

Table S1 SNPs used as instrumental variables in the Mendelian randomization analyses

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
Cystatin C	rs1000423	17	T	C	-0.0177	0.0025	51.5738
	rs10009166	4	A	C	0.0166	0.0023	51.4917
	rs10051765	5	C	T	0.0451	0.0023	381.5763
	rs10109414	8	T	C	0.0429	0.0022	378.4938
	rs1011731	1	A	G	0.0170	0.0022	59.9796
	rs10160464	11	G	A	-0.0155	0.0023	44.7978
	rs10180164	2	C	A	0.0481	0.0062	60.6749
	rs10189685	2	A	G	0.0377	0.0024	250.6480
	rs10200647	2	C	T	-0.0166	0.0025	42.9349
	rs10211596	2	A	G	0.0162	0.0022	54.9902
	rs102274	11	C	T	-0.0186	0.0023	66.2110
	rs10265221	7	C	T	0.0499	0.0024	430.9382
	rs10437886	12	T	C	-0.0130	0.0022	34.6690
	rs1047891	2	A	C	-0.0259	0.0023	122.5694
	rs1058056	7	G	A	-0.0171	0.0029	34.2067
	rs10746942	9	A	G	-0.0234	0.0022	108.7425
	rs10821907	10	T	C	-0.0247	0.0029	73.6502
	rs10846156	12	G	T	-0.0298	0.0027	120.1482
	rs10875290	1	T	G	0.0175	0.0022	61.5510
	rs10911678	1	C	T	-0.0153	0.0022	48.1455
	rs10912860	1	G	A	-0.0156	0.0026	35.7871
	rs10933149	2	T	C	0.0134	0.0024	32.3653
	rs10933713	3	G	C	0.0217	0.0024	82.6495
	rs10953356	7	G	A	0.0291	0.0024	147.5264
	rs1099455	20	A	G	-0.0704	0.0041	288.8982
	rs11000980	10	G	A	-0.0178	0.0022	64.8065
	rs11072567	15	G	A	0.0368	0.0022	285.2135
	rs11082431	18	T	C	0.0143	0.0024	36.5493
	rs11115974	12	A	G	0.0160	0.0022	53.1616
	rs111622274	16	T	C	-0.0353	0.0063	31.7987
	rs11172134	12	A	T	-0.0296	0.0027	119.1363
	rs11227279	11	A	G	0.0297	0.0023	168.5944
	rs113367286	7	T	C	-0.0148	0.0024	36.8230
	rs113778901	3	TA	T	-0.0125	0.0022	32.7367
	rs11419126	3	GA	G	-0.0134	0.0022	36.0957

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs115568222	5	C	G	0.0218	0.0039	30.4351
	rs11557049	8	T	C	0.0296	0.0044	46.0566
	rs1158127	9	G	A	0.0242	0.0038	39.8357
	rs11616030	12	C	A	-0.0308	0.0039	62.8758
	rs11629006	14	C	T	0.0211	0.0028	55.8216
	rs11645023	16	A	G	-0.0189	0.0026	54.1376
	rs11651885	17	A	G	0.0294	0.0026	124.1785
	rs11667586	19	C	T	-0.0318	0.0030	110.3480
	rs11678466	2	C	A	-0.0273	0.0031	75.2954
	rs1169300	12	A	G	0.0317	0.0024	174.0014
	rs117081694	10	A	G	-0.0335	0.0060	31.5455
	rs11728135	4	C	T	-0.0216	0.0039	30.3556
	rs11776987	8	G	C	-0.0171	0.0025	44.9630
	rs11795343	9	C	T	-0.0124	0.0022	31.0172
	rs11797157	X	A	G	0.0107	0.0018	33.3244
	rs12023563	1	A	G	-0.0146	0.0024	36.9808
	rs12077442	1	C	G	0.0169	0.0026	40.9639
	rs12108134	3	T	C	0.0145	0.0022	42.5720
	rs12247543	10	C	G	-0.0350	0.0025	202.3584
	rs12367963	12	T	C	0.0248	0.0038	42.3060
	rs12476256	2	C	T	-0.0148	0.0022	44.7721
	rs12536253	7	C	G	-0.0233	0.0025	84.9939
	rs12596890	16	G	A	0.0169	0.0027	38.8386
	rs1260326	2	C	T	0.0217	0.0022	95.3491
	rs12651794	5	C	T	-0.0146	0.0024	36.7495
	rs1265842	10	C	T	-0.0161	0.0022	54.2947
	rs12713261	2	C	T	0.0172	0.0023	56.1848
	rs12736181	1	A	G	0.0178	0.0023	58.0570
	rs12751255	1	C	A	-0.0166	0.0023	53.9729
	rs12883201	14	T	C	-0.0177	0.0026	47.1601
	rs12903271	15	T	C	-0.0164	0.0028	33.5468
	rs13000374	2	G	A	-0.0156	0.0025	40.0140
	rs13044896	20	C	T	-0.0451	0.0041	123.2215
	rs13119468	4	T	C	-0.0153	0.0027	32.4000

