

COSD mapping for Appendix D: Reporting proforma for carcinomas of the thyroid in list format

RCPath Data set item element name	Values	Implementation comments	COSD Pathology v4.0.2 (2020)	COSD Pathology v5.1.1 (2024)
Surname			CR0050 - Person Family Name	CR0050 - Person Family Name
Forenames			CR0060 - Person Given Name	CR0060 - Person Given Name
Date of birth			CR0100 - Person Birth Date	CR0100 - Person Birth Date
Sex			CR3170 - Person Stated Gender Code	CR3170 - Person Stated Gender Code
Hospital			pCR0800 - Organisation Identifier (of Reporting Pathologist)	pCR0800 - Organisation Identifier (of Reporting Pathologist)
Hospital no			CR0020 - Local Patient Identifier	CR0020 - Local Patient Identifier
NHS/CHI no		CHI number not recorded in COSD	CR0010 - NHS Number	CR0010 - NHS Number
Date of receipt			pCR0770 - Sample Receipt Date	pCR0770 - Sample Receipt Date
Date of reporting			pCR0780 - Investigation Result Date	pCR0780 - Investigation Result Date
Report no			pCR0950 - Service Report Identifier	pCR0950 - Service Report Identifier
Pathologist			pCR7100 - Professional Registration Issuer Code - Consultant (Pathology Test Requested By)	pCR7100 - Professional Registration Issuer Code - Consultant (Pathology Test Requested By)

			pCR7120 - Professional Registration Entry Identifier - Consultant (Pathology Test Requested By)	pCR7120 - Professional Registration Entry Identifier - Consultant (Pathology Test Requested By)
Surgeon			Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
Operative procedure	Multiple selection value list:	<p>If multiple selections are used, then these would have to be reported within pCR1020 - Pathology Report Text, as pCR0760 - Pathology Investigation Type is a single selection within COSD</p> <p>*Anything less than a lobectomy excluding isthmusectomy, including substernal excision.</p>	pCR0760 – Pathology Investigation Type (All values)	pCR0760 – Pathology Investigation Type (All values)
	Not specified		99 (Uncertain/other)	99 (Uncertain/other)
	Total thyroidectomy		RE(Radical Excision)	RE(Radical Excision)
	Near total thyroidectomy		PE(Partial Excision)	PE(Partial Excision)
	Hemithyroidectomy		PE(Partial Excision)	PE(Partial Excision)
	Lobectomy		PE(Partial Excision)	PE(Partial Excision)
	Isthmusectomy		PE(Partial Excision)	PE(Partial Excision)
	Partial excision (specify type if possible) *		PE(Partial Excision)	PE(Partial Excision)
	Lymph node dissection		EX(Excision)	EX(Excision)
	Other, specify		99 (Uncertain/other)	99 (Uncertain/other)
Operative procedure, other (specify)	Free text	Only applicable if Operative procedure, 'Other, specify' is selected	pCR0970 – Specimen Nature (All values)	pCR0970 – Specimen Nature (All values)
			1 (Primary tumour)	1 (Primary tumour)
			4 (Regional Lymph Nodes)	4 (Regional Lymph Nodes)
Operative findings	Multiple selection value list: Not specified	(select all that apply)	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text

	<p>Intra-operative macroscopic evidence of extrathyroidal extension</p> <p>- Yes, specify location and tissue invaded</p> <p>- No, Information not available</p> <p>Intra-operative impression of completeness of excision</p> <p>- R0/R1</p> <p>- R2, specify location</p> <p>- Information not available</p> <p>Other, specify</p>		<p>recorded within pCR1020 - Pathology Report Text</p>	<p>recorded within pCR1020 - Pathology Report Text</p>
Specimen(s) submitted	<p>Multiple selection value list:</p> <p>Not specified</p> <p>Thyroid gland</p> <p>- Left:</p> <p>- Right:</p> <p>- Isthmus</p> <p>Parathyroid gland(s)</p> <p>Lymph node(s), specify site(s) and laterality</p> <p>Other, specify site(s) and laterality</p>	(select all that apply)	<p>Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text</p>	<p>Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text</p>
Tumour focality	<p>Single selection value list:</p> <p>Unifocal</p> <p>Multifocal</p> <p>Cannot be assessed, specify</p>		<p>pCR0840 - Synchronous Tumour Indicator</p> <p>N - No, no synchronous tumours present</p> <p>Y - Yes, synchronous tumours present</p> <p>9 - Not Known</p>	<p>pCR0840 - Synchronous Tumour Indicator</p> <p>N - No, no synchronous tumours present</p> <p>Y - Yes, synchronous tumours present</p> <p>9 - Not Known</p>
Tumour site	<p>Multiple selection value list:</p> <p>Not specified</p>	For the most clinically relevant tumour.	<p>Not in the COSD Pathology data set, although could be</p>	<p>Not in the COSD Pathology data set, although could be</p>

