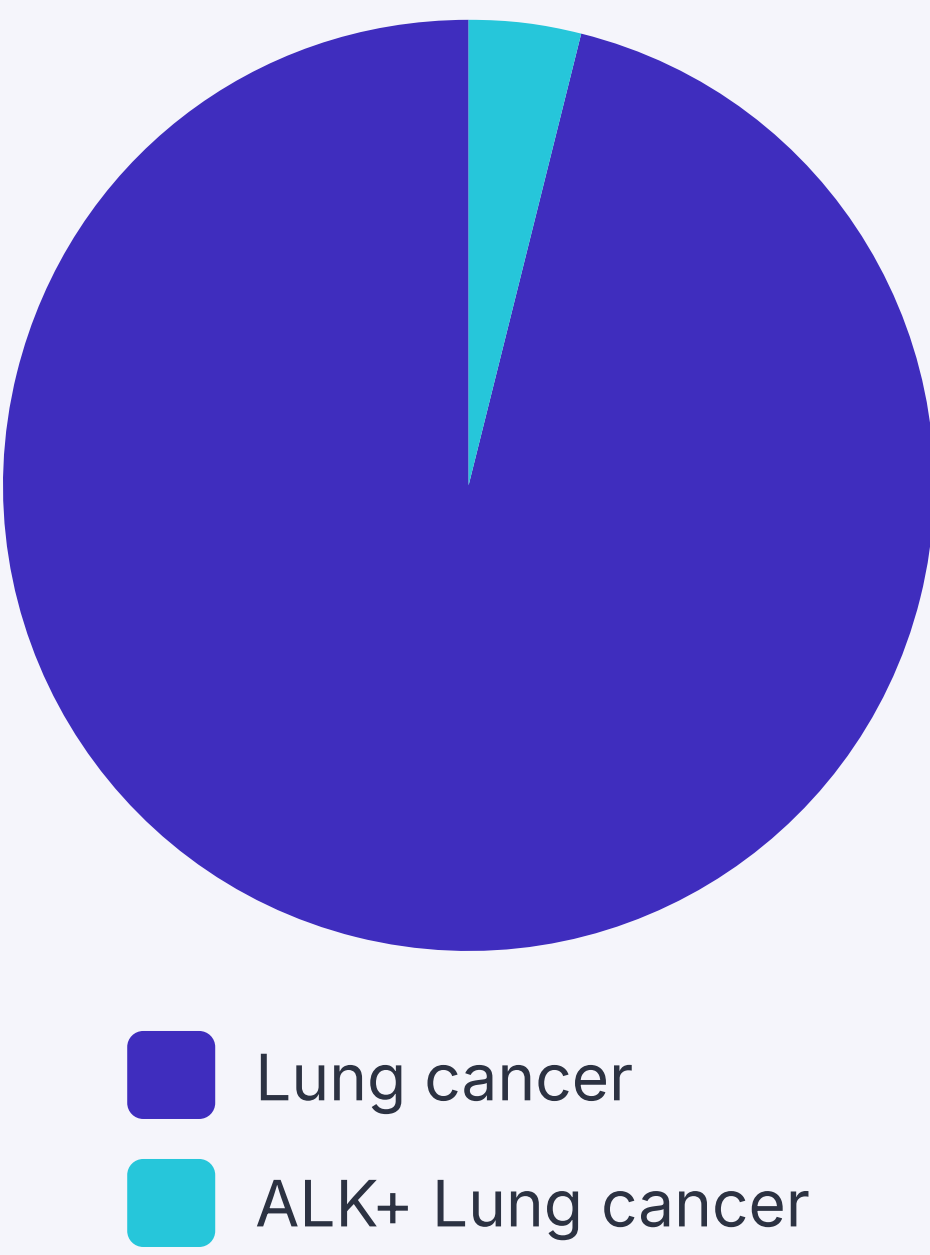


Understanding ALK+ Lung Cancer

Anaplastic lymphoma kinase (ALK)-positive non-small cell lung cancer (NSCLC) is a type of lung cancer that is caused by changes in the *ALK* gene. The *ALK* gene is naturally found in all of us. However, when the *ALK* gene joins with another gene in a process called a rearrangement, it produces an abnormal (mutant) protein.¹ As a result, this abnormal protein releases signals that turn healthy cells into cancerous cells.

People at Risk of ALK+ Lung Cancer



ALK+ lung cancer is not inherited; instead, it is an acquired mutation.¹ An acquired mutation is a mutation that can occur at any time after conception. For example, exposure to a carcinogen, such as UV radiation, can result in an acquired mutation.

