

Supplementary Table 1 Characteristics of instrumental variables for T1D

	SNP	EA	OA	Samplesize	SE	β	id.exposure	EAF	p value	R ²	F - statistic
1	rs7541882	C	A	282,809	0.0281211	0.145919	finngen_R8_T1D_STRICT1	0.312697	2.11E-07	0.009152203	2612.214561
2	rs78982012	C	A	282,809	0.14521	-0.670892	finngen_R8_T1D_STRICT1	0.0120698	3.83E-06	0.010733999	3068.588328
3	rs11720415	C	T	282,809	0.0333479	-0.161993	finngen_R8_T1D_STRICT1	0.21483	1.19E-06	0.008852809	2525.998678
4	rs113738000	C	T	282,809	0.031286	0.144758	finngen_R8_T1D_STRICT1	0.215906	3.71E-06	0.007094928	2020.832937
5	rs187074666	C	A	282,809	0.0485474	-0.24223	finngen_R8_T1D_STRICT1	0.0950529	6.05E-07	0.010094258	2883.837134
6	rs244724	C	T	282,809	0.047141	-0.218994	finngen_R8_T1D_STRICT1	0.100842	3.39E-06	0.008697048	2481.165003
7	rs79459944	C	T	282,809	0.106811	-0.545778	finngen_R8_T1D_STRICT1	0.0215421	3.23E-07	0.012557183	3596.4202
8	rs146502328	A	G	282,809	0.0634101	0.591597	finngen_R8_T1D_STRICT1	0.0292366	1.06E-20	0.019866538	5732.276359
9	rs140561556	A	C	282,809	0.199578	1.19611	finngen_R8_T1D_STRICT1	0.00181858	2.06E-09	0.005194146	1476.610502
10	rs146852891	T	G	282,809	0.0903046	-0.745272	finngen_R8_T1D_STRICT1	0.0340325	1.55E-16	0.036518756	10719.21209
11	rs9270523	G	T	282,809	0.0283344	0.98982	finngen_R8_T1D_STRICT1	0.664683	1.00E-200	0.43672956	219273.3155
12	rs117557295	C	A	282,809	0.117338	-1.05621	finngen_R8_T1D_STRICT1	0.0230121	2.23E-19	0.050162132	14935.39311
13	rs199618686	G	A	282,809	0.121516	-1.18908	finngen_R8_T1D_STRICT1	0.0235513	1.30E-22	0.065030405	19670.21595
14	rs117492872	T	C	282,809	0.089618	-0.448114	finngen_R8_T1D_STRICT1	0.0284837	5.73E-07	0.011113568	3178.317299
15	rs34025101	G	A	282,809	0.12652	0.599033	finngen_R8_T1D_STRICT1	0.00768664	2.19E-06	0.005474152	1556.649911
16	rs79188075	C	T	282,809	0.0334908	-0.166811	finngen_R8_T1D_STRICT1	0.203638	6.33E-07	0.009025031	2575.586792
17	rs34486681	A	G	282,809	0.0354547	-0.17035	finngen_R8_T1D_STRICT1	0.183372	1.55E-06	0.008691036	2479.434738
18	rs75106480	A	G	282,809	0.0403527	0.194488	finngen_R8_T1D_STRICT1	0.110801	1.44E-06	0.007453466	2123.721382
19	rs12679857	G	A	282,809	0.0278732	-0.167041	finngen_R8_T1D_STRICT1	0.363879	2.06E-09	0.012917334	3700.91843
20	rs7823699	G	A	282,809	0.0277984	-0.138636	finngen_R8_T1D_STRICT1	0.667286	6.13E-07	0.008534245	2434.319398
