Regeneron Announces Positive Topline Phase 2 Data with Anti-C5 Antibody Pozelimab in Patients with a Rare Blood Disorder

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Results from initial 6-patient cohort show pozelimab reduced lactate dehydrogenase (LDH) to normal levels at week 8 in patients with paroxysmal nocturnal hemoglobinuria (PNH), utilizing a weekly subcutaneous dosing regimen

Second part of Phase 2 trial initiated; plans for Phase 3 program underway

Regeneron Pharmaceuticals, Inc. (NASDAQ: **REGN**) today announced topline data from the pozelimab (REGN3918) Phase 2 clinical program in paroxysmal nocturnal hemoglobinuria (PNH), validating the weekly 800 mg subcutaneous (SC) dosing regimen, following an initial intravenous (IV) loading dose. Pozelimab reduced the abnormal destruction of red blood cells, otherwise known as "hemolysis," with patients in the initial cohort achieving normal levels of a blood biomarker of elevated hemolysis called lactate dehydrogenase (LDH).

PNH is an ultra-rare, chronic, life-threatening disease where genetic mutations cause hemolysis, resulting in a range of symptoms including fatigue, shortness of breath and blood clots. Even with existing therapies, which require regular intravenous infusions administered at infusion centers or during a home visit by a health professional, approximately 50% of newly-treated patients do not achieve normal LDH levels.

"In our view, any new medicine for PNH must deliver real change for patients, such as more patients achieving normal LDH levels, or a reduced treatment burden that potentially allows for at-home self-administration," said George D. Yancopoulos, M.D., Ph.D., President and Chief Scientific Officer at Regeneron. "We are encouraged by these early pozelimab results, with patients achieving normal levels of LDH by week 8 using the subcutaneous dosing regimen. We look forward to speaking with regulators about the next phase of our program for these patients."

Pozelimab is a *VelocImmune*®-derived fully-human monoclonal antibody that blocks the pathway leading to red blood cell hemolysis, which was designed to reduce LDH levels and the occurrence of breakthrough hemolysis, using a self-administered subcutaneous regimen. All 6 patients in the initial treatment cohort treated with pozelimab experienced rapid and sustained reductions in LDH up to week 8. By week 2, LDH was reduced to <1.5 times the upper limit of normal (ULN) in all patients, and at the pre-specified week 8 evaluation timepoint, the mean LDH level was 0.74 (x ULN); range: 0.62-0.91 (x ULN). One of these patients had a known C5 variant resistant to existing treatments.

In these 6 patients, no adverse events (AEs) were serious or led to discontinuation. At the cut-off date of the analyses, treatment-related AEs were reported in 3 patients (50%), including headache (n=2), injection site reaction (n=1) and nausea (n=1). One patient received a blood transfusion on day 50 due to underlying bone marrow dysfunction. In the earlier Phase 1 trial, the only serious AE was salpingitis in a single participant.

Patients in the trial initially received a 30 mg/kg IV loading dose of pozelimab, followed by weekly 800 mg SC injections. Current approved treatments are only available via IV infusion.

Data from the Phase 2 trial will be presented at an upcoming medical meeting.

About Pozelimab
Pozelimab is an investigational, fully-human monoclonal antibody designed to block complement factor C5 and prevent the destruction of red blood cells (hemolysis) that cause the symptoms of PNH and other diseases mediated by complement pathway activity. It is an IgG4 antibody that binds with high affinity to wild-type and variant human C5 and blocks its activity.

Pozelimab was invented using Regeneron's proprietary *VelocImmune* technology, which uses a unique genetically-humanized mouse to produce optimized fully-human antibodies. Pozelimab is currently under clinical development, and its safety and efficacy have not been evaluated by any regulatory authority.

About the Phase 2 Trial
The ongoing open-label, single-arm, two-part trial will enroll patients with active symptomatic PNH who are naïve to complement inhibitors or who have not received treatment with a complement inhibitor within 6 months prior to entering the trial. It consists of two cohorts: cohort A (n=6), which is complete and achieved its objective of dose confirmation; and cohort B (n=approx. 30), which is ongoing and will focus on further evaluating efficacy and safety in a larger PNH population.

Patients in the trial suffer from elevated hemolytic activity, as reflected by baseline LDH levels of ≥2 times the ULN. Patients are administered a single 30 mg/kg IV loading dose of pozelimab followed by a once-weekly 800 mg SC dose.

This Phase 2 trial could potentially provide pivotal data supporting approval for this orphan disease indication.

Future Development Opportunities
Regeneron is also collaborating with Alnylam to discover, develop and commercialize new RNA interference (RNAi) therapeutics for a broad range of diseases. This includes a joint effort led by Regeneron evaluating anti-C5 antibody-siRNA combinations for C5 complement-mediated diseases, including evaluating the combination of pozelimab with Alnylam's investigational therapy, cemdisiran.

About Regeneron Pharmaceuticals, Inc.
Regeneron (NASDAQ: REGN) is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Founded

and led for 30 years by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to seven FDA-approved treatments and numerous product candidates in development, 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, infectious diseases, pain and rare diseases.

Regeneron is accelerating and improving the traditional drug development process through our proprietary *VelociSuite*® technologies, including *VelocImmune*®, which uses a unique genetically-humanized mouse 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.

Regeneron 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 Regeneron's products, product candidates, and research and clinical programs now underway or planned, including without limitation pozelimab (REGN3918); unforeseen safety issues resulting from the administration of products and product candidates in patients, including serious complications or side effects in connection with the use of Regeneron's product candidates (such as pozelimab) in clinical trials; the extent to which the results from the research and development programs conducted by Regeneron or its collaborators (including the ongoing Phase 2 trial evaluating pozelimab discussed in this press release) may be replicated in other studies and lead to therapeutic applications; the likelihood, timing, and scope of possible regulatory approval and commercial launch of Regeneron's late-stage product candidates and new indications for marketed products; ongoing regulatory obligations and oversight impacting Regeneron's marketed products, research and clinical programs, and business, including those relating to patient privacy; 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 product candidates; competing drugs and product candidates that may be superior to Regeneron's products and product candidates; uncertainty of market acceptance and commercial success of Regeneron's products and product candidates and the impact of studies (whether conducted by Regeneron or others and whether mandated or voluntary) on the commercial success of Regeneron's products and product candidates; the ability of Regeneron to manufacture and manage supply chains for multiple products and product candidates; the ability of Regeneron's collaborators, suppliers, or other third parties (as applicable) to perform manufacturing, filling, finishing, packaging, labeling, distribution, and other steps related to Regeneron's products and product candidates; the availability and extent of reimbursement of the Company'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; 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 or collaboration 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 without any further product success; 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 Dupixent® (dupilumab) and Praluent® (alirocumab)), 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 fiscal year ended December 31, 2018 and its Form 10-Q for the quarterly period ended September 30, 2019. 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 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).

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