Assessment of a causal relationship between body mass index and atopic dermatitis

Ashley Budu-Aggrey PhD[1,2]*, Sarah H Watkins PhD[1,2]*, Ben Brumpton PhD[1,3,4]*, Mari Løset MD PhD[3,5], Jess Tyrrell PhD[6], Ellen H Modalsli MD PhD[5,7,8], Gunnhild Åberge Vie PhD[8], Tom Palmer PhD[1,2], Lars G Fritsche PhD[3], Jonas Bille Nielsen MD PhD[9,10], Pål Richard Romundstad PhD[8], George Davey Smith MD DSc[1,2], Bjørn Olav Åsvold MD PhD[3,11]**, Lavinia Paternoster PhD[1,2]**, Sara J Brown FRCPE.[12,13]**

[1]Medical Research Council (MRC) Integrative Epidemiology Unit, University of Bristol, Bristol, UK

[2]Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, UK

[3]K.G. Jebsen Center for Genetic Epidemiology, Department of Public Health and Nursing, NTNU, Norwegian University of Science and Technology, Trondheim, Norway

[4]Department of Thoracic and Occupational Medicine, St. Olavs hospital, Trondheim University Hospital, Trondheim, Norway

[5]Department of Dermatology, St. Olavs hospital, Trondheim University Hospital, Trondheim, Norway

[6]Genetics of Complex Traits, Institute of Biomedical and Clinical Science, University of Exeter Medical School, Royal Devon and Exeter Hospital, Exeter, UK

[7]Department of Clinical and Molecular Medicine, NTNU, Norwegian University of Science and Technology, Trondheim, Norway

[8]Department of Public Health and Nursing, NTNU, Norwegian University of Science and Technology, Trondheim, Norway

[9]Center for Statistical Genetics, Department of Biostatistics, University of Michigan School of Public Health, Ann Arbor, Michigan, USA

[10]K.G. Jebsen Center for Genetic Epidemiology, Department of Public Health and Nursing, NTNU, Norwegian University of Science and Technology, Trondheim, Norway

[11]Department of Endocrinology, St. Olavs hospital, Trondheim University Hospital, Trondheim, Norway

[12]Skin Research Group, School of Medicine, University of Dundee, Dundee, UK

[13]Department of Dermatology, Ninewells Hospital and Medical School, Dundee, UK

*These authors contributed equally to this work.

**Joint last authors.

Funding

AB-A is funded by a grant awarded to LP by the British Skin Foundation (8010 Innovative Project). AB-A, LP, SW & GDS work in a research unit funded by the UK Medical Research Council (MC_UU_00011/1). BB, ML, LGF & BOA work in a research unit funded by Stiftelsen Kristian Gerhard Jebsen; Faculty of Medicine and Health Sciences, NTNU; The Liaison Committee for education, research and innovation in Central Norway; and the Joint Research Committee between St. Olavs hospital and the Faculty of Medicine and Health Sciences, NTNU. JT is supported by an Academy of Medical Sciences (AMS) Springboard award, which is supported by the AMS, the Wellcome Trust, GCRF, the Government Department of Business, Energy and Industrial strategy, the British Heart Foundation and Diabetes UK. EHM was supported by a research grant from the Liaison Committee for education, research and innovation in Central Norway. GAV is supported by a research grant from the Norwegian Research Council, grant number 250335. ML is supported by research grants from the Liaison Committee for education, research and innovation in Central Norway. JBN was supported by grants from the Danish Heart Foundation and the Lundbeck Foundation. LP is supported by an Academy of Medical Sciences Springboard Award, which is supported by the Wellcome Trust, The Government Department for Business, Energy and Industrial Strategy, the Global Challenges Research Fund and the British Heart Foundation [SBF003\1094]. SJB holds a Wellcome Trust Senior Research Fellowship in Clinical Science (106865/Z/15/Z) and a British Skin Foundation large project grant. The genotyping in HUNT was financed by the National Institutes of Health (NIH); University of Michigan; The Research Council of Norway; The Liaison Committee for education, research and innovation in Central Norway; and the Joint Research Committee between St. Olavs hospital and the Faculty of Medicine and Health Sciences, NTNU. The funders had no influence on study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Association of BMI genetic instruments with BMI in UK Biobank and HUNT. BMI variants reported by Locke *et al.* (2015)

