Jasper Therapeutics Announces New Positive Briquilimab Data to be Presented at the 2023 Tandem Meetings: Transplantation & Cellular Therapy Meetings of ASTCT and CIBMTR

January 13, 2023

Three abstracts highlight the safety and efficacy of briquilimab combined with low-toxicity radiation conditioning to achieve full donor engraftment and leukemia disease eradication

- *Data demonstrates that briquilimab is safe and well-tolerated as a conditioning agent in older patients, median age 70, with AML/MDS undergoing allogeneic hematopoietic cell transplantation*
- *Durable remissions achieved in 8 of the first 12 AML patients treated at one-year follow up*
- *Lower than expected rates of severe acute and chronic graft-vs-host disease in 29 AML and MDS patients*
- *Report of 12 study patients treated at a single center who underwent outpatient conditioning and donor cell transplant, which is associated with lower hospital resource use*

REDWOOD CITY, Calif., Jan. 13, 2023 (GLOBE NEWSWIRE) -- Jasper Therapeutics, Inc. (Nasdaq: JSPR) ("Jasper" or the "Company"), a biotechnology company developing novel antibody therapies addressing chronic diseases such as urticaria, lower-risk myelodysplastic syndromes (MDS) and stem cell transplant conditioning agents targeting c-Kit, today announced that new positive data for briquilimab (formerly known as JSP191), will be presented at the 2023 Tandem Meetings: Transplantation & Cellular Therapy Meetings of ASTCT and CIBMTR, taking place on February 15-19, 2023 in Orlando, Florida.

Three abstracts, covering data related to the Phase 1 study of briquilimab in combination with fludarabine and low-dose irradiation (Flu/TBI) conditioning in older adults (62 to 79 years) with acute myeloid leukemia (AML) or MDS undergoing allogeneic hematopoietic cell transplant (HCT), will be presented. The studies demonstrate that a regimen of briquilimab plus Flu/TBI leads to successful engraftment of donor blood stem cell without the usual short and long-term toxicities that accompany alternative busulfan-based regimens commonly used in transplant of donor or gene-corrected cells. Based on its mechanism of action, briquilimab is known to potently synergize with radiation, amplifying its stem cell depleting effects without increasing off-target toxicity.

The first abstract demonstrates that briquilimab was safe, well-tolerated, and achieved durable remissions in 8 of 12 of the first treated AML patients. All 8 patients were relapse-free at one-year follow up. Six of 9 patients who entered transplant with detectable AML, a group known to have a poor prognosis with high relapse rates, showed long-term eradication of the AML clones at one-year. In a companion abstract, the total group of 29 AML and MDS patients treated with briquilimab and Flu/TBI demonstrated lower than expected rates of acute and chronic graft-versus-host disease (GVHD). The third abstract, to be presented in the Best Abstract session, evaluated the costs and healthcare utilization of 12 briquilimab plus Flu/TBI study patients who received outpatient conditioning and donor cell transplant at a single study center. During the first 100 days post-procedure there were a total of 7 hospitalizations in the 12 patients, with an overall mean stay of 4 days. These results demonstrate the feasibility and potential significant cost savings of outpatient briquilimab plus Flu/TBI conditioning followed by outpatient donor cell transplant in older patients with AML or MDS.

"Our data presentations at the ASTCT meeting add to the significant body of clinical evidence supporting the safety and clinical potential of briquilimab in a variety of indications and patient types," said Ronald Martell, President and Chief Executive Officer of Jasper. "While we are focusing our near-term resources on the development of briquilimab for chronic diseases and as a conditioning agent for stem cell transplants addressing rare diseases, we believe these data demonstrate that briquilimab is an agent that can markedly improve the safety and efficacy of stem cell transplants for a wide range of malignant and rare diseases."

Abstract details:

Title:	Subanalysis from Phase 1 Study of JSP191, an Anti-CD117 Monoclonal Antibody, in Combination with Low Dose Irradiation and Fludarabine Conditioning, Shows Durable Remissions in Older Adults with Acute Myeloid Leukemia in Complete Remission Undergoing Allogeneic Hematopoietic Cell Transplantation
Author:	Lori Muffly, MD, MS, Stanford University School of Medicine
Abstract #:	21934 (oral presentation)
Title:	Immune Biomarkers Associated with Chronic GVHD in Phase 1 Study of JSP191, an AntiCD117 Monoclonal Antibody, in Combination with Low Dose Irradiation and Fludarabine Conditioning in Older Adults with MDS/AML Undergoing Allogeneic HCT
Author:	Minyoung Youn, PhD, Jasper Therapeutics, Inc.
Abstract #:	21949 (poster presentation)
Title:	Evaluation of Clinical Outcomes and Healthcare Resource Use of Outpatient Allogeneic Stem Cell Transplant in Older Adults with AML/MDS, Using JSP191, an AntiCD117 Monoclonal Antibody, in Combination with Low Dose Irradiation and Fludarabine Conditioning – a Single Center Analysis
Author:	Lori Muffly, MD, MS, Stanford University School of Medicine

Abstract #: 22152 (oral presentation)

About Briquilimab (formerly known as JSP191)

Briquilimab is a targeted, monoclonal antibody that inhibits the cell-surface receptor c-Kit, also known as CD117. It is currently being evaluated as a primary therapeutic for mast cell diseases such as chronic spontaneous urticaria (CSU), chronic inducible urticaria (CIndU), and allergic asthma, and for lower-risk MDS patients. It is also being studied as a conditioning agent for cell and gene therapies for rare diseases. To date, briquilimab has a demonstrated efficacy and safety profile in 130 dosed subjects and healthy volunteers, with clinical outcomes as a conditioning agent in severe combined immunodeficiency (SCID), acute myeloid leukemia (AML), myelodysplastic syndromes (MDS), Fanconi anemia (FA), and sickle cell disease (SCD). In addition, briquilimab is being advanced as a transformational non-genotoxic conditioning agent for gene therapy.

About Jasper

Jasper is a clinical-stage biotechnology company developing novel antibody therapies and stem cell transplant conditioning agents targeting c-Kit (CD117), an important receptor found on stem cells and mast cells. The Company's lead program is briquilimab, a first-in-class monoclonal antibody being developed as a therapeutic for chronic diseases and as a conditioning agent for stem cell transplants for rare diseases. For more information, please visit us at jaspertherapeutics.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 Jasper's plans with respect to its near-term resources and briquilimab's potential, including with respect to cost savings and any ability for it to improve the safety and efficacy of stem cell transplants for a range of malignant and rare 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, including the ongoing COVID-19 pandemic; 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, 2021 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.

Contacts:
John Mullaly (investors)
LifeSci Advisors
617-429-3548
jmullaly@lifesciadvisors.com

Jeet Mahal (investors)
Jasper Therapeutics
650-549-1403
jmahal@jaspertherapeutics.com

Lauren Barbiero (media)
Real Chemistry
646-564-2156
lbarbiero@realchemistry.com

Source: Jasper Therapeutics