



## European Commission Approves EVENITY® (romosozumab) For The Treatment Of Severe Osteoporosis In Postmenopausal Women At High Risk Of Fracture

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### First New Osteoporosis Medicine Approved in the European Union (EU) Since 2010 Novel Bone-Builder With a Dual Effect That Increases Bone Formation and Reduces Bone Loss

THOUSAND OAKS, Calif. and BRUSSELS, Dec. 11, 2019 /PRNewswire/ -- Amgen (NASDAQ:AMGN) and UCB (Euronext Brussels: UCB) today announced that the European Commission (EC) has granted marketing authorization for EVENITY® (romosozumab) for the treatment of severe osteoporosis in postmenopausal women at high risk of fracture. EVENITY is a novel bone-builder with a dual effect that increases bone formation and to a lesser extent reduces bone resorption (or bone loss).

"After her first fracture, a woman is five times more likely to suffer another fracture within a year.<sup>1</sup> EVENITY is a significant step forward in the management of osteoporosis for physicians who need to treat patients with a medicine that can rapidly increase bone mineral density within 12 months," said David M. Reese, M.D., executive vice president of Research and Development at Amgen. "We are pleased by the European Commission's approval to make this therapy available to the millions of women at high risk of fracture in the European Union."

The approval follows a positive opinion from the Committee for Medicinal Products for Human Use (CHMP) that was received in October 2019. The first launches of EVENITY in the European Economic Area (EEA) are planned for first half of 2020.

As the population ages, the incidence and contribution of fragility fractures to the overall healthcare spend in Europe will continue to rise. Recent studies estimate that every year €37 billion is spent on healthcare costs for the 2.7 million fragility fractures that occur across France, Germany, Italy, Spain, Sweden and the UK.<sup>2</sup> This annual expenditure is predicted to increase to over €47 billion by 2030.<sup>2</sup>

"Today's European population is living longer and expecting more out of life in their later years. Yet fragility fractures due to osteoporosis affect one in three women aged over 50, and evidence shows that many women remain undiagnosed and untreated following a fracture. These fractures represent a barrier to healthy aging, potentially impacting independence and quality of life<sup>2</sup>," said Dr. Pascale Richetta, head of bone and executive vice president, UCB. "With today's approval of EVENITY we can now offer patients and clinicians a new medicine that can help drive positive changes in secondary fracture prevention."

"Fragility fractures can often be avoided, but their prevention and management are being neglected despite a large personal, societal and economic impact. With the number of worldwide fractures expected to rise there is a growing need to take action and prioritize post-fracture care through better education, specialist services, lifestyles and medicines," said Alison Doyle, head of clinical operations for the Royal Osteoporosis Society. "Therefore, we welcome this approval as it represents a new, therapeutic option for both patients and health care professionals in addressing this neglected condition."

European Commission marketing authorization approval is valid in all EU and EEA-European Free Trade Association (EFTA) states (Norway, Iceland and Liechtenstein). EVENITY is now approved in 37 countries, including the U.S., Japan, Canada and Australia.

#### About EVENITY® (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 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>3</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>4</sup> Without proper care or access to effective intervention options, they remain at risk of painful and disabling fractures in the future.

#### Important EU/EEA Product Information

EVENITY® (romosozumab) is indicated for treatment of severe osteoporosis in postmenopausal women at high risk of fracture.

#### Important EU/EEA Safety information

**This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions.**

#### Contraindications

EVENITY is contraindicated in patients with a history of myocardial infarction or stroke. EVENITY is contraindicated in patients with hypocalcemia. EVENITY is contraindicated in patients with a history of systemic hypersensitivity to romosozumab or to any component of the product formulation.

#### Special Warning and Precautions for Use

**Myocardial infarction and stroke:** In randomised controlled studies, an increase in serious cardiovascular events (myocardial infarction and stroke) has been observed in romosozumab treated patients compared to controls. Romosozumab is contraindicated in patients with previous myocardial

infarction or stroke.

When determining whether to use romosozumab for an individual patient, consideration should be given to her fracture risk over the next year and her cardiovascular risk based on risk factors (e.g. established cardiovascular disease, hypertension, hyperlipidaemia, diabetes mellitus, smoking, severe renal impairment, age). Romosozumab should only be used if the prescriber and patient agree that the benefit outweighs the risk. If a patient experiences a myocardial infarction or stroke during therapy, treatment with romosozumab should be discontinued.

**Hypocalcemia:** Transient hypocalcemia has been observed in patients receiving romosozumab. Hypocalcemia should be corrected prior to initiating therapy with romosozumab and patients should be monitored for signs and symptoms of hypocalcemia. If any patient presents with suspected symptoms of hypocalcaemia during treatment, calcium levels should be measured. Patients should be adequately supplemented with calcium and vitamin D. Patients with severe renal impairment (estimated glomerular filtration rate [eGFR] 15 to 29 ml/min/1.73 m<sup>2</sup>) or receiving dialysis are at greater risk of developing hypocalcemia and the safety data for these patients is limited. Calcium levels should be monitored in these patients.