				BMI[a] (UK Biobank)		BMI[a] (HUNT)		BMI[b] (Locke 2015)	
SNP	**CHR**	**Position (bp)**	**Effect allele**	**Beta (95% CI)**	***P* value**	**Beta (95% CI)**	***P* value**	**Beta (95% CI)**	***P* value**
rs977747	1	47684677	T	0.08 (0.06,0.10)	1.24E-13	0.03 (-0.06,0.12)	0.53	0.02 (0.01,0.02)	8.65E-08
rs657452	1	49589847	A	0.08 (0.06,0.10)	5.38E-12	0.09 (0.00,0.19)	0.05	0.02 (0.02,0.03)	5.48E-13
rs11583200	1	50559820	C	0.07 (0.05,0.09)	1.48E-09	0.08 (-0.01,0.18)	0.08	0.02 (0.01,0.02)	1.48E-08
rs3101336**	1	72751185	C	0.11 (0.08,0.13)	1.68E-21	0.18 (0.09,0.27)	8.96E-05	0.03 (0.03,0.04)	2.66E-26
rs12566985**	1	75002193	G	0.08 (0.06,0.11)	1.36E-14	0.09 (0.00,0.18)	0.05	0.02 (0.02,0.03)	3.28E-15
rs12401738	1	78446761	A	0.08 (0.06,0.10)	1.17E-12	0.08 (-0.01,0.18)	0.07	0.02 (0.02,0.03)	1.15E-10
rs11165643	1	96924097	T	0.09 (0.06,0.11)	8.99E-15	0.05 (-0.04,0.14)	0.26	0.02 (0.02,0.03)	2.07E-12
rs17024393**	1	110154688	C	0.31 (0.24,0.37)	6.26E-19	0.31 (0.03,0.59)	0.03	0.07 (0.05,0.08)	7.03E-14
rs543874**	1	177889480	G	0.24 (0.21,0.27)	3.36E-71	0.37 (0.26,0.47)	1.03E-11	0.05 (0.04,0.06)	2.62E-35
rs2820292	1	201784287	C	0.09 (0.07,0.11)	5.58E-17	0.12 (0.03,0.21)	0.01	0.02 (0.01,0.03)	1.83E-10
rs13021737**	2	632348	G	0.26 (0.23,0.29)	3.95E-74	0.19 (0.07,0.31)	1.72E-03	0.06 (0.05,0.07)	1.11E-50
rs10182181**	2	25150296	G	0.17 (0.15,0.19)	2.39E-55	0.21 (0.12,0.30)	6.30E-06	0.03 (0.03,0.04)	8.78E-24
rs11126666	2	26928811	A	0.01 (-0.01,0.04)	2.29E-01	0.01 (-0.09,0.11)	0.82	0.02 (0.02,0.03)	1.33E-09
rs1016287	2	59305625	T	0.09 (0.07,0.12)	5.07E-15	0.15 (0.05,0.25)	2.78E-03	0.02 (0.02,0.03)	2.25E-11
rs11688816	2	63053048	G	0.05 (0.03,0.07)	2.24E-05	-0.02 (-0.12,0.07)	0.60	0.02 (0.01,0.02)	1.89E-08
rs2121279	2	143043285	T	0.05 (0.02,0.08)	2.18E-03	-0.01 (-0.14,0.12)	0.93	0.02 (0.02,0.03)	2.31E-08
rs1460676	2	164567689	C	0.06 (0.03,0.09)	2.24E-05	0.06 (-0.07,0.18)	0.36	0.02 (0.01,0.03)	8.98E-07
rs1528435	2	181550962	T	0.08 (0.05,0.10)	8.76E-12	0.07 (-0.02,0.17)	0.12	0.02 (0.01,0.02)	1.2E-08
rs17203016	2	208255518	G	0.06 (0.04,0.09)	2.67E-06	0.04 (-0.07,0.15)	0.47	0.02 (0.01,0.03)	8.15E-08
rs7599312	2	213413231	G	0.08 (0.05,0.10)	7.65E-10	0.11 (0.01,0.21)	0.03	0.02 (0.02,0.03)	1.17E-10
rs492400	2	219349752	C	0.05 (0.03,0.08)	9.08E-07	0.07 (-0.02,-0.16)	0.15	0.02 (0.01,0.02)	4.17E-07
rs2176040	2	227092802	A	0.01 (-0.01,0.04)	0.23	-0.02 (-0.11,0.07)	0.64	0.01 (0.01,0.02)	6.06E-06
rs6804842	3	25106437	G	0.06 (0.04,0.09)	7.57E-09	0.10 (0.01,0.19)	0.03	0.02 (0.01,0.02)	2.48E-09
rs2365389	3	61236462	C	0.07 (0.05,0.09)	8.70E-11	0.04 (-0.05,0.13)	0.37	0.02 (0.01,0.03)	1.63E-10
rs3849570	3	81792112	A	0.06 (0.04,0.08)	4.03E-07	0.02 (-0.07,0.12)	0.63	0.02 (0.01,0.02)	2.6E-08
rs13078960	3	85807590	G	0.09 (0.06,0.12)	2.06E-11	0.09 (-0.02,0.20)	0.12	0.03 (0.02,0.04)	1.74E-14
rs16851483	3	141275436	T	0.18 (0.14,0.22)	1.45E-16	0.01 (-0.18,0.20)	0.91	0.05 (0.03,0.06)	3.55E-10
rs1516725	3	185824004	C	0.16 (0.13,0.19)	4.80E-25	0.13 (-0.01,0.27)	0.06	0.04 (0.04,0.05)	1.89E-22
rs10938397**	4	45182527	G	0.15 (0.13,0.17)	7.36E-41	0.18 (0.08,0.27)	1.59E-04	0.04 (0.03,0.05)	3.21E-38
rs17001654	4	77129568	G	0.08 (0.05,0.11)	3.14E-07	0.14 (0.02,0.27)	0.03	0.03 (0.02,0.04)	7.76E-09
rs13107325**	4	103188709	T	0.23 (0.19,0.27)	7.60E-30	0.13 (-0.07,0.33)	0.21	0.05 (0.03,0.06)	1.83E-12
rs11727676	4	145659064	T	0.04 (0.00,0.07)	3.42E-02	0.12 (-0.04,0.28)	0.13	0.04 (0.02,0.05)	2.55E-08
rs2112347	5	75015242	T	0.14 (0.11,0.16)	1.03E-33	0.04 (-0.05,0.14)	0.37	0.03 (0.02,0.03)	6.19E-17
rs7715256**	5	153537893	G	0.08 (0.05,0.10)	6.96E-12	0.08 (-0.01,0.17)	0.09	0.02 (0.01,0.02)	1.7E-07
rs205262	6	34563164	G	0.14 (0.12,0.16)	2.69E-30	0.20 (0.09,0.30)	1.6E-04	0.02 (0.01,0.03)	1.75E-10
rs2033529	6	40348653	G	0.10 (0.07,0.12)	2.60E-16	0.02 (-0.08,0.12)	0.64	0.02 (0.01,0.02)	1.39E-08
rs2207139**	6	50845490	G	0.19 (0.16,0.22)	2.57E-39	0.16 (0.04,0.28)	7.98E-03	0.04 (0.04,0.05)	4.13E-29
rs9400239	6	108977663	C	0.08 (0.06,0.11)	6.69E-12	0.08 (-0.02,0.18)	0.13	0.02 (0.01,0.02)	1.61E-08
rs9374842	6	120185665	T	0.06 (0.04,0.09)	2.15E-06	0.01 (-0.09,0.11)	0.85	0.02 (0.02,0.03)	2.67E-08
rs13201877	6	137675541	G	0.04 (0.01,0.07)	1.58E-02	0.00(-0.13,0.12)	0.96	0.02 (0.01,0.03)	2.35E-07
rs13191362	6	163033350	A	0.10 (0.06,0.13)	8.09E-09	0.16 (0.03,0.30)	0.01	0.03 (0.02,0.04)	7.34E-09
rs1167827	7	75163169	G	0.10 (0.08,0.12)	2.99E-20	0.07 (-0.02,0.16)	0.13	0.02 (0.01,0.03)	6.33E-10
rs2245368	7	76608143	C	0.12 (0.09,0.15)	3.76E-17	0.16 (0.04,0.28)	8.69E-03	0.03 (0.02,0.04)	3.19E-08

