

# Supplementary Tables.

**Table S1.** Univariate Cox regression analysis: Association of clinical parameters and immunological markers with OS or CSS in all RCC patients.

All RCC	OS				CSS			
	Hazard Ratio	Range		p-value	Hazard Ratio	Range		p-value
PD-1 TIMC	2.466	1.362	4.465	0.003*	2.344	0.901	6.101	0.081
PD-L1 TU	1.130	0.614	2078	0.695	0.977	0.344	2.775	0.964
PD-L1 TIMC	0.793	0.290	2.165	0.650	No cancer specific death			
CTLA-4	2.442	1.176	5.067	0.017*	3.271	1.146	9.337	0.027*
PD-1 + CTLA-4	4.284	1.718	10.680	0.002**	6.317	1.898	21.026	0.003**
CD3	0.903	0.595	1.369	0.630	1.344	0.683	2.644	0.393
Age >65years	2.696	1.733	4.194	<0.001**	2.255	1.120	4.537	0.023*
Gender male	1.802	1.115	2.911	0.016*	1.278	0.626	2.610	0.646
Stage >pT2	3.352	2.216	5.071	<0.001**	3.029	1.544	5.943	0.001**
Grade =G3	3.546	2.353	5.346	<0.001**	6.661	3.354	13.231	<0.001**
ECOG >0	2.338	1.485	3.682	<0.001**	1.947	0.921	4.157	0.085

\*\* Correlation is significant at 0.01 level (2-tailed) \* Correlation is significant at 0.05 level (2-tailed).

**Table S2.** Univariate Cox regression analysis: Association of clinical parameters and immunological markers with OS or CSS in the no primary metastases subgroup.

No primary metastases	OS				CSS			
	Hazard Ratio	Range		p-value	Hazard Ratio	Range		p-value
PD-1 TIMC	2.108	0.956	4.647	0.065	2.053	0.469	8.980	0.339
PD-L1 TU	1.128	5.557	2.284	0.738	0.780	0.181	3.366	0.739
PD-L1 TIMC	1.000	0.363	2.758	1.000	No cancer specific death			
CTLA-4	2.516	1.004	6.300	0.049*	5.903	1.711	20.369	0.005**
PD-1 + CTLA-4	6.420	1.972	20.904	0.002**	16.349	3.526	75.818	<0.001**
CD3	0.702	0.425	1.160	0.168	0.988	0.401	2.431	0.979
Age >65years	2.374	1.438	3.919	0.001**	1.919	0.783	4.701	0.154
Gender male	1.824	1.039	3.203	0.036*	1.394	0.535	3.629	0.496
Stage >pT2	3.285	2.013	5.360	<0.001**	2.500	0.984	6.352	0.054
Grade =G3	2.514	1.524	4.145	<0.001**	4.417	1.838	10.615	0.001**
ECOG >0	2.187	1.256	3.807	0.006**	1.445	0.445	4.693	0.540

\*\* Correlation is significant at 0.01 level (2-tailed) \* Correlation is significant at 0.05 level (2-tailed).