

A guide to Lung Cancer Histopathology Reporting

Includes the  International Collaboration on Cancer reporting dataset denoted by *



Clinical details

S1.02	Clinical information provided on request form (complete as narrative or use the structured format below)	Text
	Nature of the resection	See p2
	Additional extrapulmonary tissue	No Yes
	*If yes, specify type	Text
	Site & laterality of tumour	See p2
	Results of previous cytological investigations or biopsies	Text
	Details of previous treatment of the current tumour	Text
	Details of previous cancer dx	Text
	Risk factors for lung cancer (eg smoking history, ethnicity and asbestos exposure)	Text
	Clinical tumour stage	Text
	New primary cancer or recurrence	New primary Recurr – regional Recurr – distant Not stated
S1.03	Pathology accession no.	Text
S1.04	Principal clinician	Text
G1.01	Other clinical info received	Text

Macroscopic findings

S2.01	*Operative procedure	See p2
S2.02	*Specimen laterality	Left Right Not provided
S2.03	*Attached anatomical structures	None submitted Submitted
	*If submitted, describe	Text
S2.04	*Accompanying specimens	None submitted Lymph nodes Other (specify)
S2.05	*Block identification key	Text
S2.06	*Tumour site	Upper lobe Middle lobe Lower lobe Bronchus
	*If bronchus, specify site	Text
G2.01	Tumour location	Central Peripheral
	If central record where it is involved	Mainstem Lobar Seg. bronchus
S2.07	*Separate tumour nodules (Note: A separate checklist is required for each synchronous primary)	Can't be assessed Absent Present Sep. primaries
	If present, record:	
	*No. of tumours	_____
	*Site	Same lobe Diff. ipsilateral lobe Contralateral lung

Macroscopic findings (cont.)

S2.08	*Max. tumour dimension	___ mm
S2.09	*Macro. appearance of pleura overlying tumour	Text
S2.10	Extent of direct spread of tumour to other tissues	Text
S2.11	*Distance of tumour to closest resection margin	___ mm
S2.12	*Tumour involves main bronchus within 20mm of carina	Not assessable Not involved Involved
S2.13	Lymph nodes	Absent Present
	If present, record:	
	Site of nodes	Text
	Number of LNs/site	_____
S2.14	*Atelectasis/obstructive pneumonitis	Not assessable Absent Present
	*If present, record extent	Involves entire lobe Involves entire lung
S2.15	Non-neoplastic lung	Text
G2.02	Other relevant information and comments	Text

Microscopic findings

S3.01	*Histological tumour type	See p2
G3.01	*Adenocarcinoma classification	See p3
S3.02	*Histological grade	See p3
S3.03	*Visceral pleural invasion	Cannot be assessed Indeterminate Not identified Present
G3.02	*Extent of pleural involvement	PL1 PL2 PL3
S3.04	*Lymphovascular invasion	Not identified Indeterminate Present
G3.03	Vessel(s) involved	Artery Vein Lymphatics
	For each vessel type involved, indicate the type of involvement	Focal Extensive
G3.04	*Perineural invasion	Not identified Indeterminate Present
S3.05	*Bronchial resection margin	Not applicable Not involved Involv. by invasive ca Involved by CIS only
	If involved by invasive carcinoma, record the tissues involved	Bronchial Peribronchial soft tiss Both
	If not involved record microscopic clearance	_____mm

Microscopic findings (cont.)

*Vascular resection margin	Not applicable Not involved Involved
If involved, record nature of involvement	Text
*Other margins (state each other margin)	Not applicable Not involved Involved
If not involved, record microscopic clearance	___mm
S3.06 *Direct invasion of adjacent structures	Not identified Not applicable Trachea Chest wall Diaphragm Oesophagus Heart Great vessels Vertebral body Phrenic nerve Mediastinum Mediastinal fat Mediastinal pleura Parietal pericardium Recurr. laryngeal nerve
If any structures selected, record if there is tumour at the resection margin for that structure	Absent Present
If present, specify the involved margin(s)	Text
If absent, record closest microscopic clearance	___mm
S3.07 In situ carcinoma	Absent Present
S3.08 *Response to neoadjuvant therapy	See p3
S3.09 LYMPH NODES	
*Station(s) examined	Text
*Lymph node status	Not involved Involved
*Station(s) involved	Text
Number of positive nodes (number of positive nodes/total number of nodes per station)	___/___
G3.05 Lymph node replacement	Focal Extensive Complete
Nodal involvement due to	Metastatic spread Direct invasion
G3.06 Extracapsular extension	Absent Present
G3.07 *Non-neoplastic lung disease	Text
G3.08 *Other neoplastic processes (eg tumourlets, NEH, AAH, dysplasia)	Text
G3.09 Other relevant comments	Text

Ancillary test findings

G4.01	*IMMUNOHISTOCHEMICAL MARKERS	
	*Antibodies	Positive Abs Negative Abs Equivocal Abs
	*Conclusions	Text
G4.02	*EGFR result	Text
G4.03	*Other molecular data (repeat for each other test performed)	
	*Test	Text
	*Results	Text

