

**Table S8. A pairwise comparison by paired  $t$ -test of the ranking results in test based on AUCs.**

**(A)  $p$ -values of comparing  $AUC_{50}$**

	BiRW(0.8,4,4)	PRINCE(0.1)	RWRH(0.5,0.7,0.5)	CIPHER SP	CIPHER DN
BiRW	NaN				
PRINCE	1.56E-05	NaN			
RWRH	0.0131	0.9683	NaN		
CIPHER SP	4.11E-11	0.0003	2.76E-08	NaN	
CIPHER DN	3.93E-11	5.49E-05	2.72E-09	0.0613	NaN

**(B)  $p$ -values of comparing  $AUC_{100}$**

	BiRW(0.8,4,4)	PRINCE(0.1)	RWRH(0.5,0.7,0.5)	CIPHER SP	CIPHER DN
BiRW	NaN				
PRINCE	1.27E-07	NaN			
RWRH	0.0023	0.9836	NaN		
CIPHER SP	7.61E-12	0.0004	3.98E-08	NaN	
CIPHER DN	3.99E-11	1.58E-04	2.43E-08	0.1087	NaN