

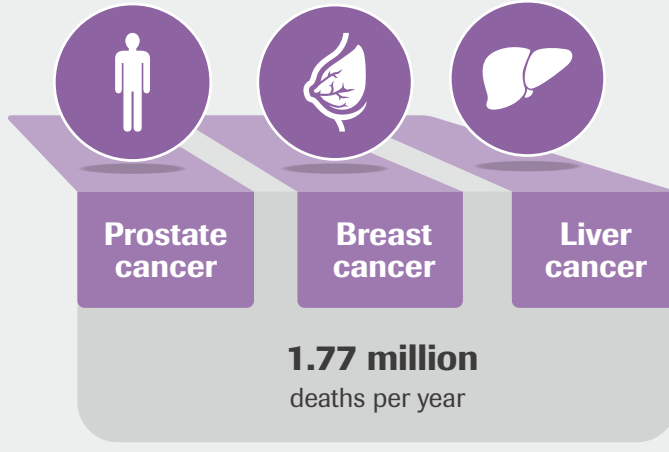
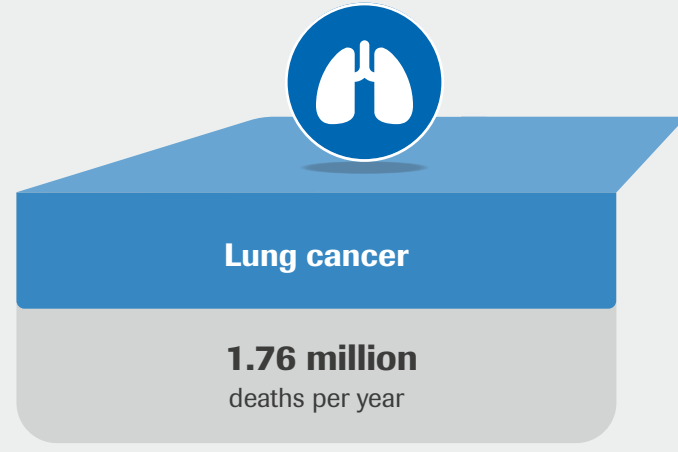
Small Cell Lung Cancer



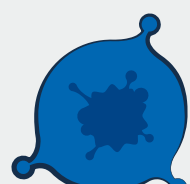
Lung cancer is the 2nd most common cancer in both men and women¹



It causes as many deaths as prostate, breast and liver cancer combined²



Lung cancer can be divided broadly into 2 types:

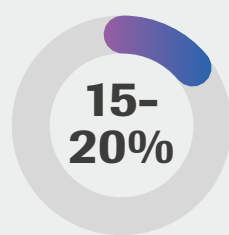


Non-small cell lung cancer (NSCLC)



Small cell lung cancer (SCLC)

Cells are small and oval-shaped in appearance³



Accounts for **15-20%** of all cases³



Cells **divide** more rapidly and **metastasise** quicker than NSCLC^{3,4}

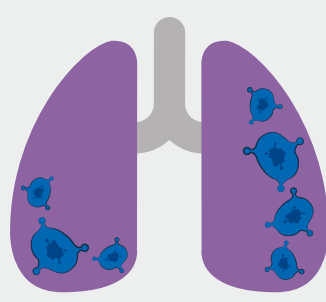


Patients usually present with **metastatic disease**⁴

Generally, SCLC is associated with a poor prognosis compared with NSCLC³

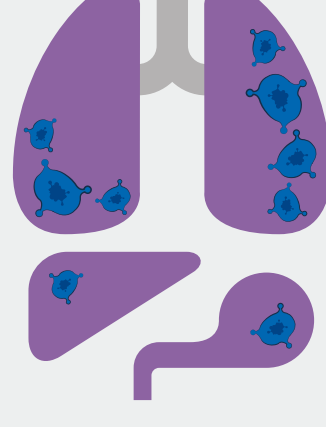
SCLC has 2 stages of diagnosis:³

Limited stage SCLC

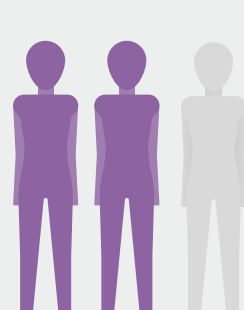


Like the early stages of NSCLC, SCLC is confined within the place the cancer originated. **With treatment, 12-15%** of those diagnosed will survive at least **5 years**³

Extensive-stage SCLC



Like advanced NSCLC, SCLC is diagnosed when the cancer has metastasised. **With treatment, only around 2%** will be alive after **5 years**³



2 out of 3 people are diagnosed at the extensive stage, due to the speed that SCLC progresses³

A unique response to treatment

SCLC usually responds well to initial chemotherapy treatment



However, this is often short-lived, with tumours typically **recurring within 1-2 years**⁵



Most patients with relapsed SCLC will develop chemotherapy-resistant tumours^{5, 6}



Median survival time⁶

Limited progress in SCLC treatment for over 20 years⁶

>60 diverse agents have failed in clinical trials over the last 2 decades⁷

A novel approach to SCLC

Researchers have been looking into using **cancer immunotherapy** to reprogramme the immune system to recognise and **attack cancer cells**⁸



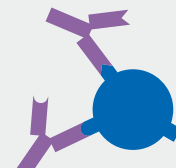
Several trials have focused on new approaches to SCLC, such as:⁹



Immune checkpoint inhibition



Vaccines



Antigenic targets

Roche is committed to advancing research in rare and difficult-to-treat cancers, including SCLC

References

1. Key Statistics for Lung Cancer. American Cancer Society. Available from: <https://www.cancer.org/cancer/non-small-cell-lung-cancer/about/key-statistics.html>. Accessed November 2018.
2. Lung Cancer Factsheet. World Health Organisation. Available from: <https://gco.iarc.fr/today/data/factsheets/cancers/15-Lung-fact-sheet.pdf>. Accessed November 2018.
3. Non-Small Cell vs. Small Cell Lung Cancer. MedicineNet. Available from: https://www.medicinenet.com/non-small_cell_lung_cancer_vs_small_cell/article.htm#what_is_non-small_cell_lung_cancer_nsclc. Accessed November 2018.
4. Lüchtenborg M. et al. Survival of patients with small cell lung cancer undergoing lung resection in England, 1998-2009. *Thorax*. 2014;69(3):269-73.
5. Klameth L et al. Small cell lung cancer: model of circulating tumor cell tumorspheres in chemoresistance. *Nature Scientific Reports*. 2017;7(1):5337.
6. Alvarado-Luna G et al. Treatment for small cell lung cancer, where are we now?-a review. *Transl Lung Cancer Res*. 2016;5(1):26-38.
7. Oronsky B et al. What's new in SCLC? A Review. *Neoplasia*. 2017;19(10):842-847.
8. Immunotherapy Treatment for Small Cell Lung Cancer. WebMD. Available from: <https://www.webmd.com/lung-cancer/small-cell-lung-cancer-immunotherapy#1>. Accessed November 2018.
9. Li Q et al. A new hope: the immunotherapy in small cell lung cancer. *Neoplasia*. 2016;63(3):342-350.