	Urothelial carcinoma (N=11187)	Micropapillary UC (N=86)	Lymphoepithelioma-like UC (N=13)	Sarcomatoid UC (N=182)	Adenocarcinoma (N=402)	Giant & Spindle-cell carcinoma (N=63)	Squamous cell carcinoma (N=683)	Neuroendocrine tumor (N=132)	Sarcoma (N=13)
Age at diagnosis, median (IQR)	70 (62-77)	72.5 (66-78)	65 (61-69)	70 (62-77)	64 (54-72.8)	74 (63.5-77.5)	69 (59-77)	72 (65-79)	75 (68-78)
Female sex, N (%)	2533 (22.6)	14 (16.3)	4 (30.8)	54 (29.7)	154 (38.3)	22 (34.9)	347 (50.8)	23 (17.4)	2 (15.4)
Race, N (%)									
White	9201 (82.2)	76 (88.4)	8 (61.5)	145 (79.7)	278 (69.2)	52 (82.5)	540 (79.1)	104 (78.8)	9 (69.2)
Black	652 (5.8)	1 (1.2)	2 (15.4)	14 (7.7)	58 (14.4)	3 (4.8)	57 (8.3)	9 (6.8)	1 (7.7)
Hispanics	755 (6.7)	4 (4.7)	2 (15.4)	13 (7.1)	38 (9.5)	6 (9.5)	62 (9.1)	12 (9.1)	3 (23.1)
Asiatic	525 (4.7)	5 (5.8)	1 (7.7)	9 (4.9)	23 (5.7)	2 (3.2)	19 (2.8)	7 (5.3)	0 (0)
Others	54 (0.5)	0 (0)	0 (0)	1 (0.5)	5 (1.2)	0 (0)	5 (0.7)	0 (0)	0 (0)
Socioeconomical status, N (%)									
High	5934 (53)	43 (50)	7 (53.8)	91 (50)	222 (55.2)	34 (54)	353 (51.7)	74 (56.1)	10 (76.9)
Low	5253 (47)	43 (50)	6 (46.2)	91 (50)	180 (44.8)	29 (46)	330 (48.3)	58 (43.9)	3 (23.1)
Region, N (%)									
West	6320 (56.5)	46 (53.5)	8 (12.7)	90 (49.5)	218 (54.2)	34 (54)	364 (53.3)	73 (55.3)	9 (69.2)
Midwest	1008 (9.0)	7 (8.1)	0 (0)	27 (14.8)	29 (7.2)	6 (9.5)	66 (9.7)	10 (7.6)	0 (0)
North-East	1976 (17.7)	9 (10.5)	3 (23.1)	27 (14.8)	77 (19.2)	15 (23.8)	128 (18.7)	28 (21.2)	3 (23.1)
South	1883 (16.8)	24 (27.9)	2 (15.4)	38 (20.9)	78 (19.4)	8 (12.7)	125 (18.3)	21 (15.9)	1 (7.7)
Marital status, N (%)									
Married	6973 (62.3)	60 (69.8)	9 (69.2)	111 (61)	220 (54.7)	32 (50.8)	364 (53.3)	80 (60.6)	10 (76.9)
Never married	1213 (10.8)	8 (9.3)	2 (15.4)	17 (9.3)	74 (18.4)	8 (12.7)	93 (13.6)	18 (13.6)	1 (7.7)
Previously married	2583 (23.1)	14 (16.3)	2 (15.4)	48 (26.4)	88 (21.9)	19 (30.2)	201 (29.4)	28 (21.2)	2 (15.4)
Unknown	418 (3.7)	4 (4.7)	0 (0)	6 (3.3)	20 (5)	4 (6.3)	25 (3.7)	6 (4.5)	0 (0)
Treatment, N (%)									
Radical cystectomy	9949 (88.9)	80 (93)	12 (92.3)	169 (92.9)	268 (66.7)	55 (87.3)	578 (84.6)	104 (78.8)	12 (92.3)
Partial cystectomy	561 (5)	4 (4.7)	1 (7.7)	6 (3.3)	104 (25.9)	2 (3.2)	52 (7.6)	17 (12.9)	0 (0)
TURB only	462 (4.1)	0 (0)	0 (0)	2 (1.1)	12 (3)	3 (4.8)	16 (2.3)	4 (3)	0 (0)
Radiotherapy	4 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
TMT	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
No local treatment	24 (0.2)	0 (0)	0 (0)	0 (0)	3 (0.7)	0 (0)	5 (0.7)	0 (0)	0 (0)
Other/Unknown	187 (1.7)	2 (2.3)	0 (0)	5 (2.7)	15 (3.7)	3 (4.8)	32 (4.7)	7 (5.3)	1 (7.7)
T stage, N (%)									
T0/x	62 (0.6)	0 (0)	0 (0)	2 (1.1)	5 (1.2)	1 (1.6)	12 (1.8)	0 (0)	1 (7.7)
T<2	2084 (18.6)	14 (16.3)	4 (30.8)	18 (9.9)	64 (15.9)	4 (6.3)	46 (6.7)	15 (11.4)	3 (23.1)
T2	3960 (35.4)	31 (36)	3 (23.1)	48 (26.4)	101 (25.1)	21 (33.3)	144 (21.1)	29 (22)	2 (15.4)
T3-4	5081 (45.4)	41 (47.7)	6 (46.2)	114 (62.6)	232 (57.7)	37 (58.7)	481 (70.4)	88 (66.7)	7 (53.8)
Grade, N (%)									
G1	91 (0.8)	0 (0)	0 (0)	1 (0.5)	20 (5)	0 (0)	55 (8.1)	1 (0.8)	0 (0)
G2	487 (4.4)	2 (2.3)	0 (0)	2 (1.1)	112 (27.9)	1 (1.6)	269 (39.4)	1 (0.8)	0 (0)
G3	3768 (33.7)	18 (20.9)	3 (23.1)	65 (35.7)	153 (38.1)	15 (23.8)	231 (33.8)	44 (33.3)	2 (15.4)

G4	6302 (56.3)	63 (73.3)	8 (61.5)	104 (57.1)	66 (16.4)	36 (57.1)	96 (14.1)	68 (51.5)	8 (61.5)
Gx	539 (4.8)	3 (3.5)	2 (15.4)	10 (5.5)	51 (12.7)	11 (17.5)	32 (4.7)	18 (13.6)	3 (23.1)
LNI, N (%)	2034 (18.2)	33 (38.4)	2 (15.4)	39 (21.4)	80 (19.9)	9 (14.3)	142 (20.8)	40 (30.3)	1 (7.7)
NNR, median (IQR)	11 (5-20)	13.5 (5.2-28.2)	17 (12-26)	11 (6-22.8)	10 (5-17)	11 (5-18)	11 (5-20)	11 (5-18)	12 (6-18)
LN density, mean	6.3	19.5	1.8	6.9	7.4	2.4	7.7	10.1	0.3

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 4 Descriptive characteristics of patients without neoadjuvant or adjuvant chemotherapy treatment (N=12761), according to the different histological subtypes.