rs9641123	7	93197732	C	0.04 (0.02,0.06)	1.83E-04	0.09 (0.00,0.18)	0.06	0.03 (0.02,0.04)	2.08E-10
rs6465468	7	95169514	T	0.03 (0.01,0.05)	1.09E-02	0.06 (-0.04,0.16)	0.21	0.02 (0.01,0.02)	2.32E-06
rs17405819	8	76806584	T	0.09 (0.07,0.12)	2.01E-15	0.11 (0.02,0.21)	0.02	0.02 (0.02,0.03)	2.07E-11
rs16907751	8	81375457	C	0.09 (0.06,0.13)	7.25E-07	0.02 (-0.13,0.17)	0.77	0.04 (0.02,0.05)	1.26E-07
rs2033732	8	85079709	C	0.05 (0.02,0.07)	1.01E-04	0.02 (-0.08,0.13)	0.66	0.02 (0.01,0.03)	4.89E-08
rs4740619	9	15634326	T	0.09 (0.07,0.11)	1.24E-15	0.13 (0.04,0.22)	3.45E-03	0.02 (0.01,0.02)	4.56E-09
rs10968576	9	28414339	G	0.12 (0.10,0.14)	5.79E-26	0.14 (0.04,0.23)	0.01	0.02 (0.02,0.03)	6.61E-14
rs6477694	9	111932342	C	0.06 (0.04,0.08)	4.80E-08	0.04 (-0.05,0.13)	0.40	0.02 (0.01,0.02)	2.67E-08
rs1928295	9	120378483	T	0.06 (0.04,0.08)	1.19E-08	0.10 (0.01,0.19)	0.03	0.02 (0.01,0.02)	7.91E-10
rs10733682	9	129460914	A	0.07 (0.04,0.09)	4.20E-09	0.07 (-0.02,0.15)	0.16	0.02 (0.01,0.02)	1.83E-08
rs7899106	10	87410904	G	0.13 (0.09,0.18)	8.60E-08	0.32 (0.09,0.54)	5.45E-03	0.04 (0.03,0.05)	2.96E-08
rs17094222	10	102395440	C	0.07 (0.04,0.09)	4.41E-07	0.09 (-0.02,0.21)	0.11	0.02 (0.02,0.03)	5.94E-11
rs11191560	10	104869038	C	0.12 (0.08,0.16)	3.49E-09	-0.01 (-0.18,0.15)	0.87	0.03 (0.02,0.04)	8.45E-09
rs7903146	10	114758349	C	0.08 (0.06,0.11)	2.38E-12	0.15 (0.04,0.25)	5.79E-03	0.02 (0.02,0.03)	1.1E-11
rs4256980	11	8673939	G	0.09 (0.06,0.11)	8.36E-14	0.10 (0.00,0.19)	0.04	0.02 (0.02,0.03)	2.9E-11
rs11030104**	11	27684517	A	0.18 (0.15,0.20)	7.14E-39	0.09 (-0.03,0.20)	0.13	0.04 (0.03,0.05)	5.56E-28
rs2176598	11	43864278	T	0.09 (0.06,0.11)	2.10E-12	0.10 (-0.01,0.20)	0.07	0.02 (0.01,0.03)	2.97E-08
rs3817334	11	47650993	T	0.11 (0.09,0.14)	6.01E-25	0.10 (0.00,0.19)	0.04	0.03 (0.02,0.03)	5.15E-17
rs12286929	11	115022404	G	0.08 (0.06,0.10)	1.97E-14	0.10 (0.01,0.19)	0.03	0.02 (0.02,0.03)	1.31E-12
rs7138803**	12	50247468	A	0.13 (0.11,0.15)	4.35E-32	0.14 (0.05,0.23)	3.21E-03	0.03 (0.03,0.04)	8.15E-24
rs11057405	12	122781897	G	0.13 (0.10,0.17)	1.76E-13	0.18 (0.03,0.33)	0.02	0.03 (0.02,0.04)	2.02E-08
rs9581854*	13	28017782	T	0.05 (0.02,0.07)	9.85E-04	0.07 (-0.04,0.18)	0.24	0.03 (0.02,0.04)	2.29E-10
rs12429545**	13	54102206	A	0.14 (0.10,0.17)	1.44E-16	0.16 (0.03,0.29)	0.02	0.03 (0.02,0.04)	1.09E-12
rs9540493	13	66205704	A	0.07 (0.05,0.09)	6.31E-10	0.02 (-0.07,0.11)	0.61	0.02 (0.01,0.03)	4.97E-08
rs1441264**	13	79580919	A	0.09 (0.07,0.11)	2.73E-15	0.05 (-0.04,0.14)	0.29	0.02 (0.01,0.02)	6.04E-08
rs10132280	14	25928179	C	0.11 (0.09,0.14)	1.41E-21	0.10 (0.01,0.20)	0.04	0.02 (0.02,0.03)	1.14E-11
rs12885454	14	29736838	C	0.07 (0.05,0.10)	5.74E-11	0.05 (-0.04,0.15)	0.25	0.02 (0.02,0.03)	1.94E-10
rs11847697**	14	30515112	T	0.12 (0.06,0.17)	1.11E-05	0.32 (0.07,0.57)	0.01	0.05 (0.03,0.06)	3.99E-09
rs7141420	14	79899454	T	0.09 (0.07,0.11)	1.69E-16	0.10 (0.01,0.19)	0.04	0.02 (0.02,0.03)	1.23E-14
rs3736485	15	51748610	A	0.07 (0.05,0.09)	3.49E-11	0.01 (-0.08,0.10)	0.83	0.02 (0.01,0.02)	7.41E-09
rs16951275	15	68077168	T	0.13 (0.11,0.16)	5.11E-24	0.17 (0.06,0.28)	2.36E-03	0.03 (0.02,0.04)	1.91E-17
rs7164727	15	73093991	T	0.08 (0.06,0.10)	1.86E-11	0.07 (-0.03,0.17)	0.16	0.02 (0.01,0.02)	6.83E-08
rs758747	16	3627358	T	0.05 (0.03,0.08)	1.83E-05	0.11 (0.00,0.21)	0.05	0.02 (0.02,0.03)	7.47E-10
rs12446632**	16	19935389	G	0.14 (0.11,0.17)	5.18E-20	0.22 (0.09,0.36)	1.15E-03	0.04 (0.03,0.05)	1.48E-18
rs2650492	16	28333411	A	0.09 (0.07,0.12)	2.54E-14	0.18 (0.09,0.28)	2.22E-04	0.02 (0.01,0.03)	1.92E-09
rs3888190**	16	28889486	A	0.13 (0.11,0.15)	8.47E-31	0.20 (0.11,0.29)	1.94E-05	0.03 (0.03,0.04)	3.14E-23
rs4787491	16	30015337	G	0.08 (0.06,0.11)	6.15E-15	0.14 (0.05,0.23)	1.69E-03	0.02 (0.01,0.03)	2.7E-08
rs9925964	16	31129895	A	0.12 (0.10,0.14)	6.83E-26	0.04 (-0.06,0.13)	0.46	0.02 (0.01,0.02)	8.11E-10
rs2080454	16	49062590	C	0.05 (0.03,0.07)	2.31E-05	0.09 (0.00,0.18)	0.04	0.02 (0.01,0.02)	6.55E-08
rs1558902**	16	53803574	A	0.36 (0.34,0.38)	5.99E-234	0.35 (0.26,0.44)	7.66E-14	0.08 (0.08,0.09)	7.5E-153
rs9914578	17	2005136	G	0.04 (0.02,0.07)	1.33E-03	0.09 (-0.01,0.20)	0.09	0.02 (0.01,0.03)	8.99E-08
rs1000940	17	5283252	G	0.07 (0.05,0.10)	7.48E-10	0.03 (-0.07,0.12)	0.61	0.02 (0.01,0.02)	1.28E-08
rs12940622	17	78615571	G	0.08 (0.06,0.11)	1.33E-14	0.09 (0.00,0.18)	0.05	0.02 (0.01,0.02)	2.49E-09
rs1808579**	18	21104888	C	0.11 (0.09,0.13)	1.91E-23	0.12 (0.03,0.21)	8.84E-03	0.02 (0.01,0.02)	4.17E-08
rs7239883	18	40147671	G	0.05 (0.03,0.07)	1.93E-05	0.03 (-0.06,0.13)	0.46	0.02 (0.01,0.02)	1.63E-07
rs7243357	18	56883319	T	0.09 (0.06,0.11)	2.03E-09	0.05 (-0.07,0.18)	0.41	0.02 (0.01,0.03)	3.86E-08

