AMGEN PRESENTS NEW CARDIOVASCULAR RESEARCH AT AHA 2023

November 10, 2023

New Repatha® (evolocumab) Data Show No Decline in Cognitive Function Associated With Very Low Levels of LDL-C

Olpasiran Research Provides Further Insights Into Cardiovascular Risks Associated With Elevated Lp(a)

Amgen Provides Updates on Efforts to Advance Bold Ambition of Halving the Number of Heart Attacks and Strokes by 2030

THOUSAND OAKS, Calif., Nov. 10, 2023 /PRNewswire/ -- Amgen (NASDAQ:AMGN) today announced new data reinforcing the safety and efficacy of Repatha® (evolocumab) from the FOURIER Open Label Extension (OLE) [FOURIER-OLE] trial at the American Heart Association (AHA) Scientific Sessions 2023 in Philadelphia. These presentations will focus on the reduction of a known cardiovascular disease (CVD) risk factor, LDL "bad" cholesterol (LDL-C). Amgen will also present new research from the Phase 2 OCEAN(a)-DOSE study of its investigational small interfering RNA (siRNA) olpasiran that will focus on a primarily genetically determined and presumed independent CVD risk factor, lipoprotein(a) [Lp(a)].[1,2,3,4,5]

Repatha Data Reinforces Benefits of Low LDL-C

Data from the EBBINGHAUS sub-study of the FOURIER-OLE is the first to evaluate the impact of long-term lowering of LDL-C on cognitive function following administration of Repatha in adult patients with atherosclerotic cardiovascular disease (ASCVD). The data showed patients treated with Repatha did not experience any apparent cognitive decline following a median achieved LDL-C of 34 mg/dL through a median follow-up period of 5.1 years.

"Cardiovascular disease is a leading public health crisis in the United States. Amgen remains steadfast in our commitment to reduce the risk of heart attack and stroke, starting with lowering levels of LDL-C, one of the most modifiable risk factors," said Paul Burton, senior vice president and chief medical officer at Amgen. "Repatha continues to be an effective option in helping people with cardiovascular disease manage their LDL-C, and this FOURIER-OLE data further demonstrates that long-term lowering of LDL-C levels come with no decline in cognitive function."

An additional analysis combining FOURIER and FOURIER-OLE data for 152 OLE participants originally randomized to receive Repatha showed that long-term treatment with this medication had no significant impact on measures of executive function, working and episodic memory, and psychomotor speed over time as compared to baseline. No new safety signals were identified in the analyses.

"The neurocognitive data highlighting long-term use of evolocumab is highly encouraging for the cardiovascular community," said Robert Giugliano, M.D., S.M., Senior Investigator, TIMI Study Group, Staff Physician, Cardiovascular Medicine, Brigham and Women's Hospital, Professor of Medicine, Harvard Medical School, and FOURIER-OLE investigator. "In addition to reiterating the neurocognitive safety of evolocumab, this study provides reassuring information for patients and clinicians that sustained very low levels of LDL-C over the long-term does not increase cognitive impairment."

Olpasiran Research on Risks Associated with Elevated Lp(a)

Amgen also shared new research from the OCEAN(a)-DOSE study on Lp(a) involving its investigational olpasiran. Evidence suggests that elevated Lp(a) contributes to cardiovascular events, including heart attack, stroke and peripheral arterial disease.[3,4] Data will be presented on the intraindividual variability in serial Lp(a) concentration among placebo-treated patients in the OCEAN(a)-DOSE trial. Additional research presented at AHA will include Mass General Brigham Lp(a) registry data on whether the association between Lp(a) and major adverse cardiovascular events (MACE) differs based on baseline ASCVD status. This research investigates the threshold for defining Lp(a) in patients both with and without ASCVD.

LDL-C Action Summit & LDL Awareness to Action Implementation Consortium

Amgen will reconvene the LDL-C Action Summit and the newly formed LDL Awareness to Action Implementation Consortium ahead of AHA. The LDL-C Action Summit brings together key CVD community stakeholders to discuss strategies and opportunities for collaboratively improving lipid management, while the Consortium convenes leading cardiovascular healthcare systems and research institutions to focus on improving LDL-C testing and accelerating the implementation of evidence-based approaches into clinical practice. Both initiatives are part of Amgen's commitment to advancing its bold ambition of halving the number of heart attacks and strokes by 2030.

For more information on the Amgen abstracts, see below.

