

**Supple table.4a. The coefficient of p value for Log-Rank test in clinical variables on PFS**

P value	Age	Gender	Histological type	Clinical stage	Smoking status	ICIs type	NLRpost	LOT	ECOG PS	BMI
Clinical characteristic in two-variable model	0.640	0.076	0.368	0.013	0.091	0.283	0.000	0.001	0.001	0.260
RAD in two-variable model	0.002	0.012	0.002	0.002	0.004	0.001	0.003	0.003	0.001	0.002
Two-variable model	0.007	0.002	0.005	0.001	0.002	0.004	0.000	0.000	0.000	0.005

**Supple table.4b. The coefficient of HR for Log-Rank test in clinical variables on PFS**

HR	Age	Gender	Histological type	Clinical stage	Smoking status	ICIs type	NLRpost	LOT	ECOG PS	BMI
Clinical characteristic in two-variable model	1.003	0.702	0.854	0.668	1.292	0.805	1.074	1.759	0.435	0.970
RAD in two-variable model	0.429	0.495	0.427	0.439	0.454	0.417	0.418	0.445	0.424	0.425

**Supple table.4c. The coefficient of p value for Log-Rank test in clinical variables on OS**

P value	Age	Gender	Histological type	Clinical stage	Smoking status	ICIs type	NLRpost	LOT	ECO PS	BMI
Clinical characteristic in two-variable model	0.814	0.162	0.747	0.199	0.098	0.476	0.051	0.009	0.000	0.790
RAD in two-variable model	0.020	0.065	0.019	0.029	0.036	0.017	0.001	0.029	0.017	0.016
Two-variable model	0.064	0.026	0.058	0.060	0.017	0.051	0.001	0.002	0.000	0.052

**Supple table.4d. The coefficient of HR for Log-Rank test in clinical variables on OS**

HR	Age	Gender	Histological type	Clinical stage	Smoking status	ICIs type	NLRpost	LOT	ECOG PS	BMI
Clinical characteristic in two-variable model	1.001	0.728	0.937	0.788	1.331	0.849	0.511	1.694	0.373	0.992
RAD in two-variable model	0.486	0.551	0.480	0.507	0.517	0.477	1.059	0.511	0.478	0.465

**Supple table.4e. The univariate coefficient of HR and P value for Log-Rank test in variables on OS**

	CRS	Age	Gender	Histological type	Clinical stage	Smoking status	LOT	ICIs type	NLRpost	BMI
HR	0.487	1.001	0.642	0.937	0.767	1.394	1.730	0.892	1.065	0.992
P value	0.020	0.825	0.040	0.747	0.152	0.054	0.006	0.619	0.000	0.793

**Supple table.4f. The univariate coefficient of HR and P value for Log-Rank test in variables on PFS**

	CRS	Age	Gender	Histological type	Clinical stage	Smoking status	ICIs type	NLRpost	LOT	BMI
HR	0.433	1.001	0.602	0.883	0.662	0.976	0.873	1.073	1.784	0.976
p value	0.002	0.786	0.008	0.475	0.011	0.363	0.499	0.000	0.001	0.363