Carcinoma of the Thyroid
Histopathology Reporting Guide

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- **Previous history of thyroid tumour or related abnormality, specify**
- **Relevant biopsy/cytology results, specify**
- **Imaging findings, specify**
- **Previous surgery/therapy, specify**
- **Relevant familial history, specify**
- **Presence of clinical syndrome, specify**
- **Other, specify**

**OPERATIVE PROCEDURE**

- **Not specified**
- Total thyroidectomy
- Near total thyroidectomy
- Hemithyroidectomy
- Lobectomy
- Isthmusectomy
- Partial excision, specify type if possible
- Lymph node dissection
- Other, specify

> *a Anything less than a lobectomy excluding isthmusectomy, including substernal excision.*

**OPERATIVE FINDINGS**

- **Not specified**
- **Intra-operative macroscopic evidence of extrathyroidal extension**
  - Yes, specify location and tissue invaded
  - No
  - Information not available
- **Intra-operative impression of completeness of excision**
  - R0/R1
  - R2, specify location
  - Information not available
- **Other, specify**
HISTOLOGICAL TUMOUR TYPE (select all that apply) (Value list from the World Health Organization Classification of Tumours: Pathology and Genetics of Tumours of Endocrine Organs (2017))

- Papillary thyroid carcinoma
  - Classic (usual, conventional)
  - Columnar cell variant
  - Cribriform-morular variant
  - Diffuse sclerosing variant
  - Encapsulated variant
  - Encapsulated/well demarcated follicular variant with invasion
  - Infiltrative follicular variant
  - Hobnail variant
  - Microcarcinoma
  - Oncocytic variant
  - Solid variant
  - Tall cell variant
  - Warthin-like variant
  - Other variant, specify

- Follicular thyroid carcinoma (FTC)
  - FTC, minimally invasive
  - FTC, encapsulated angioinvasive
  - FTC, widely invasive

- Hürthle (oncocytic) cell tumours
  - Hürthle cell carcinoma, minimally invasive
  - Hürthle cell carcinoma, encapsulated angioinvasive
  - Hürthle cell carcinoma, widely invasive

- Poorly differentiated thyroid carcinoma
- Anaplastic thyroid carcinoma
- Squamous cell carcinoma
- Medullary thyroid carcinoma
- Mixed medullary and follicular thyroid carcinoma
- Mucoepidermoid carcinoma
- Sclerosing mucoepidermoid carcinoma with eosinophilia
- Mucinous carcinoma
- Spindle epithelial tumour with thymus-like differentiation
- Intraductal thyroid thymic carcinoma
- Other, specify

TUMOUR SITE (select all that apply) (For the most clinically relevant tumour)

- Not specified
- Lobe
  - Left
  - Right
- Isthmus
- Pyramidal lobe
- Soft tissue or muscle, specify site(s) and laterality
- Other, specify site(s) and laterality

TUMOUR FOCALITY

- Unifocal
- Multifocal, specify number of tumours in specimen (if >5 state such but no need to specify the number)
- Cannot be assessed, specify

TUMOUR DIMENSIONS

Maximum tumour dimension (largest tumour)

Additional dimensions (largest tumour)

Cannot be assessed, specify

MITOTIC ACTIVITY

- Not identified/low (<3 mitoses/2 mm²)
- High (≥3 mitoses/2 mm²)

Number of mitoses per 2 mm²

Cannot be assessed

² 2 mm² approximates 10 HPFs on some microscopes.

HISTOLOGICAL TUMOUR GRADE

- Well-differentiated
- Poorly differentiated
- Undifferentiated/anaplastic

SPECIMEN(S) SUBMITTED (select all that apply)

- Not specified
- Thyroid gland
  - Left
  - Right
  - Isthmus
- Parathyroid gland(s)
- Lymph node(s), specify site(s) and laterality
- Other, specify site(s) and laterality