21	rs116965083	T	C	282,809	0.0746614	-0.385127	finngen_R8_T1D_STRICT1	0.0417024	2.49E-07	0.011854941	3392.882583
22	rs58820784	T	C	282,809	0.0491075	-0.252659	finngen_R8_T1D_STRICT1	0.0887656	2.68E-07	0.010327004	2951.02423
23	rs2018705	G	T	282,809	0.0323633	-0.186627	finngen_R8_T1D_STRICT1	0.230959	8.09E-09	0.012372667	3542.912154
24	rs7130222	G	T	282,809	0.0310595	-0.179019	finngen_R8_T1D_STRICT1	0.26203	8.23E-09	0.012394185	3549.151105
25	rs689	T	A	282,809	0.0360737	0.643875	finngen_R8_T1D_STRICT1	0.789634	2.95E-71	0.137731891	45173.35446
26	rs12418812	T	G	282,809	0.0303605	-0.147926	finngen_R8_T1D_STRICT1	0.269528	1.10E-06	0.008616413	2457.960592
27	rs10791572	C	G	282,809	0.0319241	0.150219	finngen_R8_T1D_STRICT1	0.761144	2.53E-06	0.008205078	2339.650499
28	rs118143421	T	G	282,809	0.0452675	0.21482	finngen_R8_T1D_STRICT1	0.0860799	2.08E-06	0.007260882	2068.447121
29	rs9512617	T	A	282,809	0.034844	-0.159854	finngen_R8_T1D_STRICT1	0.191835	4.48E-06	0.007923278	2258.65444
30	rs11846357	G	A	282,809	0.124193	-0.600343	finngen_R8_T1D_STRICT1	0.0167967	1.34E-06	0.01190409	3407.118542
31	rs56994090	C	T	282,809	0.0265483	-0.177446	finngen_R8_T1D_STRICT1	0.494549	2.33E-11	0.01574167	4523.054988
32	rs74550848	C	G	282,809	0.0654738	-0.317286	finngen_R8_T1D_STRICT1	0.0508032	1.26E-06	0.009709104	2772.723206
33	rs12148472	C	T	282,809	0.0395748	-0.216958	finngen_R8_T1D_STRICT1	0.145436	4.20E-08	0.011700323	3348.107158
34	rs12928537	A	G	282,809	0.0293578	-0.16057	finngen_R8_T1D_STRICT1	0.302464	4.51E-08	0.010879254	3110.569951
35	rs151234	C	G	282,809	0.0382791	0.186231	finngen_R8_T1D_STRICT1	0.123648	1.14E-06	0.007516222	2141.7381
36	rs55993634	G	C	282,809	0.0437082	0.258417	finngen_R8_T1D_STRICT1	0.0886611	3.37E-09	0.010791584	3085.229903
37	rs61759532	T	C	282,809	0.0328327	0.156148	finngen_R8_T1D_STRICT1	0.189922	1.98E-06	0.007502482	2137.793174
38	rs78331666	T	C	282,809	0.0458272	0.209903	finngen_R8_T1D_STRICT1	0.0817813	4.64E-06	0.006617096	1883.826506
39	rs876498	A	G	282,809	0.0275611	0.17432	finngen_R8_T1D_STRICT1	0.343741	2.53E-10	0.013709797	3931.121569
40	rs74203920	T	C	282,809	0.0634671	0.377671	finngen_R8_T1D_STRICT1	0.0366716	2.67E-09	0.010077702	2879.058853
41	rs2074706	C	G	282,809	0.0274726	0.181612	finngen_R8_T1D_STRICT1	0.336424	3.83E-11	0.014726404	4226.978402
43	rs572439727	T	G	282,809	0.0352656	-0.162612	finngen_R8_T1D_STRICT1	0.202855	4.01E-06	0.008551814	2439.373792

