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1. Single-cell sequencing reveals tumor microenvironment features associated with the response to neoadjuvant immunochemotherapy in oral squamous cell carcinoma

單細胞測序揭示口腔鱗狀細胞癌腫瘤微環境特徵與新輔助免疫化療反應的關係

PMID: 40105941 | Cancer Immunol Immunother | 2025 Mar

Objectives: In recent years, immune checkpoint inhibitors have shown promise as neoadjuvant therapies in the treatment of locally advanced oral squamous cell carcinoma (OSCC). However, the factors affecting the tumor response to immune checkpoint inhibitors (ICIs) remain unclear. This study aimed to analyze the impact of neoadjuvant chemoimmunotherapy (NACI) on the tumor microenvironment of OSCC via single-cell RNA sequencing, with the goal of optimizing treatment strategies.

目的：近年來，免疫檢查點抑制劑作為新輔助治療在局部晚期口腔鱗狀細胞癌（OSCC）的治療中展現出良好前景。然而，影響腫瘤對免疫檢查點抑制劑（ICIs）反應的因素仍不清楚。本研究旨在通過單細胞RNA測序分析新輔助化療免疫治療（NACI）對OSCC腫瘤微環境的影響，以優化治療策略。

Methods: We analyzed biopsy, primary tumor, matched metastatic lymph node, and normal lymph node samples from four patients with OSCC receiving two cycles of tislelizumab (200 mg), albumin-bound paclitaxel (260 mg/m²), and cisplatin (60-75 mg/m²), with 3-week intervals between each cycle.

方法：我們分析了四名接受兩個週期替雷利珠單抗（200 mg）、白蛋白結合型紫杉醇（260 mg/m²）和順鉑（60-75 mg/m²）治療的OSCC患者的活檢標本、原發腫瘤、配對轉移淋巴結和正常淋巴結樣本，每個週期間隔3週。

Results: We identified two major tumor cell subpopulations (C9 and C11), and patients with high expression of C11 subgroup-specific genes had a lower survival rate. FOXP3+ CD4 eTreg cells were

found to potentially suppress the immune response. We found that NACI enhances antitumor immunity by promoting the proliferation of granzyme-expressing CD8+ T effector cells while simultaneously diminishing the effect of CD4+ T cells on Treg-mediated immune suppression.

結果：我們鑑定出兩個主要的腫瘤細胞亞群（C9和C11），高表達C11亞群特異性基因的患者生存率較低。發現FOXP3+ CD4 eTreg細胞可能抑制免疫反應。我們發現NACI通過促進表達顆粒酶的CD8+ T效應細胞增殖來增強抗腫瘤免疫，同時減弱CD4+ T細胞對Treg介導的免疫抑制作用。

Conclusion: We explored the immune landscape of primary OSCC tumors and metastatic lymph nodes in relation to clinical response to NACI. Our findings offer valuable insights into patient treatment responses and highlight potential new therapeutic targets for the future management of OSCC.

結論：我們探討了原發性OSCC腫瘤和轉移淋巴結的免疫圖譜與NACI臨床反應的關係。我們的發現為患者治療反應提供了寶貴的見解，並為OSCC的未來治療指出了潛在的新治療靶點。

2. Neoadjuvant chemoimmunotherapy brings superior quality of life of patients with locally advanced oral or oropharyngeal cancer: A propensity score-matched analysis

新輔助化療免疫治療為局部晚期口腔或口咽癌患者帶來更優質的生活質量：傾向評分匹配分析

PMID: 40015212 | Oral Oncol | 2025 Mar

Background: The outcomes and quality of life of patients with locally advanced oral or oropharyngeal squamous cell carcinoma (LAOOPSCC) following upfront surgery (US) are suboptimal. We aimed to investigate the antitumor efficacy and quality-of-life benefits of neoadjuvant chemoimmunotherapy (NACI) and compare them with those of US for LAOOPSCC.

