Jasper Therapeutics Announces First Patient Dosed in Phase 1b/2a ETESIAN Clinical Study of Briquilimab in Asthma

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REDWOOD CITY, Calif., Dec. 02, 2024 (GLOBE NEWSWIRE) -- Jasper Therapeutics, Inc. (Nasdaq: JSPR) (Jasper), a clinical stage biotechnology company focused on development of briquilimab, a novel antibody therapy targeting c-Kit (CD117) to address mast cell driven diseases such as chronic spontaneous urticaria (CSU), chronic inducible urticaria (CIndU) and asthma, today announced that the first patient has been dosed in Jasper's Phase 1b/2a clinical challenge study evaluating briquilimab in allergic asthma, called ETESIAN (**E**valuating **T**he **E**fficacy and **S**afety of briquilimab **I**n particip**AN**ts with allergic asthma). The ETESIAN study is evaluating a single administration of subcutaneous briquilimab in patients with asthma.

"Dosing of the first patient in our ETESIAN study in asthma is a significant milestone, marking our third clinical program evaluating briquilimab in an inflammatory disease driven by unwanted mast cell activity," said Edwin Tucker, M.D., Chief Medical Officer of Jasper. "Following dose escalation through Part 2 of the BEACON study in CSU, we obtained regulatory clearance to move directly to a subcutaneous 180mg dose in the ETESIAN study, which we believe will drive deep mast cell depletion in the airways and enable durable clinical benefit for patients with asthma. We look forward to providing enrollment updates as we progress through the study and anticipate reporting the initial data in the second half of 2025."

The Phase 1b/2a ETESIAN study is a single dose double-blind, placebo-controlled challenge study that is expected to enroll approximately 30 patients across as many as 7 sites in Canada with a key objective of demonstrating proof-of-concept in asthma utilizing a potential therapeutic dose to inform future trials in the broader asthma population. The study will be conducted utilizing a single 180mg dose of subcutaneous briquilimab and key assessments will include both early and late asthmatic response, changes in airway hyperresponsiveness, mast cell depletion and recovery, and safety.

"Depletion of mast cells via inhibition of c-Kit is a novel mechanism with the potential to alleviate asthmatic response in patients underserved by existing therapies," said Paul O'Byrne, M.D., Professor, Dean and Vice President of the Faculty of Health Sciences at McMaster University. "As a potent and targeted c-Kit inhibitor, I believe briquilimab has the potential to overcome the safety issues that have limited development of other c-Kit inhibiting agents and, in turn, serve as an important treatment option for patients suffering from asthma. I look forward to enrolling patients into the ETESIAN study."

About Briquilimab

Briquilimab is a targeted aglycosylated monoclonal antibody that blocks stem cell factor from binding to the cell-surface receptor c-Kit, also known as CD117, thereby inhibiting signaling through the receptor. This inhibition disrupts the critical survival signal, leading to the depletion of the mast cells via apoptosis which removes the underlying source of the inflammatory response in mast cell driven diseases such as chronic urticaria and allergic asthma. Jasper is currently conducting clinical studies of briquilimab as a treatment in patients with CSU, CIndU or asthma. To date, briquilimab has a demonstrated efficacy and safety profile in more than 160 dosed participants and healthy volunteers, with clinical outcomes in CIndU, and as a conditioning agent in severe combined immunodeficiency (SCID), acute myeloid leukemia (AML), myelodysplastic syndromes (MDS), Fanconi anemia (FA), and sickle cell disease (SCD).

About Jasper

Jasper is a clinical-stage biotechnology company focused on developing briquilimab, a monoclonal antibody targeting c-Kit (CD117) as a therapeutic for chronic mast and stem cell diseases such as chronic urticaria and asthma. To date, briquilimab has a demonstrated efficacy and safety profile in more than 160 dosed participants and healthy volunteers, with clinical outcomes in CIndU and as a conditioning agent in SCID, AML, MDS, FA, and SCD. For more information, please visit us at www.jaspertx.com.

Forward-Looking Statements

Certain statements included in this press release that are not historical facts are forward-looking statements for purposes of the safe harbor provisions under the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements are sometimes accompanied by words such as "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "should," "would," "plan," "predict," "potential," "seem," "seek," "future," "outlook" and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding briquilimab's potential, including with respect to its potential in mast cell driven diseases such as CSU, CIndU, and asthma, the potential for deep mast cell depletion in the airways and its potential ability to enable durable clinical benefit for patients with asthma; Jasper's expectations regarding the Phase 1b/2a clinical challenge study evaluating briquilimab in allergic asthma, including protocols, expected patient enrollment, expected site locations, expected key objective and key assessments and expected timing to report initial data; and Jasper's expectations regarding building out its pipeline of programs evaluating briquilimab in mast cell driven diseases. These statements are based on various assumptions, whether or not identified in this press release, and on the current expectations of Jasper and are not predictions of actual performance. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on by an investor as, a guarantee, an assurance, a prediction or a definitive statement of fact or probability. Many actual events and circumstances are beyond the control of Jasper. These forward-looking statements are subject to a number of risks and uncertainties, including general economic, political and business conditions; the risk that the potential product candidates that Jasper develops may not progress through clinical development or receive required regulatory approvals within expected timelines or at all; the risk that clinical trials may not confirm any safety, potency or other product characteristics described or assumed in this press release; the risk that Jasper will be unable to successfully market or gain market acceptance of its product candidates; the risk that prior study results may not be replicated; the risk that Jasper's product candidates may not

be beneficial to patients or successfully commercialized; patients' willingness to try new therapies and the willingness of physicians to prescribe these therapies; the effects of competition on Jasper's business; the risk that third parties on which Jasper depends for laboratory, clinical development, manufacturing and other critical services will fail to perform satisfactorily; the risk that Jasper's business, operations, clinical development plans and timelines, and supply chain could be adversely affected by the effects of health epidemics; the risk that Jasper will be unable to obtain and maintain sufficient intellectual property protection for its investigational products or will infringe the intellectual property protection of others; and other risks and uncertainties indicated from time to time in Jasper's filings with the SEC, including its Annual Report on Form 10-K for the year ended December 31, 2023 and subsequent Quarterly Reports on Form 10-Q. If any of these risks materialize or Jasper's assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements. While Jasper may elect to update these forward-looking statements at some point in the future, Jasper specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing Jasper's assessments of any date subsequent to the date of this press release. Accordingly, undue reliance should not be placed upon the forward-looking statements.

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