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs1317983	6	C	T	0.0372	0.0024	248.5678
	rs13281719	8	T	C	-0.0213	0.0038	31.2826
	rs13329240	15	A	G	0.0194	0.0023	68.6709
	rs13391258	2	T	C	-0.0266	0.0026	105.2891
	rs141110756	13	TA	T	-0.0480	0.0034	195.3919
	rs141262170	16	G	A	-0.0523	0.0056	87.3868
	rs141350020	9	T	C	-0.0369	0.0055	44.1907
	rs145868254	3	T	C	0.0304	0.0051	36.0189
	rs1461941	16	C	G	-0.0125	0.0022	30.9868
	rs147603453	3	GT	G	0.0141	0.0024	34.7943
	rs148480921	13	CA	C	-0.0282	0.0042	45.6286
	rs151245	18	T	G	0.0161	0.0022	52.3932
	rs1554447	6	T	C	-0.0191	0.0031	38.3983
	rs1556894	10	G	A	-0.0136	0.0022	38.1526
	rs1585499	15	T	C	0.0241	0.0022	121.1044
	rs1611719	6	A	G	0.0212	0.0028	59.4995
	rs1681725	10	G	A	0.0120	0.0022	30.2830
	rs16853637	3	A	G	0.0222	0.0033	44.8735
	rs1700820	16	G	A	-0.0133	0.0022	35.9989
	rs17037425	1	A	G	0.0199	0.0031	42.3272
	rs1713806	3	A	C	0.0151	0.0025	36.4206
	rs17184086	6	A	G	-0.0529	0.0074	50.5147
	rs17597926	18	A	G	-0.0483	0.0069	49.0272
	rs17641524	1	T	C	0.0161	0.0027	36.3651
	rs17643734	7	G	A	0.0324	0.0047	47.5074
	rs17693971	2	G	C	0.0250	0.0023	114.6741
	rs1769798	1	G	A	0.0131	0.0022	35.3907
	rs1772973	6	G	A	-0.0175	0.0024	51.1022
	rs17767383	16	A	G	0.0237	0.0023	102.6686
	rs1800961	20	T	C	-0.0379	0.0062	36.8958
	rs1852731	5	G	A	-0.0210	0.0036	34.2850
	rs1885800	1	T	C	-0.0168	0.0028	35.4339
	rs1895460	5	C	A	-0.0131	0.0022	36.1044
	rs1908188	15	A	T	0.0180	0.0024	58.8378