背景：局部晚期口腔或口咽鱗狀細胞癌（LAOOPSCC）患者接受直接手術（US）後的療效和生活質量並不理想。我們旨在研究新輔助化療免疫治療（NACI）的抗腫瘤療效和生活質量獲益，並與LAOOPSCC直接手術進行比較。

Results: In the NACI group, the major pathological response rate was 58.8% (30/51), and the objective response rate was 66.7% (34/51). Patients experienced a shorter operative time ($p = 0.001$) and a reduced length of hospitalization post-surgery ($p = 0.041$), along with less intraoperative blood loss ($p < 0.001$) and fewer free flap reconstructions ($p < 0.001$).

結果：NACI組的主要病理反應率為58.8% (30/51)，客觀緩解率為66.7% (34/51)。NACI組患者手術時間更短 ($p = 0.001$)，術後住院時間更短 ($p = 0.041$)，術中出血量更少 ($p < 0.001$)，游離皮瓣重建更少 ($p < 0.001$)。

Conclusion: The findings demonstrate the safety and feasibility of NACI and the de-escalation surgery after NACI is worth promoting to improve patient postoperative quality of life.

結論：研究結果表明NACI安全可行，NACI後的降階梯手術值得推廣以改善患者術後生活質量。

3. Patterns of lymph node metastasis and treatment outcomes of parotid gland malignancies

腮腺惡性腫瘤的淋巴結轉移模式及治療結果

PMID: 39987446 | BMC Oral Health | 2025 Feb

Background: This study aimed to characterize the pattern of cervical lymph node spread and evaluate prognostic factors and outcomes of surgery and postoperative adjuvant therapy in primary parotid carcinoma (PPC).

背景：本研究旨在描述頸淋巴結擴散模式，並評估原發性腮腺癌（PPC）手術和術後輔助治療的預後因素和結果。

Results: Pathology-confirmed lymph node metastasis was detected in 60.0% and 84.1% of the patients with cT1-2 and cT3-4 tumors, respectively. The occult metastasis rate in cN0 was 55.2%. Level II metastasis was most common (93.2%).

結果：病理證實的淋巴結轉移在cT1-2和cT3-4腫瘤患者中分別為60.0%和84.1%。cN0的隱匿性轉移率為55.2%。II區轉移最常見 (93.2%)。

Conclusion: Histological high grade and advanced T classification were associated with occult lymph node metastasis. Postoperative radiotherapy conferred significant survival benefits in PPC.

結論：高組織學分級和晚期T分期與隱匿性淋巴結轉移相關。術後放療為PPC患者帶來顯著的生存獲益。

4. Integrated peripheral blood multi-omics profiling identifies immune signatures predictive of neoadjuvant PD-1 blockade efficacy in head and neck squamous cell carcinoma

外周血多組學整合分析鑑定預測頭頸部鱗狀細胞癌新輔助PD-1阻斷療效的免疫特徵

PMID: 40544277 | J Transl Med | 2025 Jun

Background: Neoadjuvant PD-1 inhibitor therapy has shown promise in locally advanced head and neck squamous cell carcinoma (HNSCC), but only a subset of patients achieves major pathological responses. The aim of this study is to develop a predictive model for neoadjuvant PD-1 therapy response using liquid biopsy approaches.

背景：新輔助PD-1抑制劑治療在局部晚期頭頸部鱗狀細胞癌（HNSCC）中展現出良好前景，但僅部分患者能獲得主要病理反應。本研究旨在使用液體活檢方法開發新輔助PD-1治療反應的預測模型。

Results: A multimodal predictive model incorporating CD8+T cell subsets (c03, c17) and plasma biomarkers (IL-5, MMP7) demonstrated superior predictive accuracy (AUC = 0.9219).

結果：整合CD8+ T細胞亞群（c03、c17）和血漿生物標誌物（IL-5、MMP7）的多模態預測模型顯示出優越的預測準確性（AUC = 0.9219）。

Conclusions: Integrated peripheral immune profiling enables robust, noninvasive prediction of neoadjuvant PD-1 blockade efficacy in HNSCC.

