# Rapportage standardisé glandes salivaires principales

Conclusion

**Thérapie néoadjuvante :** Choissisez une option.

**Localisation tumorale** : Choissisez une option.

*Si autre, spécifiez :*

**Latéralité** : Choissisez une option.

**Dimensions de la tumeur** : Choissisez une option.

Dimension maximale de la tumeur (en mm) :

*Si ne peut pas être déterminée, spécifiez :*

**Type histologique de la tumeur :** Choissisez une option.

*Si possible, spécifiez :*

**Degré de différenciation :** Choissisez une option.

*Si non évaluable, spécifiez :*

**Extension locale** : Choissisez une option.

*Si une extension locale a été démontrée :*

Extension extraparenchymateuse macroscopique : Choissisez une option.

Invasion osseuse[[1]](#footnote-1) : Choissisez une option.

Invasion de la peau : Choissisez une option.

Invasion du nerf facial : Choissisez une option.

Invasion à un autre endroit que ceux décrits ci-dessus : Choissisez une option.

*Si invasion à un autre endroit que ceux décrits ci-dessus, spécifiez :*

*Si l’extension locale ne peut pas être évaluée, spécifiez :*

**Invasion lymphovasculaire** : Choissisez une option.

*S’il est possible de différencier entre invasion des vaisseaux lymphatiques et sanguins, spécifiez :* Choissisez une option.

*Si non déterminée avec certitude, spécifiez :*

**Invasion périneurale[[2]](#footnote-2)** : Choissisez une option.

*Si non déterminée avec certitude, spécifiez :*

**Marge minimale définitive saine**

**(y compris les éventuelles résections ultérieures et sections congelées) :** Choissisez une option.

Marge minimale définitive saine (en mm) :

Précisez la marge la plus proche, si possible :

*Si non évaluable, spécifiez :*

**Classification pTNM (8ème édition du TNM de l’UICC, avec errata)[[3]](#footnote-3) :** **pT** Choissisez une option.

Préfixes :

m (multiples tumeurs primaires) : Choissisez une option.

r (récidive) : Choissisez une option.

y (après thérapie néoadjuvante) : Choissisez une option.

Champ d’application

Echantillons de résections primaires et de biopsies de tumeurs malignes des glandes salivaires principales (glande parotide, glande sub-mandibulaire et glande sub-linguale). Les tumeurs malignes des glandes salivaires accessoires de la cavité orale, des fosses nasales et des sinus, du larynx, de l’hypopharynx, de la trachée, du nasopharynx, de l’oropharynx, des os gnathaux, des os de l’oreille et de l’os temporal sont classifiés selon leur sous-localisation anatomique et traités dans des datasets distincts.

Remarques

* Pour des résections relatives à des récidives, le dataset peut être utilisé de manière pragmatique, même si certaines variables peuvent ne pas être applicables ou évaluables.
* Les mélanomes, les lymphomes et les sarcomes sont traités dans des datasets distincts.
* Les dissections cervicales et les excisions ganglionnaires sont traitées dans un dataset distinct. Si applicable, l’utilisation de ce dataset doit être combinée.
* Pour des tumeurs bilatérales, un dataset différent doit être rempli pour chaque tumeur.
* Ce dataset est basé sur l’histologie, mais si le seul matériel disponible est une cytologie, nous recommandons d’utiliser la case ‘autre’ dans la rubrique “intervention chirurgicale” afin d’afficher les informations correctes.

Dataset basé sur

Thompson LDR, Bishop JA, Hyrcza MD, Ihrler S, Leivo I, Nagao T, Rupp NJ, Skalova A, Stenman G, Vander Poorten V, van Herpen C, Helliwell T (2024). *Carcinomas of the Major Salivary Glands Histopathology Reporting Guide. 2nd edition*. International Collaboration on Cancer Reporting; Sydney, Australia. ISBN: 978-1-922324-51-1.