rs6567160**	18	57829135	C	0.26 (0.23,0.28)	3.29E-89	0.30 (0.20,0.40)	8.32E-09	0.06 (0.05,0.06)	3.93E-53
rs17724992	19	18454825	A	0.07 (0.05,0.10)	1.77E-09	-0.02 (-0.12,0.09)	0.76	0.02 (0.01,0.03)	3.42E-08
rs29941**	19	34309532	G	0.08 (0.06,0.10)	1.32E-11	0.12 (0.02,0.21)	0.02	0.02 (0.01,0.02)	2.41E-08
rs2075650	19	45395619	A	0.09 (0.06,0.12)	1.35E-09	0.08 (-0.04,0.21)	0.19	0.03 (0.02,0.04)	1.25E-08
rs2287019	19	46202172	C	0.15 (0.13,0.18)	1.75E-27	0.11 (0.00,0.22)	0.05	0.04 (0.03,0.04)	4.59E-18
rs3810291**	19	47569003	A	0.13 (0.11,0.15)	8.19E-29	0.07 (-0.03,0.16)	0.16	0.03 (0.02,0.04)	4.81E-15
rs6091540	20	51087862	C	0.09 (0.07,0.11)	2.95E-14	0.04 (-0.06,0.13)	0.47	0.02 (0.01,0.02)	2.32E-06
rs2836754	21	40291740	C	0.05 (0.03,0.08)	1.29E-06	0.06 (-0.04,0.15)	0.23	0.02 (0.01,0.02)	4.16E-07

[a]Estimate given for raw BMI (kg/m^2); [b]Estimate given for inverse-transformed BMI;*Proxy SNP for rs12016871 (r^2 = 1.0) **SNPs also reported for childhood BMI (Felix et al, 2016); Bp, base position; CHR, chromosome; CI, confidence interval.

Association of BMI genetic instruments with atopic dermatitis (AD) in UK Biobank and HUNT. BMI variants reported by Locke *et al* (2015)

