCL3/MIP-1a	ivw	32	-2.43991421.07127021
cancer	colorectal	CCL11/eotaxin-1	ivw	11	-4.38149632.47847910
cancer	colorectal	VEGF	ivw	62	3.327522316.77480254
cancer	colorectal	HGF	ivw	12	-6.46008812.20881710
cancer	colorectal	TNF-b	ivw	4	4.696109014.92787320
cancer	colorectal	IL-16	ivw	55	-5.00066955.63568653
cancer	colorectal	FGF-b	ivw	46	-5.67908497.84529357
cancer	colorectal	CCL7/MCP-3	ivw	47	8.156648315.20977870
cancer	colorectal	SCGF-b	ivw	24	1.24505098.79051061
cancer	colorectal	IL-1ra	ivw	30	1.401598019.66805260
cancer	colorectal	MIF	ivw	6	4.081653014.27439641
cancer	colorectal	CXCL8/IL-8	ivw	3	8.637801115.52760901
cancer	colorectal	CCL2/MCP-1	ivw	2	-1.93287278.15780560
cancer	colorectal	CCL4/MIP-1b	ivw	19	7.927324911.20686040
cancer	colorectal	RANTES	ivw	12	-1.14791931.62832221
cancer	colorectal	CXCL10/IP-10	ivw	8	-2.54211313.25384800
cancer	colorectal	CXCL1/GROa	ivw	55	7.779135915.00380541
cancer	colorectal	G-CSF/CSF-3	ivw	2	1.156783216.69452001
cancer	colorectal	M-CSF/CSF-1	ivw	4	-3.23709644.39837501
cancer	colorectal	TRAIL	ivw	5	-2.31492593.68242784
cancer	colorectal	CXCL12/SDF-1a	ivw	17	-4.16604042.54894641
cancer	lung	VEGF	ivw	59	-6.58140563.42673911
cancer	lung	CCL3/MIP-1a	ivw	26	-5.75318926.35649981
cancer	lung	MIF	ivw	5	-0.27227650.19081351
cancer	lung	IL-9	ivw	7	0.152902710.14961401
cancer	lung	FGF-b	ivw	38	-1.41312312.91893001
cancer	lung	IL-1ra	ivw	30	-7.06950374.15908404
cancer	lung	CCL2/MCP-1	ivw	3	-0.46178130.41034241
cancer	lung	CXCL8/IL-8	ivw	3	-0.16109400.22263340
cancer	lung	CCL4/MIP-1b	ivw	16	-2.71598046.44188801
cancer	lung	TRAIL	ivw	6	-5.39551150.10966844
cancer	lung	CCL11/eotaxin-1	ivw	9	0.130498810.13397111
cancer	lung	CXCL12/SDF-1a	ivw	16	-4.31122649.41527661
cancer	lung	CXCL1/GROa	ivw	40	1.078975712.55208831
cancer	lung	G-CSF/CSF-3	ivw	2	-0.30214270.28120281
cancer	lung	IL-16	ivw	51	-2.13957072.93994361
cancer	lung	SCGF-b	ivw	24	4.725179114.33574311
cancer	lung	IL-2ra	ivw	12	-0.11115829.47200420
cancer	lung	CCL7/MCP-3	ivw	49	-3.00995802.42013351
cancer	lung	M-CSF/CSF-1	ivw	3	-0.17929550.21576291
cancer	lung	HGF	ivw	12	1.966896719.57885281
cancer	lung	CXCL9/MIG	ivw	8	0.120274310.13598280
cancer	lung	CXCL10/IP-10	ivw	7	0.134262510.12682181
cancer	lung	RANTES	ivw	12	2.639189517.56049521
cancer	NHL	VEGF	ivw	44	0.147149919.43162221
cancer	NHL	CCL3/MIP-1a	ivw	23	-7.80291820.12404301
cancer	NHL	IL-18	ivw	6	-0.17761020.31510501
cancer	NHL	MIF	ivw	3	-0.30590100.52822200
cancer	NHL	IL-9	ivw	7	-0.62062740.34821624
cancer	NHL	FGF-b	ivw	44	-4.01669366.34038711

cancer	NHL	IL-1ra	ivw	28	0.1102079	0.1001149
cancer	NHL	CCL2/MCP-1	ivw	3	-0.1121798	0.6872020
cancer	NHL	TNF-b	ivw	2	-1.4310131	0.8373772
cancer	NHL	CXCL8/IL-8	ivw	2	6.5444982	0.5877758
cancer	NHL	CCL4/MIP-1b	ivw	12	7.1096240	0.1562322
cancer	NHL	TRAIL	ivw	6	-7.2554367	0.2028843
cancer	NHL	CCL11/eotaxin-1	ivw	9	9.1118226	0.2733684
cancer	NHL	CXCL12/SDF-1a	ivw	16	0.1227380	0.2165583
cancer	NHL	CXCL1/GROa	ivw	43	-3.6311381	5.0833941
cancer	NHL	G-CSF/CSF-3	ivw	2	-0.2038954	0.7435064
cancer	NHL	IL-16	ivw	46	-1.8101054	7.4367196
cancer	NHL	SCGF-b	ivw	18	6.3203650	9.4572076
cancer	NHL	CCL7/MCP-3	ivw	43	8.7049098	5.6095639
cancer	NHL	M-CSF/CSF-1	ivw	3	0.8516098	0.4927581
cancer	NHL	HGF	ivw	12	4.3125798	0.2134424
cancer	NHL	CXCL9/MIG	ivw	7	0.1508295	0.4768921
cancer	NHL	CXCL10/IP-10	ivw	7	-0.3051462	0.2945219
cancer	skin	IL-9	ivw	7	-1.2620744	7.2846579
cancer	skin	CCL3/MIP-1a	ivw	32	2.6002348	1.9764522
cancer	skin	CCL11/eotaxin-1	ivw	11	3.7631310	5.6117740
cancer	skin	VEGF	ivw	62	-4.3504994	1.4241019
cancer	skin	TNF-b	ivw	4	-1.1346032	1.5426854
cancer	skin	IL-16	ivw	55	6.0167255	1.0372005
cancer	skin	FGF-b	ivw	46	-1.2905089	1.1780423
cancer	skin	CCL7/MCP-3	ivw	47	-2.2433009	9.9262430
cancer	skin	SCGF-b	ivw	24	-2.5570273	1.5610535
cancer	skin	MIF	ivw	6	7.6965528	7.0573861
cancer	skin	CXCL8/IL-8	ivw	3	-2.2313281	1.2841857
cancer	skin	CCL2/MCP-1	ivw	2	1.1414505	1.5545992
cancer	skin	CXCL9/MIG	ivw	8	4.2993795	5.9760645
cancer	skin	IL-18	ivw	5	5.2983388	1.0942584
cancer	skin	CCL4/MIP-1b	ivw	19	2.6234294	2.2995475
cancer	skin	RANTES	ivw	12	7.2167335	3.1024234
cancer	skin	IL-2ra	ivw	11	-3.5124474	6.5837641
cancer	skin	CXCL10/IP-10	ivw	8	-6.7291496	5.1630666
cancer	skin	G-CSF/CSF-3	ivw	2	1.3426568	1.2752998
cancer	skin	M-CSF/CSF-1	ivw	4	1.3340738	8.3230198
cancer	skin	TRAIL	ivw	5	-4.4762457	5.6636465
cancer	skin	CXCL12/SDF-1a	ivw	17	-1.2916354	4.7933383
CVD	MI	CXCL10/IP-10	ivw	8	4.1581838	6.7405043
CVD	MI	IL-18	ivw	8	2.1683784	9.3735748
CVD	MI	CXCL1/GROa	ivw	46	-3.0156717	1.8335613
CVD	MI	HGF	ivw	12	-5.2190216	6.4990041
CVD	MI	CCL7/MCP-3	ivw	50	-2.7298211	1.6074321
CVD	MI	CCL2/MCP-1	ivw	3	-0.2084575	0.1998147
CVD	MI	CCL3/MIP-1a	ivw	26	-4.5879485	3.3386421
CVD	MI	FGF-b	ivw	42	1.8270932	1.8392324
CVD	MI	VEGF	ivw	54	2.7193782	2.0285782
CVD	MI	TNF-b	ivw	4	0.1395554	0.1459991
CVD	MI	SCGF-b	ivw	24	-2.9165316	2.8972757

CVD	MI	CCL4/MIP-1b	ivw	15	-4.75914774.56501240
CVD	MI	CXCL8/IL-8	ivw	3	0.154737910.13487870
CVD	MI	IL-16	ivw	47	-7.82614442.08942517
CVD	MI	MIF	ivw	6	5.71357610.15454580
CVD	MI	IL-9	ivw	7	5.254140810.10353960
CVD	MI	CCL11/eotaxin-1	ivw	11	5.944520317.54901607
CVD	MI	RANTES	ivw	10	4.220924915.24936081
CVD	MI	IL-2ra	ivw	14	-4.54525606.25413109
CVD	PAVK	CXCL10/IP-10	ivw	8	4.932076319.71191891
CVD	PAVK	IL-18	ivw	7	9.023399610.10453091
CVD	PAVK	CXCL1/GROa	ivw	53	1.62991651.90896021
CVD	PAVK	HGF	ivw	11	-1.12959958.16545297
CVD	PAVK	IL-1ra	ivw	31	7.469692214.54477031
CVD	PAVK	M-CSF/CSF-1	ivw	3	0.189102310.22262961
CVD	PAVK	G-CSF/CSF-3	ivw	2	0.373680110.22203071
CVD	PAVK	CCL7/MCP-3	ivw	47	1.188511312.01347781
CVD	PAVK	CCL2/MCP-1	ivw	3	-6.26687250.22319610
CVD	PAVK	CCL3/MIP-1a	ivw	26	3.960230313.84578511
CVD	PAVK	FGF-b	ivw	47	-3.96923752.12951531
CVD	PAVK	TRAIL	ivw	6	0.108211518.26299481
CVD	PAVK	VEGF	ivw	62	-2.879271112.68175761
CVD	PAVK	TNF-b	ivw	3	-0.37595740.24022974
CVD	PAVK	SCGF-b	ivw	23	5.016799718.60869900
CVD	PAVK	CCL4/MIP-1b	ivw	18	-8.384714314.50214941
CVD	PAVK	CXCL8/IL-8	ivw	3	-0.21510440.17786861
CVD	PAVK	IL-16	ivw	52	-2.162857312.47478690
CVD	PAVK	CXCL9/MIG	ivw	6	0.174949110.11639374
CVD	PAVK	MIF	ivw	4	1.445796810.17003541
CVD	PAVK	CXCL12/SDF-1a	ivw	16	0.145222618.29630251
CVD	PAVK	CCL11/eotaxin-1	ivw	11	-0.128944119.02516421
CVD	PAVK	RANTES	ivw	11	-1.789449515.77756260
CVD	PAVK	IL-2ra	ivw	13	6.344109617.42275191
CVD	stroke	CXCL10/IP-10	ivw	7	-0.35088640.26652361
CVD	stroke	IL-18	ivw	8	-0.40553020.39071181
CVD	stroke	CXCL1/GROa	ivw	54	7.279359015.21636321
CVD	stroke	HGF	ivw	12	6.384343610.20972350
CVD	stroke	IL-1ra	ivw	33	-2.35845388.61686421
CVD	stroke	M-CSF/CSF-1	ivw	4	0.704940710.48287801
CVD	stroke	G-CSF/CSF-3	ivw	2	-0.418791310.58429340
CVD	stroke	CCL7/MCP-3	ivw	50	8.067792516.71597271
CVD	stroke	CCL2/MCP-1	ivw	3	-0.96897780.99831900
CVD	stroke	CCL3/MIP-1a	ivw	28	0.169669210.11253911
CVD	stroke	FGF-b	ivw	45	2.777903115.64474001
CVD	stroke	TRAIL	ivw	6	-4.01608020.21190701
CVD	stroke	VEGF	ivw	62	1.001307016.75089391
CVD	stroke	TNF-b	ivw	2	0.348668410.77234561
CVD	stroke	CCL4/MIP-1b	ivw	16	-0.15244650.14015881
CVD	stroke	CXCL8/IL-8	ivw	3	-0.62489280.51063771
CVD	stroke	IL-16	ivw	51	0.114321417.27968971
CVD	stroke	CXCL9/MIG	ivw	8	0.202424910.27871420

