

## Supplemental Online Content

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**eTable 1.** Univariable and Multivariable Cox Proportional Hazards Model for Progression-Free Survival (n = 922)

**eTable 2.** Patient and Tumor Characteristics of the Propensity-Matched Group (n = 972)

**eTable 3.** Univariable and Multivariable Cox Proportional Hazards Model for Overall Survival in the Propensity-Matched Group (n = 972)

**eFigure.** Landmark Analysis Restricted to Patients Who Survived for More Than 12, More Than 18, and More Than 24 Months

This supplemental material has been provided by the authors to give readers additional information about their work.

**eTable 1.** Univariable and Multivariable Cox Proportional Hazards Model for Progression-Free Survival (n = 922)

	Univariable		Multivariable	
Variable	Hazard ratio (95% CI)	p-value	Hazard ratio (95% CI)	p-value
Sex				
Male	Reference		Reference	
Female	0.30 (0.11-0.81)	0.02	0.43 (0.15-1.21)	0.11
Subsite				
Tonsil	Reference		Reference	
Base of tongue	2.29 (1.46-3.60)	<0.001	2.27 (1.39-3.71)	0.001
Oropharynx, NOS	2.88 (1.67-4.96)	<0.001	3.26 (1.82-5.84)	<0.001
Histological grade				
Well-differentiated (Grade 1)	1.68 (0.72-3.90)	0.23	1.25 (0.52-2.98)	0.62
Moderately differentiated (Grade 2)	Reference		Reference	
Poorly differentiated (Grade 3-4)	0.69 (0.43-1.13)	0.14	0.87 (0.53-2.98)	0.60
Unknown	0.53 (0.27-1.05)	0.07	0.58 (0.29-1.16)	0.12
Clinical T classification				
T1	Reference		Reference	
T2	1.25 (0.63-2.47)	0.52	1.28 (0.64-2.56)	0.48
T3	1.63 (0.78-3.43)	0.20	1.67 (0.76-3.67)	0.20
T4a	2.29 (1.15-4.57)	0.02	1.63 (0.78-3.39)	0.19
Clinical N classification				
N0	Reference		Reference	
N1	1.26 (0.42-3.81)	0.68	1.85 (0.59-5.80)	0.29
N2	1.98 (0.72-5.41)	0.18	3.49 (1.23-9.86)	0.02
Primary Treatment Modality				
CCRT	Reference		Reference	
Surgery	1.64 (1.09-2.46)	0.02	1.72 (1.12-2.66)	0.01

Abbreviations: CI, confidence interval; NOS, not otherwise specified; CCRT, concurrent chemoradiotherapy

**eTable 2.** Patient and Tumor Characteristics of the Propensity-Matched Group (n = 972)

Primary Treatment Modality	Chemoradiotherapy (n = 486)	Surgery (n = 486)	p-value
Sex, n (%)			0.61
Male	434 (89.3)	428 (88.1)	
Female	52 (10.7)	58 (11.9)	
Age, mean (SD), years	53.59 (9.11)	53.49 (9.78)	0.27
Subsite, n (%)			
Tonsil	295 (60.7)	318 (65.4)	
Base of tongue	137 (28.2)	116 (23.9)	
Oropharynx, NOS	54 (11.1)	52 (10.7)	
Histological grade			0.47
Well-differentiated (Grade 1)	18 (3.7)	25 (5.1)	
Moderately differentiated (Grade 2)	291 (59.9)	277 (57.0)	
Poorly differentiated (Grade 3-4)	137 (28.2)	150 (30.9)	
Unknown	40 (8.2)	34 (7.0)	
Clinical T classification			0.001
T1	65 (13.4)	106 (21.8)	
T2	197 (40.5)	206 (42.4)	
T3	79 (16.3)	63 (13.0)	
T4a	145 (29.8)	111 (22.8)	
Clinical N classification			0.36
N0	36 ( 7.4)	33 ( 6.8)	
N1	94 (19.3)	112 (23.0)	
N2	356 (73.3)	341 (70.2)	

Abbreviations: SD, standard deviation; NOS, not otherwise specified

**eTable 3.** Univariable and Multivariable Cox Proportional Hazards Model for Overall Survival in the Propensity-Matched Group (n = 972)

	Univariable		Multivariable	
Variable	Hazard ratio (95% CI)	p-value	Hazard ratio (95% CI)	p-value
Sex				
Male	Reference		Reference	
Female	0.16 (0.09-0.29)	<0.001	0.22 (0.12-0.39)	<0.001
Subsite				
Tonsil	Reference		Reference	
Base of tongue	2.04 (1.66-2.51)	<0.001	1.52 (1.21-1.91)	<0.001
Oropharynx, NOS	1.97 (1.50-2.61)	<0.001	1.54 (1.15-2.06)	0.004
Histological grade				
Well-differentiated (Grade 1)	1.25 (0.83-1.88)	0.29	0.97 (0.64-1.47)	0.88
Moderately differentiated (Grade 2)	Reference		Reference	
Poorly differentiated (Grade 3-4)	0.60 (0.48-0.76)	<0.001	0.73 (0.57-0.93)	0.01
Unknown	0.96 (0.68-1.36)	0.84	1.01 (0.71-1.44)	0.95
Clinical T classification				
T1	Reference		Reference	
T2	1.35 (0.99-1.84)	0.06	1.29 (0.94-1.76)	0.12
T3	1.88 (1.32-2.70)	<0.001	1.61 (1.10-2.35)	0.02
T4a	2.83 (2.07-3.86)	<0.001	2.04 (1.46-2.85)	<0.001
Clinical N classification				
N0	Reference		Reference	
N1	0.83 (0.55-1.24)	0.36	1.35 (0.88-2.07)	0.17
N2	0.93 (0.65-1.35)	0.72	1.51 (1.03-2.22)	0.04
Primary Treatment Modality				
CCRT	Reference		Reference	
Surgery	0.88 (0.73-1.07)	0.19	0.95 (0.78-1.14)	0.57

Abbreviations: CI, confidence interval; NOS, not otherwise specified; CCRT, concurrent chemoradiotherapy

**eFigure.** Landmark Analysis Restricted to Patients Who Survived for More Than 12, More Than 18, and More Than 24 Months

CCRT, concurrent chemoradiotherapy.

