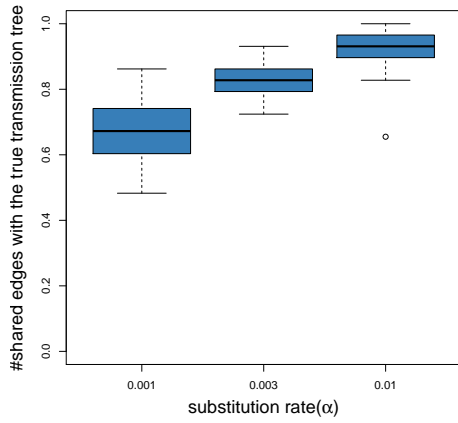
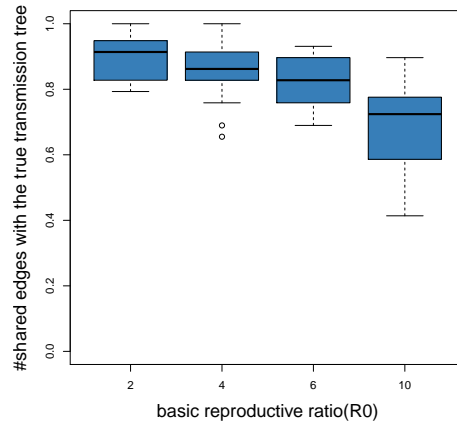


Supporting information

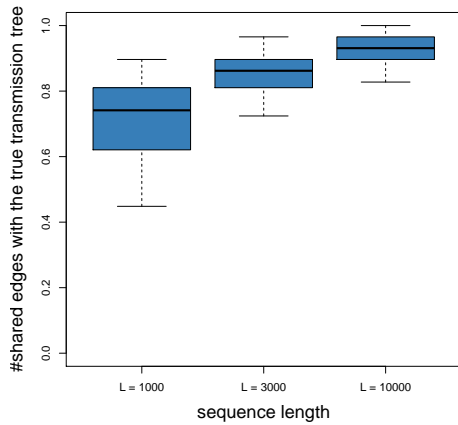
Supporting figures



(a)



(b)



(c)

Fig S1. Performance of the proposed method in transmission tree reconstruction against different parameters a) substitution rate b) basic reproductive number c) sequence length.

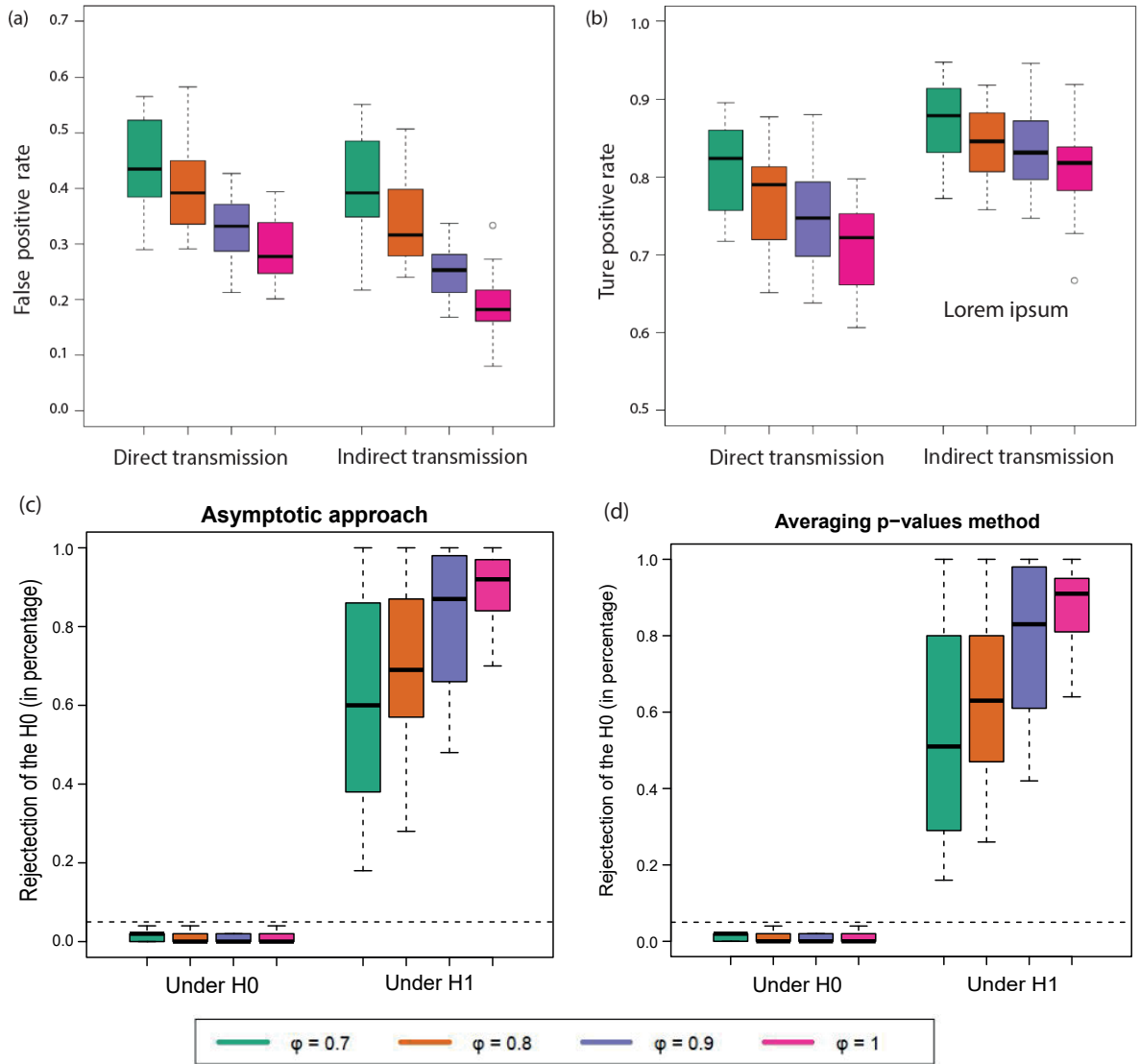


Fig S2. The performance of the proposed method is assessed in terms of a) false positive rate and b) true positive rate for identification of both direct and indirect transmission links for different sampling rates. In addition, type I error and statistical power for testing association of attributes and linkage probability are assessed for c) averaging p-values and d) asymptotic approaches.