

# FDA Classifies Prolia(TM) (Denosumab) Complete Response Submission and Targets Action Date

## February 19, 2010

THOUSAND OAKS, Calif., Feb 19, 2010 /PRNewswire via COMTEX/ -- Amgen Inc. (Nasdaq: AMGN) today announced that the U.S. Food and Drug Administration (FDA) has evaluated the content of the Company's Complete Response submission for Prolia(TM) (denosumab) in the treatment of postmenopausal osteoporosis and classified it as a Class 2 resubmission. With the Class 2 designation, the FDA set a corresponding Prescription Drug User Fee Act (PDUFA) action date of July 25, 2010.

In October 2009, the FDA's Division of Reproductive and Urologic Products issued a Complete Response Letter for the Biologic License Application (BLA) for Prolia in the treatment and prevention of postmenopausal osteoporosis. The letter requested several items, including further information on the design of Amgen's previously submitted post-marketing surveillance program. The letter did not require additional pre-marketing clinical trials to complete the review of the treatment indication. The FDA also requested all updated safety data related to Prolia. Amgen submitted the requested information for the treatment indication in late January 2010.

Amgen continues to work with the FDA to determine appropriate next steps regarding its indications for Prolia in the prevention of postmenopausal osteoporosis, as well as in the treatment and prevention of bone loss due to hormone ablation in breast and prostate cancer patients.

#### About Denosumab

Denosumab is the first and only therapy in late stage development that specifically targets RANK Ligand, an essential regulator of osteoclasts (the cells that break down bone). It is under study for administration every six months as a subcutaneous injection just under the skin and is being investigated for its potential to inhibit all stages of osteoclast development through a targeted mechanism. Denosumab is also being studied in a range of other bone loss conditions including rheumatoid arthritis, and for its potential to delay bone metastases and inhibit and treat bone destruction in patients with advanced cancer.

#### **About Osteoporosis**

Often referred to as the "silent epidemic," osteoporosis is a global problem that is increasing in significance as the population of the world both increases and ages. In the U.S. today, nearly eight million women suffer from osteoporosis.(i) The World Health Organization (WHO) has recently identified osteoporosis as a priority health issue along with other major non-communicable diseases.

The economic burden of osteoporosis is comparable to that of other major chronic diseases; for example, in the U.S., the costs associated with osteoporosis-related fractures are equivalent to those of cardiovascular disease and asthma.(ii)(iii)(iv) It has been reported that osteoporosis results in more hospital bed-days than stroke, myocardial infarction or breast cancer.(v)

Along with proper diet and weight-bearing exercise, medications can help slow bone loss and reduce the risk of fracture. Yet despite the availability of osteoporosis treatments for more than 10 years, the worldwide lifetime risk of fracture remains high at 30-50 percent for women and 15-30 percent for men.(vi) It is estimated that fewer than 50 percent of patients adhere to their current therapy for more than one year(vii)(viii)(ix), which may leave many patients insufficiently protected against bone loss.

## About Amgen

Amgen discovers, develops, manufactures and delivers innovative human therapeutics. A biotechnology pioneer since 1980, Amgen was one of the first companies to realize the new science's promise by bringing safe and effective medicines from lab, to manufacturing plant, to patient. Amgen therapeutics have changed the practice of medicine, helping millions of people around the world in the fight against cancer, kidney disease, rheumatoid arthritis and other serious illnesses. With a deep and broad pipeline of potential new medicines, Amgen remains committed to advancing science to dramatically improve people's lives. To learn more about our pioneering science and our vital medicines, visit <a href="http://www.amgen.com/">http://www.amgen.com/</a>.

## **Forward-Looking Statements**

This news release contains forward-looking statements that are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and assumptions that could cause actual results to differ materially from those described. 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 (SEC) reports filed by Amgen, including Amgen's most recent annual report on Form 10-K and most recent periodic reports on Form 10-Q and Form 8-K.

Please refer to Amgen's most recent Forms 10-K, 10-Q and 8-K for additional information on the uncertainties and risk factors related to our business. Unless otherwise noted, Amgen is providing this information as of Feb. 19, 2010 and expressly disclaims any duty to update information contained in this news release.

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. 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 after they are on the market. Our business may be impacted by government investigations, litigation and products liability claims. We depend on third parties for a significant portion of our manufacturing capacity for the supply of certain of our current and future products and limits on supply may constrain sales of certain of our current products and product candidate development. In addition, sales of our products are affected by the 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 as well as U.S. legislation affecting pharmaceutical pricing and reimbursement. Government and others' regulations and reimbursement policies may affect the development, usage and pricing of our products. In addition, we compete with other companies with respect to some of our marketed products as well as for the discovery and development of new products. We believe that some of our newer products, product candidates or new indications for existing products, may face competition when and as they are approved and marketed. Our products may compete against products that have lower prices, established reimbursement, superior performance, are easier to administer, or that are otherwise competitive with our products. In addition, 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 and there can be no guarantee of our ability to obtain or maintain patent protection for our products or product candidates. We cannot guarantee that we will be able to produce commercially successful products or maintain the commercial success of our existing products. Our stock price may be affected by actual or perceived market opportunity, competitive position, and success or failure of our products or product candidates. Further, 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.

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 (FDA), and no conclusions can or should be drawn regarding the safety or effectiveness of the product candidates. Only the FDA can determine whether the product candidates are safe and effective for the use(s) being investigated. Further, the 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 (FDA) 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. Only the FDA can determine whether the products are safe and effective professionals should refer to and rely upon the FDA-approved labeling for the products, and not the information discussed in this news release.

i. http://www.nof.org/osteoporosis/diseasefacts.htm, accessed, 3/18/2009: Main bullet #5

ii. Burge R, et al. J Bone Miner Res. 2007; 22:465-475

iii. "Osteoporosis Fast Facts." Washington (DC): National Osteoporosis Foundation. Accessed on February 24, 2009 at http://www.nof.org /osteoporosis/stats.html.

iv. "Economic Cost of Cardiovascular Diseases." Dallas (TX): American Heart Association. Accessed on February 24, 2009 at http://www.americanheart.org/statistics/10econom.html

v. Lippuner K, et al. "Incidence and direct medical costs of hospitalisations due to osteoporotic fractures in Switzerland." Osteoporosis International.1997;7:414

vi. International Osteoporosis Foundation (2002). Osteoporosis in the Workplace: The social, economic and human costs of osteoporosis on employees, employers and governments

vii. Rossini M et al. Osteoporosis Int. 2006;17:914-921

viii. Payer J et al. Biomed Pharmacother 2007;61:191-193

ix. McCombs JS et al. Maturitas 2004;48:271-287

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