



Plain Language Summary

Treatment Options for Early-Stage Non-Small Cell Lung Cancer



There are two main types of lung cancer: non-small cell lung cancer and small cell lung cancer. Non-small cell lung cancer is the most common type, and early-stage means the cancer is confined to the lung and has not spread to distant parts of the body. The treatment usually involves surgery, and some people may also need additional treatment such as chemotherapy, radiation therapy, or immunotherapy.

Who is this summary for?

This summary is intended for adults with early-stage non-small cell lung cancer (NSCLC) who are considering their treatment options, as well as their families, caregivers, patient advocates, and healthcare professionals

What does the guideline recommend for patients with early stage non small cell lung cancer

Does giving chemotherapy/immunotherapy before surgery help people live longer compared with having surgery first and chemotherapy/immunotherapy after surgery?

01

Either of the following approaches is acceptable:

Chemotherapy (with or without immunotherapy) before surgery, followed by surgery

OR

Surgery first, followed by chemotherapy (with or without immunotherapy)

Why is it recommended?

Treatment Sequence Does Not Change Outcomes: Studies find no clear survival difference between giving systemic therapy before versus after surgery, so either approach is reasonable.

Is focused radiation treatment as effective as surgical removal of part of the lung (lobectomy or segmentectomy)?

02

Surgery is recommended over focused radiation treatment for patients who are fit for surgery. Focused radiation treatment may be considered only for patients who are not fit for surgery or choose not to.

Why is it recommended?

Surgery Offers better survival than focused radiation treatment: For patients who are fit for an operation, surgery generally leads to better long-term outcomes than focused radiation treatment.

Does prehabilitation (exercise, breathing exercises, nutrition support) lead to better recovery and fewer complications compared with usual care?

03

Prehabilitation (exercise, breathing training, nutrition, and education) is recommended before lung cancer surgery.

Why is it recommended?

Better Recovery with Prehabilitation: Evidence shows that preparing patients physically before surgery (prehabilitation) reduces postoperative complications and speeds recovery.

Does removing all the lymph nodes in the chest improve survival compared with removing only selected lymph nodes?

04

During lung cancer surgery, systematic removal of lymph nodes in the chest is recommended rather than removing only a few lymph node samples.

Why is it recommended?

Improved survival with lymph node removal: Removing lymph nodes during lung cancer surgery improves survival.

05

For lung cancer with an EGFR mutation, does adding targeted therapy (TKI) after surgery, help people live longer compared with chemotherapy alone?

For patients whose tumor has an EGFR gene change, targeted therapy (also called a TKI) is recommended after surgery instead of chemotherapy alone.

Why is it recommended?

Targeted therapy improves outcomes in EGFR-Positive cancer: Studies show that in EGFR- positive lung cancer, adding targeted therapy after surgery helps people live longer and leads to better outcomes than chemotherapy alone.

06

After the cancer has been fully removed by surgery, does adding radiation therapy help people live longer compared with standard treatment alone?

Routine radiotherapy after complete surgical removal of the cancer is not recommended for most patients. But it may be considered for selected high-risk patients after specialist discussion.

Why is it recommended?

Routine radiotherapy not needed after surgery: Studies show routine postoperative radiotherapy after complete resection does not improve survival and can cause harm.

Different Stages of Lung Cancer

STAGE
01

The cancer is small and limited to the lung. It has not spread to lymph nodes or other parts of the body.

STAGE
02

The cancer is larger than 5 cm and may have spread to nearby areas, such as lymph nodes close to the lung.

STAGE
03

The cancer has spread further to surrounding areas, especially lymph nodes in the centre of the chest. This is called regional spread.

STAGE
04

The cancer has spread to distant parts of the body, such as the other lung, brain, bones, or liver.

Key Medical Terms: Made Simple

Operable

The tumour can be removed safely with surgery

Prehabilitation (Prehab)

Exercise, breathing practice, nutrition and education before surgery to help you recover faster

Lymph nodes

Small glands in the chest that doctors check or remove during surgery to see if cancer has spread

Lymph node removal (Systematic Removal)

Taking out a particular set of nodes to check thoroughly

EGFR mutation

A change in the EGFR gene in some lung cancers. Tumours with this change can often be treated more effectively with drugs that specifically target EGFR

TKI (Tyrosine Kinase Inhibitors)

Medicines that block specific signals inside cancer cells that tell them to grow and divide. In some lung cancers, these drugs can slow or stop cancer growth, especially when certain gene changes are present.

Radiotherapy/ Radiation Therapy

High-energy rays used to kill cancer cells in a specific area

Chemotherapy

Medicines that kill or slow cancer cell growth

Immunotherapy

Medicines that help your immune system fight cancer

Who developed these guidelines?

These guidelines were released by the Ministry of Health & Family Welfare. They were developed by Department of Health Research, Directorate General of Health Services & National Health Systems Resource Centre. These recommendations are based on careful review of the best available studies



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