## Supplementary

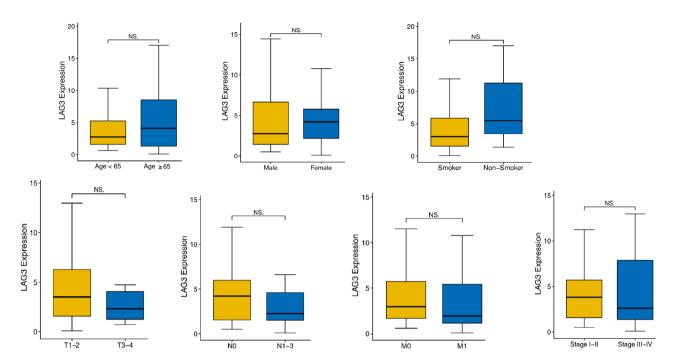


Figure S1 Correlation between LAG3 and clinical data in the cBioportal cohort. NS means no statistical significance.

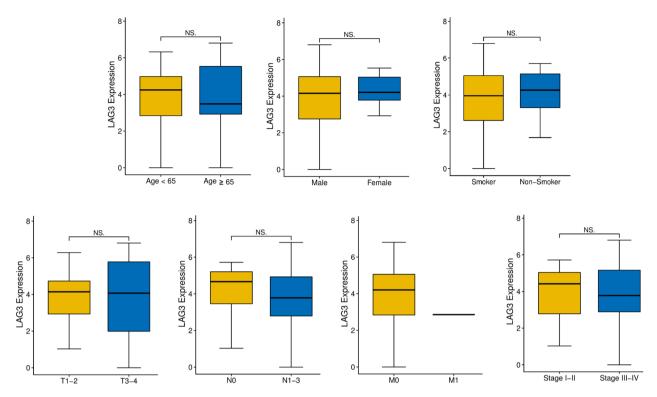


Figure S2 Correlation between LAG3 and clinical data in the GSE60052 cohort. NS means no statistical significance. LAG3, lymphocyte activation gene-3.

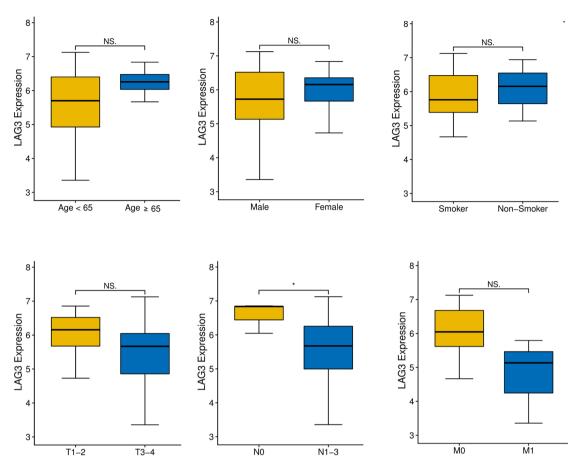


Figure S3 Correlation between LAG3 and clinical data in the GSE149507 cohort. "\*" means P<0.05; NS means no statistical significance.

Table S1 Liner analysis for LAG3 expression in the cBioPortal cohort

Variables	Univariate			Multivariate	
	Estimate	R square	P value	Estimate	P value
Age (<65 vs. ≥65 y)	-1.0914	0.01884	0.222		
Sex (female vs. male)	0.3660	0.001769	0.709		
Smoking status (non-smoker vs. smoker)	3.5942	0.0303	0.127		
Stage (I–II <i>vs.</i> III-IV)	0.2263	0.0007719	0.808		
Tumor status (T1-2 vs. T3-4)	-0.3991	0.008815	0.436		
N status (N0 vs. N1-3)	-0.3299	0.006899	0.491		
Metastasis (M0 vs. M1)	-0.7885	0.007022	0.484		
PD-1 expression	2.0994	0.7394	< 0.001	2.04406	< 0.001
PD-L1 expression	0.07531	0.07845	0.011	0.03089	0.049

Data with P value less than 0.1 were marked with italics. LAG3, lymphocyte activation gene 3; PD-1, programmed death 1; PD-L1, programmed death ligand 1.

Table S2 Liner analysis for LAG3 expression in the GSE60052 cohort

Variables	Univariate			Multivariate	
	Estimate	R square	P value	Estimate	P value
Age (<65 vs. ≥65 y)	-0.02317	3.353e-05	0.968		
Sex (female vs. male)	0.5363	0.008362	0.523		
Smoking status (non-smoker vs. smoker)	0.4980	0.01693	0.363		
Stage (I-II vs. III-IV)	0.2801	0.005555	0.603		
Tumor status (T1-2 vs. T3-4)	-0.09821	0.002019	0.757		
N status (N0 vs. N1-3)	-0.2878	0.01975	0.33		
Metastasis (M0 vs. M1)	-0.9452	0.005723	0.602		
PD-1 expression	0.2328	0.06086	0.081	0.1661	0.214
PD-L1 expression	0.3525	0.09948	0.024	0.3008	0.060

Data with P value less than 0.1 were marked with italics. LAG3, lymphocyte activation gene 3; PD-1, programmed death 1; PD-L1, programmed death ligand 1.