

Supplementary Table 3. Mendelian randomization after excluding pigmentation and tanning related SNPs.

(A) MR effect estimates after excluding 11 pigmentation and tanning related SNPs.

id.exposure	id.outcome	outcome	exposure	method	nsnp	b	se	pval	OR	OR_lci95	OR_uci95
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	Inverse variance weighted	43	-0.98029365	0.681443	0.15027647	0.375200904	0.09867517	1.426657974
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	MR Egger	43	-1.84800199	1.436685103	0.205556349	0.157551642	0.00942957	2.632412728
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	Weighted median	43	-1.30636906	0.976324007	0.180880565	0.270801538	0.039956492	1.835333109
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	Weighted mode	43	-1.95639635	1.529296063	0.207821444	0.141366941	0.007056426	2.832115433
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	Robust adjusted profile score (RAPS)	43	-1.10485806	0.708821249	0.119061262	0.331257898	0.082566792	1.329006392
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	IVW radial	43	-0.98030926	0.615999642	0.111516873	0.37519505	0.112177981	1.254892665
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	Penalised weighted median	43	-1.31343632	1.031179128	0.202761688	0.268894459	0.035630709	2.029267252

(B) Cochran heterogeneity tests in the restricted 43-SNP instrument set.

id.exposure	id.outcome	outcome	exposure	method	Q	Q_df	Q_pval
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	MR Egger	33.9	41	0.778139842
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	Inverse variance weighted	34.3	42	0.79422336

(C) MR-Egger intercept test for residual directional pleiotropy after SNP exclusion.

id.exposure	id.outcome	outcome	exposure	egger_intercept	se	pval
ebi-a-GCST90029034	ebi-a-GCST90027266	Thoracic aortic aneurysms id:ebi-a-GCST90027266	Sunburn susceptibility	0.011805236	0.02	0.496544248