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs198325	1	T	C	-0.0308	0.0026	137.7324
	rs1999032	9	C	T	-0.0137	0.0022	38.5127
	rs2014520	3	A	G	-0.0175	0.0022	61.8401
	rs2049019	2	A	C	-0.0183	0.0024	60.1354
	rs2068888	10	A	G	0.0197	0.0022	80.9811
	rs2138385	2	C	T	0.0216	0.0034	40.6700
	rs2161796	18	C	T	-0.0132	0.0023	34.1888
	rs2165301	4	G	C	-0.0192	0.0022	74.3380
	rs223331	4	A	T	-0.0252	0.0023	117.8510
	rs2237668	7	G	A	-0.0226	0.0026	76.0592
	rs2241358	19	G	C	-0.0157	0.0023	45.9280
	rs224143	10	A	G	-0.0183	0.0022	67.5456
	rs2282718	1	A	G	-0.0127	0.0023	31.2233
	rs2306623	3	C	T	-0.0197	0.0023	72.9098
	rs2306899	8	T	C	-0.0143	0.0025	31.8043
	rs2307111	5	C	T	-0.0153	0.0022	47.2190
	rs2403966	21	T	G	0.0168	0.0024	50.1103
	rs2636321	1	G	A	-0.0153	0.0022	48.5983
	rs2661503	6	A	T	0.0219	0.0023	94.3312
	rs2756176	6	T	C	-0.0143	0.0022	41.2676
	rs2780869	1	T	C	-0.0119	0.0022	29.7421
	rs2823139	21	A	G	0.0221	0.0023	91.4495
	rs2834320	21	G	A	0.0306	0.0030	106.1316
	rs28542318	9	T	A	-0.0205	0.0029	48.9785
	rs28730759	11	T	C	-0.0215	0.0031	47.6813
	rs288762	7	C	T	0.0284	0.0023	156.6992
	rs28929474	14	T	C	0.0671	0.0077	75.4705
	rs28930677	2	T	C	0.0666	0.0051	167.5987
	rs2899297	22	A	G	0.0125	0.0022	31.7423
	rs2910686	5	C	T	-0.0160	0.0022	53.3729
	rs2969473	2	C	G	-0.0160	0.0023	47.2524
	rs3012123	13	G	A	-0.0217	0.0024	85.1812
	rs301806	1	T	C	0.0131	0.0022	35.2242
	rs303937	13	A	T	-0.0270	0.0022	146.6758

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs3111253	1	G	C	-0.0140	0.0024	33.2739
	rs3130266	6	A	G	0.0133	0.0022	37.1394
	rs3184504	12	C	T	-0.0608	0.0022	780.5907
	rs3197999	3	A	G	-0.0194	0.0024	64.9519
	rs333947	1	A	G	0.0319	0.0031	109.3181
	rs340029	15	T	C	0.0140	0.0022	38.7196
	rs34099674	7	CTT	C	0.0186	0.0024	58.3715
	rs34517439	1	A	C	0.0355	0.0033	112.9160
	rs34741710	1	GC	G	-0.0159	0.0025	39.7887
	rs36207014	6	A	G	0.0224	0.0023	96.9664
	rs3729965	20	G	A	-0.0146	0.0026	31.7569
	rs3736905	1	G	A	0.0210	0.0023	85.0429
	rs3740685	11	T	C	0.0168	0.0024	49.2562
	rs376277175	8	AAAG	A	-0.0205	0.0026	61.0398
	rs3769869	2	G	A	0.0196	0.0028	50.6265
	rs3789688	1	C	T	0.0131	0.0022	35.0748
	rs3842761	11	C	G	-0.0275	0.0026	112.2391
	rs3888879	2	T	C	-0.0227	0.0023	97.0947
	rs3925584	11	C	T	-0.0352	0.0022	260.1204
	rs410335	11	C	T	-0.0141	0.0022	40.6000
	rs41276588	1	A	G	0.0184	0.0024	57.5769
	rs4134361	5	C	G	-0.0151	0.0027	31.2433
	rs4149067	12	G	C	-0.0224	0.0028	63.3490
	rs4358800	8	T	C	0.0176	0.0024	55.2813
	rs4442348	1	G	A	0.0154	0.0022	49.4963
	rs4666821	2	T	G	-0.0136	0.0022	39.0259
	rs4820483	22	A	C	0.0137	0.0022	39.0975
	rs4836732	9	T	C	-0.0138	0.0022	39.6287
	rs4859682	4	A	C	0.0667	0.0022	936.0118
	rs4898541	12	A	G	-0.0205	0.0029	49.8588
	rs4946137	6	A	G	0.0159	0.0022	51.0177
	rs4959168	6	T	C	-0.0188	0.0023	69.4716
	rs4966019	15	T	C	-0.0374	0.0023	271.4381
	rs4968248	17	A	G	-0.0123	0.0022	30.1793

