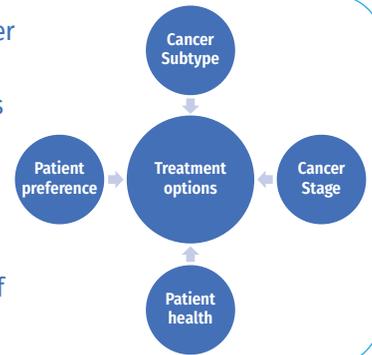


Treatment of Advanced-Stage Non-Small Cell Lung Cancer

There are several types of treatment for advanced-stage non-small cell lung cancer (NSCLC). You and your healthcare team will discuss which choice is best for you based on the type and stage of lung cancer you have, symptoms, your preferences and any other health problems you may have. Lung cancer treatments continue to improve as new discoveries are being made, so it is important to discuss all your possible options with your healthcare team. This fact sheet focuses on the treatment of advanced-stage non-small cell lung cancer. For information on treating early stage NSCLC and other information about lung cancer, see the list of other ATS Patient Information Series fact sheets in the 'Resources' section.



There are two main types of lung cancer: Non-Small Cell Lung Cancer (NSCLC) and Small Cell Lung Cancer (SCLC) (see ATS Patient Information Series Fact Sheet Lung Cancer at www.thoracic.org/patients). NSCLC is the most common and the main sub-types of NSCLC are adenocarcinoma, squamous cell, and large cell lung cancer. Treatment is different depending on the type or sub-type of lung cancer you have.

of the chest are considered early-stage lung cancer (Stage 1, Stage 2, and Stage IIIA) and are best treated with a local treatment to remove or kill the entire tumor (see ATS Patient Information Series fact sheet "Treatment of Early-Stage Non-Small Cell Lung Cancer").

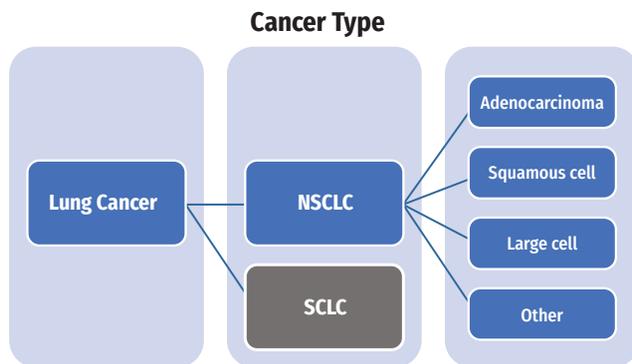
Advanced-stage lung cancer is defined as Stage IIIB to Stage IVB. If the cancer is at an advanced-stage, it is usually not possible to remove all the cancer and the goal of treatment is to control your cancer, minimize symptoms, and extend and improve quality of life.

This is usually done with a combination of therapies given separately or in combination. Radiation (high energy x-rays), chemotherapy (drugs that kill fast growing cells including the cancer cells), immunotherapy (drugs that use your own immune system to kill the cancer) and/or targeted therapy (drugs that kill the cancer cells at the DNA level) can be used to kill cancer cells throughout your body.

Which treatments are used for advanced-stage NSCLC?

The following table lists the range of possible treatment options, either recommended in guidelines and/or clinical trials, for advanced-stage NSCLC. Each person with lung cancer has different factors that need to be considered for a treatment plan, so what may be the best for one person may not be best for you.

NSCLC Advanced-Stage	Treatment (often in combination)
IIIB, IIIC	Surgery (only rarely) Chemotherapy Radiation Immunotherapy Targeted therapy
IVA, IVB	Chemotherapy Immunotherapy Radiation (for symptom relief) Targeted therapy



The treatment approach for SCLC is different and is not included here. See ATS Patient Information Series fact sheet "Treatment of Small cell Lung Cancer" for more information on this topic.



How does the stage of my cancer determine the treatment I receive?

