NEW DATA SHOWCASES HOW AMGEN IS ADVANCING ALL ANGLES OF CANCER CARE THROUGH INNOVATIVE ONCOLOGY PORTFOLIO AND PIPELINE AT ASCO 2022

May 26, 2022

Results From the PARADIGM Phase 3 Head-to-Head Trial of Vectibix® (panitumumab) Versus Bevacizumab in Untreated RAS Wild-Type Metastatic Colorectal Cancer*

Largest Evaluation of Acquired Resistance to LUMAKRAS®/LUMYKRAS® (sotorasib) in *KRAS* G12C-mutated Cancers Inform Combination Treatment Approaches

THOUSAND OAKS, Calif., May 26, 2022 /PRNewswire/ -- Amgen (NASDAQ: AMGN) will present new data from across its broad oncology innovative medicines and biosimilars portfolio and robust pipeline at the American Society of Clinical Oncology (ASCO) Annual Meeting from June 3-7 in Chicago and virtually.

Oral presentations will showcase Amgen's medicines for both lung and colorectal cancers with a plenary session highlighting the results from the PARADIGM Phase 3 head-to-head trial conducted by Takeda Pharmaceutical Company in Japan comparing the efficacy of Vectibix® (panitumumab) versus Avastin® (bevacizumab), both used in combination with chemotherapy, in patients with previously untreated *RAS* wild-type metastatic colorectal cancer (mCRC)*. Data from a pooled analysis of CodeBreaK 100, representing the largest evaluation of mechanisms of acquired resistance in $KRAS^{G12C}$ inhibition, offer new insights to help inform combination treatment approaches with LUMAKRAS®/ LUMYKRAS®.

"Amgen continues to lead the science in $KRAS^{G12C}$ inhibition and is committed to advancing research into how LUMAKRAS can improve outcomes for more patients, including further defining resistance patterns to guide our robust combination treatment development program," said David M. Reese, M.D., executive vice president of Research and Development at Amgen. "In addition, the compelling head-to-head results further reinforcing the important role Vectibix plays in the treatment of colorectal cancer, illustrate how Amgen is expanding the impact of our first-in-class therapies in some of the most challenging-to-treat cancers."

In the CodeBreaK 100 analysis, investigators evaluated patterns of resistance to LUMAKRAS in patients with NSCLC (n=67) and CRC (n=45) at disease progression. At least one newly acquired genomic alteration at progression was detected in 19 (28%) NSCLC patients and in 33 (73%) CRC patients. The alterations were heterogeneous in both tumor types, with variants detected across multiple genes and pathways.

Other research highlights being presented on Amgen Oncology's growing precision medicine and T-cell engager pipeline include study updates on bemarituzumab, a potential first-in-class therapy for a subset of gastric and gastroesophageal cancers that overexpress fibroblast growth factor receptor 2 (FGFR2b), AMG 193, a small molecule methylthioadenosine (MTA) cooperative protein arginine methyltransferase 5 (PRMT5) inhibitor being investigated for the treatment of solid tumors, and tarlatamab, an investigational, first-in-class half-life extended (HLE) bispecific T-cell engager (BiTE®) molecule that is uniquely designed to target delta-like ligand 3 (DLL3) in neuroendocrine cancers.

Additional information on Amgen's abstracts is available on the ASCO website.

Abstracts and Presentation Times:

Amgen Sponsored Abstracts

LUMAKRAS®/LUMYKRAS® (sotorasib)

- **Largest evaluation of acquired resistance to sotorasib in *KRAS* p.G12C-mutated non-small cell lung cancer (NSCLC) and colorectal cancer (CRC): plasma biomarker analysis of CodeBreaK 100**

  Abstract #102, Oral Presentation Session: Clinical Science Symposium, ctDNA: Dawn of a New Era, Saturday, June 4 from 8:00-9:30 a.m. CDT

- **First data for sotorasib in patients with pancreatic cancer with *KRAS* p.G12C mutation: a phase 1/2 study evaluating efficacy and safety**
  Abstract #360490, Plenary Series: Rapid Abstract Updates, Sunday, June 5 from 4:30-6:00 p.m. CDT