結論：外周免疫譜整合分析能夠穩健、無創地預測HNSCC新輔助PD-1阻斷療效。

5. Correlation between maxillary defect and facial asymmetry

上頷骨缺損與面部不對稱的相關性

PMID: 39870547 | Int J Oral Maxillofac Surg | 2025 Jul

The aim of this study was to evaluate the correlation between maxillary defects and facial asymmetry, and to establish categories for visual perception of facial asymmetry. Facial asymmetry was classified into three grades (I-III) based on visual perception. Maxillary defects significantly affect the midface soft tissue symmetry. For grade III asymmetry, reconstruction is essential.

本研究旨在評估上頷骨缺損與面部不對稱的相關性，並建立面部不對稱視覺感知的分類標準。根據視覺感知將面部不對稱分為三級（I-III）。上頷骨缺損顯著影響中面部軟組織對稱性。III級不對稱則必須進行重建。

6. Reconstructing defects following radical parotidectomy using superficial circumflex iliac perforator flaps

使用旋髂淺動脈穿支皮瓣修復腮腺根治術後缺損

PMID: 40050935 | BMC Oral Health | 2025 Mar

Background: The restoration of tissue defects following radical parotidectomy poses significant challenges. The superficial circumflex iliac perforator (SCIP) flap presents several advantages.

背景：腮腺根治術後組織缺損的修復面臨重大挑戰。旋髂淺動脈穿支皮瓣（SCIP）具有多項優勢。

Results: The study included 10 patients. All flaps survived without radiation-related recipient complications or donor site complications.

結果：研究納入10例患者。所有皮瓣均存活，無放療相關受區併發症或供區併發症。

Conclusion: The use of SCIP flaps has been demonstrated to be a viable and safe option for the reconstruction of defects resulting from radical parotidectomy.

結論：SCIP皮瓣已被證明是修復腮腺根治術後缺損的可行且安全的選擇。

7. Use of Superficial Temporal Vessels in Reconstructive Oral and Maxillofacial Surgery With Vascularized Free Flaps Among "Frozen Neck" Patients

顳淺血管在「冰凍頸」患者口腔頤面外科血管化游離皮瓣重建中的應用

PMID: 41255777 | Laryngoscope Investig Otolaryngol | 2025 Nov

Background: This study aimed to evaluate the feasibility of using superficial temporal vessels as recipient vessels for vascularized free flap reconstruction in "frozen neck" patients following radiotherapy.

背景：本研究旨在評估顳淺血管作為受區血管在放療後「冰凍頸」患者血管化游離皮瓣重建中的可行性。

Results: 16 patients underwent vascularized free flap reconstruction. All patients attained optimal surgical outcomes with all flaps survived.

結果：16例患者接受了血管化游離皮瓣重建。所有患者均獲得理想的手術結果，所有皮瓣均存活。

Conclusion: Superficial temporal vessels offer a safe, reliable approach for vascularized free flap reconstruction in challenging "frozen neck" cases.

結論：顳淺血管為具有挑戰性的「冰凍頸」病例提供了安全、可靠的血管化游離皮瓣重建方法。

8. Reconstruction of lower lip defects with chimeric nasolabial flap with buccal artery myomucosal flap

嵌合鼻唇溝皮瓣聯合頰動脈肌黏膜瓣修復下唇缺損

PMID: 39855302 | J Stomatol Oral Maxillofac Surg | 2025 Jun

Purpose: This study aimed to evaluate a chimeric flap comprising a nasolabial flap and a buccal artery myomucosal flap used to reconstruct a large defect of the lower lip.

目的：本研究旨在評估由鼻唇溝皮瓣和頰動脈肌黏膜瓣組成的嵌合皮瓣修復下唇大面積缺損的效果。

Results: Seven patients underwent radical resection and reconstruction. The flap survived without complications in 6 patients. All patients were able to intake oral diet in a public setting.

