

	Univariate		Multivariate		Adjusted P value*
	HR (95%CI)	P value	HR (95%CI)	P value	
<b>Histology</b>					
Urothelial carcinoma	-		Reference		
Micropapillary UC	1.01 (0.74-1.38)	0.94	1.12 (0.82-1.54)	0.45	1
Lymphoepithelioma-like UC	0.64 (0.16-2.57)	0.53	0.66 (0.16-2.68)	0.57	1
Sarcomatoid UC	1.50 (1.09-2.05)	0.01	1.28 (0.93-1.75)	0.12	1
Adenocarcinoma	1.17 (0.93-1.48)	0.17	1.04 (0.82-1.32)	0.70	1
Giant & spindle cell carcinoma	0.74 (0.31-1.79)	0.50	0.72 (0.3-1.74)	0.47	1
Neuroendocrine tumor	1.41 (1.09-1.82)	<0.001	1.42 (1.09-1.84)	<0.001	0.2
Squamous cell carcinoma	1.80 (1.48-2.19)	<0.001	1.59 (1.29-1.97)	<0.001	<0.001
Sarcoma	4.72 (1.18-18.94)	0.03	4.87 (1.21-19.56)	0.02	0.7
<b>Age at diagnosis (years)</b>	1.01 (1.00-1.01)	<0.01	1.00 (1.00-1.01)	0.01	0.3
<b>Sex</b>					
Male	-		Reference		
Female	1.12 (1.03-1.22)	<0.01	1.04 (0.95-1.14)	0.38	1
<b>Race</b>					
Caucasian	-		Reference		
Black	1.26 (1.09-1.45)	<0.01	1.18 (1.01-1.37)	0.03	0.9
Hispanic	0.98 (0.84-1.15)	0.85	1.01 (0.86-1.19)	0.86	1
Asiatic	0.94 (0.72-1.13)	0.54	1.01 (0.83-1.22)	0.88	1
Other	1.04 (0.59-1.84)	0.88	0.99 (0.56-1.75)	0.98	1
<b>Socioeconomic status</b>					
Low	-		Reference		
High	0.99 (0.92-1.08)	0.94	1.00 (0.92-1.09)	0.88	1
<b>Region</b>					
West	-		Reference		
Midwest	1.08 (0.95-1.22)	0.23	1.10 (0.97-1.26)	0.14	1
North-East	1.21 (1.09-1.35)	<0.001	1.12 (1.00-1.26)	0.04	1
South	1.25 (1.13-1.39)	<0.001	1.17 (1.05-1.31)	<0.001	0.9
<b>Marital status</b>					
Married	-		Reference		
Never married	1.25 (1.11-1.40)	<0.001	1.23 (1.09-1.39)	<0.001	0.03
Previously married	1.24 (1.12-1.36)	<0.001	1.12 (1.02-1.23)	0.02	0.5
Unknown	0.98 (0.76-1.27)	0.92	0.95 (0.74-1.23)	0.75	1
<b>Perioperative CT</b>					
No	-		Reference		
Yes	0.62 (0.57-0.67)	<0.001	0.66 (0.61-0.72)	<0.001	<0.001
<b>T stage</b>					
T<2	-		Reference		
T2	0.92 (0.68-1.26)	0.64	0.88 (0.65-1.21)	0.45	1
T3-4	1.83 (1.36-2.46)	<0.001	1.68 (1.25-2.27)	<0.001	0.02
T0/x	1.72 (0.89-3.33)	0.10	1.68 (0.86-3.26)	0.12	1
<b>Grade</b>					
G1	-		Reference		
G2	1.37 (0.78-2.42)	0.26	1.02 (0.58-1.82)	0.92	1
G3	1.14 (0.67-1.93)	0.62	1.07 (0.63-1.83)	0.77	1
G4	1.00 (0.59-1.70)	0.97	1.05 (0.61-1.78)	0.85	1
Gx	1.05 (0.60-1.86)	0.84	1.00 (0.57-1.77)	0.98	1
<b>NNR</b>	0.98 (0.98-0.99)	<0.001	0.99 (0.99-0.99)	<0.001	<0.001

**Abbreviations.** CI: confidence interval; CT: chemotherapy; HR: hazard ratio; NNR: number of lymph nodes removed; UC: urothelial carcinoma

\* p values were adjusted using the conservative Bonferroni correction method which multiplies the raw p-values by the number of tests

**Supplementary Table 8.** Univariable and Multivariable Cox regression analyses predicting Overall Mortality among patients with lymph node invasion treated with radical cystectomy.