# Appendix A TNM classification of malignant tumours of the thyroid (UICC TNM 8)

This update to Appendix A provides updated information on staging using UICC TNM 8, which should be used for all tumours diagnosed after 1 January 2018.

The staging applies to all tumour types, including anaplastic carcinoma, which hitherto had automatically been staged as stage 4 irrespective of all other details. With TNM 8, those few anaplastic carcinomas that do not attain stage 4 by size or structures invaded are accorded a lower stage, just as though they had been a less aggressive cancer type.

**Primary tumour (pT)**

pTX Primary tumour cannot be assessed

pT0 No evidence of primary tumour

pT1a ≤10 mm, limited to thyroid

pT1b ≤20 mm but >10 mm, limited to thyroid

pT2 >20 mm, ≤40 mm, limited to thyroid

pT3a >40 mm, limited to thyroid

pT3b Tumour of any size with gross extrathyroidal extension invading strap muscles (sternohyoid, sternothyroid or omohyoid muscles)

pT4a Tumour invades beyond thyroid capsule and invades any of: subcutaneous soft tissues, larynx, trachea, oesophagus or recurrent laryngeal nerve

pT4b Tumour invades prevertebral fascia, mediastinal vessels or encases carotid artery

UICC TNM 8 staging applies to carcinomas and includes papillary, follicular, poorly differentiated, Hurthle cell and anaplastic carcinomas.

Multifocal tumours (≥2 foci) of all histological types should be designated (m), the largest focus determining the classification, e.g. pT2(m).

**Regional lymph nodes (pN)**

pNX Cannot assess regional lymph nodes

pN0 No regional nodes involved

pN1a Metastasis in level VI (pretracheal, paratracheal and prelaryngeal/Delphian) lymph nodes

pN1b Metastasis in other unilateral, bilateral or contralateral cervical (levels I, II, III, IV or V) or retropharyngeal or superior mediastinal lymph nodes

**Distant metastasis (M)**

M0 No distant metastases

M1 Distant metastases

**Residual primary tumour (R)**

RX Cannot assess presence of residual primary tumour

R0 No residual primary tumour

R1 Microscopic residual primary tumour

R2 Macroscopic residual primary tumour

## **Clinical staging**

This is mentioned for ease of reference as it may be discussed in the MDT meeting and in relation to clinical trials, but we recommend that pathology reports include only the pathological TNM staging. The translation of the pathological data into staging differs with the tumour type.

In papillary and follicular carcinoma, there is evidence that prognosis is poorer in older patients and therefore different criteria are applied to patients under 55 years from those to patients aged 55 years and older. In medullary carcinoma, no age stratification applies.

All undifferentiated/anaplastic tumours are regarded as categories within stage IV.

## **Papillary or follicular\* under 55 years**

|  |  |  |  |
| --- | --- | --- | --- |
| Stage I  | Any T  | Any N  | M0  |
| Stage II  | Any T | Any N  | M1  |

**Papillary or follicular 55 years or over**

|  |  |  |  |
| --- | --- | --- | --- |
| Stage I  | T1a, T1b, T2 | N0  | M0  |
| Stage II  | T3 | N0  | M0  |
| T1, T2, T3 | N1 | M0 |
| Stage III  | T4a  | Any N  | M0  |
| Stage IVA  | T4b  | Any N  | M0  |
| Stage IVB  | Any T | Any N  | M1  |

**Medullary carcinoma**

|  |  |  |  |
| --- | --- | --- | --- |
| Stage I | T1a, T1b | N0  | M0 |
| Stage II  | T2, T3 | N0 | M0 |
| Stage III | T1, T2, T3 | N1a  | M0 |
| Stage IVA  | T1, T2, T3 | N1b | M0 |
| T4a | Any N | M0 |
| Stage IVB | T4b | Any N | M0 |
| Stage IVC | Any T | Any N  | M1 |

**Anaplastic/undifferentiated carcinoma**

|  |
| --- |
| All are considered stage IV  |
| Stage IVA  | T1, T2, T3a  | N0  | M0  |
| Stage IVB | T1, T2, T3a | N1 | M0 |
| T3b, T4a, T4b | Any N | M0 |
| Stage IVC | Any T  | Any N  | M1  |

\* Including papillary, follicular, poorly differentiated and Hurthle cell carcinomas.

**Reference**

1 Thyroid Gland. *In*: Brierley JD, Gospodarowicz MK, Wittekind C (eds). *TNM Classification of Malignant Tumours (8th edition).* Oxford, UK: Wiley-Blackwell, 2017.