

Statin Use and Head and Neck Squamous Cell Carcinoma Outcomes

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Supplemental Table 1. Multivariable Cox Proportional Hazards Models of Ever Use of Statins and HNSCC Outcomes (no distant metastatic disease and no participants who died within 6 months)

	No. of Events ^a	Person-Months ^a	HR (95% CI) ^a	No. of Events ^b	Person-Months ^b	HR (95% CI) ^b
Overall Death	621			553		
Statin Use						
No	405	54725.72	1	366	55409.12	1
Yes	216	29669.65	0.75 (0.63, 0.89)	187	29719.52	0.75 (0.62, 0.90)
HNSCC Death	349			318		
Statin Use						
No	228	54725.72	1	209	55409.12	1
Yes	121	29669.65	0.79 (0.63, 1.00)	109	29719.52	0.80 (0.63, 1.03)
Recurrence	461			419		
Statin Use						
No	291	34379.93	1	264	34621.70	1
Yes	170	19378.56	0.88 (0.72, 1.08)	155	19391.87	0.92 (0.74, 1.13)

a. No patients with distant metastatic disease, adjusted for age, BMI and ACE-27

b. Excluding patients who died within 6 months of follow-up, adjusted for age, BMI and ACE-27

Supplemental Table 2. HPV Stratified Analysis excluding patients with distant metastatic disease

Outcomes	Never Statin User			Ever Statin user		
	No. of Events	Person Months	HR (95% CI) ^a	No. of Events	Person Months	HR (95% CI) ^a
Overall Death						
HPV status						
HPV-Positive	57	12550.70	1	19	7614.03	0.49 (0.29, 0.83)
HPV-Negative	124	12763.47	1	80	7560.38	0.78 (0.58, 1.05)
<i>P for interaction</i>	0.11					
Disease-Specific Death						
HPV status						
HPV-Positive	34	12550.70	1	9	7614.03	0.40 (0.19, 0.84)
HPV-Negative	65	12763.47	1	52	7560.38	1.08 (0.74, 1.59)
<i>P for interaction</i>	0.01					
Recurrence						
HPV status						
HPV-Positive	50	8600.18	1	17	5782.70	0.49 (0.28, 0.86)
HPV-Negative	87	8996.37	1	68	5028.99	1.10 (0.79, 1.54)
<i>P for interaction</i>	0.01					

a. Adjusted for Age at diagnosis, BMI and ACE-27

Supplemental Table 3. HPV Stratified Analysis using various strategies to account for missing data on HPV status

Outcomes	Never Statin User			Ever Statin user		
	No. of Events	Person Months	HR (95% CI) ^a	No. of Events	Person Months	HR (95% CI) ^{a,b}
Overall Death						
<i>HPV status with missing</i>						
HPV-Positive	61	12943.93	1 (REF)	21	7660.39	0.51 (0.31, 0.85)
HPV-Negative	131	12916.80	1 (REF)	80	7560.38	0.76 (0.57, 1.01)
HPV-Missing/Invalid	240	29766.87	1 (REF)	124	14627.19	0.81 (0.64, 1.01)
<i>P for interaction</i>	0.25					
<i>HPV status IPW</i>						
HPV-Positive	57	12437.75	1 (REF)	20	7522.4	0.55 (0.32, 0.95)
HPV-Negative	126	12641.97	1 (REF)	76	7317.68	0.80 (0.55, 1.18)
<i>P for interaction</i>	0.23					
Disease-Specific Death						
<i>HPV status with missing</i>						
HPV-Positive	38	12943.93	1 (REF)	10	7660.39	0.43 (0.21, 0.86)
HPV-Negative	71	12916.80	1 (REF)	52	7560.38	1.02 (0.70, 1.47)
HPV-Missing/Invalid	141	29766.87	1 (REF)	67	14627.19	0.77 (0.57, 1.04)
<i>P for interaction</i>	0.07					
<i>HPV status IPW</i>						
HPV-Positive	36	12437.75	1 (REF)	10	7522.4	0.47 (0.22, 0.99)
HPV-Negative	69	12641.97	1 (REF)	49	7317.68	0.99 (0.61, 1.62)
<i>P for interaction</i>	0.07					
Recurrence						
<i>HPV status with missing</i>						
HPV-Positive	55	8814.55	1 (REF)	18	5798.21	0.51 (0.30, 0.87)
HPV-Negative	95	8996.63	1 (REF)	68	5028.99	1.03 (0.75, 1.42)
HPV-Missing/Invalid	168	16841.95	1 (REF)	91	8615.2	0.89 (0.68, 1.15)
<i>P for interaction</i>	0.07					
<i>HPV status IPW</i>						
HPV-Positive	52	8429.93	1 (REF)	17	5725.8	0.53 (0.29, 0.95)
HPV-Negative	90	8845.34	1 (REF)	64	4899.45	1.10 (0.73, 1.65)
<i>P for interaction</i>	0.03					

b. Adjusted for Age at diagnosis, BMI and ACE-27

c. Stabilized inverse probability weighted model