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New REGN5458 (BCMAxCD3) Phase 1 Data Show 75% Response Rate at Highest Dose Levels Studied in Patients with Heavily Pretreated Multiple Myeloma

December 11, 2021 at 12:00 PM EST

TARRYTOWN, N.Y., Dec. 11, 2021 /PRNewswire/ --

Includes latest data for REGN5458, including in highest dose levels (200-800 mg)

Among patients who responded across all dose groups (3-800 mg), there was a 90% probability of being event-free (i.e., alive without disease progression) 8 months from the time of response

Regeneron Pharmaceuticals, Inc. (NASDAQ: **REGN**) today announced new results for higher dose level cohorts of its investigational REGN5458 (BCMAxCD3) bispecific antibody, which were presented in an oral session at the 2021 American Society of Hematology (ASH) Annual Meeting in Atlanta, GA. The new results from the Phase 1 portion of the Phase 1/2 trial in patients with relapsed/refractory multiple myeloma found a 51% overall response rate (ORR) across all dose groups, rising to 75% in patients who received higher doses of REGN5458 (200-800 mg).

"Patients with multiple myeloma often face a long and challenging journey, with most becoming refractory to multiple lines of therapy over time," said Jeffrey Zonder, M.D., Professor of Oncology at the Karmanos Cancer Institute, MI, and a trial investigator. "Today's REGN5458 data show promising response rates, particularly at the higher dose levels, in patients with a high disease burden and highly refractory disease who otherwise would have very limited options available."

REGN5458 is a bispecific antibody designed to bind to BCMA on multiple myeloma cells and the CD3 receptor on T-cells in order to bridge them together and activate T-cells to kill the cancer cells. It is currently being assessed in the potentially registrational Phase 2 portion of the trial, which is expected to complete recruitment in 2022.

In results presented at ASH today, 73 patients were treated with REGN5458 doses ranging from 3-800 mg for up to 21 months at the time of data cutoff. Patients had received a median of 5 prior lines of therapy, with 38% (n=28) being penta-refractory and 90% (n=66) being refractory to the last line of therapy.

The ORR was 75% at the highest dose levels (200-800 mg, n=18/24), and 51% among all enrolled patients (n=37/73). Most responses occurred within the first month of treatment and deepened over time. Among responders across all dose groups:

- 86% (n=32/37) achieved a very good partial response (VGPR) or better.
- 43% (n=16/37) achieved a complete response (CR), with 40% of evaluable CR patients (n=4/10) being minimal residual disease (MRD) negative.
- 8 months from the time of response, there was a 90% probability of being event-free (95% CI: 73%, 97%), defined by the absence of disease progression or death. The estimated median duration of response had not yet been reached at the time of data cutoff.
- Responses occurred rapidly, usually within the first month of treatment, and continue to deepen with longer treatment; the higher dose groups currently have substantially shorter follow up.

The safety profile was generally consistent across all dose levels. Cytokine release syndrome (CRS) was reported in 38% of patients (n=28), the majority of which were Grade 1 (n=25), with no cases \geq Grade 3. The other most common treatment-emergent adverse events (TEAEs) were fatigue (n=33), pyrexia (n=26), nausea (n=24) and anemia (n=23). The most common \geq Grade 3 TEAEs were anemia (n=17), neutropenia (n=16), lymphopenia (n=14), thrombocytopenia (n=10) and pneumonia (n=9). There were 5 deaths in the trial, all due to infection; none were considered related to the the study medication by investigators.

"In multiple myeloma, the highest treatment response rates are typically seen earlier in the course of the disease, using multi-drug regimens. It is very encouraging that we observed a 75% response rate with higher doses of REGN5458 monotherapy in patients with more advanced disease," said L. Andres Sirulnik, M.D., Ph.D., Senior Vice President, Clinical Development, Hematology at Regeneron. "This adds to the growing body of encouraging data across our investigational CD3 bispecifics, supporting the continued development of this class across a diverse range of blood cancers."

REGN5458 is currently under clinical development and its safety and efficacy have not been fully evaluated by any regulatory authority.

Investor Webcast Information

Regeneron will host a conference call and simultaneous webcast to share updates on the company's hematology portfolio on Monday, December 13 at 4:30 PM ET. To access this call, dial (888) 660-6127 (U.S.) or (973) 890-8355 (International); conference ID 2668896. A link to the webcast may be accessed from the 'Investors and Media' page of Regeneron's website at <http://investor.regeneron.com/events.cfm>. A replay of the conference call and webcast will be archived on the company's website for at least 30 days.

About the Dose-escalation Trial

The open-label Phase 1/2 dose-escalation trial is investigating REGN5458 (BCMAxCD3) in patients with relapsed/refractory multiple myeloma who had received at least three prior lines of therapy or were double refractory. All patients had received prior treatment with proteasome inhibitors, immunomodulatory drugs and CD38 antibody treatments.