SNP, single nucleotide polymorphism; EA, effect allele; OA, other allele; EAF, effect allele frequency; SE, standard error; T1D, type 1 diabetes.

Supplementary Table 2 Information of identified SNPs in exposure (T1D) and outcomes (IBD)

	SNP	EA	OA	Exposure (T1D)			Outcome (IBD)				
				β	SE	<i>p</i> value	Case	Control	β	SE	<i>p</i> value
1	rs10791572	C	G	0.150219	0.0319241	2.53E-06	7,625	369,652	-0.0151513	0.0194052	0.434929
2	rs113738000	C	T	0.144758	0.031286	3.71E-06	7,625	369,652	-0.0229625	0.0200016	0.250955
3	rs116965083	T	C	-0.385127	0.0746614	2.49E-07	7,625	369,652	-0.0504753	0.0412151	0.220695
4	rs11720415	C	T	-0.161993	0.0333479	1.19E-06	7,625	369,652	0.018631	0.0200726	0.353315
5	rs117492872	T	C	-0.448114	0.089618	5.73E-07	7,625	369,652	-0.0526543	0.0498157	0.29052
6	rs117557295	C	A	-1.05621	0.117338	2.23E-19	7,625	369,652	0.0980732	0.0552625	0.0759504
7	rs118143421	T	G	0.21482	0.0452675	2.08E-06	7,625	369,652	-0.0546421	0.0295586	0.0645149
8	rs11846357	G	A	-0.600343	0.124193	1.34E-06	7,625	369,652	0.045377	0.0644723	0.481544
9	rs12148472	C	T	-0.216958	0.0395748	4.20E-08	7,625	369,652	-0.0227421	0.0234066	0.331243
10	rs12418812	T	G	-0.147926	0.0303605	1.10E-06	7,625	369,652	-0.0298289	0.0185058	0.106991
11	rs12679857	G	A	-0.167041	0.0278732	2.06E-09	7,625	369,652	0.0223782	0.0170771	0.190051
12	rs140561556	A	C	1.19611	0.199578	2.06E-09	7,625	369,652	-0.156295	0.198742	0.431621
13	rs146502328	A	G	0.591597	0.0634101	1.06E-20	7,625	369,652	0.0037746	0.0483721	0.937802
14	rs146852891	T	G	-0.745272	0.0903046	1.55E-16	7,625	369,652	0.0615251	0.0455273	0.17657
15	rs151234	C	G	0.186231	0.0382791	1.14E-06	7,625	369,652	0.0268029	0.0250153	0.283963
16	rs187074666	C	A	-0.24223	0.0485474	6.05E-07	7,625	369,652	-0.0120488	0.0287047	0.674666
17	rs199618686	G	A	-1.18908	0.121516	1.30E-22	7,625	369,652	0.129729	0.0544865	0.0172683
18	rs2018705	G	T	-0.186627	0.0323633	8.09E-09	7,625	369,652	-0.00868155	0.0195328	0.656709
19	rs244724	C	T	-0.218994	0.047141	3.39E-06	7,625	369,652	0.0155303	0.0275526	0.572986
20	rs34025101	G	A	0.599033	0.12652	2.19E-06	7,625	369,652	0.00715826	0.095675	0.940359
21	rs34486681	A	G	-0.17035	0.0354547	1.55E-06	7,625	369,652	0.0133298	0.0212574	0.530616
22	rs55993634	G	C	0.258417	0.0437082	3.37E-09	7,625	369,652	-0.0010154	0.0291246	0.972188
23	rs56994090	C	T	-0.177446	0.0265483	2.33E-11	7,625	369,652	-0.00494067	0.0165263	0.764971
24	rs572439727	T	G	-0.162612	0.0352656	4.01E-06	7,625	369,652	0.0146976	0.0211766	0.487653
25	rs58820784	T	C	-0.252659	0.0491075	2.67E-07	7,625	369,652	0.0655615	0.0289063	0.0233249
26	rs61759532	T	C	0.156148	0.0328327	1.98E-06	7,625	369,652	0.0073787	0.0209686	0.724918
27	rs689	T	A	0.643875	0.0360737	2.95E-71	7,625	369,652	-0.00528388	0.0203211	0.794849
28	rs7130222	G	T	-0.179019	0.0310595	8.23E-09	7,625	369,652	0.0109047	0.0186857	0.559501
29	rs74203920	T	C	0.377671	0.0634671	2.67E-09	7,625	369,652	-0.0251352	0.0439928	0.567763
30	rs74550848	C	G	-0.317286	0.0654738	1.26E-06	7,625	369,652	-0.00764099	0.0375145	0.838603
31	rs75106480	A	G	0.194488	0.0403527	1.44E-06	7,625	369,652	-0.0136285	0.0261911	0.60282
32	rs7541882	C	A	0.145919	0.0281211	2.11E-07	7,625	369,652	-0.0233254	0.0177738	0.189403
33	rs7823699	G	A	-0.138636	0.0277984	6.13E-07	7,625	369,652	0.00164457	0.0174557	0.924939
34	rs78331666	T	C	0.209903	0.0458272	4.64E-06	7,625	369,652	-0.0432958	0.0298715	0.147225
35	rs78982012	C	A	-0.670892	0.14521	3.83E-06	7,625	369,652	-0.0246941	0.076623	0.74724
36	rs79459944	C	T	-0.545778	0.106811	3.23E-07	7,625	369,652	-0.0396601	0.0570893	0.487241
37	rs876498	A	G	0.17432	0.0275611	2.53E-10	7,625	369,652	-0.0113876	0.0173414	0.511392
38	rs9270523	G	T	0.98982	0.0283344	2.31E-267	7,625	369,652	-0.0445504	0.0173372	0.0101805
39	rs9512617	T	A	-0.159854	0.034844	4.48E-06	7,625	369,652	0.0201967	0.0210116	0.336444

SNP, single nucleotide polymorphism; EA, effect allele; OA, other allele; SE, standard error; T1D, type 1 diabetes; IBD, inflammatory bowel disease.

