

## NON-SMALL CELL LUNG CANCER FACTSHEET

### WHAT IS LUNG CANCER?

Lung cancer is the uncontrolled growth of abnormal cells in the lung. Depending on how the cancer cells look, lung cancer is divided into two types that are treated differently: <sup>1</sup>

- Small Cell Lung Cancer (SCLC)
- Non Small Cell Lung Cancer (NSCLC)

Non Small Cell Lung Cancer is the most common form of lung cancer, accounting for 80-85% of all lung cancers. <sup>1</sup>

### PREVALENCE

According to the Global Lung Cancer Coalition, more than 1.2 million new cases of lung and bronchus cancer are diagnosed each year worldwide, and approximately 1.1 million deaths occur annually around the world. <sup>2</sup>

#### United States

The American Cancer Society estimates that approximately 213,380 new cases of lung and bronchus cancer and more than 160,390 related deaths will occur in the United States in 2007. It is the leading cause of cancer death in this country in both men and women. <sup>3</sup>

#### Europe

The International Agency for Research on Cancer stated that there were 386,300 new cases of lung cancer in Europe in 2006<sup>4</sup> and 334,800 related deaths in the same year, causing lung cancer to remain the biggest killer in Europe. <sup>4</sup>

### RISK FACTORS

Cigarette smoking is by far the most important risk factor for lung cancer. Tobacco smoke causes more than 8 out of 10 cases of lung cancer. <sup>5</sup> Other risk factors include passive smoking; occupational or environmental exposures to asbestos and radon gas, certain metals, some organic chemicals, radiation; air pollution; tuberculosis. Genetic susceptibility plays a contributing role in the development of lung cancer, especially in those who develop the disease at a younger age. <sup>6</sup>

## **SYMPTOMS**

Symptoms may include: <sup>5,7</sup>

- Persistent cough,
- Bloody sputum,
- Chest pain,
- Shortness of breath,
- Voice change,
- Recurrent pneumonia or bronchitis,
- Loss of appetite and unintentional weight loss.

## **TREATMENT AND PROGNOSIS**

Treatment options are determined by the type and stage of the cancer and the patient health's condition. Surgery, chemotherapy and radiotherapy are currently the three standard treatments against lung cancer. More than one kind of treatment may be used, depending on the stage of the cancer. <sup>8</sup>

Surgery is usually performed when the cancer has not spread beyond the lung and selected lymph nodes. The current standard of care presents surgery alone as the treatment for stage I and surgery in combination with adjuvant chemotherapy for stages II and IIIA. Some patients receive chemotherapy or a combination of chemotherapy and radiation therapy prior to surgery. When a patient reaches advanced NSCLC, i.e. stage IV, the cancer is considered terminal and therapy is focused on extending life and palliative care.

NSCLC is associated with poor outcomes. The 5-year survival rate for all stages combined is only 15%. For local-stage lung cancer, i.e. cancer confined to the organ of origin, the 5-year survival rate is 50%. However, only 16% of NSCLC cases are diagnosed at this stage. <sup>6</sup>

### **REFERENCES**

1. [http://www.cancer.org/docroot/CRI/content/CRI\\_2\\_2\\_1x\\_What\\_Is\\_Non-small\\_Cell\\_Lung\\_Cancer.asp?sitearea=](http://www.cancer.org/docroot/CRI/content/CRI_2_2_1x_What_Is_Non-small_Cell_Lung_Cancer.asp?sitearea=) (Date of access: May 8, 2007)
2. <http://www.lungcancercoalition.org/files/File/90280%20GLCC%20English.pdf> - (Date of access May 2008)
3. [http://www.e-participacija.si/files/2006\\_iarc\\_press\\_release\\_-\\_european\\_cancer\\_figures.pdf](http://www.e-participacija.si/files/2006_iarc_press_release_-_european_cancer_figures.pdf) - (Date of last access August 1, 2007)
4. [http://www.iarc.fr/ENG/Press\\_Releases/pr174a.html](http://www.iarc.fr/ENG/Press_Releases/pr174a.html) - (Date of access August 1, 2007)
5. [http://www.cancer.org/docroot/CRI/content/CRI\\_2\\_2\\_2x\\_What\\_Causes\\_Non-small\\_Cell\\_Lung\\_Cancer.asp?rnav=cri](http://www.cancer.org/docroot/CRI/content/CRI_2_2_2x_What_Causes_Non-small_Cell_Lung_Cancer.asp?rnav=cri) (Date of access: May 8, 2007)

6. <http://www.cancer.org/downloads/STT/CAFF2006PWSecured.pdf>
7. <http://www.nlm.nih.gov/medlineplus/ency/article/007194.htm> (Date of access: May 8, 2007)
8. [http://www.cancer.org/docroot/CRI/content/CRI\\_2\\_2\\_4x\\_How\\_Is\\_Non-small\\_Cell\\_Lung\\_Cancer\\_Treated.asp?rnav=cri](http://www.cancer.org/docroot/CRI/content/CRI_2_2_4x_How_Is_Non-small_Cell_Lung_Cancer_Treated.asp?rnav=cri) (Date of access: May 8, 2007)