

AMGEN TO SUBMIT TEPROTUMUMAB MARKETING AUTHORIZATION APPLICATION TO THE EUROPEAN MEDICINES AGENCY

April 26, 2024

THOUSAND OAKS, Calif., April 26, 2024 /PRNewswire/ -- Amgen (NASDAQ:AMGN) today announced the imminent submission of a Marketing Authorization Application (MAA) to the European Medicines Agency (EMA) for teprotumumab, a fully human monoclonal antibody and targeted inhibitor of the insulin-like growth factor-1 receptor (IGF-1R), for the treatment of moderate to severe Thyroid Eye Disease (TED) in adults. TED is a serious, progressive, debilitating and potentially vision-threatening autoimmune disease that can cause proptosis (eye bulging), diplopia (double vision), eye pain, redness and swelling. If approved, teprotumumab would be the first and only medicine approved for TED in the European Union.

"We are enthusiastic to bring a much-needed medicine to the Thyroid Eye Disease community in Europe by leveraging Amgen's strong reputation and broad infrastructure in the region," said Jay Bradner, executive vice president of Research and Development and chief scientific officer at Amgen. "This disease is currently managed with steroids and invasive surgeries, both of which carry their own set of risks. Having access to a non-surgical option like teprotumumab that not only treats the signs and symptoms, but also targets the underlying cause of the disease represents a major advance for patients."

The MAA is supported by multiple well-controlled clinical studies - a Phase 2 clinical study (NCT01868997)¹, Phase 3 confirmatory clinical study OPTIC (NCT03298867)², a Phase 4 study (NCT04583735)³, and a Phase 3 clinical trial in Japan (OPTIC-J, <u>iRCT2031210453</u>) - providing statistically significant and clinically meaningful improvements across multiple facets of TED, including in proptosis and diplopia, among the 287 total patients studied. Additionally, the studies assessed TED signs and symptoms such as pain, inflammation, redness and functional vision. Clinical improvements were seen in proptosis as early as six weeks, with continued improvement across the 24-week treatment period.² Teprotumumab has a well-established safety profile.

"People living with Thyroid Eye Disease, a painful and potentially sight-threatening disease, have no approved treatment options in Europe at this time," said Mario Salvi, MD, founder & head of Graves Orbitopathy Center Aldo, Fondazione IRCCS Ca' Granda, Milano. "When considering the impact of this disease on patients, it's important to look beyond the symptoms, like eye bulging and double vision, and recognize that the inability to work, drive or even look or feel like themselves has a serious negative impact on overall well-being and mental health."

Teprotumumab is approved for TED in the U.S., Brazil and the Kingdom of Saudi Arabia under the brand name TEPEZZA[®], where it is administered to patients through an intravenous (IV) infusion once every three weeks for a total of eight infusions over the course of about five months.^{1,2}

In March 2024, Amgen submitted a marketing authorization application to the Medicines and Healthcare products Regulatory Agency (MHRA) in Great Britain, a New Drug Submission (NDS) to Health Canada and an application to the Therapeutic Goods Administration (TGA) in Australia for teprotumumab. Teprotumumab is also under review by the Ministry of Health, Labour and Welfare (MHLW) in Japan.

About Thyroid Eye Disease (TED)

TED is a serious, progressive, debilitating and potentially vision-threatening autoimmune disease. It often occurs in people living with Graves' disease, but is a distinct disease that is caused by autoantibodies activating an insulin-like growth factor-1 receptor (IGF-1R)-mediated signaling complex on cells within the retro-orbital space. This leads to a cascade of negative effects, which may cause long-term, irreversible damage, including blindness. Signs and symptoms of TED may include dry eyes and grittiness; redness, swelling and excessive tearing; eyelid retraction; proptosis; pressure and/or pain behind the eyes; and diplopia.

About TEPEZZA

Teprotumumab is marketed as TEPEZZA (teprotumumab-trbw) in the United States. Teprotumumab is not currently approved for commercial use in Europe.

INDICATION

TEPEZZA is indicated for the treatment of Thyroid Eye Disease regardless of Thyroid Eye Disease activity or duration.

IMPORTANT SAFETY INFORMATION

WARNINGS AND PRECAUTIONS

Infusion Reactions: TEPEZZA may cause infusion reactions. Infusion reactions have been reported in approximately 4% of patients treated with TEPEZZA. Reported infusion reactions have usually been mild or moderate in severity. Signs and symptoms may include transient increases in blood pressure, feeling hot, tachycardia, dyspnea, headache, and muscular pain. Infusion reactions may occur during an infusion or within 1.5 hours after an infusion. In patients who experience an infusion reaction, consideration should be given to premedicating with an antihistamine, antipyretic, or corticosteroid and/or administering all subsequent infusions at a slower infusion rate.

Preexisting Inflammatory Bowel Disease: TEPEZZA may cause an exacerbation of preexisting inflammatory bowel disease (IBD). Monitor patients with IBD for flare of disease. If IBD exacerbation is suspected, consider discontinuation of TEPEZZA.

Hyperglycemia: Increased blood glucose or hyperglycemia may occur in patients treated with TEPEZZA. In clinical trials, 10% of patients (two-thirds of whom had preexisting diabetes or impaired glucose tolerance) experienced hyperglycemia. Hyperglycemic events should be controlled with medications for glycemic control, if necessary. Assess patients for elevated blood glucose and symptoms of hyperglycemia prior to infusion and continue to monitor while on treatment with TEPEZZA. Ensure patients with hyperglycemia or preexisting diabetes are under appropriate glycemic control before and while receiving TEPEZZA.