	<table border="1"> <tr><td>Lobe</td></tr> <tr><td>- Left:</td></tr> <tr><td>- Right:</td></tr> <tr><td>- Isthmus</td></tr> <tr><td>- Pyramidal lobe</td></tr> <tr><td>- Soft tissue or muscle, specify site(s) and laterality</td></tr> <tr><td>Other, specify site(s) and laterality</td></tr> </table>	Lobe	- Left:	- Right:	- Isthmus	- Pyramidal lobe	- Soft tissue or muscle, specify site(s) and laterality	Other, specify site(s) and laterality		recorded within pCR1020 - Pathology Report Text	recorded within pCR1020 - Pathology Report Text
Lobe											
- Left:											
- Right:											
- Isthmus											
- Pyramidal lobe											
- Soft tissue or muscle, specify site(s) and laterality											
Other, specify site(s) and laterality											
Maximum tumour dimension	Size (mm) of largest tumour	If it is important to record 'Cannot be assessed, specify', use pCR1020 - Pathology Report Text	pCR0830 - Lesion Size (Pathological)	pCR0830 - Lesion Size (Pathological)							
Histological tumour type	Single selection value list: Papillary thyroid carcinoma - Classic (usual, conventional) - Encapsulated classic subtype - Infiltrative follicular subtype - Clear cell subtype - Columnar cell subtype - Diffuse sclerosing subtype - Hobnail subtype - Oncocytic subtype - PTC with fibromatosis/fasciitis-like/ desmoid stroma - Solid/trabecular subtype - Spindle cell subtype - Tall cell subtype - Warthin-like subtype	Value list from the WHO Classification of Tumours: Pathology and Genetics of Tumours of Endocrine Organs (2022).	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text							

	Other subtype, specify
	Invasive encapsulated follicular variant papillary carcinoma (IEFVPTC)
	- IEFVPTC, minimally invasive
	- IEFVPTC, encapsulated angioinvasive
	- IEFVPTC, widely invasive
	Follicular thyroid carcinoma (FTC)
	- FTC, minimally invasive
	- FTC, encapsulated angioinvasive
	- FTC, widely invasive
	Oncocytic (Hürthle cell) carcinomas
	- Oncocytic carcinoma, minimally invasive
	- Oncocytic carcinoma, encapsulated angioinvasive
	- Oncocytic carcinoma, widely invasive
	Follicular-derived carcinoma, high grade
	- Differentiated high grade thyroid carcinoma (DHGTC)
	- Poorly differentiated thyroid carcinoma (PDTC)
	Anaplastic thyroid carcinoma
	Medullary thyroid carcinoma
	Mixed medullary and follicular cell derived thyroid carcinoma

	Mucoepidermoid carcinoma		
	Secretory carcinoma of salivary gland type		
	Sclerosing mucoepidermoid carcinoma with eosinophilia		
	Cribiform morular thyroid carcinoma		
	Spindle epithelial tumour with thymus-like elements		
	Intrathyroid thymic carcinoma		
	Thyroblastoma		
	Other, specify		
Histological tumour grade (follicular derived tumours)	Single selection value list:	pCR0860 - Grade of Differentiation (Pathological)	pCR0860 - Grade of Differentiation (Pathological)
	Well-differentiated	G1 - Well differentiated	G1 - Well differentiated
	Differentiated high grade	G2 - Moderately differentiated	G3 - Poorly differentiated
	Poorly differentiated	G3 - Poorly differentiated	G3 - Poorly differentiated
	Undifferentiated/anaplastic	G4 - Undifferentiated / anaplastic	G4 - Undifferentiated / anaplastic
Medullary thyroid carcinoma	Low grade	G1 - Well differentiated	G1 - Well differentiated
	High grade	G3 - Poorly differentiated	G3 - Poorly differentiated
Mitotic activity^b	Single selection value list:	^b 2 mm ² approximates 10 HPFs on some microscopes.	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	Not identified/low (<3 mitoses/2 mm ²)		
	High (≥ 3 mitoses/2 mm ²)		
	High (≥ 5 mitoses/2 mm ²)		
	Number of mitoses per 2 mm ²		
	Cannot be assessed		
	Single selection value list:	Not in the COSD Pathology data set, although could be	Not in the COSD Pathology data set, although could be
	Encapsulated		

