



Efficacy Of Repatha® (Evolocumab) Across High-Risk Patient Populations Reinforced At ACC.21

May 11, 2021

Final Analysis From Open-Label Extension Study in Patients with Human Immunodeficiency Virus and Dyslipidemia

THOUSAND OAKS, Calif., May 11, 2021 /PRNewswire/ -- Amgen (NASDAQ:AMGN) today announced the presentation of four cardiovascular research abstracts, including final data from the Repatha® (evolocumab) open label extension trial of patients living with HIV who have high cholesterol, as well as new data from FOURIER evaluating biomarkers of major cardiovascular (CV) events, including complex revascularization procedures. Additional abstracts to be presented include a simulation comparing the impact of different LDL-C guidelines on CV risk reduction, as well as negative control outcomes to assess residual bias when comparing PCSK9 inhibitors to other treatments. These analyses will be presented at the American College of Cardiology's 70th Annual Scientific Session & Expo (ACC.21), May 15-17, 2021.

The data in HIV confirm the safety and efficacy of Repatha across different patient populations and contribute to Amgen's PROFICIO (Program to Reduce LDL-C and Cardiovascular Outcomes Following Inhibition of PCSK9 In Different POPulations) program of clinical and real-world evidence studies investigating the impact of Repatha on cardiovascular disease. To date, the PROFICIO program consists of 50 clinical trials including more than 47,000 patients worldwide with eight real-world evidence studies¹. These studies provide the body of evidence for treatment in a variety of high-risk patients and have contributed to Repatha being approved in more than 75 countries. Notably, Amgen recently passed the milestone of more than one million patients receiving Repatha worldwide².

"We're excited to have reached more than one million patients with Repatha® – a significant achievement through our unwavering commitment to advancing CV treatment and addressing unmet needs, especially in vulnerable, at-risk populations," said David M. Reese, M.D., executive vice president of Research and Development at Amgen. "Our commitment to helping improve outcomes for CV patients goes beyond developing treatment; it's the guiding force behind our partnerships with leading advocacy organizations on a variety of programs, including the American College of Cardiology (ACC) on the TRANSFORM: ACS program, which aims to initiate lipid lowering treatment sooner to help patients reduce the risk of subsequent CV events."

TRANSFORM: Accelerating Lipid Lowering Post ACS (TRANSFORM: ACS), is a collaboration with ACC and Veradigm which is focused on helping patients with Acute Coronary Syndrome (ACS) receive cholesterol testing in the hospital and guideline-recommended therapies to reduce their LDL-C after discharge. The goal of this program is to improve the rate of lipid panel testing and lipid lowering treatment intensification in ACS patients.

A list of Amgen-sponsored abstracts at ACC.21 can be found [online](#) and include:

- **Evolocumab Use in Patients with Human Immunodeficiency Virus and Dyslipidemia: Final Results of the Open Label Extension Period (BEIJERINCK)** (Moderated Poster, Session 1056-05)
- **Biomarker Prediction of Major Coronary Events and Complex Revascularization Procedures in Patients with Stable Atherosclerosis** (Oral, Session 910-08)
- **Comparison of Achieving 2019 ESC/EAS Versus 2018 ACC/AHA LDL-C Goals for Patients with Atherosclerotic Cardiovascular Disease: A Cardiovascular Risk Simulation from the DA VINCI Study** (Poster, Session 2118)
- **Use of Negative Control Outcomes to Assess the Comparability of Treatments for Hypercholesterolemia** (Poster, Session 2108)

About the Repatha CV Outcomes Trial FOURIER

FOURIER (Further cardiovascular **OU**tcomes Research with PCSK9 Inhibition in Subjects with **E**levated Risk), a multinational Phase 3 randomized, double-blind, placebo-controlled trial, was designed to evaluate whether treatment with Repatha in combination with statin therapy compared to placebo plus statin therapy reduces CV events. The primary endpoint is the time to CV death, myocardial infarction, stroke, hospitalization for unstable angina, or coronary revascularization. The key secondary endpoint is the time to CV death, myocardial infarction or stroke.