Supplementary Table 3 Information of identified SNPs in exposure (T1D) and outcomes (UC)

	SNP	EA	OA	Exposure (T1D)			Outcome (UC)				
				β	SE	<i>p</i> value	Case	Control	β	SE	<i>p</i> value
1	rs10791572	C	G	0.150219	0.0319241	2.53E-06	4,527	359,927	-0.0402459	0.0250447	0.108062
2	rs113738000	C	T	0.144758	0.031286	3.71E-06	4,527	359,927	-0.0208506	0.0258449	0.419804
3	rs116965083	T	C	-0.385127	0.0746614	2.49E-07	4,527	359,927	-0.0863188	0.0529986	0.103377
4	rs11720415	C	T	-0.161993	0.0333479	1.19E-06	4,527	359,927	0.03036	0.0259512	0.242046
5	rs117492872	T	C	-0.448114	0.089618	5.73E-07	4,527	359,927	-0.0393912	0.0642542	0.539842
6	rs117557295	C	A	-1.05621	0.117338	2.23E-19	4,527	359,927	0.0961116	0.0711521	0.176763
7	rs118143421	T	G	0.21482	0.0452675	2.08E-06	4,527	359,927	-0.0416976	0.0380895	0.273637
8	rs11846357	G	A	-0.600343	0.124193	1.34E-06	4,527	359,927	-0.0324458	0.0835632	0.69781
9	rs12148472	C	T	-0.216958	0.0395748	4.20E-08	4,527	359,927	0.00647328	0.0301797	0.830164
10	rs12418812	T	G	-0.147926	0.0303605	1.10E-06	4,527	359,927	-0.0151705	0.023917	0.525888
11	rs12679857	G	A	-0.167041	0.0278732	2.06E-09	4,527	359,927	0.00724843	0.0220448	0.742303
12	rs12928537	A	G	-0.16057	0.0293578	4.52E-08	4,527	359,927	-0.0635169	0.0232392	0.00627263
13	rs140561556	A	C	1.19611	0.199578	2.06E-09	4,527	359,927	-0.207594	0.25979	0.424242
14	rs146502328	A	G	0.591597	0.0634101	1.06E-20	4,527	359,927	-0.0375258	0.0625465	0.548528
15	rs146852891	T	G	-0.745272	0.0903046	1.55E-16	4,527	359,927	-0.0206646	0.0588599	0.725528
16	rs151234	C	G	0.186231	0.0382791	1.14E-06	4,527	359,927	0.0402425	0.0323162	0.213031
17	rs187074666	C	A	-0.24223	0.0485474	6.05E-07	4,527	359,927	-0.00389276	0.0369883	0.916183
18	rs199618686	G	A	-1.18908	0.121516	1.30E-22	4,527	359,927	0.193893	0.0658517	0.00323594
19	rs2018705	G	T	-0.186627	0.0323633	8.09E-09	4,527	359,927	-0.0330226	0.0252131	0.190284
20	rs2074706	C	G	0.181612	0.0274726	3.83E-11	4,527	359,927	-0.0622133	0.0225253	0.00574619
21	rs244724	C	T	-0.218994	0.047141	3.39E-06	4,527	359,927	0.0421185	0.0356205	0.237037
22	rs34025101	G	A	0.599033	0.12652	2.19E-06	4,527	359,927	-0.0517715	0.123792	0.675792
23	rs34486681	A	G	-0.17035	0.0354547	1.55E-06	4,527	359,927	0.0120724	0.0274071	0.659585
24	rs55993634	G	C	0.258417	0.0437082	3.37E-09	4,527	359,927	0.0816521	0.0375163	0.0295223
25	rs56994090	C	T	-0.177446	0.0265483	2.33E-11	4,527	359,927	0.00469785	0.0213385	0.825748
26	rs572439727	T	G	-0.162612	0.0352656	4.01E-06	4,527	359,927	0.0304085	0.0273472	0.266163
27	rs58820784	T	C	-0.252659	0.0491075	2.67E-07	4,527	359,927	0.031042	0.0373052	0.405348
28	rs61759532	T	C	0.156148	0.0328327	1.98E-06	4,527	359,927	0.0013514	0.0270799	0.960199
29	rs689	T	A	0.643875	0.0360737	2.95E-71	4,527	359,927	-0.0129639	0.0262697	0.621663
30	rs7130222	G	T	-0.179019	0.0310595	8.23E-09	4,527	359,927	0.00223264	0.0241224	0.926257
31	rs74203920	T	C	0.377671	0.0634671	2.67E-09	4,527	359,927	-0.0130394	0.0569061	0.818761
32	rs74550848	C	G	-0.317286	0.0654738	1.26E-06	4,527	359,927	-0.0392188	0.0482083	0.415915
33	rs75106480	A	G	0.194488	0.0403527	1.44E-06	4,527	359,927	-0.0172342	0.0338965	0.611146
34	rs7541882	C	A	0.145919	0.0281211	2.11E-07	4,527	359,927	-0.0171907	0.0229874	0.454562
35	rs7823699	G	A	-0.138636	0.0277984	6.13E-07	4,527	359,927	0.0348413	0.0225026	0.121544
36	rs78331666	T	C	0.209903	0.0458272	4.64E-06	4,527	359,927	-0.0312896	0.038519	0.416609
37	rs78982012	C	A	-0.670892	0.14521	3.83E-06	4,527	359,927	-0.0104407	0.0986751	0.915734
38	rs79188075	C	T	-0.166811	0.0334908	6.33E-07	4,527	359,927	-0.0605173	0.0263555	0.0216651
39	rs79459944	C	T	-0.545778	0.106811	3.23E-07	4,527	359,927	-0.0112127	0.0729163	0.877787
40	rs876498	A	G	0.17432	0.0275611	2.53E-10	4,527	359,927	-0.00978998	0.0223671	0.661608
41	rs9270523	G	T	0.98982	0.0283344	2.31E-267	4,527	359,927	-0.0536717	0.0225057	0.0170883
42	rs9512617	T	A	-0.159854	0.034844	4.48E-06	4,527	359,927	-0.0258014	0.027124	0.341482