Tumour encapsulation/ circumscription	Infiltrative		recorded within pCR1020 - Pathology Report Text	recorded within pCR1020 - Pathology Report Text
	Other, specify			
Capsular invasion	Single selection value list:		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	Not applicable			
	Uncertain			
	Not identified			
	Present			
	Cannot be assessed, specify			
Lymphatic or blood vessel invasion	Single selection value list:	For 'Type of vessel involved', use pCR1020 - Pathology Report Text	pCR0870 - Cancer Vascular or Lymphatic Invasion	pCR0870 - Cancer Vascular or Lymphatic Invasion
	Not identified		NU- No - vascular/lymphatic invasion not present	NU- No - vascular/lymphatic invasion not present
	Present		YL- Lymphatic invasion only present	YL- Lymphatic invasion only present
	Type of vessel involved			
	- Blood vessel			
	Number of vessels involved, for encapsulated neoplasms, specify			
	- Focal, 1-3 foci			
	- Extensive, ≥ 4 foci			
	- Lymphatic			
	- Small vessel, not otherwise classifiable			
	Cannot be assessed, specify			
Necrosis	Single selection value list:		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	Not identified			
	Present			
	Single selection value list:		Not in the COSD Pathology data set, although could be	Not in the COSD Pathology data set, although could be
	Cannot be assessed			

Extrathyroidal extension	Not identified		recorded within pCR1020 - Pathology Report Text	recorded within pCR1020 - Pathology Report Text
	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	Single selection value list:	To specify 'anterior or posterior' and 'why it cannot be assessed', use pCR1020 - Pathology Report Text	pCR0880 - Excision Margin	pCR0880 - Excision Margin
	Not involved		01 - Excision margins are clear (distance from margin not stated)	01 - Excision margins are clear (distance from margin not stated)
	Involved, specify (anterior or posterior)		05 - Tumour reaches excision margin	05 - Tumour reaches excision margin
	Cannot be assessed, specify		06 - Uncertain	06 - Uncertain
Lymph node status	Single selection value list:		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	No nodes submitted or found			
	Not involved			
	Number cannot be determined			
	Location of involved lymph nodes, specify			
Number of lymph nodes examined	Integer		pCR0890 - Number of Nodes Examined	pCR0890 - Number of Nodes Examined
Number of involved lymph nodes	Integer		pCR0900 - Number of Nodes Positive	pCR0900 - Number of Nodes Positive
Greatest dimension of largest lymph node with metastasis	size in mm		Not in the COSD Pathology data set, although could be	Not in the COSD Pathology data set, although could be

			recorded within pCR1020 - Pathology Report Text	recorded within pCR1020 - Pathology Report Text
Greatest dimension of largest metastatic focus in lymph node	size in mm		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
Extranodal extension	Single selection value list:		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	Not identified			
	Present			
	Cannot be determined			
Coexistent pathology	Single selection value list:		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	None identified			
	Follicular nodular disease			
	Diffuse hyperplasia			
	Dyshormonogenetic goitre			
	Chronic lymphocytic thyroiditis			
	Follicular adenoma			
	Oncocytic (Hürthle cell) adenoma			
	Noninvasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP)			
	Other, specify			
Parathyroid gland status	Single selection value list:		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	None identified			
	Present			
	Number of parathyroid gland(s) found			
	- Normal			
	- Involved by carcinoma			
	- Hypercellular/enlarged			

Histologically confirmed distant metastases	Single selection value list:		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	Not identified			
	Not assessed			
	Present, specify site(s)			
Pathological Staging	Single selection value list:		Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text	Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text
	m – multiple primary tumours			
	r – recurrent			
	y – post-therapy			
TNM edition number used	UICC8, UICC9	Within COSD, version number and edition are separate but should be reported together	pCR6820 - TNMVersion Number (Pathological)	pCR6820 - TNMVersion Number (Pathological)
			pCR6980 - TNMCoding Edition	pCR6980 - TNMCoding Edition
Primary tumour (pT)	Single selection value list:		pCR0910 - TCategory (Pathological)	pCR0910 - TCategory (Pathological)
	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 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			
Regional lymph nodes (pN)	Single selection value list:		pCR0920 - N Category (Pathological)	pCR0920 - N Category (Pathological)
	NXRegional 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			
SNOMED topography code	Free text	May have multiple codes. Look up from SNOMED tables.	pCR6410 - Topography (SNOMED) Pathology	pCR6410 - Topography (SNOMED) Pathology
SNOMED morphology code	Free text	May have multiple codes. Look up from SNOMED tables.	pCR6420 - Morphology (SNOMED) Pathology	pCR6420 - Morphology (SNOMED) Pathology
Further comments	Free text		pCRI020 - Pathology Report Text	pCRI020 - Pathology Report Text