Informations complémentaires[[4]](#footnote-4)

**Note 1 –Tumour site and Tumour laterality**

The salivary sites, particularly the parotid have a nuanced, oncologically relevant compartmentalisation that should be represented appropriately under specimen submitted and tumour site.10 Tissue types and microanatomic structures encountered histologically are dependent on this specimen type and site. Thus, as with operative procedure, open communication is necessary to maximise accuracy. An attempt should be made at tumour centring within the submitted sample to document the true site of the primary neoplasm (such as superficial or deep parotid lobes). Accompanying specimens would include skin, bone (mandible or maxilla), and other localised tissues which aid in final staging and thus should be included.

Laterality is a standard identifying parameter for specimens submitted, with ‘not specified’ sparingly selected and only after best efforts have been made to obtain the requisite information. Reporting of laterality provides supporting information to ensure that the correct site is recorded and is a common quality assurance metric.12,15-17

**Note 2 – Tumour dimensions**

Tumour size, specifically the largest dimension is a key staging element for UICC and American Joint Committee on Cancer (AJCC) and is prognostically critical.4,12,23,24 Tumour measurement should ideally be performed macroscopically on the fresh specimen if possible, since formalin fixation may cause tumour shrinkage.25 Occasionally, the microscopic extent of tumour should be used to record tumour size, for example, when the size significantly exceeds macroscopic estimates. When sample fragmentation or disruption precludes accurate measurement, reliance of imaging or intraoperative dimensions may be necessary.

**Note 3 – Histological tumour type**

All salivary gland tumours should be classified based on the most recent edition of the WHO Classification of Head and Neck Tumours, 5th edition, 2024 (Table 1).9 Histologic type informs biologic behaviour and thus influences prognosis, patterns of recurrence and clinical management.26,27 Carcinoma biology is quite different (i.e., basal cell adenocarcinoma is indolent with locoregional recurrence and low nodal metastatic rates28 versus salivary duct carcinoma with high rates of nodal metastasis29-31), and thus accurate classification is important.

Carcinoma ex pleomorphic adenoma is further subclassified by carcinoma subtype and extent of invasion. The histologic type of the malignant component should be reported (most commonly salivary duct carcinoma, myoepithelial carcinoma, and epithelial-myoepithelial carcinoma).32-34 Extent of invasion beyond the pleomorphic adenoma borders is separately into: 1) intracapsular: when the carcinoma is confined within the polymorphous adenoma capsule; 2) minimally invasive: when the carcinoma invades <6 millimetres (mm) beyond the pleomorphic adenoma capsule; and 3) invasive: when the invasion beyond the pleomorphic adenoma capsule measures ≥6 mm. Prior to diagnosing an in situ/intracapsular carcinoma ex pleomorphic adenoma, sectioning of the entire lesion for histologic evaluation is recommended in order to exclude the presence of invasive growth. Prognosis has been linked to degree of invasion with non-invasive and minimally invasive cancers having a better prognosis than invasive cancers.35-37 The presence of a solid component in adenoid cystic carcinoma has been shown to be an independent prognostic factor,38 and thus is a core element. However, the percentage of solid pattern is not yet standardised without cutoffs determined, and as such, the percentage of solid pattern is non-core at this time.

Metastasising pleomorphic adenoma, despite metastatic development is not included here since it is technically considered benign under the recent WHO classification of tumours.39

Primary salivary gland neuroendocrine carcinomas (small cell and large cell) are not specifically included in the salivary gland classification in the WHO 5th edition,9 but should be included under ‘other’ in this reporting guide. Harmonisation resulted in a single chapter within the WHO classification devoted to neuroendocrine neoplasms.

The diagnosis of primary squamous cell carcinoma of the salivary gland should be used sparingly as it is typically a metastasis from another site, unless sialodochodysplasia is histologically identified or primary skin or mucosal squamous cell carcinoma can be definitively excluded.

