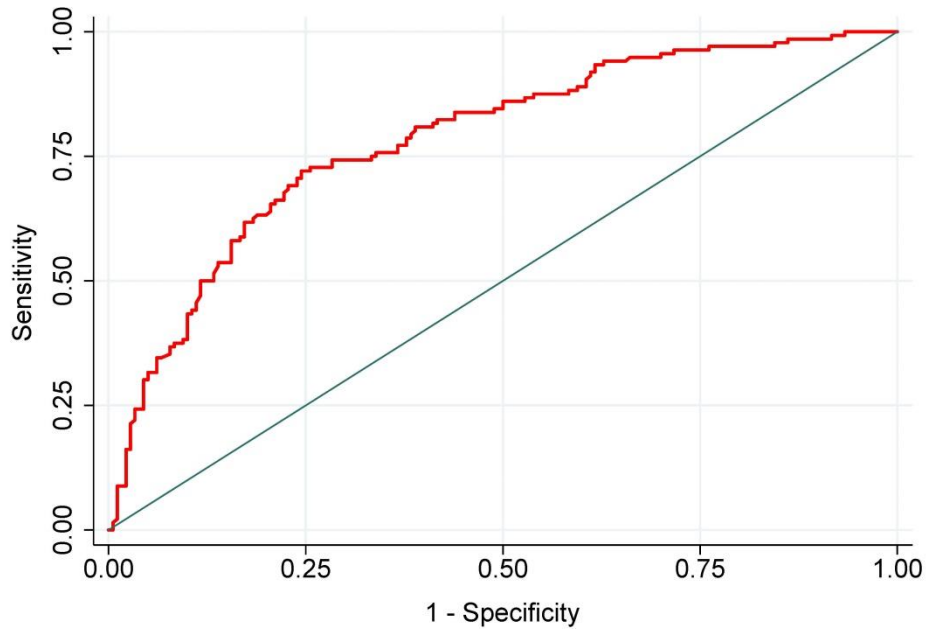


Supplementary figure 1 Receiver operating characteristic (ROC) curve of the final model in development. The final model presented a good discrimination (AUC = 0.76; 95% CI 0.70, 0.81). AUC: Area under the ROC curve.



Supplementary table 1. Baseline characteristics and outcome (mortality), comparing patients who were not included due to incomplete data with those were included in the final multivariate model.

Variable	All	Excluded	Included	P-value
	(n=400)	(n=65)	(n=335)	
Age (years), median (IQR)	61 (53, 68)	63 (53, 72)	61 (53, 67)	0.59
Gender				0.04
Female	107 (26.8)	24 (36.9)	83 (24.8)	
Male	293 (73.3)	41 (63.1)	252 (75.2)	
Race				0.67
White	333 (83.3)	53 (81.5)	280 (83.6)	
Asian	11 (2.8)	1 (1.5)	10 (3.0)	
Black or African American	42 (10.5)	8 (12.3)	34 (10.1)	
American Indian or Alaska native	2 (0.5)	1 (1.5)	1 (0.3)	
Unknown	12 (3.0)	2 (3.1)	10 (3.0)	

Tobacco use				0.51
No	80 (20.0)	16 (24.6)	64 (19.1)	
Yes	311 (77.8)	47 (72.3)	264 (78.8)	
Unknown	9 (2.3)	2 (3.1)	7 (2.1)	
Excessive alcohol consumption				0.42
No	242 (60.5)	43 (66.2)	199 (59.4)	
Yes	45 (11.3)	8 (12.3)	37 (11.0)	
Unknown	113 (28.2)	14 (21.5)	99 (29.6)	
Laterality				0.39
Left	108 (27.0)	15 (23.1)	93 (27.8)	
Right	106 (26.5)	22 (33.8)	84 (25.1)	
Midline	31 (7.8)	3 (4.6)	28 (8.4)	
Unknown	155 (38.8)	25 (38.5)	130 (38.8)	
*OPSCC				0.38
No	264 (66.0)	46 (70.8)	218 (65.1)	
Yes	136 (34.0)	19 (29.2)	117 (34.9)	
**LSCC				0.37
No	295 (73.8)	45 (69.2)	250 (74.6)	
Yes	105 (26.3)	20 (30.8)	85 (25.4)	
Dead				0.03
No	222 (55.5)	28 (43.1)	194 (57.9)	
Yes	178 (44.5)	37 (56.9)	141 (42.1)	

*OPSCC: Oropharyngeal squamous cell carcinoma; **LSCC: Laryngeal squamous cell carcinoma;

Significant p values (p<0.05) are in bold.