



AMGEN TO DISCUSS APPLICATION FOR LUMAKRAS® (SOTORASIB) FOR THE TREATMENT OF KRAS G12C-POSITIVE NSCLC AT FDA ADVISORY COMMITTEE MEETING

August 21, 2023

THOUSAND OAKS, Calif., Aug. 21, 2023 /PRNewswire/ -- Amgen (NASDAQ:AMGN) today announced the U.S. Food and Drug Administration (FDA) Oncologic Drugs Advisory Committee (ODAC) will review data supporting the supplemental New Drug Application (sNDA) for the full approval of LUMAKRAS® (sotorasib) for adults with previously treated locally advanced or metastatic *KRAS* G12C-mutated non-small cell lung cancer (NSCLC) at a meeting on Oct. 5, 2023.

LUMAKRAS/LUMYKRAS is approved in several markets outside the United States including Europe, South America, Asia and the European Union. To date, over 6,500 patients around the world have received LUMAKRAS/LUMYKRAS through the clinical development program and commercial use.

Lumakras has demonstrated a favorable benefit/risk profile in multiple studies in non-small lung cancer and other tumor types such as colo-rectal cancer. Amgen is progressing the largest and broadest global *KRAS*^{G12C} inhibitor development program exploring multiple combination regimens, with clinical trial sites spanning five continents.

"We believe in the clinical value of LUMAKRAS for prescribers and patients navigating *KRAS* G12C-mutated NSCLC and we look forward to discussing the comprehensive data package for LUMAKRAS with members of the Committee," said David M. Reese, M.D., executive vice president of Research and Development at Amgen.

LUMAKRAS received accelerated approval from the FDA on May 28, 2021. The sNDA for full approval of LUMAKRAS was accepted by the FDA for standard review and a Prescription Drug User Fee Act (PDUFA) target action date of Dec. 24, 2023, has been set.

About LUMAKRAS®/LUMYKRAS® (sotorasib)

Amgen took on one of the toughest challenges of the last 40 years in cancer research by developing LUMAKRAS/LUMYKRAS, a *KRAS*^{G12C} inhibitor.¹ LUMAKRAS/LUMYKRAS has demonstrated a positive benefit-risk profile with rapid, deep, and durable anticancer activity in patients with locally advanced or metastatic non-small cell lung cancer (NSCLC) harboring the *KRAS* G12C mutation with a once daily oral formulation.²

In May 2021, LUMAKRAS was the first *KRAS*^{G12C} inhibitor to receive regulatory approval with its approval in the U.S., under accelerated approval. LUMAKRAS/LUMYKRAS is also approved in the European Union, Japan, United Arab Emirates, South Korea, Hong Kong, Switzerland, Taiwan, Turkey, Thailand, Qatar, Australia, Argentina, Brazil, Canada, Great Britain, Kuwait, Macao, Singapore, Mexico, Israel, Bulgaria, Hungary, Romania, and Russia. Additionally, Amgen has submitted MAAs in Colombia, Malaysia and Saudi Arabia.

LUMAKRAS/LUMYKRAS is also being studied in multiple other solid tumors.

About Non-Small Cell Lung Cancer and the *KRAS* G12C Mutation

Lung cancer is the leading cause of cancer-related deaths worldwide, and it accounts for more deaths worldwide than colon cancer, breast cancer and prostate cancer combined.³ Overall survival rates for NSCLC are improving but remain poor for patients with advanced disease, and 5-year survival is only 9% for those with metastatic disease.⁴

KRAS G12C is the most common *KRAS* mutation in NSCLC.⁵ About 13% of patients with NSCLC harbor the *KRAS* G12C mutation.⁶ The unmet medical need remains high and treatment options are limited for NSCLC patients with the *KRAS* G12C mutation whose first-line treatment has failed to work or has stopped working. The outcomes with other approved therapies are suboptimal, with a median progression-free survival of approximately four months following second-line treatment of *KRAS* G12C-mutated NSCLC.⁷

About CodeBreak

The CodeBreak clinical development program for Amgen's drug sotorasib is designed to study patients with an advanced solid tumor with the *KRAS* G12C mutation and address the longstanding unmet medical need for these cancers.