				AD (UK Biobank)		AD (HUNT)		AD (Paternoster)	
SNP	**CHR**	**Position (bp)**	**Effect allele**	**OR (95% CI)**	***P* value**	**OR (95% CI)**	***P* value**	**OR (95% CI)**	***P* value**
rs977747	1	47684677	T	1.02 (0.99, 1.05)	0.19	1.07 (0.99, 1.15)	0.07	1.01 (0.98, 1.03)	0.47
rs657452	1	49589847	A	0.99 (0.97, 1.02)	0.72	0.99 (0.92, 1.06)	0.73	0.99 (0.97, 1.02)	0.57
rs11583200	1	50559820	C	0.99 (0.96, 1.02)	0.66	1.01 (0.94, 1.08)	0.85	1.00 (0.98, 1.03)	0.89
rs3101336**	1	72751185	C	1.02 (0.99, 1.05)	0.21	1.08 (1.01, 1.16)	0.04	1.01 (0.99, 1.04)	0.26
rs12566985**	1	75002193	G	1.00 (0.97, 1.03)	0.94	0.97 (0.90, 1.04)	0.38	1.01 (0.98, 1.03)	0.59
rs12401738	1	78446761	A	1.00 (0.97, 1.03)	1.00	1.02 (0.95, 1.09)	0.51	0.98 (0.96, 1.01)	0.19
rs11165643	1	96924097	T	0.99 (0.96, 1.02)	0.63	1.08 (1.01, 1.16)	0.03	1.00 (0.98, 1.03)	0.82
rs17024393**	1	110154688	C	1.04 (0.96, 1.14)	0.34	1.19 (0.97, 1.45)	0.10	1.07 (0.99, 1.15)	0.08
rs543874**	1	177889480	G	0.99 (0.95, 1.02)	0.46	0.99 (0.91, 1.07)	0.79	1.02 (0.99, 1.05)	0.19
rs2820292	1	201784287	C	0.99 (0.96, 1.02)	0.39	1.02 (0.95, 1.09)	0.55	1.00 (0.97, 1.02)	0.83
rs13021737**	2	632348	G	1.00 (0.96, 1.04)	0.93	1.06 (0.96, 1.16)	0.27	1.01 (0.97, 1.04)	0.70
rs10182181**	2	25150296	G	1.00 (0.97, 1.03)	1.00	1.00 (0.93, 1.07)	0.97	1.04 (1.02, 1.07)	0.00
rs11126666	2	26928811	A	1.01 (0.97, 1.04)	0.71	0.92 (0.85, 0.99)	0.03	1.00 (0.97, 1.02)	0.79
rs1016287	2	59305625	T	0.99 (0.96, 1.03)	0.71	0.98 (0.90, 1.05)	0.58	1.01 (0.99, 1.04)	0.28
rs11688816	2	63053048	G	1.01 (0.98, 1.04)	0.41	0.96 (0.90, 1.03)	0.28	0.99 (0.97, 1.01)	0.39
rs2121279	2	143043285	T	0.99 (0.95, 1.03)	0.68	1.01 (0.91, 1.12)	0.89	1.01 (0.97, 1.05)	0.61
rs1460676	2	164567689	C	1.01 (0.97, 1.05)	0.75	1.09 (1.00, 1.20)	0.06	0.99 (0.96, 1.02)	0.53
rs1528435	2	181550962	T	0.99 (0.96, 1.02)	0.51	1.06 (0.98, 1.14)	0.13	1.00 (0.98, 1.03)	0.83
rs17203016	2	208255518	G	0.99 (0.96, 1.03)	0.75	0.98 (0.90, 1.06)	0.64	1.00 (0.96, 1.03)	0.85
rs7599312	2	213413231	G	0.99 (0.96, 1.03)	0.72	0.97 (0.90, 1.05)	0.51	1.01 (0.98, 1.04)	0.47
rs492400	2	219349752	C	1.01 (0.98, 1.04)	0.41	1.14 (1.06, 1.22)	0.00	0.99 (0.97, 1.02)	0.61
rs2176040	2	227092802	A	0.99 (0.96, 1.02)	0.59	0.98 (0.91, 1.05)	0.57	1.02 (1.00, 1.05)	0.07
rs6804842	3	25106437	G	1.03 (1.00, 1.05)	0.08	1.00 (0.93, 1.07)	0.90	0.99 (0.97, 1.02)	0.50
rs2365389	3	61236462	C	1.02 (0.99, 1.04)	0.29	0.97 (0.90, 1.04)	0.39	0.99 (0.96, 1.01)	0.28
rs3849570	3	81792112	A	1.02 (0.99, 1.05)	0.149514643	1.08 (1.00, 1.16)	0.04	1.02 (1.00, 1.05)	0.06
rs13078960	3	85807590	G	1.01 (0.97, 1.04)	0.643103582	0.95 (0.87, 1.04)	0.29	0.99 (0.96, 1.03)	0.74
rs16851483	3	141275436	T	0.96 (0.90, 1.02)	0.174896573	1.18 (1.02, 1.35)	0.02	0.96 (0.91, 1.01)	0.15
rs1516725	3	185824004	C	1.00 (0.96, 1.04)	0.973709896	1.04 (0.93, 1.15)	0.53	0.98 (0.95, 1.02)	0.34
rs10938397**	4	45182527	G	1.01 (0.98, 1.04)	0.506767292	0.98 (0.91, 1.05)	0.63	1.00 (0.98, 1.03)	0.76
rs17001654	4	77129568	G	0.99 (0.95, 1.03)	0.752284724	1.02 (0.92, 1.13)	0.68	1.02 (0.98, 1.05)	0.34
rs13107325**	4	103188709	T	0.99 (0.94, 1.05)	0.737050887	0.95 (0.81, 1.12)	0.53	1.04 (0.99, 1.10)	0.08
rs11727676	4	145659064	T	1.04 (0.99, 1.09)	0.138353512	1.09 (0.96, 1.23)	0.18	0.98 (0.94, 1.03)	0.48
rs2112347	5	75015242	T	1.00 (0.97, 1.03)	0.949954363	0.99 (0.92, 1.07)	0.85	1.00 (0.98, 1.03)	0.90
rs7715256**	5	153537893	G	1.01 (0.98, 1.04)	0.354030218	0.98 (0.91, 1.05)	0.50	1.00 (0.97, 1.02)	0.80
rs205262	6	34563164	G	0.99 (0.96, 1.02)	0.615173176	1.07 (0.99, 1.16)	0.08	1.01 (0.98, 1.04)	0.46
rs2033529	6	40348653	G	1.00 (0.97, 1.03)	0.893594721	1.00 (0.92, 1.08)	0.97	0.99 (0.97, 1.02)	0.51
rs2207139**	6	50845490	G	0.99 (0.95, 1.02)	0.438483741	0.98 (0.89, 1.07)	0.61	1.02 (0.99, 1.05)	0.29
rs9400239	6	108977663	C	1.04 (1.01, 1.07)	0.008119675	1.04 (0.96, 1.13)	0.31	1.01 (0.98, 1.04)	0.42
rs9374842	6	120185665	T	0.99 (0.96, 1.03)	0.761641967	0.98 (0.90, 1.06)	0.56	0.98 (0.96, 1.01)	0.29
rs13201877	6	137675541	G	0.97 (0.93, 1.01)	0.169545093	1.00 (0.90, 1.09)	0.96	1.02 (0.98, 1.06)	0.27
rs13191362	6	163033350	A	0.99 (0.95, 1.04)	0.723417575	1.01 (0.91, 1.12)	0.85	0.99 (0.95, 1.03)	0.71
rs1167827	7	75163169	G	0.99 (0.96, 1.02)	0.39561432	0.99 (0.93, 1.06)	0.88	0.99 (0.97, 1.02)	0.58
rs2245368	7	76608143	C	1.02 (0.98, 1.05)	0.381617298	1.05 (0.96, 1.15)	0.29	1.01 (0.96, 1.05)	0.79

