

Staging and risk assessment

- In non-metastatic NSCLC, detailed locoregional staging according to the 8th TNM staging system and the cardiopulmonary fitness of the patient determine the choice of treatment [III, A].

Locoregional staging

- For part-solid tumours, the size of the invasive component should be used to assign the T category for clinical staging [III, A].
- Subsolid lesions need dedicated radiological expertise for evaluating the lung lesion composition [V, A].
- If two lung lesions fulfil the criteria for two primaries these should be evaluated and treated accordingly [III, A].
- For patients with abnormal mediastinal and/or hilar lymph nodes at CT and/or PET imaging, endosonography is recommended over surgical staging [I, A].
- The preferred first technique for pathological confirmation of suspect nodes is needle aspiration under EBUS and/or EUS guidance [I, A].
- If EBUS and/or EUS does not reveal nodal involvement in a situation of high clinical suspicion, mediastinoscopy is indicated [I, A].
- Mediastinoscopy is the test with the highest negative predictive value to rule out mediastinal lymph node disease [I, A].
- Screening for brain metastases by MRI might be useful in patients considered for curative therapy [III, B].

Pretreatment risk assessment

- In non-metastatic NSCLC, the cardiopulmonary fitness of the patient will determine the choice of treatment [III, A].
- The risk of postoperative morbidity and mortality can be estimated using risk-specific models, although none have been validated in a cancer population [III, B].
- Before considering surgical resection, precise assessment of cardiac and pulmonary function is necessary to estimate risk of operative morbidity [III, A].
- For cardiac assessment, use of recalibrated RCRI is recommended [III, A].
- Formal lung function testing should be undertaken to estimate postoperative lung function. For patients with FEV1 and DLCO values >80% of their predicted pulmonary function tests and no other major comorbidities, no further investigations are advised before surgical resection [III, A]. For others, exercise testing and split lung function are recommended. In these patients, VO2max can be used to measure exercise capacity and predict postoperative complications [III, A].
- Comorbidities should be evaluated and optimized before surgery [III, A].
- In patients with limited pulmonary function due to emphysema, a lung volume reduction effect may be observed by resection of the lung cancer within emphysematous lung tissue [III, B].