

Supplemental online content for:

Elderly Black Non-Hispanic Patients With Head and Neck Squamous Cell Cancer Have the Worst Survival Outcomes

Jessica D. McDermott, MD; Megan Eguchi, MPH; Rustain Morgan, MD; Arya Amini, MD; Julie A. Goddard, MD; Evelinn A. Borrayo, PhD; and Sana D. Karam, MD, PhD

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eTable 1: Descriptive Statistics of Patients by Race/Ethnicity

eTable 2: Effects of Individual Covariates on Cancer-Specific Survival Differences in All Racial/Ethnic Groups

eTable 1. Descriptive Statistics of Patients by Race/Ethnicity					
Characteristic	White Non-Hispanic (%)	Black Non-Hispanic (%)	Hispanic (%)	Asian Non-Hispanic (%)	P Value^a
Patients, n	10,858	994	725	540	
Sex					.029
Female	30.3	27.0	27.0	32.0	
Male	69.7	73.0	73.0	68.0	
Age, y					<.001
66–74	51.0	63.9	53.1	46.8	
75–84	34.8	28.6	34.8	36.5	
≥85	14.2	7.5	12.1	16.7	
Marital status					<.001
Unmarried	47.2	69.3	50.3	35.2	
Married/Partnered	52.8	30.7	49.7	64.8	
Registry region					<.001
East	19.3	18.0	16.1	8.3	
Midwest	12.4	15.9	1.8	2.2	
South	30.2	47.2	4.0	3.7	
West	38.0	18.9	78.1	85.7	
Patient urban/rural recode category					<.001
Urban commuting area	84.5	93.2	90.6	97.2	
Nonurban commuting area	15.5	6.8	9.4	2.8	
Census tract percentage below poverty line					<.001
<20%	80.3	41.4	61.0	80.4	
≥20%	19.7	58.5	39.0	19.6	
Visited NCI-designated CC or teaching hospital					<.001
No or unknown	27.9	19.4	26.6	21.3	
NCI-designated CC	21.6	14.6	24.4	42.8	
Teaching hospital	50.5	66.0	49.0	35.9	
Charlson comorbidity score					<.001
0	45.7	37.3	44.4	50.0	
1	25.2	25.7	24.3	22.8	
≥2	29.1	36.9	31.3	27.2	
Primary site					<.001
Lip and oral cavity	27.7	14.1	27.6	31.3	
Oropharynx	25.5	23.6	19.2	21.7	
Nasopharynx	1.8	3.1	2.3	9.4	
Hypopharynx	4.7	7.1	5.7	5.9	
Larynx	30.5	47.0	35.6	23.3	
Salivary glands/overlapping/NOS	9.7	5.0	9.7	8.3	
AJCC cancer stage					<.001
I	28.1	17.4	23.7	26.3	
II	15.1	13.6	16.0	14.6	
III	16.6	18.6	19.2	16.1	
IVA, IVB, or IV NOS	36.3	43.4	35.6	39.3	
IVC	3.9	7.0	5.5	3.7	

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eTable 1. Descriptive Statistics of Patients by Race/Ethnicity (cont.)					
Characteristic	White Non-Hispanic (%)	Black Non-Hispanic (%)	Hispanic (%)	Asian Non-Hispanic (%)	P Value^a
Receipt of treatment within 6 mo					<.001
No	12.9	19.1	13.6	11.5	
Yes	87.1	80.7	86.3	88.5	
Any visits with PCP in prior year					<.001
No	19.1	23.8	24.4	22.6	
Yes	80.9	76.2	75.6	77.4	
Any visits with otolaryngology in prior year					.035
No	59.4	63.8	62.1	60.4	
Yes	40.5	36.2	37.9	39.6	
Any ED visits in prior year					<.001
No	68.7	55.0	66.5	75.4	
Yes	31.3	45.0	33.5	24.6	

Statistics are unweighted column percentages.

Abbreviations: CC, cancer center; ED, emergency department; NOS, not otherwise specified; PCP, primary care physician.

