

◆ Staging of Nose and Paranasal Sinus Cancer: For All Carcinomas Excluding Mucosal Malignant Melanoma

Primary Tumor (T): Maxillary Sinus

- TX: Cannot be assessed
- Tis: Carcinoma in situ
- T1: Tumor limited to the maxillary sinus mucosa with no erosion or destruction of bone
- T2: Tumor causing bone erosion or destruction, including extension into the hard palate and/or middle nasal meatus, except extension to posterior wall of maxillary sinus and pterygoid plates
- T3: Tumor invades any of the following: bone of the posterior wall of maxillary sinus, subcutaneous tissues, floor or medial wall of orbit, pterygoid fossa, or ethmoid sinuses
- T4a: Tumor invades anterior orbital contents, skin of cheek, pterygoid plates, infratemporal fossa, cribriform plate, or sphenoid or frontal sinuses
- T4b: Tumor invades any of the following: orbital apex, dura, brain, middle cranial fossa, cranial nerves other than maxillary division of trigeminal nerve (V₂), nasopharynx, or clivus

Primary Tumor (T): Nasal Cavity and Ethmoid Sinus

- TX: Cannot be assessed
- Tis: Carcinoma in situ
- T1: Tumor restricted to any one subsite, with or without bone invasion
- T2: Tumor invading two subsites in a single region or extending to involve an adjacent region within the nasoethmoidal complex, with or without bone invasion

- T3: Tumor extends to invade the medial wall or floor of the orbit, maxillary sinus, palate, or cribriform plate
- T4a: Tumor invades any of the following: anterior orbital contents, skin of nose or cheek, minimal extension to anterior cranial fossa, pterygoid plates, or sphenoid or frontal sinuses
- T4b: Tumor invades any of the following: orbital apex, dura, brain, middle cranial fossa, cranial nerves other than maxillary division of trigeminal nerve (V_2), nasopharynx, or clivus

Regional Lymph Nodes (N)*

- NX: Regional lymph nodes cannot be assessed
- N0: No regional lymph node metastasis
- N1: Metastasis to a single ipsilateral lymph node measuring ≤ 3 cm in greatest diameter and ENE negative
- N2: Further divided into three categories:
N2a: Single ipsilateral lymph node > 3 and ≤ 6 cm and ENE negative (pathologic staging also includes a single ipsilateral or contralateral lymph node ≤ 3 cm and ENE positive)
N2b: Multiple ipsilateral lymph nodes ≤ 6 cm and ENE negative
N2c: Bilateral or contralateral lymph nodes ≤ 6 cm in greatest dimension and ENE negative
- N3: Now further divided into two categories:
N3a: Metastasis to a lymph node > 6 cm, ENE negative
N3b: Metastasis to a single lymph node that is ENE positive (pathologic staging includes single lymph nodes that are ENE positive > 3 cm), or metastasis to multiple lymph nodes with any ENE positive

Stage IVA disease: Includes T4a disease with N0-N2 M0 disease and T1-T3 disease that is N2 M0

Stage IVB disease: Includes T4b disease with any nodal disease or T1-T4a disease with N3 disease without distant metastases (M0)

Stage IVC disease: Any disease with distant metastases (M1)

◆ Staging of Nasopharyngeal Cancer

Primary Tumor (T)

- TX: Primary tumor cannot be assessed
- T0: No tumor identified, but EBV-positive cervical node(s) involvement
- Tis: Carcinoma in situ
- T1: Tumor confined to nasopharynx, or extension to oropharynx and/or nasal cavity without parapharyngeal involvement
- T2: Tumor with extension to parapharyngeal space, and/or adjacent soft tissue involvement (medial pterygoid, lateral pterygoid, prevertebral muscles)

- T3: Tumor with infiltration of bony structures at skull base, cervical vertebra, pterygoid structures, and/or paranasal sinuses
- T4: Tumor with intracranial extension, involvement of cranial nerves, hypopharynx, orbit, parotid gland, and/or soft tissue infiltration beyond the lateral surface of the pterygoid muscle

Regional Lymph Node (N)

