Lynozyfic™ (linvoseltamab) Approved in the European Union for the Treatment of Relapsed/Refractory Multiple Myeloma

April 28, 2025 at 7:01 AM EDT

Approval of Lynozyfic is based on data showing deep and durable responses in relapsed/refractory multiple myeloma

Lynozyfic will provide a new option with convenient dosing and administration to patients who face cycles of relapse and remission

TARRYTOWN, N.Y., April 28, 2025 (GLOBE NEWSWIRE) -- Regeneron Pharmaceuticals, Inc. (NASDAQ: REGN) today announced that the European Commission (EC) has granted conditional marketing approval of Lynozyfic™ (linvoseltamab) to treat adults with relapsed and refractory (R/R) multiple myeloma (MM). The indication is specific to those who have received at least three prior therapies, including a proteasome inhibitor, an immunomodulatory agent and an anti-CD38 monoclonal antibody, and have demonstrated disease progression on the last therapy. Lynozyfic is a bispecific antibody designed to bridge B-cell maturation antigen (BCMA) on MM cells with CD3-expressing T cells to facilitate T-cell activation and cancer-cell killing.

Lynozyfic is the first BCMAxCD3 therapy approved that can be dosed every four weeks due to a response-adapted regimen if a very good partial response (VGPR) or better is achieved following completion of at least 24 weeks of therapy. The regimen includes monitoring in close proximity of a qualified treatment center for safety during the step-up dosing period (one 24-hour period after the first step-up dose and another 24-hour period after the second step-up dose, if certain safety events occur).

“Despite treatment advances, patients with multiple myeloma inevitably endure relapses, reduced responses to subsequent therapies, and increasingly shorter remissions. For those who develop relapsed and refractory disease after having been exposed to the three major drug classes, it’s important to have new therapies with different mechanisms of action like linvoseltamab,” said Paula Rodriguez-Otero, M.D., Department of Hematology, Cancer Center Clínica Universidad de Navarra, Pamplona, Navarra, Spain. “In a clinical trial, linvoseltamab demonstrated compelling and impressive efficacy with the potential for complete remission in this patient population, including those with high disease burden. Furthermore, its response-adapted schedule will provide patients a convenient treatment option.”

The EC approval is based on results from the pivotal LINKER-MM1 trial (n=117 at the 200 mg dose of Lynozyfic), which demonstrated robust and durable responses in patients with R/R MM. Results showed a 71% objective response rate (ORR), with 50% of patients achieving a complete response (CR) or better, as determined by an independent review committee. The minimal residual disease (MRD) negativity rate in patients achieving a CR or stringent CR was 41% (24 of 58 patients; 95% confidence interval [CI]: 29 to 55). The median duration of response (DOR) was 29 months (95% CI: 19 to not estimable).

The most frequent adverse reactions were musculoskeletal pain (52%), cytokine release syndrome (CRS; 46%), neutropenia (43%), cough (42%), diarrhea (39%), anemia (38%), fatigue (36%), pneumonia (32%), and upper respiratory tract infection (30%). The majority of CRS cases were Grade 1 (35%) or Grade 2 (10%), and there was one case of Grade 3 CRS (0.9%) and no cases of ≥Grade 4 CRS. The median time to first CRS onset was 11 hours (range: -1.1 to 184 hours), with the median time to resolution within 1 day (16 hours; range: 1-96 hours). Grade 3 immune effector cell-associated neurotoxicity syndrome (ICANS; 2.6%) and infections that were Grade 3 or 4 (36%) or fatal (4%) also occurred.

“Lynozyfic is our second approved bispecific antibody – in this case for relapsed/refractory multiple myeloma patients – reinforcing our relentless commitment to transforming cancer care for those who need it most,” said George D. Yancopoulos, M.D., Ph.D., Board co-Chair, President and Chief Scientific Officer of Regeneron. “We are excited by the potential of Lynozyfic and its differentiated clinical profile, dosing and administration. Given the strength of the data, we are pursuing a robust clinical development program exploring its use – in earlier lines of therapy as monotherapy and in novel combinations – with the hope of further advancing care for patients.”

In the U.S., the FDA accepted for review the Biologics License Application for linvoseltamab in adults with R/R MM with a target action date of July 10, 2025.

About Multiple Myeloma
As the second most common blood cancer, there are over 35,000 new cases of MM diagnosed in Europe and 187,000 new cases of MM diagnosed globally every year. The disease is characterized by the proliferation of cancerous plasma cells (MM cells) that crowd out healthy blood cells in the bone marrow, infiltrate other tissues and cause potentially life-threatening organ injury. Despite treatment advances, MM is not curable and while current treatments are able to slow the progression of the cancer, most patients will ultimately experience cancer progression and require additional therapies.