^aBold indicates statistically significant P value.

Table 2. Effects of Individual Covariates on Cancer-Specific Survival Differences in All Racial/Ethnic Groups

Characteristic	Base Model ^a		Base Model + SES ^a		Base Model + SES + Stage ^a		Base Model + SES + Stage + Treatment ^a	
	HR	P Value	HR	P Value	HR	P Value	HR	P Value
Sex		.004		.002		.001		<.001
Male	Ref		Ref		Ref		Ref	
Female	1.10		1.11		1.15		1.20	
Age, y		<.001		<.001		<.001		<.001
66–74	Ref		Ref		Ref		Ref	
75–84	1.29		1.29		1.38		1.34	
≥85	1.84		1.85		2.03		1.78	
Race/Ethnicity		<.001		<.001		.209		.898
White NH	Ref		Ref		Ref		Ref	
Black NH	1.38		1.29		1.10		1.00	
Hispanic	1.10		1.05		0.95		1.01	
Asian NH	0.94		0.94		0.92		0.94	
Marital status		<.001		<.001		<.001		<.001
Married/Partnered	Ref		Ref		Ref		Ref	
Unmarried	1.52		1.49		1.41		1.30	
Geographic region		.005		.092		.028		.020
West	Ref		Ref		Ref		Ref	
East	0.90		0.91		0.90		0.93	
Midwest	1.03		1.03		1.04		1.02	
South	1.07		1.03		1.03		1.08	
Charlson comorbidity score		<.001		<.001		<.001		<.001
0	Ref		Ref		Ref		Ref	
1	1.07		0.99		1.07		1.14	
≥2	1.46		1.35		1.45		1.50	
Primary site		<.001		<.001		<.001		<.001
Oropharynx	Ref		Ref		Ref		Ref	
Hypopharynx	1.80		1.80		1.93		1.78	
Larynx	0.67		0.67		1.35		1.28	
Lip and oral cavity	0.73		0.73		1.41		1.57	
Nasopharynx	1.22		1.22		1.44		1.34	
Salivary gland/overlapping/NOS	0.93		0.93		1.35		1.60	
Patient location		—		.694		.584		.939
Urban commuting	—		Ref		Ref		Ref	
Nonurban commuting	—		0.98		1.02		1.02	
Census tract percentage below poverty level		—		<.001		.005		.057
<20%	—		Ref		Ref		Ref	
≥20%	—		1.18		1.12		1.08	
Visited NCI-designated CC or teaching hospital		—		.137		<.001		<.001
No or unknown	—		Ref		Ref		Ref	
NCI-designated CC	—		0.97		0.80		0.98	
Teaching hospital	—		1.05		0.97		1.15	

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eTable 2. Effects of Individual Covariates on Cancer-Specific Survival Differences in All Racial/Ethnic Groups (cont.)

Characteristic	Base Model ^a		Base Model + SES ^a		Base Model + SES + Stage ^a		Base Model + SES + Stage + Treatment ^a	
	HR	P Value	HR	P Value	HR	P Value	HR	P Value
AJCC cancer stage		—		—		<.001		<.001
I	—		—		Ref		Ref	
II	—		—		2.83		2.57	
III	—		—		5.26		5.16	
IVA, IVB, or IV NOS	—		—		8.33		7.87	
IVC	—		—		19.47		14.96	
Treatment		—		—		—		<.001
None	—		—		—		Ref	
Chemotherapy alone	—		—		—		0.54	
RT + chemotherapy	—		—		—		0.26	
RT alone	—		—		—		0.38	
Surgery + chemotherapy	—		—		—		0.34	
Surgery + RT	—		—		—		0.19	
Surgery + RT + chemotherapy	—		—		—		0.21	
Surgery alone	—		—		—		0.21	

Year of diagnosis was included in the analysis but excluded from the table.

Abbreviations: CC, cancer center; HR, hazard ratio; NH, non-Hispanic; NOS, not otherwise specified; RT, radiation therapy; SES, socioeconomic status.

^aBold indicates statistically significant values.