SNP, single nucleotide polymorphism; EA, effect allele; OA, other allele; SE, standard error; T1D, type 1 diabetes; UC, ulcerative colitis.

Supplementary Table 4 Information of identified SNPs in exposure (T1D) and outcomes (CD)

	SNP	EA	OA	Exposure (T1D)			Outcome (CD)				
				β	SE	<i>p</i> value	Case	Control	β	SE	<i>p</i> value
1	rs10791572	C	G	0.150219	0.0319241	2.53E-06	2,007	359,927	0.0753901	0.0375342	0.0445831
2	rs113738000	C	T	0.144758	0.031286	3.71E-06	2,007	359,927	0.0164511	0.038643	0.670314
3	rs116965083	T	C	-0.385127	0.0746614	2.49E-07	2,007	359,927	0.0597463	0.0791695	0.45045
4	rs11720415	C	T	-0.161993	0.0333479	1.19E-06	2,007	359,927	0.0223368	0.0388557	0.565383
5	rs117492872	T	C	-0.448114	0.089618	5.73E-07	2,007	359,927	0.080157	0.0959258	0.403372
6	rs117557295	C	A	-1.05621	0.117338	2.23E-19	2,007	359,927	0.140229	0.106168	0.18656
7	rs118143421	T	G	0.21482	0.0452675	2.08E-06	2,007	359,927	-0.0385001	0.0570114	0.499482
8	rs11846357	G	A	-0.600343	0.124193	1.34E-06	2,007	359,927	0.0704123	0.124601	0.572003
9	rs12148472	C	T	-0.216958	0.0395748	4.20E-08	2,007	359,927	0.0158986	0.0450901	0.724391
10	rs12418812	T	G	-0.147926	0.0303605	1.10E-06	2,007	359,927	0.00348742	0.0357747	0.922343
11	rs12679857	G	A	-0.167041	0.0278732	2.06E-09	2,007	359,927	-0.0080047	0.0330189	0.808448
12	rs12928537	A	G	-0.16057	0.0293578	4.52E-08	2,007	359,927	0.0125777	0.0346261	0.716422
13	rs140561556	A	C	1.19611	0.199578	2.06E-09	2,007	359,927	0.261242	0.375301	0.486375
14	rs146502328	A	G	0.591597	0.0634101	1.06E-20	2,007	359,927	0.170237	0.0935729	0.0688652
15	rs146852891	T	G	-0.745272	0.0903046	1.55E-16	2,007	359,927	0.0241585	0.087933	0.783518
16	rs151234	C	G	0.186231	0.0382791	1.14E-06	2,007	359,927	-0.0469921	0.0484479	0.33207
17	rs187074666	C	A	-0.24223	0.0485474	6.05E-07	2,007	359,927	-0.0251494	0.055347	0.649545
18	rs199618686	G	A	-1.18908	0.121516	1.30E-22	2,007	359,927	-0.0685702	0.10539	0.515284
19	rs2018705	G	T	-0.186627	0.0323633	8.09E-09	2,007	359,927	-0.0464656	0.0377147	0.217938
20	rs244724	C	T	-0.218994	0.047141	3.39E-06	2,007	359,927	0.0360445	0.0532377	0.498376
21	rs34025101	G	A	0.599033	0.12652	2.19E-06	2,007	359,927	0.000802047	0.183922	0.996521
22	rs34486681	A	G	-0.17035	0.0354547	1.55E-06	2,007	359,927	0.0233989	0.0409971	0.568172
23	rs55993634	G	C	0.258417	0.0437082	3.37E-09	2,007	359,927	-0.0622224	0.0563023	0.269095
24	rs56994090	C	T	-0.177446	0.0265483	2.33E-11	2,007	359,927	-0.0158022	0.0319043	0.620389
