FDA Approves EVENITY™ (romosozumab-aqqg) For The Treatment Of Osteoporosis In Postmenopausal Women At High Risk For Fracture

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One in Two Women in the United States Will Suffer a Fracture in Her Lifetime Due to Osteoporosis(1)
EVENITY is the First and Only Bone Builder With a Dual Effect That Both Increases Bone Formation and Decreases Bone Loss(2)
EVENITY Rapidly Reduces Fracture Risk and Builds New Bone With 12 Months of Therapy(2)

THOUSAND OAKS, Calif. and BRUSSELS, April 9, 2019 /PRNewswire/ -- Amgen (NASDAQ: AMGN) and UCB (Euronext Brussels: UCB) today announced that the U.S. Food and Drug Administration (FDA) has approved EVENITY™ (romosozumab-aqqg) for the treatment of osteoporosis in postmenopausal women at high risk for fracture. EVENITY is the first and only bone builder with a unique dual effect that both increases bone formation and to a lesser extent reduces bone resorption (or bone loss) to rapidly reduce the risk of fracture. A full course of EVENITY therapy is 12 monthly doses administered by a healthcare provider.[2] Since osteoporosis is a chronic disease, continued therapy with an anti-resorptive agent should be considered once EVENITY therapy is completed.

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"One in two women will experience a fracture due to osteoporosis in her lifetime.[1] These fractures can be devastating, with many leading to hospital stays and life-altering consequences.[3] The FDA approval of EVENITY represents an important therapeutic development for patients who need a medicine that can rapidly increase bone mineral density and help reduce the risk of future fractures within 12 months," said David M. Reese, M.D., executive vice president of Research and Development at Amgen. "Postmenopausal osteoporosis is a significant women's health issue that far too often gets overlooked. As a leader in bone health with more than 20 years of osteoporosis research experience, Amgen is as committed as ever to combatting this disease to help women at high risk for fracture reduce their risk of a first and subsequent fracture."

Osteoporosis is a serious, chronic condition with no cure.[4,5] According to the World Health Organization (WHO), osteoporosis is a major public health crisis, affecting millions of people worldwide. In the U.S. alone, 10 million Americans suffer from osteoporosis.[6] Osteoporosis-related fractures, known as bone breaks, are common, and the disease is responsible for an estimated two million fractures per year.[6] After her first fracture, a woman is five times more likely to suffer another fracture within a year.[7] In fact, her fracture risk remains elevated over time if left untreated. Fractures for postmenopausal women can be life-altering events which can lead to loss of mobility.[4] Each year, osteoporosis-related fractures account for 432,000 hospital admissions and 180,000 nursing home admissions.[3] Given the aging population in the U.S., annual direct costs from osteoporosis are expected to reach approximately $25.3 billion by 2025.[1]

"After spending 30 years caring for women with osteoporosis and in clinical research, I know that women at high risk of fracture need another therapy that reduces fractures quickly," said Felicia Cosman, M.D., professor of medicine at Columbia University College of Physicians and Surgeons in New York, co-editor in chief of the journal *Osteoporosis International* and principal investigator of the FRAME trial. "EVENITY acts by a novel mechanism of action to reduce the risk of new vertebral fracture within 12 months, and it produces rapid and dramatic improvements in bone mass. These benefits are sustained upon transition to an anti-resorptive medication and address a critical need for patients at high risk of fracture."

The FDA based its approval of EVENITY on the results of two Phase 3 studies. In the placebo-controlled FRAME study, treatment with EVENITY resulted in a significant reduction of new vertebral (spine) fracture at 12 months compared to placebo. This significant reduction in fracture risk persisted through the second year in women who received EVENITY during the first year and transitioned to denosumab compared to those who transitioned from placebo to denosumab. In addition, EVENITY significantly increased bone mineral density (BMD) at the lumbar spine, total hip and femoral neck compared to placebo at 12 months. Following the transition from EVENITY to denosumab at month 12, BMD continued to increase through month 24.

In the active-controlled ARCH study, treatment with EVENITY for 12 months followed by 12 months of alendronate significantly reduced the incidence of new vertebral fracture at 24 months. EVENITY followed by alendronate significantly reduced the risk of clinical fracture (defined as a composite of symptomatic vertebral fracture and nonvertebral fracture) after a median follow-up of 33 months. EVENITY significantly increased BMD at the lumbar spine, total hip and femoral neck at 12 months compared to alendronate. Twelve months of treatment with EVENITY followed by 12 months of treatment with alendronate significantly increased BMD compared with alendronate alone.