- **Trial-in-progress: A phase 2 study of sotorasib as first-line treatment in patients with stage IV non-small cell lung cancer (NSCLC) whose tumors harbor a KRAS p.G12C mutation (CodeBreaK 201)**
  Abstract #TPS9150, Poster Presentation Session: Lung Cancer—Non-Small Cell Metastatic, Monday, June 6 from 8:00-11:00 a.m. CDT

IMLYGIC® (talimogene laherparepvec)

- **Primary analysis of a phase 2, open-label, multicenter trial of talimogene laherparepvec (T-VEC) plus pembrolizumab (pembro) for the treatment (Tx) of patients (pts) with advanced melanoma (MEL) who progressed on prior anti–PD-1 therapy: MASTERKEY-115**

Abstract #9518, Poster Discussion Session: Melanoma/Skin Cancers, Monday, June 6 from 4:30-6:00 p.m. CDT

Investigational BiTE® Platform

- **Trial-in-progress: Phase 2 study of tarlatamab, a DLL3-targeting half-life extended bispecific T-cell engager (HLE BiTE®) immuno-oncology therapy, in relapsed/refractory small cell lung cancer (SCLC)**

  Abstract #TPS8603, Poster Presentation Session: Lung Cancer-Non-small cell local-regional/small cell/other thoracic cancers, Monday, June 6 from 8:00-11:00 a.m. CDT

- **Trial-in-progress: A phase 1 study of AMG 509 in patients (pts) with metastatic castration-resistant prostate cancer (mCRPC)**
  Abstract #TPS5101, Poster Session: Genitourinary Cancer—Prostate, Testicular, and Penile, Monday, June 6 from 1:15-4:15 p.m. CDT

AMG 193

- **Trial-in-progress: Design and rationale of a phase 1 dose-escalation study of AMG 193, a methylthioadenosine (MTA)-cooperative PRMT5 inhibitor, in patients with advanced methylthioadenosine phosphorylase (MTAP)-null solid tumors**
  Abstract #TPS3167, Poster Presentation Session: Developmental Therapeutics—Molecularly Targeted Agents and Tumor Biology, Sunday, June 5 from 8:00-11:00 a.m. CDT

Bemarituzmab

- **Trial-in-progress: Phase 3 study of bemarituzumab + mFOLOFOX6 versus placebo + mFOLFOX6 in previously untreated advanced gastric or gastroesophageal junction (GEJ) cancer with FGFR2b overexpression (FORTITUDE-101)**
  Abstract #TPS4164, Poster Presentation: Gastrointestinal Cancer—Gastroesophageal, Pancreatic, and Hepatobiliary, Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Trial-in-progress: Phase 1b/3 study of bemarituzumab + mFOLFOX6 + nivolumab vs mFOLFOX6 + nivolumab in previously untreated advanced gastric and gastroesophageal junction (GEJ) cancer with FGFR2b overexpression (FORTITUDE-102)**
  Abstract #TPS4165, Poster Presentation: Gastrointestinal Cancer—Gastroesophageal, Pancreatic, and Hepatobiliary, Saturday, June 4 from 8:00-11:00 a.m. CDT

Partner-Led Abstracts

Vectibix® (panitumumab)

- **Plasma RAS dynamics and anti-EGFR rechallenge efficacy in patients with *RAS/BRAF* wild-type metastatic colorectal cancer: REMARRY and PURSUIT trials**
  Abstract #3518, Poster Discussion Session: Gastrointestinal Cancer—Colorectal and Anal, Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Resistance mechanisms to anti-EGFR therapy in *RAS/RAF* wildtype colorectal cancer varies by regimen and line of therapy**
  Abstract #3554, Poster Presentation: Gastrointestinal Cancer—Colorectal and Anal,Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Panitumumab (PAN) plus mFOLFOX6 versus bevacizumab (BEV) plus mFOLFOX6 as first-line treatment in patients with *RAS* wild-type metastatic colorectal cancer (mCRC): results from the phase 3 PARADIGM trial**
  Abstract #LBA1, Plenary Session: Primary Track: Special Sessions, Sunday, June 5 from 1:00-4:00 p.m. CDT

Prolia® (denosumab)

- **Long-term outcomes of adjuvant denosumab in breast cancer: Fracture reduction and survival results from 3,425 patients in the randomised, double-blind, placebo-controlled ABCSG-18 trial**
  Abstract #507, Oral Presentation: Breast Cancer—Local/Regional/Adjuvant, Tuesday, June 7 from 9:45 a.m.-12:45 p.m. CDT