Synthesis and overview

S5.01	*PATHOLOGICAL STAGING (AJCC 7TH EDITION)	See p3
S5.02	Year and edition of staging system	Text
G5.01	Residual tumour status	See p3
G5.02	Completeness of surgical resection	Complete Incomplete Uncertain
G5.03	Diagnostic summary (Include: Operative procedure; Specimen laterality; Tumour site; Tumour type; Tumour stage; Residual tumour status; Completeness of surgical resection)	Text
S5.03	Overarching comment	Text

NOTES

S1.02 Nature of the resection

S2.01 Operative procedure

- Wedge resection
- Segmentectomy
- Bilobectomy
- Lobectomy
- Pneumonectomy
- Other (please specify)

S1.02 Site & laterality of tumour

- Right upper lobe
- Right middle lobe
- Right lower lobe
- Left upper lobe
- Left lower lobe
- Main bronchus

S3.01 Histological tumour type

- Squamous cell carcinoma
- Small cell carcinoma
- Adenocarcinoma
- Large cell carcinoma
- Adenosquamous carcinoma
- Sarcomatoid carcinoma
- Carcinoid tumour
- Other (specify)

G3.01 Adenocarcinoma classification

- Adenocarcinoma in situ (AIS)
 - Non-mucinous
 - Mucinous
- Minimally invasive adenocarcinoma (MIA)
 - Non-mucinous
 - Mucinous
- Invasive adenocarcinoma
 - Predominant pattern*
 - Lepidic (Specify %)
 - Acinar (Specify %)
 - Papillary (Specify %)
 - Micropapillary (Specify %)
 - Solid (Specify %)
 - Other patterns (if present) (specify type and %)*
- Mucinous
- Colloid
- Fetal
- Enteric

S3.02 Histological grade

- Well differentiated
- Moderately differentiated
- Poorly differentiated
- Undifferentiated
- Not applicable

S3.08 Response to neoadjuvant therapy

- Not applicable
- Less than 10% residual viable tumour
- Greater than 10% residual viable tumour
- Treatment history not known

G5.01 Residual tumour status**

The R categories are:

RX: Presence of residual tumour cannot be assessed

R0: No residual tumour

R1: Microscopic residual tumour.

Residual tumour at the bronchial margin may be:

R1: Invasive mucosal carcinoma or peribronchial infiltration

R1(is): Carcinoma in situ

R2: Macroscopic residual tumour.

S5.01 Pathological Staging (AJCC 7th Ed.)**

Suffixes (choose if applicable)

m - multiple primary tumours r - recurrent y - posttreatment

Primary tumour (T)

- TX Primary tumour cannot be assessed, or tumour proven by the presence of malignant cells in sputum or bronchial washings but not visualised by imaging or bronchoscopy.
- T0 No evidence of primary tumour
- Tis Carcinoma in situ
- T1 Tumour 3cm or less in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus (ie not in the main bronchus)
- T1a Tumour 2cm or less in greatest dimension
- T1b Tumour more than 2cm but 3cm or less in greatest dimension
- T2 Tumour more than 3cm but 7cm or less or tumour with any of the following features (T2 tumours with these features are classified T2a if 5cm or less);
Involves main bronchus 2cm or more distal to the carina
Invades visceral pleura (PL1 or PL2);
Associated with atelectasis or obstructive pneumonitis that extends to the hilar region but does not involve the entire lung
- T2a Tumour more than 3 cm but 5cm or less in greatest dimension
- T2b Tumour more than 5 cm but 7cm or less in greatest dimension
- T3 Tumour more than 7cm or one that directly invades any of the following:
parietal pleural (PL3) chest wall (including superior sulcus tumours), diaphragm, phrenic nerve, mediastinal pleura, parietal pericardium;
or tumour in the main bronchus (less than 2cm distal to the carina*) but without involvement of the carina;
or associated atelectasis or obstructive pneumonitis of the entire lung
or separate tumour nodule(s) in the same lobe
- T4 Tumour of any size that invades any of the following:
mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, oesophagus, vertebral body, carina;
separate tumour nodule(s) in a different ipsilateral lobe

* The uncommon superficial spreading tumour of any size with its invasive component limited to the bronchial wall, which may extend proximally to the main bronchus, is also classified as T1a.

Regional lymph nodes (N)

- NX Regional lymph nodes cannot be assessed
- N0 No regional node metastasis
- N1 Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension
- N2 Metastasis in ipsilateral mediastinal and/or subcarinal lymph node(s)
- N3 Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s)

Distant metastasis (M)

- M0 No distant metastasis
- M1 Distant metastasis
- M1a Separate tumour nodule(s) in a contralateral lobe; tumour with pleural nodules or malignant pleural (or pericardial) effusion**
- M1b Distant metastasis

** Most pleural (and pericardial) effusions with lung cancer are due to tumour. In a few patients, however, multiple cytopathologic examinations of pleural (pericardial) fluid are negative for tumour, and the fluid is nonbloody and is not an exudate. Where these elements and clinical judgement dictate that the effusion is not related to the tumour, the effusion should be excluded as a staging element and the patient should be classified as M0.

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