Additional file 1

Table 1. The comparison results of PAAD dataset on the proposed method, classic LASSO and previous wavelet-based methods with diverse predictors

	Wavelet function	AUC at 3 years	AUC at 5 years	gene number
	db2	0.707	0.825	7
	db3	0.707	0.825	7
	db4	0.707	0.825	7
db	db5	0.787	0.845	6
	db6	0.799	0.866	6
	db7	0.804	0.867	5
	db8	0.707	0.825	5
bior	bior1.1	0.797	0.858	5
	bior1.3	0.769	0.838	6
	bior1.5	0.787	0.937	5
	bior2.2	0.681	0.809	4
	bior2.4	0.736	0.857	8
	bior2.6	0.707	0.790	6
	bior2.8	0.729	0.724	8
	bior3.1	0.761	0.908	7
	bior3.3	0.760	0.908	7
	bior3.5	0.760	0.890	6
	bior3.7	0.691	0.800	5
	bior3.9	0.732	0.857	6
	bior4.4	0.751	0.839	4
	bior5.5	0.795	0.881	8
	bior6.8	0.697	0.792	6
sym	sym2	0.749	0.873	8
	sym3	0.806	0.904	5
	sym4	0.691	0.756	7
	sym5	0.767	0.855	5
	sym6	0.658	0.837	5
	sym7	0.788	0.825	6
	sym8	0.787	0.845	7
coif	coif2	0.700	0.785	9
	coif3	0.775	0.745	6
	coif4	0.696	0.788	5
	coif5	0.700	0.785	9
haar		0.618	0.756	5
naar				_
dmeyer		0.823	0.869	7
	rbio1.1	0.823	0.826	11

LASSO		0.782	0.802	11
SWT-CNN	sym4	0.721	0.859	8
	fk22	0.733	0.856	8
	fk18	0.689	0.792	7
	fk14	0.672	0.861	5
fk	fk8	0.682	0.827	4
	fk6	0.681	0.859	7
	fk4	0.687	0.873	6
	rbio6.8	0.784	0.817	7
	rbio5.5	0.762	0.760	10
	rbio4.4	0.795	0.824	7
	rbio3.9	0.693	0.725	6
	rbio3.7	0.783	0.858	8
	rbio3.5	0.749	0.774	7
	rbio3.3	0.595	0.719	6
rbio	rbio3.1	0.812	0.834	9
	rbio2.8	0.852	0.897	10
	rbio2.6	0.790	0.894	9
	rbio2.4	0.799	0.894	9
	rbio2.2	0.823	0.884	7
	rbio1.5	0.766	0.827	8

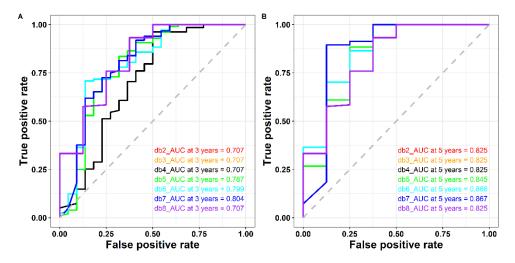


Figure 1. The performance of PAAD dataset on db basis function.

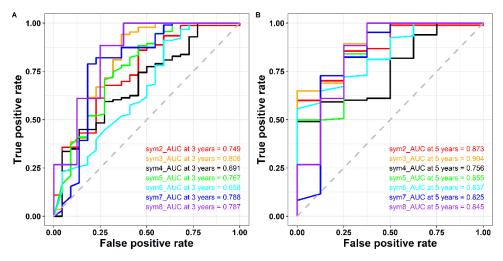


Figure 2. The performance of PAAD dataset on sym basis function.

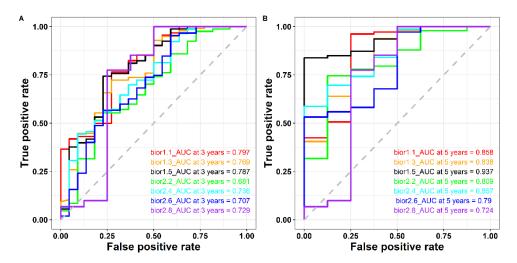


Figure 3. The performance of PAAD dataset on bior basis function (bior1.1~bior2.8).

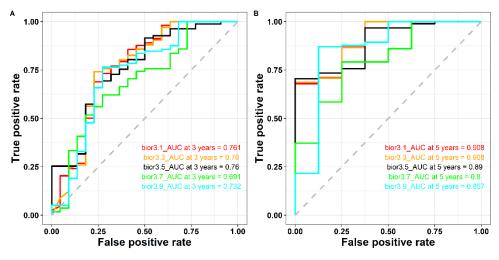


Figure 4. The performance of PAAD dataset on bior basis function (bior3.1~bior3.9).