CVD	stroke	MIF	ivw	6	-1.0343730	0.5337400
CVD	stroke	CXCL12/SDF-1a	ivw	17	0.1227235	0.2343192
CVD	stroke	IL-9	ivw	7	-0.3732242	0.3199248
CVD	stroke	CCL11/eotaxin-1	ivw	11	0.2176097	0.2432533
CVD	stroke	IL-2ra	ivw	14	3.5818713	0.2032342
CVD	DM2_suzuki	VEGF	ivw	66	1.6890418	1.4701407
CVD	DM2_suzuki	CCL3/MIP-1a	ivw	31	1.8251176	1.9542734
CVD	DM2_suzuki	MIF	ivw	4	5.9267565	0.1111675
CVD	DM2_suzuki	IL-9	ivw	8	8.8041710	6.0736443
CVD	DM2_suzuki	CCL2/MCP-1	ivw	2	6.3217479	0.1096015
CVD	DM2_suzuki	TNF-b	ivw	4	9.4019374	9.4894258
CVD	DM2_suzuki	CXCL8/IL-8	ivw	3	2.6851967	7.1953141
CVD	DM2_suzuki	CCL4/MIP-1b	ivw	20	1.3511525	1.8800371
CVD	DM2_suzuki	TRAIL	ivw	6	5.0530714	2.7828068
CVD	DM2_suzuki	CCL11/eotaxin-1	ivw	10	2.6272712	3.5742100
CVD	DM2_suzuki	CXCL12/SDF-1a	ivw	17	1.3430287	3.5691041
CVD	DM2_suzuki	CXCL1/GROa	ivw	55	-1.1462998	6.6627153
CVD	DM2_suzuki	G-CSF/CSF-3	ivw	2	6.3865143	0.1950416
CVD	DM2_suzuki	IL-16	ivw	57	3.5944722	8.2003260
CVD	DM2_suzuki	SCGF-b	ivw	26	9.1024819	2.3320037
CVD	DM2_suzuki	IL-2ra	ivw	14	-6.2992607	3.2469736
CVD	DM2_suzuki	CCL7/MCP-3	ivw	51	-1.0554133	6.5751001
CVD	DM2_suzuki	M-CSF/CSF-1	ivw	4	5.2218907	0.1030236
CVD	DM2_suzuki	HGF	ivw	12	-3.5704012	3.3547033
CVD	DM2_suzuki	CXCL9/MIG	ivw	8	0.1309212	7.4461252
CVD	DM2_suzuki	CXCL10/IP-10	ivw	8	3.4877636	6.0302397
CVD	DM2_suzuki	RANTES	ivw	11	2.2535260	2.3108716

er with circulating cytokine concentrations from inverse-variance weighted MR analysis

pval	Pval_FDR	causal SNP for cyto	causal SNP for disease
8.1622452	1.5202181715764	1.2341209650413741E-3	4.142833130296166E-4
3.1315901	9.3321385557259	1.6692371391185039E-279	1.144154797650229E-2
1.8110554	2.2358601399066	0.79908561486142426	2.8319031729974461E-6
2.1008081	2.2358601399066	0.87566895498406683	2.8981247672936918E-17
1.8221157	2.2358601399066	0.91343760018522657	3.2019657858959132E-17
1.1608180	3.4899315090191	0.96505307355339764	4.0947560557801061E-134
3.9208682	9.7368227843547	0.96042217872470059	1.592513788630114E-134
5.3925015	1.1478324796534	0.32417651814328058	2.2128852857518862E-174
1.9649048	2.2358601399066	0.97899834220242132	4.8796166086537807E-191
2.8799459	2.6819496241113	0.97756387282000023	1.93347177770583E-174
6.0474255	3.7796409540403	0.99226846398587076	6.2375907812921617E-58
8.2320062	4.1160031497437	0.99063418715286322	1.189710556593699E-260
5.5529707	4.5966258014843	0.94560454550036555	3.5002054395222961E-258
4.2662020	4.2662020798774	0.88635824262318264	3.57583174142481E-174
1.3959726	3.4899315090191	0.9059423186435569	1.487177093529264E-25
1.6055149	2.2358601399066	0.95563959460654502	2.3228050068562649E-44
1.3688174	2.2358601399066	0.98661983933211361	2.583789992776639E-43
1.4467962	7.1857547544432	0.97836239272293402	1.8613223482910929E-34
2.7361113	2.6819496241113	0.14474446452331821	1.347131125592083E-19
3.8213063	3.3492626211093	0.82111976098005079	1.4275194369890859E-81
2.3545475	1.7541379167999	0.86433763157773025	6.5819976279608589E-81
1.6995895	2.1244869646580	0.87580805013183127	1.6946258542665649E-19
2.9093254	9.3321385557259	6.7162719098061999E-71	2.7337864271267838E-3
2.4728727	3.6845803386983	6.9813662159491792E-20	3.315697398598666E-31
7.4597412	5.5575072347951872E-2		
7.2569625	5.5575072347951872E-2		
1.0883095	7.7218154900640129E-2		
1.8353299	0.12430188931090359		
1.9896214	0.12889287104309349		
2.4818085	0.1312955673572031		
2.1773713	0.1312955673572031		
2.4244438	0.1312955673572031		
2.5291662	0.1312955673572031		
2.3375560	0.1312955673572031		
2.5554170	0.1312955673572031		
4.7057102	0.23371694395667211		
4.8814878	0.23462635059975021		
3.2526682	0.40658352982893747		
2.4368351	0.40658352982893747		
5.1392771	0.21324794635717159		
6.8239342	0.21324794635717159		
3.0744339	0.40658352982893747		
2.2239827	0.40658352982893747		
3.6443733	0.41413333277180231		
4.9900577	0.51979768275481142		
2.6892673	0.40658352982893747		
2.5249363	0.40658352982893747		

9.1056137 0.13008019684982489
1.2114608 0.13460675730066221
4.1546594 0.37590475505924792
4.2985684 7.1642807224325838E-2
1.1693696 0.13460675730066221
4.5576799 0.37590475505924792
1.8329302 0.18329302923562901
2.9817592 5.9635184445658802E-2
5.3859099 0.2507814310680912
5.5749403 0.25171700490938992
6.1805646 0.25470344204632012
6.4216922 0.25470344204632012
6.0539623 0.25470344204632012
6.1335814 0.25470344204632012
6.4957924 0.25470344204632012
7.2176884 0.27575271335824592
8.4324294 0.31410799855284488
8.6581973 0.31465156065522548
8.9617316 0.31792809872799588
9.4119041 0.32613342350172542
0.1012988 0.33541184779563371
0.1010875 0.33541184779563371
0.1055232 0.34180365584986538
0.1114605 0.35335361920323038
0.1153824 0.3581664880990959
0.1328700 0.38307446310568838
0.1344185 0.38307446310568838
0.1388323 0.38307446310568838
0.1371098 0.38307446310568838
0.1301391 0.38307446310568838
0.1368125 0.38307446310568838
0.1419108 0.38444950138677009
0.1513320 0.40265138205654011
0.1555588 0.40663639799304119
0.1739541 0.417832361142631
0.1694450 0.417832361142631
0.1738810 0.417832361142631
0.1766673 0.417832361142631
0.1759777 0.417832361142631
0.1642032 0.417832361142631
0.1808089 0.42094591225025613
0.1946336 0.44616025452915631
0.2113604 0.47426207889018118
0.2133873 0.47426207889018118
0.2164417 0.47426207889018118
0.2238022 0.47637906495065879
0.2206921 0.47637906495065879
0.2323898 0.48769146730528851
0.2365926 0.4894446494476411
0.2397950 0.4894446494476411

0.2448591\0.49302729177796178
0.2646516\0.52577452603294905
0.2882411\0.5577654052418668
0.2868793\0.5577654052418668
0.2945900\0.56274258093572838
0.3638960\0.58749735573064155
0.3584648\0.58749735573064155
0.3243632\0.58749735573064155
0.3577712\0.58749735573064155
0.3353856\0.58749735573064155
0.3332232\0.58749735573064155
0.3615984\0.58749735573064155
0.3607688\0.58749735573064155
0.3529775\0.58749735573064155
0.3603365\0.58749735573064155
0.3482839\0.58749735573064155
0.3362428\0.58749735573064155
0.3553278\0.58749735573064155
0.3706359\0.58749735573064155
0.3151335\0.58749735573064155
0.3697714\0.58749735573064155
0.4018377\0.6112579134462538
0.4020354\0.6112579134462538
0.3976781\0.6112579134462538
0.3975906\0.6112579134462538
0.4064686\0.61175581198731743
0.4207710\0.6269488378892526
0.4376343\0.64519261702816377
0.4503357\0.64519261702816377
0.4459710\0.64519261702816377
0.4477243\0.64519261702816377
0.4706034\0.66780868665214177
0.4752505\0.66804092908631474
0.4807556\0.66946342229854017
0.5056571\0.6912194027409343
0.5034486\0.6912194027409343
0.5204258\0.69638762456881442
0.5281328\0.69638762456881442
0.5157112\0.69638762456881442
0.5280853\0.69638762456881442
0.5406714\0.70666710994065207
0.5595971\0.71695503360723367
0.5554956\0.71695503360723367
0.5629781\0.71695503360723367
0.5846686\0.73826808416994538
0.6060546\0.7588415651503676
0.6267471\0.7717795477887428
0.6247918\0.7717795477887428
0.6568450\0.80221238073160039
0.6826563\0.82695771766371995

0.7025811\0.84110112373723345
0.7056217\0.84110112373723345
0.7133113\0.84351895090815443
0.7341509\0.86132665041369061
0.7547516\0.87652956084911793
0.7588745\0.87652956084911793
0.7915882\0.90728195284631719
0.8029696\0.91330130134550969
0.8289809\0.9287079451368343
0.8271722\0.9287079451368343
0.8514902\0.94019238437917185
0.8518521\0.94019238437917185
0.8657439\0.94849884426054032
0.8914000\0.95256380472094659
0.9017325\0.95256380472094659
0.8920581\0.95256380472094659
0.9082152\0.95256380472094659
0.8893007\0.95256380472094659
0.9142055\0.95256380472094659
0.9098872\0.95256380472094659
0.9489035\0.97508015370144019
0.9454489\0.97508015370144019
0.9635494\0.97665897131318158
0.9621927\0.97665897131318158
0.9775506\0.97755061644885899
0.9761503\0.97755061644885899
0.1834757\0.71670205775085161
0.3509770\0.82777615681799765
0.1520007\0.61936098629655245
0.2392910\0.79504301229150254
0.3298437\0.80886285700510063
0.3994305\0.87106614262788773
0.8534470\0.950699726426255
0.3116568\0.79504301229150254
0.7025352\0.950699726426255
0.3046101\0.79504301229150254
0.6723009\0.9456571505670871
8.7696579\0.53585216155648219
0.7228304\0.950699726426255
0.8441758\0.950699726426255
0.9040516\0.950699726426255
0.9943872\0.994387238682925
0.7523535\0.950699726426255
0.3921927\0.87106614262788773
7.2299523\0.53585216155648219
0.9277617\0.950699726426255
0.7293803\0.950699726426255
0.1188012\0.53585216155648219
0.2762098\0.79504301229150254
0.8497965\0.950699726426255