CodeBreak 100, the Phase 1 and 2, first-in-human, open-label multicenter study, enrolled patients with *KRAS* G12C-mutant solid tumors.⁸ Eligible patients must have received a prior line of systemic anticancer therapy, consistent with their tumor type and stage of disease. The primary endpoint for the Phase 2 study was centrally assessed objective response rate. The Phase 2 trial in NSCLC enrolled 126 patients, 124 of whom had centrally evaluable lesions by RECIST at baseline.² The Phase 2 trial in metastatic colorectal cancer (mCRC) enrolled 62 patients and results have been published.⁹

CodeBreak 200, the global Phase 3 multicenter, randomized, open-label, active-controlled study compared the efficacy, safety, and tolerability of sotorasib to docetaxel in *KRAS* G12C-mutated NSCLC completed enrollment of 345 patients. Eligible patients had previously treated, locally advanced and unresectable or metastatic *KRAS* G12C-mutated NSCLC. The primary endpoint was progression-free survival and key secondary endpoints included overall survival, objective response rate, and patient-reported outcomes.¹⁰

CodeBreak 300, the global Phase 3 randomized active-controlled study comparing sotorasib in combination with panitumumab to investigator's choice (trifluridine and tipiracil, or regorafenib) in chemorefractory *KRAS* G12C-mutated mCRC, has completed enrollment of 160 patients. Eligible patients had *KRAS* G12C-mutated mCRC, received at least one prior line of therapy, and have received and progressed on or after fluoropyrimidine, irinotecan, and oxaliplatin. The primary endpoint is progression-free survival and key secondary endpoints include overall survival (OS) and objective response rate (ORR).¹¹

Amgen also has several Phase 1b studies investigating sotorasib in combination with several other treatments across various advanced solid tumors (CodeBreak 101) open for enrollment.¹² A Phase 3 randomized controlled study will evaluate frontline sotorasib in combination with platinum doublet chemotherapy versus pembrolizumab platinum doublet combination in patients with PD-L1-negative, advanced *KRAS* G12C-mutated NSCLC (CodeBreak 202).¹³

LUMAKRAS® (sotorasib) U.S. Indication

LUMAKRAS is indicated for the treatment of adult patients with *KRAS* G12C-mutated locally advanced or metastatic non-small cell lung cancer (NSCLC), as determined by an FDA-approved test, who have received at least one prior systemic therapy.

This indication is approved under accelerated approval based on overall response rate (ORR) and duration of response (DOR). Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial(s).

LUMAKRAS® (sotorasib) Important U.S. Safety Information

Hepatotoxicity

- LUMAKRAS can cause hepatotoxicity, which may lead to drug-induced liver injury and hepatitis.
- Among 357 patients who received LUMAKRAS in CodeBreak 100, hepatotoxicity occurred in 1.7% (all grades) and 1.4% (Grade 3). A total of 18% of patients who received LUMAKRAS had increased alanine aminotransferase (ALT)/increased aspartate aminotransferase (AST); 6% were Grade 3 and 0.6% were Grade 4. In addition to dose interruption or reduction, 5% of patients received corticosteroids for the treatment of hepatotoxicity.
- Monitor liver function tests (ALT, AST and total bilirubin) prior to the start of LUMAKRAS every 3 weeks for the first 3 months of treatment, then once a month or as clinically indicated, with more frequent testing in patients who develop transaminase and/or bilirubin elevations.
- Withhold, dose reduce or permanently discontinue LUMAKRAS based on severity of adverse reaction.

Interstitial Lung Disease (ILD)/Pneumonitis

- LUMAKRAS can cause ILD/pneumonitis that can be fatal. Among 357 patients who received LUMAKRAS in CodeBreak 100, ILD/pneumonitis occurred in 0.8% of patients, all cases were Grade 3 or 4 at onset, and 1 case was fatal. LUMAKRAS was discontinued due to ILD/pneumonitis in 0.6% of patients.
- Monitor patients for new or worsening pulmonary symptoms indicative of ILD/pneumonitis (e.g., dyspnea, cough, fever). Immediately withhold LUMAKRAS in patients with suspected ILD/pneumonitis and permanently discontinue LUMAKRAS if no other potential causes of ILD/pneumonitis are identified.