EVENITY has a Boxed Warning in its product label which advises that EVENITY may increase the risk of myocardial infarction (heart attack), stroke and cardiovascular death. EVENITY should not be initiated in patients who have had a heart attack or stroke within the preceding year. Consider whether the benefits outweigh the risks in patients with other cardiovascular risk factors. If a patient experiences a heart attack or stroke during therapy, EVENITY should be discontinued.[2]

The most common adverse reactions (≥5 percent) reported with EVENITY were arthralgia (joint pain) and headache.

This approval comes with a post-marketing requirement from the FDA to assess the cardiovascular safety of EVENITY in postmenopausal osteoporosis women. The requirement includes a five-year observational feasibility study, potentially followed by a comparative safety study or trial. Amgen is committed to the safety of patients and will continue to monitor all safety data as it emerges.

"Women who experience a fracture due to osteoporosis are at significant risk for another fracture within one to two years;[7] however, many of these patients are not diagnosed with osteoporosis as the underlying cause of fracture so they do not receive the proper care, and as a result, may experience new fractures," said Dr. Pascale Richetta, head of bone and executive vice president, UCB. "We are excited EVENITY is now approved in

the U.S. and that physicians will have a new treatment option for postmenopausal women with osteoporosis who are at high risk for fracture."

"Osteoporosis is a serious disease that is underdiagnosed and often goes untreated. In fact, approximately 80 percent of patients who have had one or more osteoporotic-related fractures are not being identified or treated,"[8,9] said Elizabeth Thompson, chief executive officer, National Osteoporosis Foundation. "This approval is great news for patients and physicians because it gives them another much needed treatment option to help reduce the risk of life changing fractures."

Amgen is committed to supporting the osteoporosis community and to helping appropriate patients with affordable access to EVENITY. The Amgen Assist® support program can help patients and physician offices navigate insurance coverage and identify access resources for patients. Amgen also provides patient assistance for its medicines marketed in the U.S. in a variety of ways, including free medicines through The Amgen Safety Net Foundation for qualifying individuals with no or limited drug coverage.

EVENITY is expected to be available in approximately one week from select wholesalers in the U.S., at which time the price of EVENITY will be publicly available.

About EVENITY™ (romosozumab-aqqg)
EVENITY is a bone-building humanized 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 more than 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 12,000 postmenopausal women with osteoporosis. Amgen and UCB are co-developing EVENITY.

About the Pivotal EVENITY Clinical Trials
FRAME (Fracture study in postmenopausal women with osteoporosis) is a randomized, double-blind, placebo-controlled study (Study 1) 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 (Active-controlled fracture study in postmenopausal women with osteoporosis at high risk of fracture) is a randomized, double-blind, alendronate-controlled study (Study 2) 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.

About Osteoporosis-related Fractures
Worldwide, one in three women and one in five men, over the age of 50, will suffer a fracture due to osteoporosis.[8] Similarly, in the U.S. one in two women will fracture in her lifetime due to osteoporosis.[1] With an aging population these numbers will rise, 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.[8] 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 ™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 ™may increase the risk of myocardial infarction, stroke and cardiovascular death. EVENITY ™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 ™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 ™compared to those treated with alendronate.

Contraindications: EVENITY ™is contraindicated in patients with hypocalcemia. Pre-existing hypocalcemia must be corrected prior to initiating therapy with EVENITY ™. EVENITY ™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 ™-treated patients. If an anaphylactic or other clinically significant allergic reaction occurs, initiate appropriate therapy and discontinue further use of EVENITY ™.

Hypocalcemia: Hypocalcemia has occurred in patients receiving EVENITY ™. Correct hypocalcemia prior to initiating EVENITY ™. 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 ™.

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 ™. A routine oral exam should be performed by the prescriber prior to initiation of EVENITY ™. 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 ™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 ™. Causality has not been established as these fractures also occur in osteoporotic patients who have not been treated.

During EVENITY ™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 ™therapy should be considered based on benefit-risk assessment.

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

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

Please see accompanying EVENITY ™full Prescribing Information, including Boxed Warning and Medication Guide.

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 (www.ucb.com) 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 7,500 people in approximately 40 countries, the company generated revenue of € 4.6 billion in 2018. 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. 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. 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, 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.

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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