25	rs572439727	T	G	-0.162612	0.0352656	4.01E-06	2,007	359,927	-0.027397	0.0409233	0.503196
26	rs58820784	T	C	-0.252659	0.0491075	2.67E-07	2,007	359,927	0.0442704	0.0558749	0.428179
27	rs61759532	T	C	0.156148	0.0328327	1.98E-06	2,007	359,927	0.0553082	0.0404514	0.171539
28	rs689	T	A	0.643875	0.0360737	2.95E-71	2,007	359,927	-0.0594689	0.0392272	0.129516
29	rs7130222	G	T	-0.179019	0.0310595	8.23E-09	2,007	359,927	0.0559285	0.0360873	0.121187
30	rs74203920	T	C	0.377671	0.0634671	2.67E-09	2,007	359,927	0.0193198	0.0852646	0.820745
31	rs74550848	C	G	-0.317286	0.0654738	1.26E-06	2,007	359,927	-0.107468	0.0722454	0.136873
32	rs75106480	A	G	0.194488	0.0403527	1.44E-06	2,007	359,927	-0.0707178	0.0507	0.163068
33	rs7541882	C	A	0.145919	0.0281211	2.11E-07	2,007	359,927	-0.0613239	0.0343933	0.074583
34	rs7823699	G	A	-0.138636	0.0277984	6.13E-07	2,007	359,927	0.00271057	0.0337352	0.93596
35	rs78331666	T	C	0.209903	0.0458272	4.64E-06	2,007	359,927	-0.0352614	0.0578191	0.541956
36	rs78982012	C	A	-0.670892	0.14521	3.83E-06	2,007	359,927	0.23689	0.146847	0.106708
37	rs79188075	C	T	-0.166811	0.0334908	6.33E-07	2,007	359,927	-0.0453391	0.0394747	0.250737
38	rs79459944	C	T	-0.545778	0.106811	3.23E-07	2,007	359,927	-0.19314	0.108921	0.0761921
39	rs876498	A	G	0.17432	0.0275611	2.53E-10	2,007	359,927	-0.022311	0.0334241	0.504445
40	rs9512617	T	A	-0.159854	0.034844	4.48E-06	2,007	359,927	0.0543688	0.0405571	0.180067

SNP, single nucleotide polymorphism; EA, effect allele; OA, other allele; SE, standard error; T1D, type 1 diabetes; CD, Crohn's disease.

Supplementary Table 5 The results of MR-Egger intercept analysis

Exposure	Outcome	Egger_intercept	SE	<i>p</i> value
T1D	IBD	0.001088797	0.006015166	0.857348752
T1D	UC	0.007500692	0.008633789	0.390161303
T1D	CD	0.001017318	0.013630012	0.940894218

T1D, type 1 diabetes; IBD, inflammatory bowel disease; UC, ulcerative colitis; CD, Crohn's disease.

Supplementary Table 6 The results of heterogeneity analysis

Exposure	Outcome	Method	Q	Q_df	Q_p val
T1D	IBD	MR Egger	33.43832719	37	0.636788423
T1D	IBD	Inverse variance weighted	33.47109129	38	0.678803215
T1D	UC	MR Egger	55.66749026	40	0.050848298
T1D	UC	Inverse variance weighted	56.71785803	41	0.052094389
T1D	CD	MR Egger	41.04931565	38	0.338372294
T1D	CD	Inverse variance weighted	41.05533353	39	0.380561875

T1D, type 1 diabetes; IBD, inflammatory bowel disease; UC, ulcerative colitis; CD, Crohn's disease.