Jasper Therapeutics to Present Updated Data on JSP191 Conditioning in SCID Patients at the 2022 Clinical Immunology Society Annual Meeting

March 31, 2022

REDWOOD CITY, Calif., March 31, 2022 (GLOBE NEWSWIRE) -- Jasper Therapeutics, Inc. (NASDAQ: JSPR), a biotechnology company focused on hematopoietic cell transplant therapies, today announced that updated data from the Company's ongoing study of JSP191 as single agent conditioning prior to allogeneic hematopoietic stem cell (HSC) re-transplant in patients with severe combined immunodeficiency (SCID) has been accepted for presentation as a late-breaking poster at the 2022 *Clinical Immunology Society* (CIS) Annual Meeting, to be held in Charlotte, North Carolina from March 31 to April 3, 2022.

> **Title:** *Update: Single-Agent Conditioning with Anti-CD117 Antibody JSP191 Shows Donor Engraftment, Naïve Lymphocyte Production, and Clinical Benefit in Patients with Severe Combined Immunodeficiency (SCID)*
> **Date and Time**: Friday, April 1, 2022, 1:00-2:00 p.m. ET

"This updated data indicates that JSP191 at 0.6mg/kg can deplete blood stem cells, leading to long-term donor cell engraftment, immune reconstitution which positively affects the clinical status of SCID patients who suffer from poor T cell and negligible B cell immunity because they failed their first transplant," said Wendy Pang, MD, Ph.D., Senior Vice President of Research and Translational Medicine of Jasper Therapeutics. "This population of SCID patients is largely without treatment options and rely on supportive therapies like life long IVIG to provide some level of immune protection. JSP191 based conditioning may provide these patients with the best chance of a safe and successful transplant and reconstituted immune system."

"CIS attendees are the primary caregivers for the immune deficient patient population, we are pleased to be able to present this data at the 2022 CIS annual meeting," Ronald Martell, CEO of Jasper. "We believe that with our successful clinical efforts, we are one step closer, and uniquely positioned to deliver a targeted non-genotoxic conditioning agent to patients with SCID."

About JSP191

JSP191 is a humanized monoclonal antibody in clinical development as a conditioning agent that blocks stem cell factor receptor signaling leading to clearance of hematopoietic stem cells from bone marrow, creating an empty space for donor or genetically modified transplanted stem cells to engraft. To date, JSP191 has been evaluated in more than 100 healthy volunteers and patients. Three clinical trials for myelodysplastic syndromes (MDS)/acute myeloid leukemia (AML), severe combined immunodeficiency (SCID) and Fanconi anemia are currently enrolling. The Company plans a new study of JSP191 as a second-line therapeutic in lower risk MDS patients in 2022 as well as to a pivotal study in MDS/AML transplant in early 2023. Enrollment in additional studies are planned in patients with sickle cell disease, chronic granulomatous disease and GATA2 MDS who are undergoing hematopoietic cell transplantation.

About Jasper Therapeutics

Jasper Therapeutics is a biotechnology company focused on the development of novel curative therapies based on the biology of the hematopoietic stem cell. The company is advancing two potentially groundbreaking programs. JSP191, an anti-CD117 monoclonal antibody, is in clinical development as a conditioning agent that clears hematopoietic stem cells from bone marrow in patients undergoing hematopoietic cell transplantation. It is designed to enable safer and more effective curative allogeneic hematopoietic cell transplants and gene therapies. In parallel, Jasper Therapeutics is advancing its preclinical mRNA engineered hematopoietic stem cell (eHSC) platform, which is designed to overcome key limitations of allogeneic and autologous gene-edited stem cell grafts. Both innovative programs have the potential to transform the field and expand hematopoietic stem cell therapy cures to a greater number of patients with life-threatening cancers, genetic diseases and autoimmune diseases than is possible today. 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 the potential long-term benefits of hematopoietic stem cells (HSC) engraftment following targeted single-agent JSP191 conditioning in the treatment of severe combined immunodeficiency (SCID) and Jasper's ability to potentially deliver a targeted non-genotoxic conditioning agent to patients with SCID. 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. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. 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; risks relating to uncertainty regarding the regulatory pathway for Jasper's product candidates; 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 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. 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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