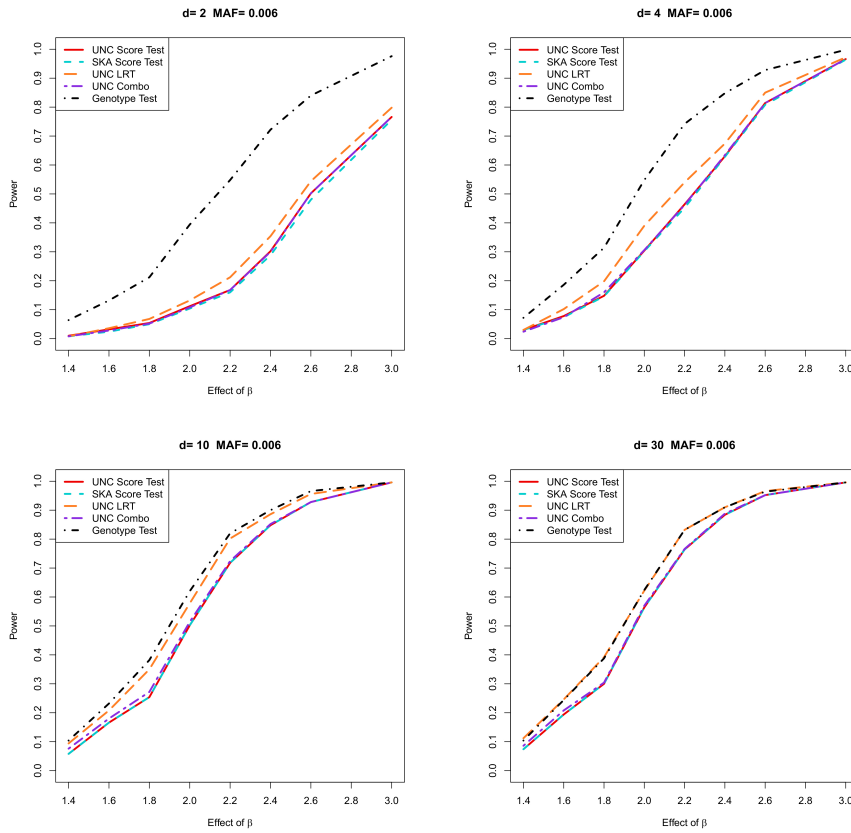
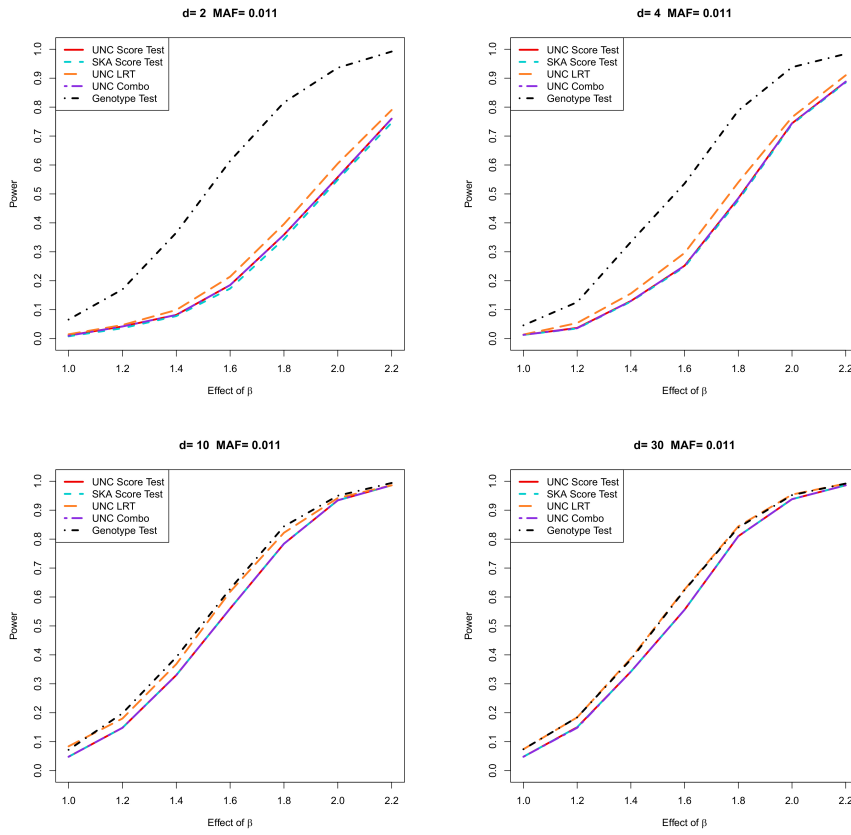


Supplementary Figure 4: Powers of single SNP testing for binary trait with  $p_{threshold} = 0.01$ ,  $MAF=0.006$  and  $n = 1000$ .



Supplementary Figure 5: Powers of single SNP testing for binary trait with  $p_{threshold} = 0.01$ ,  $MAF=0.011$  and  $n = 1000$ .



Supplementary Figure 6: Powers of single SNP testing for binary trait with  $p_{threshold} = 0.01$ ,  $MAF=0.02$  and  $n = 1000$ .

