

Table S1. Discriminant results by different classifiers using 5-fold CV based on six candidate wavelet filters (%)

modwt_filter		Rate (Mean $\pm$ SD)							
		LDA	Logreg	KNN	SVM	RF	Nbayes	Adaboost	NNet
Accuracy	Haar	91.75 $\pm$ 4.01	92.11 $\pm$ 2.05	72.76 $\pm$ 13.82	84.15 $\pm$ 10.76	81.81 $\pm$ 8.97	80.18 $\pm$ 8.34	83.16 $\pm$ 8.84	91.68 $\pm$ 3.21
	D4	90.44 $\pm$ 3.20	91.80 $\pm$ 3.51	77.21 $\pm$ 8.12	88.12 $\pm$ 4.95	81.37 $\pm$ 8.23	81.84 $\pm$ 7.38	81.61 $\pm$ 7.97	89.33 $\pm$ 4.48
	D6	92.21 $\pm$ 4.36	90.45 $\pm$ 3.45	75.93 $\pm$ 8.42	86.52 $\pm$ 5.76	78.72 $\pm$ 9.23	79.09 $\pm$ 8.34	78.14 $\pm$ 7.48	87.38 $\pm$ 5.32
	D8	91.61 $\pm$ 3.94	91.59 $\pm$ 2.00	71.36 $\pm$ 7.58	84.53 $\pm$ 6.23	78.51 $\pm$ 8.71	78.22 $\pm$ 7.37	80.44 $\pm$ 6.40	91.47 $\pm$ 1.98
	LA8	93.18 $\pm$ 3.65	92.44 $\pm$ 3.61	76.76 $\pm$ 5.85	83.56 $\pm$ 4.81	79.28 $\pm$ 7.18	78.97 $\pm$ 6.22	79.73 $\pm$ 8.03	91.47 $\pm$ 4.93
	C6	91.53 $\pm$ 2.37	90.45 $\pm$ 2.95	80.09 $\pm$ 8.46	85.86 $\pm$ 5.35	79.43 $\pm$ 8.42	81.10 $\pm$ 3.80	79.68 $\pm$ 9.73	84.97 $\pm$ 7.46
AUC	Haar	97.58 $\pm$ 2.48	97.51 $\pm$ 1.63	78.81 $\pm$ 13.58	90.36 $\pm$ 7.18	90.29 $\pm$ 8.37	86.49 $\pm$ 8.14	91.00 $\pm$ 5.78	97.16 $\pm$ 2.31
	D4	96.81 $\pm$ 1.71	97.15 $\pm$ 1.63	86.38 $\pm$ 6.05	95.42 $\pm$ 3.34	87.72 $\pm$ 8.99	90.08 $\pm$ 4.82	89.17 $\pm$ 7.54	91.87 $\pm$ 3.48
	D6	97.29 $\pm$ 1.45	96.15 $\pm$ 0.96	84.58 $\pm$ 6.53	92.38 $\pm$ 3.17	86.69 $\pm$ 9.89	86.58 $\pm$ 6.95	87.29 $\pm$ 6.87	90.16 $\pm$ 3.87
	D8	96.55 $\pm$ 2.16	96.65 $\pm$ 0.53	80.71 $\pm$ 6.53	91.12 $\pm$ 4.30	86.69 $\pm$ 8.75	85.75 $\pm$ 8.10	87.11 $\pm$ 6.13	95.88 $\pm$ 0.97
	LA8	97.92 $\pm$ 1.66	97.18 $\pm$ 1.77	86.69 $\pm$ 4.61	91.28 $\pm$ 3.99	88.05 $\pm$ 7.12	89.12 $\pm$ 3.81	87.40 $\pm$ 6.85	96.60 $\pm$ 1.84
	C6	97.15 $\pm$ 1.06	96.74 $\pm$ 1.03	88.88 $\pm$ 6.21	93.34 $\pm$ 4.05	86.70 $\pm$ 9.64	89.80 $\pm$ 3.22	86.90 $\pm$ 8.85	88.34 $\pm$ 5.88
Specificity	Haar	91.27 $\pm$ 5.53	88.97 $\pm$ 5.05	73.51 $\pm$ 13.34	79.03 $\pm$ 12.34	73.49 $\pm$ 11.45	78.16 $\pm$ 8.48	78.79 $\pm$ 9.82	87.54 $\pm$ 7.35
	D4	88.07 $\pm$ 4.69	89.06 $\pm$ 5.56	75.44 $\pm$ 8.64	84.15 $\pm$ 5.67	69.57 $\pm$ 13.55	76.35 $\pm$ 12.78	79.06 $\pm$ 9.59	87.16 $\pm$ 6.23
	D6	90.75 $\pm$ 7.77	88.75 $\pm$ 4.58	79.97 $\pm$ 7.18	84.08 $\pm$ 8.22	67.85 $\pm$ 14.21	76.53 $\pm$ 11.11	75.16 $\pm$ 11.42	87.76 $\pm$ 8.04
	D8	89.78 $\pm$ 6.66	89.01 $\pm$ 4.68	79.55 $\pm$ 8.52	80.02 $\pm$ 4.35	65.54 $\pm$ 11.08	78.34 $\pm$ 9.91	76.18 $\pm$ 6.33	87.43 $\pm$ 4.91
	LA8	91.45 $\pm$ 6.98	88.04 $\pm$ 9.71	75.81 $\pm$ 2.76	81.18 $\pm$ 7.78	66.30 $\pm$ 8.43	85.68 $\pm$ 9.14	75.41 $\pm$ 11.00	85.02 $\pm$ 12.13
	C6	88.23 $\pm$ 6.47	88.68 $\pm$ 5.00	79.23 $\pm$ 7.36	82.37 $\pm$ 6.96	69.38 $\pm$ 12.68	79.16 $\pm$ 5.59	75.52 $\pm$ 7.44	82.99 $\pm$ 9.60
Recall	Haar	93.20 $\pm$ 5.30	94.57 $\pm$ 2.28	72.59 $\pm$ 14.44	89.35 $\pm$ 10.08	89.86 $\pm$ 9.21	78.54 $\pm$ 11.39	87.98 $\pm$ 10.36	95.77 $\pm$ 2.79
	D4	92.20 $\pm$ 3.52	93.46 $\pm$ 2.80	77.67 $\pm$ 12.15	90.96 $\pm$ 5.39	89.52 $\pm$ 6.21	84.96 $\pm$ 6.23	83.66 $\pm$ 13.88	90.09 $\pm$ 3.63
	D6	93.67 $\pm$ 2.71	90.35 $\pm$ 4.50	74.41 $\pm$ 13.28	88.60 $\pm$ 5.53	86.57 $\pm$ 8.45	77.56 $\pm$ 11.08	82.7 $\pm$ 7.42	85.67 $\pm$ 9.57
	D8	92.72 $\pm$ 2.32	92.35 $\pm$ 2.61	67.59 $\pm$ 14.13	87.58 $\pm$ 7.85	87.55 $\pm$ 7.49	75.61 $\pm$ 10.34	84.28 $\pm$ 7.10	93.09 $\pm$ 2.75
	LA8	94.55 $\pm$ 3.85	94.26 $\pm$ 5.07	76.86 $\pm$ 12.06	85.53 $\pm$ 11.04	87.04 $\pm$ 11.07	69.26 $\pm$ 16.99	82.89 $\pm$ 11.40	94.34 $\pm$ 5.49