- NX: Regional lymph nodes cannot be assessed
- N0: No regional lymph node metastasis
- N1: Unilateral metastasis in cervical lymph node(s) and/or unilateral or bilateral metastasis in retropharyngeal lymph node(s), ≤ 6 cm in greatest dimension, above the caudal border of cricoid cartilage
- N2: Bilateral metastasis in cervical lymph node(s), ≤ 6 cm in greatest dimension, above the caudal border of cricoid cartilage
- N3: Unilateral or bilateral metastasis in cervical lymph node(s), > 6 cm in greatest dimension, and/or extension below the caudal border of cricoid cartilage

Distant Metastasis (M)

- M0: No distant metastasis
- M1: Distant metastasis

American Joint Committee on Cancer Stage Groupings of Nasopharynx Cancers (8th Edition)

- Stage 0 disease: Carcinoma in situ (TisN0M0)
- Stage I disease: Includes only T1 N0 M0 tumors
- Stage II disease: Includes T0–N1M0 and T2 N0–N1 M0 tumors
- Stage III disease: Includes T3 N0 M0 and T0–3 disease that is N2 M0
- Stage IVA disease: Includes T4 disease with N0–N2 M0 disease and T0–T4 disease that is N3 M0

Stage IVB disease: Any disease with distant metastases (M1) (Table 6.10)

Table 6.10 Cancer Stage Groupings for Nasopharynx Cancer

	N0	N1	N2	N3
T0	N/A	Stage II	Stage III	Stage IVA
T1	Stage I	Stage II	Stage III	Stage IVA
T2	Stage II	Stage II	Stage III	Stage IVA
T3	Stage III	Stage III	Stage III	Stage IVA
T4	Stage IVA	Stage IVA	Stage IVA	Stage IVA
M1	Stage IVB	Stage IVB	Stage IVB	Stage IVB

◆ Staging of Oral Cavity Cancer

Primary Tumor (T) (now includes Depth of Invasion [DOI])

- TX: Primary tumor cannot be assessed
- Tis: Carcinoma in situ
- T1: Tumor ≤ 2 cm in greatest dimension, and ≤ 5 mm DOI
- T2: Tumor ≤ 2 cm and DOI >5 mm and ≤ 10 mm or tumor > 2 cm and ≤ 4 cm, and ≤ 10 mm DOI
- T3: Tumor > 4 cm in greatest dimension or any tumor >10 mm DOI
- T4a: Moderately advanced local disease
 - Lip: Tumor invades through the cortical bone, the inferior alveolar nerve, the floor of the mouth, or the skin of the face (i.e., the chin or nose).
 - Oral cavity: Tumor invades the adjacent structures, such as the cortical bone [mandible, maxilla], the maxillary sinus, or the skin of the face.
- T4b: Very advanced local disease. Tumor invades the masticator space, pterygoid plates, or skull base and/or encases the internal carotid artery.

Regional Lymph Nodes (N)*

- NX: Regional lymph nodes cannot be assessed
- N0: No regional lymph node metastasis
- N1: Metastasis to a single ipsilateral lymph node measuring ≤ 3 cm in greatest diameter and ENE negative
- N2: Further divided into three categories:
 - N2a: Single ipsilateral lymph node > 3 and ≤ 6 cm and ENE negative (pathologic staging also includes a single ipsilateral or contralateral lymph node ≤ 3 cm and ENE positive)

N2b: Multiple ipsilateral lymph nodes \leq 6 cm and ENE negative

N2c: Bilateral or contralateral lymph nodes \leq 6 cm in greatest dimension and ENE negative

N3: Now further divided into two categories:

N3a: Metastasis to a lymph node $>$ 6 cm, ENE negative

N3b: Metastasis to a single lymph node that is ENE positive (pathologic staging includes single lymph nodes that are ENE positive $>$ 3cm), or metastasis to multiple lymph nodes with any ENE positive

A designation of "U" or "L" can be attached to the N category to indicate nodes above ("U") or below ("L") the lower border of the cricoid. Similarly, clinical and pathologic ENE should be recorded as ENE (-) or ENE (+). Clinical and pathologic staging are similar with the differences noted in parenthesis.