結果：7例患者接受了根治性切除和重建。6例患者皮瓣存活無併發症。所有患者均能在公共場合進行口服飲食。

Conclusions: The chimeric flap offers a method for reconstructing near-total and total defects of the lower lip.

結論：嵌合皮瓣為修復下唇近全部和全部缺損提供了一種方法。

9. Role of 18F-FDG PET/CT radiomics in predicting lymph node metastasis and prognosis in oral squamous cell carcinoma

18F-FDG PET/CT影像組學在預測口腔鱗狀細胞癌淋巴結轉移和預後中的作用

PMID: 41478255 | Radiography (Lond) | 2025 Dec

Introduction: This study aimed to develop and validate 18F-FDG PET/CT radiomics-based models for predicting cervical lymph node metastasis (LNM) and prognosis in patients with OSCC.

引言：本研究旨在開發和驗證基於18F-FDG PET/CT影像組學的模型，用於預測OSCC患者的頸淋巴結轉移（LNM）和預後。

Results: The LNM diagnostic model achieved an AUC of 0.856 and an accuracy of 81.5%, outperforming conventional visual PET/CT assessment (accuracy = 74.6%).

結果：LNM診斷模型的AUC達到0.856，準確率為81.5%，優於傳統視覺PET/CT評估（準確率 = 74.6%）。

Conclusion: PET/CT radiomics significantly improved the diagnostic accuracy for cervical LNM.

結論：PET/CT影像組學顯著提高了頸部LNM的診斷準確性。

10. Deep learning-based auto-segmentation model for clinical target volume delineation in brachytherapy after parotid cancer surgery

基於深度學習的自動分割模型用於腮腺癌術後近距離放療臨床靶區勾畫

PMID: 41048621 | J Contemp Brachytherapy | 2025 Aug

Purpose: This study aimed to develop and evaluate a deep learning-based model for auto-segmentation of the CTVs in postoperative adjuvant brachytherapy for patients with parotid gland cancer.

目的：本研究旨在開發和評估基於深度學習的模型，用於腮腺癌患者術後輔助近距離放療CTV的自動分割。

Results: The deep learning model generated initial CTV contours in 9.4 seconds. Subsequent expert review required an average of 11.9 minutes, substantially shorter than the 46.7 minutes needed for fully manual delineation.

結果：深度學習模型在9.4秒內生成初始CTV輪廓。隨後的專家審核平均需要11.9分鐘，明顯短於完全手動勾畫所需的46.7分鐘。

Conclusions: Automatic contouring with physician review enabled high-accuracy and rapid CTV generation, reducing the overall delineation workload by more than 30 minutes.

結論：自動勾畫結合醫生審核實現了高準確性和快速CTV生成，將整體勾畫工作量減少了30多分鐘。

11. Neoadjuvant tislelizumab plus chemotherapy in locally advanced oral and oropharyngeal squamous cell carcinoma: A single-arm phase II clinical trial

新輔助替雷利珠單抗聯合化療治療局部晚期口腔和口咽鱗狀細胞癌：單臂II期臨床試驗

PMID: 41352160 | Oral Oncol | 2026 Jan

Background: This study aimed to evaluate the antitumor effect and safety of neoadjuvant chemotherapy plus tislelizumab for the treatment of resectable locally advanced oral or oropharyngeal squamous cell carcinoma (LAOOPSCC).

背景：本研究旨在評估新輔助化療聯合替雷利珠單抗治療可切除的局部晚期口腔或口咽鱗狀細胞癌(LAOOPSCC)的抗腫瘤效果和安全性。

Results: A total of 82 patients completed two cycles of neoadjuvant therapy. An objective response rate of 67.9% and an MPR rate of 60.3% were achieved, with 34.2% achieving a pathological complete response. The two-year overall survival rate was 84.4%.

結果：共82例患者完成了兩個週期的新輔助治療。客觀緩解率為67.9%，MPR率為60.3%，34.2%的患者達到病理完全緩解。2年總生存率為84.4%。

Conclusions: Neoadjuvant tislelizumab plus chemotherapy for LAOOPSCC achieved a high pathological response rate and favorable survival metrics with an acceptable safety profile.