rs9641123	7	93197732	C	0.99 (0.96, 1.01)	0.318082689	0.96 (0.90, 1.04)	0.32	1.00 (0.98, 1.03)	0.94
rs6465468	7	95169514	T	1.00 (0.97, 1.04)	0.774394294	0.97 (0.90, 1.04)	0.38	0.97 (0.95, 1.00)	0.03
rs17405819	8	76806584	T	1.00 (0.97, 1.03)	0.885600303	1.01 (0.93, 1.08)	0.88	0.99 (0.96, 1.01)	0.32
rs16907751	8	81375457	C	1.04 (0.99, 1.09)	0.100904935	1.06 (0.94, 1.19)	0.37	1.01 (0.97, 1.05)	0.77
rs2033732	8	85079709	C	1.05 (1.02, 1.08)	0.002791355	1.00 (0.92, 1.08)	0.98	1.00 (0.98, 1.03)	0.80
rs4740619	9	15634326	T	0.98 (0.95, 1.01)	0.204536669	0.94 (0.88, 1.01)	0.08	1.02 (0.99, 1.04)	0.18
rs10968576	9	28414339	G	1.02 (0.99, 1.05)	0.260677835	0.99 (0.91, 1.06)	0.74	1.00 (0.97, 1.02)	0.77
rs6477694	9	111932342	C	1.00 (0.97, 1.03)	0.828754495	0.99 (0.92, 1.06)	0.72	1.00 (0.98, 1.03)	0.94
rs1928295	9	120378483	T	1.00 (0.97, 1.03)	0.855549614	0.99 (0.93, 1.06)	0.88	1.01 (0.99, 1.04)	0.23
rs10733682	9	129460914	A	0.98 (0.95, 1.01)	0.282236571	1.00 (0.93, 1.07)	0.98	1.00 (0.98, 1.02)	0.98
rs7899106	10	87410904	G	0.99 (0.92, 1.06)	0.76052755	0.89 (0.75, 1.07)	0.22	1.03 (0.97, 1.09)	0.30
rs17094222	10	102395440	C	1.01 (0.98, 1.05)	0.440098966	0.95 (0.87, 1.04)	0.32	0.99 (0.96, 1.02)	0.45
rs11191560	10	104869038	C	1.04 (0.99, 1.09)	0.124582957	0.95 (0.84, 1.08)	0.45	1.04 (0.99, 1.09)	0.09
rs7903146	10	114758349	C	0.98 (0.95, 1.01)	0.197127706	1.05 (0.97, 1.14)	0.23	1.00 (0.97, 1.02)	0.81
rs4256980	11	8673939	G	1.02 (0.99, 1.04)	0.324441965	1.04 (0.97, 1.12)	0.30	1.00 (0.97, 1.02)	0.97
rs11030104**	11	27684517	A	1.05 (1.01, 1.08)	0.012223849	0.96 (0.89, 1.05)	0.39	1.02 (0.99, 1.05)	0.22
rs2176598	11	43864278	T	1.01 (0.98, 1.04)	0.565153672	0.98 (0.90, 1.06)	0.59	1.00 (0.97, 1.03)	0.92
rs3817334	11	47650993	T	0.99 (0.96, 1.02)	0.447740492	1.05 (0.98, 1.13)	0.21	1.00 (0.97, 1.02)	0.78
rs12286929	11	115022404	G	0.98 (0.95, 1.01)	0.144339704	1.01 (0.94, 1.08)	0.75	1.00 (0.97, 1.02)	0.78
rs7138803**	12	50247468	A	0.99 (0.96, 1.02)	0.658206123	0.97 (0.90, 1.04)	0.40	0.98 (0.96, 1.01)	0.22
rs11057405	12	122781897	G	1.04 (1.00, 1.09)	0.079141434	1.03 (0.92, 1.16)	0.58	1.07 (1.02, 1.11)	0.01
rs9581854*	13	28017782	T	0.98 (0.95, 1.02)	0.418272799	0.99 (0.90, 1.07)	0.76	0.98 (0.95, 1.02)	0.32
rs12429545**	13	54102206	A	1.01 (0.97, 1.05)	0.619911514	0.99 (0.90, 1.09)	0.84	0.99 (0.95, 1.02)	0.44
rs9540493	13	66205704	A	1.01 (0.98, 1.03)	0.725286201	0.99 (0.92, 1.06)	0.84	1.00 (0.98, 1.03)	0.92
rs1441264**	13	79580919	A	1.00 (0.97, 1.03)	0.797049459	1.02 (0.94, 1.09)	0.68	1.03 (1.01, 1.06)	0.01
rs10132280	14	25928179	C	1.00 (0.96, 1.03)	0.771701062	1.01 (0.94, 1.09)	0.72	0.96 (0.94, 0.99)	0.01
rs12885454	14	29736838	C	1.00 (0.97, 1.03)	0.784373138	0.98 (0.91, 1.05)	0.57	1.00 (0.98, 1.03)	0.87
rs11847697**	14	30515112	T	0.98 (0.91, 1.05)	0.55388985	1.01 (0.83, 1.22)	0.96	1.01 (0.95, 1.08)	0.70
rs7141420	14	79899454	T	1.02 (0.99, 1.05)	0.169005438	0.98 (0.91, 1.05)	0.55	0.99 (0.96, 1.01)	0.29
rs3736485	15	51748610	A	1.00 (0.97, 1.03)	0.806444214	1.06 (0.99, 1.14)	0.08	0.98 (0.96, 1.01)	0.12
rs16951275	15	68077168	T	0.99 (0.96, 1.03)	0.625414954	0.98 (0.90, 1.06)	0.58	0.99 (0.97, 1.02)	0.69
rs7164727	15	73093991	T	0.99 (0.96, 1.02)	0.38523274	0.98 (0.91, 1.06)	0.69	1.00 (0.98, 1.03)	0.89
rs758747	16	3627358	T	1.01 (0.98, 1.04)	0.64656427	0.94 (0.87, 1.02)	0.15	1.01 (0.98, 1.04)	0.43
rs12446632**	16	19935389	G	1.01 (0.97, 1.05)	0.601708307	1.08 (0.97, 1.20)	0.16	0.98 (0.94, 1.01)	0.21
rs2650492	16	28333411	A	1.00 (0.97, 1.04)	0.797487209	1.02 (0.95, 1.11)	0.57	1.01 (0.98, 1.04)	0.72
rs3888190**	16	28889486	A	1.02 (0.99, 1.05)	0.227939148	1.03 (0.96, 1.11)	0.45	1.00 (0.98, 1.03)	0.89
rs4787491	16	30015337	G	1.03 (1.00, 1.05)	0.088385912	0.99 (0.92, 1.06)	0.70	1.01 (0.98, 1.03)	0.46
rs9925964	16	31129895	A	0.98 (0.95, 1.01)	0.300474859	0.97 (0.90, 1.04)	0.41	0.99 (0.97, 1.02)	0.58
rs2080454	16	49062590	C	0.99 (0.96, 1.02)	0.335946442	1.00 (0.93, 1.07)	0.97	1.02 (0.99, 1.04)	0.22
rs1558902**	16	53803574	A	1.02 (0.99, 1.05)	0.13925268	1.01 (0.94, 1.08)	0.80	1.02 (0.99, 1.04)	0.19
rs9914578	17	2005136	G	0.97 (0.93, 1.00)	0.088549596	0.92 (0.85, 1.00)	0.06	0.98 (0.95, 1.01)	0.26
rs1000940	17	5283252	G	1.02 (0.99, 1.05)	0.297519274	1.07 (0.99, 1.15)	0.08	0.99 (0.96, 1.01)	0.33
rs12940622	17	78615571	G	1.00 (0.97, 1.03)	0.896910937	1.00 (0.93, 1.07)	0.94	0.99 (0.96, 1.01)	0.34
rs1808579**	18	21104888	C	1.01 (0.98, 1.04)	0.597597617	0.99 (0.92, 1.06)	0.75	0.97 (0.95, 1.00)	0.03
rs7239883	18	40147671	G	0.97 (0.94, 1.00)	0.068082553	1.03 (0.96, 1.11)	0.45	0.99 (0.97, 1.02)	0.46
rs7243357	18	56883319	T	0.97 (0.93, 1.00)	0.086806748	0.97 (0.88, 1.07)	0.52	0.98 (0.95, 1.01)	0.21