*Superior mediastinal lymph nodes are considered regional lymph nodes (level VII). Midline nodes are considered ipsilateral nodes.

Distant Metastasis

M0: No distant metastasis

M1: Distant metastasis

N2b: Multiple ipsilateral lymph nodes \leq 6 cm and ENE negative

N2c: Bilateral or contralateral lymph nodes \leq 6 cm in greatest dimension and ENE negative

N3: Now further divided into two categories:

N3a: Metastasis to a lymph node $>$ 6 cm, ENE negative

N3b: Metastasis to a single lymph node that is ENE positive (pathologic staging includes single lymph nodes that are ENE positive $>$ 3cm), or metastasis to multiple lymph nodes with any ENE positive

A designation of "U" or "L" can be attached to the N category to indicate nodes above ("U") or below ("L") the lower border of the cricoid. Similarly, clinical and pathologic ENE should be recorded as ENE (-) or ENE (+). Clinical and pathologic staging are similar with the differences noted in parenthesis.

*Superior mediastinal lymph nodes are considered regional lymph nodes (level VII). Midline nodes are considered ipsilateral nodes.

Distant Metastasis

M0: No distant metastasis

M1: Distant metastasis

American Joint Committee on Cancer Stage Groupings for Oral Cavity Cancers (8th edition)

- Stage 0 disease: Carcinoma in situ (TisN0M0)
- Stage I disease: Includes only T1 N0 M0 tumors
- Stage II disease: Includes only T2 N0 M0 tumors
- Stage III disease: Includes T3 N0 M0 and T1 -3 disease that is N1 M0
- Stage IVA disease: Includes T4a disease with N0-N2 M0 disease and T1-T3 disease that is N2 M0
- Stage IVB disease: Includes T4b disease with any nodal disease or T1-T4a disease with N3 disease without distant metastases (M0)
- Stage IVC disease: Any disease with distant metastases (M1) (Table 6.11)

Table 6.11 Cancer stage groupings

	N0	N1	N2	N3
T1	Stage I	Stage III	Stage IVA	Stage IVB
T2	Stage II	Stage III	Stage IVA	Stage IVB
T3	Stage III	Stage III	Stage IVA	Stage IVB
T4a	Stage IVA	Stage IVA	Stage IVA	Stage IVB
T4b	Stage IVB	Stage IVB	Stage IVB	Stage IVB
M1	Stage IVC	Stage IVC	Stage IVC	Stage IVC

◆ Staging of Oropharyngeal Cancer (HPV Negative)

Primary Tumor (T)

- TX: Primary tumor cannot be assessed
- Tis: Carcinoma in situ
- T1: Tumor ≤ 2 cm in greatest dimension
- T2: Tumor > 2 cm but ≤ 4 cm in greatest dimension
- T3: Tumor > 4 cm in greatest dimension or extension to lingual surface of epiglottis
- T4: Moderately advanced or very advanced local disease
 - T4a: Moderately advanced local disease. Tumor invades the larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible.*
 - T4b: Very advanced local disease. Tumor invades lateral pterygoid muscle, pterygoid plates, lateral nasopharynx or skull base or encases carotid artery.

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

Regional Lymph Nodes (N) *

- NX: Regional lymph nodes cannot be assessed
- N0: No regional lymph node metastasis
- N1: Metastasis to a single ipsilateral lymph node measuring ≤ 3 cm in greatest diameter and ENE negative
- N2: Further divided into three categories:
 - N2a: Single ipsilateral lymph node > 3 and ≤ 6 cm and ENE negative (pathologic staging also includes a single ipsilateral or contralateral lymph node ≤ 3 cm and ENE positive)
 - N2b: Multiple ipsilateral lymph nodes ≤ 6 cm and ENE negative
 - N2c: Bilateral or contralateral lymph nodes ≤ 6 cm in greatest dimension and ENE negative
- N3: Now further divided into two categories:
 - N3a: Metastasis to a lymph node > 6 cm, ENE negative
 - N3b: Metastasis to a single lymph node that is ENE positive (pathologic staging includes single lymph nodes that are ENE positive > 3 cm), or metastasis to multiple lymph nodes with any ENE positive

A designation of "U" or "L" can be attached to the N category to indicate nodes above ("U") or below ("L") the lower border of the cricoid. Similarly, clinical and pathologic ENE should be recorded as ENE (-) or ENE (+). Clinical and pathologic staging are similar with the differences noted in parenthesis.