Investigator Sponsored Studies (ISS)

IMLYGIC® (talimogene laherparepvec)

- **Trial-in-progress: Neo-adjuvant T-VEC plus nivolumab combination therapy for resectable early- stage or metastatic (IIIB-IVM1a) melanoma with injectable disease: The NIVEC trial**
  Abstract #TPS9607, Poster Session: Melanoma/Skin Cancers, Monday, June 6 from 1:15-4:15 p.m. CDT

KYPROLIS® (carfilzomib)

- **A phase II study of daratumumab with weekly carfilzomib, pomalidomide, and dexamethasone in relapsed and refractory multiple myeloma**
  Abstract #8012, Poster Discussion Session: Hematologic Malignancies – Plasma Cell Dyscrasia, Saturday, June 4 from 4:30-6:00 p.m. CDT

- **ATLAS: A phase 3 randomized trial of carfilzomib, lenalidomide, and dexamethasone versus lenalidomide alone after stem-cell transplant for multiple myeloma**
  Abstract #8001, Oral Abstract Session: Hematologic Malignancies—Plasma Cell Dyscrasia, Sunday, June 5 from 8:00-11:00 a.m. CDT

- **Daratumumab carfilzomib lenalidomide and dexamethasone as induction therapy in high-risk, transplant-eligible patients with newly diagnosed myeloma: Results of the phase 2 study IFM 2018-04**
  Abstract #8002, Oral Abstract Session: Hematologic Malignancies—Plasma Cell Dyscrasia, Sunday, June 5 from 8:00-11:00 a.m. CDT

LUMAKRAS®/LUMYKRAS® (sotorasib)

- **Trial-in-progress: A phase Ib/II study of sotorasib combined with chemotherapy for second-line treatment of *KRAS* p. G12C mutated advanced pancreatic cancer**
  Abstract #TPS4194, Poster Session: Gastrointestinal Cancer—Gastroesophageal, Pancreatic, and Hepatobiliary, Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Predictors of biomarker testing among patients (pts) with metastatic non-small cell lung cancer (mNSCLC)**
  Abstract #9130, Poster Session: Lung Cancer—Non-Small Cell Metastatic, Monday, June 6 from 8:00-11:00 a.m. CDT

Vectibix® (panitumumab)

- **Phase 2 study of anti-EGFR rechallenge therapy with panitumumab with or without trametinib in advanced colorectal cancer**
  Abstract #3520, Poster Discussion Session: Gastrointestinal Cancer—Colorectal and Anal, Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Negative hyperselection for mutations associated with anti-EGFR antibody resistance in *RAS* wildtype metastatic colorectal cancer (mCRC): Evaluation of the PANAMA trial (AIO-KRK-0212, maintenance therapy with 5-FU, folinic acid (FU/FA) with or without panitumumab)**
  Abstract #3536, Poster Session: Gastrointestinal Cancer—Colorectal and Anal, Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Consensus molecular subtypes (CMS) as prognostic & predictive biomarkers of panitumumab (Pmab), fluorouracil & folinic acid (FU/FA) or FU/FA maintenance therapy following Pmab-FOLFOX induction in *RAS* wildtype metastatic colorectal cancer (mCRC) - PANAMA trial (AIO-KRK-0212)**
  Abstract #3537, Poster Session: Gastrointestinal Cancer—Colorectal and Anal, Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Impact of age and gender on the efficacy & safety of panitumumab plus fluorouracil & folinic acid versus fluorouracil and folinic acid alone as maintenance therapy in *RAS* WT metastatic colorectal cancer (mCRC). Subgroup analysis of the PANAMA-study (AIO-KRK-0212)**
  Abstract #3567, Poster Session: Gastrointestinal Cancer—Colorectal and Anal, Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Predictive and prognostic value of carcinoembryonic antigen (CEA) on maintenance therapy with 5-fluoruracil/leucovorin plus panitumumab or 5-fluoruracil/leucovorin alone in *RAS* wildtype metastatic colorectal cancer: Evaluation of the phase II PanaMa trial (AIO KRK 0212)**
  Abstract # 3587, Poster Session: Gastrointestinal Cancer—Colorectal and Anal, Saturday, June 4 from 8:00-11:00 a.m. CDT

