

Lung Cancer

May 2015

FACT SHEET

What is lung cancer?

Lung cancer is a cancer that begins in the lungs. It is the most common and deadly cancer worldwide.¹

The most common and deadly cancer worldwide¹



LUNG
~1.8M
cases per year,
and
~1.6M
deaths per year

>



BREAST
~1.67M
cases per year,
and
~522K
deaths per year

>



PROSTATE
~1.1M
cases per year,
and
~307K
deaths per year

The two main types of lung cancer are small cell lung cancer and non-small cell lung cancer (NSCLC).

Non-small cell lung cancer



Non-small cell
lung cancer accounts for
~85%
of all lung cancers.²

Risk factors for lung cancer^{9,10}



Smoking, the most common cause of lung cancer



Exposure to radon, a naturally occurring radioactive gas



Exposure to other forms of radiation, such as during radiation therapy to the chest



Workplace exposure to **certain inhaled chemicals or minerals**, such as asbestos, silica or diesel exhaust



Air pollution



Personal or family **history of lung cancer**



Personal **history of lung disease**

Incidence

Each year, **more than 224,000** people in the U.S. are diagnosed with lung cancer and more than **159,000** die of this disease.³

In the E.U., there are **309,589 new cases** of lung cancer and **264,907 lung cancer deaths** annually.⁴



Symptoms

Signs and symptoms may not be apparent in early stages of lung cancer. When the disease is more advanced, common signs and symptoms can include:⁵

- Persistent or worsening cough
- Hoarseness
- Coughing up blood
- Unexpected weight loss
- Chest pain
- Bone pain
- Shortness of breath
- Headache
- Wheezing

Even with today's treatment options, 5 year mortality rates for Stage III and IV NSCLC patients are higher than 85%.⁶



Current treatment options for NSCLC may include:^{7,8}

- Surgery
- Targeted agents
- Radiotherapy
- Radiofrequency ablation
- Chemotherapy
- Immunotherapy
- Chemoradiotherapy

Possible future options:

To learn about clinical trials in lung cancer, visit clinicaltrials.gov and search for 'lung cancer'.

Need for further research

Despite advances in the field of lung cancer, **the prognosis for patients with advanced-stage disease remains extremely poor.**⁶ There is a clear **unmet medical need** for new treatment options.

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References

1. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2013. Available at: <http://globocan.iarc.fr>. Last accessed April 2015.
2. Molina JR, et al. Mayo Clin Proc. 2008; 83(5): 584–594.
3. National Cancer Institute Surveillance Epidemiology and End Results (SEER). SEER Stat Fact Sheets: Lung and Bronchus Cancer. Available at: <http://seer.cancer.gov/statfacts/html/lungb.html>. Last accessed April 2015.
4. International Agency for Research on Cancer (IARC)/EUCAN. Lung cancer: Estimated incidence & mortality from lung cancer including trachea and bronchus in both sexes, 2012. Available at: <http://eco.iarc.fr/EUCAN/Cancer.aspx?Cancer=18>. Last accessed April 2015.
5. Mayo Clinic. Lung cancer symptoms. Available at: <http://www.mayoclinic.org/diseases-conditions/lung-cancer/basics/symptoms/con-20025531>. Last accessed April 2015.
6. American Cancer Society. Non-small cell cancer survival rates by stage. Available at: <http://www.cancer.org/cancer/lungcancer-non-smallcell/detailedguide/non-small-cell-lung-cancer-survival-rates>. Last accessed April 2015.
7. NCCN Clinical Practice Guidelines in Oncology. Non-Small Cell Lung Cancer. Version 5.2015. Available at: http://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf. Last accessed April 2015.
8. American Cancer Society. How is non-small cell lung cancer treated? Available at: <http://www.cancer.org/cancer/lungcancer-non-smallcell/detailedguide/non-small-cell-lung-cancer-treating-general-info>. Last accessed April 2015.
9. Cancer Research UK. Lung cancer risks and causes. Available at: <http://www.cancerresearchuk.org/about-cancer/type/lung-cancer/about/lung-cancer-risks-and-causes>. Last accessed April 2015.
10. American Cancer Society. What are the risk factors for lung cancer? Available at: <http://www.cancer.org/cancer/lungcancer-non-smallcell/moreinformation/lungcancerpreventionandearlydetection/lung-cancer-prevention-and-early-detection-risk-factors>. Last accessed April 2015.

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