



ASO Author Reflections: Surgery for pT3 and pT4 Cutaneous Squamous Cell Carcinomas of the Head and Neck Provides Robust Outcomes Against Which Emerging Treatment Modalities Should be Compared to Determine Their Role in the Standard of Care

Amanda E. Yung, BSc(Adv)^{1,2}, and Sydney Ch'ng, MBBS, PhD, FRACS^{2,3,4,5} 

¹Sydney Medical School, University of Sydney, Sydney, NSW, Australia; ²Royal Prince Alfred Hospital Institute of Academic Surgery, Sydney, NSW, Australia; ³Faculty of Medicine and Health, The University of Sydney, Sydney, NSW, Australia; ⁴Melanoma Institute Australia, University of Sydney, Camperdown, NSW, Australia; ⁵Department of Plastic and Reconstructive Surgery, Royal Prince Alfred Hospital, Sydney, NSW, Australia

PAST

The current standard of care for pT3/4 cutaneous squamous cell carcinomas of the head and neck (HNcSCC) consists of surgery and post-operative radiotherapy. However, a number of patients may be considered incurable with surgery due to the presence of multiple-recurrent disease or inability to achieve clear microscopic margins. In the past, alternatives to surgery for advanced HNcSCC, such as definitive radiotherapy or chemotherapy, have been much inferior to surgery and were associated with significant adverse events.¹

PRESENT

Based on encouraging data from recent clinical trials of immune checkpoint inhibitors (ICI), cemiplimab and pembrolizumab have been granted FDA approval for use in locally advanced and metastatic HNcSCC not curative with surgery or radiotherapy.^{2,3} To allow better integration of conventional and emerging treatment modalities, we reviewed the surgical treatment outcomes of our patient

cohort with pT3/4 HNcSCC.⁴ Our real-world experience demonstrated a 5-year locoregional control rate of 62.0%, disease-specific survival rate of 83.7%, and overall survival rate of 71.9%. LRC was reduced in the presence of margin involvement and previous treatment (radiotherapy/surgery). These adverse features should guide the use of adjuvant or alternative therapy.

FUTURE

This study is to date the largest dataset of advanced HNcSCC patients treated with standard of care of surgery with/without postoperative radiotherapy/medical therapy with long-term follow-up before wider use of ICI immunotherapy. It provides a benchmark against which potential treatment alternatives may be compared. While currently reported outcomes of ICI as primary or adjuvant treatment for advanced HNcSCC are promising, long-term clinical trial data and real-world outcomes are still emerging. Further studies assessing interactions between preoperative functional status and surgical outcomes/complications, and prediction of individual response to ICI immunotherapy are required to allow better selection of patients most suitable for surgery versus alternative primary or (neo)adjuvant therapies for advanced HNcSCC.

© The Author(s) 2022

First Received: 15 March 2022

Accepted: 16 March 2022

Published Online: 7 April 2022

S. Ch'ng, MBBS, PhD, FRACS
e-mail: sydney.chng@sydney.edu.au

FUNDING Open Access funding enabled and organized by CAUL and its Member Institutions. No funding was sought for our study.

DISCLOSURES No conflicts of interest have been declared.

OPEN ACCESS This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

REFERENCES

1. Lee SY, Hwang WJ, Kim KP, Kim HM, Hwang JH, Kim KS. The relationship between the size and the invasion depth of tumors in head and neck cutaneous squamous cell carcinoma. *Arch Plast Surg.* 2016;43(6):538–43.
2. Migden MR, Khushalani NI, Chang ALS, et al. Cemiplimab in locally advanced cutaneous squamous cell carcinoma: results from an open-label, phase 2, single-arm trial. *Lancet Oncol.* 2020;21(2):294–305.
3. Grob JJ, Gonzalez R, Basset-Seguín N, et al. Pembrolizumab monotherapy for recurrent or metastatic cutaneous squamous cell carcinoma: a single-arm Phase II trial (KEYNOTE-629). *J Clin Oncol.* 2020;38(25):2916–25.
4. Yung AE, Crouch G, Varey AHR, et al. Benchmarking survival outcomes following surgical management of pT3 and pT4 cutaneous squamous cell carcinoma of the head and neck. *Ann Surg Oncol.* 2022. <https://doi.org/10.1245/s10434-022-11669-z>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.