

UNDERSTANDING NON-SMALL CELL LUNG CANCER

What is Non-Small Cell Lung Cancer?

There are two major types of lung cancer: non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC). Non-small cell lung cancer represents about 85% of lung cancers and can be either adenocarcinomas, squamous cell carcinomas, or large cell carcinomas.

Who Is At Greater Risk for Developing Non-Small Cell Lung Cancer?

Smoking significantly increases your risk of developing lung cancer, even if you have quit smoking. Starting smoking earlier in life, smoking more cigarettes, smoking for more of a person's life, and taking beta carotene supplements while smoking will place people at greater risk. After a person has stopped smoking, the risk decreases as time passes.

Other risk factors include exposure to second-hand smoke; exposure to radiation therapy to the breast or chest; exposure to asbestos, chromium, nickel, arsenic, beryllium, uranium, soot, tar, or radon; living in places with more significant air pollution; infection with human immunodeficiency virus (HIV); a history of other lung illnesses, such as emphysema, chronic obstructive pulmonary disease (COPD), or tuberculosis; and a family history of lung cancer.

What Are the Symptoms of Non-Small Cell Lung Cancer?

Talk to your doctor if you have chest discomfort or pain that worsens with deep breathing, coughing or laughing, a cough that does not resolve or worsens over time, trouble breathing, wheezing, coughing up blood, hoarseness, loss of appetite, unexplained weight loss, lethargy, trouble swallowing, recurrent infections such as bronchitis or pneumonia, swelling in the face, and/or veins in the neck.

How Is Non-Small Cell Lung Cancer Diagnosed?

The diagnosis of non-small cell lung cancer begins with a physical exam and history, including checking for signs of disease, such as abnormal lung sounds or new onset of enlarged neck veins. The clinical history should include a person's smoking, family, and work history, as well as previous illnesses.

Tests that may be performed to reach a diagnosis include: examination of samples of tissue, sputum, blood; X-rays (which shows where tumors are located); CT (computed tomography) scans, which can show tumors not visible on an X-ray; PET (positron emission tomography), which can demonstrate glucose uptake by cancerous tumors; endobronchial ultrasound, which helps locate the tumor; MRI (magnetic resonance imaging), which can help determine if the cancer has spread beyond its original location; a bronchoscopy, in which a thin tube with a light and a camera is inserted into the bronchial passages; a thoracoscopy, in which an incision is made into the chest cavity and a thin tube with a light and a camera is inserted to view the lungs.

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How is Non-Small Cell Lung Cancer Treated?

Treatment will depend on the stage and subtype of the cancer, lung function, ability to perform daily tasks, and the overall general health and biomarkers, which are unique features for each cancer cell.

Treatment options include surgery to remove the tumor and surrounding tissue (wedge resection), remove part of the lung (lobectomy), or remove the entire lung (pneumonectomy).

Chemotherapy is another option in which drugs are used to kill rapidly growing and dividing cells, including cancer cells.

Another option is targeted therapy, which employs newer drugs that are less likely to affect healthy cells, and may have fewer adverse effects. Targeted therapy is not appropriate for all forms or stages of cancer.

Radiation therapy is also intended to kill cells that grow and divide quickly, and may be used in conjunction with chemotherapy and/or surgery.

Another option is to discuss with your clinician whether you would be a candidate to take part in one of the many clinical trials being conducted in most parts of the country.

Your doctor will review the options with you and help you decide the best course of treatment.

What Is My Prognosis?

Several factors affect a patient's chances of recovery, including the type and stage of the cancer, which is determined by the size of the tumor, the location within the lungs, and whether it has spread to other parts of the body. Some forms of lung cancer are more aggressive than others.

For more information:

American Cancer Society www.cancer.org

American Society of Clinical Oncology www.cancer.net/survivorship

Centers for Disease Control and Prevention www.cdc.gov/cancer/index.htm

Lung Cancer Alliance www.lungcanceralliance.org

Memorial Sloan Kettering Cancer Center www.mskcc.org/cancer-care/survivorship

Sources: American Cancer Society, Lung Cancer Alliance, National Cancer Institute