Table 1: World Health Organization classification of epithelial tumours of the salivary glands.9

|  |  |
| --- | --- |
| **Descriptor** | **ICD-O codinga** |
| Mucoepidermoid carcinoma | 8430/3 |
| Adenoid cystic carcinoma | 8200/3 |
| Acinic cell carcinoma | 8550/3 |
| Secretory carcinoma | 8502/3 |
| Microsecretory carcinoma | 8502/3 |
| Polymorphous carcinoma | 8525/3 |
| Hyalinising clear cell carcinoma | 8310/3 |
| Basal cell adenocarcinoma | 8147/3 |
| Intraductal carcinoma | 8500/2 |
| Salivary duct carcinoma | 8500/3 |
| Myoepithelial carcinoma | 8982/3 |
| Epithelial-myoepithelial carcinoma | 8562/3 |
| Mucinous adenocarcinoma | 8480/3 |
| Sclerosing microcystic adenocarcinoma | 8407/3 |
| Carcinoma ex pleomorphic adenoma | 8941/3 |
| Carcinosarcoma of the salivary glands | 8980/3 |
| Sebaceous adenocarcinoma | 8410/3 |
| Lymphoepithelial carcinoma | 8082/3 |
| Squamous cell carcinoma | 8070/3 |
| Sialoblastoma | 8974/1 |
| Salivary gland carcinoma NOS and emerging entities | 8140/3 |

a These morphology codes are from the International Classification of Diseases for Oncology, third edition, second revision (ICD-0-3.2).40 Behaviour is coded /0 for benign tumours; /1 for unspecified, borderline, or uncertain behaviour: /2 for carcinoma in situ and grade Ill intraepithelial neoplasia; /3 for malignant tumours, primary site: and /6 for malignant tumours, metastatic site. Behaviour code /6 is not generally used by cancer registries.

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**Note 4 – Histological tumour grade**

The histologic (microscopic) grading of salivary gland carcinomas has been shown to be an independent predictor of behaviour and plays a role in optimising therapy. Further, there is often a positive correlation between histologic grade and clinical stage.35 However, most salivary gland carcinoma types have an intrinsic biologic behaviour, such as basal cell adenocarcinoma (low grade) compared to salivary duct carcinoma (high grade) and attempted application of a universal grading scheme is not recommended.35 Thus by assigning a histologic type, the tumour grade itself is often implied. Still, several grading systems for each tumour type are available, with differing merits, and as such, recording which system has been applied is more clinically meaningfully (use ‘specify’ to state the system used), with the ICCR deferring to the WHO Classification current edition for grading guidance and preference.9 As a general guide, histologic grade is not applied for acinic cell carcinoma, basal cell adenocarcinoma, epithelial-myoepithelial carcinoma, hyalinising clear cell carcinoma, myoepithelial carcinoma, sebaceous adenocarcinoma, lymphoepithelial carcinoma, salivary duct carcinoma, microsecretory adenocarcinoma, sclerosing microcystic adenocarcinoma, and sialoblastoma (refer to Table 1).

High grade transformation has evolved into an important concept of tumour progression in salivary gland carcinomas. Historically designated as ‘dedifferentiation’, it describes progression of a typically monomorphic carcinoma into a pleomorphic high grade carcinoma, showing sheet-like growth, tumour necrosis, mitotic index, and profound nuclear pleomorphism.41,42 The importance of this phenomenon is that tumours demonstrating high grade transformation show an aggressive clinical course that deviates drastically from the usual behaviour for a given tumour type, thus alerting to the potential need for more aggressive clinical management. Tumours for which this phenomenon is well characterised include acinic cell carcinoma, adenoid cystic carcinoma, and epithelial-myoepithelial carcinoma, while secretory carcinoma and polymorphous adenocarcinoma also rarely undergo high grade transformation.43,44 High grade and high grade transformation may sound similar, but the latter generally implies there is a low grade component concurrently present with the high grade transformation.

