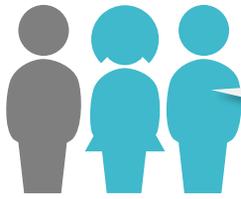




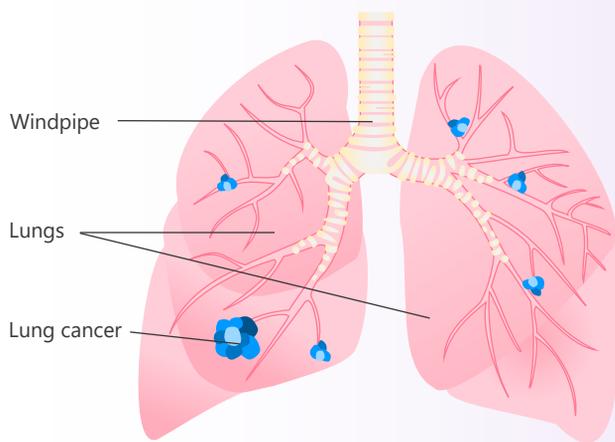
# TREATMENTS FOR ALK MUTATION-POSITIVE ADVANCED NON-SMALL-CELL LUNG CANCER



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** when the companies **reduced** the drug prices.



**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 for any of these treatments.

\* 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. <https://go.gov.sg/moh-cancer-drug-list>



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