

Table e-1. Effect of *TOMM40*-523' allele size on risk for LOAD in 4 bin analysis

Haplotype	Comparison	OR	CI	P Value
AF $\epsilon 4$	VS vs S	1.48	0.2-74.2	1
	VS vs L	0.9	0.2-3.5	1
	VS vs VL	0.62	0.2-2.5	0.5343
	VS vs (S+L+VL)	0.62	0.2-2	0.4335
	S vl L	0.53	0-6	1
	S vl VL	0.31	0-3.6	0.3798
	S vs (L+VL)	0.42	0-3.8	0.6639
	L vs VL	0.5	0.1-2.5	0.4701
EUR $\epsilon 4$	VS vs S	0.7	0.2-2.6	0.575
	VS vs L	0.74	0.2-2.3	0.6122
	VS vs VL	0.46	0.1-4	0.3841
	VS vs (S+L+VL)	0.67	0.2-2	0.4767
	S vl L	1.03	0.4-2.7	1
	S vl VL	0.49	0.1-4.2	0.6456
	S vs (L+VL)	0.96	0.4-2.5	1
	L vs VL	0.46	0.1-3.7	0.3867
AF $\epsilon 3$	VS vs S	1.01	0.4-2.7	1
	VS vs L	1.07	0.4-2.8	1
	VS vs VL	1.1	0.5-2.6	0.8427
	VS vs (S+L+VL)	1.36	0.4-4.4	0.5873
	S vl L	2.27	0-191.4	0.5343
	S vl VL	1.27	0.3-5.3	0.7526
	S vs (L+VL)	1.35	0.3-5.4	0.7565
	L vs VL	1.2	0.3-4.9	1
EUR $\epsilon 3$	VS vs S	2.13	0.2-105	0.6705
	VS vs L	0.48	0.1-2	0.3239
	VS vs VL	0.41	0.1-1.2	0.0918
	VS vs (S+L+VL)	0.28	0.1-0.8	0.011
	S vl L	0.09	0-1.1	0.0515
	S vl VL	0.14	0-1.2	0.0755
	S vs (L+VL)	0.13	0-1	0.0433
	L vs VL	0.62	0.2-2.2	0.5706

Statistical test results between *TOMM40*-523' allele sizes among *APOE* $\epsilon 3$ and *APOE* $\epsilon 4$ alleles in the presence of African (AF) and European (EUR) Local Genetic Ancestry using four bin sizes. Abbreviations: 'VS', very short; 'S', short; 'L', long; 'VL', very long.