Amgen's Sotorasib Granted Breakthrough Therapy Designation For Advanced Or Metastatic Non-Small Cell Lung Cancer Patients With KRAS G12C Mutation

December 8, 2020

Sotorasib Also Accepted Into FDA's Real-Time Oncology Review Pilot Program
New Drug Application Submission to FDA Planned by End of the Year

THOUSAND OAKS, Calif., Dec. 8, 2020 /PRNewswire/ -- Amgen (NASDAQ: AMGN) today announced that the U.S. Food and Drug Administration (FDA) granted Breakthrough Therapy designation for its investigational $KRAS^{G12C}$ inhibitor, sotorasib, for the treatment of patients with locally advanced or metastatic non-small cell lung cancer (NSCLC) with *KRAS G12C* mutation, as determined by an FDA-approved test, following at least one prior systemic therapy.

"For more than 40 years, scientists have been trying to target KRAS. Today's news is a welcome update for the many non-small cell lung cancer patients with the *KRAS G12C* mutation, who currently have no targeted therapies," said Bonnie J. Addario, cofounder and board chair of the GO2 Foundation for Lung Cancer. "We are pleased that the FDA and Amgen recognize the unmet need for these patients and are working to make new treatment options available as quickly as possible."

KRAS G12C is the most common *KRAS* mutation in NSCLC.[1,2] In the U.S., about 13% of patients with NSCLC adenocarcinoma harbor the *KRAS G12C* mutation[3] and each year approximately 25,000 new patients in the U.S. are diagnosed with *KRAS G12C*-mutated NSCLC.[4] Unmet need remains high and options are limited for NSCLC patients with the *KRAS G12C* mutation that have failed first-line treatment. The outcomes with current therapies are suboptimal with response rates of approximately 9-18% and a median progression-free survival of approximately 4 months for second-line NSCLC.[5,6,7]

Amgen has taken on one of the toughest challenges of the last 40 years in cancer research[8] by developing sotorasib. Sotorasib was the first $KRAS^{G12C}$ inhibitor to enter the clinic and is being studied in the broadest clinical program exploring 10 combinations with global sites spanning across 4 continents. In just over two years, the sotorasib clinical program has also established the deepest clinical data set with more than 600 patients studied across 13 tumor types.

"Breakthrough Therapy designation and Real-Time Oncology Review bring Amgen closer to potentially providing a targeted therapy to patients with a *KRAS G12C* mutation and establishing sotorasib as the foundational therapy in *KRAS G12C*-driven cancers," said David M. Reese, M.D., executive vice president of Research and Development at Amgen. "We are pleased to receive these regulatory designations and plan to submit a new drug application by end of year as we rapidly work to get sotorasib to the patients who need it."

A Breakthrough Therapy designation is designed to expedite the development and regulatory review of medicines that may demonstrate substantial improvement on a clinically significant endpoint over available medicines.[9] The Real-Time Oncology Review (RTOR) pilot program aims to explore a more efficient review process that ensures safe and effective treatments are made available to patients as early as possible.[10]

The designation and RTOR are supported by positive Phase 2 results in patients with advanced NSCLC from the CodeBreaK 100 clinical study, whose cancer had progressed despite prior treatment with chemotherapy and/or immunotherapy. In the study, treatment with sotorasib provided durable anticancer activity with a positive benefit-risk profile.[11]

About CodeBreaK
The CodeBreaK clinical development program for Amgen's investigational 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. As the most advanced *KRAS G12C* clinical development program, CodeBreaK has enrolled more than 600 patients across 13 tumor types since its inception.

CodeBreaK 100, the Phase 1 and 2, first-in-human, open-label multicenter study, enrolled patients with *KRAS G12C*-mutant solid tumors. 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, 123 of whom had centrally evaluable lesions by RECIST at baseline. The Phase 2 trial in colorectal cancer (CRC) is fully enrolled and topline results are expected in 2021.

A global Phase 3 randomized active-controlled study comparing sotorasib to docetaxel in patients with *KRAS G12C*-mutated NSCLC (CodeBreaK 200) is currently recruiting. Amgen also has several Phase 1b combination studies across various advanced solid tumors (CodeBreaK 101) open for enrollment.

For information, please visit www.codebreaktrials.com.

About Amgen Oncology
Amgen Oncology is searching for and finding answers to incredibly complex questions that will advance care and improve lives for cancer patients and their families. Our research drives us to understand the disease in the context of the patient's life – not just their cancer journey – so they can take control of their lives.

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 are driven by our commitment to transform the lives of cancer patients and keep them at the center of everything we do.

To learn more about Amgen's innovative pipeline with diverse modalities and genetically validated targets, please visit AmgenOncology.com. 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.

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. or any collaboration or potential collaboration in pursuit of therapeutic antibodies against COVID-19 (including statements regarding such collaboration's, or our own, ability to discover and develop fully-human neutralizing antibodies targeting SARS-CoV-2 or antibodies against targets other than the SARS-CoV-2 receptor binding domain, and/or to produce any such antibodies to potentially prevent or treat COVID-19), or the Otezla® (apremilast) acquisition (including anticipated Otezla sales growth and the timing of non-GAAP EPS accretion), 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, or effects relating to studies of Otezla as a potential treatment for COVID-19, 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. 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
Trish Rowland, 805-447-5631 (Media)
Jessica Akopyan, 805-447-0974 (Media)
Arvind Sood, 805-447-1060 (Investors)

References

[1] Pakkala S, et al. *JCI Insight*. 2018;3:e120858.
[2] Arbour KC, et al. *Clin Cancer* Res. 2018;24:334-340.
[3] Amgen, Data on File. 2020.
[4] American Cancer Society, Cancer Facts and Figures. 2020. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2020/cancer-facts-and-figures-2020.pdf. Accessed November 23, 2020.
[5] Herbst RS, et al. *Lancet.* 2016;387-1540-1550.
[6] Aggarwal S, et al. Poster presentation at ESMO Virtual Congress 2020, Sep. 19-21, 2020. Poster 1339P.
[7] Hayashi H, et al. *Clin Lung Cancer.* 2013;14:261-266.
[8] Kim D, et al. *Cell*. 2020. doi:10.1016/j.cell.2020.09.044.
[9] U.S. Food and Drug Administration. Breakthrough Therapy. https://www.fda.gov/patients/fast-track-breakthrough-therapy-accelerated-approval-priority-review/breakthrough-therapy. Accessed November 10, 2020.
[10] U.S. Food and Drug Administration. Real Time Oncology Review https://www.fda.gov/about-fda/oncology-center-excellence/real-time-oncology-review-pilot-program . Accessed November 20, 2020.
[11] Hong DS, et al. *N Engl J Med.* 2020; 383:1207-1217.

View original content to download multimedia:http://www.prnewswire.com/news-releases/amgens-sotorasib-granted-breakthrough-therapy-designation-for-advanced-or-metastatic-non-small-cell-lung-cancer-patients-with-kras-g12c-mutation-301187803.html

SOURCE Amgen