# A guide to Carcinomas of the Nasopharynx and Oropharynx Histopathology Reporting

Includes the International Collaboration on Cancer reporting dataset denoted by *

<table>
<thead>
<tr>
<th>Clinical details</th>
<th>Microscopic findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S1.02</strong></td>
<td><strong>S3.01</strong> <em>Histological tumour type</em></td>
</tr>
<tr>
<td>Clinical information on request form</td>
<td>See p2</td>
</tr>
<tr>
<td>OR</td>
<td>Text</td>
</tr>
<tr>
<td>OR</td>
<td>Structured entry as below:</td>
</tr>
<tr>
<td><strong>S2.03</strong></td>
<td><strong>S3.02</strong> <em>Histologic grade</em></td>
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<tr>
<td><em>Neoadjuvant therapy</em></td>
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<td><strong>S2.04</strong></td>
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<tr>
<td><em>Operative procedure</em></td>
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<tr>
<td><strong>S2.05</strong></td>
<td>_mm</td>
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<tr>
<td><em>Specimen submitted</em></td>
<td>See p2</td>
</tr>
<tr>
<td><strong>G3.02</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td>Anatomical site of lesion</td>
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<tr>
<td><strong>S3.03</strong></td>
<td><strong>S3.04</strong> Tumour size (greatest surface dimensions)</td>
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<tr>
<td>Laterality of lesion</td>
<td><em>x</em> mm</td>
</tr>
<tr>
<td><strong>S3.05</strong></td>
<td>Notes: length x width</td>
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<tr>
<td>Clinical history</td>
<td>Text</td>
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<tr>
<td><strong>S3.06</strong></td>
<td><strong>S3.07</strong> <em>MARGIN STATUS</em></td>
</tr>
<tr>
<td>Human papilloma virus (HPV) status</td>
<td>Text</td>
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<tr>
<td><strong>S3.08</strong></td>
<td><em>Invasive carcinoma</em></td>
</tr>
<tr>
<td>Clinical diagnosis or differential diagnosis</td>
<td>Only applicable for large excision specimens.</td>
</tr>
<tr>
<td><strong>G1.01</strong></td>
<td><em>Margins involved</em></td>
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<tr>
<td>Pathology accession number</td>
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<td><strong>S1.04</strong></td>
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<td>Principal clinician</td>
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<td><strong>G1.02</strong></td>
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<tr>
<td>Comments</td>
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<tr>
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<td><strong>S2.03</strong> <em>Maximum dimension of largest tumour</em></td>
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<td>Specimen labelled as</td>
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<tr>
<td><strong>G2.01</strong></td>
<td>Present, describe and measure</td>
</tr>
<tr>
<td>Specimen dimensions</td>
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<td><em>x</em> <em>x</em> mm</td>
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<tr>
<td><strong>G2.02</strong></td>
<td><strong>S2.04</strong> Additional dimensions of largest tumour</td>
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<td>Mucosal surface abnormalities/lesion(s)</td>
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<td><em>x</em> mm</td>
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<td><strong>G2.04</strong></td>
<td><strong>S2.06</strong> Tumour description</td>
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<tr>
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<td><strong>S2.07</strong></td>
<td>Endophytic</td>
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<td><em>Tumour site</em></td>
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<tr>
<td><strong>S2.08</strong></td>
<td>Polypoid</td>
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<tr>
<td><strong>S2.09</strong></td>
<td>Nodular</td>
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<td>See p2</td>
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<td><strong>G2.10</strong></td>
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<td><em>Invasive carcinoma</em></td>
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<tr>
<td><strong>G4.01</strong></td>
<td><em>Margin(s) involved</em></td>
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<td><strong>G5.01</strong> Diagnostic summary</td>
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<td>Include:</td>
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<td>Ancillary test findings</td>
<td>Specimen(s) submitted</td>
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<td><strong>S4.01</strong></td>
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<td><strong>S4.02</strong></td>
<td><strong>S5.01</strong> PATHOLOGICAL STAGING (AJCC 8TH EDITION)</td>
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<td><strong>S5.02</strong></td>
<td>Year And Edition Of Staging System</td>
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<td><strong>S5.03</strong></td>
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<td><strong>S5.04</strong> Overarching Comment</td>
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<td>Text</td>
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<td>Edition/version of RCPA protocol</td>
</tr>
<tr>
<td><strong>G5.04</strong></td>
<td>Text</td>
</tr>
</tbody>
</table>
S1.02 Neoadjuvant Therapy
- Information not provided
- Not administered
- Administered, specify type (select all that apply)
  - Chemotherapy
  - Radiotherapy
  - Chemoradiotherapy
  - Targeted therapy, specify if available
  - Immunotherapy, specify if available
  - Time interval since therapy, specify

Operative procedure
Select all that apply:
- Resection, specify
  - Transoral laser microsurgical resection
  - Transoral robotic surgical resection
- Other, specify
- Biopsy (excisional, incisional), specify
- Neck (lymph node) dissection*, specify
- Other, specify

Note: * If a neck dissection is submitted, then a separate protocol is used to record the information.