rs6567160**	18	57829135	C	1.00 (0.97, 1.04)	0.91582916	0.98 (0.90, 1.06)	0.62	1.00 (0.98, 1.03)	0.74
rs17724992	19	18454825	A	1.01 (0.97, 1.04)	0.698897718	1.00 (0.92, 1.08)	0.99	0.99 (0.96, 1.02)	0.58
rs29941**	19	34309532	G	0.98 (0.95, 1.01)	0.185103936	1.04 (0.96, 1.12)	0.31	1.01 (0.98, 1.04)	0.43
rs2075650	19	45395619	A	0.99 (0.95, 1.03)	0.790948853	1.05 (0.96, 1.16)	0.28	1.01 (0.98, 1.05)	0.50
rs2287019	19	46202172	C	1.01 (0.97, 1.04)	0.774818125	1.02 (0.93, 1.11)	0.66	1.01 (0.97, 1.04)	0.71
rs3810291**	19	47569003	A	1.00 (0.97, 1.03)	0.773049651	0.99 (0.91, 1.06)	0.71	0.99 (0.96, 1.01)	0.36
rs6091540	20	51087862	C	1.00 (0.97, 1.04)	0.793143801	0.96 (0.90, 1.04)	0.32	1.02 (0.99, 1.05)	0.14
rs2836754	21	40291740	C	1.00 (0.98, 1.03)	0.756469394	0.99 (0.91, 1.06)	0.72	1.01 (0.98, 1.03)	0.52

*Proxy SNP for rs12016871 (r^2 = 1.0) **SNPs also reported for childhood BMI (Felix et al, 2016); Bp, base position; CHR, chromosome; CI, confidence interval.

Association of atopic dermatitis (AD) genetic instruments with AD in UK Biobank and HUNT data sets. Atopic dermatitis variants reported by Paternoster *et al*. (2015)

				AD (UK Biobank)		AD (HUNT)		AD (Paternoster 2015)	
SNP	**CHR**	**Position (bp)**	**Effect allele**	**OR (95% CI)**	***P* value**	**OR (95% CI)**	***P* value**	**OR (95% CI)**	***P* value**
rs61816761	1	152285861	A	2.03 (1.86, 2.21)	1.88E-57	1.74 (1.40, 2.16)	4.66E-07	1.65 (1.47, 1.87)	3.49E-16
rs2228145	1	154426970	C	1.09 (1.06, 1.12)	1.46E-08	1.01 (0.94, 1.08)	8.33E-01	1.08 (1.05, 1.11)	1.33E-09
rs112111458	2	71100105	A	1.06 (1.01, 1.10)	1.15E-02	0.91 (0.82, 1.01)	8.85E-02	1.10 (1.06, 1.15)	2.93E-07
rs13015714	2	102971865	G	1.11 (1.07, 1.14)	2.23E-09	1.09 (1.00, 1.18)	5.37E-02	1.10 (1.07, 1.14)	5.64E-12
rs1057258	2	234115629	C	1.08 (1.04, 1.12)	9.78E-05	1.02 (0.93, 1.12)	6.51E-01	1.07 (1.03, 1.10)	0.0001
rs17389644	4	123497697	A	1.08 (1.04, 1.12)	1.00E-05	0.99 (0.91, 1.07)	7.87E-01	1.07 (1.04, 1.10)	7.03E-06
rs10214237	5	35883734	T	1.09 (1.06, 1.13)	1.04E-07	1.01 (0.93, 1.09)	8.52E-01	1.08 (1.05, 1.11)	6.47E-08
rs2897442	5	132049027	C	1.09 (1.06, 1.13)	8.78E-08	1.12 (1.04, 1.21)	2.69E-03	1.09 (1.06, 1.12)	4.13E-10
rs12153855	6	32074804	T	1.17 (1.11, 1.22)	1.11E-09	NA	#N/A	1.10 (1.05, 1.14)	1.69E-05
rs6473227	8	81285892	C	1.05 (1.02, 1.08)	5.41E-04	1.02 (0.95, 1.10)	5.01E-01	1.08 (1.05, 1.10)	3.71E-09
rs10995251	10	64398466	C	1.04 (1.01, 1.07)	9.54E-03	1.02 (0.95, 1.10)	6.17E-01	1.02 (1.00, 1.05)	0.10763
rs12295535	11	36432024	T	1.24 (1.15, 1.34)	6.46E-08	1.22 (1.00, 1.51)	5.45E-02	1.16 (1.08, 1.25)	5.14E-05
rs479844	11	65551957	G	1.09 (1.06, 1.12)	1.79E-09	1.07 (1.00, 1.14)	5.90E-02	1.11 (1.09, 1.14)	1.43E-17
rs7927894	11	76301316	T	1.11 (1.08, 1.14)	8.59E-13	1.08 (1.01, 1.16)	3.14E-02	1.08 (1.05, 1.10)	6.35E-09
rs7127307	11	128187383	T	1.09 (1.06, 1.12)	2.60E-09	1.07 (0.99, 1.14)	6.96E-02	1.08 (1.05, 1.11)	1.06E-09
rs2227483	12	68648176	T	1.04 (1.01, 1.07)	1.98E-02	1.03 (0.96, 1.10)	4.85E-01	1.06 (1.03, 1.09)	4.07E-06
rs2143950	14	35572357	T	1.10 (1.06, 1.15)	1.47E-07	1.07 (0.98, 1.18)	1.36E-01	1.10 (1.07, 1.14)	1.8E-09
rs7146581	14	103301072	C	1.06 (1.02, 1.10)	1.39E-03	1.08 (0.99, 1.17)	8.12E-02	1.06 (1.03, 1.09)	0.00
rs2041733	16	11229589	T	1.12 (1.09, 1.16)	8.44E-16	1.08 (1.01, 1.15)	3.32E-02	1.08 (1.06, 1.11)	7.77E-11
rs17881320	17	40485239	T	1.07 (1.02, 1.12)	6.68E-03	0.95 (0.83, 1.09)	4.86E-01	1.12 (1.07, 1.17)	3.59E-06
rs16948048	17	47440466	G	1.05 (1.02, 1.08)	1.69E-03	1.07 (1.00, 1.15)	5.87E-02	1.05 (1.03, 1.08)	2.75E-05
rs11657987	17	76387363	T	1.02 (0.99, 1.05)	1.09E-01	0.99 (0.92, 1.06)	7.66E-01	1.06 (1.04, 1.09)	0.000002
rs2164983	19	8789381	A	1.05 (1.01, 1.09)	1.93E-02	1.10 (1.01, 1.21)	3.59E-02	1.12 (1.08, 1.15)	6.06E-11
rs6010620	20	62309839	G	1.14 (1.09, 1.18)	1.10E-13	1.05 (0.97, 1.14)	2.59E-01	1.09 (1.06, 1.13)	5.64E-09