### TUMOUR ENCAPSULATION/CIRCUMSCRIPTION
- Encapsulated
- Infiltrative
- Other, specify

### CAPSULAR INVASION
- Not applicable
- Uncertain
- Not identified
- Present
- Cannot be assessed, specify

### LYMPHATIC OR BLOOD VESSEL INVASION
- Not identified
- Present
- Type of vessel involved (select all that apply)
  - Blood vessel
    - Number of vessels involved, for encapsulated neoplasms, specify
      - Focal, 1-3 foci
      - Extensive, ≥4 foci
  - Lymphatic
  - Small vessel, not otherwise classifiable
- Extrathyroidal blood vessel invasion
  - Not identified
  - Present
  - Cannot be assessed, specify

### NECROSIS
- Not identified
- Present

### EXTRATHYROIDAL EXTENSION (select all that apply)
- Cannot be assessed
- Not identified
- Invasion into perithyroid fibroadipose tissue
- Invasion into skeletal muscle
- Invasion into subcutaneous soft tissue, larynx, trachea, oesophagus or recurrent laryngeal nerve
- Invasion into prevertebral fascia or encasing the carotid artery or mediastinal vessel

### MARGIN STATUS
- Not involved
- Distance of tumour to closest margin mm
- Involved, specify (anterior or posterior)
- Cannot be assessed, specify

### LYMPH NODE STATUS
- No nodes submitted or found
- Number of lymph nodes examined
- Not involved
- Involved
  - Number of positive lymph nodes
  - Number cannot be determined
- Location of involved lymph nodes, specify
  - Greatest dimension of largest lymph node with metastasis mm
  - Greatest dimension of largest metastatic focus in lymph node mm

### C-CELL HYPERPLASIA (Medullary carcinoma only)
- Not identified
- Present
- Unilateral
- Bilateral

### COEXISTENT PATHOLOGY (select all that apply)
- None identified
- Nodular hyperplasia
- Diffuse hyperplasia
- Dyshormonogenetic goitre
- Chronic lymphocytic thyroiditis
- Follicular adenoma
- Hürthle cell adenoma
- Noninvasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP)
- Other, specify

### PARATHYROID GLAND STATUS
- Not identified
- Present
- Number of parathyroid gland(s) found
  - Normal
  - Involved by carcinoma
  - Hypercellular/enlarged
### PATHOLOGICAL STAGING (UICC TNM 8\textsuperscript{th} edition)\textsuperscript{c}

#### TNM Descriptors (only if applicable) (select all that apply)
- **m** - multiple primary tumours
- **r** - recurrent
- **y** - post-therapy

#### Primary tumour (pT)\textsuperscript{d}
- TX: Primary tumour cannot be assessed
- T1: Tumour 2 cm or less in greatest dimension, limited to the thyroid
  - T1a: Tumour 1 cm or less in greatest dimension, limited to the thyroid
  - T1b: Tumour more than 1 cm but not more than 2 cm in greatest dimension, limited to the thyroid
- T2: Tumour more than 2 cm but not more than 4 cm in greatest dimension, limited to the thyroid
- T3: Tumour more than 4 cm in greatest dimension, limited to the thyroid or with gross extrathyroidal extension invading only strap muscles (sternohyoid, sternothyroid, or omohyoid muscles)
  - T3a: Tumour more than 4 cm in greatest dimension, limited to the thyroid
  - T3b: Tumour of any size with gross extrathyroidal extension invading strap muscles (sternohyoid, sternothyroid, or omohyoid muscles)
- T4\textsuperscript{e}: Includes gross extrathyroidal extension into major neck structures
  - T4a: Tumour extends beyond the thyroid capsule and invades any of the following: subcutaneous soft tissues, larynx, trachea, oesophagus, recurrent laryngeal nerve
  - T4b: Tumour invades prevertebral fascia, mediastinal vessels, or encases carotid artery

\textsuperscript{d} Including papillary, follicular, poorly differentiated, Hürthle cell and anaplastic carcinomas.

\textsuperscript{e} T4 has been added for clarity from AJCC TNM 8\textsuperscript{th} edition.

#### Regional lymph nodes (pN)
- NX: Regional lymph nodes cannot be assessed
- N0: No regional lymph node metastasis
- N1: Regional lymph node metastasis
  - N1a: Metastasis in level VI (pretracheal, paratracheal, and prelaryngeal/Delphian lymph nodes) or upper/superior mediastinum
  - N1b: Metastasis in other unilateral, bilateral or contralateral cervical (levels I, II, III, IV or V) or retropharyngeal

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