About the Lynozyfic (linvoseltamab) Clinical Development Program

Lynozyfic as monotherapy is indicated for the treatment of adult patients with R/R MM who have received at least three prior therapies, including a proteasome inhibitor, an immunomodulatory agent and an anti-CD38 monoclonal antibody, and have demonstrated disease progression on the last therapy. For complete product information, please see the Summary of Product Characteristics that can be found on www.ema.europa.eu in due course.

The ongoing, open-label, multicenter Phase 1/2 dose-escalation and dose-expansion LINKER-MM1 trial is investigating linvoseltamab in more than 300 enrolled patients with R/R MM. The Phase 1 dose-escalation portion of the trial – which is now complete – primarily assessed safety, tolerability and dose-limiting toxicities across nine dose levels of linvoseltamab and explored different administration regimens. The ongoing Phase 2 dose expansion portion is assessing the safety and anti-tumor activity of linvoseltamab, with the primary endpoint of ORR. Key secondary endpoints include DOR, progression-free survival, rate of MRD negative status and overall survival.

Eligibility in the Phase 2 portion requires patients to have received at least three prior lines of therapy or have triple-class refractory MM. Linvoseltamab is administered with an initial step-up dosing regimen followed by the full 200 mg dose administered weekly. After week 14, all patients transition to every two-week dosing. A response-adapted regimen further enables patients to shift to every four-week dosing if they achieve a VGPR or better and have completed at least 24 weeks of therapy. The regimen requires a total of two 24-hour hospitalizations for safety monitoring.

Linvoseltamab is being investigated in a broad clinical development program exploring its use as a monotherapy as well as in combination regimens across different lines of therapy in MM, including earlier lines of treatment, as well as plasma cell precursor disorders. They include evaluating linvoseltamab in a Phase 1b trial (LINKER-MM2) in combination with other cancer treatments in R/R MM as well as a Phase 3 confirmatory trial (LINKER-MM3) as a monotherapy in R/R MM. For more information on Regeneron's clinical trials in blood cancer, visit the clinical trials website, or contact via clinicaltrials@regeneron.com or 844-734-6643.

About Regeneron in Hematology

At Regeneron, we're applying more than three decades of biology expertise with our proprietary *VelociSuite*® technologies to develop medicines for patients with diverse blood cancers and rare blood disorders.

Our blood cancer research is focused on bispecific antibodies that are being investigated both as monotherapies and in various combinations and emerging therapeutic modalities. Together, they provide us with unique combinatorial flexibility to develop customized and potentially synergistic cancer treatments.

Our research and collaborations to develop potential treatments for rare blood disorders include explorations in antibody medicine, gene editing and gene-knockout technologies, and investigational RNA-approaches focused on depleting abnormal proteins or blocking disease-causing cellular signaling.

About Regeneron's *VelocImmune*® Technology

Regeneron's *VelocImmune* technology utilizes a proprietary genetically engineered mouse platform endowed with a genetically humanized immune system to produce optimized fully human antibodies. When Regeneron's co-Founder, President and Chief Scientific Officer George D. Yancopoulos was a graduate student with his mentor Frederick W. Alt in 1985, they were the first to envision making such a genetically humanized mouse, and Regeneron has spent decades inventing and developing *VelocImmune* and related *VelociSuite* technologies. Dr. Yancopoulos and his team have used *VelocImmune* technology to create a substantial proportion of all original, FDA-approved fully human monoclonal antibodies. This includes Dupixent® (dupilumab), Libtayo® (cemiplimab-rwlc), Praluent® (alirocumab), Kevzara® (sarilumab), Evkeeza® (evinacumab-dgnb), Inmazeb® (atoltivimab, maftivimab and odesivimab-ebgn) and Veopoz® (pozelimab-bbfg). In addition, REGEN-COV® (casirivimab and imdevimab) had been authorized by the FDA during the COVID-19 pandemic until 2024.

About Regeneron

Regeneron (NASDAQ: REGN) is a leading biotechnology company that invents, develops and commercializes life-transforming medicines for people with serious diseases. Founded and led by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to numerous approved treatments and product candidates in development, most of which were homegrown in our laboratories. Our medicines and pipeline are designed to help patients with eye diseases, allergic and inflammatory diseases, cancer, cardiovascular and metabolic diseases, neurological diseases, hematologic conditions, infectious diseases, and rare diseases.

Regeneron pushes the boundaries of scientific discovery and accelerates drug development using our proprietary technologies, such as *VelociSuite*, which produces optimized fully human antibodies and new classes of bispecific antibodies. We are shaping the next frontier of medicine with data-powered insights from the Regeneron Genetics Center® and pioneering genetic medicine platforms, enabling us to identify innovative targets and complementary approaches to potentially treat or cure diseases.

For more information, please visit www.Regeneron.com or follow Regeneron on LinkedIn, Instagram, Facebook or X.