Bp, base position; CHR, chromosome; CI, confidence interval

Association of AD genetic instruments with BMI in UK Biobank and HUNT data sets. AD variants reported by Paternoster *et al.* (2015)

				BMI (UK Biobank)		BMI (HUNT)		BMI (Locke 2015)	
SNP	**CHR**	**Position (bp)**	**Effect allele**	**Beta (95% CI)**	***P* value**	**Beta (95% CI)**	***P* value**	**Beta (95% CI)**	***P* value**
rs61816761	1	152285861	A	-0.08 (-0.18, 0.02)	0.105675	0.27 (-0.07, 0.62)	0.12094	NA	NA
rs2228145	1	154426970	C	0.01 (-0.02, 0.03)	0.531216	0.12 (0.02, 0.21)	0.014734	0.01 (0.00, 0.01)	0.04049
rs112111458	2	71100105	A	0.02 (-0.02, 0.05)	0.360634	-0.05 (-0.19, 0.09)	0.464924	NA	NA
rs13015714	2	102971865	G	0.01 (-0.02, 0.04)	0.498693	-0.01 (-0.12, 0.10)	0.880712	0.00 (-0.01, 0.01)	0.8379
rs1057258	2	234115629	C	-0.01 (-0.04, 0.02)	0.648936	0.11 (-0.01, 0.24)	0.074709	0.00 (-0.01, 0.01)	0.5511
rs17389644	4	123497697	A	0.01 (-0.02, 0.04)	0.556557	0.10 (-0.01, 0.21)	0.068277	0.01 (0.00, 0.02)	0.07826
rs10214237	5	35883734	T	-0.01 (-0.04, 0.01)	0.377918	0.04 (-0.06, 0.14)	0.487732	0.00 (-0.01, 0.01)	0.6964
rs2897442	5	132049027	C	0.01 (-0.01, 0.04)	0.293844	0.01 (-0.09, 0.11)	0.828119	0.00 (-0.01, 0.01)	0.981
rs12153855	6	32074804	T	-0.04 (-0.08, 0.00)	0.061588	NA	#N/A	0.00 (-0.01, 0.01)	0.8669
rs6473227	8	81285892	C	0.01 (-0.02, 0.03)	0.451338	-0.01 (-0.10, 0.09)	0.885062	0.00 (-0.01, 0.01)	0.8128
rs10995251	10	64398466	C	-0.02 (-0.04, 0.01)	0.217871	0.05 (-0.05, 0.14)	0.334794	0.00 (0.00, 0.01)	0.5839
rs12295535	11	36432024	T	-0.02 (-0.09, 0.05)	0.640319	-0.06 (-0.35, 0.23)	0.682557	0.01 (-0.01, 0.04)	0.2627
rs479844	11	65551957	G	-0.01 (-0.04, 0.01)	0.256363	-0.07 (-0.16, 0.02)	0.115748	0.00 (-0.01, 0.01)	0.8288
rs7927894	11	76301316	T	0.01 (-0.02, 0.03)	0.620515	-0.02 (-0.11, 0.08)	0.715547	0.00 (-0.01, 0.01)	0.5996
rs7127307	11	128187383	T	0.00 (-0.03, 0.02)	0.767382	-0.02 (-0.11, 0.08)	0.739172	0.00 (-0.01, 0.01)	0.981
rs2227485	12	68647713	A	NA	NA	NA	NA	0.00 (-0.01, 0.01)	0.5454
rs2227483	12	68648176	T	-0.01 (-0.04, 0.01)	0.260073	0.00 (-0.10, 0.09)	0.924914	NA	NA
rs2143950	14	35572357	T	0.01 (-0.02, 0.04)	0.580299	0.06 (-0.06, 0.18)	0.351199	0.01 (0.00, 0.02)	0.1114
rs7146581	14	103301072	C	-0.07 (-0.10, -0.04)	1.78E-06	-0.06 (-0.17, 0.05)	0.259433	-0.01 (-0.02, 0.00)	0.02593
rs2041733	16	11229589	T	-0.01 (-0.03, 0.02)	0.543636	0.06 (-0.03, 0.15)	0.18112	0.00 (0.00, 0.01)	0.4902
rs17881320	17	40485239	T	-0.06 (-0.10, -0.01)	0.008111	-0.01 (-0.19, 0.16)	0.871053	NA	NA
rs16948048	17	47440466	G	0.04 (0.02, 0.06)	0.001547	0.05 (-0.05, 0.14)	0.32451	0.01 (0.00, 0.02)	0.00107
rs11657987	17	76387363	T	-0.01 (-0.04, 0.01)	0.317827	0.00 (-0.09, 0.09)	0.934643	NA	NA
rs4129767	17	76403984	A	NA	NA	NA	NA	0.00 (-0.01, 0.01)	0.8653
rs2164983	19	8789381	A	-0.02 (-0.06, 0.01)	0.193217	0.02 (-0.11, 0.14)	0.807445	0.00 (-0.01, 0.01)	0.747
rs6010620	20	62309839	G	0.04 (0.01, 0.07)	0.002812	0.05 (-0.06, 0.15)	0.391716	0.00 (-0.01, 0.01)	0.4133

Bp, base position; CHR, chromosome; CI, confidence interval.