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs4970460	1	A	C	-0.0145	0.0026	30.1227
	rs498010	9	T	C	-0.0190	0.0028	44.6135
	rs4981832	14	T	C	0.0145	0.0022	42.6306
	rs5029979	3	A	G	0.0161	0.0022	52.2657
	rs55887858	19	T	G	0.0138	0.0025	31.3166
	rs55938024	5	A	G	0.0337	0.0035	92.2653
	rs561222	9	A	T	-0.0169	0.0023	56.0545
	rs56210800	3	G	C	0.0202	0.0032	39.2880
	rs569502	17	C	T	-0.0168	0.0023	53.4141
	rs5756822	22	T	C	0.0152	0.0022	47.9329
	rs57602436	2	A	G	0.0168	0.0023	52.3954
	rs58542926	19	T	C	0.0250	0.0041	36.8226
	rs5951348	X	A	C	0.0140	0.0020	49.0091
	rs6029394	20	T	G	-0.0138	0.0022	39.6579
	rs60385825	16	C	T	0.0253	0.0024	107.2750
	rs60767324	7	C	T	0.0281	0.0039	52.4615
	rs6083315	20	A	G	-0.0447	0.0024	348.3581
	rs6113840	20	T	G	0.0177	0.0030	36.0626
	rs6123837	20	A	G	-0.0180	0.0023	61.7190
	rs6127099	20	T	A	-0.0334	0.0025	180.9903
	rs61332283	11	T	A	-0.0330	0.0053	38.7120
	rs62033400	16	G	A	0.0206	0.0022	85.4524
	rs62106258	2	C	T	-0.0372	0.0051	53.7004
	rs621634	20	T	G	-0.0147	0.0025	34.4048
	rs62265615	3	T	A	0.0203	0.0032	39.7878
	rs62435145	7	T	G	0.0381	0.0024	246.0091
	rs62618693	11	T	C	-0.0411	0.0052	62.1183
	rs6458867	6	G	A	0.0171	0.0023	56.5883
	rs6532771	4	G	A	0.0149	0.0025	34.9001
	rs6668299	1	T	C	-0.0128	0.0022	34.0309
	rs6744911	2	G	A	-0.0147	0.0025	34.0498
	rs6777400	3	A	G	-0.0178	0.0025	50.9844
	rs6787409	3	C	T	-0.0246	0.0023	110.3614
	rs68033110	18	A	G	0.0202	0.0026	61.8758

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs6807915	3	C	T	0.0127	0.0023	31.2324
	rs6857	19	T	C	-0.0297	0.0029	105.6542
	rs687467	6	G	A	0.0297	0.0026	135.1038
	rs700750	7	A	C	0.0272	0.0023	145.6097
	rs71382367	16	AGAT	A	-0.0185	0.0022	71.1744
	rs7145592	14	T	G	0.0164	0.0024	46.5049
	rs7161833	15	A	C	-0.0189	0.0022	73.8318
	rs7168958	15	C	G	-0.0212	0.0025	70.2090
	rs7207304	17	A	G	-0.0201	0.0024	68.9028
	rs7258309	19	G	T	-0.0187	0.0027	47.9594
	rs72747610	15	G	A	-0.0153	0.0025	36.0452
	rs72821069	2	C	T	0.0196	0.0030	43.4975
	rs728538	16	G	T	0.0254	0.0029	74.7854
	rs72868839	6	T	A	0.0293	0.0043	47.0867
	rs73089698	7	C	G	0.0227	0.0026	75.5369
	rs73102389	20	A	C	0.1226	0.0029	1850.4180
	rs73232580	12	C	T	-0.0172	0.0030	32.4955
	rs73260458	4	T	C	-0.0312	0.0051	37.0642
	rs734801	20	G	A	-0.3668	0.0026	20664.4146
	rs7459014	7	A	C	-0.0178	0.0025	50.8521
	rs7490694	13	G	A	-0.0251	0.0024	107.7529
	rs7502669	17	G	A	-0.0156	0.0022	48.7756
	rs759219	2	T	C	-0.0122	0.0022	30.5135
	rs76433917	12	T	C	-0.0355	0.0062	32.8619
	rs7645663	3	T	C	-0.0125	0.0023	30.2454
	rs7684939	4	A	G	-0.0196	0.0022	80.7447
	rs7763581	6	G	T	-0.0123	0.0022	32.1931
	rs7766720	6	C	T	0.0250	0.0041	37.9604
	rs77871802	13	G	A	-0.0328	0.0060	30.0969
	rs77924615	16	A	G	-0.0604	0.0028	480.2873
	rs78040893	9	T	G	-0.0349	0.0049	51.1949
	rs78128878	1	C	T	0.0245	0.0042	34.1247
	rs78260152	20	T	C	0.0416	0.0040	107.2802
	rs78597273	2	A	G	-0.0135	0.0023	33.4381