Most Common Adverse Reactions

- The most common adverse reactions occurring in $\geq 20\%$ were diarrhea, musculoskeletal pain, nausea, fatigue, hepatotoxicity and cough.

Drug Interactions

- Advise patients to inform their healthcare provider of all concomitant medications, including prescription medicines, over-the-counter drugs, vitamins, dietary and herbal products.
- Inform patients to avoid proton pump inhibitors and H₂ receptor antagonists while taking LUMAKRAS.
- If coadministration with an acid-reducing agent cannot be avoided, inform patients to take LUMAKRAS 4 hours before or 10 hours after a locally acting antacid.

Please see LUMAKRAS full [Prescribing Information](#).

About Amgen Oncology

At Amgen Oncology, our mission to serve patients drives all that we do. That's why we're relentlessly focused on accelerating the delivery of medicines that have the potential to empower all angles of care and transform lives of people with cancer.

For the last four decades, we have been dedicated to discovering the firsts that matter in oncology and to finding ways to reduce the burden of cancer. Building on our heritage, Amgen continues to advance the largest pipeline in the Company's history, moving with great speed to advance those innovations for the patients who need them.

For more information, follow us on www.twitter.com/amgenoncology.

About Amgen

Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies,

has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

Amgen is one of the 30 companies that comprise the Dow Jones Industrial Average and is also part of the Nasdaq-100 index. In 2022, Amgen was named one of the "World's Best Employers" by Forbes and one of "America's 100 Most Sustainable Companies" by Barron's.

For more information, visit [Amgen.com](https://www.amgen.com) and follow us on [Twitter](#), [LinkedIn](#), [Instagram](#), [TikTok](#) and [YouTube](#).

Amgen Forward-Looking Statements

This news release contains forward-looking statements that are based on the current expectations and beliefs of Amgen. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including any statements on the outcome, benefits and synergies of collaborations, or potential collaborations, with any other company (including BeiGene, Ltd., Kyowa-Kirin Co., Ltd., or any collaboration to manufacture therapeutic antibodies against COVID-19), the performance of Otezla® (apremilast) (including anticipated Otezla sales growth and the timing of non-GAAP EPS accretion), the Five Prime Therapeutics, Inc. acquisition, the Teneobio, Inc. acquisition, the ChemoCentryx, Inc. acquisition, or the proposed acquisition of Horizon Therapeutics plc (including the potential outcome of any litigation with the Federal Trade Commission, prospective performance and outlook of Horizon's business, performance and opportunities and any potential strategic benefits, synergies or opportunities expected as a result of such acquisition), as well as estimates of revenues, operating margins, capital expenditures, cash, other financial metrics, expected legal, arbitration, political, regulatory or clinical results or practices, customer and prescriber patterns or practices, reimbursement activities and outcomes, effects of pandemics or other widespread health problems such as the ongoing COVID-19 pandemic on our business, outcomes, progress, and other such estimates and results. Forward-looking statements involve significant risks and uncertainties, including those discussed below and more fully described in the Securities and Exchange Commission reports filed by Amgen, including our most recent annual report on Form 10-K and any subsequent periodic reports on Form 10-Q and current reports on Form 8-K. Unless otherwise noted, Amgen is providing this information as of the date of this news release and does not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

No forward-looking statement can be guaranteed and actual results may differ materially from those we project. Discovery or identification of new product candidates or development of new indications for existing products cannot be guaranteed and movement from concept to product is uncertain; consequently, there can be no guarantee that any particular product candidate or development of a new indication for an existing product will be successful and become a commercial product. Further, preclinical results do not guarantee safe and effective performance of product candidates in humans. The complexity of the human body cannot be perfectly, or sometimes, even adequately modeled by computer or cell culture systems or animal models. The length of time that it takes for us to complete clinical trials and obtain regulatory approval for product marketing has in the past varied and we expect similar variability in the future. Even when clinical trials are successful, regulatory authorities may question the sufficiency for approval of the trial endpoints we have selected. We develop product candidates internally and through licensing collaborations, partnerships and joint ventures. Product candidates that are derived from relationships may be subject to disputes between the parties or may prove to be not as effective or as safe as we may have believed at the time of entering into such relationship. Also, we or others could identify safety, side effects or manufacturing problems with our products, including our devices, after they are on the market.