- **Modified FOLFOXIRI plus panitumumab (mFOLFOXIRI/PAN) versus mFOLFOX6/PAN as initial treatment of**

unresectable *RAS* and *BRAF* wild-type metastatic colorectal cancer (mCRC) patients: results of the phase III randomized TRIPLETE study by GONO
Abstract #LBA3505, Oral Presentation: Gastrointestinal Cancer—Colorectal and Anal, Saturday, June 4 from 9:45 a.m.–12:45 p.m. CDT

- **Randomized intermittent or continuous panitumumab plus FOLFIRI (FOLFIRI/PANI) for first-line treatment of patients (pts) with *RAS/BRAF* wild-type metastatic colorectal cancer (mCRC): the IMPROVE study**
Abstract #3503, Oral Abstract Session: Gastrointestinal Cancer—Colorectal and Anal, Monday, June 6 from 9:45 a.m.-12:45 p.m. CDT

XGEVA® (denosumab)

- **Trial-in-progress: A phase 3 study to determine the breast cancer risk reducing effect of denosumab in women carrying a germline *BRCA1* mutation (BRCA-P Study)**
Abstract #TPS10616, Poster Session: Prevention, Risk Reduction, and Hereditary Cancer, Monday, June 6 from 1:15-4:15 p.m. CDT

*Amgen out licenses Vectibix to Takeda in Japan.

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]

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 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 and Switzerland and in Australia, Brazil, 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 Israel and Singapore. Additionally, Amgen has submitted MAAs in Argentina, Colombia, Hong Kong, Kuwait, Malaysia, Mexico, Qatar, Saudi Arabia, Taiwan, Thailand and Turkey.

LUMAKRAS/LUMYKRAS is also being studied in multiple other solid tumors.[3]

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.[4] Overall survival rates for NSCLC are improving but remain poor for patients with advanced disease and 5-year survival is only 8% for those with metastatic disease.[5]

KRAS G12C is the most common *KRAS* mutation in NSCLC.[6] About 13% of patients with NSCLC harbor the *KRAS* G12C mutation.[7] 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.[8]

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.[9] 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 colorectal cancer (CRC) is fully enrolled and results have been published.[10]

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, 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.[11]

Amgen also has several Phase 1b studies investigating sotorasib monotherapy and sotorasib combination therapy across various advanced solid tumors (CodeBreaK 101) open for enrollment.[12] 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).[13]

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 ≥ 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 H_2 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 Vectibix® (panitumumab)
Vectibix is the first fully human monoclonal anti-EGFR antibody approved by the FDA for the treatment of mCRC. Vectibix was approved in the U.S. in September 2006 as a monotherapy for the treatment of patients with EGFR-expressing mCRC after disease progression after prior treatment with fluoropyrimidine-, oxaliplatin-, and irinotecan-containing chemotherapy.

In May 2014, the FDA approved Vectibix for use in combination with FOLFOX, as first-line treatment in patients with wild-type *KRAS* (exon 2) mCRC. With this approval, Vectibix became the first-and-only biologic therapy indicated for use with FOLFOX, one of the most commonly used chemotherapy regimens, in the first-line treatment of mCRC for patients with wild-type *KRAS* mCRC.

In June 2017, the FDA approved a refined indication for Vectibix for use in in patients with wild-type *RAS* (defined as wild-type in both *KRAS* and *NRAS* as determined by an FDA-approved test for this use*)* mCRC.

INDICATION AND LIMITATION OF USE

Vectibix® is indicated for the treatment of patients with wild-type *RAS* (defined as wild-type in both *KRAS* and *NRAS* as determined by an FDA-approved test for this use) metastatic colorectal cancer (mCRC): as first-line therapy in combination with FOLFOX, and as monotherapy following disease progression after prior treatment with fluoropyrimidine-, oxaliplatin-, and irinotecan-containing chemotherapy.

Limitation of Use: Vectibix® is not indicated for the treatment of patients with *RAS* mutant mCRC or for whom *RAS* mutation status is unknown.

IMPORTANT SAFETY INFORMATION

BOXED WARNING: DERMATOLOGIC TOXICITY

Dermatologic Toxicity: Dermatologic toxicities occurred in 90% of patients and were severe (NCI-CTC grade 3 and higher) in 15% of patients receiving Vectibix monotherapy *[see Dosage and Administration (2.3), Warnings and Precautions (5.1), and Adverse Reactions (6.1)].*

- In Study 20020408, dermatologic toxicities occurred in 90% of patients and were severe (NCI-CTC grade 3 and higher) in

15% of patients with mCRC receiving Vectibix®. The clinical manifestations included, but were not limited to, acneiform dermatitis, pruritus, erythema, rash, skin exfoliation, paronychia, dry skin, and skin fissures.

