NICE National Institute for Health and Care Excellence

NICE Pathways

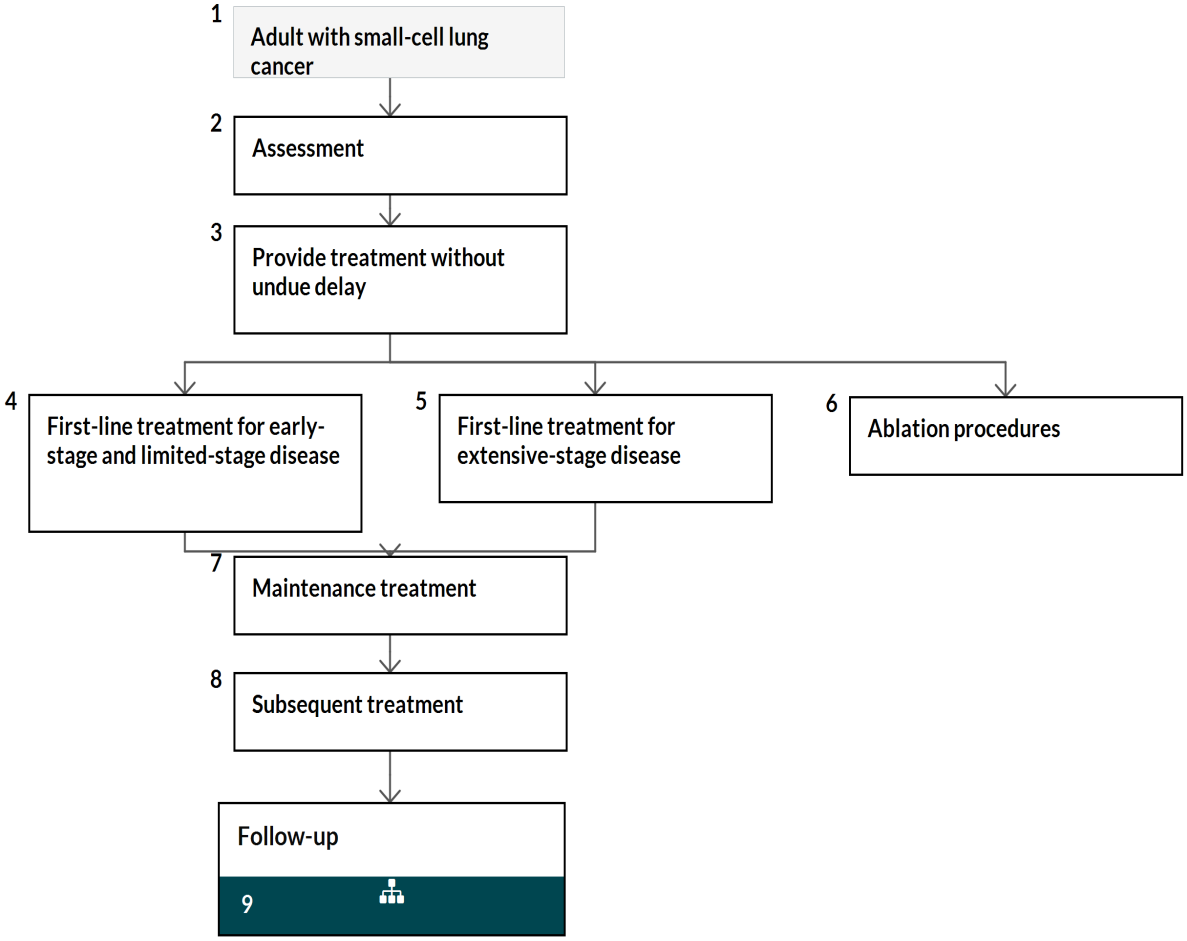
Treating small-cell lung cancer

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/lung-cancer
NICE Pathway last updated: 27 January 2021

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



1 Adult with small-cell lung cancer

No additional information

2 Assessment

Arrange for people with SCLC to have an assessment by a thoracic oncologist within 1 week of deciding to recommend treatment.

3 Provide treatment without undue delay

Provide treatment without undue delay for people who have lung cancer that is suitable for radical treatment or chemotherapy, or who need radiotherapy or ablative treatment for relief of symptoms.

See also the NICE Pathway on medicines optimisation.

4 First-line treatment for early-stage and limited-stage disease

Early-stage

Consider surgery in people with early-stage SCLC (T1–2a, N0, M0).

Limited-stage

Offer people with limited-stage disease SCLC (broadly corresponding to T1–4, N0–3, M0) 4 to 6 cycles of cisplatin-based combination chemotherapy. Consider substituting carboplatin in people with impaired renal function, poor performance status (WHO 2 or more) or significant comorbidity.

Offer twice-daily radiotherapy with concurrent chemoradiotherapy to people with limited-stage disease SCLC (broadly corresponding to T1–4, N0–3, M0) and a WHO performance status of 0 or 1, if they present with disease that can be encompassed in a radical thoracic radiotherapy volume. Start the radiotherapy during the first or second cycle of chemotherapy.

If the person declines or is unable to have twice-daily radiotherapy, offer once-daily

radiotherapy.

Offer sequential radical thoracic radiotherapy to people with limited-stage disease SCLC (broadly corresponding to T1–4, N0–3, M0) who are not well enough for concurrent chemoradiotherapy but who respond to chemotherapy.

Offer prophylactic cranial irradiation at a dose of 25 Gy in 10 fractions to people with limited-stage disease SCLC and WHO performance status 0 to 2, if their disease has not progressed on first-line treatment.

