The Use of Circulating Tumor HPV DNA by Practicing Head and Neck Otolaryngologists: A Survey of American Head and Neck Society Physicians

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BACKGROUND

- In recent years, there has been increasing interest in the use of circulating tumor HPV DNA (ctHPVDNA) in the diagnosis, management, and surveillance of HPV-associated oropharyngeal squamous cell carcinoma (HPV-OPSCC)[1-2]
- While ctHPVDNA testing is now integrated into HPV-OPSCC treatment protocols at many institutions, significant debate remains regarding its efficacy and ability to safely influence clinical decision making[3]
- This study aimed to assess the current knowledge, use, and perspectives of ctHPVDNA testing among surgeon-members of the American Head and Neck Society (AHNS)

METHODS

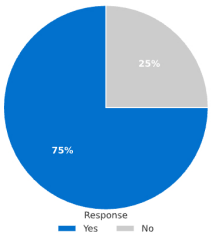
- This was a cross-sectional study in which a 25-question survey was distributed via email to all members of the AHNS
- Responses to the survey were collected anonymously via a REDCap link between June 17, 2024 and August 1, 2024
- Variables assessed included demographics variables, such as years in practice, practice setting, location, and city size, as well as knowledge and use of ctHPVDNA in the management of HPV-OPSCC, types of assays used, and current barriers to use among practicing otolaryngologists
- Adequate survey responses were collected from 73 practicing head and neck surgeons

RESULTS

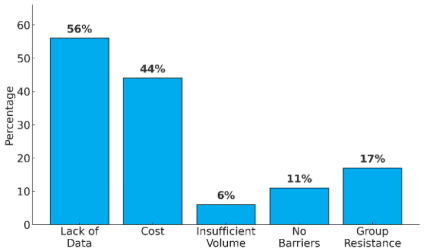
Demographics of Survey Respondents

Characteristic	Number (%)
Years in Practice	
<5 Years	24 (33%)
5-9 Years	15 (21%)
10-19 Years	16 (22%)
20+ Years	18 (25%)
Practice Setting	
Academic	58 (79%)
Community Hospital/Private Practice	14 (19%)
VA	1 (1%)
Location	
Northeast	20 (27%)
Midwest	20 (27%)
Southeast	16 (22%)
West	10 (14%)
Southwest	7 (10%)
Rural vs. Urban	
Large City	49 (67%)
Mid-size City	14 (19%)
Small to Mid-Size City	7 (10%)
Small City	1 (1%)
Rural	2 (3%)
Annual Cases of OPSCC Seen by Respondent	
<10	1 (1%)
10-49	49 (67%)
50	19 (26%)
100+	4 (5%)
Annual Cases of OPSCC at Institution	
<10	0 (0%)
10-49	15 (20%)
50-99	21 (29%)
100+	37 (51%)
Percent of HPV-Associated OPSCC	
<25%	1 (1%)
25-49%	0 (0%)
50-74%	26 (36%)
75-100%	46 (63%)

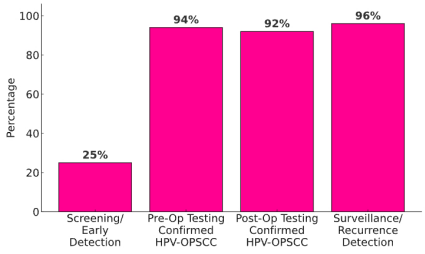
"Do You Use ctHPVDNA in the Management of HPV-OPSCC?"



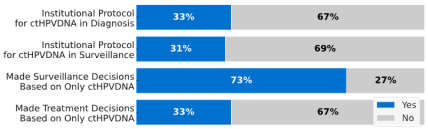
Barriers in Those Not Using ctHPVDNA



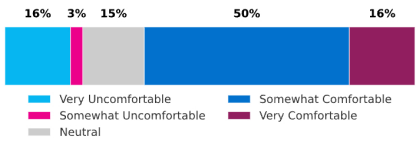
Specific Uses of ctHPVDNA by Respondents



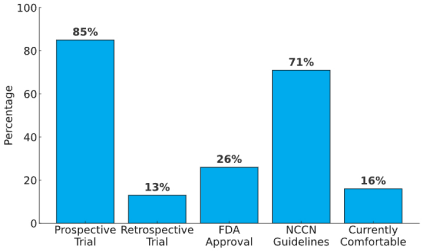
Protocols and Decision-Making



Comfort with Data Supporting ctHPVDNA



Necessary Steps to Increase Comfort



CONCLUSIONS

- While selection bias is a limitation of the present study, as participation was optional and 75% of respondents noted use of ctHPVDNA in the management of HPV-OPSCC, it is notable that the majority of head and neck surgeons in this sample utilize the test and report at least some comfort with the supporting data
- Those respondents not currently utilizing ctHPVDNA displayed interest, but cited lack

REFERENCES

1. Haring CT, Dermody SM, Yalamanchi P, et al. The future of circulating tumor DNA as a biomarker in HPV related oropharyngeal squamous cell carcinoma. *Oral Oncol*. 2022;126:105776.

2. Chera BS, Kumar S, Shen C, et al. Plasma circulating

of data and cost as primary barriers to its implementation in their practices

- Overall, these results highlight the increasing acceptance and application of liquid biopsy in the management of HPV-OPSCC, particularly in the context of disease surveillance, and highlight areas for advancing clinical implementation

tumor HPV DNA for the surveillance of cancer recurrence in HPV-associated oropharyngeal cancer. *J Clin Oncol*. 2020;38(10):1050-1058.

3. Xie DX, Kut C, Quon H, Seiwert TY, D'Souza G, Fakhry C. Clinical uncertainties of circulating tumor DNA in human papillomavirus–related oropharyngeal squamous cell carcinoma in the absence of National Comprehensive Cancer Network Guidelines. *J Clin Oncol*. 2023;41(14):2483-2487.