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs786913	1	G	A	-0.0185	0.0022	68.6533
	rs78691875	12	A	C	-0.0481	0.0075	40.9455
	rs7919595	10	G	A	-0.0160	0.0027	34.6890
	rs7944897	11	G	A	0.0189	0.0022	75.1445
	rs7952141	11	A	G	-0.0191	0.0022	72.2166
	rs80138475	5	T	C	-0.0282	0.0035	66.6263
	rs8023580	15	C	T	0.0136	0.0024	30.9527
	rs80282103	10	T	A	0.0504	0.0040	162.6814
	rs8058761	16	A	G	0.0134	0.0024	32.0582
	rs807624	2	T	G	-0.0330	0.0023	212.1900
	rs8101667	19	C	T	0.0300	0.0023	170.3079
	rs835223	5	T	C	0.0212	0.0022	91.4889
	rs854917	6	T	C	-0.0183	0.0025	54.3130
	rs855866	1	G	A	-0.0154	0.0028	30.5996
	rs863678	2	T	G	0.0281	0.0023	144.7397
	rs9273453	6	G	C	0.0414	0.0035	139.9948
	rs9297867	8	T	G	-0.0183	0.0030	37.0429
	rs9361669	6	T	G	-0.0169	0.0029	34.1824
	rs9361858	6	G	T	0.0297	0.0022	178.7787
	rs9409710	9	G	A	0.0155	0.0024	43.1437
	rs9444543	6	A	G	-0.0122	0.0022	30.3089
	rs9747093	17	A	G	-0.0128	0.0022	34.0998
	rs9905543	17	C	T	0.0364	0.0026	201.8771
	rs9930127	16	G	A	0.0157	0.0022	51.5577
Creatinine	rs10265221	7	C	T	0.0729	0.0112	42.5748
	rs3119311	6	C	T	0.0908	0.0155	34.2382
	rs61524473	15	C	T	0.0852	0.0106	64.3589
	rs1986734	4	T	C	0.0619	0.0098	39.8300
	rs6127099	20	T	A	-0.0600	0.0108	30.6731
Urinary albumin	rs10207567	2	C	G	0.0145	0.0021	46.3304
	rs1047891	2	A	C	-0.0121	0.0018	45.2858
	rs11162351	1	G	C	-0.0095	0.0017	31.3145
	rs11264327	1	A	G	0.0099	0.0017	33.5272
	rs12032996	1	A	G	-0.0146	0.0023	41.9605