Staging is a process for defining how much cancer is within your body (see ATS Patient Information Series fact sheet "What is Lung Cancer Staging?" at www.thoracic.org/patients). Usually, cancers that are limited to a small area

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How will my healthcare team decide what treatments to recommend for advanced-stage NSCLC?

The treatment approach to advanced-stage lung cancer is changing rapidly as we learn more about the disease. Your healthcare team will use the stage and sub-type of your cancer, but will also possibly test for specific immune markers and DNA changes or “biomarkers”. If you are a patient with Stage IV disease it is recommended to check for these biomarkers to ensure you get the right treatment. Sometimes a second biopsy will be needed or a blood sample will be taken or a “liquid biopsy” to look for these changes.

They will then review your other symptoms and health problems to make sure you can safely tolerate the treatment. You and your healthcare team should discuss the risks and benefits of all the options presented to you. For more information on biomarker testing in lung cancer please read <https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/learn-about-lung-cancer/how-is-lung-cancer-diagnosed/lung-cancer-tumor-testing>.

How will I find out about possible side effects of lung cancer treatment and how to manage them?

Your healthcare team will discuss the specific side effects of each therapy you receive. Many of the side effects of systemic therapies depend on the type of therapy, the individual patient and the doses used. Be sure to talk to your healthcare providers about what to expect and medications that can help to reduce or relieve your symptoms. Palliative care is an important approach for patients with lung cancer. The goal of palliative care is to improve your quality of life and help you and your family deal with the challenges of a serious illness. Palliative care can help to minimize side effects and any related psychological, social, and spiritual problems you may be experiencing. Procedures to alleviate lung cancer symptoms are also an option. Your pulmonologist can help you figure out if a procedure will help improve your quality of life.

For more detailed information on these topics please see helpful links in the ‘Resources’ section.

What about research centers or clinical trials?

Many of the treatments available for lung cancer patients today are the direct result of studies in which other people with cancer volunteered to take part in clinical trials. These research studies assess new treatments or new ways to deliver treatments. They allow healthcare providers to learn the very best treatment options for people and at times can benefit the people taking part in the studies. Often, many of the newest treatment options are available only by taking part in a clinical trial. Speak with your healthcare team about what research is being done to treat your type of cancer and whether you would be a good candidate to enroll in a clinical trial. You can search for clinical trials in your area through the National Cancer Institute website (<http://www.cancer.gov/clinicaltrials>).

How does stopping smoking improve lung cancer outcomes?

Stopping smoking can improve cancer outcomes at any stage of disease. Stopping smoking may help you heal better

if you need surgery, cut down on side effects from systemic therapies like chemotherapy and radiation, and allow these treatments to work better. Smoking cessation may also help you live longer, improve your quality of life, and lower the risk of cancer coming back or you getting a new cancer.

Speak to your healthcare provider about taking over-the-counter and/or prescription medications to help you stop smoking.

Helpful links to stop smoking:

<https://www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking/nicotine-replacement-therapy.html>

<https://quitnow.net/mve/quitnow>

OR call 1-800-QUITNOW (1-800-784-8669)

Healthcare Provider’s Contact Number:

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Resources:

American Thoracic Society

- www.thoracic.org/patients
 - Lung Cancer
 - Lung Cancer Staging
 - Treatment of Early-Stage Non-Small Cell Lung Cancer
 - Smoking Cessation and Cancer
 - Palliative Care for People with Respiratory Disease or Critical Illness
 - Malignant Pleural Effusion

American Lung Association

- lung.org/lung-force

American Society of Clinical Oncology

- https://www.cancer.net/sites/cancer.net/files/asco_answers_guide_nsclc.pdf

American Society for Radiation Oncology

- <https://www.ranswers.org/Cancer-Types/Lung-Cancer>

Go2 Foundation

- <https://go2foundation.org/treatments-and-side-effects/side-effect-management/>

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