Our results may be affected by our ability to successfully market both new and existing products domestically and internationally, clinical and regulatory developments involving current and future products, sales growth of recently launched products, competition from other products including biosimilars, difficulties or delays in manufacturing our products and global economic conditions. In addition, sales of our products are affected by pricing pressure, political and public scrutiny and reimbursement policies imposed by third-party payers, including governments, private insurance plans and managed care providers and may be affected by regulatory, clinical and guideline developments and domestic and international trends toward managed care and healthcare cost containment. Furthermore, our research, testing, pricing, marketing and other operations are subject to extensive regulation by domestic and foreign government regulatory authorities. Our business may be impacted by government investigations, litigation and product liability claims. In addition, our business may be impacted by the adoption of new tax legislation or exposure to additional tax liabilities. If we fail to meet the compliance obligations in the corporate integrity agreement between us and the U.S. government, we could become subject to significant sanctions. Further, while we routinely obtain patents for our products and technology, the protection offered by our patents and patent applications may be challenged, invalidated or circumvented by our competitors, or we may fail to prevail in present and future intellectual property litigation. We perform a substantial amount of our commercial manufacturing activities at a few key facilities, including in Puerto Rico, and also depend on third parties for a portion of our manufacturing activities, and limits on supply may constrain sales of certain of our current products and product candidate development. An outbreak of disease or similar public health threat, such as COVID-19, and the public and governmental effort to mitigate against the spread of such disease, could have a significant adverse effect on the supply of materials for our manufacturing activities, the distribution of our products, the commercialization of our product candidates, and our clinical trial operations, and any such events may have a material adverse effect on our product development, product sales, business and results of operations. We rely on collaborations with third parties for the development of some of our product candidates and for the commercialization and sales of some of our commercial products. In addition, we compete with other companies with respect to many of our marketed products as well as for the discovery and development of new products. Further, some raw materials, medical devices and component parts for our products are supplied by sole third-party suppliers. Certain of our distributors, customers and payers have substantial purchasing leverage in their dealings with us. The discovery of significant problems with a product similar to one of our products that implicate an entire class of products could have a material adverse effect on sales of the affected products and on our business and results of operations. Our efforts to collaborate with or acquire other companies, products or technology, and to integrate the operations of companies or to support the products or technology we have acquired, may not be successful. There can be no guarantee that we will be able to realize any of the strategic benefits, synergies or opportunities arising from the Horizon acquisition, and such benefits, synergies or opportunities may take longer to realize than expected. We may not obtain regulatory clearance to acquire Horizon or be able to successfully integrate Horizon, and such acquisition or integration may take longer, be more difficult or cost more than expected. A breakdown, cyberattack or information security breach of our information technology systems could compromise the confidentiality, integrity and availability of our systems and our data. Our stock price is volatile and may be affected by a number of events. Our business and operations may be negatively affected by the failure, or perceived failure, of achieving our environmental, social and governance objectives. The effects of global climate change and related natural disasters could negatively affect our business and operations. Global economic conditions may magnify certain risks that affect our business. Our business performance could affect or limit the ability of our Board of Directors to declare a dividend or our ability to pay a dividend or repurchase our common stock. We may not be able to access the capital and credit markets on terms that are favorable to us, or at all.

The scientific information discussed in this news release related to our product candidates is preliminary and investigative. Such product candidates are not approved by the U.S. Food and Drug Administration, and no conclusions can or should be drawn regarding the safety or effectiveness of the

product candidates. Further, any scientific information discussed in this news release relating to new indications for our products is preliminary and investigative and is not part of the labeling approved by the U.S. Food and Drug Administration for the products. The products are not approved for the investigational use(s) discussed in this news release, and no conclusions can or should be drawn regarding the safety or effectiveness of the products for these uses.

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