



Figure S10 Comparison of theoretical and empirical power of allelic association tests with low MAF. Empirical power was estimated from 1,000,000 replicate simulations of data for each of several parameter sets, using the z_1^2 test and $\alpha = 5 \times 10^{-8}$, while theoretical power was estimated using the non-centrality parameter λ_1 defined in the Appendix. The parameter sets consist of all combinations of $GRR \in \{1.1, 1.2, 1.3, 1.4\}$, $N_{cases} = N_{controls} \in \{1000, 5000, 10000\}$, population prevalence of 0.05, and allelic frequency $p \in \{0.005, 0.01, 0.02, 0.03, 0.04, 0.05\}$. Each plot is for a different MAF and each point represents the results for one parameter set.