

Factors	HR(Multivariate)–OS	P value	significance
distal_Stroma	0.807	0.105	
distal_Necrosis	1.027	0.821	
distal_Lymphocyte	0.773	0.037	*
distal_Normal_hepatic	0.761	0.034	*
distal_Mucus	0.953	0.680	
distal_CH_score	1.631	7.278e–05	***
distal_SDI	1.089	0.482	
infiltrating_Stroma	1.000	0.997	
infiltrating_Necrosis	1.072	0.570	
infiltrating_Lymphocyte	0.902	0.398	
infiltrating_Normal_hepatic	1.142	0.290	
infiltrating_Mucus	1.216	0.113	
infiltrating_CH_score	1.127	0.323	
infiltrating_SDI	1.178	0.173	
tumor_proximal_stroma_interaction	0.939	0.603	
tumor_proximal_Necrosis_interaction	0.854	0.181	
tumor_proximal_Lymphocyte_interaction	0.701	0.004	**
tumor_proximal_Normal_hepatic_interaction	1.076	0.552	
tumor_proximal_Mucus_interaction	1.432	0.003	**
overall_Stroma	0.789	0.071	
overall_Necrosis	1.153	0.233	
overall_Lymphocyte	0.686	0.004	**
overall_Normal_hepatic	0.965	0.781	
overall_Mucus	1.123	0.331	
overall_CH_score	1.288	0.035	*
overall_SDI	1.126	0.327	