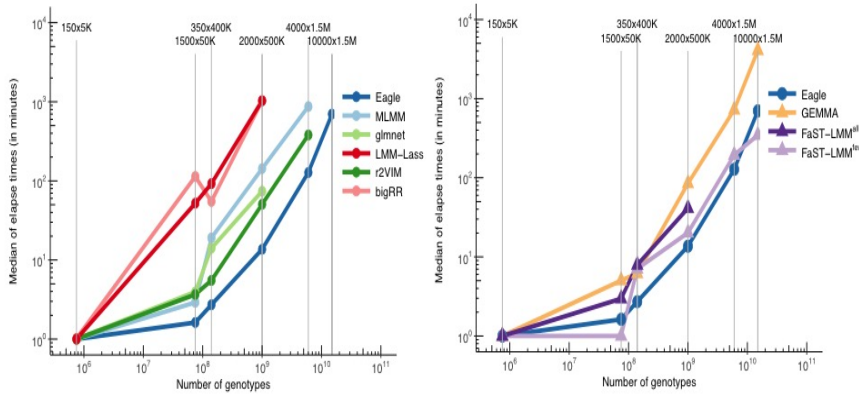


Figure 1: Median run times, in minutes, for the analysis of association study data from the six simulation scenarios. Eagle is compared against five other multiple-locus programs (top left plot) and two single-locus programs (top right plot). The x- and y-axes are on a log scale for improved aesthetics. Eagle has the lowest run-times of the multiple-locus programs, sometimes by orders of magnitude. Eagle can even produce results faster than single-locus programs. The actual median run times for the programs across the scenarios are given in the table. The entries in a bold font correspond to the lowest run-time for a scenario. FaST-LMM^{all} is where the single-locus results are based on all the available SNP data. FaST-LMM^{few} is where the single-locus results as based on a subset of the available SNP data.



		Simulation Scenarios					
Method	Name	150x5K	1500x50K	350x400K	2000x500K	4000x1.5M	10000x1.5M
Multiple	Eagle	0.08	1.62	2.71	13.65	127.63	699.55
	MLMM	0.15	2.91	19.04	143.01	870.84	
	glmnet	0.11	3.95	14.06	74.03		
	r2VIM	0.09	3.66	5.51	50.59	380.52	
	bigRR	1.01	113.35	54.99	1030.61		
	LMM-Lasso	0.57	52.08	92.20	1031.85		
Single	GEMMA	0.02	5.02	6.17	84.83	723.33	4071.60
	FaST-LMM ^{few}	0.01	0.80	7.07	20.16	193.90	346.19
	FaST-LMM ^{all}	0.03	2.96	7.90	41.27		