

Supplementary Material S5. *SNs, SPs, ACCs*, and Youden's Indexs obtained from the Dagging, RF classifiers and IFS method across different numbers of features.

(1) Dagging

Number of features	<i>SN</i>	<i>SP</i>	<i>ACC</i>	Youden's Index
10	0.761	0.526	0.534	0.287
20	0.754	0.581	0.587	0.335
30	0.787	0.620	0.625	0.407
40	0.799	0.624	0.630	0.423
50	0.810	0.667	0.672	0.477
60	0.808	0.675	0.679	0.483
70	0.833	0.701	0.705	0.534
80	0.832	0.708	0.712	0.539
90	0.842	0.724	0.728	0.566
100	0.840	0.727	0.731	0.567
110	0.841	0.736	0.740	0.577
120	0.840	0.744	0.747	0.584
130	0.845	0.751	0.754	0.596
140	0.840	0.762	0.765	0.603
150	0.840	0.763	0.766	0.603
160	0.844	0.768	0.771	0.612
170	0.837	0.777	0.779	0.614
180	0.837	0.783	0.784	0.619
190	0.836	0.786	0.787	0.622
200	0.837	0.790	0.792	0.628
210	0.836	0.807	0.808	0.643
220	0.834	0.820	0.821	0.654
230	0.837	0.823	0.824	0.660
240	0.832	0.830	0.830	0.663
250	0.837	0.858	0.857	0.695
260	0.849	0.871	0.870	0.720
270	0.846	0.885	0.883	0.731
280	0.843	0.892	0.890	0.735
290	0.861	0.920	0.918	0.781
300	0.862	0.921	0.919	0.783
310	0.862	0.923	0.921	0.786
320	0.864	0.924	0.922	0.788
330	0.870	0.926	0.924	0.796
340	0.868	0.927	0.925	0.796
350	0.868	0.927	0.925	0.795
360	0.872	0.928	0.926	0.800

370	0.868	0.928	0.926	0.796
380	0.871	0.929	0.927	0.800
390	0.873	0.930	0.928	0.802
400	0.876	0.930	0.928	0.805
410	0.872	0.930	0.928	0.802
420	0.875	0.930	0.928	0.805
430	0.874	0.931	0.929	0.804
440	0.876	0.930	0.928	0.806
450	0.877	0.930	0.928	0.807
460	0.876	0.931	0.929	0.807
470	0.879	0.930	0.928	0.809
480	0.879	0.931	0.929	0.810
490	0.879	0.931	0.929	0.810
500	0.881	0.931	0.929	0.811
510	0.876	0.932	0.930	0.808
520	0.880	0.931	0.929	0.811
530	0.882	0.932	0.930	0.814
540	0.881	0.931	0.930	0.812
550	0.876	0.932	0.930	0.807
560	0.882	0.931	0.930	0.813
570	0.882	0.932	0.930	0.814
580	0.886	0.932	0.930	0.817
590	0.884	0.933	0.931	0.818
600	0.885	0.933	0.932	0.818
610	0.883	0.934	0.932	0.817
620	0.886	0.933	0.932	0.819
630	0.887	0.934	0.933	0.821
640	0.884	0.933	0.932	0.818
650	0.887	0.935	0.933	0.822
660	0.896	0.939	0.937	0.834
670	0.896	0.939	0.937	0.835
680	0.895	0.940	0.939	0.835
690	0.905	0.948	0.947	0.853
700	0.907	0.949	0.948	0.856
710	0.907	0.949	0.948	0.856
720	0.911	0.951	0.950	0.862
730	0.911	0.952	0.951	0.863
740	0.912	0.952	0.951	0.864
750	0.913	0.953	0.951	0.865
760	0.911	0.953	0.951	0.864
770	0.911	0.953	0.952	0.864
780	0.916	0.953	0.952	0.869

790	0.915	0.953	0.952	0.868
800	0.915	0.953	0.951	0.867
810	0.914	0.953	0.952	0.866
820	0.916	0.952	0.951	0.869
830	0.912	0.953	0.952	0.865
840	0.915	0.953	0.951	0.867
850	0.912	0.953	0.952	0.866
851	0.915	0.954	0.953	0.869
852	0.911	0.953	0.952	0.865
853	0.914	0.953	0.952	0.867
854	0.912	0.953	0.952	0.865
855	0.913	0.953	0.952	0.866
856	0.915	0.953	0.952	0.869
857	0.910	0.953	0.952	0.863
858	0.914	0.953	0.951	0.867
859	0.911	0.953	0.952	0.864
860	0.913	0.953	0.952	0.866
861	0.913	0.953	0.952	0.866
862	0.912	0.953	0.952	0.866
863	0.912	0.953	0.952	0.865
864	0.912	0.953	0.952	0.866
865	0.912	0.954	0.952	0.866
866	0.914	0.954	0.952	0.868
867	0.914	0.953	0.952	0.867
868	0.915	0.954	0.952	0.869
869	0.916	0.953	0.952	0.869
870	0.917	0.953	0.952	0.871
871	0.912	0.954	0.952	0.865
872	0.913	0.954	0.953	0.868
873	0.915	0.954	0.953	0.870
874	0.912	0.955	0.953	0.867
875	0.915	0.954	0.953	0.870
876	0.912	0.954	0.952	0.865
877	0.913	0.954	0.953	0.867
878	0.916	0.954	0.953	0.870
879	0.915	0.954	0.953	0.869
880	0.911	0.955	0.953	0.865
881	0.914	0.954	0.953	0.869
882	0.911	0.954	0.952	0.865
883	0.911	0.954	0.953	0.865
884	0.914	0.954	0.953	0.868
885	0.911	0.954	0.953	0.866

