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Lung Cancer - Non-Small Cell: Stages

Approved by the <u>Cancer.Net Editorial Board</u> (http://www.cancer.net/about-us/cancernet-editorial-board), **12/2022 ON THIS PAGE:** You will learn about how doctors describe a cancer's growth or spread. This is called the stage. Use the menu to see other pages.

What is cancer staging?

Staging is a way of describing where the cancer is located, if or where it has spread, and whether it is affecting other parts of the body. Doctors use diagnostic tests to find out the cancer's stage, so staging may not be complete until all of the tests are finished. Knowing the stage helps the doctor recommend the best kind of treatment and can help predict a patient's prognosis, which is the chance of recovery. There are different stage descriptions for different types of cancer.

In general, a lower number stage of non-small cell lung cancer (NSCLC) is linked with a better outcome. However, no doctor can predict how long a patient will live with lung cancer based only on the stage of disease. This is because lung cancer is different in each person and treatment works differently for each tumor.

This page provides detailed information about the stage groups for NSCLC, such as stage II or stage IV, and what this means for prognosis.

- Stage groups for NSCLC (https://www.cancer.net/cancer-types/lung-cancer-non-small-cell/stages#stage-groups)
- Prognosis (https://www.cancer.net/cancer-types/lung-cancer-non-small-cell/stages#prognosis)

Stage groups for NSCLC

The stage of NSCLC is based on a combination of several factors, including:

- · The size and location of the tumor
- Whether it has spread to the lymph nodes and/or other parts of the body.

There are 5 stages for NSCLC: stage 0 (zero) and stages I through IV (1 through 4). One way to determine the staging of NSCLC is to find out whether the cancer can be completely removed by a surgeon. To completely remove the lung cancer, the surgeon must remove the cancer, along with the surrounding, healthy lung tissue and often nearby lymph nodes. Learn more about **treatment options for NSCLC** (http://www.cancer.net/node/19155).

Stage 0

This is called in situ disease, meaning the cancer is "in place" and has not grown into nearby normal lung tissues or spread outside the lung.

Stage I

A stage I lung cancer is a small tumor that has not spread to any lymph nodes. Stage I is divided into 2 substages based on the size of the tumor:

- Stage IA tumors are 3 centimeters (cm) or less in size. Stage IA tumors may be further divided into IA1, IA2, or IA3 based on the size of the tumor.
- Stage IB tumors are more than 3 cm but 4 cm or less in size.

Stage II

Stage II lung cancer is divided into 2 substages:

- A stage IIA cancer describes a tumor larger than 4 cm but 5 cm or less in size that has not spread to the nearby lymph nodes.
- Stage IIB lung cancer describes a tumor that is 5 cm or less in size that has spread to the lymph nodes within the lung, called the N1 lymph nodes. A stage IIB cancer can also be a tumor more than 5 cm wide that has not spread to the lymph nodes.

Usually, stage II tumors can be removed with surgery, but often additional treatments are recommended.

Stage III

Stage III lung cancers are classified as either stage IIIA, IIIB, or IIIC. The stage is based on the size of the tumor and which lymph nodes the cancer has spread to. Stage III cancers have often spread extensively to the lymph nodes, but have not spread to other distant parts of the body.

If stage III NSCLC is suspected, the doctor will want to make sure the cancer has not spread to other parts of the body. For this evaluation, ASCO recommends a physical examination, assessment of the patient's medical history, a CT scan of the chest and upper abdomen, and a PET-CT scan and MRI of the brain (see Diagnosis (http://www.cancer.net/node/19153). For some people, lymph nodes may also need to be tested for cancer by endoscopy (http://www.cancer.net/node/24511) or surgery. A team of cancer care specialists generally work together to recommend the most appropriate treatment plan based on the stage and other characteristics of the cancer as well as other medical conditions the patient may have.

For many stage IIIA and stage IIIB cancers, it may be difficult, or sometimes impossible, to remove the tumor completely with surgery alone. Stage IIIC cancers, in general, cannot be removed with surgery and may need to be treated with a combination of chemotherapy and radiation followed by immunotherapy. For example, the lung cancer may have spread to the lymph nodes located in the center of the chest, which is outside the lung. Or the tumor may have grown into nearby structures in the lung. In either situation, it is less likely that the surgeon can completely remove the cancer. Stage III NSCLC that cannot be treated with surgery is generally treated with systemic therapy and radiation therapy (see **Types of Treatment** (http://www.cancer.net/node/19155).)

This information is based on the ASCO guideline, "<u>Management of Stage III NSCLC</u> (https://www.asco.org/practice-patients/guidelines/thoracic-cancer#/168762)." Please note that this link takes you to a different ASCO website.

Stage IV

Stage IV means the lung cancer has spread to more than 1 area in the other lung, the fluid surrounding the lung or the heart, or distant parts of the body through the bloodstream. Once cancer cells get into the blood, the cancer can spread anywhere in the body. But, NSCLC is more likely to spread to the brain, bones, liver, and adrenal glands. Stage IV NSCLC is divided into 2 substages:

- Stage IVA cancer has spread within the chest and/or has spread to 1 area outside of the chest.
- Stage IVB has spread outside of the chest to more than 1 place in 1 organ or to more than 1 organ.

In general, surgery is usually not an option for most stage IIIB, IIIC, or IV lung cancers. It can be difficult to remove lung cancer that has spread to the lymph nodes above the collarbone or into vital structures within the chest. These include the heart, large blood vessels, or the main breathing tubes leading to the lungs. In these situations, the doctor will carefully consider if surgery is an option or recommend other **treatment options** (http://www.cancer.net/node/19155). Surgery is usually not be recommended if the tumor cannot be completely removed. But for some people with stage IV lung cancer that have a good response to treatment, surgery and/or radiation therapy may be offered to treat the remaining sites of cancer.

Recurrent NSCLC

Recurrent cancer is cancer that has come back after treatment. If the cancer does return, there will be another round of tests to learn about the extent of the recurrence. These tests and scans are often similar to those done at the time of the original <u>diagnosis</u> (http://www.cancer.net/node/19153).

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Prognosis

The type and stage of NSCLC and the patient's overall health influence the prognosis. NSCLC is treatable at any stage and new treatments in recent years have led to improvements in overall survival for people with all stages of NSCLC. But only some people with certain stages can be cured.

Your doctor may use an index known as "performance status" or "functional status" to guide your treatment and determine your prognosis. This index measures a person's general strength and health. People who are strong enough to continue daily activities without assistance can safely receive cancer medication, radiation therapy, or surgery. For people with bone or liver metastases from lung cancer, excessive weight loss, ongoing tobacco use, or certain pre-existing medical conditions, such as heart disease or emphysema, treatment may not be as safe or effective.

It is important to note that a person's age has never been useful in predicting to predict if a person will benefit from treatment for NSCLC. The average age of people with lung cancer in the United States is 71. Age should never be used as the only reason for deciding what treatment is best, especially for older patients who are otherwise physically fit and have no medical problems besides lung cancer.

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Information about the cancer's stage will help the doctor recommend a specific treatment plan. The **next section in this guide is T** (https://www.cancer.net/cancer-types/lung-cancer-non-small-cell/types-treatment) **ypes of**

<u>Treatment (http://www.cancer.net/node/19155)</u>. Use the menu to choose a different section to read in this guide.