Abstracts and Presentation Times:

Amgen Sponsored Abstracts

Repatha® (evolocumab)

- **Long-Term Efficacy of Evolocumab in Patients With and Without Multivessel Coronary Artery Disease (FOURIER OLE)**
  Abstract #Sa3071, Poster Session, Zone 3, Science and Technology Hall, Level 2, Saturday, Nov. 11 from 3-4:15 p.m. EST
- **Association Between Achieved LDL-C Levels and Long-Term Cardiovascular and Safety Outcomes: An Analysis of FOURIER-OLE**
  Invited Encore Oral Presentation, Room 121B, Sunday, Nov. 12 from 3:30-3:35 p.m. EST (previously published in *Circulation*, Feb. 2023)
- **Low Rates of Achievement of LDL-C<55dL Among Patients with ASCVD in the United States: Findings from the**

cvMOBIUS Registry
Abstract #Su3278, Poster Session, Zone 3, Science and Technology Hall, Level 2, Hall A-D, Sunday, Nov. 12 from 3-4:15 p.m. EST

- **Racial/Ethnic Disparities in Low-Density Lipoprotein Cholesterol Testing Following Myocardial Infarction Hospitalization Among Medicare Beneficiaries in the United States, by State**
  Abstract #Su3242, Poster Session, Zone 3, Science and Technology Hall, Level 2, Sunday, Nov. 12 from 11:30 a.m.-12:45 p.m. EST
- **Long-Term Neurocognitive Safety of LDL-C Lowering With Evolocumab: Open-Label Extension Data From FOURIER**
  Abstract #304, Oral Presentation, Room 204C, Monday, Nov. 13 from 10:30-10:40 a.m. EST
- **Persistence and Adherence to Proprotein Convertase Subtilisin/kexin type 9 Monoclonal Antibodies and Ezetimibe in Real-World Settings**
  Abstract #Mo3065, Poster Session, Zone 3, Science and Technology Hall, Level 2, Monday, Nov. 13 from 10:30-11:45 a.m. EST
- **104-Week Safety and Effectiveness of Low-Density Lipoprotein Cholesterol-Lowering Therapy with Evolocumab in Patients with Familial Hypercholesterolemia/ Hypercholesterolemia in Japan: Results of Post-Marketing Surveillance**
  Abstract #Mo3012, Poster Session, Zone 3, Science and Technology Hall, Level 2, Monday, Nov. 13 from 10:30-11:45 a.m. EST

Olpasiran

- **Intraindividual Variability in Serial Lipoprotein(a) Concentration Among Placebo-Treated Patients in the OCEAN(a)-DOSE Trial**
  Abstract #Sa1005, Poster Session, Zone 1, Science and Technology Hall, Level 2, Saturday, Nov. 11 from 11:30 a.m.-12:45 p.m. EST
- **The Association of Lipoprotein(a) with Major Adverse Cardiovascular Events Among Individuals With and Without Baseline Atherosclerotic Cardiovascular Disease: The Mass General Brigham Lp(a) Registry**
  Abstract #MDP278, Moderated Digital Poster 4, Science and Technology Hall, Level 2, Monday, Nov. 13 from 12:10-12:15 p.m. EST

Investigator-Sponsored Studies (ISS)

- **Stem Cell Factor Associated with Critical Limb Ischemia in Patients with Peripheral Artery Disease**
  Abstract #Su3229, Poster Session, Zone 3, Science and Technology Hall, Level 2, Sunday, Nov. 12 from 3:30-4:45 p.m. EST
- **CAD Polygenic Risk Score and Incident Complex Coronary Revascularization in Adults with Atherosclerosis**
  Abstract #565, Poster Session, Zone 2, Science and Technology Hall, Level 2, Monday, Nov. 13, 2023 from 9:50-9:55 a.m. EST

Amgen's Cardiovascular Ambition
Cardiovascular disease is a leading public health crisis in the United States, with a heart attack or stroke occurring every 40 seconds. High levels of LDL ("bad") cholesterol are a main culprit for cardiovascular events. Amgen is committed to advancing a bold ambition: to halve the number of heart attacks and strokes by 2030. To change the cardiovascular disease treatment landscape, Amgen is working together alongside community stakeholders, healthcare systems and research institutions to drive urgency and action around the importance of LDL-C testing.

For more information about LDL and to learn how to get a free LDL-C test*, visit WhatIsMyLDL.com.

*Terms and conditions apply. Programs subject to change; quantities may be limited.

About Repatha® (evolocumab)
Repatha is a human monoclonal antibody that inhibits proprotein convertase subtilisin/kexin type 9 (PCSK9). Repatha binds to PCSK9 and inhibits circulating PCSK9 from binding to the low-density lipoprotein (LDL) receptor (LDLR), preventing PCSK9-mediated LDLR degradation and permitting LDLR to recycle back to the liver cell surface. By inhibiting the binding of PCSK9 to LDLR, Repatha increases the number of LDLRs available to clear LDL from the blood, thereby lowering LDL-C levels. Repatha has been studied for 12 years in 50 clinical trials with over 51,000 patients.

Repatha is approved in more than 75 countries, including the U.S., Japan, Canada and in all 28 countries that are members of the European Union. Applications in other countries are pending.