Forward-Looking Statements and Use of Digital Media

This press release includes forward-looking statements that involve risks and uncertainties relating to future events and the future performance of Regeneron Pharmaceuticals, Inc. ("Regeneron" or the "Company"), and actual events or results may differ materially from these forward-looking statements. Words such as "anticipate," "expect," "intend," "plan," "believe," "seek,"

"estimate," variations of such words, and similar expressions are intended to identify such forward-looking statements, although not all forward-looking statements contain these identifying words. These statements concern, and these risks and uncertainties include, among others, the nature, timing, and possible success and therapeutic applications of products marketed or otherwise commercialized by Regeneron and/or its collaborators or licensees (collectively, "Regeneron's Products") and product candidates being developed by Regeneron and/or its collaborators or licensees (collectively, "Regeneron's Product Candidates") and research and clinical programs now underway or planned, including without limitation Lynozyfic™ (linvoseltamab) to treat adults with relapsed and refractory ("R/R") multiple myeloma ("MM"); uncertainty of the utilization, market acceptance, and commercial success of Regeneron's Products (such as Lynozyfic) and Regeneron's Product Candidates and the impact of studies (whether conducted by Regeneron or others and whether mandated or voluntary), including the studies discussed or referenced in this press release, on any of the foregoing; the likelihood, timing, and scope of possible regulatory approval and commercial launch of Regeneron's Product Candidates and new indications for Regeneron's Products, including linvoseltamab for the treatment of adults with R/R MM in the United States based on the Biologics License Application referenced in this press release as well as linvoseltamab as a monotherapy and in combination regimens across different lines of therapy in MM and plasma cell precursor disorders as referenced in this press release; the ability of Regeneron's collaborators, licensees, suppliers, or other third parties (as applicable) to perform manufacturing, filling, finishing, packaging, labeling, distribution, and other steps related to Regeneron's Products and Regeneron's Product Candidates; the ability of Regeneron to manage supply chains for multiple products and product candidates; safety issues resulting from the administration of Regeneron's Products (such as Lynozyfic) and Regeneron's Product Candidates in patients, including serious complications or side effects in connection with the use of Regeneron's Products and Regeneron's Product Candidates in clinical trials; determinations by regulatory and administrative governmental authorities which may delay or restrict Regeneron's ability to continue to develop or commercialize Regeneron's Products and Regeneron's Product Candidates; ongoing regulatory obligations and oversight impacting Regeneron's Products, research and clinical programs, and business, including those relating to patient privacy; the availability and extent of reimbursement of Regeneron's Products from third-party payers, including private payer healthcare and insurance programs, health maintenance organizations, pharmacy benefit management companies, and government programs such as Medicare and Medicaid; coverage and reimbursement determinations by such payers and new policies and procedures adopted by such payers; changes in laws, regulations, and policies affecting the healthcare industry; competing drugs and product candidates that may be superior to, or more cost effective than, Regeneron's Products and Regeneron's Product Candidates (including biosimilar versions of Regeneron's Products); the extent to which the results from the research and development programs conducted by Regeneron and/or its collaborators or licensees may be replicated in other studies and/or lead to advancement of product candidates to clinical trials, therapeutic applications, or regulatory approval; unanticipated expenses; the costs of developing, producing, and selling products; the ability of Regeneron to meet any of its financial projections or guidance and changes to the assumptions underlying those projections or guidance; the potential for any license, collaboration, or supply agreement, including Regeneron's agreements with Sanofi and Bayer (or their respective affiliated companies, as applicable) to be cancelled or terminated; the impact of public health outbreaks, epidemics, or pandemics on Regeneron's business; and risks associated with litigation and other proceedings and government investigations relating to the Company and/or its operations (including the pending civil proceedings initiated or joined by the U.S. Department of Justice and the U.S. Attorney's Office for the District of Massachusetts), risks associated with intellectual property of other parties and pending or future litigation relating thereto (including without limitation the patent litigation and other related proceedings relating to EYLEA® (aflibercept) Injection), the ultimate outcome of any such proceedings and investigations, and the impact any of the foregoing may have on Regeneron's business, prospects, operating results, and financial condition. A more complete description of these and other material risks can be found in Regeneron's filings with the U.S. Securities and Exchange Commission, including its Form 10-K for the year ended December 31, 2024. Any forward-looking statements are made based on management's current beliefs and judgment, and the reader is cautioned not to rely on any forward-looking statements made by Regeneron. Regeneron does not undertake any obligation to update (publicly or otherwise) any forward-looking statement, including without limitation any financial projection or guidance, whether as a result of new information, future events, or otherwise.

Regeneron uses its media and investor relations website and social media outlets to publish important information about the Company, including information that may be deemed material to investors. Financial and other information about Regeneron is routinely posted and is accessible on Regeneron's media and investor relations website (https://investor.regeneron.com) and its LinkedIn page (https://www.linkedin.com/company/regeneron-pharmaceuticals).

Contacts:

Media Relations
Tammy Allen
Tel: +1 914-306-2698
tammy.allen@regeneron.com

Investor Relations
Mark Hudson
Tel: +1 914-847-3482
mark.hudson@regeneron.com

REGENERON

Source: Regeneron Pharmaceuticals, Inc.