結論：新輔助替雷利珠單抗聯合化療治療LAOOPSCC獲得了較高的病理反應率和良好的生存指標，安全性可接受。

12. Is the use of intraoperative vasopressors associated with flap failure in head and neck free tissue transfer surgery?

頭頸部游離組織移植手術中術中血管收縮劑的使用是否與皮瓣失敗相關？

PMID: 40914291 | J Stomatol Oral Maxillofac Surg | 2025 Sep

Background: The use of vasopressors to treat intraoperative hypotension is controversial. The purpose of this prospective cohort study is to evaluate the impact of intraoperative vasopressors on the incidence of flap necrosis.

背景：使用血管收縮劑治療術中低血壓存在爭議。本前瞻性隊列研究旨在評估術中血管收縮劑對皮瓣壞死發生率的影響。

Results: A total of 239 participants were enrolled. Although vasopressor use was not significantly associated with flap necrosis, operation duration and flap ischemia duration were significant factors.

結果：共納入239例參與者。儘管血管收縮劑使用與皮瓣壞死無顯著相關，但手術時間和皮瓣缺血時間是重要因素。

Conclusions: Use of intraoperative vasopressors during free flap transfer surgery of the head and neck was not associated with early flap failure.

結論：頭頸部游離皮瓣移植手術中術中血管收縮劑的使用與早期皮瓣失敗無關。

13. Magnetic resonance neurography: Preoperative assessment of facial nerve invasion in malignant parotid gland tumors

磁共振神經成像：惡性腮腺腫瘤面神經侵犯的術前評估

PMID: 40220868 | J Stomatol Oral Maxillofac Surg | 2025 Oct

Background: Facial nerve invasion (FNI) in parotid gland malignancies significantly impacts treatment outcomes. Accurate preoperative assessment of FNI is crucial for surgical planning and tumor staging.

背景：腮腺惡性腫瘤中的面神經侵犯（FNI）顯著影響治療結果。FNI的準確術前評估對手術計劃和腫瘤分期至關重要。

Results: The display rates of the main trunk of the intraparotid facial nerve were 100%. Twenty-three patients (82.1%) matched the surgical findings.

結果：腮腺內面神經主幹的顯示率為100%。23例患者（82.1%）與手術所見相符。

Conclusions: MRN can provide valuable information for predicting FNI in parotid gland malignancies, thereby improving tumor staging and aiding treatment decision-making.

結論：MRN可為預測腮腺惡性腫瘤FNI提供寶貴信息，從而改善腫瘤分期並輔助治療決策。

14. Progressive functional training in patients who underwent jaw defect reconstruction using vascularized iliac flaps: A randomized controlled trial

血管化髂骨皮瓣頷骨缺損重建患者的漸進式功能訓練：隨機對照試驗

PMID: 39754999 | Oral Oncol | 2025 Feb

Objective: This trial investigated the effects of progressive functional training on hip mobility, lower-limb stability, quality of life, and hip complications in patients who have undergone jaw defect reconstruction using vascularized iliac flaps.

目的：本試驗旨在研究漸進式功能訓練對血管化髂骨皮瓣頷骨缺損重建患者髖關節活動度、下肢穩定性、生活質量和髖關節併發症的影響。

Results: The donor area function and quality of life of the patients in the training group were significantly improved at 1, 3, 6, and 12 months after surgery. The incidence rates of gait disturbance were significantly lower in the training group.

結果：訓練組患者的供區功能和生活質量在術後1、3、6、12個月顯著改善。訓練組的步態障礙發生率顯著降低。

Conclusion: Progressive functional training can accelerate the restoration of hip function and stability of lower-limb movement, alleviate gait disorders, relieve pain, and improve patients' quality of life.

結論：漸進式功能訓練可加速髖關節功能恢復和下肢運動穩定性，緩解步態障礙，減輕疼痛，提高患者生活質量。