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs12727104	1	A	G	-0.0161	0.0028	32.2265
	rs13394343	2	A	C	-0.0105	0.0017	39.1858
	rs17158386	7	A	G	0.0133	0.0019	48.3059
	rs17368443	11	C	G	0.0207	0.0035	35.4804
	rs1801239	10	C	T	0.0437	0.0027	256.8967
	rs2338796	17	G	A	-0.0099	0.0018	30.9921
	rs2601006	12	T	C	-0.0118	0.0018	44.8505
	rs35483183	2	A	G	0.0149	0.0026	34.1178
	rs3805382	4	G	A	-0.0102	0.0018	30.2963
	rs4109437	4	A	G	0.0465	0.0044	114.1857
	rs45437393	10	T	C	0.0407	0.0065	39.3661
	rs6535594	4	A	G	0.0115	0.0017	46.9972
	rs67339103	10	A	G	0.0152	0.0020	55.2301
	rs6750228	2	A	T	0.0223	0.0040	31.4321
	rs6768627	3	T	C	0.0185	0.0033	31.4415
	rs702634	5	A	G	0.0104	0.0018	33.2690
	rs7654754	4	A	G	-0.0102	0.0017	37.3346
	rs7731168	5	C	G	0.0125	0.0020	40.2897
	rs784257	18	C	T	-0.0122	0.0021	32.2293
	rs8035855	15	A	G	0.0123	0.0017	49.5755
	rs838142	19	G	A	-0.0117	0.0019	39.5957
GFR	rs1044261	10	T	C	-0.0110	0.0016	47.2656
	rs10774021	12	T	C	-0.0063	0.0009	46.8927
	rs10994856	10	A	G	0.0075	0.0011	46.4876
	rs11655511	17	T	C	-0.0083	0.0011	56.9339
	rs11657044	17	C	T	0.0110	0.0012	84.0278
	rs12209517	6	G	C	-0.0100	0.0013	59.1716
	rs12460876	19	C	T	0.0066	0.0009	51.4650
	rs1260326	2	C	T	-0.0068	0.0009	54.6314
	rs13329952	16	C	T	0.0160	0.0011	211.5702
	rs1394125	15	A	G	-0.0073	0.0010	53.2900
	rs1405809	7	A	G	0.0064	0.0010	40.9600
	rs163160	11	G	A	-0.0067	0.0011	37.0992
	rs17216707	20	C	T	0.0084	0.0011	58.3140

Table S1 (continued)

Table S1 (continued)

Renal function indexes	SNP	Chr	EA	NEA	Beta	SE	F
	rs17319721	4	A	G	-0.0110	0.0009	142.9584
	rs1800615	1	T	C	-0.0058	0.0009	39.7448
	rs228611	4	A	G	-0.0055	0.0009	35.7396
	rs2467853	15	G	T	-0.0130	0.0009	199.6692
	rs267734	1	C	T	0.0079	0.0011	51.5785
	rs2861422	3	T	C	0.0074	0.0010	54.7600
	rs316009	6	C	T	-0.0130	0.0014	86.2245
	rs3758086	8	A	G	-0.0071	0.0009	59.5581
	rs3820716	2	A	G	-0.0052	0.0009	31.9471
	rs3850625	1	A	G	0.0080	0.0014	32.6531
	rs4014195	11	G	C	-0.0061	0.0009	43.9627
	rs4744712	9	C	A	0.0071	0.0009	59.5581
	rs491567	15	C	A	0.0084	0.0010	70.5600
	rs6420094	5	G	A	-0.0096	0.0010	92.1600
	rs6503507	17	T	C	0.0076	0.0010	57.7600
	rs6546838	2	G	A	0.0093	0.0010	86.4900
	rs6795744	3	A	G	0.0071	0.0012	35.0069
	rs7735249	5	G	C	0.0110	0.0018	37.3457
	rs7805747	7	A	G	-0.0130	0.0011	139.6694
	rs7956634	12	C	T	0.0068	0.0011	38.2149
	rs807601	2	T	G	0.0064	0.0009	48.3932
	rs848490	7	C	G	0.0073	0.0010	53.2900
	rs894680	17	A	G	-0.0065	0.0009	49.9173
	rs913423	10	A	G	-0.0052	0.0009	31.9471
	rs9472135	6	C	T	0.0080	0.0010	64.0000
	rs963837	11	C	T	0.0078	0.0009	71.8809

SNP, single-nucleotide polymorphism; Chr, chromosome; EA, effect allele; NEA, non-effect allele; SE, standard error.

