



Non-Small Cell Lung Cancer Fact Sheet

The Disease

Non-small cell lung cancer (NSCLC) is a disease in which malignant (cancer) cells form in the tissues of the lung. It is characterized by several types of lung cancers, each of which grow and spread in different ways, including: squamous cell carcinoma, adenocarcinoma, and large cell carcinoma.¹ NSCLC accounts for 85 percent of all diagnosed lung cancers.²

Key Statistics

- Lung cancer is the leading cause of cancer death among both men and women. More people die of lung cancer than of colon, breast, and prostate cancers combined.²
- Approximately 1.4 million people worldwide (nearly 175,000 in the United States²) are diagnosed with lung cancer each year.³
- In spite of the large number of people diagnosed with this cancer, there are only about 330,000 long-term survivors in the United States.²
- In 2007, there will be an estimated 160,390 deaths from lung cancer in the United States (89,510 among men and 70,880 among women), accounting for about 29 percent of all cancer deaths.²
- Nearly 60 percent of Americans diagnosed with lung cancer die within one year of their diagnosis and 75 percent die within 2 years. These survival rates have not improved in the past 10 years.²
- The average age of Americans with lung cancer is 70 at time of diagnosis.²

Risk Factors and Symptoms²

Risk factors for NSCLC include:

- Tobacco smoking; By far the greatest risk factor for lung cancer; about 87 percent of lung cancers are thought to result from smoking or passive (second-hand) exposure to tobacco smoke.
- Exposure to carcinogenic agents such as asbestos, radium, chromium, arsenic, soot or tar
- Cancer-causing agents in the workplace
 - radioactive ores such as uranium
 - inhaled chemicals or minerals such as arsenic, beryllium, vinyl chloride, nickel chromates, coal products, mustard gas, and chloromethyl ethers
 - fuels such as gasoline
 - diesel exhaust
- Radiation exposure to the lungs

- Recurring inflammation; Tuberculosis and some types of pneumonia often leave scars on the lung, which can increase the risk of developing adenocarcinoma type of lung cancer.
- Personal and/or family history of lung cancer
- Diet - some reports indicate that a diet low in fruits and vegetables may increase the chances of getting cancer if patients are also exposed to tobacco smoke.
- Air pollution

While some patients do not experience symptoms in the early stages of NSCLC, common symptoms may include:

- a cough that does not go away
- chest pain, often aggravated by deep breathing, coughing and even laughing
- hoarseness
- unexplained weight loss and loss of appetite
- bloody or rust-colored sputum (spit or phlegm)
- shortness of breath
- recurring infections such as bronchitis and pneumonia
- new onset of wheezing

Treatment²

At diagnosis, patients can be categorized into 3 treatment groups based on the stage of the cancer:

- NSCLC that can be treated with surgery
- NSCLC that has spread to nearby tissue or to lymph nodes
- NSCLC that has spread to other parts of the body or to another lobe of the lungs

Six types of standard treatment are used:

- Surgery
- Chemotherapy
- Radiation therapy
- Laser therapy
- Photodynamic therapy (PDT)
- Approved targeted therapies for advanced NSCLC

New types of treatment and prevention are being tested in clinical trials. These include the following:

- Chemoprevention
- Biologic therapy
- New targeted therapies – used alone, in combination with chemotherapy as well as with other targeted therapies

References

¹National Cancer Institute. Available at: <http://www.cancer.gov>. Accessed April 10, 2007.

²American Cancer Society. Available at: <http://www.cancer.org>. Accessed April 10, 2007.

³Ferlay J, et al., GLOBOCAN 2002. Cancer Incidence, Mortality and Prevalence Worldwide. IARC CancerBase No.5, Version 2.0. IARC Press, Lyon, 2004. Available at: <http://www-dep.iarc.fr>. Accessed April 10, 2007.

Leverkusen, 2007

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