Lung Cancer: Did You Know...

A look into the most common and fatal type of cancer



NEW CASES OF LUNG CANCER DIAGNOSED EACH YEAR GLOBALLY¹



ONE LUNG CANCER DIAGNOSIS WORLDWIDE EVERY 15 SECONDS¹

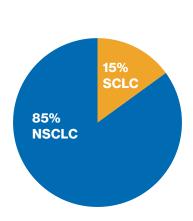
There are two main types of lung cancer:

NON-SMALL CELL LUNG CANCER (NSCLC)

is the most common type of lung cancer. NSCLC accounts for approximately 85% of lung cancer diagnoses worldwide, resulting in nearly 1.7 million new cases each year.1

SMALL CELL LUNG CANCER (SCLC)

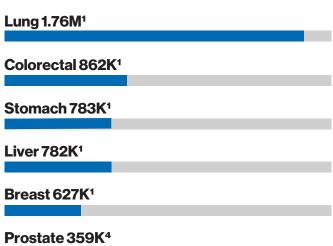
represents about 15% of all lung cancers. SCLC tends to grow faster and spread faster than NSCLC.2



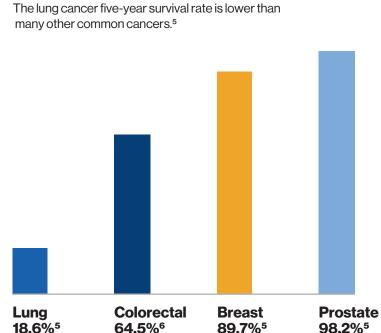
Lung Cancer: A Heavy Burden

Lung cancer is the leading cause of cancer death and has been for more than 30 years.3

DEATHS PER YEAR

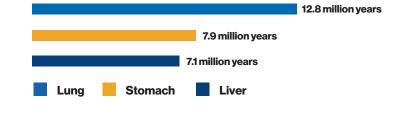


Lowest 5-year survival rates



The Socioeconomic Impact

Lung cancer accounts for the highest number of healthy life years lost - a measure of global disease impact.7



DEATH AND DISABILITY FROM LUNG CANCER HAVE A SIGNIFICANT IMPACT ON GLOBAL ECONOMIES.

Cancers with the largest economic costs due to loss of productivity on a global scale.7



Risk for Lung Cancer Is Prevalent and Growing

The number of new lung cancer cases in the world is expected to increase by about 70% over the next 2 decades.8

IN THE UNITED STATES:





WOMEN WILL DEVELOP LUNG CANCER

Lung cancer kills almost 1.5 times as many women as breast cancer.5

Racial and ethnic disparities in lung cancer



Black men are **15% more likely** to develop lung cancer than white men, even though overall exposure to cigarette smoke is lower.9,10



Radon (9-15%)

Compared to white patients in the US, black patients are about 34% less likely to receive timely treatment.10

Lung cancer has several causes beyond smoking

Never REPRESENT ABOUT 25% OF ALL LUNG CANCER

CASES WORLDWIDE¹¹ LUNG CANCER IN NEVER SMOKERS IS THE 7TH LEADING

CAUSE OF CANCER DEATHS IN THE WORLD¹¹

THE MOST COMMON CAUSES OF LUNG CANCER:12 Active smoking (90%)

Exposure to cancer-causing compounds in the workplace (10%) **Outdoor air pollution (1-2%)**

Nearly 70% of NSCLC patients have a mutation or change in genes that drives cancer growth.13

Sustained Stigma

Lung cancer stigma remains a critical problem



with having lung cancer.14

For cancers associated with stigma, including lung cancer,

70% of lung cancer patients surveyed feel stigma associated



nonprofits receive less funding relative to burden on society. 15

Lung cancer stigma is a potential barrier to timely medical help seeking.¹⁶

More than 20 treatments have been approved for lung cancer in

The Need for Continued Innovation



recent years.¹⁷ Targeted therapies against specific tumor driver mutations and immunotherapies have transformed the lung cancer treatment landscape worldwide.18 Yet despite these advancements, many patients with lung cancer still

have a poor prognosis and limited treatment options - particularly in advanced stages.19 More treatment options are needed to treat this complex disease and



help patients live better and longer lives.

Learn <u>more</u> about how Novartis is working to reimagine medicine to transform cancer care.

References:

1. World Health Organization. Cancer. Available at: https://www.who.int/news-room/fact-sheets/detail/cancer. Accessed October 8, 2020 2. American Cancer Society. What is lung cancer? https://www.cancer.org/cancer/lung-cancer/about/what-is.html. Accessed October 8, 2020.

4. Rawla P. Epidemiology of prostate cancer. World J Oncol. 2019; 10(2): 63-89. Siegel R. Miller K. Jemal A. Cancer statistics. 2020. CA Cancer J Clin. 2020;70(1):7-30

3. Ridge CA, McErlean AM, Ginsberg MS. Epidemiology of lung cancer. Semin Intervent Radiol. 2013 Jun. 30(2): 93-98.

6. SEER Cancer Statistics Review (CSR) 1975-2015. Prostate cancer. Available at: https://seer.cancer.gov/archive/csr/1975_2015/results_merged/sect_23_prostate.pdf 7. American Cancer Society. The global economic cost of cancer. 2010. Available at: http://phrma-docs.phrma.org/sites/default/files/pdf/08-17-2010_economic_impact_study.pdf.

8. Bray F, Ferlay J, Soerjomataram I, et al. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin.

9. American Cancer Society. Key statistics for lung cancer. Available at: https://www.cancer.org/cancer/lung-cancer/about/key-statistics.html. Accessed October 8, 2020.

10. Schabath MB, Cress WD, Munoz-Antonia T. Racial and ethnic differences in the epidemiology of lung cancer and the lung cancer genome. Cancer Control. 2016; 23(4): 338-346. 11. Sun S. Schiller JH. Gazdar AF, Lung cancer in never smokers--a different disease. Nat Rev Cancer. 2007 Oct;7(10):778-90. doi: 10.1038/nrc2190. PMID: 17882278

12. Khazaei S, et al. Role of smoking in lung cancer in United States. Iran J Pub Health. 2016;45(9):1245-1246. Available at: https://www.researchgate.net/ publication/309101886 Role of Smoking in Lung Cancer in United States/download.

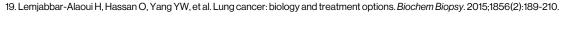
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14. King JC, Rapsomaniki E, Rigney M. Lung cancer stigma: A ten-year look at patient and oncologist attitudes about lung cancer. J Clin Oncol. 2019;37(15):11619 15. Kamath S, Kircher S, Benson A. comparison of cancer burden and nonprofit organization funding reveals disparities in funding across cancer types. J Natl Compr Canc Netw

13. Hirsch FR, Suda K, Wiens J, et al. New and emerging targeted treatments in advanced non-small-cell lung cancer. Lancet. 2016;388:1012-1024.

16. Carter-Harris L. Lung cancer stigma as a barrier to medical help-seeking behavior: practice implications. J Am Assoc Nurse Pract. 2015; 27(5): 240–245. 17. Lung Cancer Research Foundation. FDA approvals in lung cancer treatment. Available at: https://www.lungcancerresearchfoundation.org/research/why-research/treatmentadvances/

Accessed October 8, 2020. 18. Yuan M, Huang L, Chen, JH. The emerging treatment landscape of targeted therapy in non-small cell lung cancer. Sig Transduct Target Ther. 2019;4:61.



CH-4002 Basel Switzerland