Approximately 4% of people in Western countries have *ALK*+ lung cancer.¹ Younger individuals and those who are non-smokers or light smokers tend to have *ALK*+ lung cancer.¹

Treating ALK+ Lung Cancer

ALK+ lung cancer is currently treated mainly with targeted therapy. Targeted therapy finds and attacks specific signals that cancer cells depend on for growth and spread. The type of targeted therapy used to treat *ALK*+ lung cancer is known as tyrosine kinase inhibitors (TKIs) or *ALK* inhibitors.¹ These *ALK* inhibitors block the signaling pathway of the mutant protein. This slows cancer growth and helps keep it from spreading without harming healthy cells.

Deciding on the Type of ALK inhibitors

There are several types of *ALK* inhibitors; deciding on the right one for you depends on several factors, which should be discussed with your doctor:

Accessibility	Which ALK inhibitor is available to you?	Depending on your location (country, region)
Efficacy	How well will an ALK inhibitor work for you?	Everyone responds differently to a drug
Safety	How safe is this ALK inhibitor for you?	Depending on whether you have other health conditions

When it comes to treatment decisions, you can decide how involved you want to be. Let your doctor know. Treatment decisions should involve both you and your doctor. Let your doctor know of any preferences you may have when making treatment choices.

What to Expect When Starting Treatment

ALK inhibitors come in the form of oral tablets, which are taken once or twice daily. This means you can take them by mouth anywhere. Depending on the type of *ALK* inhibitor chosen, the number of pills taken may vary. Some *ALK* inhibitors should be taken with food, while others should be taken on an empty stomach. *ALK* inhibitors are generally taken long-term to keep the cancer under control.



You should take *ALK* inhibitors only if you have tested positive for an *ALK* gene abnormality using a biomarker test. Biomarker testing is a type of laboratory test that looks at your blood, tissue, or another body fluid to find certain genes or proteins that can signal a disease.



ALK inhibitors work better for some individuals than others because everyone is different. There is also the possibility that *ALK* inhibitors could stop working over time due to drug resistance. Drug resistance occurs when cancer cells adapt to the drug, making it less effective. In this case, your doctor may prescribe a different type of *ALK* inhibitor or switch to a different treatment.



Before starting treatment, your doctor will perform a baseline assessment of your health, including measuring your blood pressure and conducting blood tests. As you begin treatment, you will be monitored regularly for any changes in your health, especially the first few weeks of treatment. This helps your doctor assess how well you are responding to treatment and identify any potential side effects.

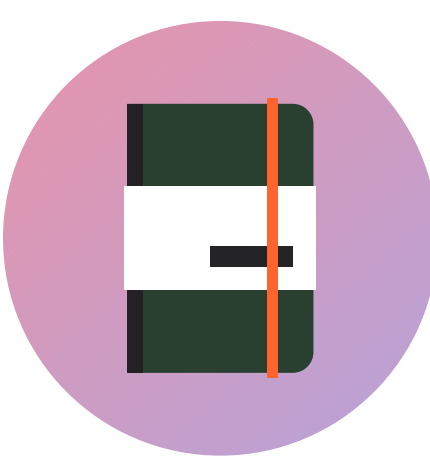
When Treatment Needs a Different Approach

Oligoprogression is a term used to describe the condition when a new tumour grows in one or more locations despite the cancer being under control with *ALK* inhibitors.² In this instance, your doctor may treat these new tumours with local therapy (radiation or surgery).

Brain metastases occur when the cancer has spread from the lungs to the brain. This is commonly seen in patients with lung cancer. Approximately 35% of patients with *ALK*+ lung cancer have brain metastases at the time of their diagnosis.³ For those without brain metastases during their lung cancer diagnosis, about 17% will eventually develop them.³ Some *ALK* inhibitors can reduce the risk of brain metastases or shrink brain tumors.

Engaging With Your Care Team

Here are some tips for making the most out of your medical appointments:



- Keep a journal for:
- ✓ Medical history or symptoms
 - ✓ Questions you may have for your doctor
 - ✓ Tracking treatment journey
 - ✓ Tracking side effects
 - ✓ Any other concerns



- Bring a friend or family for:
- ✓ Providing emotional support
 - ✓ Taking notes
 - ✓ Asking questions

References

1. Munnariz BEJ, Khan S, Li Y, et al. Update advances in anaplastic lymphoma kinase-positive non-small cell lung cancer treatment. *Cancer*. 2025;131(S1):e35786.

2. Pisano C, De Filippis M, Jacobs F, Novello S, Reale ML. Management of Oligoprogression in Patients with Metastatic NSCLC Harboring ALK Rearrangements. *Cancers (Basel)*. 2022;14(3):718.

3. Gillespie CS, Mustafa MA, Richardson GE, et al. Genomic alterations and the incidence of brain metastases in advanced and metastatic NSCLC: A systematic review and meta-analysis. *J Thorac Oncol*. 2023;18(12):1703-1713.