0.8198336\0.950699726426255
0.8596799\0.950699726426255
0.6233122\0.93496740939899858
0.7699286\0.950699726426255
0.3406059\0.81876423492878603
0.3749054\0.85553709580808868
0.4691367\0.87106614262788773
0.1174324\0.53585216155648219
0.9886994\0.994387238682925
0.1471362\0.61936098629655245
0.9239250\0.950699726426255
0.1181314\0.53585216155648219
0.8127069\0.950699726426255
0.5112740\0.88263993155142162
0.4808285\0.87106614262788773
0.4346474\0.87106614262788773
0.1200308\0.53585216155648219
8.3996221\0.53585216155648219
0.4617455\0.87106614262788773
0.5295839\0.88263993155142162
0.1021713\0.53585216155648219
0.8476949\0.950699726426255
0.9278829\0.950699726426255
0.1536015\0.61936098629655245
0.3067896\0.79504301229150254
0.6282980\0.93496740939899858
8.9173407\0.53585216155648219
0.2604382\0.79504301229150254
0.4693210\0.87106614262788773
0.6733078\0.9456571505670871
0.6227306\0.93496740939899858
0.3300160\0.80886285700510063
0.6470264\0.94340196974255952
0.6724547\0.9456571505670871
0.2826140\0.79504301229150254
0.4667610\0.87106614262788773
0.2757924\0.79504301229150254
0.2405774\0.79504301229150254
0.2136042\0.78530962190053299
0.4059827\0.87106614262788773
0.8373085\0.950699726426255
0.3764363\0.85553709580808868
0.2897499\0.79504301229150254
0.7270320\0.950699726426255
0.1187181\0.53585216155648219
0.5293167\0.88263993155142162
0.5729895\0.90662901196245249
0.5625118\0.90662901196245249
7.4699559\0.53585216155648219
0.5264011\0.88263993155142162

0.2709771:0.79504301229150254
0.8703283:0.950699726426255
8.7465232:0.53585216155648219
0.9113440:0.950699726426255
0.6490605:0.94340196974255952
0.7206318:0.950699726426255
0.7388953:0.950699726426255
0.5708727:0.90662901196245249
0.4750332:0.87106614262788773
0.7839041:0.950699726426255
0.8076947:0.950699726426255
0.5039344:0.88263993155142162
0.8766795:0.950699726426255
8.3943211:0.53585216155648219
0.8398785:0.950699726426255
0.7517930:0.950699726426255
0.3001681:0.79504301229150254
0.8624541:0.950699726426255
0.8953317:0.950699726426255
0.5024895:0.88263993155142162
0.9756291:0.99149304515248082
0.4620516:0.87106614262788773
0.5618520:0.90662901196245249
0.2733111:0.79504301229150254
0.8212037:0.950699726426255
0.1014188:0.53585216155648219
0.9131575:0.950699726426255
8.2291351:0.53585216155648219
0.4628018:0.87106614262788773
0.4718740:0.87106614262788773
0.6282478:0.93496740939899858
0.2539340:0.79504301229150254
0.8160595:0.950699726426255
0.5936865:0.92763521123974679
0.1924641:0.72903072014763637
0.2924250:0.79504301229150254
0.1089628:0.53585216155648219
0.4293251:0.87106614262788773
0.7875721:0.950699726426255
0.5373039:0.8058267016852243
0.8170593:0.91804417944766081
0.1000301:0.41776273765921668
0.4219461:0.70324359444552831
8.9460645:0.41776273765921668
0.2968305:0.63796695258487313
0.1693808:0.51327533087702426
0.3205151:0.63796695258487313
0.8933603:0.95038334448262241
0.3391406:0.63988798203845287
0.3141048:0.63796695258487313

0.9169688:0.95091231672600518
0.2512835:0.61288670432965608
0.7079879:0.85735576764593147
0.7116052:0.85735576764593147
0.6118375:0.81633411934292399
0.4310147:0.7065816246479738
0.9359124:0.95091231672600518
0.4673726:0.72850664569103241
0.6115673:0.81633411934292399
0.3880123:0.67060490441633724
0.3932023:0.67060490441633724
0.8899726:0.95038334448262241
0.1002630:0.41776273765921668
0.3956568:0.67060490441633724
9.2373088:0.41776273765921668
0.5550043:0.8058267016852243
0.7788801:0.89126540865395121
0.3031233:0.63796695258487313
6.2333515:0.39093441788624739
0.1903337:0.54381082398920577
0.2829792:0.63796695258487313
0.1175849:0.43549988350986302
0.5600553:0.8058267016852243
6.2549506:0.39093441788624739
0.2265305:0.60431827739658428
0.9303569:0.95091231672600518
0.1328182:0.45799411943938623
0.9322382:0.95091231672600518
8.0040746:0.41776273765921668
0.1530852:0.49382326812104832
0.7567708:0.88466296939851163
0.3927259:0.67060490441633724
0.1879961:0.54381082398920577
0.2993042:0.63796695258487313
0.1628694:0.50896716401152509
0.7608101:0.88466296939851163
0.7843135:0.89126540865395121
0.1443249:0.48108320838692659
0.4735293:0.72850664569103241
0.2296409:0.60431827739658428
0.3317428:0.63796695258487313
0.1316450:0.45799411943938623
0.6226327:0.81925368174399882
0.8496846:0.94409405580740002
0.8820885:0.95038334448262241
0.6516718:0.84632705710828182
0.2767411:0.63796695258487313
0.2210465:0.60431827739658428
0.1163183:0.43549988350986302
0.4676661:0.72850664569103241

5.2626665\0.37590475505924792
0.6004560\0.81633411934292399
0.2433720\0.61288670432965608
0.3710112\0.67060490441633724
0.8601026\0.94516772011708472
0.2505980\0.61288670432965608
0.3503497\0.64879583801937413
0.5939386\0.81633411934292399
0.9884345\0.98843451178467401
0.5640786\0.8058267016852243
0.3217928\0.63796695258487313
0.7090093\0.85735576764593147
0.4723356\0.72850664569103241
6.9398258\0.40822504855842878
0.9414031\0.95091231672600518
0.7066991\0.85735576764593147
8.5347124\0.41776273765921668
0.7433323\0.88466296939851163
0.6611450\0.84762182240829231
0.6962934\0.85735576764593147
5.2374758\0.37590475505924792
0.1084570\0.43382824072223197
0.6122505\0.81633411934292399
0.2871941\0.63796695258487313
7.8705501\0.41776273765921668
0.5630083\0.8058267016852243
0.3294687\0.63796695258487313

distinct causal SNPs	common causal SNPs
1.6502353179475869E-2	0.98181826247830162
2.9357266022483501E-2	0.95920118600099125
8.8666774248044903E-5	0.1753531636745711
3.0183279513085448E-4	0.1240292122207181
3.3353110601907267E-4	8.6228868708667139E-2
1.510927895533459E-4	3.4795833657058982E-2
5.8728400277538543E-5	3.9519092875006268E-2
2.385025493024211E-4	0.67558497930742845
6.3870144663961118E-5	2.0937787652893822E-2
2.091758148144276E-4	2.2226951365207762E-2
2.101669312721156E-6	7.7294343448220818E-3
1.097670020830169E-4	9.2560458449995348E-3
1.1366862614258941E-2	4.3028591885365029E-2
3.867743585634703E-4	0.1132549830182633
1.25409276888109E-4	9.3932272079553403E-2
6.1514055065558241E-5	4.429889133838498E-2
6.8449140397149554E-4	1.269566926391609E-2
5.6134476070962168E-4	2.107626251635264E-2
4.92038712113966E-5	0.85520633160547033
1.2718129531231209E-4	0.17875305772462341
5.8719027998064557E-4	0.13507517814229719
1.0528194886677541E-4	0.1240866679192995
7.5155436863189762E-2	0.922110776709684
0.99999999326720967	6.7327887393408881E-9

Supplementary Table S7: associations between cardiometabolic, allergic and autoimmune disease and cancer

group	outcome	exposure	nsnp	b	se	pval
autoimmune	RA	TNF_B	4	2,845442	0,709136	6,01E-05
autoimmune	RA	M_CSF	4	0,323252	0,417704	0,439003
autoimmune	RA	HGF	10	-0,04574	0,238157	0,847682
autoimmune	RA	VEGF	39	-0,06431	0,05653	0,255249
autoimmune	RA	SCGF_B	18	0,02489	0,09444	0,792124
autoimmune	RA	IL_2RA	13	0,137002	0,218152	0,529997
autoimmune	RA	SDF_1A	14	0,125837	0,186618	0,500119
autoimmune	RA	IP_10	4	-0,18243	0,422322	0,665759
autoimmune	RA	MCP_3	37	0,025466	0,053749	0,635642
autoimmune	RA	MIP_1A	14	0,146101	0,098236	0,136951
autoimmune	RA	IL_16	28	0,046814	0,096959	0,629221
autoimmune	RA	RANTES	8	0,096434	0,201867	0,632854
autoimmune	RA	IL_18	4	0,336001	0,339875	0,322858
autoimmune	RA	MIG	7	-0,25166	0,339558	0,458603
autoimmune	RA	GROA_CXCL1	22	0,087662	0,104322	0,40074
autoimmune	RA	IL_1RA	28	-0,27821	0,089906	0,001972
autoimmune	RA	IL_8	3	0,571016	0,51225	0,264969
autoimmune	RA	EOTAXIN	9	-0,11993	0,205254	0,55903
autoimmune	RA	FGF_BASIC	35	0,066655	0,075864	0,379615
autoimmune	RA	MIP_1B	9	-0,10424	0,15265	0,494677
autoimmune	RA	TRAIL	5	-0,20991	0,200543	0,295237
autoimmune	RA	IL_9	5	-0,35566	0,413426	0,389634
autoimmune	asthma	GROA_CXCL1	45	-0,02019	0,014936	0,176459
autoimmune	asthma	IL_16	44	0,001474	0,016373	0,928276
autoimmune	asthma	IL_18	8	0,052182	0,075801	0,491191
autoimmune	asthma	MIF	6	-0,00738	0,094217	0,937535
autoimmune	asthma	HGF	9	-0,04126	0,064064	0,519583
autoimmune	asthma	EOTAXIN	10	0,032926	0,062099	0,595955
autoimmune	asthma	TNF_B	4	-0,17886	0,148534	0,228524
autoimmune	asthma	IL_1RA	29	-0,02008	0,026035	0,440443
autoimmune	asthma	IL_9	8	0,030459	0,071934	0,671981
autoimmune	asthma	IP_10	4	-0,11496	0,085062	0,17652
autoimmune	asthma	VEGF	52	0,018756	0,01782	0,292535
autoimmune	asthma	MIG	8	0,043374	0,072685	0,550682
autoimmune	asthma	SCGF_B	22	-0,01373	0,01961	0,483904
autoimmune	asthma	TRAIL	5	0,096044	0,051565	0,062523
autoimmune	asthma	SDF_1A	15	-0,00577	0,057559	0,920125
autoimmune	asthma	RANTES	11	0,109465	0,039832	0,005993
autoimmune	asthma	FGF_BASIC	41	0,031614	0,015303	0,038845
autoimmune	asthma	IL_2RA	12	-0,04759	0,057232	0,405688
autoimmune	asthma	IL_8	3	0,100508	0,141009	0,475982
autoimmune	asthma	MIP_1A	27	-0,01244	0,032967	0,705959
autoimmune	asthma	MCP_3	39	0,003699	0,013913	0,790348
autoimmune	asthma	MCP_1_MCAF	3	-0,05884	0,168705	0,727268
autoimmune	asthma	M_CSF	4	0,148236	0,090565	0,101674
autoimmune	asthma	MIP_1B	15	-0,00581	0,038395	0,879746
autoimmune	CD	MIF	6	0,157685	0,40789	0,699063