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

Thopaz+ for managing chest drains

The following recommendations are from NICE medical technologies guidance on Thopaz+ portable digital system for managing chest drains.

The case for adopting Thopaz+ for managing chest drains is supported by the evidence. Thopaz+ can reduce drainage time and length of stay in hospital, and improves safety for people with chest drains. Its use may also improve clinical decision-making through continuous, objective monitoring of air leaks and fluid loss.

Thopaz+ should be considered for people who need chest drainage after pulmonary resection or because of a pneumothorax. The system can increase patient mobility because it is portable. Staff find it more convenient and easier to use than conventional chest drains.

Cost modelling indicates that Thopaz+ is cost saving compared with conventional chest drains in people after pulmonary resection. The estimated saving is £111 per patient per hospital stay, with savings mainly achieved through reduced length of stay. The NICE resource impact assessment shows that, at a national level, adopting Thopaz+ is expected to save around £8.5 million per year in England.

5 First-line treatment for extensive-stage disease

Offer platinum-based combination chemotherapy to people with extensive-stage disease SCLC (broadly corresponding to T1–4, N0–3, M1a/b – including cerebral metastases) if they are fit enough.

Assess the person's condition before each cycle of chemotherapy for extensive-stage disease SCLC (broadly corresponding to T1–4, N0–3, M1a/b) and offer up to a maximum of 6 cycles, depending on response and toxicity.

Consider thoracic radiotherapy with prophylactic cranial irradiation for people with extensive-stage disease SCLC who have had a partial or complete response to chemotherapy within the thorax and at distant sites. See the NICE guideline to find out why we made this recommendation and how it might affect practice.

Consider prophylactic cranial irradiation for people with extensive-stage disease SCLC and WHO performance status 0 to 2, if their disease has responded to first-line treatment. See the NICE guideline to find out why we made this recommendation and how it might affect practice.

Atezolizumab with carboplatin and etoposide

The following recommendations are from NICE technology appraisal guidance on atezolizumab with carboplatin and etoposide for untreated extensive-stage SCLC.

Atezolizumab with carboplatin and etoposide is recommended as an option for untreated extensive-stage small-cell lung cancer in adults, only if:

- they have an ECOG performance status of 0 or 1 and
- the company provides atezolizumab according to the commercial arrangement.

When using ECOG performance status, healthcare professionals should take into account any physical, sensory or learning disabilities, or communication difficulties that could affect ECOG performance status and make any adjustments they consider appropriate.

These recommendations are not intended to affect treatment with atezolizumab that was started in the NHS before this guidance was published. People having treatment outside these recommendations may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

See why we made the recommendations on atezolizumab with carboplatin and etoposide.

NICE has written information for the public on atezolizumab with carboplatin and etoposide.

Durvalumab in combination

NICE is unable to make a recommendation about the use in the NHS of durvalumab in combination for untreated extensive-stage SCLC in adults because AstraZeneca withdrew its evidence submission. The company has confirmed that it does not intend to make a submission for the appraisal because the technology is unlikely to be a cost-effective use of NHS resources.

6 Ablation procedures

NICE has published interventional procedures guidance on microwave ablation for treating primary lung cancer and metastases in the lung with **special arrangements** for clinical governance, consent and audit.

NICE has published interventional procedures guidance that irreversible electroporation for treating primary lung cancer and metastases in the lung should be used **only in the context of research**.

7 Maintenance treatment

Only offer maintenance treatment to people with SCLC in the context of a clinical trial.

8 Subsequent treatment

Offer people with SCLC that has relapsed after first-line treatment assessment by a thoracic oncologist.

Offer people with relapsed SCLC in whom chemotherapy is suitable treatment with an anthracycline-containing regimen or further treatment with a platinum-based regimen to a maximum of 6 cycles.

Offer radiotherapy for palliation of local symptoms to people with SCLC that has relapsed after first-line treatment.

Inform people whose disease has not responded to first-line treatment that there is very limited evidence that second-line chemotherapy will be of benefit.

Topotecan

The following recommendations are from NICE technology appraisal guidance on topotecan for the treatment of relapsed SCLC.

Oral topotecan is recommended as an option only for people with relapsed SCLC for whom:

- re-treatment with the first-line regimen is not considered appropriate **and**
- the combination of cyclophosphamide, doxorubicin and vincristine (CAV) is contraindicated (for details of the contraindications to CAV see the summary of product characteristics for each of the component drugs).

Intravenous topotecan is not recommended for people with relapsed small-cell lung cancer.

People with relapsed SCLC currently receiving oral topotecan who do not meet the criteria specified above, or who are receiving intravenous topotecan should have the option to continue their treatment until they and their clinicians consider it appropriate to stop.

NICE has written information for the public on topotecan.

Genomic biomarker-based treatment for solid tumours

The point at which to use genomic biomarker-based therapy in solid tumour treatment pathways is uncertain. See the NICE Pathway on genomic biomarker-based treatment for solid tumours for guidance on specific treatments.

9 Follow-up

See Lung cancer/lung cancer overview /follow-up

Glossary

ECOG

Eastern Cooperative Oncology Group

SCLC

small-cell lung cancer

Sources

Lung cancer: diagnosis and management (2019) NICE guideline NG122

Atezolizumab with carboplatin and etoposide for untreated extensive-stage small-cell lung cancer (2020) NICE technology appraisal 638

Topotecan for the treatment of relapsed small-cell lung cancer (2009) NICE technology appraisal guidance 184

Thopaz+ portable digital system for managing chest drains (2018) NICE medical technologies guidance 37

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline

to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare

professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.