BlueCross BlueShield Federal Employee Program

LUMAKRAS
(sotorasib)

RATIONALE FOR INCLUSION IN PA PROGRAM

Background

Lumakras (sotorasib) is an inhibitor of KRAS G12C, a tumor-restricted, mutant-oncogenic form of the RAS GTPase, KRAS. Lumakras forms an irreversible, covalent bond with the unique cysteine of KRAS G12C, locking the protein in an inactive state that prevents downstream signaling without affecting wild-type KRAS. Lumakras blocks KRAS signaling, inhibits cell growth, and promotes apoptosis only in *KRAS G12C* tumor cell lines (1).

Regulatory Status

FDA-approved indication: Lumakras is an inhibitor of the RAS GTPase family indicated for: (1)

- *KRAS* G12C-mutated Locally Advanced or Metastatic Non-Small Cell Lung Cancer (NSCLC)
    - As a single agent, for the treatment of adult patients with *KRAS* G12C-mutated locally advanced or metastatic NSCLC, as determined by an FDA-approved test, who have received at least one prior systemic therapy.
- KRAS G12C-mutated Metastatic Colorectal Cancer (mCRC)
    - In combination with panitumumab, for the treatment of adult patients with KRAS G12C-mutated mCRC as determined by an FDA-approved test, who have received prior fluoropyrimidine-, oxaliplatin- and irinotecan-based chemotherapy.

Lumakras has warnings regarding hepatotoxicity and interstitial lung disease (ILD)/pneumonitis. Liver function tests (ALT, AST, alkaline phosphatase, and total bilirubin) should be monitored prior to the start of Lumakras, every 3 weeks for the first 3 months of treatment, then once a month or as clinically indicated (1).

The safety and effectiveness of Lumakras in pediatric patients less than 18 years of age have not been established (1).

Summary

Lumakras (sotorasib) is an inhibitor of the RAS GTPase family indicated for the treatment of adult patients with *KRAS G12C*-mutated locally advanced or metastatic non-small cell lung cancer (NSCLC) and metastatic colorectal cancer (mCRC). Lumakras has warnings regarding

hepatotoxicity and interstitial lung disease (ILD)/pneumonitis. The safety and effectiveness of Lumakras in pediatric patients less than 18 years of age have not been established (1-2).

Prior authorization is required to ensure the safe, clinically appropriate, and cost-effective use of Lumakras while maintaining optimal therapeutic outcomes.

References

1. Lumakras [package insert]. Thousand Oaks, CA: Amgen Inc.; January 2025.
2. NCCN Drugs & Biologics Compendium® Sotorasib 2025. National Comprehensive Cancer Network, Inc. Accessed on January 17, 2025.