

ALK Fact Sheet

If a biomarker test shows you have ALK positive (ALK+) nonsmall cell lung cancer (NSCLC), what does that mean? This fact sheet explains the diagnosis and how it might affect your treatment.



WHAT IS ALK?

ALK stands for **anaplastic lymphoma kinase**. It's both a gene and a protein the gene produces. ALK plays an important role in the cell growth process — preventing unhealthy cells from growing. When it fuses to another gene, causing a mutation known as an ALK rearrangement, the gene can no longer prevent cell growth — and this can lead to cancer. The ALK rearrangement is found not only in lung cancers, but also in neuroblastoma and lymphoma. The causes are not yet known.



WHO HAS ALK+ LUNG CANCER?

Although long-term smoking is a common cause of lung cancer, the ALK rearrangement appears to be an exception. It's more often found in younger people, women and people who have never smoked. Roughly 5% of lung cancer patients are ALK+ — usually those with nonsmall cell adenocarcinoma.



HOW DO DOCTORS TREAT ALK+ LUNG CANCERS?

Chemotherapy is sometimes used to treat ALK+ NSCLC, but patients who test positive for ALK can be treated with a **tyrosine kinase inhibitor** — a drug specifically designed to block the ALK protein and stop cancer cells from reproducing, while having far fewer side effects than chemotherapy.

Below is a list of drugs approved by the U.S. Food and Drug Administration to target ALK+ advanced NSCLC. The five drugs listed below are given in pill form and taken once or twice a day. If the drug you were prescribed isn't working, your oncology team may try another. In addition, other targeted drugs may be available in clinical trials.

- Alectinib (Alecensa)
- Brigatinib (Alunbrig)
- Ceritinib (Zykadia)
- Crizotinib (Xalkori)
- Lorlatinib (Lorbrena)

Common side effects of these drugs include:

- Changes in vision (blurry vision)
- Constipation
- Diarrhea
- Fatigue
- Loss of appetite
- Nausea and vomiting
- Swelling

In rare cases, they may also cause heart, liver, kidney or lung problems.