

# Amgen and UCB Provide Regulatory Update on Status of EVENITY™ (romosozumab) in the EU

June 28, 2019

THOUSAND OAKS, Calif. and BRUSSELS, June 27, 2019 /PRNewswire/ -- Amgen (NASDAQ:AMGN) and UCB (Euronext Brussels: UCB) today announced that the companies have been informed the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) has adopted a negative opinion on the Marketing Authorization Application for EVENITY<sup>TM</sup> (romosozumab) for the treatment of severe osteoporosis. The companies intend to submit a written notice for a re-examination by the CHMP.

"After a fracture, postmenopausal women with osteoporosis are five times more likely to fracture in the subsequent year, and these fractures can be life-changing. Yet these patients often remain undiagnosed and untreated and could benefit from a new treatment option with 12 monthly doses to reduce their risk of a fracture," said David M. Reese, M.D., executive vice president of Research and Development at Amgen. "We are disappointed by the Committee's opinion and continue to believe that EVENITY has a positive benefit:risk profile. Amgen and UCB remain committed to working with regulatory authorities around the world to bring EVENITY to patients and physicians who need additional treatment options for osteoporosis."

The opinion is based on results from a large development program including three pivotal Phase 3 studies comprised of nearly 12,000 patients: FRAME, including 7,180 postmenopausal women with osteoporosis at risk for fracture; ARCH, including 4,093 postmenopausal women with osteoporosis at high risk for fracture: and BRIDGE, including 245 men with osteoporosis.

"We are disappointed with the CHMP opinion and believe that the body of evidence submitted supports a positive benefit:risk profile for EVENITY and its use in helping address the urgent need to improve post-fracture care and reduce the risk of painful, disabling fractures in postmenopausal women with severe osteoporosis at high risk of fracture," said Dr. Pascale Richetta, head of bone and executive vice president, UCB. "Together with Amgen we will seek a re-examination of the CHMP opinion. The re-examination process gives us the opportunity to clarify our position on the submitted data with the goal of making EVENITY available to postmenopausal women at high risk of fracture in the EU."

EVENITY (romosozumab-aqqg) was approved by the U.S. Food and Drug Administration (FDA) in April 2019, for the treatment of osteoporosis in postmenopausal women at high risk for fracture.<sup>5</sup> EVENITY is also approved in Japan and South Korea for the treatment of osteoporosis for women and men at high risk for fracture and in Canada for the treatment of osteoporosis for postmenopausal women at high risk for fracture.<sup>6,7,8</sup>

## About EVENITY<sup>TM</sup> (romosozumab)

EVENITY is a bone-forming monoclonal antibody. It is designed to work by inhibiting the activity of sclerostin, which simultaneously results in increased bone formation and to a lesser extent decreased bone resorption. The EVENITY development program includes 19 clinical studies that enrolled approximately 14,000 patients. EVENITY has been studied for its potential to reduce the risk of fractures in an extensive global Phase 3 program that included two large fracture trials comparing EVENITY to either placebo or active comparator in nearly 11,000 postmenopausal women with osteoporosis. Amgen and UCB are co-developing EVENITY.

### **About the Pivotal EVENITY Clinical Trials**

FRAME (<u>Fra</u>cture study in postmenopausal women with osteoporosis) is a randomized, double-blind, placebo-controlled study that evaluated 7,180 postmenopausal women with osteoporosis. The study evaluated the efficacy of EVENITY treatment (210 mg, administered monthly), compared with placebo, in reducing the incidence of new vertebral fractures through 12 months. The study also evaluated the efficacy of treating with EVENITY for 12 months followed by denosumab for 12 months, compared with placebo followed by denosumab, in reducing the incidence of new vertebral fractures through 24 months.

ARCH (<u>Active-controlled fracture</u> study in postmenopausal women with osteoporosis at <u>high</u> risk of fracture) is a randomized, double-blind, alendronate-controlled study of EVENITY in 4,093 postmenopausal women with osteoporosis and previous fracture history. This event-driven study evaluated 12 months of EVENITY treatment (210 mg, administered monthly), followed by at least 12 months of alendronate treatment (70 mg), compared with alendronate treatment alone, to assess its efficacy in reducing the risk of clinical fracture (non-vertebral fracture and symptomatic vertebral fracture) through the primary analysis period and the incidence of new vertebral fracture at 24 months.

BRIDGE (Placebo-controlled study evaluating the efficacy and safety of romosozumab in treating men with osteoporosis) is a randomized, double-blind, placebo-controlled study of 245 men aged 55-90 years with osteoporosis and a history of fragility fracture (excluding hip fracture) or vertebral fracture. The study evaluated the efficacy of EVENITY treatment (210 mg, administered monthly) for 12 months, compared with placebo, in increasing bone mineral density (BMD) at the lumbar spine and the effect on BMD at the femoral neck and total hip.

