

# BRAF Fact Sheet

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



## WHAT IS BRAF?

The BRAF gene produces the **B-Raf protein** that plays a role in cell growth and cell signaling, which is how cells communicate and keep your body working well. When the BRAF gene changes, or mutates, a malfunction in cell signaling can result in cancer. The ALK mutation is found not only in lung cancers, but in cancers of the thyroid, ovaries and colon, as well as in some melanomas. The cause is not yet known.



## WHO HAS BRAF+ LUNG CANCER?

A BRAF mutation is most commonly found in smokers. It occurs in about 2-4% of people with NSCLC most commonly in those with adenocarcinoma.



## HOW DO DOCTORS TREAT BRAF+ LUNG CANCERS?

Patients who test positive for a BRAF mutation can often be treated with a drug specifically designed to target that mutation, and this type of treatment usually has far fewer side effects than chemotherapy.

Chemotherapy and immunotherapy are often used to treat BRAF+ NSCLC. In addition, two targeted drugs have been approved for this mutation by the U.S. Food and Drug Administration: **dabrafenib (Tafinlar)** and **trametinib (Mekinist)**. These drugs, which come in pill form, are used together to prevent BRAF-driven cancer growth. Tafinlar is taken twice a day and Mekinist once a day. Other targeted drugs may be available in clinical

trials.

### Common side effects of these drugs include:

- Diarrhea
- Fatigue
- Fever
- Nausea and vomiting
- Sensitivity to the sun
- Swelling

In rare cases, these drugs may cause allergic reactions and increases in blood sugar, and lung, kidney, eye and liver problems.