**Hypersensitivity:** Clinically significant hypersensitivity reactions, including angioedema, erythema multiforme, and urticaria occurred in the romosozumab group in clinical trials. If an anaphylactic or other clinically significant allergic reaction occurs, appropriate therapy should be initiated and use of romosozumab should be discontinued.

**Osteonecrosis of the Jaw (ONJ):** ONJ, has been reported rarely in patients receiving romosozumab. The following risk factors should be considered when evaluating a patient's risk of developing ONJ:

- potency of the medicinal product that inhibits bone resorption (the risk increases with the antiresorptive potency of the compound), and cumulative dose of bone resorption therapy.
- cancer, co-morbid conditions (e.g. anaemia, coagulopathies, infection), smoking.
- concomitant therapies: corticosteroids, chemotherapy, angiogenesis inhibitors, radiotherapy to head and neck.
- poor oral hygiene, periodontal disease, poorly fitting dentures, history of dental disease, invasive dental procedures e.g. tooth extractions.

All patients should be encouraged to maintain good oral hygiene, receive routine dental check-ups, and immediately report any oral symptoms such as dental mobility, pain or swelling or non-healing of sores or discharge during treatment with romosozumab.

Patients who are suspected of having or who develop ONJ while on romosozumab should receive care by a dentist or an oral surgeon with expertise in ONJ. Discontinuation of romosozumab therapy should be considered until the condition resolves and contributing risk factors are mitigated where possible.

**Atypical Femoral Fractures:** Atypical low-energy or low trauma fracture of the femoral shaft, which can occur spontaneously, has been reported rarely in patients receiving romosozumab. Any patient who presents with new or unusual thigh, hip, or groin pain should be suspected of having an atypical fracture and should be evaluated to rule out an incomplete femur fracture. Patient presenting with an atypical femur fracture should also be assessed for symptoms and signs of fracture in the contralateral limb. Interruption of romosozumab therapy should be considered, based on an individual benefit-risk assessment.

**Adverse Reactions:** The most common adverse reactions were nasopharyngitis (13.6%) and arthralgia (12.4%). Common adverse reactions included hypersensitivity, sinusitis, rash, dermatitis, headache, neck pain, muscle spasms and injection site reactions (most frequent injection site reactions were pain and erythema). Uncommon adverse reactions were urticaria, hypocalcaemia, stroke, myocardial infarction and cataract. Finally, rare side effects were serious allergic reactions which caused swelling of the face, throat, hands, feet, ankles or lower legs (angioedema) and acute skin eruption (erythema multiforme).

**Refer to the European Summary of Product Characteristics for other adverse reactions and full prescribing information for EVENITY®.**

#### **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.<sup>5</sup>

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 ( $\geq 5\%$ ) 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 U.S. [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](http://www.amgen.com) and follow us on [www.twitter.com/amgen](https://www.twitter.com/amgen).

#### **About UCB**

UCB, Brussels, Belgium ([www.ucb.com](http://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 any statements on the outcome, benefits and synergies of collaboration with any other company, including BeiGene, Ltd., 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 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 Amgen fails to meet the compliance obligations in the corporate integrity agreement between Amgen and the U.S. government, Amgen could become subject to significant sanctions. Further, 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 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. Amgen relies on collaborations with third parties for the development of some of its product candidates and for the commercialization and sales of some of its 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 collaborate with or acquire other companies or products, and to integrate the operations of companies or in support of products 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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#### **References**

1. Lindsay R, Silverman SL, Cooper C, et al. Risk of new vertebral fracture in the year following fracture. *JAMA*. 2001;285(3):320-323.
2. International Osteoporosis Foundation. Broken Bones, Broken Lives: A Roadmap to Solve the Fragility Fracture Crisis in Europe. [http://share.iofbonehealth.org/EU-6-Material/Reports/IOF%20Report\\_EU.pdf](http://share.iofbonehealth.org/EU-6-Material/Reports/IOF%20Report_EU.pdf) Accessed November 18, 2019.
3. International Osteoporosis Foundation. Patient Brochure. [http://share.iofbonehealth.org/WOD/2012/patient\\_brochure/WOD12-pa-tient\\_brochure.pdf](http://share.iofbonehealth.org/WOD/2012/patient_brochure/WOD12-pa-tient_brochure.pdf). Accessed November 18, 2019.
4. Nguyen TV, Center JR, Eisman JA (2004) Osteoporosis: underrated, underdiagnosed and undertreated. *Med J Aust*

180:S18.

5. EVENITY™ (romosozumab-aqqg) U.S. Prescribing Information [https://www.pi.amgen.com/~media/amgen/repositorysites/pi-amgen-com/eventy/eventy\\_pi\\_hcp\\_english.ashx](https://www.pi.amgen.com/~media/amgen/repositorysites/pi-amgen-com/eventy/eventy_pi_hcp_english.ashx)



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