- Monitor patients who develop dermatologic or soft tissue toxicities while receiving Vectibix® for the development of inflammatory or infectious sequelae. Life-threatening and fatal infectious complications including necrotizing fasciitis, abscesses, and sepsis have been observed in patients treated with Vectibix®. Life-threatening and fatal bullous mucocutaneous disease with blisters, erosions, and skin sloughing has also been observed in patients treated with Vectibix®. It could not be determined whether these mucocutaneous adverse reactions were directly related to EGFR inhibition or to idiosyncratic immune- related effects (e.g., Stevens Johnson syndrome or toxic epidermal necrolysis). Withhold or discontinue Vectibix® for dermatologic or soft tissue toxicity associated with severe or life-threatening inflammatory or infectious complications. Dose modifications for Vectibix® concerning dermatologic toxicity are provided in the product labeling.
- Vectibix® is not indicated for the treatment of patients with colorectal cancer that harbor somatic *RAS* mutations in exon 2 (codons 12 and 13), exon 3 (codons 59 and 61), and exon 4 (codons 117 and 146) of either *KRAS* or *NRAS* and hereafter is referred to as "*RAS*."
- Retrospective subset analyses across several randomized clinical trials were conducted to investigate the role of *RAS* mutations on the clinical effects of anti-EGFR-directed monoclonal antibodies (panitumumab or cetuximab). Anti-EGFR antibodies in patients with tumors containing *RAS* mutations resulted in exposing those patients to anti-EGFR related adverse reactions without clinical benefit from these agents. Additionally, in Study 20050203, 272 patients with *RAS*-mutant mCRC tumors received Vectibix® in combination with FOLFOX and 276 patients received FOLFOX alone. In an exploratory subgroup analysis, OS was shorter (HR = 1.21, 95% CI: 1.01-1.45) in patients with *RAS*-mutant mCRC who received Vectibix® and FOLFOX versus FOLFOX alone.
- Progressively decreasing serum magnesium levels leading to severe (grade 3-4) hypomagnesemia occurred in up to 7% (in Study 20080763) of patients across clinical trials. Monitor patients for hypomagnesemia and hypocalcemia prior to initiating Vectibix® treatment, periodically during Vectibix® treatment, and for up to 8 weeks after the completion of treatment. Other electrolyte disturbances, including hypokalemia, have also been observed. Replete magnesium and other electrolytes as appropriate.
- In Study 20020408, 4% of patients experienced infusion reactions and 1% of patients experienced severe infusion reactions (NCI-CTC grade 3-4). Infusion reactions, manifesting as fever, chills, dyspnea, bronchospasm, and hypotension, can occur following Vectibix® administration. Fatal infusion reactions occurred in postmarketing experience. Terminate the infusion for severe infusion reactions.
- Severe diarrhea and dehydration, leading to acute renal failure and other complications, have been observed in patients treated with Vectibix® in combination with chemotherapy.
- Fatal and nonfatal cases of interstitial lung disease (ILD) (1%) and pulmonary fibrosis have been observed in patients treated with Vectibix®. Pulmonary fibrosis occurred in less than 1% (2/1467) of patients enrolled in clinical studies of Vectibix®. In the event of acute onset or worsening of pulmonary symptoms interrupt Vectibix® therapy. Discontinue Vectibix® therapy if ILD is confirmed.
- In patients with a history of interstitial pneumonitis or pulmonary fibrosis, or evidence of interstitial pneumonitis or pulmonary fibrosis, the benefits of therapy with Vectibix® versus the risk of pulmonary complications must be carefully considered.
- Exposure to sunlight can exacerbate dermatologic toxicity. Advise patients to wear sunscreen and hats and limit sun exposure while receiving Vectibix®.
- Keratitis and ulcerative keratitis, known risk factors for corneal perforation, have been reported with Vectibix® use. Monitor for evidence of keratitis or ulcerative keratitis. Interrupt or discontinue Vectibix® for acute or worsening keratitis.
- In an interim analysis of an open-label, multicenter, randomized clinical trial in the first-line setting in patients with mCRC, the addition of Vectibix® to the combination of bevacizumab and chemotherapy resulted in decreased OS and increased incidence of NCI-CTC grade 3-5 (87% vs 72%) adverse reactions. NCI-CTC grade 3-4 adverse reactions occurring at a higher rate in Vectibix®-treated patients included rash/acneiform dermatitis (26% vs 1%), diarrhea (23% vs 12%), dehydration (16% vs 5%), primarily occurring in patients with diarrhea, hypokalemia (10% vs 4%), stomatitis/mucositis (4% vs < 1%), and hypomagnesemia (4% vs 0).
- NCI-CTC grade 3-5 pulmonary embolism occurred at a higher rate in Vectibix®-treated patients (7% vs 3%) and included fatal events in three (< 1%) Vectibix®-treated patients. As a result of the toxicities experienced, patients randomized to Vectibix®, bevacizumab, and chemotherapy received a lower mean relative dose intensity of each chemotherapeutic agent (oxaliplatin, irinotecan, bolus 5-FU, and/or infusional 5-FU) over the first 24 weeks on study compared with those randomized to bevacizumab and chemotherapy.
- Vectibix® can cause fetal harm when administered to a pregnant woman. Advise pregnant women and females of reproductive potential of the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during treatment, and for at least 2 months after the last dose of Vectibix®.