autoimmune	CD	M_CSF	4	0,496525	0,40562	0,220908
autoimmune	CD	HGF	12	-0,07364	0,256707	0,774209
autoimmune	CD	VEGF	64	0,118531	0,082519	0,150883
autoimmune	CD	SCGF_B	27	-0,03696	0,089718	0,680382
autoimmune	CD	IL_2RA	14	0,381687	0,246959	0,122214
autoimmune	CD	SDF_1A	17	0,610431	0,23495	0,009373
autoimmune	CD	IP_10	8	-0,58818	0,285505	0,039386
autoimmune	CD	MCP_3	51	-0,06481	0,073183	0,37584
autoimmune	CD	MIP_1A	33	-0,15387	0,134773	0,253567
autoimmune	CD	IL_16	58	0,044503	0,081627	0,585614
autoimmune	CD	RANTES	12	0,153442	0,206604	0,457673
autoimmune	CD	IL_18	8	0,049015	0,310638	0,874623
autoimmune	CD	MIG	8	0,685373	0,366545	0,061509
autoimmune	CD	MCP_1_MCAF	3	-2,17911	0,959342	0,023119
autoimmune	CD	GROA_CXCL1	57	-0,13229	0,062052	0,033017
autoimmune	CD	IL_1RA	33	-0,15597	0,108448	0,150379
autoimmune	CD	IL_8	3	0,119905	0,500859	0,810796
autoimmune	CD	EOTAXIN	11	0,312434	0,358969	0,384102
autoimmune	CD	FGF_BASIC	48	0,016265	0,076179	0,830934
autoimmune	CD	MIP_1B	20	-0,11936	0,156549	0,445808
autoimmune	CD	TRAIL	6	-0,47378	0,207568	0,022459
autoimmune	CD	IL_9	8	-0,52543	0,386036	0,173485
autoimmune	MS	TNF_B	4	-1,75209	0,609545	0,004048
autoimmune	MS	MIF	5	-0,19278	0,367615	0,600001
autoimmune	MS	M_CSF	4	0,589587	0,351252	0,093243
autoimmune	MS	HGF	11	-0,26181	0,209792	0,21205
autoimmune	MS	VEGF	59	-0,03519	0,060407	0,560171
autoimmune	MS	SCGF_B	23	0,038999	0,059255	0,510439
autoimmune	MS	IL_2RA	13	1,610061	0,261682	7,62E-10
autoimmune	MS	SDF_1A	17	-0,23287	0,200621	0,245745
autoimmune	MS	IP_10	7	0,35446	0,219051	0,105628
autoimmune	MS	MCP_3	50	-0,11234	0,062458	0,072064
autoimmune	MS	MIP_1A	25	-0,04575	0,094046	0,626644
autoimmune	MS	IL_16	44	0,025282	0,05998	0,673386
autoimmune	MS	RANTES	10	-0,35166	0,156505	0,024643
autoimmune	MS	IL_18	6	-0,09134	0,2579	0,723207
autoimmune	MS	MIG	7	-0,20678	0,260702	0,427686
autoimmune	MS	GROA_CXCL1	33	-0,05354	0,051514	0,298629
autoimmune	MS	IL_1RA	30	-0,22804	0,080523	0,004626
autoimmune	MS	IL_8	3	0,793435	0,430861	0,065547
autoimmune	MS	EOTAXIN	10	-0,1394	0,229888	0,544269
autoimmune	MS	FGF_BASIC	34	-0,02855	0,060715	0,638186
autoimmune	MS	MIP_1B	16	-0,013	0,145307	0,928701
autoimmune	MS	TRAIL	6	0,18619	0,141652	0,188705
autoimmune	MS	IL_9	6	-0,03841	0,284457	0,892602
autoimmune	UC	MIF	6	-0,78939	0,412181	0,055473
autoimmune	UC	M_CSF	4	0,759077	0,400956	0,058336
autoimmune	UC	HGF	12	0,026288	0,248734	0,91583
autoimmune	UC	VEGF	66	0,014534	0,081769	0,858922
autoimmune	UC	SCGF_B	27	0,112289	0,090077	0,21255

autoimmune	UC	IL_2RA	14	0,240145	0,248746	0,334333
autoimmune	UC	SDF_1A	17	-0,12986	0,239329	0,587396
autoimmune	UC	IP_10	8	-0,43656	0,289489	0,131548
autoimmune	UC	MCP_3	51	0,063979	0,063993	0,317415
autoimmune	UC	MIP_1A	33	-0,281	0,128237	0,028434
autoimmune	UC	IL_16	58	-0,03009	0,071718	0,674762
autoimmune	UC	RANTES	12	-0,2488	0,198545	0,21016
autoimmune	UC	IL_18	8	0,84012	0,331977	0,011385
autoimmune	UC	MIG	8	0,376209	0,366325	0,304429
autoimmune	UC	MCP_1_MCAF	3	-1,57072	0,664296	0,018055
autoimmune	UC	GROA_CXCL1	57	-0,0272	0,066624	0,683089
autoimmune	UC	IL_1RA	33	-0,0261	0,104803	0,803332
autoimmune	UC	IL_8	3	0,493019	0,520046	0,343114
autoimmune	UC	EOTAXIN	11	-0,62613	0,268326	0,019623
autoimmune	UC	FGF_BASIC	48	0,034896	0,074493	0,639464
autoimmune	UC	MIP_1B	20	-0,01072	0,125759	0,932038
autoimmune	UC	TRAIL	6	0,087511	0,181559	0,629809
autoimmune	UC	IL_9	8	0,341289	0,356547	0,338462
autoimmune	psoriasis	GROA_CXCL1	57	-0,08708	0,051651	0,091817
autoimmune	psoriasis	IL_16	57	0,068303	0,057856	0,237773
autoimmune	psoriasis	IL_18	8	0,723695	0,325865	0,026362
autoimmune	psoriasis	MIF	4	0,538705	0,4113	0,190277
autoimmune	psoriasis	HGF	12	-0,22204	0,21451	0,300621
autoimmune	psoriasis	EOTAXIN	11	-0,16495	0,260679	0,526889
autoimmune	psoriasis	TNF_B	4	-0,06105	0,539563	0,909915
autoimmune	psoriasis	IL_1RA	33	-0,0306	0,101288	0,762558
autoimmune	psoriasis	IL_9	7	-0,07865	0,35695	0,825609
autoimmune	psoriasis	IP_10	8	-0,26801	0,287573	0,351356
autoimmune	psoriasis	VEGF	63	-0,13504	0,069637	0,052474
autoimmune	psoriasis	MIG	8	0,496769	0,345059	0,149962
autoimmune	psoriasis	SCGF_B	27	-0,15398	0,076514	0,044178
autoimmune	psoriasis	TRAIL	6	-0,28588	0,178734	0,109714
autoimmune	psoriasis	SDF_1A	17	0,312114	0,216097	0,148648
autoimmune	psoriasis	RANTES	12	-0,19923	0,156493	0,202983
autoimmune	psoriasis	FGF_BASIC	48	0,168964	0,068469	0,013596
autoimmune	psoriasis	IL_2RA	13	-0,32776	0,225283	0,145701
autoimmune	psoriasis	IL_8	3	0,951024	0,585475	0,104298
autoimmune	psoriasis	MIP_1A	28	-0,05729	0,108512	0,597539
autoimmune	psoriasis	MCP_3	49	0,030221	0,058883	0,607781
autoimmune	psoriasis	MCP_1_MCAF	3	0,223917	0,651328	0,731008
autoimmune	psoriasis	M_CSF	4	-0,34913	0,411136	0,395783
autoimmune	psoriasis	MIP_1B	16	0,139232	0,142871	0,329792
cancer	breast	MIP_1A	33	-0,22003	0,104867	0,035889
cancer	breast	IL_9	8	0,850892	0,287613	0,003092
cancer	breast	IP_10	8	-0,52587	0,246124	0,032631
cancer	breast	VEGF	65	-0,01715	0,062051	0,782192
cancer	breast	IL_18	8	0,524007	0,269922	0,052219
cancer	breast	MIF	6	-0,51776	0,331335	0,118135
cancer	breast	FGF_BASIC	48	0,042896	0,059124	0,468131
cancer	breast	IL_1RA	33	-0,0303	0,079949	0,704689

cancer	breast	MCP_1_MCAF	3	0,262673	0,554962	0,635987
cancer	breast	TNF_B	4	0,035361	0,346362	0,918684
cancer	breast	IL_8	3	-0,50678	0,428627	0,237075
cancer	breast	MIP_1B	20	0,022647	0,117815	0,847564
cancer	breast	TRAIL	6	-0,27709	0,153694	0,071407
cancer	breast	EOTAXIN	11	0,151215	0,21888	0,489655
cancer	breast	SDF_1A	17	0,341409	0,193222	0,07724
cancer	breast	GROA_CXCL1	57	-0,013	0,049743	0,793859
cancer	breast	IL_16	56	0,037216	0,07461	0,617914
cancer	breast	SCGF_B	27	0,023747	0,082446	0,773319
cancer	breast	IL_2RA	14	0,1382	0,183845	0,452222
cancer	breast	MCP_3	51	-0,01926	0,051179	0,706607
cancer	breast	M_CSF	4	0,424877	0,349648	0,224307
cancer	breast	HGF	12	-0,103	0,203791	0,613274
cancer	breast	MIG	8	0,058527	0,283708	0,836562
cancer	breast	RANTES	12	-0,00929	0,147228	0,949712
cancer	colorectal	IL_18	5	-0,01163	0,005169	0,024481
cancer	colorectal	IL_2RA	11	0,006706	0,00312	0,031577
cancer	colorectal	IL_9	7	-0,00013	0,004242	0,975397
cancer	colorectal	MIP_1A	32	-0,00055	0,00147	0,706712
cancer	colorectal	EOTAXIN	11	0,001144	0,003538	0,746512
cancer	colorectal	VEGF	62	-4,2E-05	0,001074	0,968545
cancer	colorectal	HGF	12	-0,0015	0,002861	0,599531
cancer	colorectal	TNF_B	4	0,005316	0,006101	0,383611
cancer	colorectal	IL_16	55	0,000159	0,000814	0,845477
cancer	colorectal	FGF_BASIC	46	0,000568	0,000951	0,550645
cancer	colorectal	MCP_3	47	0,000965	0,000785	0,218587
cancer	colorectal	SCGF_B	24	-0,00028	0,000999	0,780696
cancer	colorectal	IL_1RA	30	0,000986	0,001384	0,476061
cancer	colorectal	MIF	6	0,002783	0,004886	0,569
cancer	colorectal	IL_8	3	0,009501	0,006939	0,170894
cancer	colorectal	MIG	8	0,00471	0,004491	0,294379
cancer	colorectal	MIP_1B	19	0,0007	0,001669	0,674991
cancer	colorectal	RANTES	12	-0,00103	0,002301	0,654407
cancer	colorectal	IP_10	8	-0,00425	0,003548	0,231332
cancer	colorectal	GROA_CXCL1	55	7,42E-05	0,000701	0,915692
cancer	colorectal	M_CSF	4	-0,00226	0,005309	0,670802
cancer	colorectal	TRAIL	5	-0,00113	0,003643	0,756064
cancer	colorectal	SDF_1A	17	-0,00423	0,003071	0,168533
cancer	lung	VEGF	59	0,005229	0,044721	0,906918
cancer	lung	MIP_1A	26	0,018315	0,074362	0,805458
cancer	lung	IL_18	8	-0,45262	0,188037	0,016081
cancer	lung	MIF	5	-0,30111	0,237267	0,20441
cancer	lung	IL_9	7	0,08632	0,193802	0,656027
cancer	lung	FGF_BASIC	38	-0,01341	0,040202	0,738661
cancer	lung	IL_1RA	30	-0,06724	0,054428	0,216702
cancer	lung	MCP_1_MCAF	3	-0,541	0,390624	0,166064
cancer	lung	IL_8	3	-0,11364	0,26383	0,666668
cancer	lung	MIP_1B	16	-0,02028	0,090995	0,823646
cancer	lung	TRAIL	6	-0,11101	0,096305	0,249054

