Supplementary Tables

Table A1. Feature selectors used for gastric cancer for comparative basis

Feature Selection	Classifier	Settings (Top n features)	Accuracy	Kappa
RF	**SVM**	Top 10 features	0.8925	0.7852
		Top 50 features	0.914	0.828
		Top 100 features	0.9247	0.8495
		Top 500 features	0.9247	0.8495
		Top 1000 features	0.914	0.8281
RF	**LR**	Top 10 features	0.892473	0.78512
		Top 50 features	0.946237	0.892486
		Top 100 features	0.935484	0.871012
		Top 500 features	0.935484	0.871012
		Top 1000 features	0.924731	0.849619
RF	**RF**	Top 10 features	0.946237	0.892486
		Top 50 features	0.935484	0.870953
		Top 100 features	0.935484	0.870953
		Top 500 features	0.956989	0.913969
Variance Threshold	**XGB**	0.001	0.935484	0.871012
		0.005	0.935484	0.871012
		0.01	0.946237	0.892486
		0.05	0.935484	0.871012
		0.1	0.946237	0.892486
Variance Threshold	**SVM**	0.001	0.913978	0.827937
		0.005	0.892473	0.785021

		0.01	0.88172	0.763578
		0.05	0.892473	0.78512
		0.1	0.892473	0.78512
Variance Threshold	**LR**	0.001	0.913978	0.828176
		0.005	0.903226	0.806742
		0.01	0.913978	0.828176
		0.05	0.924731	0.849549
		0.1	0.924731	0.849549
Variance Threshold	**RF**	0.001	0.935484	0.871012
		0.005	0.935484	0.871012
		0.01	0.913978	0.828017
		0.05	0.935484	0.871012
		0.1	0.935484	0.871012
Mutual Information	**SVM**	Top 10 features	0.903226	0.806653
		Top 50 features	0.913978	0.828096
		Top 100 features	0.913978	0.828096
		Top 500 features	0.913978	0.828096
		Top 1000 features	0.913978	0.828096
Mutual Information	**LR**	Top 10 features	0.892473	0.785219
		Top 50 features	0.946237	0.892486
		Top 100 features	0.946237	0.892486
		Top 500 features	0.903226	0.806653
		Top 1000 features	0.946237	0.892535
Mutual Information	**RF**	Top 10 features	0.946237	0.892486
		Top 50 features	0.935484	0.870953
		Top 100 features	0.935484	0.870953
		Top 500 features	0.946237	0.892486

		Top 1000 features	0.946237	0.892486

Table A2. Feature selectors used for breast cancer for comparative basis

Feature Selection	Classifier	Settings	Accuracy	Kappa
RF	**SVM**	Top 10 features	0.8925	0.7852
		Top 50 features	0.914	0.828
		Top 100 features	0.9247	0.8495
		Top 500 features	0.9247	0.8495
		Top 1000 features	0.914	0.8281
RF	**LR**	Top 10 features	0.892473	0.78512
		Top 50 features	0.946237	0.892486
		Top 100 features	0.935484	0.871012
		Top 500 features	0.935484	0.871012
		Top 1000 features	0.924731	0.849619
RF	**RF**	Top 10 features	0.946237	0.892486
		Top 50 features	0.935484	0.870953
		Top 100 features	0.935484	0.870953
		Top 500 features	0.956989	0.913969
		Top 1000 features	0.946237	0.892486
Variance Threshold	**SVM**	0.001	0.913978	0.827937
		0.005	0.892473	0.785021
		0.01	0.88172	0.763578
		0.05	0.892473	0.78512
		0.1	0.892473	0.78512
Variance Threshold	**LR**	0.001	0.913978	0.828176
		0.005	0.903226	0.806742

		0.01	0.913978	0.828176
		0.05	0.924731	0.849549
		0.1	0.924731	0.849549
Variance Threshold	**RF**	0.001	0.935484	0.871012
		0.005	0.935484	0.871012
		0.01	0.913978	0.828017
		0.05	0.935484	0.871012
		0.1	0.935484	0.871012
Mutual Information	**SVM**	Top 10 features	0.903226	0.806653
		Top 50 features	0.913978	0.828096
		Top 100 features	0.913978	0.828096
		Top 500 features	0.913978	0.828096
		Top 1000 features	0.913978	0.828096
Mutual Information	**LR**	Top 10 features	0.892473	0.785219
		Top 50 features	0.946237	0.892486
		Top 100 features	0.946237	0.892486
		Top 500 features	0.903226	0.806653
		Top 1000 features	0.946237	0.892535
Mutual Information	**RF**	Top 10 features	0.946237	0.892486
		Top 50 features	0.935484	0.870953
		Top 100 features	0.935484	0.870953
		Top 500 features	0.946237	0.892486
		Top 1000 features	0.946237	0.892486

Table A3. Feature selectors used for lung cancer for comparative basis

Feature Selection	Classifier	Settings	Accuracy	Kappa
RF	**SVM**	Top 10 features	0.9882	0.9268

		Top 50 features	0.9841	0.9445
		Top 100 features	0.9841	0.9545
		Top 500 features	0.9841	0.9545
RF	**LR**	Top 10 features	0.982249	0.893465
		Top 50 features	0.988166	0.930992
		Top 100 features	0.988166	0.930992
		Top 500 features	0.988166	0.930992
		Top 1000 features	0.982249	0.899345
RF	**RF**	Top 10 features	0.96166	0.92684
		Top 50 features	0.96166	0.92684
		Top 100 features	0.96166	0.92684
		Top 500 features	0.96816	0.92684
Variance Threshold	**SVM**	0.001	0.9984083	0.944488
		0.005	0.984083	0.944488
		0.01	0.984083	0.944488
		0.05	0.974083	0.956488
		0.1	0.984083	0.956488
Variance Threshold	**LR**	0.001	0.934911	0.697674
		0.005	0.934911	0.697674
		0.01	0.934911	0.697674
		0.05	0.934911	0.697674
		0.1	0.934911	0.697674
Variance Threshold	**RF**	0.001	0.974083	0.954488
		0.005	0.974083	0.954488
		0.01	0.988166	0.92684
		0.05	0.974083	0.954488
		0.1	0.94083	0.954488

Mutual Information	**SVM**	Top 10 features	0.988166	0.92684
		Top 50 features	0.984083	0.954488
		Top 100 features	0.988166	0.92684
		Top 500 features	0.984083	0.954488
		Top 1000 features	0.974083	0.943488
Mutual Information	**LR**	Top 10 features	0.977146	0.92684
		Top 50 features	0.977166	0.920992
		Top 100 features	0.977166	0.920992
		Top 500 features	0.987166	0.920992
		Top 1000 features	0.988166	0.920992
Mutual Information	**RF**	Top 10 features	0.972249	0.886856
		Top 50 features	0.978166	0.91684
		Top 100 features	0.978166	0.91684
		Top 500 features	0.978166	0.91684
		Top 1000 features	0.978166	0.92784