

**Table.** Cox proportional hazard 10-year overall survival models of NMIBC patient outcomes

	n (%) deceased	n (%) alive	Survival months	Multivariable model	
			Mean <sup>#</sup>	HR (95% CI)	P value
Age	180 (29.9)	423 (70.1)	104.3	1.07 (1.05-1.10)	7.7E-11
Age acceleration	180 (29.9)	423 (70.1)	104.3	1.04 (1.02-1.06)	0.001
Sex					
Male	156 (34.1)	301 (65.9)	102.2	Referent group	
Female	24 (16.4)	122 (83.6)	111.1	0.53 (0.35-0.82)	0.005
Tumor grade					
1 + 2	118 (26.1)	334 (73.9)	106.6	Referent group	
3 + 4	62 (41.1)	89 (58.9)	97.7	1.55 (1.12-2.12)	0.008
Smoking status					
Non-smoker	19 (18.4)	84 (81.6)	110.8	Referent group	
Ever-smoker	161 (32.2)	339 (67.8)	103.0	1.43 (0.89-2.32)	0.141
BCG treatment					
No	152 (29.6)	362 (70.4)	104.8	Referent group	
Yes	28 (31.5)	61 (68.5)	101.9	0.99 (0.65-1.51)	0.946
Group					
Group 1	106 (22.9)	357 (77.1)	109.6	Referent group	
Group 2	72 (52.2)	66 (47.8)	88.0	2.42 (1.77-3.29)	2.2E-8

HR: hazard ratio, CI: confidence interval, mdNLR: methylation-derived neutrophil to lymphocyte ratio

\*: Winsorization was used on the top 2% values for fitting linearity assumption.

All covariates modeled met proportionality assumptions

#: the median survival month for each variable is 120.