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## Tumour Budding - A Prognostic Indicator in Oral Squamous Cell Carcinoma?

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We read the article with interest the study by the author Yopovinu Rhusto., et al. This study has elucidated a statistically significant and clinically relevant association between POI, PNI with LNM and locoreginal recurrence. Other pathological features: along with pattern of invasion such as depth of invasion, grade of pathological differentiation and neuro - vascular invasion are usually considered for prognostication for disease [1-6].

In recent times however, tumour budding has emerged as another feature of prognostic importance [7]. Tumour budding and WPOI are shown to be associated more closely with nodal metastasis when compared to histologic grading.

Although factors such as the mode of invasion, WPOI, LVI and PNI influenced 5-year disease-free survival significantly, some studies consider, tumour budding as the only independent predictor of regional metastasis. Results of the same study recommend that the intensity of tumour budding may be a novel diagnostic biomarker, as well as a therapeutic tool, for regional metastasis in patients with early OSCC [3]. WPOI/POI have been subject of study since broders and brandwein gensler pointed out its importance.

WPOI has also become a part of regular reporting in Histopathological of OSCC, however its clinical importance and the need for addition of adjuvant therapy is much debated. This paper serves as an important reminder on how WPOI may influence outcome for OSCC. Tumour budding on the other hand is not a part of routine histopalogical reporting for OSCC. In view recent evidence it may be prudent to include this in the reports.

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Although more extensive prospective studies with large datasets are needed to elaborate the importance of these features individually. Both factors must be a part of staging and decision making for adjuvant therapy.

Tumour budding still has not been included in the histopathological findings, so we suggest you include tumour budding as a promising prognostic marker in many cancers.

## **Bibliography**

- 1. Wu., *et al.* "Can pattern and depth of invasion predict lymph node relapse and prognosis in tongue squamous cell carcinoma". *BMC Cancer* 19 (2019): 714.
- Deval Parekh., *et al.* "Worst pattern of invasion type 4 (wopi-4) and Lymphocyte host response should be mandatory reporting criteria for oral cavity squamous cell carcinoma: A re-look at the American joint committee of cancer (AJJCC) minimum dataset". *Indian Journal of Pathology and Microbiology* 63.4 (2020): 527-533.
- 3. Shimizu S., *et al.* "Tumor budding is an independent prognostic marker in early-stage oral squamous cell carcinoma: With special reference to the mode of invasion and worst pattern of invasion". *PLoS ONE* 13.4 (2018): e0195451.

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- 4. Bin Xu., *et al.* "The prognostic role of histologic grade, worst pattern of invasion, and tumour budding in early oral tongue squamous cell carcinoma a comparative study". *Virchows Archiv* 479.3 (2021): 597-606.
- 5. Yamamoto E., *et al.* "Mode of invasion, bleomycin sensitivity, and clinical course in squamous cell carcinoma of the oral cavity". *Cancer* 51.12 (1983): 2175-2180.
- Jakobsson PA., *et al.* "Histologic classification and grading of malignancy in carcinoma of the larynx". *Acta Radiology* 12.1 (1973): 1-7.
- 7. Alhadi Almangush., *et al.* "Tumour budding in oral squamous cell carcinoma: a meta-analysis". *British Journal of Cancer* 118.4 (2018): 577-586.

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