The Phase 1 portion of the trial is primarily assessing safety, tolerability and dose-limiting toxicities of REGN5458, with efficacy as secondary endpoints. The Phase 2 portion will further assess REGN5458 anti-tumor activity and safety. If you are interested in learning more about this trial, please contact us (clinicaltrials@regeneron.com, +1 844 734 6643), or visit our clinical trial [website](#).

About Multiple Myeloma

Multiple myeloma is the second most common blood cancer with approximately 30,192 and 168,765 new diagnoses in the U.S. and the world, respectively, in 2020. It is characterized by the proliferation of cancerous plasma cells (multiple myeloma cells) that crowd out healthy blood cells in the bone marrow, infiltrate other tissues and cause potentially life-threatening organ injury. Multiple myeloma is not curable despite treatment advances, and while current treatments are able to slow the progression of the cancer, most patients will ultimately experience cancer progression and require additional therapies. In addition, patients are at increased risk of frequent infections, bone problems, reduced kidney function and anemia.

About Regeneron in Hematology

At Regeneron, we're translating more than 3 decades of biology expertise with our proprietary *VelociSuite*[®] technologies to develop potentially paradigm-changing medicines for patients with diverse blood cancers and rare blood disorders.

Our blood cancer research is focused on bispecific antibodies that are being assessed both as monotherapies and in combination with each other 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 using CRISPR and gene-knockout technologies, as well as investigational RNA-approaches that are being investigated for their ability to deplete abnormal proteins or block disease-causing cellular signaling.

For more information, visit <https://www.regeneron.com/pipeline>.

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 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 approximately a quarter of all original, FDA-approved or authorized fully human monoclonal antibodies currently available. This includes Dupixent[®] (dupilumab), REGEN-COV[®] (casirivimab and imdevimab), Libtayo[®] (cemiplimab-rwlc), Praluent[®] (alirocumab), Kevzara[®] (sarilumab), Evkeeza[®] (evinacumab-dgnb) and Inmazeb[™] (atoltivimab, maftivimab, and odesivimab-ebgn).

About Regeneron

Regeneron (NASDAQ: REGN) is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Founded and led for over 30 years by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to nine FDA-approved treatments and numerous product candidates in development, almost all 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, pain, hematologic conditions, infectious diseases and rare diseases.

Regeneron is accelerating and improving the traditional drug development process through our proprietary *VelociSuite* technologies, such as *VelocImmune*, which uses unique genetically humanized mice to produce optimized fully human antibodies and bispecific antibodies, and through ambitious research initiatives such as the Regeneron Genetics Center, which is conducting one of the largest genetics sequencing efforts in the world.

For additional information about the company, please visit www.regeneron.com or follow @Regeneron on Twitter.

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 impact of SARS-CoV-2 (the virus that has caused the COVID-19 pandemic) on Regeneron's business and its employees, collaborators, and suppliers and other third parties on which Regeneron relies, Regeneron's and its collaborators' ability to continue to conduct research and clinical programs, Regeneron's ability to manage its supply chain, net product sales of products marketed or otherwise commercialized by Regeneron and/or its collaborators or licensees (collectively, "Regeneron's Products"), and the global economy; the nature, timing, and possible success and therapeutic applications of 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 REGN5458 (a BCMAxCD3 bispecific antibody) and other blood cancer and rare blood disorder programs; the likelihood, timing, and scope of possible regulatory approval and commercial launch of Regeneron's Product Candidates and new indications for Regeneron's Products, such as REGN5458 for the treatment of multiple myeloma; uncertainty of the utilization, market acceptance, and commercial success of Regeneron's Products and Regeneron's Product Candidates and the impact of studies (whether conducted by Regeneron or others and whether mandated or voluntary), including the study discussed in this press release, on any of the foregoing or any potential regulatory approval of Regeneron's Products and Regeneron's Product Candidates (such as REGN5458); 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 manufacture and manage supply chains for multiple products and product candidates; safety issues resulting from the administration of Regeneron's Products 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; competing drugs and product candidates that may be superior to, or more cost effective than, Regeneron's Products and Regeneron's Product Candidates; the extent to which the results from the research and development programs conducted by Regeneron and/or its collaborators 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, Bayer, and Teva Pharmaceutical Industries Ltd. (or their respective affiliated companies, as applicable), to be cancelled or terminated; and 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® (afibercept) Injection, Dupixent® (dupilumab), Praluent® (alirocumab), and REGEN-COV® (casirivimab and imdevimab)), other litigation and other proceedings and government investigations relating to the Company and/or its operations, 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, 2020 and its Form 10-Q for the quarterly period ended September 30, 2021. 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 (<http://newsroom.regeneron.com>) and its Twitter feed (<http://twitter.com/regeneron>).

Contacts:

Media Relations

Taylor Ramsey

Tel: +1 914-409-2381


taylor.ramsey@regeneron.com

Investor Relations

Vesna Tomic

Tel: +1 914-847-5443

vesna.tomic@regeneron.com

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