

Table S2. R-squared (R^2) between realized and predicted phenotype in training data sets, by data set, simulation scenario, genetic information used and Monte Carlo replicate.

Dataset	FRAMINGHAM						GENEVA			
Scenario	RAND			LOW-MAF			RAND		LOW-MAF	
Information	QTL	Markers	Pedigree	QTL	Markers	Pedigree	QTL	Markers	QTL	Markers
Rep-1	.905	.964	.965	.908	.958	.966	.922	.989	.925	.976
Rep-2	.914	.955	.958	.914	.942	.950	.931	.986	.928	.973
Rep-3	.916	.967	.973	.920	.966	.974	.933	.995	.933	.982
Rep-4	.919	.964	.968	.910	.950	.966	.929	.992	.932	.985
Rep-5	.917	.959	.962	.916	.952	.957	.933	.990	.933	.989
Rep-6	.909	.959	.961	.913	.963	.971	.923	.990	.919	.985
Rep-7	.918	.971	.975	.921	.958	.968	.931	.988	.929	.979
Rep-8	.919	.962	.965	.914	.953	.964	.930	.987	.929	.977
Rep-9	.914	.965	.966	.912	.958	.966	.922	.994	.927	.974
Rep-10	.910	.949	.953	.916	.952	.954	.921	.992	.928	.981
Rep-11	.915	.967	.966	.907	.945	.955	.927	.991	.925	.963
Rep-12	.908	.958	.954	.911	.956	.963	.937	.994	.930	.978
Rep-13	.917	.966	.964	.923	.962	.974	.941	.991	.926	.970
Rep-14	.932	.970	.970	.921	.945	.951	.937	.990	.930	.978
Rep-15	.918	.954	.964	.915	.957	.965	.929	.994	.929	.974
Rep-16	.916	.965	.967	.909	.955	.962	.936	.992	.933	.974
Rep-17	.916	.956	.956	.915	.940	.952	.934	.990	.924	.980
Rep-18	.923	.963	.963	.913	.955	.968	.933	.995	.926	.963
Rep-19	.915	.969	.971	.908	.949	.960	.928	.986	.925	.975
Rep-20	.917	.962	.967	.919	.956	.966	.928	.990	.933	.980
Rep-21	.912	.962	.967	.915	.955	.957	.931	.994	.920	.963
Rep-22	.906	.955	.964	.914	.950	.954	.935	.993	.924	.966
Rep-23	.912	.960	.961	.912	.957	.963	.931	.987	.939	.970
Rep-24	.910	.964	.965	.914	.952	.966	.929	.990	.930	.959
Rep-25	.915	.968	.970	.917	.960	.970	.936	.995	.931	.973
Rep-26	.907	.951	.952	.911	.954	.958	.930	.989	.924	.986
Rep-27	.919	.965	.965	.918	.957	.966	.929	.992	.928	.980
Rep-28	.917	.966	.972	.914	.950	.954	.927	.988	.932	.984
Rep-29	.913	.960	.963	.914	.951	.961	.935	.992	.931	.981
Rep-30	.911	.960	.966	.911	.950	.957	.934	.993	.930	.976
Average	.915	.962	.964	.914	.954	.962	.931	.991	.928	.976
SE	.005	.006	.006	.004	.006	.007	.005	.003	.004	.008