cancer	lung	EOTAXIN	9	0,206888	0,179743	0,249725
cancer	lung	SDF_1A	16	0,002569	0,131986	0,984472
cancer	lung	GROA_CXCL1	40	0,029186	0,034528	0,397953
cancer	lung	IL_16	51	0,038514	0,04193	0,358345
cancer	lung	SCGF_B	24	0,052532	0,042876	0,220498
cancer	lung	IL_2RA	12	0,007613	0,137246	0,955764
cancer	lung	MCP_3	49	-0,05471	0,033081	0,098131
cancer	lung	M_CSF	3	-0,18219	0,266638	0,494418
cancer	lung	HGF	12	-0,05465	0,12694	0,666818
cancer	lung	MIG	8	0,034289	0,181378	0,850055
cancer	lung	IP_10	7	0,07789	0,167438	0,641796
cancer	lung	RANTES	12	-0,05103	0,104973	0,626852
cancer	NHL	VEGF	44	0,0479	0,160303	0,765085
cancer	NHL	MIP_1A	23	-0,1598	0,176408	0,365013
cancer	NHL	IL_18	6	-0,08898	0,388531	0,818865
cancer	NHL	MIF	3	-0,30887	0,623999	0,620611
cancer	NHL	IL_9	7	-0,46807	0,450867	0,2992
cancer	NHL	FGF_BASIC	44	0,015367	0,097398	0,874633
cancer	NHL	IL_1RA	28	0,228323	0,138897	0,100212
cancer	NHL	MCP_1_MCAF	3	-0,19261	0,893526	0,829329
cancer	NHL	MIP_1B	12	0,089929	0,203608	0,658722
cancer	NHL	TRAIL	6	-0,08595	0,233543	0,712868
cancer	NHL	EOTAXIN	9	-0,08978	0,376183	0,811366
cancer	NHL	SDF_1A	16	-0,06675	0,291619	0,818961
cancer	NHL	GROA_CXCL1	43	-0,02254	0,073138	0,757943
cancer	NHL	IL_16	46	-0,10584	0,091724	0,248539
cancer	NHL	SCGF_B	18	0,091969	0,104766	0,380026
cancer	NHL	IL_2RA	10	0,564608	0,309423	0,068044
cancer	NHL	MCP_3	43	0,060888	0,080237	0,447941
cancer	NHL	M_CSF	3	0,838375	0,628026	0,181897
cancer	NHL	HGF	12	-0,16367	0,291898	0,574992
cancer	NHL	MIG	7	-0,29281	0,487828	0,548348
cancer	NHL	IP_10	7	-0,24169	0,354247	0,495075
cancer	NHL	RANTES	11	-0,48117	0,226956	0,033997
cancer	skin	IL_9	7	-0,00654	0,009054	0,469942
cancer	skin	MIP_1A	32	-0,00272	0,002816	0,334312
cancer	skin	EOTAXIN	11	0,008247	0,006701	0,218455
cancer	skin	VEGF	62	9E-05	0,001891	0,962048
cancer	skin	HGF	12	-0,00443	0,005531	0,423043
cancer	skin	TNF_B	4	-0,00124	0,013696	0,927863
cancer	skin	IL_16	55	-0,00089	0,00156	0,567917
cancer	skin	FGF_BASIC	46	-0,00197	0,001738	0,257526
cancer	skin	MCP_3	47	-0,00013	0,001468	0,929173
cancer	skin	SCGF_B	24	-0,00327	0,001844	0,075943
cancer	skin	IL_1RA	30	0,004571	0,002587	0,077175
cancer	skin	MIF	6	-0,00014	0,008701	0,987579
cancer	skin	IL_8	3	-0,02625	0,014172	0,063952
cancer	skin	MIG	8	0,003841	0,007963	0,629524
cancer	skin	IL_18	5	0,000633	0,010003	0,949548
cancer	skin	MIP_1B	19	-0,00089	0,003233	0,782178

cancer	skin	RANTES	12	-0,00042	0,00402	0,916142
cancer	skin	IL_2RA	11	0,00161	0,006911	0,815743
cancer	skin	IP_10	8	-0,0069	0,006554	0,29226
cancer	skin	GROA_CXCL1	55	0,001812	0,001471	0,21802
cancer	skin	M_CSF	4	0,006313	0,010503	0,547779
cancer	skin	TRAIL	5	-0,00351	0,006793	0,605473
cancer	skin	SDF_1A	17	-0,00249	0,005883	0,671951
CVD	MI	IP_10	8	0,024951	0,0899	0,781366
CVD	MI	IL_18	8	-0,02197	0,116692	0,85064
CVD	MI	GROA_CXCL1	46	-0,05158	0,023826	0,030407
CVD	MI	HGF	12	-0,07841	0,087764	0,371653
CVD	MI	IL_1RA	33	0,138307	0,039203	0,000419
CVD	MI	M_CSF	4	0,345097	0,165835	0,037437
CVD	MI	MCP_3	50	-0,0159	0,024071	0,508859
CVD	MI	MCP_1_MCAF	3	-0,12033	0,234911	0,608498
CVD	MI	MIP_1A	26	-0,00095	0,044952	0,983219
CVD	MI	FGF_BASIC	42	0,037252	0,026697	0,162903
CVD	MI	TRAIL	6	0,221663	0,07464	0,00298
CVD	MI	VEGF	54	-0,01713	0,030484	0,574135
CVD	MI	TNF_B	4	0,0925	0,178946	0,605216
CVD	MI	SCGF_B	24	-0,03503	0,035729	0,326934
CVD	MI	MIP_1B	15	-0,02957	0,061993	0,633406
CVD	MI	IL_8	3	0,13511	0,159533	0,397043
CVD	MI	IL_16	47	-0,02733	0,029529	0,354645
CVD	MI	MIG	8	0,068549	0,136051	0,614368
CVD	MI	MIF	6	0,169467	0,165226	0,305049
CVD	MI	SDF_1A	17	0,219467	0,098444	0,025789
CVD	MI	IL_9	7	0,00989	0,129511	0,939126
CVD	MI	EOTAXIN	11	0,108832	0,100279	0,277792
CVD	MI	RANTES	10	0,010393	0,067196	0,877087
CVD	MI	IL_2RA	14	-0,04279	0,092792	0,644707
CVD	PAVK	IP_10	8	0,109559	0,11342	0,334064
CVD	PAVK	IL_18	7	0,075699	0,138587	0,584916
CVD	PAVK	GROA_CXCL1	53	0,010388	0,024117	0,666671
CVD	PAVK	HGF	11	0,034359	0,111582	0,75814
CVD	PAVK	IL_1RA	31	0,120715	0,051034	0,018012
CVD	PAVK	M_CSF	3	0,160785	0,21325	0,450865
CVD	PAVK	MCP_3	47	0,000544	0,029388	0,985237
CVD	PAVK	MCP_1_MCAF	3	-0,04932	0,253222	0,845584
CVD	PAVK	MIP_1A	26	0,031241	0,054544	0,566799
CVD	PAVK	FGF_BASIC	47	-0,06973	0,031772	0,028188
CVD	PAVK	TRAIL	6	0,092733	0,083956	0,269358
CVD	PAVK	VEGF	62	-0,03214	0,035266	0,362075
CVD	PAVK	TNF_B	3	-0,35858	0,249877	0,151281
CVD	PAVK	SCGF_B	23	0,066477	0,108922	0,541652
CVD	PAVK	MIP_1B	18	-0,06617	0,060285	0,272352
CVD	PAVK	IL_8	3	-0,13307	0,215394	0,536698
CVD	PAVK	IL_16	52	0,030891	0,032661	0,344234
CVD	PAVK	MIG	6	0,135249	0,14585	0,353761
CVD	PAVK	MIF	4	0,003424	0,199086	0,986276

CVD	PAVK	SDF_1A	16	0,17618	0,107508	0,101262
CVD	PAVK	IL_9	5	0,386469	0,203527	0,057583
CVD	PAVK	EOTAXIN	11	-0,20086	0,122937	0,102284
CVD	PAVK	RANTES	11	-0,0148	0,07459	0,842713
CVD	PAVK	IL_2RA	13	-0,00913	0,097279	0,925195
CVD	stroke	IP_10	7	-0,23895	0,331258	0,470699
CVD	stroke	IL_18	8	-0,32945	0,414125	0,426297
CVD	stroke	GROA_CXCL1	54	0,056391	0,07091	0,426467
CVD	stroke	HGF	12	0,074266	0,301407	0,805373
CVD	stroke	IL_1RA	33	-0,02003	0,11454	0,861188
CVD	stroke	M_CSF	4	0,478906	0,521463	0,358415
CVD	stroke	MCP_3	50	0,118359	0,07555	0,1172
CVD	stroke	MCP_1_MCAF	3	-1,26442	0,897908	0,159076
CVD	stroke	MIP_1A	28	0,058528	0,15227	0,700703
CVD	stroke	FGF_BASIC	45	0,006295	0,078136	0,935791
CVD	stroke	TRAIL	6	-0,05441	0,214006	0,799309
CVD	stroke	VEGF	62	0,057059	0,090641	0,52902
CVD	stroke	SCGF_B	27	0,104336	0,105262	0,321586
CVD	stroke	MIP_1B	16	-0,17653	0,188331	0,348592
CVD	stroke	IL_8	3	-0,59199	0,631484	0,348525
CVD	stroke	IL_16	51	0,274838	0,110866	0,013174
CVD	stroke	MIG	8	0,032892	0,33724	0,922303
CVD	stroke	MIF	6	-1,5619	0,553786	0,004796
CVD	stroke	SDF_1A	17	0,398907	0,31689	0,208095
CVD	stroke	IL_9	7	-0,38184	0,418849	0,361954
CVD	stroke	EOTAXIN	11	0,16517	0,323209	0,609328
CVD	stroke	RANTES	12	-0,63766	0,207907	0,002162
CVD	stroke	IL_2RA	14	-0,15594	0,269901	0,563421
CVD	DM2_suzuki	VEGF	66	0,020545	0,012611	0,103283
CVD	DM2_suzuki	MIP_1A	31	0,011561	0,026214	0,659187
CVD	DM2_suzuki	IL_18	8	0,087412	0,048577	0,071948
CVD	DM2_suzuki	MIF	4	0,098984	0,088036	0,260864
CVD	DM2_suzuki	IL_9	8	0,079264	0,056175	0,158238
CVD	DM2_suzuki	FGF_BASIC	48	0,038833	0,011386	0,000648
CVD	DM2_suzuki	IL_1RA	33	0,029732	0,017191	0,083718
CVD	DM2_suzuki	TNF_B	4	0,043326	0,087951	0,622282
CVD	DM2_suzuki	IL_8	3	0,049068	0,087442	0,574695
CVD	DM2_suzuki	MIP_1B	20	0,031616	0,022078	0,152139
CVD	DM2_suzuki	TRAIL	6	0,053409	0,034181	0,118159
CVD	DM2_suzuki	EOTAXIN	10	0,001106	0,04755	0,981439
CVD	DM2_suzuki	SDF_1A	17	0,062143	0,041961	0,138621
CVD	DM2_suzuki	GROA_CXCL1	55	-0,00879	0,009434	0,351597
CVD	DM2_suzuki	IL_16	57	0,011291	0,011444	0,323787
CVD	DM2_suzuki	SCGF_B	26	0,025722	0,029258	0,379317
CVD	DM2_suzuki	IL_2RA	14	-0,06838	0,042124	0,104542
CVD	DM2_suzuki	MCP_3	51	-0,02112	0,009614	0,028038
CVD	DM2_suzuki	M_CSF	4	0,066617	0,077643	0,3909
CVD	DM2_suzuki	HGF	12	-0,02805	0,041137	0,495352
CVD	DM2_suzuki	MIG	8	0,016769	0,068032	0,805303
CVD	DM2_suzuki	IP_10	8	0,057412	0,047641	0,228172

CVD	DM2_suzuki	RANTES	11	0,022813	0,033578	0,496879
-----	------------	--------	----	----------	----------	----------

er with circu

Pval_FDR

0,004175
0,774592
0,92053
0,633565
0,895164
0,809555
0,79904
0,832889
0,823014
0,511529
0,823014
0,823014
0,701207
0,777388
0,741983
0,091347
0,646153
0,819619
0,741529
0,79904
0,68251
0,741906
0,557643
0,937535
0,79904
0,937535
0,809555
0,823014
0,610861
0,774592
0,832889
0,557643
0,68251
0,819619
0,79904
0,347631
0,937535
0,138828
0,288143
0,741983
0,797126
0,845934
0,895164
0,853866
0,458822
0,933471
0,844954

0,602084
0,889381
0,511529
0,832889
0,499638
0,186125
0,288143
0,741529
0,633565
0,823014
0,777388
0,933471
0,347631
0,244285
0,269961
0,511529
0,901606
0,741529
0,909447
0,774592
0,244285
0,557643
0,128603
0,823014
0,446925
0,590889
0,819619
0,806262
1,06E-07
0,632565
0,458822
0,370994
0,823014
0,832889
0,244285
0,853866
0,772057
0,68251
0,128603
0,350423
0,819619
0,823014
0,937535
0,574966
0,937535
0,347631
0,347631
0,937535
0,925505
0,590889

0,701365
0,823014
0,511529
0,700328
0,24702
0,832889
0,590889
0,197812
0,68251
0,244285
0,832889
0,900509
0,701365
0,244285
0,823014
0,937535
0,823014
0,701365
0,446925
0,623593
0,244285
0,574966
0,68251
0,809555
0,937535
0,883296
0,909447
0,707805
0,347326
0,511529
0,307036
0,462128
0,511529
0,590889
0,209987
0,511529
0,458822
0,823014
0,823014
0,853866
0,741983
0,701365
0,589601
0,355552
0,589601
0,977563
0,63447
0,799149
0,977563
0,977563

