

Supplementary Table 1. Univariate and Multivariate Fine-Gray regression model for HG recurrence and progression to MIBC or metastatic disease using age as a continuous variable.

Characteristic	High-Grade Recurrence			Progression to MIBC or Metastatic Disease		
	SHR	95%CI	p-value	SHR	95%CI	p-value
Age at diagnosis	1.01	0.99-1.02	0.16	1.02	0.99-1.05	0.10
BMI				0.94	0.91-0.98	0.003
Smoker						
Never	1.00		.			
Current/Past	0.76	0.55-1.04	0.09			
Grade						
Low	1.00		.	1.00		.
High	13.49	1.8-94	0.01	3.41	0.46-25	0.23
Stage of entry TURBT						
Ta	1.00		.	1.00		.
Tis	1.68	0.92-3.1	0.09	1.50	0.45-4.98	0.5
T1	1.92	1.35-2.75	<0.001	2.94	1.5-5.47	0.001
Tumor						
Primary	1.00		.	1.00		.
Recurrent	1.69	1.20-2.4	0.002	2.40	1.31-4.2	0.004
Variant Histology						
No	1.00		.			
Yes	0.50	0.19-1.3	0.16			
LVI						
No				1.00		.
Yes				4.28	0.88-20	0.07
CIS in entry tumor						
No	1.00		.	1.00		.
Yes	1.16	0.81-1.7	0.4	1.03	0.53-1.89	0.99
Focality						
Single	1.00		.	1.00		.
Multiple	1.18	0.86-1.63	0.3	1.28	0.69-2.37	0.4

MIBC: Muscle-invasive bladder cancer; SHR: Sub-standardized Hazard ratio; CI: confident interval; BMI: Body-mass index; TURBT: Transurethral resection of the bladder; LVI: Lymphovascular invasion, CIS: carcinoma in situ.