**Note 5 – Extent of invasion**

Macroscopic extraparenchymal extension is the parameter required to upstage a tumour to pT3 or higher and is thus more important than microscopic extraparenchymal extension. Extraparenchymal extension can be difficult to clarify in minor salivary gland sites, but extension into adjacent structures informs stage determination. Bone, skin, and facial nerve involvement are parameters that define stage T4a.23 While microscopic extraparenchymal extension is not a stage defining parameter, in certain instances it may yield useful information for postoperative clinical management. Direct extension into lymph nodes is not considered lymph node involvement. However, if lymph node(s) are included within the samples submitted, a separate reporting guide for neck lymph nodes should be completed,5 as intra- and peri-parotid or submandibular gland lymph nodes are commonly present, and are known to predict cervical lymph node metastases.45-48

**Note 6 – Lymphovascular invasion**

Lymphovascular invasion is diagnostic of malignancy in salivary gland tumours (except for benign metastasising pleomorphic adenoma). Existing data are limited but support its prognostic value although this varies by tumour type and study.49-57 As with many other organ sites, the significance of the distinction between vascular and lymphatic invasion as well as the extent of vascular invasion is not known.

Cases that are still equivocal after taking additional steps may be reported as ‘indeterminate’ for lymphovascular invasion, but this designation should be sparingly used and it is useful to provide the reason in a comment in the report.

**Note 7 – Perineural invasion**

Perineural invasion is diagnostically useful since it often confirms a malignant classification (although there are benign exceptions). Perineural, circumferential, or intraneural invasion is defined as the presence of carcinoma juxtaposed intimately along, around, or within a nerve. Specifically, it includes the potential space between the bundles of axons and the perineurium; thus, carcinoma external to the perineurium is not perineural invasion. Further, some distinguish between intratumoural versus extratumoural affected nerves, although robust data supporting such a distinction is not yet available for salivary gland tumours.49,58-61 The value of perineural invasion as a prognosticator varies depending on tumour type and literature.55,62-67 Selected named nerve (i.e., facial nerve) involvement is incorporated into staging and assigned a more advanced stage,23 but nerve involvement should be recorded regardless the size of the nerve(s). A more granular documentation to include extent of perineural invasion, localisation and size of involved nerves (measured in millimetre diameter of the largest nerve68) may be prognostically relevant, though not well studied, hence their inclusion as non-core elements.

**Note 8 – Margin status**

Complete surgical excision to include cancer-free surgical margins is the primary mode of therapy for salivary gland cancers, as retrospective studies have shown an increased risk for recurrence and decreased survival with positive surgical margins.69-72 Still, when controlling for stage, histologic risk group, and use of radiation, margin status is not an independent risk factor.73 Unlike mucosal sites, there are no data to indicate a specified critical distance of tumour from margin indicative of a prognostic difference.52,54,61,73,74 Indeed this may be dependent on tumour type, major salivary gland involved, and border.73,75 Based on current level of evidence, reporting of distances to margins constitute a non-core element, giving these distance may aid in decisions about therapeutic intervention (postoperative radiation or chemotherapy).64,76,77

**Note 9 – Pathological staging**

By UICC/AJCC convention,4,103 the designation ‘T’ refers to a primary tumour that has not been previously treated. The symbol ‘p’ refers to the pathologic classification of the TNM, as opposed to the clinical classification, and based on clinical stage information supplemented/ modified by operative findings and gross and microscopic evaluation of the resected specimens.4,103 pT entails a resection of the primary tumour or biopsy adequate to evaluate the highest pT category, pN entails removal of nodes adequate to validate lymph node metastasis, and pM implies microscopic examination of distant lesions. Clinical classification (cTNM) is usually carried out by the referring physician before treatment during initial evaluation of the patient or when pathologic classification is not possible.

Pathologic staging is usually performed after surgical resection of the primary tumour. Pathologic staging depends on pathologic documentation of the anatomic extent of disease, whether or not the primary tumour has been completely removed. If a biopsied tumour is not resected for any reason (e.g., when technically unfeasible) and if the highest T and N categories or the M1 category of the tumour can be confirmed microscopically, the criteria for pathologic classification and staging have been satisfied without total removal of the primary cancer.

