

Supplementary Table S3. Clinicopathological characteristics of 12 patients subject to gene expression profiling

GEP group	Age	Sex	Diagnosis	Organ	Distant metastasis	Death	Overall survival (months)	IHC-defined molecular subtype	ASCL1 (H-score)	NEUROD1 (H-score)	POU2F3 (H-score)	YAP1 (H-score)	p63	TTF1	p16	NUT	CD3 (cells/mm ²)	CD20 (cells/mm ²)	CD8 (cells/mm ²)	PD1 (cells/mm ²)
POU2F3-positive	75	Male	Small cell neuroendocrine carcinoma	Renal pelvis	No	Yes	3.2	POU2F3	0	0	120	0	Negative	Negative	Positive	Negative	2.01	2.68	88.56	0.00
POU2F3-positive	88	Male	Small cell neuroendocrine carcinoma	Urinary bladder	No	No	17.9	POU2F3	0	0	270	0	Negative	Negative	Positive	Negative	126.60	6.41	3.51	1.83
POU2F3-positive	82	Female	Urothelial carcinoma with neuroendocrine features	Urinary bladder	No	No	27.0	POU2F3	0	0	185	0	Negative	Negative	Positive	Negative	44.62	13.85	110.37	1.54
POU2F3-positive	72	Male	Neuroendocrine carcinoma, type unspecified	Neck lymph node	No	No	124.4	POU2F3	0	0	130	0	Negative	Negative	Positive	Negative	87.76	4.66	56.28	0.55
POU2F3-positive	55	Male	Poorly differentiated carcinoma	Paranasal sinus	Yes	Yes	12.1	POU2F3	0	0	150	60	Negative	Negative	Negative	Negative	24.09	13.41	138.56	2.95
POU2F3-positive	81	Female	Poorly differentiated carcinoma	Parotid gland	No	Yes	6.7	POU2F3	0	0	110	5	Negative	Negative	Positive	Negative	80.89	25.26	37.34	1.26
POU2F3-negative	73	Male	Small cell neuroendocrine carcinoma	Urinary bladder	Yes	Yes	11.4	ASCL1	90	0	0	0	Negative	Positive	Positive	Negative	26.93	2.29	3.10	0.31
POU2F3-negative	58	Male	Urothelial carcinoma with neuroendocrine features	Urinary bladder	No	Yes	7.2	YAP1	0	0	0	160	Negative	Negative	Positive	Negative	86.05	52.03	0.87	3.51
POU2F3-negative	76	Male	Small cell neuroendocrine carcinoma	Renal pelvis	Yes	No	40.2	NEUROD1	0	150	0	0	Negative	Negative	Positive	Negative	26.47	3.74	42.01	3.61
POU2F3-negative	60	Female	Poorly differentiated adenocarcinoma	Neck lymph node	No	No	88.7	YAP1	0	0	1	170	Negative	Negative	Negative	Negative	10.53	5.26	25.00	0.00
POU2F3-negative	78	Female	Poorly differentiated carcinoma	Nasal cavity	No	Yes	7.7	YAP1	0	0	0	250	Negative	Negative	Negative	Negative	7.56	4.65	12.90	5.57
POU2F3-negative	70	Male	Carcinosarcoma	Nasal cavity	Yes	Yes	7.2	YAP1	10	0	0	130	Negative	Negative	Positive	Negative	30.50	0.71	20.99	1.92