886	0.914	0.955	0.953	0.868
887	0.915	0.954	0.953	0.869
888	0.911	0.954	0.953	0.865
889	0.913	0.954	0.952	0.866
890	0.913	0.954	0.952	0.867
891	0.910	0.954	0.953	0.864
892	0.913	0.954	0.953	0.867
893	0.912	0.954	0.953	0.866
894	0.911	0.954	0.953	0.865
895	0.912	0.954	0.953	0.866
896	0.913	0.954	0.953	0.867
897	0.914	0.954	0.953	0.868
898	0.912	0.954	0.953	0.866
899	0.909	0.954	0.953	0.863
900	0.909	0.954	0.953	0.864
901	0.914	0.954	0.953	0.868
902	0.911	0.954	0.953	0.865
903	0.911	0.954	0.952	0.864
904	0.913	0.954	0.953	0.867
905	0.914	0.954	0.953	0.869
906	0.912	0.955	0.953	0.867
907	0.909	0.955	0.953	0.864
908	0.909	0.954	0.952	0.863
909	0.915	0.955	0.953	0.869
910	0.912	0.954	0.953	0.866
911	0.912	0.954	0.953	0.867
912	0.915	0.954	0.952	0.869
913	0.908	0.954	0.952	0.862
914	0.911	0.954	0.953	0.865
915	0.911	0.954	0.953	0.865
916	0.914	0.954	0.953	0.868
917	0.912	0.954	0.953	0.866
918	0.911	0.954	0.952	0.865
919	0.914	0.954	0.953	0.869
920	0.911	0.954	0.952	0.865

(2) RF

Number of features	<i>SN</i>	<i>SP</i>	<i>ACC</i>	Youden's Index
10	0.126	0.992	0.963	0.118
20	0.174	0.995	0.967	0.169
30	0.260	0.993	0.969	0.254

40	0.269	0.993	0.969	0.262
50	0.333	0.989	0.967	0.322
60	0.351	0.986	0.965	0.337
70	0.394	0.983	0.963	0.377
80	0.413	0.981	0.962	0.394
90	0.452	0.977	0.959	0.429
100	0.467	0.975	0.958	0.442
110	0.492	0.973	0.957	0.465
120	0.515	0.970	0.955	0.486
130	0.524	0.971	0.956	0.494
140	0.528	0.969	0.954	0.497
150	0.538	0.967	0.953	0.505
160	0.549	0.967	0.953	0.516
170	0.568	0.966	0.952	0.533
180	0.577	0.965	0.952	0.541
190	0.577	0.965	0.952	0.541
200	0.586	0.964	0.951	0.550
210	0.628	0.964	0.952	0.592
220	0.631	0.963	0.952	0.594
230	0.628	0.964	0.953	0.592
240	0.630	0.963	0.952	0.593
250	0.656	0.967	0.956	0.623
260	0.665	0.968	0.958	0.633
270	0.678	0.969	0.959	0.647
280	0.678	0.970	0.960	0.648
290	0.699	0.974	0.965	0.673
300	0.718	0.974	0.966	0.692
310	0.716	0.974	0.965	0.689
320	0.714	0.973	0.965	0.688
330	0.709	0.974	0.966	0.683
340	0.717	0.975	0.967	0.692
350	0.718	0.974	0.966	0.692
360	0.720	0.974	0.966	0.695
370	0.725	0.973	0.965	0.698
380	0.709	0.974	0.965	0.683
390	0.726	0.973	0.965	0.699
400	0.725	0.973	0.965	0.698
410	0.721	0.973	0.965	0.694
420	0.713	0.974	0.965	0.686
430	0.719	0.974	0.965	0.693
440	0.715	0.974	0.965	0.689
450	0.706	0.974	0.965	0.680

460	0.717	0.974	0.965	0.691
470	0.706	0.974	0.965	0.679
480	0.708	0.974	0.965	0.682
490	0.710	0.974	0.965	0.684
500	0.699	0.973	0.964	0.672
510	0.714	0.974	0.965	0.688
520	0.716	0.974	0.966	0.690
530	0.710	0.974	0.965	0.684
540	0.709	0.974	0.965	0.683
550	0.718	0.974	0.966	0.692
560	0.706	0.974	0.965	0.680
570	0.705	0.974	0.965	0.679
580	0.701	0.975	0.965	0.676
590	0.709	0.975	0.966	0.684
600	0.706	0.974	0.965	0.680
610	0.702	0.974	0.965	0.675
620	0.711	0.974	0.966	0.685
630	0.715	0.975	0.966	0.690
640	0.714	0.976	0.967	0.689
650	0.707	0.976	0.967	0.683
660	0.705	0.977	0.968	0.682
670	0.702	0.978	0.968	0.679
680	0.710	0.978	0.969	0.687
690	0.717	0.981	0.972	0.698
700	0.723	0.981	0.973	0.704
710	0.726	0.981	0.973	0.707
720	0.710	0.981	0.972	0.691
730	0.714	0.981	0.972	0.696
740	0.704	0.982	0.972	0.686
750	0.714	0.982	0.973	0.697
760	0.710	0.981	0.972	0.692
770	0.709	0.981	0.972	0.690
780	0.714	0.982	0.973	0.696
790	0.706	0.981	0.972	0.688
800	0.713	0.983	0.974	0.696
810	0.712	0.983	0.973	0.694
820	0.703	0.982	0.973	0.686
830	0.711	0.983	0.974	0.694
840	0.717	0.982	0.973	0.699
850	0.712	0.982	0.973	0.694
860	0.714	0.983	0.974	0.697
870	0.720	0.985	0.977	0.705

880	0.734	0.985	0.977	0.719
890	0.750	0.986	0.978	0.736
900	0.734	0.986	0.978	0.720
910	0.741	0.986	0.978	0.727
920	0.739	0.986	0.978	0.725