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# ESMO Minimum Clinical Recommendations for diagnosis, treatment and follow-up of small-cell lung cancer (SCLC)

## Incidence

- The crude incidence of lung cancer in the European Union is 52.5/100 000 per year, the mortality 48.7/100 000 per year. Among men the rates are 82.5 and 77.0/100 000 per year, among women 23.9 and 22.3/100 000 per year, respectively. SCLC accounts for 20% of all cases. About 90% of lung cancer mortality among men (and 80% among women) is attributable to smoking.

## Diagnosis

- Pathological diagnosis should be made according to the World Health Organisation classification from a bronchoscopic, Tru-cut or surgical biopsy or fine needle aspiration.

## Staging and risk assessment

- Patients are usually staged according to a simple two-stage system developed by the Veteran's Administration Lung Cancer Study Group as limited disease (LD) or extensive disease (ED):

### Limited disease

- The definition is based on the possibility of encompassing all detectable tumor within a "tolerable" radiotherapy port. Patients with limited disease have tumor deposits restricted to one hemithorax with regional lymph node metastasis including ipsilateral hilar, ipsilateral supraclavicular, mediastinal and contralateral hilar nodes.

### Extensive disease

- It represents any tumor beyond the bounds defined above including ipsilateral lung metastases and malignant pleural effusion.
- In addition to a complete history and physical examination, staging procedures should at least include the following: chest X-ray, complete blood count, liver and renal function tests, LDH, sodium, and a CT scan of chest and upper abdomen.
- Additional tests to define limited disease in patients with symptoms or abnormal physical examination suggesting metastasis are: a bone scintigraphy, a CT scan or MRI of the brain, and a bone marrow biopsy. Once any one of these tests is positive, extensive disease has been confirmed and there is no need to proceed with the rest of the tests *[V, D]*.

## Treatment

### Treatment of limited disease

- Standard regimens, also for patients diagnosed at surgery, are either based on etoposide-platinum or cyclophosphamide-doxorubicin and should be given for 4–6 cycles *[I, A]*. Maintenance chemotherapy does not result in any substantial improvement in survival *[II, A]*.
- Etoposide-cisplatin is widely regarded as state-of-the-art chemotherapy for limited disease, particularly because this regimen can be combined with concurrent irradiation without unacceptable toxicity *[II, A]*.
- Chest radiotherapy increases local control and survival and should be given to all patients with limited disease. Several studies suggest to start thoracic radiotherapy early during chemotherapy *[II–III, A]*.
- Prophylactic cranial irradiation is indicated in patients with a complete remission from limited disease because it reduces the lifetime risk of cerebral metastases and improves survival *[II, B]*.

### Treatment of extensive disease

- Chemotherapy with the same regimens as for limited disease and given for 4–6 cycles also improves survival for patients with extensive disease and is usually the most effective way to ameliorate clinical symptoms *[II, A]*.

### Second-line chemotherapy

- Patients relapsed from a response to first-line chemotherapy should be considered for second-line chemotherapy *[III, B]*.

## Response evaluation

- Response evaluation is recommended at least at the end of treatment by repetition of the initial radiographic tests *[V, D]*.

## Follow-up

- There is no evidence that follow-up of asymptomatic patients is needed. Specific examinations as clinically indicated.

## Note

Levels of Evidence *[I–V]* and Grades of Recommendation *[A–D]* as used by the American Society of Clinical Oncology are given in square brackets. Statements without grading were

considered justified standard clinical practice by the experts and the ESMO faculty.

## Literature


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