



Figure S1 Pearson correlation heat map for the mRNA expression levels of various autonomic nerve receptor. The X- and Y-axis stand for different mRNA expression levels. ADRA, adrenoceptor alpha; ADRB, adrenoceptor beta; CHRMA, cholinergic receptor, muscarinic; CHRNA, cholinergic receptor nicotinic alpha.

Table S1 Correlations of the receptor expressions and the clinic characteristics

Characteristics	ADRB1	ADRA1A	ADRA2A	ADRB2	CHRNA2	CHRM3	CHRM1	CHRNA5
Age at diagnosis, y								
51–70	11.96±0.92	2.15±0.26	1.25±0.21	16.02±1.09	14.78±2.09	4.85±1.31	8.96±0.85	5.84±0.90
71–85	10.90±1.61	2.85±0.35	1.64±0.39	17.43±1.41	19.91±4.33	3.43±0.69	10.44±1.03	5.63±0.75
P value	0.144	0.093	0.257	0.346	0.613	0.891	0.299	0.642
PSA (ng/mL)								
4–10	12.89±1.81	2.78±0.45	1.66±0.50	18.50±2.32	21.35±6.58	3.94±1.06	9.57±1.26	5.74±0.75
>10	11.09±1.00	2.28±0.22	1.42±0.23	16.17±0.95	16.00±2.18	4.59±1.07	9.94±0.80	5.98±0.79
P value	0.272	0.265	0.904	0.537	0.420	0.891	0.932	0.382
T								
T2	12.00±0.97	2.48±0.28	1.21±0.20	16.16±0.93	18.79±3.09	3.52±0.91	9.33±0.90	6.06±0.87
T3–4	10.98±1.52	2.21±0.26	1.73±0.40	17.52±1.64	14.05±2.77	5.30±1.53	10.20±0.95	5.36±0.82
P value	0.305	0.305	0.085	0.698	0.328	0.197	0.335	0.988
GS								
<7	11.80±3.33	3.62±0.78	1.36±0.54	12.61±1.04	24.13±6.91	3.67±1.39	9.72±1.66	5.56±1.22
7	11.31±1.19	2.66±0.31	1.57±0.32	16.03±1.23	16.55±3.09	5.10±1.37	8.96±0.85	6.16±0.90
>7	11.59±1.28	1.88±0.25	1.21±0.22	18.42±1.30	15.23±3.20	3.01±0.71	10.60±1.16	5.07±0.89
P value	0.905	0.061	0.992	0.035*	0.239	0.420	0.503	0.654
Location								
Localized	11.84±1.01	2.57±0.29	1.26±0.21	16.05±0.98	19.11±3.25	3.69±0.95	9.36±0.94	6.19±0.91
Invasion	11.43±1.69	2.04±0.23	1.82±0.45	17.66±1.84	15.03±3.05	5.32±1.68	10.35±1.05	5.81±0.88
Metastasis	10.51±2.29	2.37±1.02	0.79±0.29	17.03±1.58	9.13±3.15	3.24±2.61	8.91±1.10	2.59±0.85
P value	0.570	0.572	0.126	0.736	0.365	0.248	0.580	0.132

*, Correlation is significant at the 0.05 level (two-tailed). PSA, prostate-specific antigen; GS, Gleason's score; ADRA, adrenoceptor alpha; ADRB, adrenoceptor beta; CHRM, cholinergic receptor, muscarinic; CHRNA, cholinergic receptor nicotinic alpha.

Table S2 Pearson analysis the receptor expressions and the clinic characteristics

Characteristics	ADRB1	ADRA1A	ADRA2A	ADRB2	CHRNA2	CHRM3	CHRM1	CHRNA5
T								
Pearson correlation	-0.053	-0.116	0.044	0.09	-0.171	0.055	0.036	-0.157
Sig. (two-tailed)	0.677	0.362	0.732	0.478	0.176	0.663	0.775	0.216
N	64	64	64	64	64	64	64	64
PSA								
Pearson correlation	-0.355**	0.442**	0.404**	-0.006	-0.267*	0.031	0.01	-0.189
Sig. (two-tailed)	0.005	0	0.001	0.961	0.037	0.813	0.937	0.144
N	61	61	61	61	61	61	61	61
Age								
Pearson correlation	-0.061	0.077	-0.003	0.106	0.164	-0.188	0.068	0.088
Sig. (two-tailed)	0.634	0.543	0.981	0.406	0.195	0.136	0.594	0.49
N	64	64	64	64	64	64	64	64
Tumor or not								
Pearson correlation	-0.425**	0.598**	-0.097	-0.319**	-0.151	-0.181*	0.325**	-0.310**
Sig. (two-tailed)	0	0	0.271	0	0.086	0.04	0	0
N	130	130	130	130	130	130	130	130
GS								
Pearson correlation	-0.021	-0.227	-0.032	0.216	-0.086	-0.091	0.151	-0.093
Sig. (two-tailed)	0.866	0.069	0.803	0.084	0.493	0.473	0.231	0.463
N	65	65	65	65	65	65	65	65

*, Correlation is significant at the 0.05 level (two-tailed); **, correlation is significant at the 0.01 level (two-tailed). PSA, prostate-specific antigen; GS, Gleason's score; ADRA, adrenoceptor alpha; ADRB, adrenoceptor beta; CHRM, cholinergic receptor, muscarinic; CHRNA, cholinergic receptor nicotinic alpha.