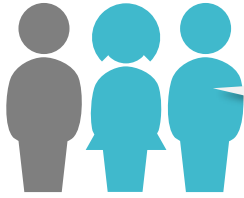




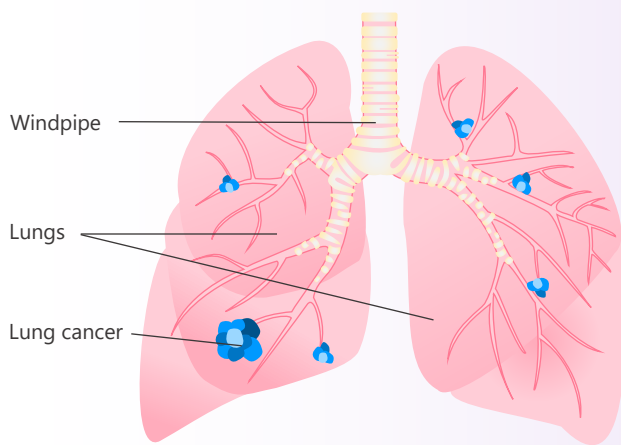
# TREATMENTS FOR ALK MUTATION-POSITIVE ADVANCED NON-SMALL-CELL LUNG CANCER



Around **1,600 people** are diagnosed with lung cancer **every year**, making it one of the **most common** cancers in Singapore. It is also one of the **leading causes** of cancer-related **deaths** locally.<sup>1</sup>

**Two in three** patients<sup>1</sup> have cancer that has spread outside of the lungs to other parts of the body, which is known as **advanced lung cancer**.

There are different types of lung cancer depending on which cells are affected. Non-small-cell lung cancer or **NSCLC** is the most common type.



Doctors may send samples of the cancer for **testing** to determine which treatment will work best.

Some patients with NSCLC have an abnormality (**mutation**) in the Anaplastic Lymphoma Kinase (**ALK**) gene which helps the cancer grow. This is called **ALK mutation-positive** NSCLC.

## How is NSCLC **treated**?

**Advanced NSCLC** options include:

Chemotherapy

Radiotherapy

**Targeted therapy**

Immunotherapy +/- chemotherapy

**Targeted therapy** are medicines that are **effective** against cancers with **specific** genetic mutations.

There are **5** targeted therapies approved for patients who have **advanced** NSCLC with an ALK mutation. These drugs are known as **ALK inhibitors**.

Alectinib

Brigatinib

Ceritinib

Crizotinib

Lorlatinib

Legend: Tablets Capsules

Published studies show that all 5 ALK inhibitors are **effective** treatments for ALK mutation-positive NSCLC. They have **different** side effects from each other.



- ▶ For patients with **newly diagnosed NSCLC**, **alectinib**, **brigatinib**, **ceritinib** and **lorlatinib** are likely to be **more effective** than crizotinib in **extending** the length of time they can live without their cancer getting worse.
- ▶ If the cancer continues to grow while a patient is taking an **ALK inhibitor**, **alectinib**, **brigatinib**, **ceritinib** and **lorlatinib** are **effective** treatment options.

ACE reviewed all available clinical evidence for each ALK inhibitor and negotiated prices with the companies.

Value for money (cost-effectiveness) of **alectinib**, **brigatinib**, **ceritinib** and **lorlatinib** was improved at the prices proposed by the companies.



**Cash or MediSave** needed **every month** after subsidy and MediShield Life for a **middle-income patient** receiving **outpatient** treatment at **public hospitals\***:

**Ceritinib**

**Around \$100**

Subsidised ✓

MediShield Life: \$1000 ✓

**Alectinib**

**Around \$200**

Subsidised ✓

MediShield Life: \$2000 ✓

**Brigatinib**

**Around \$200**

Subsidised ✓

MediShield Life: \$2000 ✓

**Lorlatinib**

**Around \$200**

Subsidised ✓

MediShield Life: \$2000 ✓

**Crizotinib**

**\$6,500 to \$7,000**

Subsidised ✗

MediShield Life ✗

**Alectinib**, **brigatinib**, **ceritinib** and **lorlatinib** were **recommended** for government funding<sup>2</sup> because they are **effective** and provide the best value for money for treating ALK mutation-positive advanced NSCLC.



Crizotinib was **not recommended** for funding because its benefits do not justify its cost at the price offered by the company.

Talk to your **doctor** to discuss which treatment is suitable for you. You can also speak to a **medical social worker** if you need further financial assistance, or you can reach out to **local patient support groups**<sup>3</sup> if you want to meet people with similar experiences.

\* Expenses will differ according to the amount of medicine that each patient needs and does not include other costs for doctor consultations, medical tests etc. MediSave withdrawal is capped at \$600 per month for these treatments. For Singaporeans who are eligible for subsidy, treatment costs will be subsidised by 40% to 75%. For subsidised drugs, expenses have been calculated using prices proposed by the companies including patient assistance programmes. For non-subsidised drugs, prices at public healthcare institutions at the time of subsidy review were used.

- Sources:
1. Health Promotion Board National Registry of Diseases Office. Singapore Cancer Registry Annual Report 2019. 28 Jan 2022.
  2. Ministry of Health, Singapore. Cancer Drug List.
  3. Lung Cancer Education and Advocacy for Patients (LEAP), Singapore Cancer Society.



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