

Mesothelioma in the Pleura, Pericardium and Peritoneum Histopathology Reporting Guide



Family/Last name Date of birth

Given name(s)

Patient identifiers Date of request Accession/Laboratory number

Elements in **black text** are CORE. Elements in **grey text** are NON-CORE. SCOPE OF THIS DATASET
 indicates multi-select values indicates single select values

CLINICAL INFORMATION (select all that apply)

- Information not provided
- Radiological appearance, *specify*
- History of previous cancer/BAP1 predisposition, *specify*
- History of recurrent pleural effusion, *specify*
- Other clinical information, *specify*

NEOADJUVANT THERAPY

- Information not provided
- Not administered
- Administered, *describe*

CLINICAL AND RADIOLOGICAL CORRELATION

Specify

OPERATIVE PROCEDURE

- Not specified
- Core biopsy ➡
- Open biopsy ➡ Number of biopsies
- VATS biopsy ➡
- Extrapleural pneumonectomy (EPP)
- Pleurectomy/decortication
- Extended pleurectomy/decortication (EPD)
- Partial pleurectomy
- Other, *specify*

SPECIMEN(S) SUBMITTED (select all that apply)

- Information not provided
- Pleura/Thoracic**
 - Lung
 - Left
 - Wedge
 - Lobe
 - Entire lung
 - Right
 - Wedge
 - Lobe
 - Entire lung
 - Diaphragm
 - Mediastinum
 - Pericardium
 - Parietal pleura
 - Contralateral pleura
 - Visceral pleura
 - Chest wall
 - Rib
 - Port site
- Peritoneum**
 - Peritoneum
 - Omentum
 - Testis
 - Left Right Laterality not specified
 - Ovary
 - Left Right Laterality not specified
 - Fallopian tube
 - Left Right Laterality not specified
 - Uterus
 - Other intra-abdominal organs, *specify*

Other submitted specimens

- Lymph nodes, *specify site(s)*
- Other, *specify*

TUMOUR SIZE 

Pleural specimens

MAXIMUM THICKNESS OF ANY MASS mm

AND Indeterminate

DIMENSIONS OF DOMINANT MASS

mm x mm x mm

Indeterminate

Peritoneal specimens

DIMENSIONS OF DOMINANT MASS

mm x mm x mm

OR Indeterminate

DIMENSIONS OF LARGEST NODULE

mm x mm x mm

Indeterminate

MACROSCOPIC TUMOUR SITE (select all that apply) 

Indeterminate

Pleura/Thoracic

- | | |
|--|--|
| <input type="checkbox"/> Left | <input type="checkbox"/> Right |
| <input type="checkbox"/> Lung | <input type="checkbox"/> Lung |
| <input type="checkbox"/> Parietal pleura | <input type="checkbox"/> Parietal pleura |
| <input type="checkbox"/> Visceral pleura | <input type="checkbox"/> Visceral pleura |
| <input type="checkbox"/> Chest wall | <input type="checkbox"/> Chest wall |
| <input type="checkbox"/> Rib | <input type="checkbox"/> Rib |

- Diaphragm
- Mediastinum
- Pericardium
- Port site

Peritoneum

- Peritoneum
- Omentum
- Testis
 - Left Right Laterality not specified
- Ovary
 - Left Right Laterality not specified
- Fallopian tube
 - Left Right Laterality not specified
- Uterus
- Other intra-abdominal organs, *specify*

Other

- Lymph nodes
- Other site, *specify*

BLOCK IDENTIFICATION KEY 

(List overleaf or separately with an indication of the nature and origin of all tissue blocks)

HISTOLOGICAL TUMOUR TYPE 

(Value list from the World Health Organization, Classification of Thoracic Tumours (2021))

- Mesothelioma in situ
- Localized mesothelioma
- Diffuse mesothelioma, NOS

Subtype

- Epithelioid mesothelioma
- Sarcomatoid mesothelioma (including desmoplastic)
- Biphasic mesothelioma

Epithelioid %

Sarcomatoid %

Architectural patterns

- Tubulopapillary → %
- Trabecular → %
- Adenomatoid → %
- Solid → %
- Micropapillary → %

Cytological features

- Rhabdoid
- Deciduoid
- Small cell
- Clear cell
- Signet ring
- Lymphohistiocytoid
- Pleomorphic
- Transitional

Stromal features

- Myxoid
- Desmoplastic
- Heterologous differentiation

HISTOLOGICAL TUMOUR GRADE 

(Applicable to diffuse epithelioid mesotheliomas)

- Low grade (nuclear grades I and II without necrosis)
- High grade (nuclear grade II with necrosis, nuclear grade III with or without necrosis)

RESPONSE TO THERAPY 

Specify

COEXISTENT PATHOLOGY (select all that apply) 

- None identified
- Pleural plaque
- Other, *specify*

EXTENT OF INVASION (select all that apply) 