Hearing Impairment Including Hearing Loss: TEPEZZA may cause severe hearing impairment including hearing loss, which in some cases may be permanent. Assess patients' hearing before, during, and after treatment with TEPEZZA and consider the benefit-risk of treatment with patients.

ADVERSE REACTIONS

The most common adverse reactions (incidence ≥5% and greater than placebo) are muscle spasm, nausea, alopecia, diarrhea, fatigue, hyperglycemia, hearing impairment, dysgeusia, headache, dry skin, weight decreased, nail disorders, and menstrual disorders.

Please see Full Prescribing Information or visit TEPEZZAhcp.com for more information.

About Amgen

Amgen discovers, develops, manufactures and delivers innovative medicines to help millions of patients in their fight against some of the world's toughest diseases. More than 40 years ago, Amgen helped to establish the biotechnology industry and remains on the cutting-edge of innovation, using technology and human genetic data to push beyond what's known today. Amgen is advancing a broad and deep pipeline that builds on its existing portfolio of medicines to treat cancer, heart disease, osteoporosis, inflammatory diseases and rare diseases.

In 2024, Amgen was named one of the "World's Most Innovative Companies" by Fast Company and one of "America's Best Large Employers" by Forbes, among other external recognitions. Amgen is one of the 30 companies that comprise the Dow Jones Industrial Average[®], and it is also part of the Nasdaq-100 Index[®], which includes the largest and most innovative non-financial companies listed on the Nasdaq Stock Market based on market capitalization.

For more information, visit Amgen.com and follow Amgen on X, LinkedIn, Instagram, TikTok, YouTube and Threads.

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 Kyowa-Kirin Co., Ltd.), the performance of Otezla® (apremilast) (including anticipated Otezla sales growth and the timing of non-GAAP EPS accretion), the Teneobio, Inc. acquisition, the ChemoCentryx, Inc. acquisition, or the Horizon Therapeutics plc acquisition (including the prospective performance and outlook of Horizon's business, performance and opportunities and any potential strategic benefits, synergies or opportunities expected as a result of such acquisition), 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 on our business, outcomes, progress, 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. 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. We or others could identify safety, side effects or manufacturing problems with our products, including our devices, after they are on the market. 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. 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, 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. There can be no guarantee that we will be able to realize any of the strategic benefits, synergies or opportunities arising from the Horizon acquisition, and such benefits, synergies or opportunities may take longer to realize than expected. We may not be able to successfully integrate Horizon, and such acquisition or integration may take longer, be more difficult or cost more than expected. A breakdown, cyberattack or information security breach of our information technology systems 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. Our business and operations may be negatively affected by the failure, or perceived failure, of achieving our environmental, social and governance objectives. The effects of global climate change and related natural disasters could negatively affect our business and operations. 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 favourable to us, or at all.

References

- 1. Smith TJ, Kahaly GJ, Ezra DG, et al. Teprotumumab for thyroid-associated ophthalmopathy. *N Engl J Med.* 2017;376(18):1748-1761.
- 2. Douglas RS, Kahaly GJ, Patel A, et al. Teprotumumab for the treatment of active thyroid eye disease. *N Engl J Med*. 2020;382(4):341-352.
- 3. Douglas RS, et al. Efficacy and Safety of Teprotumumab in Patients With Thyroid Eye Disease of Long Duration and Low Disease Activity. *The Journal of Clinical Endocrinology & Metabolism.* 2023; 109 (1): 25-35.
- 4. Barrio-Barrio J, et al. Graves' Ophthalmopathy: VISA versus EUGOGO Classification, Assessment, and Management. *Journal of Ophthalmopathy*. 2015;2015:249125.
- 5. Weightman DR, et al. Autoantibodies to IGF-1 Binding Sites in Thyroid Associated Ophthalmopathy. *Autoimmunity*. 1993;16(4):251–257.
- 6. Pritchard J, et al. Immunoglobulin Activation of T Cell Chemoattractant Expression in Fibroblasts from Patients with Graves' Disease Is Mediated Through the Insulin-Like Growth Factor 1 Receptor Pathway. *J Immunol.* 2003;170:6348-6354.
- 7. McKeag D, et al. Clinical features of dysthyroid optic neuropathy: a European Group on Graves' Orbitopathy (EUGOGO) survey. *Br J Ophthalmol*. 2007;91:455-458.
- 8. Bartalena L, Kahaly GJ, Baldeschi L, et al. The 2021 European Group on Graves' Orbitopathy (EUGOGO) Clinical Practice Guidelines for the Medical Management of Graves' Orbitopathy [published online ahead of print]. *Eur J Endocrinol.* 2021 Jul 1:EJE-21-0479.R1. doi: 10.1530/EJE-21-0479.

CONTACT: Amgen, Thousand Oaks Madison Howard, 773-636-4910 (media) Jessica Akopyan, 805-440-5721 (media) Justin Claeys, 805-313-9775 (investors)



C View original content to download multimedia: https://www.prnewswire.com/news-releases/amgen-to-submit-teprotumumab-marketing-authorization-application-to-the-european-medicines-agency-302128358.html

SOURCE Amgen