- In monotherapy, the most commonly reported adverse reactions (≥ 20%) in patients with Vectibix® were skin rash with variable presentations, paronychia, fatigue, nausea, and diarrhea.
- The most commonly reported adverse reactions (≥ 20%) with Vectibix® + FOLFOX were diarrhea, stomatitis, mucosal inflammation, asthenia, paronychia, anorexia, hypomagnesemia, hypokalemia, rash, acneiform dermatitis, pruritus, and dry skin. The most common serious adverse reactions (≥ 2% difference between treatment arms) were diarrhea and dehydration.

To see the Vectibix® Prescribing Information, including Boxed Warning visit www.vectibix.com.

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., 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 Teneobio, 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, 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 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.

CONTACT: Amgen, Thousand Oaks
Megan Fox, 805-447-1423 (media)
Jessica Akopyan, 805-440-5721 (media)
Arvind Sood, 805-447-1060 (investors)

LUMAKRAS, LUMYKRAS, Otezla, and Advancing Oncology at The Speed of Life are trademarks of Amgen Inc.

[1] Canon J, et al. *Nature*. 2019;575: 217–223.
[2] Skoulidis F, et al. *N Engl J Med*. 2021;384:2371-2381.
[3] Hong DS, et al. *N Engl J Med*. 2020;383:1207-1217.
[4] Sung H, et al. *CA Cancer J Clin*. 2021; 71:209-249.
[5] American Cancer Society. Lung Cancer Survival Rates. 2021. Available at: https://www.cancer.org/cancer/lung-cancer/detection-diagnosis-staging/survival-rates.html. Accessed on April 14, 2022.
[6] Arbour KC, et al. *Clin Cancer Res*. 2018; 24:334-340.
[7] Nassar AF, et al. *N Engl J. Med*. 2021;384:185-187.
[8] Spira AI, et al. *Lung Cancer*. 2021;159 :1-9.
[9] ClinicalTrials.gov. CodeBreaK 100. Available at: https://clinicaltrials.gov/ct2/show/NCT03600883. Accessed on April 14, 2022.
[10] Fakih MG, et al. *Lancet Oncol.* 2022;23:115-124.
[11] ClinicalTrials.gov. CodebreaK 200. Available at: https://clinicaltrials.gov/ct2/show/NCT04303780. Accessed on April 14, 2022.
[12] ClinicalTrials.gov. CodeBreaK 101. Available at: https://clinicaltrials.gov/ct2/show/NCT04185883 . Accessed on April 14, 2022.
[13] ClinicalTrials.gov. CodeBreaK 201. Available at: https://clinicaltrials.gov/ct2/show/NCT04933695. Accessed on April 14, 2022.

View original content to download multimedia:https://www.prnewswire.com/news-releases/new-data-showcases-how-amgen-is-advancing-

all-angles-of-cancer-care-through-innovative-oncology-portfolio-and-pipeline-at-asco-2022-301556292.html

SOURCE Amgen