$\label{eq:table 1: Results on regression analysis in a simulated dataset.}$ 

	Covariate	Est.	Std. Err.	<i>p</i> -value
AD	APOE $\epsilon 4$	0.592	0.083	< 0.0001
	$Gender\_Male$	0.063	0.127	0.618
	Race_White	-0.323	0.175	0.064
	Race_Black	0.248	0.142	0.081
	Education	-0.101	0.011	< 0.0001
$\sigma_b^2$		0.151	0.363	0.338
$\sigma_b^2 \ \sigma_r^2$		0.276	0.263	0.147
CVD	APOE $\epsilon 4$	0.054	0.078	0.490
	$Gender\_Male$	0.331	0.106	0.002
	$Race_White$	0.341	0.139	0.014
	Race_Black	0.170	0.123	0.166
	Education	0.000	0.008	0.978
$ ho_1$		0.951	1.609	0.554
$\rho_2$		1.782	1.179	0.130