## **About Osteoporosis-Related Fractures**

Worldwide, one in three women and one in five men, over the age of 50, will suffer a fragility fracture due to osteoporosis and with an aging population these numbers will rise. <sup>9</sup> Yet despite this, there is a large gap in the management and treatment of osteoporosis, especially in the post-fracture setting, with an estimated four out of five patients remaining undiagnosed and untreated after a fracture. <sup>10</sup> Without proper care or access to effective intervention options, they remain at risk of painful and disabling fractures in the future.

## Important U.S. Product Information

EVENITY<sup>TM</sup> is indicated for the treatment of osteoporosis in postmenopausal women at high risk for fracture, defined as a history of osteoporotic fracture, or multiple risk factors for fracture; or patients who have failed or are intolerant to other available osteoporosis therapy.

The anabolic effect of EVENITY wanes after 12 monthly doses of therapy. Therefore, the duration of EVENITY use should be limited to 12 monthly doses. If osteoporosis therapy remains warranted, continued therapy with an anti-resorptive agent should be considered.

#### Important U.S. Safety Information

#### POTENTIAL RISK OF MYOCARDIAL INFARCTION, STROKE AND CARDIOVASCULAR DEATH

EVENITY<sup>TM</sup> may increase the risk of myocardial infarction, stroke and cardiovascular death. EVENITY<sup>TM</sup> should not be initiated in patients who have had a myocardial infarction or stroke within the preceding year. Consider whether the benefits outweigh the risks in patients with other cardiovascular risk factors. Monitor for signs and symptoms of myocardial infarction and stroke and instruct patients to seek prompt medical attention if symptoms occur. If a patient experiences a myocardial infarction or stroke during therapy, EVENITY<sup>TM</sup> should be discontinued.

In a randomized controlled trial in postmenopausal women, there was a higher rate of major adverse cardiac events (MACE), a composite endpoint of cardiovascular death, nonfatal myocardial infarction and nonfatal stroke, in patients treated with EVENITY<sup>TM</sup> compared to those treated with alendronate

**Contraindications:** EVENITY<sup>TM</sup> is contraindicated in patients with hypocalcemia. Pre-existing hypocalcemia must be corrected prior to initiating therapy with EVENITY<sup>TM</sup>. EVENITY<sup>TM</sup> is contraindicated in patients with a history of systemic hypersensitivity to romosozumab or to any component of the product formulation. Reactions have included angioedema, erythema multiforme and urticaria.

**Hypersensitivity:** Hypersensitivity reactions, including angioedema, erythema multiforme, dermatitis, rash and urticaria have occurred in EVENITY<sup>TM</sup>-treated patients. If an anaphylactic or other clinically significant allergic reaction occurs, initiate appropriate therapy and discontinue further use of EVENITY<sup>TM</sup>.

**Hypocalcemia:** Hypocalcemia has occurred in patients receiving EVENITY<sup>TM</sup>. Correct hypocalcemia prior to initiating EVENITY<sup>TM</sup>. Monitor patients for signs and symptoms of hypocalcemia, particularly in patients with severe renal impairment or receiving dialysis. Adequately supplement patients with calcium and vitamin D while on EVENITY<sup>TM</sup>.

Osteonecrosis of the Jaw (ONJ): ONJ, which can occur spontaneously, is generally associated with tooth extraction and/or local infection with delayed healing, and has been reported in patients receiving EVENITY<sup>TM</sup>. A routine oral exam should be performed by the prescriber prior to initiation of EVENITY<sup>TM</sup>. Concomitant administration of drugs associated with ONJ (chemotherapy, bisphosphonates, denosumab, angiogenesis inhibitors, and corticosteroids) may increase the risk of developing ONJ. Other risk factors for ONJ include cancer, radiotherapy, poor oral hygiene, pre-existing dental disease or infection, anemia and coagulopathy.

For patients requiring invasive dental procedures, clinical judgment should guide the management plan of each patient. Patients who are suspected of having or who develop ONJ should receive care by a dentist or an oral surgeon. In these patients, dental surgery to treat ONJ may exacerbate the condition. Discontinuation of EVENITY<sup>TM</sup> should be considered based on benefit-risk assessment.

**Atypical Femoral Fractures:** Atypical low-energy or low trauma fractures of the femoral shaft have been reported in patients receiving EVENITY<sup>TM</sup>. Causality has not been established as these fractures also occur in osteoporotic patients who have not been treated.

During EVENITY<sup>TM</sup> treatment, patients should be advised to report new or unusual thigh, hip or groin pain. Any patient who presents with thigh or groin pain should be evaluated to rule out an incomplete femur fracture. Interruption of EVENITY<sup>TM</sup> therapy should be considered based on benefit-risk assessment.

Adverse Reactions: The most common adverse reactions (≥ 5%) reported with EVENITY<sup>TM</sup> were arthralgia and headache.