*Superior mediastinal lymph nodes are considered regional lymph nodes (level VII). Midline nodes are considered ipsilateral nodes.

◆ Staging of HPV+ Oropharyngeal Cancer

Primary Tumor (T)

- T0: No primary identified
- T1: Tumor ≤ 2 cm in greatest dimension
- T2: Tumor > 2 cm but ≤ 4 cm in greatest dimension
- T3: Tumor > 4 cm in greatest dimension or extension to lingual surface of epiglottis
- T4: Moderately advanced local disease; tumor invades the larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible or beyond*

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

Regional Lymph Node (N)

Clinical N (cN)

- NX: Regional lymph nodes cannot be assessed
- N0: No regional lymph node metastasis
- N1: One or more ipsilateral lymph nodes, ≤ 6 cm
- N2: Contralateral or bilateral lymph nodes, ≤ 6 cm
- N3: Lymph node(s) > 6 cm

Pathologic N (pN)

- NX: Regional lymph nodes cannot be assessed
- pN0: No regional lymph node metastasis
- pN1: Metastasis in ≤ 4 lymph nodes
- pN2: Metastasis in > 4 lymph nodes

Distant Metastasis (M)

- M0: No distant metastasis
- M1: Distant metastasis

American Joint Committee on Cancer Stage Groupings for HPV positive Oropharyngeal Cancers (8th Edition)

Clinical staging is as follows:

- Stage I disease: T0-T2, N0-N1 disease that is M0
- Stage II disease: T3N0-N1 M0 and T0-T3 disease that is N2 M0
- Stage III disease: T4 tumors with or without nodal disease as well as any tumor with N3 disease without metastases

Stage IV disease: any tumor with metastatic disease

Please refer to **Table 6.12**.

Table 6.12 Clinical staging of HPV + oropharynx cancer

	N0	N1	N2	N3
T0	N/A	Stage I	Stage II	Stage III
T1	Stage I	Stage I	Stage II	Stage III
T2	Stage I	Stage I	Stage II	Stage III
T3	Stage II	Stage II	Stage II	Stage III
T4	Stage III	Stage III	Stage III	Stage III
M1	Stage IV	Stage IV	Stage IV	Stage IV

Staging based on pathologic criteria for HPV associated (p16-positive) oropharyngeal cancer is different and is as follows:

- Stage I disease: T0-T2, N0-N1 disease that is M0
- Stage II disease: T3-T4N0-N1 M0 and T0-T2 disease that is N2 M0
- Stage III disease: T3-T4 with N2M0 disease
- Stage IV disease: any tumor with metastatic disease

Please refer to **Table 6.13**.

Table 6.13 Pathologic staging of HPV + oropharynx cancer

	N0	N1	N2
T0	N/A	Stage I	Stage II
T1	Stage I	Stage I	Stage II
T2	Stage I	Stage I	Stage II
T3	Stage II	Stage II	Stage III
T4	Stage II	Stage II	Stage III
M1	Stage IV	Stage IV	Stage IV

A designation of "U" or "L" can be attached to the N category to indicate nodes above ("U") or below ("L") the lower border of the cricoid. Similarly, clinical and pathologic ENE should be recorded as ENE (-) or ENE (+). Clinical and pathologic staging are similar with the differences noted in parenthesis.

*Superior mediastinal lymph nodes are considered regional lymph nodes (level VII). Midline nodes are considered ipsilateral nodes.

Distant Metastasis (M)

M0: No distant metastasis

M1: Distant metastasis

American Joint Committee on Cancer Stage Groupings of Sinonasal Cancers Except Mucosal Malignant Melanoma (8th edition)

Stage 0 disease: Carcinoma in situ (TisN0M0)

Stage I disease: Includes only T1 N0 M0 tumors

Stage II disease: Includes only T2 N0 M0 tumors

Stage III disease: Includes T3 N0 M0 and T1 -3 disease that is N1 M0