Understanding *KRAS* G12C in Non-Small Cell Lung Cancer (NSCLC)

THE IMPACT OF LUNG CANCER

2nd most common cancer in the U.S.[1]

25%

Leading cause of **cancer death** for men and women, making up more than **25% of cancer deaths.**[1]

ABOUT LUNG CANCER

A disease in which **cancerous cells form in the tissues of the lung.**[2]

85%

NSCLC is the most common type of lung cancer, accounting for **~85%** of lung cancers.[1]

Despite recent significant advances in the treatment of advanced lung cancer, there remains a **high unmet need** for patients and **outcomes remain poor.**[4]

More than half of patients have advanced disease at diagnosis.[3]

Metastatic or advanced lung cancer is **lung cancer that has spread.**[3]

The **stage** of a patient's lung cancer at diagnosis is based upon how much cancer is present and the extent of its spread within the body, which **can impact the prognosis.**[4]

KRAS G12C – A NEWLY ACTIONABLE BIOMARKER

~50% of NSCLC patients have an oncogene that **initiates cancer** and **contributes to its growth.**[5]

KRAS is one of the most prevalent driver mutation in NSCLC,[6] and nearly **1/2 of all *KRAS* mutations in the US are *KRAS* G12C.**[7,8]

KRAS G12C occurs in **~13%, or 1 in 8,** of patients with NSCLC in the U.S.[9]

BIOMARKER TESTING IS CRITICAL AT DIAGNOSIS

Biomarker testing allows for the detection of driver mutations that initiate and support the growth of cancer.[10]

Comprehensive biomarker testing at diagnosis is critical because it can help doctors and patients develop **a targeted and personalized treatment plan** to help improve patient outcomes.[10,11]

Professional medical organizations **recommend comprehensive testing for actionable and emerging biomarkers at the time of diagnosis** for patients with advanced NSCLC.[12-14]

Treatment with targeted therapy is associated with **improved outcomes** for patients with a mutational driver identified by biomarker testing*[10]

NSCLC TREATMENT OPTIONS

Depending on stage at diagnosis and a patient's biomarker status, treatment options may include:[15]

- **chemotherapy**
- **immunotherapy**
- **radiation**
- **surgery**
- **targeted therapies**

To learn more visit Amgen.com/knowkras

1. ACS. About Lung Cancer – Key Statistics. Available at: https://www.cancer.org/cancer/lung-cancer/about/key-statistics.html. Accessed 4/25/2021. **2.** ACS. About Lung Cancer – What is Lung Cancer? Available at: https://www.cancer.org/cancer/lung-cancer/about/what-is.html. Accessed 4/25/2021. **3.** Siegel R, et al. Cancer Statistics, 2021. *CA Cancer J Clin.* 2021 Jan;71(1):7-33. doi: 10.3322/caac.21654. **4.** ACS. Early Detection, Diagnosis, and Staging – Lung Cancer Survival Rates. Available at: https://www.cancer.org/cancer/lung-cancer/detection-diagnosis-staging/survival-rates.html. Accessed 4/25/2021. **5.** Baumgart M. Am J Hematol Oncol. 2015;11:10-13. **6.** Pakkala S, et al. *JCI Insight.* 2018:e120858. **7.** Arbour KC, et al. *Clin Cancer Res.* 2018;24:334-340. **8.** Cox AD, et al. *Nat Rev Drug Discov.* 2014;13:828-851. **9.** Amgen Data on File: Analysis of AACR Genie v8, 7-A-Table. **10.** Kris MG, et al. *JAMA.* 2014;311:1998-2006. **11.** Barlesi F, et al. *Lancet.* 2016;387:1415-1426. **12.** Gregg JP, et al. *Transl Lung Cancer Res.* 2019;8:286-301. **13.** Pennell NA, et al. *Am Soc Clin Oncol Educ Book.* 2019;39:531-542. **14.** Gierman HJ, et al. *J Clin Oncol.* 2019;37(15_Suppl):Abstract 1585. **15.** ACS. Treating Non-Small Cell Lung Cancer. Available at: https://www.cancer.org/cancer/lung-cancer/treating-non-small-cell.html. Accessed 4/25/21.

*Median overall survival (mOS) of 3.5 months in patients receiving targeted therapy enabled by biomarker testing compared to 2.4 months mOS in patients with a driver mutation not receiving targeted therapy.[10]

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