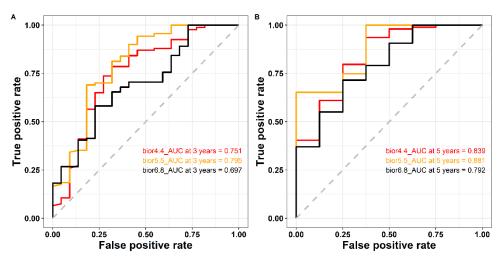


Figure 5. The performance of PAAD dataset on bior basis function (bior4.4~bior6.8).

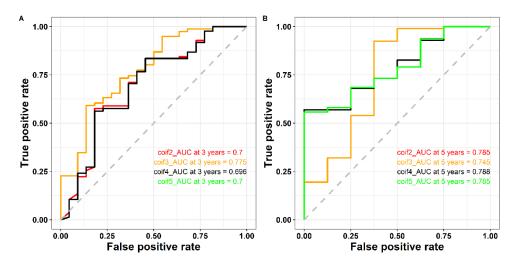


Figure 6. The performance of PAAD dataset on coif basis function.

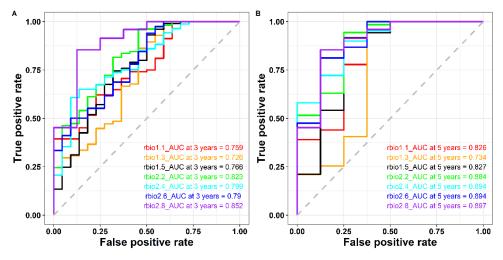


Figure 7. The performance of PAAD dataset on rbio basis function (rbio1.1~rbio2.8).

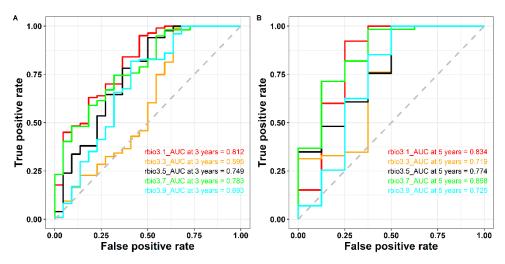


Figure 8. The performance of PAAD dataset on rbio basis function (rbio3.1~rbio3.9).

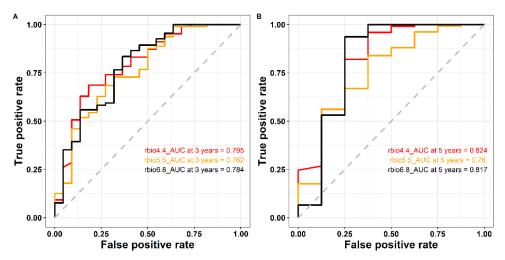


Figure 9. The performance of PAAD dataset on rbio basis function (rbio4.4~rbio6.8).

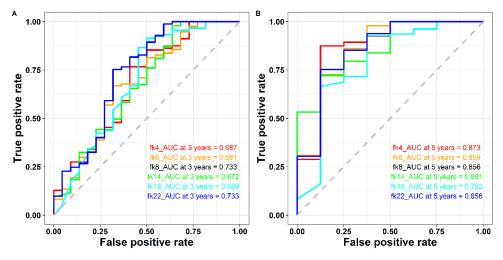


Figure 10. The performance of PAAD dataset on fk basis function.

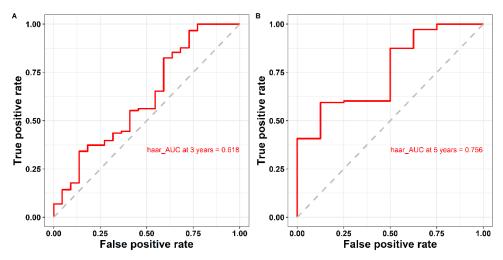


Figure 11. The performance of PAAD dataset on haar basis function.

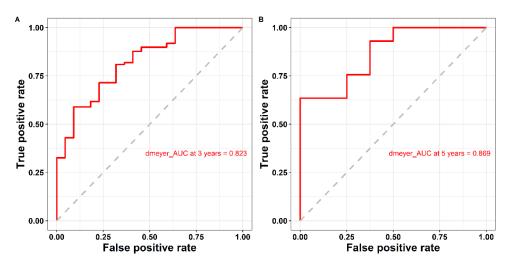


Figure 12. The performance of PAAD dataset on dmeyer basis function.

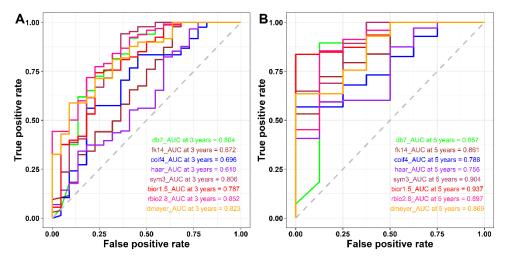


Figure 13. The performance of PAAD dataset on all basis functions (Take the smoothness corresponding to the best result for each basis function).