Eligible patients with high cholesterol (LDL-C ≥ 70 mg/dL or non-high-density lipoprotein cholesterol [non-HDL-C] ≥ 100 mg/dL) and clinically evident ASCVD at more than 1,300 study locations around the world were randomized to receive Repatha subcutaneous 140 mg every two weeks or 420 mg monthly plus effective statin dose; or placebo subcutaneous every two weeks or monthly plus effective statin dose. Optimized statin therapy was defined as at least atorvastatin 20 mg or equivalent daily with a recommendation for at least atorvastatin 40 mg or equivalent daily where approved. The study was event-driven and continued until at least 1,630 patients experienced a key secondary endpoint.

FOURIER is part of Amgen's PROFICIO (**P**rogram to **R**educe LDL-C and cardiovascular **O**utcomes **F**ollowing Inhibition of PCSK9 In **D**ifferent **p**Opulations) program of clinical studies investigating the impact of Repatha on LDL-C and CVD across multiple populations at high CV risk, including those managed by statins, statin-intolerant patients, those with genetic disorders and patients with atherosclerosis. To date, the PROFICIO program consists of 50 trials including more than 43,000 patients worldwide.

About BEIJERINCK Study Design

Evolocuma**B** Effect on LDL-C Lower**I**ng in Sub**J**ects with Human Immunodeficiency Vi**R**us and **I**ncreased Cardiovascular Ris**K** (BEIJERINCK) is a double-blind, randomized, placebo-controlled study designed to evaluate the efficacy and safety of 420 mg once-monthly treatment with evolocumab in HIV+ patients with hyperlipidemia or mixed dyslipidemia over 24 weeks. The study enrolled 467 adults with known HIV infection who have received stable HIV therapy for six months or more prior to randomization and have also been treated with maximally tolerated lipid-lowering therapy for four weeks or longer prior to randomization. Both background therapies were not expected to change during the duration of study participation. Statin-intolerant patients were also eligible for the study. Evolocumab-treated patients who completed the 24-week double-blind treatment period were enrolled in an open-label period through the end of the study at week 52.

About Amgen in the Cardiovascular Therapeutic Area

Building on more than three decades of experience in developing biotechnology medicines for patients with serious illnesses, Amgen is dedicated to addressing important scientific questions to advance care and improve the lives of patients with cardiovascular disease, the leading cause of morbidity and mortality worldwide.³ Amgen's research into cardiovascular disease, and potential treatment options, is part of a growing competency at Amgen that utilizes human genetics to identify and validate certain drug targets. Through its own research and development efforts, as well as partnerships, Amgen is building a robust cardiovascular portfolio consisting of several approved and investigational molecules in an effort to address a number of today's important unmet patient needs, such as elevated lipids, including high cholesterol and Lp(a), and heart failure.

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 biologics manufacturing 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 the world's largest independent biotechnology company, 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.

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.⁴

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

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 other LDL-C-lowering therapies in patients with homozygous familial hypercholesterolemia (HoFH), to reduce LDL-C

The safety and effectiveness of Repatha have not been established in pediatric patients with HoFH who are younger than 13 years old or in pediatric patients with primary hyperlipidemia.

Important U.S. 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 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 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.

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 to manufacture therapeutic antibodies against 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. 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
Michael Strapazon, 805-313-5553 (media)
Megan Fox, 805-447-1423 (media)
Arvind Sood, 805-447-1060 (investors)

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[1] Amgen Data on File. 2021.

[2] Amgen Data on File. 2021.

[3] World Health Organization. Cardiovascular diseases (CVDs) fact sheet. <http://www.who.int/mediacentre/factsheets/fs317/en/>. Accessed September 2020.

[4] Repatha Prescribing Information; Amgen, Thousand Oaks, CA, 2018.

The Amgen logo consists of the word "AMGEN" in a bold, blue, sans-serif font. A registered trademark symbol (®) is located at the top right of the letter "N".

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