

	Overall (N=12761)	No LNI (N=10381)	LNI (N=2380)	P value
Age at diagnosis, median (IQR)	70 (62-77)	70 (62-77)	72 (63-79)	<0.001
Sex, N (%)				
Male	9608 (75.3)	7904 (76.1)	1704 (71.6)	<0.001
Female	3153 (24.7)	2477 (23.9)	676 (28.4)	
Race, N (%)				0.03
White	10413 (81.6)	8505 (81.9)	1908 (80.2)	
Black	797 (6.2)	622 (6)	175 (7.4)	
Hispanics	895 (7)	709 (6.8)	186 (7.8)	
Asiatic	591 (4.6)	490 (4.7)	101 (4.2)	
Others	65 (0.5)	55 (0.5)	10 (0.4)	
Socioeconomical status, N (%)				0.9
High	6768 (53)	5507 (53)	1261 (53)	
Low	5993 (47)	4874 (47)	1119 (47)	
Region, N (%)				0.05
West	7162 (56.1)	5833 (56.2)	1329 (55.8)	
Midwest	1153 (9)	969 (9.3)	184 (7.7)	
North-East	2266 (17.8)	1829 (17.6)	437 (18.4)	
South	2180 (17.1)	1750 (16.9)	430 (18.1)	
Histology, N (%)				<0.001
Urothelial carcinoma	11187 (87.7)	9153 (88.2)	2034 (85.5)	
Micropapillary UC	86 (0.7)	53 (0.5)	33 (1.4)	
Lymphoepithelioma-like UC	13 (0.1)	11 (0.1)	2 (0.1)	
Sarcomatoid UC	182 (1.4)	143 (1.4)	39 (1.6)	
Adenocarcinoma	402 (3.1)	322 (3.1)	80 (3.4)	
Giant & Spindle cell carcinoma	63 (0.5)	54 (0.5)	9 (0.4)	
Squamous cell carcinoma	683 (5.4)	541 (5.2)	142 (6)	
Neuroendocrine tumor	132 (1.0)	92 (0.9)	40 (1.7)	
Sarcoma	13 (0.1)	12 (0.1)	1 (0)	
Marital status, N (%)				
Married	7859 (61.6)	6517 (62.8)	1342 (56.4)	
Never married	1434 (11.2)	1132 (10.9)	302 (12.7)	
Previously mar	2985 (23.4)	2333 (22.5)	652 (27.4)	
Unknown	483 (3.8)	399 (3.8)	84 (3.5)	
Treatment, N (%)				<0.001
Radical cystectomy	11227 (88)	9171 (88.3)	2056 (86.4)	
Partial cystectomy	746 (5.9)	676 (6.5)	70 (2.9)	
TURB only	499 (3.9)	362 (3.5)	137 (5.8)	
Radiotherapy	4 (0)	1 (0)	3 (0.1)	
TMT	0 (0)	0 (0)	0 (0)	
No local treat	32 (0.3)	14 (0.1)	18 (0.8)	
Other/Unknown	253 (2)	157 (1.5)	96 (4)	
T stage, N (%)				
T0/x	83 (0.7)	60 (0.6)	23 (1.0)	
T<2	2252 (17.6)	2187 (21.1)	65 (2.7)	
T2	4339 (34)	3946 (38)	393 (16.5)	
T3-4	6087 (47.7)	4188 (40.3)	1899 (79.8)	
Grade, N (%)				<0.001
G1	168 (1.3)	150 (1.4)	18 (0.8)	
G2	874 (6.8)	766 (7.4)	108 (4.5)	
G3	4299 (33.7)	3403 (32.8)	896 (37.6)	
G4	6751 (52.9)	5502 (53)	1249 (52.5)	
Gx	669 (5.2)	560 (5.4)	109 (4.6)	
NNR, median (IQR)	11 (5-20)	11 (5-20)	11 (5-20)	0.8

Abbreviations. CT: chemotherapy; IQR: interquartile range; LN: lymph node; LNI: lymph node invasion; NNR: number of lymph nodes removed; TMT: trimodal therapy; TURB: transurethral resection of the bladder; UC: urothelial carcinoma

Supplementary Table 5. Descriptive characteristics according to the lymph node invasion status in patients without neoadjuvant or adjuvant chemotherapy treatment (N=12761).