

Staging Systems for SCLC

A. Veterans Affairs Lung Cancer Study Group Staging System for SCLC

Limited stage: disease that involves the one hemithorax and can be encompassed within a tolerable field of radiation. The definition of tolerable field of radiation may vary among radiation oncologists and institutions. In general, patients with contralateral mediastinal lymphadenopathy, supraclavicular lymphadenopathy, or both are considered to have limited-stage disease.

Extensive stage: all cases that do not fulfill the above criterion. Patients with ipsilateral malignant pleural effusion are usually considered to have extensive-stage disease.

B. TNM Definitions for Lung Cancer (AJCC 1997)

Primary Tumor (T)

TX: Primary tumor cannot be assessed, or tumor proven by presence of malignant cells in sputum or bronchial washings but not visualized by imaging or bronchoscopy

T0: No evidence of primary tumor

Tis: Carcinoma *in situ*

T1: Tumor 3 cm or less in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus* (i.e., not in main bronchus)

T2: Tumor with *any* of the following features of size or extent:

More than 3 cm in greatest dimension

Involves main bronchus, 2 cm or more distal to the carina

Involves the visceral pleura

Associated with atelectasis or obstructive pneumonitis that extends to the hilar region but does not involve the entire lung

T3: Tumor of any size that directly invades any of the following: chest wall (including superior sulcus tumors), diaphragm, mediastinal pleura, parietal pericardium; or tumor in the main bronchus less than 2 cm distal to the carina but without involvement of the carina; or associated atelectasis or obstructive pneumonitis of the entire lung

T4: Tumor of any size that invades any of the following: mediastinum, heart, great vessels, trachea, esophagus, vertebral body, carina; separate tumor nodule(s) in the same lobe; or tumor with a malignant pleural effusion†

Regional Lymph Nodes (N)

NX: Regional lymph nodes cannot be assessed

N0: No regional lymph node metastasis

N1: Metastasis to ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes involved by direct extension of the primary tumor

N2: Metastasis to 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)

MX: Distant metastasis cannot be assessed

M0: No distant metastasis

M1: Distant metastasis present (includes synchronous separate nodule(s) in a different lobe)

* The uncommon superficial tumor of any size with its invasive component limited to the bronchial wall, which may extend proximal to the main bronchus, is also classified T1.

†Most pleural effusions associated with lung cancer are due to tumor. However there are a few patients in whom multiple cytopathologic examinations of pleural fluid are negative for tumor. In these patients, fluid is nonbloody and is not an exudate. When these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging element and the patient should be staged T1, T2, or T3.

SCLC = small-cell lung cancer; TNM = tumor, node, metastasis.

Table from Physicians' Information and Education Resource (PIER), *Lung Cancer* module.