0,977563
0,987579
0,870253
0,977563
0,63447
0,977563
0,63447
0,977563
0,977563
0,977563
0,977563
0,977563
0,870253
0,977563
0,977563
0,987579
0,589601
0,589601
0,987579
0,977563
0,977563
0,987579
0,977563
0,977563
0,977563
0,977563
0,870253
0,977563
0,977563
0,977563
0,870253
0,929947
0,977563
0,977563
0,870253
0,987579
0,977563
0,977563
0,870253
0,987579
0,977563
0,589601
0,870253
0,977563
0,977563
0,870253
0,870253
0,977563
0,977563
0,870253

0,870253
0,987579
0,977563
0,977563
0,870253
0,987579
0,720276
0,977563
0,977563
0,977563
0,977563
0,977563
0,977563
0,977563
0,977563
0,977563
0,929947
0,987579
0,720276
0,977563
0,977563
0,977563
0,977563
0,977563
0,977563
0,977563
0,870253
0,977563
0,63447
0,977563
0,870253
0,977563
0,977563
0,977563
0,589601
0,977563
0,977563
0,870253
0,987579
0,977563
0,987579
0,977563
0,871044
0,987579
0,63447
0,63447
0,987579
0,63447
0,977563
0,987579
0,977563

0,987579
0,977563
0,929947
0,870253
0,977563
0,977563
0,977563
0,934631
0,951906
0,259845
0,72767
0,030451
0,293255
0,823867
0,823867
0,986276
0,567143
0,070034
0,823867
0,823867
0,72415
0,826947
0,731805
0,72415
0,823867
0,72415
0,259845
0,980865
0,72415
0,958676
0,83017
0,72415
0,823867
0,835561
0,925522
0,24188
0,784839
0,986276
0,951906
0,823867
0,259845
0,72415
0,72415
0,567143
0,823867
0,72415
0,823867
0,72415
0,72415
0,986276

0,517206
0,41637
0,517206
0,951906
0,980865
0,804468
0,756375
0,756375
0,934631
0,952372
0,72415
0,528902
0,567143
0,866659
0,980865
0,934631
0,823867
0,72415
0,72415
0,72415
0,206399
0,980865
0,090173
0,698605
0,72415
0,823867
0,067743
0,823867
0,517206
0,835561
0,483082
0,72415
0,567143
0,030451
0,517206
0,823867
0,823867
0,567143
0,528902
0,986276
0,567143
0,72415
0,72415
0,72767
0,517206
0,259845
0,731805
0,819415
0,934631
0,72415

0,819415

Supplementary Table S7: associations between cardiometabolic, allergic and autoimmune disease and

group	outcome	exposure	nsnp	b	se	pval
autoimmune	RA	TNF_B	4	-2,65192	8,910325	0,794059
autoimmune	RA	M_CSF	4	2,346409	1,82821	0,327959
autoimmune	RA	HGF	10	0,012345	0,363182	0,973718
autoimmune	RA	VEGF	39	-0,03514	0,068937	0,613273
autoimmune	RA	SCGF_B	18	0,091796	0,096602	0,356124
autoimmune	RA	IL_2RA	13	1,270905	0,71123	0,101507
autoimmune	RA	SDF_1A	14	-0,37724	0,471244	0,438977
autoimmune	RA	IP_10	4	-1,33319	2,558402	0,65425
autoimmune	RA	MCP_3	37	0,012581	0,067447	0,853109
autoimmune	RA	MIP_1A	14	0,333897	0,18175	0,091071
autoimmune	RA	IL_16	28	0,028608	0,09535	0,766536
autoimmune	RA	RANTES	8	-0,17287	0,303836	0,590028
autoimmune	RA	IL_18	4	-0,68672	1,706853	0,726367
autoimmune	RA	MIG	7	-0,56658	1,406242	0,703671
autoimmune	RA	GROA_CXCL1	22	-0,16818	0,134899	0,226911
autoimmune	RA	IL_1RA	28	-0,32545	0,154448	0,044901
autoimmune	RA	IL_8	3	0,124141	1,023731	0,923176
autoimmune	RA	EOTAXIN	9	-0,292	0,526225	0,596249
autoimmune	RA	FGF_BASIC	35	-0,00476	0,123802	0,96955
autoimmune	RA	MIP_1B	9	0,28443	0,250788	0,294076
autoimmune	RA	TRAIL	5	-0,47571	0,368653	0,287369
autoimmune	RA	IL_9	5	-0,59861	1,420094	0,701751
autoimmune	asthma	GROA_CXCL1	45	-0,0218	0,019347	0,266113
autoimmune	asthma	IL_16	44	0,001737	0,017253	0,920266
autoimmune	asthma	IL_18	8	-0,07094	0,187604	0,718342
autoimmune	asthma	MIF	6	0,037382	0,866019	0,967638
autoimmune	asthma	HGF	9	-0,12177	0,101022	0,267228
autoimmune	asthma	EOTAXIN	10	-0,14599	0,148309	0,353768
autoimmune	asthma	TNF_B	4	-0,16218	1,539392	0,92571
autoimmune	asthma	IL_1RA	29	-0,00729	0,037253	0,846269
autoimmune	asthma	IL_9	8	0,182097	0,157094	0,290434
autoimmune	asthma	IP_10	4	0,458498	0,326233	0,295099
autoimmune	asthma	VEGF	52	0,027981	0,024101	0,251154
autoimmune	asthma	MIG	8	0,380371	0,244087	0,170164
autoimmune	asthma	SCGF_B	22	-0,01206	0,019612	0,545431
autoimmune	asthma	TRAIL	5	0,22438	0,160406	0,256322
autoimmune	asthma	SDF_1A	15	0,032746	0,176145	0,855391
autoimmune	asthma	RANTES	11	0,126182	0,075213	0,127724
autoimmune	asthma	FGF_BASIC	41	0,009419	0,050562	0,853192
autoimmune	asthma	IL_2RA	12	-0,12003	0,141213	0,415206
autoimmune	asthma	IL_8	3	0,051334	0,451269	0,927892
autoimmune	asthma	MIP_1A	27	-0,0187	0,046038	0,688054
autoimmune	asthma	MCP_3	39	0,008114	0,013044	0,537726
autoimmune	asthma	MCP_1_MCAF	3	0,618585	0,467041	0,411704
autoimmune	asthma	M_CSF	4	0,480514	0,27817	0,226235
autoimmune	asthma	MIP_1B	15	0,042981	0,056577	0,460994
autoimmune	CD	MIF	6	-0,32154	3,998936	0,939777

autoimmune	CD	M_CSF	4	0,210913	1,26994	0,883365
autoimmune	CD	HGF	12	0,163258	0,391805	0,685715
autoimmune	CD	VEGF	64	0,182828	0,097472	0,065407
autoimmune	CD	SCGF_B	27	-0,08833	0,091912	0,345729
autoimmune	CD	IL_2RA	14	0,550123	0,40456	0,198893
autoimmune	CD	SDF_1A	17	0,817813	0,579885	0,17885
autoimmune	CD	IP_10	8	-0,26192	0,469855	0,597391
autoimmune	CD	MCP_3	51	-0,14578	0,098217	0,144154
autoimmune	CD	MIP_1A	33	0,046587	0,180517	0,798056
autoimmune	CD	IL_16	58	0,096318	0,07845	0,224673
autoimmune	CD	RANTES	12	0,058917	0,338392	0,865253
autoimmune	CD	IL_18	8	-0,53721	0,676351	0,45729
autoimmune	CD	MIG	8	-0,0362	1,164302	0,976206
autoimmune	CD	MCP_1_MCAF	3	2,760102	5,350456	0,696805
autoimmune	CD	GROA_CXCL1	57	-0,17771	0,065796	0,009173
autoimmune	CD	IL_1RA	33	-0,04966	0,137145	0,719754
autoimmune	CD	IL_8	3	0,222358	0,791914	0,825733
autoimmune	CD	EOTAXIN	11	-0,6325	1,168107	0,601325
autoimmune	CD	FGF_BASIC	48	-0,11904	0,144559	0,414502
autoimmune	CD	MIP_1B	20	-0,47943	0,187854	0,020011
autoimmune	CD	TRAIL	6	-0,15317	0,363779	0,69535
autoimmune	CD	IL_9	8	-1,09124	1,052978	0,339994
autoimmune	MS	TNF_B	4	-5,55301	2,449388	0,151544
autoimmune	MS	MIF	5	-1,55915	4,984463	0,774915
autoimmune	MS	M_CSF	4	0,931724	1,580041	0,615147
autoimmune	MS	HGF	11	-0,48732	0,340503	0,186173
autoimmune	MS	VEGF	59	-0,03338	0,073385	0,650911
autoimmune	MS	SCGF_B	23	0,036929	0,063517	0,567159
autoimmune	MS	IL_2RA	13	2,978602	1,647357	0,09798
autoimmune	MS	SDF_1A	17	-0,53157	0,556958	0,355002
autoimmune	MS	IP_10	7	0,406888	0,461416	0,418241
autoimmune	MS	MCP_3	50	-0,19917	0,073721	0,009507
autoimmune	MS	MIP_1A	25	0,050686	0,141826	0,724068
autoimmune	MS	IL_16	44	0,021641	0,065829	0,743983
autoimmune	MS	RANTES	10	-0,50185	0,276894	0,107489
autoimmune	MS	IL_18	6	1,233902	0,940467	0,259745
autoimmune	MS	MIG	7	2,730615	1,834587	0,196811
autoimmune	MS	GROA_CXCL1	33	-0,04659	0,053888	0,393888
autoimmune	MS	IL_1RA	30	-0,41535	0,104857	0,000466
autoimmune	MS	IL_8	3	1,277597	1,07959	0,446648
autoimmune	MS	EOTAXIN	10	0,63698	0,691094	0,38364
autoimmune	MS	FGF_BASIC	34	-0,03091	0,101713	0,763152
autoimmune	MS	MIP_1B	16	0,253386	0,219487	0,267644
autoimmune	MS	TRAIL	6	0,295371	0,257408	0,315147
autoimmune	MS	IL_9	6	0,173669	1,097421	0,881926
autoimmune	UC	MIF	6	3,466775	6,054866	0,597588
autoimmune	UC	M_CSF	4	2,026063	1,193537	0,231691
autoimmune	UC	HGF	12	-0,11695	0,349229	0,744628
autoimmune	UC	VEGF	66	0,083876	0,08216	0,311154
autoimmune	UC	SCGF_B	27	0,154142	0,086085	0,085479

