

Table S1. Association between expression of pSTAT5 and other important clinicopathological factors in UC

Parameter	Category	Upper Urinary Tract Urothelial Carcinoma				Urinary Bladder Urothelial Carcinoma			
		Case No.	pSTAT5 Expression		p-value	Case No.	pSTAT5 Expression		p-value
			Low	High			Low	High	
Sex	Male	158	84	74	0.227	216	109	107	0.719
	Female	182	86	96		79	38	41	
Age (years)	< 65	138	71	67	0.659	121	64	57	0.380
	≥ 65	202	99	103		174	83	91	
Tumor location	Renal pelvis	141	72	69	0.741	-	-	-	-
	Ureter	150	76	74		-	-	-	-
	Renal pelvis & ureter	49	22	27		-	-	-	-
Multifocality	Single	278	140	138	0.779	-	-	-	-
	Multifocal	62	30	32		-	-	-	-
Primary tumor (pT)	pTa	89	57	32	0.004*	84	55	29	<0.001*
	pT1	92	46	46		88	46	42	
	pT2-T4	159	67	92		123	46	77	
Nodal metastasis	Negative (N0)	312	161	151	0.049*	266	140	126	0.004*
	Positive (N1-N2)	28	9	19		29	7	22	
Histological grade	Low grade	56	33	23	0.144	56	36	20	0.016*
	High grade	284	137	147		239	111	128	
Vascular invasion	Absent	234	126	108	0.035*	246	133	113	0.001*
	Present	106	44	62		49	14	35	
Perineural invasion	Absent	321	161	160	0.813	275	140	135	0.169
	Present	19	9	10		20	7	13	
Mitotic rate/ 10HPFs	< 10	173	89	84	0.588	139	78	61	0.042*
	≥ 10	167	81	86		156	69	87	

* Statistically significant