**Primary tumour (pT)**

TX Primary tumour cannot be assessed

T0 No evidence of primary tumour

Tis Carcinoma in situ

T1 Tumour 2 cm or less in greatest dimension without extraparenchymal extension

T2 Tumour more than 2 cm but not more than 4 cm in greatest dimension without extraparenchymal extensionf

T3 Tumour more than 4 cm and/or tumour with extraparenchymal extensionf

T4a Moderately advanced local disease Tumour invades skin, mandible, ear canal, and/or facial nerve

T4b Very advanced local disease Tumour invades base of skull and/or pterygoid plates, and/or encases carotid artery

**TNM Descriptors**

For identification of special cases of TNM or pTNM classifications, the ‘m’ suffix and ‘y’ and ‘r’ prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis.

The ‘m’ suffix indicates the presence of multiple primary tumours in a single site and is recorded in parentheses: pT(m)NM.

The ‘y’ prefix indicates those cases in which classification is performed during or following initial multimodality therapy (i.e., neoadjuvant chemotherapy, radiation therapy, or both chemotherapy and radiation therapy). The cTNM or pTNM category is identified by a ‘y’ prefix. The ycTNM or ypTNM categorises the extent of tumour actually present at the time of that examination. The ‘y’ categorisation is not an estimate of tumour prior to multimodality therapy (i.e., before initiation of neoadjuvant therapy).

The ‘r’ prefix indicates a recurrent tumour when staged after a documented disease-free interval, and is identified by the ‘r’ prefix: rTNM.

Reporting of pathological staging categories (pT,pN,pM) is based on the evidence available to the pathologist at the time of reporting. As indicated in UICC TNM8 and AJCC TNM8,4,103 the final stage grouping of a patient's tumour is based on a combination of pathological staging and other clinical and imaging information.

Pathological staging should not be reported if the submitted specimen is insufficient for definitive staging, especially with biopsy samples (core needle, incisional or excisional). Staging is based on the submitted resection, and even if there is grossly residual disease or there is tumour at the margin, pT staging should only be reported on findings in the resection specimen and/or at operation.4,103

For the pN classification of regional lymph nodes, see ICCR Nodal excisions and neck dissection specimens dataset.5

The reference document TNM Supplement: A commentary on uniform use, 5th Edition (C Wittekind et al. editors) may be of assistance when staging.104

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1. La présence d’une invasion osseuse influence le stade de la tumeur et constitue un facteur pronostic négatif. Il est important de faire la distinction entre de l’érosion osseuse corticale et de l’invasion infiltrante de la moëlle osseuse, car l’érosion osseuse n’affectera pas les soins futurs. Pour plus d’informations, voir ‘Note 5 – Extent of invasion’ plus bas dans ce document. [↑](#footnote-ref-1)
2. La présence ou l’absence d’invasion périnerveuse péritumorale peut avoir une influence sur le traitement et le pronostic. Il s’agit d’une invasion périnerveuse péritumorale le long ou au-delà des limites de la tumeur, et donc pas d’une extension intratumorale. Pour plus d’informations, voir ‘Note 7 – Perineural invasion’ plus bas dans ce document. [↑](#footnote-ref-2)
3. La stadification pathologique est basée sur la ‘TNM Classification of Malignant Tumours’ (8ème édition, UICC). Une description de chaque catégorie pT est disponible dans la ‘Note 9 – Pathological staging’ plus bas dans ce document. [↑](#footnote-ref-3)
4. Informations complémentaires (‘notes’) tirées et adaptées de

   Thompson LDR, Bishop JA, Hyrcza MD, Ihrler S, Leivo I, Nagao T, Rupp NJ, Skalova A, Stenman G, Vander Poorten V, van Herpen C, Helliwell T (2024). Carcinomas of the Major Salivary Glands Histopathology Reporting Guide. 2nd edition. International Collaboration on Cancer Reporting; Sydney, Australia. ISBN: 978-1-922324-51-1. [↑](#footnote-ref-4)