Specimen Submitted
Select all that apply:
- Oropharynx
  - Palatine tonsil
  - Base of tongue/lingual tonsil
  - Soft palate
  - Uvula
  - Pharyngeal wall (posterior)
  - Pharyngeal wall (lateral)
- Other, specify
- Nasopharynx, specify if necessary
- Other, specify

S2.02 Tumour Site
Cannot be assessed
OR
Select all that apply:
- Oropharynx
  - Left
  - Right
  - Midline
  - Laterality not specified
- Palatine tonsil
- Base of tongue/lingual tonsil
- Soft palate
- Uvula
- Pharyngeal wall (posterior)
- Pharyngeal wall (lateral)
- Other, specify
- Nasopharynx
  - Left
  - Right
  - Midline
  - Laterality not specified
  - Nasopharyngeal tonsils (adenoids)
  - Fossa of Rosenmüller
  - Lateral wall
  - Other, specify
  - Other, specify including laterality

S3.01 Histological Tumour Type
Cannot be assessed, specify
OR
Select all that apply:
Carcinomas of the oropharynx
- Squamous cell carcinoma, conventional
  - Keratinizing
  - Nonkeratinizing
  - Nonkeratinizing with maturation ("partially keratinizing")
- Acantholytic squamous cell carcinoma
- Adenosquamous carcinoma
- Basaloid squamous cell carcinoma
- Papillary squamous cell carcinoma
- Spindle cell carcinoma
- Verrucous carcinoma
- Lymphoepithelial carcinoma
- Salivary gland tumours, specify type
- Haematolymphoid tumours

Carcinomas of the nasopharynx
- Nonkeratinizing squamous cell carcinoma
  - Differentiated
  - Undifferentiated (lymphoepithelial)
- Keratinizing squamous cell carcinoma
- Basaloid squamous cell carcinoma
- Nasopharyngeal papillary adenocarcinoma
- Salivary gland tumours, specify type
- Neuroendocrine tumour, specify type
- Other, specify

S3.02 Histological Grade
- Not applicable
- GX: Cannot be assessed, specify
- G1: Well differentiated
- G2: Moderately differentiated
- G3: Poorly differentiated
- Other, specify

Note: Only applicable for conventional, EBV negative nasopharyngeal carcinomas, and HPV negative oropharyngeal carcinomas.

S3.04 Tumour Site
- Base of tongue
- Tonsils
- Soft palate
- Posterior wall
- Uvula
- Other, specify
- Cannot be assessed, specify

S3.05 Perineural Invasion
- Cannot be assessed, specify
- Not identified
- Present

S3.06 Lymphovascular Invasion
- Cannot be assessed, specify
- Not identified
- Present
G3.02 Coexistent Pathology

None identified

OR

Select all that apply:

- Dysplasia
  - Mild
  - Moderate
  - Severe
    - Focal
    - Multifocal
    - Discontinuous with the primary site
- Carcinoma in situ
  - Focal
  - Multifocal
  - Discontinuous with the primary site
- Other, specify

Notes: ^Applicable for oropharyngeal surface mucosal disease only; not for tonsillar crypt epithelium.

G4.01 Ancillary studies

Viral testing/Viral tumour markers

**OROPHARYNX**

- Not performed/unknown
- Performed
  - p16 IHC
    - Positive
      - >70% nuclear and cytoplasmic staining of at least moderate to strong intensity
    - Other criterion used, specify
  - Negative
- Criteria used to determine p16 IHC results, specify
  - High risk HPV specific testing
    - DNA PCR
      - Not identified
      - Present
    - DNA ISH
      - Not identified
      - Present
    - E6/E7 mRNA ISH
      - Not identified
      - Present
    - E6/E7 mRNA RT-PCR
      - Not identified
      - Present

**NASOPHARYNX:**

- Not performed/unknown
- Performed
  - EBV (EBER) ISH – Positive
  - EBV (EBER) ISH – Negative

**Other ancillary studies**

Single selection value list:

- Not performed
- Performed, specify

S5.01 Pathological staging

(AJCC 8th Edition)##

**TNM descriptors**

m - multiple primary tumours; y - post therapy; r - recurrent

**p16 Positive oropharynx**

- T0 No primary identified
- T1 Tumour 2 cm or smaller in greatest dimension
- T2 Tumour larger than 2 cm but not larger than 4 cm in greatest dimension
- T3 Tumour larger than 4 cm in greatest dimension or extension to lingual surface of epiglottis
- T4 Moderately advanced local disease

Tumour invades the larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible or beyond*

*Mucosal extension to lingual surface of epiglottis from primary tumours of the base of the tongue and vallecula does not constitute invasion of the larynx.

**p16 Negative oropharynx**

- TX Primary tumour cannot be assessed
- Tis Carcinoma in situ
- T1 Tumour 2 cm or smaller in greatest dimension
- T2 Tumour larger than 2 cm but not larger than 4 cm in greatest dimension
- T3 Tumour larger than 4 cm in greatest dimension or extension to lingual surface of epiglottis

**Nasopharynx**

- TX Primary tumour cannot be assessed
- T0 No tumour identified, but EBV-positive cervical node(s) involvement
- T1 Tumour confined to nasopharynx, or extension to oropharynx and/or nasal cavity without parapharyngeal involvement
- T2 Tumour with extension to parapharyngeal space, and/or adjacent soft tissue involvement (medial pterygoid, lateral pterygoid, prevertebral muscles)
- T3 Tumour with infiltration of bony structures at skull base, cervical vertebra, pterygoid structures, and/or paranasal sinuses
- T4 Tumour with intracranial extension, involvement of cranial nerves, hypopharynx, orbit, parotid gland and/or extensive soft tissue infiltration beyond the lateral surface of the lateral pterygoid muscle

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