

**S10 Table. Model comparison between the full ACE Cholesky and the best balance of model fit with parsimony for chronic pain<sup>±</sup> and cardiovascular disease (n=2,902): Twins UK**

	Difference of log likelihood	Difference of degree of freedom	P-value	AIC	BIC
Full ACE Cholesky model	Base	Base	NA	-5919.404	-36506.49
AE Cholesky model	5.226656	3	0.16	-5920.177	-36523.1
Best fitting model (Fig 1)	6.476206	4	0.17	-5920.928	-36529.14

A, additive genetic factors; C, shared environmental factors; E, non-shared environmental factors; D, non-additive genetic factors; <sup>±</sup>chronic widespread pain; AIC, Akaike information criterion; BIC, Schwarz's Bayesian information criteria; NA, not applicable.