About Olpasiran
Olpasiran (formerly known as AMG 890) is a small interfering RNA (siRNA) that targets lipoprotein(a), also known as Lp(a). We look forward to studying this treatment further in the Phase 3 clinical trial OCEAN(a)-Outcomes, which is currently recruiting.

Repatha® (evolocumab) Important U.S. Product Information

INDICATIONS

Repatha® is indicated:

- In adults with established cardiovascular disease to reduce the risk of myocardial infarction, stroke, and coronary revascularization
- As an adjunct to diet, alone or in combination with other low-density lipoprotein cholesterol (LDL-C)–lowering therapies, in adults with primary hyperlipidemia, including heterozygous familial hypercholesterolemia (HeFH), to reduce LDL–C
- As an adjunct to diet and other LDL-C-lowering therapies in pediatric patients aged 10 years and older with HeFH, to reduce LDL-C
- As an adjunct to other LDL–C-lowering therapies in adults and pediatric patients aged 10 years and older with homozygous familial hypercholesterolemia (HoFH), to reduce LDL–C

The safety and effectiveness of Repatha® have not been established in pediatric patients with HeFH or HoFH who are younger than 10 years old or in pediatric patients with other types of hyperlipidemia.

IMPORTANT SAFETY INFORMATION

- **Contraindication:** Repatha® is contraindicated in patients with a history of a serious hypersensitivity reaction to evolocumab or any of the excipients in Repatha®. Serious hypersensitivity reactions including angioedema have occurred in patients treated with Repatha®.
- **Hypersensitivity Reactions:** Hypersensitivity reactions, including angioedema, have been reported in patients treated with Repatha®. If signs or symptoms of serious hypersensitivity reactions occur, discontinue treatment with Repatha®, treat according to the standard of care, and monitor until signs and symptoms resolve.
- **Adverse Reactions in Adults with Primary Hyperlipidemia:** The most common adverse reactions (>5% of patients treated with Repatha® and more frequently than placebo) were: nasopharyngitis, upper respiratory tract infection, influenza, back pain, and injection site reactions.

  From a pool of the 52-week trial and seven 12-week trials: Local injection site reactions occurred in 3.2% and 3.0% of Repatha®-treated and placebo-treated patients, respectively. The most common injection site reactions were erythema, pain, and bruising. Hypersensitivity reactions occurred in 5.1% and 4.7% of Repatha®-treated and placebo-treated patients, respectively. The most common hypersensitivity reactions were rash (1.0% versus 0.5% for Repatha® and placebo, respectively), eczema (0.4% versus 0.2%), erythema (0.4% versus 0.2%), and urticaria (0.4% versus 0.1%).

- **Adverse Reactions in the Cardiovascular Outcomes Trial:** The most common adverse reactions (>5% of patients treated with Repatha® and more frequently than placebo) were: diabetes mellitus (8.8% Repatha®, 8.2% placebo), nasopharyngitis (7.8% Repatha®, 7.4% placebo), and upper respiratory tract infection (5.1% Repatha®, 4.8% placebo).

  Among the 16,676 patients without diabetes mellitus at baseline, the incidence of new-onset diabetes mellitus during the trial was 8.1% in patients treated with Repatha® compared with 7.7% in patients that received placebo.

- **Adverse Reactions in Pediatric Patients with HeFH:** The most common adverse reactions (>5% of patients treated with Repatha® and more frequently than placebo) were: nasopharyngitis, headache, oropharyngeal pain, influenza, and upper respiratory tract infection.
- **Adverse Reactions in Adults and Pediatric Patients with HoFH:** In a 12-week study in 49 patients, the adverse reactions that occurred in at least two patients treated with Repatha® and more frequently than placebo were: upper respiratory tract infection, influenza, gastroenteritis, and nasopharyngitis. In an open-label extension study in 106 patients, including 14 pediatric patients, no new adverse reactions were observed.
- **Immunogenicity:** Repatha® is a human monoclonal antibody. As with all therapeutic proteins, there is potential for immunogenicity with Repatha®.

Please contact Amgen Medinfo at 800-77-AMGEN (800-772-6436) or 844-REPATHA (844-737-2842) regarding Repatha® availability or find more information, including full Prescribing Information, at www.amgen.com and www.Repatha.com.

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 2023, Amgen was named one of "America's Greatest Workplaces" by Newsweek, one of "America's Climate Leaders" by USA Today and one of the "World's Best Companies" by TIME.

For more information, visit Amgen.com and follow us on X (formerly known as Twitter), LinkedIn, Instagram, TikTok, YouTube and Threads.

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 Kyowa Kirin Co., Ltd.), the performance of Otezla® (apremilast) (including anticipated Otezla sales growth and the timing of non-GAAP EPS accretion), our acquisitions of Teneobio, Inc., ChemoCentryx, Inc., or Horizon Therapeutics plc (including the 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 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 be able to successfully integrate Horizon, and such 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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