autoimmune	UC	IL_2RA	14	0,890568	0,534224	0,121374
autoimmune	UC	SDF_1A	17	-0,74841	0,672494	0,283274
autoimmune	UC	IP_10	8	0,239329	0,487287	0,64077
autoimmune	UC	MCP_3	51	0,106319	0,063014	0,097919
autoimmune	UC	MIP_1A	33	-0,35257	0,168149	0,044269
autoimmune	UC	IL_16	58	-0,01545	0,074819	0,837174
autoimmune	UC	RANTES	12	0,151186	0,342524	0,668323
autoimmune	UC	IL_18	8	-0,49924	0,619886	0,451334
autoimmune	UC	MIG	8	1,031056	1,685216	0,563104
autoimmune	UC	MCP_1_MCAF	3	0,03755	2,008271	0,988098
autoimmune	UC	GROA_CXCL1	57	-0,04834	0,072968	0,510401
autoimmune	UC	IL_1RA	33	0,084959	0,126337	0,506258
autoimmune	UC	IL_8	3	1,295455	0,789416	0,348411
autoimmune	UC	EOTAXIN	11	-1,38824	0,600593	0,046127
autoimmune	UC	FGF_BASIC	48	-0,11109	0,138774	0,427526
autoimmune	UC	MIP_1B	20	0,193707	0,177512	0,289564
autoimmune	UC	TRAIL	6	0,135733	0,338652	0,709051
autoimmune	UC	IL_9	8	0,578535	0,819244	0,506557
autoimmune	psoriasis	GROA_CXCL1	57	-0,07553	0,0546	0,172153
autoimmune	psoriasis	IL_16	57	0,0631	0,054021	0,247825
autoimmune	psoriasis	IL_18	8	0,63925	0,641349	0,357381
autoimmune	psoriasis	MIF	4	4,404719	3,988545	0,384533
autoimmune	psoriasis	HGF	12	0,006751	0,293092	0,982078
autoimmune	psoriasis	EOTAXIN	11	0,362335	0,613079	0,569058
autoimmune	psoriasis	TNF_B	4	9,495255	12,90725	0,538518
autoimmune	psoriasis	IL_1RA	33	-0,02686	0,162809	0,870047
autoimmune	psoriasis	IL_9	7	-0,26098	1,067866	0,816638
autoimmune	psoriasis	IP_10	8	-0,0527	0,566556	0,928912
autoimmune	psoriasis	VEGF	63	-0,12633	0,068723	0,070885
autoimmune	psoriasis	MIG	8	2,584564	1,127091	0,061679
autoimmune	psoriasis	SCGF_B	27	-0,11961	0,072514	0,111562
autoimmune	psoriasis	TRAIL	6	-0,16188	0,392081	0,700864
autoimmune	psoriasis	SDF_1A	17	0,899466	0,511816	0,099234
autoimmune	psoriasis	RANTES	12	0,046967	0,27544	0,868005
autoimmune	psoriasis	FGF_BASIC	48	0,150559	0,119216	0,212989
autoimmune	psoriasis	IL_2RA	13	-0,5886	0,555032	0,31166
autoimmune	psoriasis	IL_8	3	1,438771	1,400914	0,491513
autoimmune	psoriasis	MIP_1A	28	-0,04599	0,150364	0,762138
autoimmune	psoriasis	MCP_3	49	0,02494	0,055723	0,656519
autoimmune	psoriasis	MCP_1_MCAF	3	-2,35345	1,984492	0,445983
autoimmune	psoriasis	M_CSF	4	1,340038	1,180332	0,373983
autoimmune	psoriasis	MIP_1B	16	0,16713	0,194872	0,405535
cancer	breast	VEGF	65	0,025689	0,063127	0,685428
cancer	breast	MIP_1A	33	-0,30769	0,146967	0,04457
cancer	breast	IL_18	8	0,809071	0,67028	0,27283
cancer	breast	MIF	6	1,319383	3,098421	0,692149
cancer	breast	IL_9	8	1,272432	0,834428	0,178123
cancer	breast	FGF_BASIC	48	0,112386	0,091835	0,227266
cancer	breast	IL_1RA	33	-0,01551	0,104903	0,88343
cancer	breast	MCP_1_MCAF	3	-2,05717	1,669297	0,433974

cancer	breast	TNF_B	4	-2,11122	1,315467	0,249724
cancer	breast	IL_8	3	-0,75625	0,701206	0,475966
cancer	breast	MIP_1B	20	0,034413	0,155682	0,827546
cancer	breast	TRAIL	6	-0,49197	0,434077	0,320384
cancer	breast	EOTAXIN	11	0,22599	0,553112	0,6924
cancer	breast	SDF_1A	17	0,158453	0,456909	0,733565
cancer	breast	GROA_CXCL1	57	0,005996	0,050995	0,906826
cancer	breast	IL_16	56	-0,01322	0,067908	0,846346
cancer	breast	SCGF_B	27	0,035533	0,089503	0,694731
cancer	breast	IL_2RA	14	0,308219	0,430931	0,488144
cancer	breast	MCP_3	51	-0,02208	0,053204	0,679896
cancer	breast	M_CSF	4	1,027022	1,215318	0,487051
cancer	breast	HGF	12	-0,06693	0,301526	0,8288
cancer	breast	MIG	8	0,6192	1,411308	0,676206
cancer	breast	IP_10	8	-0,40355	0,706005	0,588352
cancer	breast	RANTES	12	-0,06501	0,256356	0,804954
cancer	colorectal	IL_9	7	-0,00351	0,008047	0,680818
cancer	colorectal	MIP_1A	32	-0,00092	0,002024	0,651662
cancer	colorectal	EOTAXIN	11	-0,00735	0,00734	0,342519
cancer	colorectal	VEGF	62	0,000134	0,00107	0,900945
cancer	colorectal	HGF	12	-2,5E-05	0,004293	0,995425
cancer	colorectal	TNF_B	4	0,021222	0,022769	0,449703
cancer	colorectal	IL_16	55	2,38E-05	0,000764	0,975262
cancer	colorectal	FGF_BASIC	46	5,91E-05	0,001782	0,973713
cancer	colorectal	MCP_3	47	0,000887	0,000756	0,246596
cancer	colorectal	SCGF_B	24	0,000125	0,001095	0,910094
cancer	colorectal	IL_1RA	30	-0,00036	0,001701	0,83578
cancer	colorectal	MIF	6	-0,05139	0,050921	0,369985
cancer	colorectal	IL_8	3	0,012151	0,011218	0,474587
cancer	colorectal	MIG	8	0,02549	0,013154	0,10074
cancer	colorectal	IL_18	5	-0,01399	0,020741	0,548437
cancer	colorectal	MIP_1B	19	0,001431	0,002107	0,506209
cancer	colorectal	RANTES	12	-0,00059	0,00371	0,877028
cancer	colorectal	IL_2RA	11	0,004279	0,007685	0,591218
cancer	colorectal	IP_10	8	0,004956	0,00828	0,571326
cancer	colorectal	GROA_CXCL1	55	0,000598	0,000749	0,428071
cancer	colorectal	M_CSF	4	-0,01691	0,017366	0,432837
cancer	colorectal	TRAIL	5	0,001146	0,006792	0,876738
cancer	colorectal	SDF_1A	17	-0,01109	0,008347	0,20365
cancer	lung	VEGF	59	-0,07108	0,051203	0,170486
cancer	lung	MIP_1A	26	-0,05845	0,143414	0,687187
cancer	lung	IL_18	8	0,142584	0,407344	0,738272
cancer	lung	MIF	5	-1,85559	2,319696	0,482234
cancer	lung	IL_9	7	-0,08701	0,396332	0,83492
cancer	lung	FGF_BASIC	38	0,010661	0,060576	0,861285
cancer	lung	IL_1RA	30	-0,15048	0,071252	0,043745
cancer	lung	MCP_1_MCAF	3	-0,47314	2,244728	0,867749
cancer	lung	IL_8	3	-0,14332	0,43438	0,797111
cancer	lung	MIP_1B	16	-0,08787	0,118072	0,469074
cancer	lung	TRAIL	6	-0,25308	0,236072	0,344073

cancer	lung	EOTAXIN	9	-0,10925	0,49367	0,831175
cancer	lung	SDF_1A	16	0,101133	0,316432	0,753987
cancer	lung	GROA_CXCL1	40	0,037867	0,037966	0,324881
cancer	lung	IL_16	51	0,004172	0,042241	0,921727
cancer	lung	SCGF_B	24	0,047049	0,053166	0,385757
cancer	lung	IL_2RA	12	-0,41192	0,336576	0,249056
cancer	lung	MCP_3	49	-0,04698	0,036578	0,205275
cancer	lung	M_CSF	3	-1,14803	0,690201	0,344606
cancer	lung	HGF	12	-0,07792	0,182006	0,677628
cancer	lung	MIG	8	0,945371	0,596608	0,164154
cancer	lung	IP_10	7	0,190011	0,604494	0,765963
cancer	lung	RANTES	12	-0,16327	0,17242	0,365992
cancer	NHL	VEGF	44	0,105233	0,140636	0,458472
cancer	NHL	MIP_1A	23	-0,09561	0,278745	0,735002
cancer	NHL	IL_18	6	-0,18971	0,918314	0,846423
cancer	NHL	MIF	3	-1,7596	10,77907	0,896985
cancer	NHL	IL_9	7	-0,41242	1,405325	0,780952
cancer	NHL	FGF_BASIC	44	0,107514	0,131545	0,418358
cancer	NHL	IL_1RA	28	0,252174	0,178909	0,170534
cancer	NHL	MCP_1_MCAF	3	-2,43359	2,670036	0,529473
cancer	NHL	MIP_1B	12	-0,02227	0,279601	0,938086
cancer	NHL	TRAIL	6	-0,25223	0,446622	0,602417
cancer	NHL	EOTAXIN	9	-1,00867	0,780801	0,237426
cancer	NHL	SDF_1A	16	-1,01772	0,73972	0,19049
cancer	NHL	GROA_CXCL1	43	-0,0353	0,072609	0,629435
cancer	NHL	IL_16	46	-0,1473	0,100909	0,151464
cancer	NHL	SCGF_B	18	0,090628	0,112641	0,43286
cancer	NHL	IL_2RA	10	-0,03572	0,787746	0,964945
cancer	NHL	MCP_3	43	0,010805	0,080185	0,893469
cancer	NHL	M_CSF	3	-1,61026	2,74134	0,661889
cancer	NHL	HGF	12	-0,12843	0,397448	0,753252
cancer	NHL	MIG	7	2,483278	2,145944	0,299467
cancer	NHL	IP_10	7	-1,11974	1,365145	0,449401
cancer	NHL	RANTES	11	-0,43363	0,434716	0,344588
cancer	skin	IL_9	7	0,015285	0,017462	0,42144
cancer	skin	MIP_1A	32	-0,00209	0,003682	0,574427
cancer	skin	EOTAXIN	11	0,016141	0,016967	0,36631
cancer	skin	VEGF	62	0,001723	0,002248	0,446624
cancer	skin	HGF	12	-0,00425	0,007514	0,584396
cancer	skin	TNF_B	4	-0,10435	0,055641	0,201558
cancer	skin	IL_16	55	-0,00011	0,001406	0,936073
cancer	skin	FGF_BASIC	46	9,43E-05	0,002665	0,971948
cancer	skin	MCP_3	47	-0,00097	0,001447	0,504253
cancer	skin	SCGF_B	24	-0,00302	0,001903	0,12673
cancer	skin	IL_1RA	30	-0,0001	0,003239	0,975111
cancer	skin	MIF	6	0,050728	0,084424	0,580313
cancer	skin	IL_8	3	-0,0255	0,036657	0,61309
cancer	skin	MIG	8	-0,0026	0,025043	0,920787
cancer	skin	IL_18	5	0,029964	0,057827	0,640134
cancer	skin	MIP_1B	19	0,000594	0,004014	0,8841

