On-line Table 1: Demographic and clinical characteristics of the HPV-positive and HPV-negative groups

Variable	HPV+ (n = 68)		HPV− (n = 68)		P Value
	N	%	N	%	
Age category					1.0
<55 years	34	50.0	34	50.0	
≥55 years	34	50.0	34	50.0	
Mean (range)	52 (39–74)		64 (40–73)		
Sex					.015
Male	61	89.7	50	73.5	
Female	7	10.3	18	26.5	
Race/ethnicity					.771
Non-Hispanic white	62	91.2	61	89.7	
Other	6	8.8	7	10.3	
Smoking status[a]					1.0
Current smoker	20	29.4	20	29.4	
Former smoker	22	32.4	22	32.4	
Never-smoker	26	38.2	26	38.2	
Alcohol drinking status					.377
Current drinker	33	48.5	41	60.3	
Former drinker	14	20.6	10	14.7	
Never-drinker	21	30.9	17	25.0	
Tumor subsite[a]					1.0
Tonsil	40	58.8	40	58.8	
Base of tongue	28	41.2	28	41.2	
Tumor category[a]					1.0
T1	22	32.4	22	32.4	
T2	29	42.6	29	42.6	
T3	9	13.2	9	13.2	
T4	8	11.8	8	11.8	
Nodal category					1.0
N0	7	10.3	7	10.3	
N1–2	61	89.7	61	89.7	
N3	0	0.0	0	0.0	
Stage					1.0
I–II	5	7.4	4	5.9	
III–IV	63	92.6	64	94.1	
Grade[b]					.683
Well differentiated	1	1.6	2	3.2	
Moderately differentiated	26	41.3	22	35.5	
Poorly differentiated	36	57.1	38	61.3	

[a] Matched variables (smoking status, subsite, and T-category).
[b] Grade was not recorded in 5 HPV+ and 6 HPV−. For this analysis, moderately well-differentiated tumors (n = 0 HPV+ and 1 HPV−) were included in the well-differentiated group and moderately-poorly–differentiated (n = 3 HPV+ and 5 HPV−) were included in the poorly differentiated group.

On-line Table 2: Matched-pair analysis of imaging characteristics associated with HPV status

	Matched Pairs		Imaging Finding Associated With HPV+ (95% Confidence Interval)	P Value[a]
	HPV–			
HPV+	Imaging Finding Present	Imaging Finding Absent		
Primary visible (61 pairs)				
No	10	2		
Yes	43	6	0.6 (0.18–1.82)	.317
Primary enhancing (43 pairs)				
No	6	2		
Yes	25	9	1.5 (0.48–5.12)	.439
Primary well defined (43 pairs)				
No	6	4		
Yes	19	13	2.2 (0.77–6.95)	.108
Primary is exophytic (43 pairs)				
No	6	23		
Yes	1	12	2.0 (0.69–6.49)	.157
Primary with submucosal spread (43 pairs)				
No	5	12		
Yes	17	8	1.6 (0.46–6.22)	.405
Primary invades adjacent muscle (43 pairs)				
No	10	30		
Yes	2	0	0.0 (0–0.45)	.002
Metastatic lymph nodes visible (59 pairs)				
No	5	2		
Yes	45	7	1.4 (0.38–5.59)	.564
Metastatic lymph nodes cystic (45 pairs)				
No	2	29		
Yes	3	11	5.5 (1.2–51.07)	.013
Metastatic lymph nodes necrotic (45 pairs)				
No	6	7		
Yes	30	2	0.3 (0.03–1.86)	.157
Metastatic lymph nodes with ECS (45 pairs)				
No	8	22		
Yes	6	9	1.1 (0.39–3.35)	.808
Node of Rouvier involved (45 pairs)				
No	5	32		
Yes	2	6	1.2 (0.31–4.97)	.763

[a] McNemar χ^2 test.