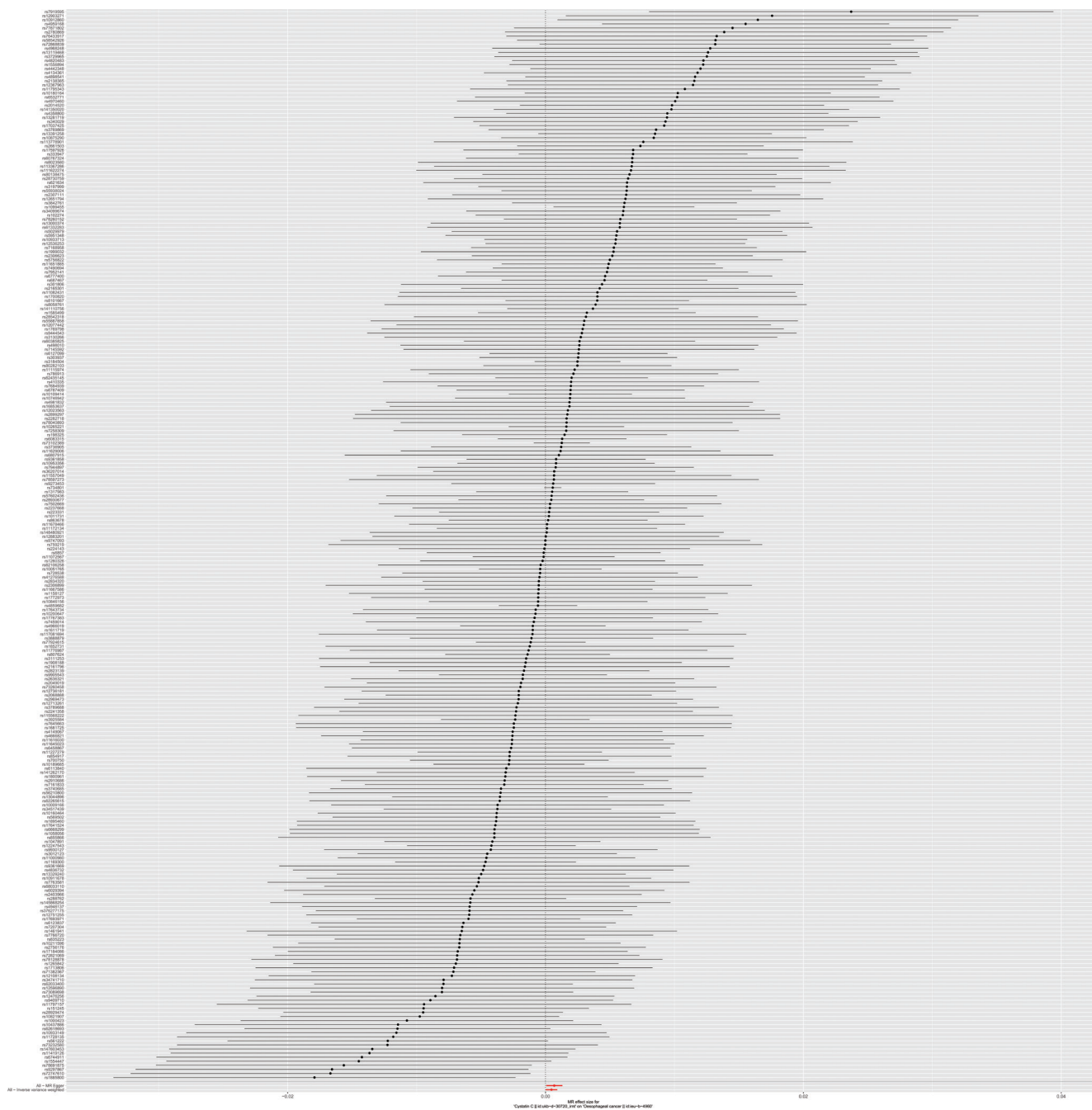


Figure S1 Forest plot of the association of cystatin C and EC. EC, esophageal cancer.



Figure S2 Leave-one-out sensitivity analysis of cystatin C and EC. EC, esophageal cancer.