Microscopic findings

S3.01 *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)
  - Microcarcinoma
  - Columnar cell variant
  - Cribriform-morular variant
  - Diffuse sclerosing variant
  - Encapsulated variant
  - Encapsulated/well demarcated follicular variant with invasion
  - Infiltrative follicular variant
- 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
- Intrathyroid thymic carcinoma
- Other variant, specify

S2.05 *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

G2.01 *SPECIMEN WEIGHT

G2.02 THYROID APPEARANCE

S2.08 MACROSCOPIC DESCRIPTION

G2.03 ADDITIONAL MACROSCOPIC COMMENTS

S2.09 BLOCK IDENTIFICATION KEY

G2.04 ADDITIONAL MICROSCOPIC COMMENTS

S2.06 *TUMOUR FOCALITY
(For the most clinically relevant tumour)
- Unifocal
- Multifocal, specify number of tumours in specimen (if >5 state such but no need to specify the number)
- Cannot be assessed, specify

S2.07 *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

S3.02 *MICROSCOPIC TUMOUR DIMENSION

Maximum tumour dimension (largest tumour)

Additional dimensions (largest tumour)

- Cannot be assessed, specify
S3.03 *MITOTIC ACTIVITY\(^b\)
- Not identified/low (<3 mitoses/2 mm\(^2\))
- High (≥3 mitoses/2 mm\(^2\))

Number of mitoses per 2 mm\(^2\) [ ]

\(^b\) 2 mm\(^2\) approximates 10 HPFs on some microscopes.

G3.01 *HISTOLOGICAL TUMOUR GRADE
- Well-differentiated
- Poorly differentiated
- Undifferentiated/anaplastic

S3.04 *TUMOUR ENCAPSULATION/CIRCUMSCRIPTION
- Encapsulated
- Infiltrative
- Other, specify

S3.05 *CAPSULAR INVASION
- Not applicable
- Uncertain
- Not identified
- Present
- Cannot be assessed, specify

S3.06 *LYMPHATIC INVASION
- Not identified
- Present
- Cannot be assessed, specify

*VASCULAR INVASION
- Not identified
- Present, for encapsulated neoplasms, specify
- Focal, <4 foci
- Extensive, ≥4 foci

Extrathyroidal blood vessel invasion
- Not identified
- Present
- Small vessel, not otherwise classifiable
- Cannot be assessed, specify

S3.07 *NECROSIS
- Not identified
- Present

S3.08 *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

S3.09 *MARGIN STATUS
- Not involved
  - Distance of tumour to closest margin [ ] mm
- Involved, specify (anterior or posterior)
- Cannot be assessed, specify

S3.10 *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

Extranodal extension
- Not identified
- Present
- Cannot be determined

G3.02 *C-CELL HYPERPLASIA (Medullary carcinoma only)
- Not identified
- Present
  - Unilateral
  - Bilateral

S3.11 *PARATHYROID GLAND STATUS
- Not identified
- Present
  - Number of parathyroid gland(s) found [ ]
    - Normal
    - Involved by carcinoma
    - Hypercellular/enlarged
## Ancillary findings

### G4.01 *ANCILLARY STUDIES*
- Not performed
- Performed, specify

### G3.04 ADDITIONAL MICROSCOPIC COMMENT

### G3.02 MOLECULAR STUDIES

### G5.01 DIAGNOSTIC SUMMARY
Include: Specimen submitted, Histological tumour type, Diameter of largest tumour, Completeness of excision, Tumour stage.

### G5.02 Edition/version number of the Cancer Structured Reporting Protocol.

### S3.12 *DISTANT METASTASES*
- Not identified
- Not assessed
- Present, specify site(s)

### S3.13 *COEXISTENT PATHOLOGY* (select all that apply)
- None identified
- Nodular hyperplasia
- Diffuse hyperplasia
- Dyschromatogenous goitre
- Chronic lymphocytic thyroiditis
- Follicular adenoma
- Hürthle cell adenoma
- Noninvasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP)
- Other, specify

### S3.14 *DISTANT METASTASES* (select all that apply)
- Not identified
- Not assessed
- Present, specify site(s)

### S5.01 *PATHOLOGICAL STAGING* (AJCC TNM 8th edition)

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

#### Primary tumour (pT)*
- TX Primary tumour cannot be assessed
- T0 No evidence of primary tumour
- T1 Tumour \(< 2\) cm in greatest dimension limited to the thyroid
  - T1a Tumour \(< 1\) cm in greatest dimension limited to the thyroid
  - T1b Tumour \(> 1\) cm but \(< 2\) cm in greatest dimension limited to the thyroid
- T2 Tumour \(> 2\) cm but \(< 4\) cm in greatest dimension limited to the thyroid
- T3 Tumour \(> 4\) cm limited to the thyroid, or gross extrathyroidal extension invading only strap muscles
  - T3a Tumour \(> 4\) cm limited to the thyroid
  - T3b Gross extrathyroidal extension invading only strap muscles (sternohyoid, sternothyroid, thyrohyoid, or omohyoid muscles) from a tumour of any size
- T4 Includes gross extrathyroidal extension beyond the strap muscles
  - T4a Gross extrathyroidal extension invading subcutaneous soft tissues, larynx, trachea, oesophagus, recurrent laryngeal nerve from a tumour of any size
  - T4b Gross extrathyroidal extension invading prevertebral fascia or encasing the carotid artery or mediastinal vessels from a tumour of any size

*All categories may be subdivided: (s) solitary tumour and (m) multifocal tumour (the largest tumour determines the classification).

#### Regional lymph nodes (pN)
- NX Regional lymph nodes cannot be assessed
- N0 No evidence of locoregional lymph node metastasis
  - N0a One or more cytologically or histologically confirmed benign lymph nodes
  - N0b No radiologic or clinical evidence of locoregional lymph node metastasis
- N1 Metastasis to regional nodes
  - N1a Metastasis to level VI or VII (pretracheal, paratracheal, paratracheal, or paralaryngeal/ Delphian, or upper mediastinal) lymph nodes. This can be unilateral or bilateral disease.
  - N1b Metastasis to unilateral, bilateral or contralateral lateral neck lymph nodes (levels I, II, III, IV or V) or retropharyngeal lymph nodes

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### S5.02 Year and edition of staging system

### S5.03 OVERARCHING COMMENT