

	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 (0.68-1.50)	0.95	1.05 (0.71-1.56)	0.8	1
Lymphoepithelioma-like UC	0.35 (0.11-3.04)	0.07	0.34 (0.11-1.07)	0.06	1
Sarcomatoid UC	1.79 (1.46-2.20)	<0.001	1.58 (1.28- 1.94)	<0.001	0.001
Adenocarcinoma	1.09 (0.93-1.28)	0.30	1.08 (0.91-1.21)	0.36	1
Giant & spindle cell carcinoma	2.15 (1.52-3.04)	<0.001	1.83 (1.29-2.59)	<0.001	0.026
Neuroendocrine tumor	1.17 (0.94-1.46)	0.15	1.25 (1.0-1.55)	0.05	1
Squamous cell carcinoma	1.31 (1.15- 1.48)	<0.001	1.04 (0.9-1.19)	0.6	1
Sarcoma	0.91 (0.29-2.81)	0.86	1.10 (0.36-3.42)	0.8	1
<b>Age at diagnosis (years)</b>	1.03 (1.02-1.03)	<0.001	1.02 (1.02-1.03)	<0.001	<0.001
<b>Sex</b>		<0.001			
Male	-		Reference		
Female	1.07 (1.0-1.14)		0.89 (0.83-0.95)	<0.001	0.016
<b>Race</b>					
Caucasian	-		Reference		
Black	1.31 (1.17-1.46)	<0.001	1.21 (1.08-1.36)	0.001	0.035
Hispanic	1.03 (0.92-1.15)	0.63	1.11 (0.99-1.25)	0.08	1
Asiatic	0.83 (0.72-0.96)	0.01	0.90 (0.77-1.04)	0.14	1
Other	0.74 (0.49-1.13)	0.16	0.79 (0.52-1.21)	0.28	1
<b>Socioeconomic status</b>		0.16			
Low	-		Reference		
High	1.04 (0.98-1.10)		1.03 (0.97-1.10)	0.3	1
<b>Region</b>					
West	-		Reference		
Midwest	1.03 (0.94-1.12)	0.51	1.08 (0.98-1.18)	0.1	1
North-East	1.15 (1.06-1.23)	<0.001	1.09 (1.01-1.18)	0.02	0.84
South	1.24 (1.13-1.35)	<0.001	1.24 (1.15-1.34)	<0.001	<0.001
<b>Marital status</b>					
Married	-		Reference		
Never married	1.24 (1.13-1.35)	<0.001	1.45 (1.32-1.59)	<0.001	<0.001
Previously married	1.47 (1.38-1.57)	<0.001	1.35 (1.26-1.44)	<0.001	<0.001
Unknown	1.16 (1.0-1.35)	0.06	1.28 (1.10-1.50)	0.001	0.05
<b>Perioperative CT</b>					
No	-		Reference		
Yes	0.87 (0.82-0.93)	<0.001	0.89 (0.83-0.95)	<0.001	0.015
<b>Treatment</b>					
No local treatment	-		Reference		
Radical cystectomy	0.38 (0.20-0.70)	0.002	0.36 (0.20-0.68)	0.001	0.05
Partial cystectomy	0.35 (0.19-0.66)	0.001	0.31 (0.17-0.59)	<0.001	0.01
TURB only	0.33 (0.18-0.63)	<0.001	0.37 (0.19-0.69)	0.002	0.07
Radiotherapy	1.80 (0.23-14.06)	0.57	0.99 (0.13-7.74)	0.99	1
TMT	0.49 (0.23-1.06)	0.07	0.38 (0.18-0.82)	0.5	0.5
Other/Unknown	0.70 (0.37-1.33)	0.27	0.54 (0.29-1.03)	0.06	1
<b>T stage</b>					
T<2	-		Reference		
T2	1.34 (1.22-1.47)	<0.001	1.34 (1.22-1.48)	<0.001	<0.001
T3-4	2.68 (1.45-2.93)	<0.001	2.51 (2.29-2.75)	<0.001	<0.001
T0/x	2.29 (1.66-3.16)	<0.001	1.95 (1.42-2.70)	<0.001	0.002
<b>Grade</b>					
G1	-		Reference		
G2	1.31 (0.98-1.75)	0.07	1.22 (0.91-1.64)	0.18	1
G3	1.44 (1.10-1.90)	0.001	1.28 (0.97-1.69)	0.08	1
G4	1.17 (0.89-1.54)	0.25	1.11 (0.84-1.47)	0.46	1
Gx	1.10 (0.81-1.49)	0.53	1.12 (0.83-1.52)	0.46	1
<b>NNR</b>	0.99 (0.99-0.99)	<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; TMT: trimodal therapy; TURB: transurethral resection of the bladder; 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 10.** Univariable and Multivariable Cox regression analyses predicting Overall Mortality among patients without lymph node invasion in the overall population (N=15468).