EVENITY<sup>TM</sup> is a humanized monoclonal antibody. As with all therapeutic proteins, there is potential for immunogenicity.

## About the Amgen and UCB Collaboration

Since 2004, Amgen and UCB have been working together under a collaboration and license agreement to research, develop and market antibody products targeting the protein sclerostin. As part of this agreement, the two companies continue to collaborate on the development of romosozumab for the treatment of osteoporosis. This gene-to-drug project demonstrates how Amgen and UCB are joining forces to translate a genetic discovery into a new medicine, turning conceptual science into a reality.

#### **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 UCB

UCB, Brussels, Belgium (<a href="www.ucb.com">www.ucb.com</a>) is a global biopharmaceutical company focused on the discovery and development of innovative medicines and solutions to transform the lives of people living with severe diseases of the immune system or of the central nervous system. With more than 7,500 people in approximately 40 countries, the company generated revenue of € 4.5 billion in 2017. UCB is listed on Euronext Brussels (symbol: UCB). Follow us on Twitter: @UCB\_news

### **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 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 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 its 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 Amgen projects. 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 Amgen to complete clinical trials and obtain regulatory approval for product marketing has in the past varied and Amgen expects similar variability in the future. Even when clinical trials are successful, regulatory authorities may question the sufficiency for approval of the trial endpoints Amgen has selected. Amgen develops 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 Amgen may have believed at the time of entering into such relationship. Also, Amgen or others could identify safety, side effects or manufacturing problems with its products, including its devices, after they are on the market.

Amgen's results may be affected by its 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 its products and global economic conditions. In addition, sales of Amgen's 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, Amgen's research, testing, pricing, marketing and other operations are subject to extensive regulation by domestic and foreign government regulatory authorities. Amgen's business may be impacted by government investigations, litigation and product liability claims. In addition, Amgen's 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. While Amgen routinely obtains patents for its products and technology, the protection offered by its patents and patent applications may be challenged, invalidated or circumvented by its competitors, or Amgen may fail to prevail in present and future intellectual property litigation. Amgen performs a substantial amount of its commercial manufacturing activities at a few key manufacturing facilities, including in Puerto Rico, and also depends on third parties for a portion of its manufacturing activities, and limits on supply may constrain sales of certain of its current products and product candidate development. In addition, Amgen competes with other companies with respect to many of its marketed products as well as for the discovery and development of new products. Further, some raw materials, medical devices and component parts for Amgen's products are supplied by sole third-party suppliers. Certain of Amgen's distributors, customers and payers have substantial purchasing leverage in their dealings with Amgen. The discovery of significant problems with a product similar to one of Amgen's products that implicate an entire class of products could have a material adverse effect on sales of the affected products and on its business and results of operations. Amgen's efforts to acquire other companies or products and to integrate the operations of companies Amgen has acquired may not be successful. A breakdown, cyberattack or information security breach could compromise the confidentiality, integrity and availability of Amgen's systems and Amgen's data. Amgen's stock price may be volatile and may be affected by a number of events. Amgen's business performance could affect or limit the ability of the Amgen Board of Directors to declare a dividend or its ability to pay a dividend or repurchase its common stock. Amgen may not be able to access the capital and credit markets on terms that are favorable to it, or at all.

The scientific information discussed in this news release related to Amgen's 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.

### **UCB Forward-Looking Statements**

This press release contains forward-looking statements based on current plans, estimates and beliefs of management. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including estimates of revenues, operating margins, capital expenditures, cash, other financial information, expected legal, political, regulatory or clinical results and other such estimates and results. By their nature, such forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties and assumptions which could cause actual results to differ materially from those that may be implied by such forward-looking statements contained in this press release. Important factors that could result in such differences include: changes in general economic, business and competitive conditions, the inability to obtain necessary regulatory approvals or to obtain them on acceptable terms, costs associated with research and development, changes in the prospects for products in the pipeline or under development by UCB, effects of future judicial decisions or governmental investigations, product liability claims, challenges to patent protection for products or product candidates, changes in laws or regulations, exchange rate fluctuations, changes or uncertainties in tax laws or the administration of such laws and hiring and retention of its employees. UCB is providing this information as of the date of this press release and expressly disclaims any duty to update any information contained in this press release, either to confirm the actual results or to report a change in its expectations.

There is no guarantee that new product candidates in the pipeline will progress to product approval or that new indications for existing products will be developed and approved. Products or potential products which are the subject of partnerships, joint ventures or licensing collaborations may be subject to differences between the partners. Also, UCB or others could discover safety, side effects or manufacturing problems with its products after they are marketed.

Moreover, sales may be impacted by international and domestic trends toward managed care and health care cost containment and the reimbursement policies imposed by third-party payers as well as legislation affecting biopharmaceutical pricing and reimbursement.

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