

QUICK REFERENCE GUIDE TO

# **TNM Staging of Head and Neck Cancer and Neck Dissection Classification**

Fourth Edition



AMERICAN ACADEMY OF  
OTOLARYNGOLOGY-  
HEAD AND NECK SURGERY

F O U N D A T I O N



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**Quick Reference Guide to  
TNM Staging of Head and Neck Cancer  
and Neck Dissection Classification**

*Copublished by*  
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## Preface

Staging is the language essential to the proper and successful management of head and neck cancer patients. It is the core of diagnosis, treatment planning, application of therapeutics from multiple disciplines, recovery, follow-up, and scientific investigation. Staging must be consistent, efficient, accurate, and reproducible. The head and neck cancer caregiver can never be too fluent in this mode of communication, as we educate patients and navigate them toward cure. The simple clarification that Stage IV disease is not synonymous with a “death sentence” has powerful impact for patients and their families. With this imperative, the American Academy of Otolaryngology—Head and Neck Surgery Foundation and the American Head and Neck Society present the fourth edition of *Quick Reference Guide to TNM Staging of Head and Neck Cancer and Neck Dissection Classification*.

Just as our knowledge of and therapeutics for head and neck cancer evolve, so does the language we use in managing the disease. Such terms as “chemo-radiation,” “organ preservation,” “HPV positive,” and “de-escalation” are now central to care planning discussions. Likewise, the staging system evolves to incorporate current knowledge and reflect state-of-the-art treatments.

This new edition of *Quick Reference Guide to TNM Staging of Head and Neck Cancer and Neck Dissection Classification* incorporates the changes from the seventh edition of the American Joint Commission on Cancer (AJCC) Cancer Staging Manual, as well as updated discussions of site-specific cancers.

We hope this *Quick Reference Guide* will serve the practitioner and the patient equally well as we ready ourselves for further evolution of head and neck cancer staging and management.

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### III. American Joint Committee on Cancer Tumor Staging—Nasopharynx, Thyroid, and Mucosal Melanoma

#### A. Nasopharynx

*The nasopharynx includes the vault, the lateral walls, the posterior walls, and the superior surface of the soft palate.*

#### PRIMARY TUMOR (T)

TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
Tis	Carcinoma <i>in situ</i>
T1	Tumor confined to the nasopharynx or tumor extends to the oropharynx and/or nasal cavity without parapharyngeal extension
T2	Tumor with parapharyngeal extension
T3	Tumor involves bony structures of skull base and/or paranasal sinuses
T4	Tumor with intracranial extension and/or involvement of cranial nerves, hypopharynx, orbit, or with extension to the infratemporal fossa/masticator space

#### REGIONAL LYMPH NODES (N)

This site is different from other head and neck sites.

NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Unilateral metastasis in cervical lymph node(s), 6 cm or less in greatest dimension, above the supraclavicular fossa, and/or unilateral or bilateral retropharyngeal lymph nodes, 6 cm or less in greatest dimension*
N2	Bilateral metastasis in cervical lymph node(s), 6 cm or less in greatest dimension, above the supraclavicular fossa*
N3	Metastasis in lymph node)* >6 cm and/or to supraclavicular fossa*
N3a	Greater than 6 cm in dimension
N3b	Extension to the supraclavicular fossa**

\*Note: Midline nodes are considered ipsilateral nodes.



*\*\*Note: Supraclavicular zones or fossa is relevant to the staging of nasopharyngeal carcinoma and is the triangular region originally described by Ho. It is defined by three points: (1) the superior margin of the sternal end of the clavicle, (2) the superior margin of the lateral end of the clavicle, (3) the point where the neck meets the shoulder. Note that this would include caudal portions of Levels IV and VB. All cases with lymph nodes (whole or part) in the fossa are considered N3b.*

### Stage Grouping

This stage grouping is unique to regional lymph nodes.

Stage 0	Tis	N0	M0
Stage I	T1	N0	M0
Stage II	T2	N1	M0
	T2	N0	M0
	T2	N1	M0
Stage III	T1	N2	M0
	T2	N2	M0
	T3	N0	M0
	T3	N1	M0
	T3	N2	M0
Stage IVA	T4	N0	M0
	T4	N1	M0
	T4	N2	M0
Stage IVB	Any T	N3	M0
Stage IVC	Any T	Any N	M1

### B. Thyroid

*The thyroid is composed of right and left lobes, with an isthmus connecting the two lobes.*

#### PRIMARY TUMOR (T)

- TX Primary tumor cannot be assessed
- T0 No evidence of primary tumor

- T1 Tumor 2 cm or less in greatest dimension, limited to the thyroid
- T1a Tumor 1 cm or less, limited to the thyroid
- T1b Tumor more than 1 cm but not more than 2 cm in greatest dimension, limited to the thyroid
- T2 Tumor more than 2 cm but not more than 4 cm in greatest dimension, limited to the thyroid
- T3 Tumor more than 4 cm in greatest dimension, limited to the thyroid or any tumor with minimal extrathyroid extension (e.g., extension to sternothyroid muscle or perithyroid soft tissues)
- T4a Moderately advanced local disease  
Tumor of any size extending beyond the thyroid capsule to invade subcutaneous soft tissues, larynx, trachea, esophagus, or recurrent laryngeal nerve
- T4b Very advanced local disease  
Tumor invades prevertebral fascia or encases the carotid artery or mediastinal vessels
- T4a Intrathyroidal anaplastic\* carcinoma
- T4b Extrathyroidal anaplastic\* carcinoma with gross extrathyroid extension

*\*All anaplastic carcinomas are considered T4 tumors.*

## REGIONAL LYMPH NODES (N)

Regional lymph nodes are the central compartment, lateral cervical, and upper mediastinal lymph nodes.