- Cannot be assessed
- No evidence of primary tumour
- Parietal pleura without involvement of the
 - Ipsilateral visceral pleura
 - Mediastinal pleura
 - Diaphragmatic pleura
- Parietal pleura with focal involvement of the
 - Ipsilateral visceral pleura
 - Mediastinal pleura
 - Diaphragmatic pleura
- Diaphragmatic muscle
- Lung parenchyma
- Endothoracic fascia
- Mediastinal fat
- Localised focus of tumour invading the soft tissue of the chest wall
- Into but not through the pericardium
- Through the pericardium
- Diffuse or multiple foci invading soft tissue of chest wall
- Rib(s)
- Peritoneum through the diaphragm
- Great vessels/oesophagus/trachea or other mediastinal organ
- Spine
- Myocardium
- Extension into contralateral pleura
- Other, *specify*

MARGIN STATUS 

(Only applicable to EPP and EPD specimens)

- Cannot be assessed
- Not involved
- Involved, *specify margin(s) and their location, if possible*

LYMPH NODE STATUS 

- Cannot be assessed
 - No nodes submitted or found
- Lymph node station/location or specimen identification



	<input type="radio"/> Not involved	<input type="radio"/> Involved
	<input type="radio"/> Not involved	<input type="radio"/> Involved
	<input type="radio"/> Not involved	<input type="radio"/> Involved
	<input type="radio"/> Not involved	<input type="radio"/> Involved

ANCILLARY STUDIES - INVASIVE MESOTHELIOMA 

- Not performed
- Performed (select all that apply)
 - ALK testing, *specify test(s) and result(s)*
 - BAP1 testing, *specify test(s) and result(s)*
 - CDKN2A, *specify test(s) and result(s)*
 - MTAP testing, *specify test(s) and result(s)*
 - Immunohistochemistry, *specify test(s) and result(s)*
 - Other, e.g., NF2 (loss or fusion), EWSR1/ATF1, EWSR1/FUS-CREB, EWSR1/YY fusions, *record test(s), methodology and results*

ANCILLARY STUDIES - MESOTHELIOMA IN SITU 

- Not performed
- Performed (select all that apply)
 - BAP1 testing, *specify test(s) and result(s)*
 - CDKN2A, *specify test(s) and result(s)*
 - MTAP testing, *specify test(s) and result(s)*
 - Other, *record test(s), methodology and results*

ANCILLARY STUDIES continued

Representative blocks for ancillary studies, specify those blocks best representing tumour and/or normal tissue for further study

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HISTOLOGICALLY CONFIRMED DISTANT METASTASES 

- Not identified
- Present, specify site(s)

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PATHOLOGICAL STAGING (UICC TNM 8th edition)^a 

(Only EPD/EPP should be pathologically staged; not applicable to mesotheliomas in situ)

PLEURAL SPECIMENS

TNM Descriptors (only if applicable) (select all that apply)

- m - multiple primary tumours at a single site
- r - recurrent tumours after a disease free period
- y - classification is performed during or following multimodality treatment

Primary tumour (pT)

- TX^b Primary tumour cannot be assessed
- T0 No evidence of primary tumour
- T1 Tumour involves ipsilateral parietal pleura, with or without involvement of visceral, mediastinal or diaphragmatic pleura
- T2 Tumour involves the ipsilateral pleura (parietal or visceral pleura), with at least one of the following:
 - invasion of diaphragmatic muscle
 - invasion of lung parenchyma
- T3 Tumour involves ipsilateral pleura (parietal or visceral pleura), with at least one of the following:
 - invasion of endothoracic fascia
 - invasion into mediastinal fat
 - solitary focus of tumour invading soft tissues of the chest wall
 - non-transmural involvement of the pericardium
- T4 Tumour involves ipsilateral pleura (parietal or visceral pleura), with at least one of the following:
 - chest wall, with or without associated rib destruction (diffuse or multifocal)
 - peritoneum (via direct transdiaphragmatic extension)
 - contralateral pleura
 - mediastinal organs (oesophagus, trachea, heart, great vessels)
 - vertebra, neuroforamen, spinal cord
 - internal surface of the pericardium (transmural invasion with or without a pericardial effusion)

Regional lymph nodes (pN)

- NX^b Regional lymph nodes cannot be assessed
- N0 No regional lymph node metastasis
- N1 Metastases to ipsilateral intrathoracic lymph nodes (includes ipsilateral bronchopulmonary, hilar, subcarinal, paratracheal, aortopulmonary, paraesophageal, peridiaphragmatic, pericardial fat pad, intercostal and internal mammary nodes)
- N2 Metastases to contralateral intrathoracic lymph nodes. Metastases to ipsilateral or contralateral supraclavicular lymph nodes

^a Reproduced with permission. Source: UICC TNM Classification of Malignant Tumours, 8th Edition, eds by James D. Brierley, Mary K. Gospodarowicz, Christian Wittekind. 2016, Publisher Wiley. (incorporating any errata published up until 6th October 2020).

^b TX and NX should be used only if absolutely necessary.