Precision	C6	93.73±2.62	91.16±4.85	79.99±13.80	87.92±9.23	86.17±10.95	80.47±6.98	82.98±15.05	85.40±7.80
	Haar	93.25±6.31	92.25±5.73	78.46±18.67	85.00±14.56	81.86±14.30	83.74±12.71	84.89±13.10	90.50±8.98
	D4	91.29±7.69	92.11±7.64	82.52±9.51	88.44±9.08	80.32±13.58	83.52±13.42	84.29±12.60	90.90±8.11
	D6	92.91±8.36	92.07±5.98	83.26±11.66	87.02±10.86	78.76±14.76	83.27±11.9	80.75±15.60	90.89±9.36
	D8	92.50±8.02	92.51±5.28	81.53±11.83	84.70±11.35	77.82±13.88	83.41±13.22	82.55±12.48	91.56±5.48
	LA8	94.02±7.95	93.05±8.32	81.85±10.45	85.85±11.43	78.78±12.77	88.88±6.89	82.00±13.85	91.76±9.50
F-measure	C6	92.02±7.93	91.89±7.36	84.66±8.36	87.19±9.42	79.28±14.45	84.50±9.80	81.46±13.13	87.2±13.10
	Haar	93.00±2.99	93.26±2.21	74.93±15.3	86.31±9.85	84.80±8.58	80.98±11.75	85.54±8.28	92.76±4.01
	D4	91.53±3.88	92.63±4.30	79.45±8.51	89.39±5.38	84.15±8.78	83.78±8.50	83.11±10.26	90.39±5.38
	D6	93.13±4.78	91.14±4.63	77.70±9.16	87.55±7.27	81.80±10.00	80.12±10.8	80.94±8.96	87.82±7.58
	D8	92.50±4.89	92.38±3.38	72.91±9.52	85.84±8.48	81.83±9.32	79.06±10.87	82.85±7.34	92.26±3.62
	LA8	94.06±4.04	93.36±4.31	78.79±9.21	84.92±7.74	82.01±9.49	77.28±13.11	81.69±10.21	92.68±5.18
	C6	92.62±3.28	91.31±4.20	81.67±9.18	87.08±6.55	81.92±10.76	82.36±7.97	81.50±11.61	85.88±9.20
