



LUMAKRAS® (SOTORASIB) SHOWS ENCOURAGING AND CLINICALLY MEANINGFUL ANTICANCER ACTIVITY IN PATIENTS WITH KRAS G12C-MUTATED ADVANCED PANCREATIC CANCER IN CODEBREAK 100 TRIAL

February 14, 2022

Centrally Confirmed Objective Response Rate of 21% and Disease Control Rate of 84% Largest Dataset and Only Global Clinical Trial to Date to Evaluate the Efficacy and Safety of a KRAS G12C Inhibitor in Advanced Pancreatic Cancer

THOUSAND OAKS, Calif., Feb. 14, 2022 /PRNewswire/ -- Amgen (NASDAQ: AMGN) today announced the presentation of efficacy and safety data from the CodeBreak 100 Phase 1/2 trial in patients with KRAS G12C-mutated advanced pancreatic cancer who received LUMAKRAS® (sotorasib)*. The data will be presented at the monthly American Society of Clinical Oncology (ASCO) Plenary Series on Feb. 15, 2022. Data show encouraging and clinically meaningful anticancer activity and a positive benefit:risk profile.

"Based on these exciting data, we are expanding CodeBreak 100 to enroll more patients with pancreatic and other tumor types to better understand the efficacy and safety of LUMAKRAS in tumors outside of non-small cell lung and colorectal cancers," said David M. Reese, M.D., executive vice president of Research and Development at Amgen. "CodeBreak is the largest and broadest global clinical trial program to date with one of the most robust, centrally reviewed datasets. As we learn more from the extensive data that we collect, we'll continue to invest in the program by expanding cohorts and exploring new combinations so that we can help as many patients as possible."

LUMAKRAS demonstrated a centrally confirmed objective response rate (ORR) of 21% and disease control rate (DCR) of 84% across 38 heavily pre-treated advanced pancreatic cancer patients. Nearly 80% of patients received LUMAKRAS as a third-line or later therapy. Eight of the 38 patients achieved a confirmed partial response (PR) performed by a blinded independent central review (BICR). Two of the eight patients with PR have ongoing responses. Median duration of response was 5.7 months with a median follow-up of 16.8 months as of the data cutoff date of Nov. 1, 2021. The results also show a median progression free survival (PFS) of 4 months and a median overall survival (OS) of almost 7 months. No new safety signals were identified with this study of patients with advanced pancreatic cancers. Treatment-related adverse events (TRAEs) of any grade occurred in 16 (42%) patients with diarrhea (5%) and fatigue (5%) as the most common grade 3 TRAEs. No TRAEs were fatal or resulted in treatment discontinuation.

"After decades of research, current treatments for patients with pancreatic cancer provide limited survival benefit, illustrating the critical need for novel, safe and effective treatment options," said John Strickler, M.D. associate professor of medicine, Duke University School of Medicine and gastrointestinal oncologist. "In the largest dataset evaluating the efficacy and safety of a KRAS^{G12C} inhibitor in heavily pretreated advanced pancreatic cancer, sotorasib achieved a centrally confirmed response rate of 21% and a disease control rate of 84%. This is clinically meaningful for patients because there is not an established standard therapy for these patients once they get to a third-line of treatment."

Cancer of the pancreas is a highly lethal malignancy. It is the fourth leading cause of cancer-related deaths in both men and women in the U.S. with a 5-year survival rate of approximately 10%.¹ There is a high unmet need for patients with advanced pancreatic cancer that has progressed after first-line treatment, where FDA-approved second-line therapy has provided survival of about six months and a response rate of 16%.² After progression on first- and second-line chemotherapy, there are no therapies with a demonstrated survival benefit.^{2,3} Despite advances in treatment, few improvements have been made to improve diagnosis and treatment of pancreatic cancer.

It is estimated that approximately 90% of patients with pancreatic cancer harbor a KRAS mutation with KRAS G12C accounting for approximately 1-2% of these mutations.⁴⁻⁵

ASCO Plenary Series Session

ASCO will host a livestream event on Tuesday, Feb. 15 at 3 p.m. ET featuring presentation of the abstract "*First data for sotorasib in patients with pancreatic cancer with KRAS p.G12C mutation: A phase I/II study evaluating efficacy and safety*" by Dr. John Strickler from Duke University. To participate in the free and open session, participants may register and login at <https://www.asco.org/meetings-education/monthly-plenary-series/program>.

*LUMAKRAS is marketed as LUMYKRAS® (sotorasib) in the European Union and the United Kingdom.

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.⁶ 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.⁷

Amgen is progressing the largest and broadest global KRAS^{G12C} inhibitor development program with unparalleled speed and exploring more than 10 sotorasib combination regimens, including triplets, with clinical trial sites spanning five continents. To date, over 4,000 patients around the world have received LUMAKRAS/LUMYKRAS through the clinical development program and commercial use.

In May 2021, LUMAKRAS was the first KRAS^{G12C} inhibitor to receive regulatory approval anywhere in the world with its approval in the U.S., under accelerated approval. LUMAKRAS/LUMYKRAS® is also approved in the United Arab Emirates, the European Union, Japan and Switzerland, and in Canada and Great Britain under the FDA's Project Orbis. Through Project Orbis, Amgen also has Marketing Authorization Applications (MAAs) for sotorasib in review in Australia, Brazil, Singapore and Israel. Additionally, Amgen has submitted MAAs in South Korea, Turkey, Taiwan, Colombia, Thailand, Mexico, Hong Kong, Saudi Arabia, Argentina, Kuwait and Qatar.

LUMAKRAS/LUMYKRAS is also being studied in multiple other solid tumors.⁸

About CodeBreak

The CodeBreak clinical development program for Amgen's drug sotorasib is designed to treat 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.^{7,8} 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.⁷ The Phase 2 trial in colorectal cancer (CRC) is fully enrolled and results have been published.⁹

CodeBreak 200, the global Phase 3 randomized active-controlled study comparing sotorasib to docetaxel in *KRAS* G12C-mutated NSCLC completed enrollment of 345 patients. Eligible patients had previously treated (previous treatment with both platinum doublet chemotherapy and a checkpoint inhibitor), locally-advanced and unresectable or metastatic *KRAS* G12C-mutated NSCLC. The primary endpoint is progression-free survival and key secondary endpoints include overall survival, objective response rate, and patient-reported outcomes.

Amgen also has several Phase 1b studies investigating sotorasib monotherapy and sotorasib combination therapy across various advanced solid tumors (CodeBreak 101) open for enrollment. A Phase 2 randomized study will evaluate sotorasib in patients with stage IV *KRAS* G12C-mutated NSCLC in need of first-line treatment (CodeBreak 201). For information, please visit www.hcp.codebreaktrials.com.

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 $\geq 20\%$ 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.

At Amgen, we're advancing oncology at the speed of life®.

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 2021, Amgen was named one of the 25 World's Best Workplaces™ by Fortune and Great Place to Work™ and one of the 100 most sustainable companies in the world by *Barron's*.

For more information, visit www.amgen.com and follow us on www.twitter.com/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., Genentech Biomedicines, Inc., Arrakis Therapeutics, Inc., Plexium, Inc., 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, or the Tenebio, Inc. 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. A breakdown, cyberattack or information security breach 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. 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.

CONTACT: Amgen, Thousand Oaks
Megan Fox, 805-447-1423 (media)
Michael Strapazon, 805-313-5553 (media)
Arvind Sood, 805-447-1060 (investors)

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