

Histological tumour type (Required)

Reason/Evidentiary Support:

All lung carcinomas should be typed according to the 2015 World Health Organization (WHO) Classification (see list below).¹ Accurate typing of lung carcinoma is becoming increasingly important, as histology impacts on decisions to proceed with molecular testing (see below) and the most appropriate chemotherapy regimen for patients in whom adjuvant therapy is indicated. Given the essential role that histologic type plays in patient management, a designation of non-small cell lung carcinoma, not otherwise specified (NSCLC, NOS), is not acceptable in resection specimens.² While it is beyond the scope of this document to provide a detailed discussion of the pathologic features of various histologic types of lung carcinoma, in poorly differentiated cases, immunohistochemistry can greatly aid in classification.

Lung carcinomas should be adequately sampled in order to ensure defining features are satisfactorily represented in the sections examined histologically. For cases in which adenocarcinoma in situ (AIS) or minimally invasive adenocarcinoma (MIA) are being considered, the IASLC/ATS/ERS requires that lesions be entirely submitted for histopathologic examination.²

It should be noted that the recommendations put forth in this document apply to small cell carcinoma and carcinoid tumours, as well as non-small cell types of lung carcinoma. While originally used primarily for non-small cell lung carcinoma, the TNM staging system has since also been scientifically validated for small cell carcinoma and carcinoid tumours.³

World Health Organization classification of tumours of the lung¹

Epithelial tumours

Adenocarcinoma	8140/3
Lepidic adenocarcinoma	8250/3*
Acinar adenocarcinoma	8551/3*
Papillary adenocarcinoma	8260/3
Micropapillary adenocarcinoma	8265/3
Solid adenocarcinoma	8230/3
Invasive mucinous adenocarcinoma	8253/3*
Mixed invasive mucinous and non-mucinous adenocarcinoma	8254/3*
Colloid adenocarcinoma	8480/3
Fetal adenocarcinoma	8333/3
Enteric adenocarcinoma	8144/3
Minimally invasive adenocarcinoma	
Non-mucinous	8256/3*
Mucinous	8257/3*
Preinvasive lesions	
Atypical adenomatous hyperplasia	8250/0*
Adenocarcinoma in situ	8140/2
Non-mucinous	8250/2*
Mucinous	8253/2*
Squamous cell carcinoma	8070/3
Keratinizing squamous cell carcinoma	8071/3
Non-keratinizing squamous cell carcinoma	8072/3
Basaloid squamous cell carcinoma	8083/3
Preinvasive lesion	
Squamous cell carcinoma in situ	8070/2
Neuroendocrine tumours	
Small cell carcinoma	8041/3
Combined small cell carcinoma	8045/3
Large cell neuroendocrine carcinoma	8013/3
Combined large cell neuroendocrine carcinoma	8013/3
Carcinoid tumours	
Typical carcinoid	8240/3
Atypical carcinoid	8249/3

Preinvasive lesion	
Diffuse idiopathic pulmonary neuroendocrine cell hyperplasia	8040/0*
Large cell carcinoma	8012/3
Adenosquamous carcinoma	8560/3
Pleomorphic carcinoma	8022/3
Spindle cell carcinoma	8032/3
Giant cell carcinoma	8031/3
Carcinosarcoma	8980/3
Pulmonary blastoma	8972/3
Other and unclassified carcinomas	
Lymphoepithelioma-like carcinoma	8082/3
NUT carcinoma	8023/3*
Salivary gland-type tumours	
Mucoepidermoid carcinoma	8430/3
Adenoid cystic carcinoma	8200/3
Epithelial- myoepithelial carcinoma	8562/3
Pleomorphic adenoma	8940/0

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References

- 1 WHO (World Health Organization) (2015). *WHO Classification of Tumours of the Lung, Pleura, Thymus and Heart. Fourth edition* Travis WD, Brambilla E, Burke AP, Marx A and Nicholson AG. IARC Press, Lyon, France.
- 2 Travis WD, Brambilla E and Noguchi M et al (2011). International Association for the Study of Lung Cancer/American Thoracic Society/European Respiratory Society international multidisciplinary classification of lung adenocarcinoma. *J Thorac Oncol* 6:244-285.
- 3 Shepherd FA, Crowley J, Van Houtte P, Postmus PE, Carney D, Chansky K, Shaikh Z and Goldstraw P (2007). The International Association for the Study of Lung Cancer lung cancer staging project: proposals regarding the clinical staging of small cell lung cancer in the forthcoming (seventh) edition of the tumor, node, metastasis classification for lung cancer. *J Thorac Oncol* 2(12):1067–1077.