- NX Regional lymph nodes cannot be assessed
- N0 No regional lymph node metastasis
- N1 Regional lymph node metastasis
- N1a Metastasis to Level VI (pretracheal, paratracheal, and prelaryngeal/Delphian lymph nodes)
- N1b Metastasis to unilateral, bilateral, or contralateral cervical Levels I, II, III, IV, or V) or superior mediastinal lymph nodes (Level VII)

## DISTANT METASTASIS (M)

- M0 No distant metastasis
- M1 Distant metastasis

## Stage Grouping

Separate stage groupings are recommended for papillary or follicular, medullary, and anaplastic (undifferentiated) carcinoma.

<b>Papillary or Follicular Carcinoma (differentiated)</b>			
<i>Under 45 years</i>			
<b>Stage I</b>	Any T	Any N	M0
<b>Stage II</b>	Any T	Any N	M1
<i>45 years and older</i>			
<b>Stage I</b>	T1	N0	M0
<b>Stage II</b>	T2	N0	M0
	T3	N0	M0
<b>Stage III</b>	T1	N1a	M0
	T2	N1a	M0
	T3	N1a	M0
<b>Stage IVA</b>	T4a	N0	M0
	T4a	N1a	M0
	T1	N1b	M0
	T2	N1b	M0
	T3	N1b	M0
	T4a	N1b	M0
<b>Stage IVB</b>	T4b	Any N	M0
<b>Stage IVC</b>	Any T	Any N	M1
<b>Medullary Carcinoma (all age groups)</b>			
<b>Stage I</b>	T1	N0	M0
<b>Stage II</b>	T2	N0	M0
	T3	N0	M0
<b>Stage III</b>	T1	N1a	M0
	T2	N1a	M0
	T3	N1a	M0

<b>Stage IVA</b>	T4a	N0	M0
	T4a	N1a	M0
	T1	N1b	M0
	T2	N1b	M0
	T3	N1b	M0
	T4a	N1b	M0
<b>Stage IVB</b>	T4b	Any N	M0
<b>Stage IVC</b>	Any T	Any N	M1
<b>Anaplastic Carcinoma*</b>			
<b>Stage IVA</b>	T4a	Any N	M0
<b>Stage IVB</b>	T4b	Any N	M0
<b>Stage IVC</b>	Any T	Any N	M1

\*All anaplastic carcinomas are considered Stage IV.

## C. Mucosal Melanoma\*

*Malignant melanoma involving a mucosal (noncutaneous) site within the upper aerodigestive tract.*

### PRIMARY TUMOR (T)

- TX Primary tumor cannot be assessed
- T0 No evidence of primary tumor
- T3 Mucosal disease
- T4a Moderately advanced disease  
Tumor involving deep soft tissue, cartilage, bone, or overlying skin
- T4b Very advanced disease  
Tumor involving brain, dura, skull base, lower cranial nerves (IX, X, XI, or XII), masticator space, internal or common carotid artery, prevertebral space, or mediastinal structures

REGIONAL LYMPH NODES (N)

Regional lymph nodes are the central compartment, lateral cervical, and upper mediastinal lymph nodes.

- NX      Regional lymph nodes cannot be assessed
- N0      No regional lymph node metastases
- N1      Regional lymph node metastases present

DISTANT METASTASIS (M)

- MX      Distant metastasis cannot be assessed
- M0      No distant metastasis
- M1      Distant metastasis

Stage Grouping\*

Stage III	T3	N0	M0
Stage IVA	T4a	N0	M0
	T3-T4a	N1	M0
Stage IVB	T4b	Any N	M0
Stage IVC	Any T	Any N	M1

\*Note: Mucosal melanoma is an aggressive group of tumors. As a result, T1-T2 and Stage I and II are omitted.

The American Academy of Otolaryngology—Head and Neck Surgery Foundation's education initiatives are aimed at increasing the quality of patient outcomes through knowledgeable, competent, and professional physicians. The goals of education are to provide activities and services for practicing otolaryngologists, physicians-in-training, and nonotolaryngologist health professionals.

The Foundation's AcademyU® serves as the primary education resource for otolaryngology-head and neck surgery activities and events. These include expert-developed knowledge resources, subscription products, live events, eBooks, and online education. In addition, the AAO-HNSF Annual Meeting & OTO EXPO<sup>SM</sup> is the world's largest gathering of otolaryngologists, offering a variety of education seminars, courses, and posters. Many of the Foundation's activities are available for *AMA PRA Category 1 Credit™*.

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## AHNS MISSION

On May 13, 1998, The American Head and Neck Society (AHNS) became the single largest organization in North America for the advancement of research and education in head and neck oncology. The merger of two societies, the American Society for Head and Neck Surgery and the Society of Head and Neck Surgeons, formed the American Head and Neck Society. The American Head and Neck Society remains dedicated to the common goals of its parental organizations:

- To promote and advance the knowledge of prevention, diagnosis, treatment, and rehabilitation of neoplasms and other diseases of the head and neck,
- To promote and advance research in diseases of the head and neck, and
- To promote and advance the highest professional and ethical standards.

For more information about the AHNS, visit [www.ahns.info](http://www.ahns.info).



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