

Jasper Therapeutics Announces Briquilimab Development Program in Asthma

May 13, 2024

- Expanding Portfolio of Mast Cell Programs with Plans to Initiate a Phase 1b/2a study in Patients with Asthma in Q4 2024
- Company to Host Key Opinion Leader Webinar on the Potential of Briquilimab in Asthma on May 20, 2024, at 8:00 a.m. FDT

REDWOOD CITY, Calif., May 13, 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) and chronic inducible urticaria (CIndU), today announced the expansion of its mast cell development portfolio with a Phase 1b/2a study evaluating briquilimab in asthma patients that is expected to begin enrolling in the fourth quarter of 2024.

"Mast cells are critical drivers of the inflammatory response in asthma," said Wendy Pang, M.D., Ph.D., Senior Vice President, Research and Translational Medicine. "These cells are located in multiple compartments in the lungs and, when triggered, release potent mediators such as histamine, cytokines, tryptase and others that contribute to the asthmatic response. At the recent American Academy of Allergy, Asthma, and Immunology (AAAAI) annual meeting in February we presented preclinical data generated in our c-Kit Mouse™ demonstrating that briquilimab led to the depletion of mast cells in the airways and prevented an allergen-induced asthmatic response. We look forward to reviewing these preclinical data at our KOL webinar next week and at upcoming conferences."

"Asthma remains a devastating chronic disease affecting millions of patients in the US despite current treatment options," said Ronald Martell, President and Chief Executive Officer of Jasper. "We believe that briquilimab's ability to deplete mast cells in the lung may have a significant impact on disease control across all types of asthma, including patients who are not indicated for current biologic agents or who remain refractory to them. Clinical proof of concept for the efficacy of c-Kit inhibition in asthma has been previously established with older, less specific c-Kit inhibitors, and we are excited bring the first anti-c-Kit antibody into human studies. With the anticipated launch of the Phase 1b/2a study later this year, we plan to present clinical data in the second half of 2025. This trial, along with our ongoing clinical studies in chronic spontaneous and chronic inducible urticarias, is the latest step in our goal of realizing briquilimab's therapeutic potential across numerous mast cell driven diseases affecting tens of millions of patients worldwide."

The Company will host a KOL webinar on the potential of briquilimab in asthma on May 20, 2024, at 8:00 a.m. EDT. The event will feature Professor Joshua Boyce, M.D., who will discuss the current treatment landscape and unmet medical need for patients suffering from asthma, as well as the potential of briquilimab as a therapeutic option. Jasper's leadership team will also provide an overview of the role of the mast cell in asthma, the preclinical data supporting development of briquilimab in asthma, as well as the plans for clinical development of briquilimab in asthma.

Joshua Boyce is the Albert L. Sheffer Professor of Medicine in the Field of Allergic Diseases at Harvard Medical School in Boston, Massachusetts, the Chief of the Division of Allergy and Clinical Immunology at the Brigham and Women's Hospital and the Director of the Jeff and Penny Vinik Center for Allergic Disease Research.

"Many patients suffering from asthma remain underserved by currently approved therapies," said Prof. Boyce. "I believe that mast cell depletion via c-Kit inhibition is a promising mechanism of action with potential to address significant unmet need in asthma, and as a potent and differentiated c-Kit inhibitor, briquilimab could serve as an important treatment option for the significant portion of the asthma community that is refractory to existing biologic agents. I look forward to discussing the unmet need in asthma, as well as the potential of c-Kit inhibition, during the upcoming webinar."

A live question and answer session with management will follow the formal presentations. To register for the event, please click here.

About Briquilimab

Briquilimab (formerly JSP191) 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. Jasper is currently conducting clinical studies of briquilimab as a treatment in patients with CSU or with ClndU. Briquilimab is also currently in clinical studies as a treatment for patients with LR-MDS and as a conditioning agent for cell therapies for rare diseases. To date, briquilimab has a demonstrated efficacy and safety profile in more than 145 dosed participants and healthy volunteers, with clinical outcomes as a conditioning agent in severe combined immunodeficiency (SCID), AML, MDS, FA, and sickle cell disease (SCD).

About Jasper

Jasper is a clinical-stage biotechnology company developing briquilimab, a monoclonal antibody targeting c-Kit (CD117) as a therapeutic for chronic mast and stem cell diseases such as chronic urticaria and lower to intermediate risk myelodysplastic syndromes (MDS) and as a conditioning agent for stem cell transplants for rare diseases such as sickle cell disease (SCD), Fanconi anemia (FA) and severe combined immunodeficiency (SCID). To date, briquilimab has a demonstrated efficacy and safety profile in more than 145 dosed participants and healthy volunteers, with clinical outcomes as a conditioning agent in SCID, acute myeloid leukemia, MDS, FA, and SCD. For more information, please visit us at www.iaspertherapeutics.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 and CIndU, its potential to deplete mast cells in airways and the lungs, its potential to prevent an allergen-induced asthmatic response, its potential as a therapeutic option in asthma, its potential to have a significant impact on disease control across all types of asthma and that it could serve as an important treatment option for the significant portion of the asthma community that is refractory to existing biologic agents; Jasper's expectations regarding its Phase 1b/2a study evaluating briquilimab in asthma patients, including the expected timing of initiating the study and expected timing for reporting clinical data; Jasper's expectations regarding realizing briquilimab's therapeutic potential across numerous mast cell driven diseases; Jasper's KOL webinar on the potential of briquilimab in asthma; and Jasper's plans for the clinical development of briquilimab in asthma. 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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