

Table S1 Minimal depth ranking of variables in the random forest model for OS and CSS

Patient characteristics	Minimal depth OS	Minima depth CSS
Age	2.535714286	2.933333333
County type	5.885714286	5.64
Sex	6.635714286	6.26
Race	4.992857143	4.66
Surgery	2.357142857	2.066666667
Site	3.75	3.76
Radiation	6.028571429	5.826666667
Chemotherapy	5.435714286	5.606666667
Marital	6.385714286	6.34
Income	5.092857143	4.826666667
Primary indicator	6.107142857	6.353333333
Tumor size	3.292857143	3.08
Grade	6.514285714	6.726666667
Stage	1.407142857	1.773333333
Tumor number	6.55	6.046666667

CSS, cancer-specific survival; OS, overall survival.

Table S2 Permutation VIMP with 95% CI (subsampling) for OS in the random forest model

Variable	VIMP	StdErr	CI_lower	CI_upper	P	Significant
Stage	0.0753093	0.0079269	0.0597112	0.0909074	1.50E-21	TRUE
Surgery	0.0166807	0.0037606	0.0086769	0.0246845	2.21E-05	TRUE
Age	0.0149291	0.0031875	0.0086085	0.0212497	1.83E-06	TRUE
Tumor size	0.0111409	0.004049	0.000767	0.0215149	0.0176508	TRUE
Chemotherapy	0.0055592	0.0014119	0.0011858	0.0099325	0.0063619	TRUE
Race	0.0026433	0.0013337	3.25E-05	0.0052541	0.0236098	TRUE
Radiation	0.0023295	0.0010474	0.0002723	0.0043866	0.0132295	TRUE
Marital	0.0003974	0.0005015	-0.000684	0.0014788	0.235661	FALSE
Grade	0.0001638	0.0001838	-0.000197	0.0005241	0.1865345	FALSE
Site	0.0001408	0.0012867	-0.003192	0.0034736	0.4670069	FALSE
Sex	0.0001197	0.0003748	-0.000713	0.0009525	0.3890741	FALSE
Tumor number	0.000114	0.0003303	-0.000579	0.0008067	0.3734761	FALSE
Primary indicator	1.17E-05	0.0004196	-0.000817	0.0008409	0.4889372	FALSE
County type	-1.72E-05	0.0004109	-0.000822	0.0007874	0.5167403	FALSE
Income	-0.000564	0.0007205	-0.002086	0.0009578	0.7661782	FALSE

CI, confidence interval; OS, overall survival; VIMP, variable importance.