

Supplemental Table 4 Multivariable Cox regression analysis including tumor size and metastatic location

Variable		Multivariable analysis	
		Hazard Ratio (95% CI)	P
Hospital Type	Academic	Ref	
	Community	1.174 (1.157-1.190)	0.0001
Age at diagnosis (continuous)		1.013 (1.013-1.014)	0.0001
Sex	Male	Ref	
	Female	0.958 (0.945-0.971)	0.0001
Race	White	Ref	
	Black	0.970 (0.949-0.991)	0.0047
	neither White nor Black	0.883 (0.851-0.917)	0.0001
Education	>=13% NHD*	0.964 (0.948-0.980)	0.0001
	<13% NHD*	Ref	
Income	>=\$35,000	Ref	
	<\$35,000	1.087 (1.069-1.105)	0.0001
Place of Living	Urban	Ref	
	Rural	1.065 (1.014-1.120)	0.0126
Insurance Status	Insured	Ref	
	Not insured	1.062 (1.019-1.107)	0.0044
Charlson/Deyo Score	0	Ref	
	1	1.095 (1.077-1.112)	0.0001
	>=2	1.336 (1.306-1.366)	0.0001
M stage	M0	0.714 (0.698-0.731)	0.0001
	M1	Ref	
Chemotherapy	Yes	Ref	
	No	2.351 (2.315-2.388)	0.0001
Radiation Therapy	Yes	Reference	

	No	1.092 (1.069-1.116)	0.001
Immunotherapy	Yes	Ref	
	No	1.159 (1.018-1.320)	0.0256
Liver metastases	No	0.736 (0.720-0.752)	0.0001
	Yes	Ref	
Lung metastases	No	0.910 (0.890-0.931)	0.0001
	Yes	Ref	
Bone metastases	No	0.801 (0.771-0.831)	0.0001
	Yes	Ref	
Brain metastases	No	0.779 (0.697-0.871)	0.0001
	Yes	Ref	
Tumor size	<=2cm	0.738 (0.719-0.757)	0.0001
	2< size<=4 cm	0.860 (0.848-0.873)	0.0001
	>4cm	Ref	

*NHD: No high school degree