

In Silico Genotyping: Determining Genotypes in Pedigrees by Inference

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Supplementary Table 1. Detailed Comparisons of Simulated Data

Family Structures and Individuals Genotyped at Candidate SNP	Missing Genotypes			Power				Relative Efficiency versus*...	
	% of Total	% Inferred	Error Rate	Simulated H ² *	Observed Genotypes	Inferred Genotypes	All Genotypes	Alternative Design A*	Alternative Design B*
CEPH Pedigrees In Table 1 of main manuscript	46.4	82.4	0.4	0.5	0.0	83.9	97.1	NA	NA
10 3-generation pedigrees with 8 offspring each									
... grandparents and parents genotyped	57.1	82.4	0.4	0.5	0.0	74.1	92.2	NA	NA
... grandparents, parents and one child genotyped	50.0	99.2	0.7	0.5	0.0	91.2	92.2	NA	NA
100 3-generation pedigrees with 8 offspring each									
... grandparents and parents genotyped	57.1	82.4	0.4	0.05	0.3	44.3	82.2	5.13	1.78
... grandparents, parents and one child genotyped	50.0	99.2	0.7	0.05	1.3	70.8	82.2	3.87	1.93
500 nuclear families with 3 offspring each									
... parents and one child genotyped	40.0	94.6	1.1	0.05	4.7	62.1	82.7	2.40	1.37
... parents and two children genotyped	20.0	96.9	0.6	0.05	40.8	77.4	82.7	1.41	1.18
500 nuclear families with 2 offspring each									
...parents and one child genotyped	25.0	94.7	1.0	0.05	4.5	27.3	41.2	1.70	1.14

- see “relative efficiency calculation” section for description of Design A and Design B.