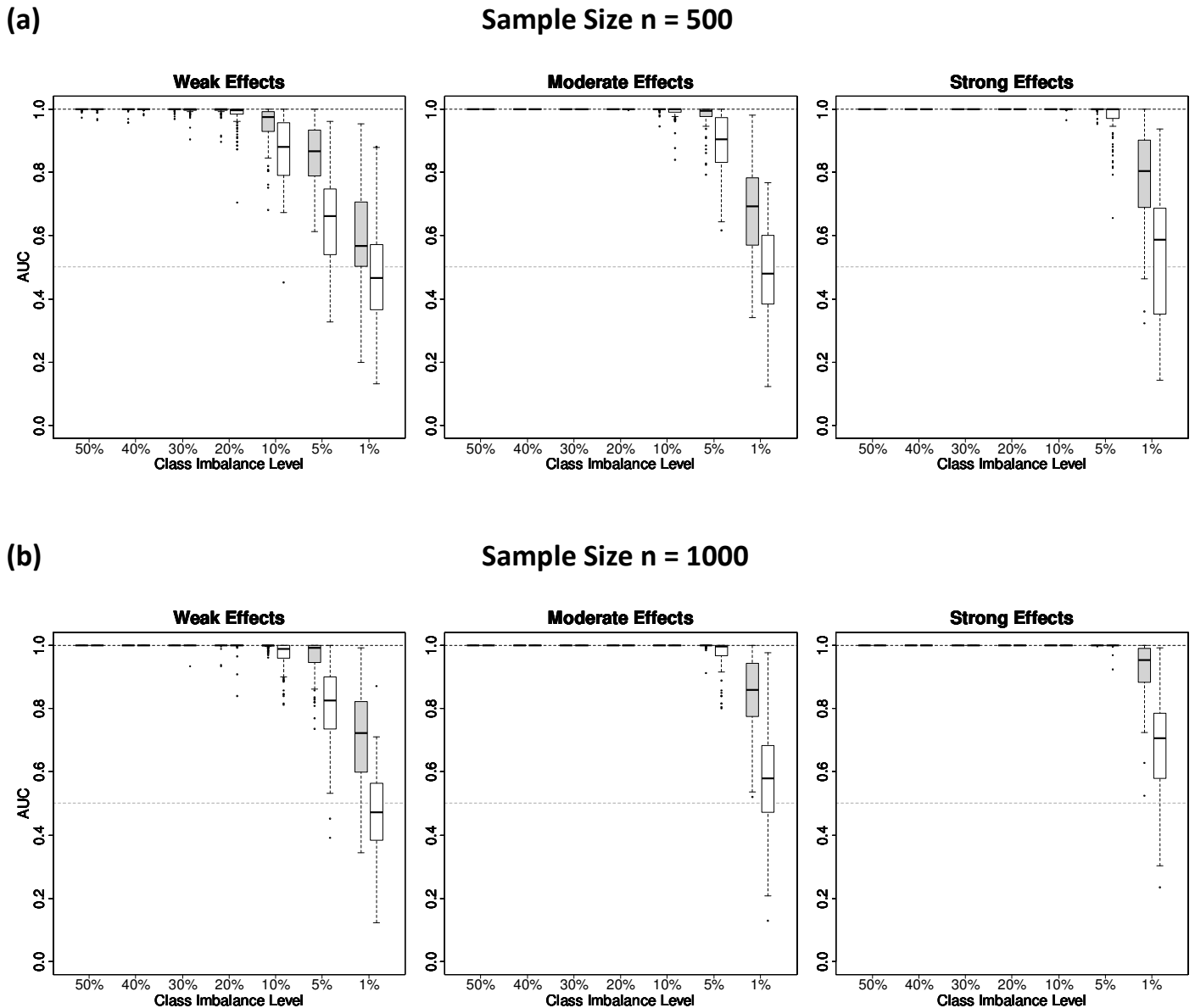


Additional File 2

Performance comparison between the AUC-based permutation VIM and the error-rate-based permutation VIM for sample sizes $n = 500$ and $n = 1000$



Distribution of AUC-values for 100 simulated datasets for AUC-based permutation VIM (filled) and error-rate-based permutation VIM (unfilled) for different class imbalances. The AUC is used to assess the ability of a VIM to discriminate between predictors with an effect and predictors without an effect. Distributions are shown for a total sample size of **(a)** $n = 500$ and **(b)** $n = 1000$.