

Supplementary table 1. Association of PD-L1 expression with clinicopathological characteristics in a subset of 74 patients with UTUC

	PD-L1 CPS $\geq$ 10	PD-L1 CPS < 10	p value
	<i>N</i> (%)	<i>N</i> (%)	
Patient number	16 (22)	58 (78)	
Follow duration	15.47 $\pm$ 12.4 (mo)	19.0 $\pm$ 11.2 (mo)	0.273
Age			
> 65 yr	7 (43.8)	42 (72.4)	0.041*
$\leq$ 65 yr	9 (56.2)	16 (27.6)	
Gender			0.258
Male	10 (62.5)	25 (43.1)	
Female	6 (37.5)	33 (56.9)	
Pathologic stage			0.09
pTa/is	0 (0)	13 (22.4)	
pT1	3 (18.8)	9 (15.5)	
pT2	5 (31.2)	10 (17.2)	
pT3	7 (43.8)	20 (34.5)	
pT4	1 (6.2)	6 (10.3)	
Muscle-invasive tumor			0.233
< T2	3 (18.8)	22 (37.9)	
$\geq$ T2	13 (81.2)	36 (62.1)	
Lymph node status			0.138
N0/Nx	11 (68.8)	50 (86.2)	
N1/N2	5 (31.2)	8 (13.8)	
Papillary feature			0.218
Absent	7 (43.8)	15 (25.9)	
Present	9 (56.2)	43 (74.1)	
Tumor grade			0.335
Low	0 (0)	7 (12.1)	
High	16 (100)	51 (87.9)	
Lymphovascular invasion			0.876
Absent	10 (62.5)	35 (60.3)	
Present	6 (37.5)	23 (39.7)	
Concomitant CIS			0.768
Absent	7 (43.8)	23 (39.7)	
Present	9 (56.2)	35 (60.3)	
Squamous differentiation			0.763
Absent	11 (68.8)	42 (72.4)	
Present	5 (31.2)	16 (27.6)	
Margin positive			1.000
Negative	14 (87.5)	49 (84.5)	
Positive	2 (12.5)	9 (15.5)	

Supplementary table 1 (continued). Association of PD-L1 expression with clinicopathological characteristics in a subset of 74 patients with UTUC

Tumor necrosis			0.35
Absent	7 (43.8)	33 (56.9)	
Present	9 (56.2)	25 (43.1)	
Multifocal tumor			0.762
Solitary	12 (75)	39 (67.2)	
Multifocal	4 (25)	19 (32.8)	
Bladder recurrence			0.031*
Yes	0 (0)	15 (25.9)	
No	16 (100)	43 (74.1)	
Locoregional recurrence			0.366
Yes	6 (37.5)	15 (25.9)	
No	10 (62.5)	43 (74.1)	
Distant metastasis			1.000
Yes	3 (18.8)	13 (22.4)	
No	13 (81.2)	45 (77.6)	
Adjuvant chemotherapy			1.000
Yes	1 (6.2)	5 (8.6)	
No	15 (93.8)	53 (91.4)	
Palliative chemotherapy			0.64
Yes	2 (12.5)	5 (8.6)	
No	14 (87.5)	53 (91.4)	
Palliative immunotherapy			0.001*
Yes	5 (31.2)	1 (1.7)	
No	11 (68.8)	57 (98.3)	
Overall death	8 (50)	37 (63.8)	0.39
Death due to UTUC	6 (37.5)	16 (27.6)	0.539

CIS, carcinoma *in situ*; \* indicates  $p < 0.05$