cancer	skin	RANTES	12	-0,00351	0,007069	0,629863
cancer	skin	IL_2RA	11	-0,01704	0,023037	0,478329
cancer	skin	IP_10	8	-0,00744	0,013135	0,591453
cancer	skin	GROA_CXCL1	55	0,001022	0,001603	0,526253
cancer	skin	M_CSF	4	-0,03214	0,030219	0,398928
cancer	skin	TRAIL	5	0,000143	0,009627	0,989051
cancer	skin	SDF_1A	17	-0,00661	0,016023	0,685889
CVD	MI	IP_10	8	0,061522	0,116495	0,616378
CVD	MI	IL_18	8	-0,26755	0,282977	0,380919
CVD	MI	GROA_CXCL1	46	-0,03931	0,027185	0,155296
CVD	MI	HGF	12	-0,16088	0,124493	0,225334
CVD	MI	IL_1RA	33	0,142829	0,051839	0,009731
CVD	MI	M_CSF	4	-0,19192	0,483158	0,729592
CVD	MI	MCP_3	50	-0,01147	0,024174	0,637347
CVD	MI	MCP_1_MCAF	3	-0,78228	0,770005	0,494965
CVD	MI	MIP_1A	26	0,01768	0,065554	0,789697
CVD	MI	FGF_BASIC	42	0,049319	0,039748	0,221902
CVD	MI	TRAIL	6	0,177869	0,133703	0,254187
CVD	MI	VEGF	54	-0,0119	0,029586	0,68908
CVD	MI	TNF_B	4	0,158232	0,661812	0,833304
CVD	MI	SCGF_B	24	-0,01505	0,035765	0,677987
CVD	MI	MIP_1B	15	-0,07937	0,092001	0,403954
CVD	MI	IL_8	3	0,099928	0,239833	0,748674
CVD	MI	IL_16	47	-0,01762	0,030224	0,562868
CVD	MI	MIG	8	0,641849	0,497661	0,244624
CVD	MI	MIF	6	-2,79825	1,542855	0,14393
CVD	MI	SDF_1A	17	-0,18139	0,429849	0,679019
CVD	MI	IL_9	7	-0,05629	0,421101	0,898878
CVD	MI	EOTAXIN	11	0,450733	0,23477	0,087072
CVD	MI	RANTES	10	-0,03464	0,121072	0,782089
CVD	MI	IL_2RA	14	-0,34108	0,174932	0,074958
CVD	PAVK	IP_10	8	0,117171	0,225009	0,621199
CVD	PAVK	IL_18	7	-0,0346	0,354486	0,926038
CVD	PAVK	GROA_CXCL1	53	0,020701	0,027858	0,460842
CVD	PAVK	HGF	11	0,012091	0,149852	0,937457
CVD	PAVK	IL_1RA	31	0,061551	0,080035	0,448086
CVD	PAVK	M_CSF	3	1,580883	0,933644	0,339616
CVD	PAVK	MCP_3	47	0,019345	0,028404	0,499306
CVD	PAVK	MCP_1_MCAF	3	0,691776	0,821662	0,554502
CVD	PAVK	MIP_1A	26	0,013317	0,078735	0,867104
CVD	PAVK	FGF_BASIC	47	-0,11147	0,047892	0,024487
CVD	PAVK	TRAIL	6	-0,1115	0,160432	0,525319
CVD	PAVK	VEGF	62	-0,01871	0,041076	0,650466
CVD	PAVK	TNF_B	3	0,800711	0,663155	0,440353
CVD	PAVK	SCGF_B	23	0,067057	0,115787	0,568657
CVD	PAVK	MIP_1B	18	-0,07063	0,080613	0,393924
CVD	PAVK	IL_8	3	-0,48768	0,339369	0,387036
CVD	PAVK	IL_16	52	0,012728	0,035397	0,720676
CVD	PAVK	MIG	6	0,264778	0,548571	0,654557
CVD	PAVK	MIF	4	-2,00539	2,238234	0,46482

CVD	PAVK	SDF_1A	16	0,173216	0,292511	0,56318
CVD	PAVK	IL_9	5	0,30653	0,56429	0,624746
CVD	PAVK	EOTAXIN	11	-0,06619	0,284691	0,821344
CVD	PAVK	RANTES	11	-0,00307	0,132219	0,981977
CVD	PAVK	IL_2RA	13	0,229425	0,211371	0,300953
CVD	stroke	IP_10	7	-1,2399	1,315933	0,389342
CVD	stroke	IL_18	8	-0,32082	1,271863	0,809269
CVD	stroke	GROA_CXCL1	54	0,111143	0,076999	0,154897
CVD	stroke	HGF	12	-0,028	0,406201	0,946402
CVD	stroke	IL_1RA	33	0,058672	0,148	0,6945
CVD	stroke	M_CSF	4	2,434705	1,697692	0,287967
CVD	stroke	MCP_3	50	0,20032	0,098075	0,046614
CVD	stroke	MCP_1_MCAF	3	-1,15515	5,431633	0,866597
CVD	stroke	MIP_1A	28	0,366386	0,237576	0,135113
CVD	stroke	FGF_BASIC	45	-0,06019	0,12165	0,623289
CVD	stroke	TRAIL	6	-0,72821	0,405898	0,147251
CVD	stroke	VEGF	62	-0,00763	0,100963	0,94001
CVD	stroke	SCGF_B	27	0,095265	0,106496	0,379566
CVD	stroke	MIP_1B	16	0,158714	0,28073	0,580775
CVD	stroke	IL_8	3	-0,6099	1,066451	0,669277
CVD	stroke	IL_16	51	-0,02807	0,102423	0,785221
CVD	stroke	MIG	8	-0,65529	1,269181	0,624105
CVD	stroke	MIF	6	-0,67999	7,279376	0,930067
CVD	stroke	SDF_1A	17	-0,73773	0,761886	0,34825
CVD	stroke	IL_9	7	-2,1144	1,312889	0,168205
CVD	stroke	EOTAXIN	11	0,095509	0,814193	0,909195
CVD	stroke	RANTES	12	-0,75663	0,360409	0,062143
CVD	stroke	IL_2RA	14	-0,03125	0,648395	0,962353
CVD	DM2_suzuki	VEGF	66	0,025193	0,022051	0,257512
CVD	DM2_suzuki	MIP_1A	31	0,023521	0,037833	0,538982
CVD	DM2_suzuki	IL_18	8	0,091034	0,111941	0,447145
CVD	DM2_suzuki	MIF	4	1,251883	1,333443	0,446922
CVD	DM2_suzuki	IL_9	8	0,115401	0,160638	0,499522
CVD	DM2_suzuki	FGF_BASIC	48	0,036946	0,01838	0,050306
CVD	DM2_suzuki	IL_1RA	33	0,015818	0,021827	0,474076
CVD	DM2_suzuki	TNF_B	4	0,200774	0,488101	0,720715
CVD	DM2_suzuki	IL_8	3	0,062088	0,144242	0,741232
CVD	DM2_suzuki	MIP_1B	20	0,0586	0,029538	0,062732
CVD	DM2_suzuki	TRAIL	6	0,007928	0,057521	0,89704
CVD	DM2_suzuki	EOTAXIN	10	0,07743	0,099446	0,458618
CVD	DM2_suzuki	SDF_1A	17	-0,06285	0,117461	0,600462
CVD	DM2_suzuki	GROA_CXCL1	55	-0,00295	0,010023	0,769709
CVD	DM2_suzuki	IL_16	57	0,003313	0,011567	0,775635
CVD	DM2_suzuki	SCGF_B	26	0,014335	0,039122	0,717268
CVD	DM2_suzuki	IL_2RA	14	-0,05446	0,088324	0,549028
CVD	DM2_suzuki	MCP_3	51	-0,01814	0,009342	0,057931
CVD	DM2_suzuki	M_CSF	4	-0,37391	0,348449	0,395539
CVD	DM2_suzuki	HGF	12	-0,10784	0,060122	0,103098
CVD	DM2_suzuki	MIG	8	-0,08564	0,331663	0,80487
CVD	DM2_suzuki	IP_10	8	0,007754	0,127077	0,953329

CVD	DM2_suzuki	RANTES	11	0,072099	0,053541	0,211035
-----	------------	--------	----	----------	----------	----------

d cancer wi

Pval_FDR

0,964607
0,871508
0,988098
0,943599
0,871508
0,861506
0,877784
0,943599
0,966832
0,861506
0,951326
0,943599
0,943599
0,943599
0,871508
0,861506
0,978173
0,943599
0,988098
0,871508
0,871508
0,943599
0,871508
0,978173
0,943599
0,988098
0,871508
0,871508
0,978173
0,966832
0,871508
0,871508
0,871508
0,871508
0,943599
0,871508
0,966832
0,871508
0,966832
0,877784
0,978173
0,943599
0,943599
0,877784
0,871508
0,877784
0,982172

0,966832
0,943599
0,861506
0,871508
0,871508
0,871508
0,943599
0,871508
0,964607
0,871508
0,966832
0,877784
0,988098
0,943599
0,440482
0,943599
0,966832
0,943599
0,877784
0,69538
0,943599
0,871508
0,871508
0,953214
0,943599
0,871508
0,943599
0,943599
0,861506
0,871508
0,877784
0,440482
0,943599
0,949571
0,861506
0,871508
0,871508
0,877784
0,064822
0,877784
0,877784
0,951326
0,871508
0,871508
0,966832
0,943599
0,871508
0,949571
0,871508
0,861506

0,871508
0,871508
0,943599
0,861506
0,861506
0,966832
0,943599
0,877784
0,943599
0,988098
0,921373
0,921373
0,871508
0,861506
0,877784
0,871508
0,943599
0,921373
0,871508
0,871508
0,871508
0,877784
0,988098
0,943599
0,943599
0,966832
0,966832
0,978173
0,861506
0,861506
0,861506
0,943599
0,861506
0,966832
0,871508
0,871508
0,921373
0,951326
0,943599
0,877784
0,877784
0,877784
0,992523
0,992523
0,992523
0,992523
0,992523
0,992523
0,992523

[illegible]

[illegible]

[illegible]

0,962928
0,962928
0,96508
0,981977
0,962928
0,962928
0,962928
0,962928
0,972701
0,962928
0,962928
0,842396
0,972701
0,962928
0,962928
0,962928
0,972701
0,962928
0,962928
0,962928
0,962928
0,962928
0,972701
0,962928
0,962928
0,972701
0,842396
0,972701
0,962928
0,962928
0,962928
0,962928
0,962928
0,842396
0,962928
0,962928
0,962928
0,842396
0,972701
0,962928
0,962928
0,962928
0,962928
0,962928
0,842396
0,962928
0,962928
0,962928
0,972701

0,962928

Supplementary Table S7: colocalization of causal variants of circulating cytokine concentrations and

Gene_Name	Disease	causal SNP for cyto	causal SNP for disease
G-CSF/CSF-3	asthma	6.7162719098061999E-71	2.7337864271267838E-3
IL-9	breast	0.87580805013183127	1.6946258542665649E-19
G-CSF/CSF-3	CD	1.2341209650413741E-3	4.142833130296166E-4
IL-1ra	CD	0.97756387282000023	1.93347177770583E-174
IL-2ra	CD	0.97836239272293402	1.8613223482910929E-34
CXCL10/IP-10	CD	0.87566895498406683	2.8981247672936918E-17
CXCL9/MIG	CD	0.14474446452331821	1.347131125592083E-19
CXCL12/SDF-1a	CD	0.98661983933211361	2.583789992776639E-43
IL-18	colorectal	0.99226846398587076	6.2375907812921617E-58
IL-1ra	MI	0.88635824262318264	3.57583174142481E-174
TRAIL	MI	0.9059423186435569	1.487177093529264E-25
IL-2ra	MS	6.9813662159491792E-20	3.315697398598666E-31
RANTES	MS	0.96042217872470059	1.592513788630114E-134
TNF-b	MS	1.6692371391185039E-279	1.144154797650229E-2
FGF-b	psoriasis	0.94560454550036555	3.5002054395222961E-258
IL-18	psoriasis	0.86433763157773025	6.5819976279608589E-81
CXCL12/SDF-1a	psoriasis	0.95563959460654502	2.3228050068562649E-44
IL-1ra	RA	0.32417651814328058	2.2128852857518862E-174
RANTES	stroke	0.96505307355339764	4.0947560557801061E-134
IL-18	UC	0.82111976098005079	1.4275194369890859E-81
CXCL10/IP-10	UC	0.91343760018522657	3.2019657858959132E-17
CCL2/MCP-1	UC	0.79908561486142426	2.8319031729974461E-6
CCL3/MIP-1a	UC	0.97899834220242132	4.8796166086537807E-191

and disease outcomes

distinct causal SNPs

7.5155436863189762E-2
1.0528194886677541E-4
1.6502353179475869E-2
2.091758148144276E-4
5.6134476070962168E-4
3.0183279513085448E-4
4.92038712113966E-5
6.8449140397149554E-4
2.101669312721156E-6
3.867743585634703E-4
1.25409276888109E-4
0.99999999326720967
5.8728400277538543E-5
2.9357266022483501E-2
1.1366862614258941E-2
5.8719027998064557E-4
6.1514055065558241E-5
2.385025493024211E-4
1.510927895533459E-4
1.2718129531231209E-4
3.3353110601907267E-4
8.8666774248044903E-5
6.3870144663961118E-5

common causal SNPs

0.922110776709684
0.1240866679192995
0.98181826247830162
2.2226951365207762E-2
2.107626251635264E-2
0.1240292122207181
0.85520633160547033
1.269566926391609E-2
7.7294343448220818E-3
0.1132549830182633
9.3932272079553403E-2
6.7327887393408881E-9
3.9519092875006268E-2
0.95920118600099125
4.3028591885365029E-2
0.13507517814229719
4.429889133838498E-2
0.67558497930742845
3.4795833657058982E-2
0.17875305772462341
8.6228868708667139E-2
0.1753531636745711
2.0937787652893822E-2