



Jasper Therapeutics Announces Expansion of Series A Financing, Bringing Total Corporate Fundraising to More than \$50 Million

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–Funds will be used to advance JSP191, the first clinical-stage antibody designed for use as a single and combination conditioning agent in patients undergoing curative allogeneic hematopoietic cell transplant and autologous gene therapy–

–Jasper is pursuing new leads to expand its pipeline to include additional treatments for patients undergoing hematopoietic cell transplant or autologous gene therapy–

PALO ALTO, Calif.--([BUSINESS WIRE](#))--Jasper Therapeutics, Inc., a biotechnology company focused on hematopoietic cell transplant therapies, today announced the expansion of its Series A financing with an additional investment of \$14.1 million led by Roche Venture Fund and with participation from other investors, bringing the total company financing to more than \$50 million to date. The [initial Series A round](#) was led by Abingworth LLP and Qiming Venture Partners USA, with further investment from Surveyor Capital (a Citadel company) and participation from Alexandria Venture Investments, LLC.

Jasper plans to use the proceeds to advance and expand the study of its lead clinical asset, JSP191. A humanized antibody targeting CD117 on hematopoietic stem cells, JSP191 is designed to replace toxic chemotherapy and radiation therapy as conditioning regimens to prepare patients for curative stem cell and gene therapy. JSP191 is the only antibody of its kind in clinical development as a single conditioning agent for people undergoing curative hematopoietic cell transplantation.

This investigational agent is currently being evaluated in a Phase 1/2 dose-escalation and expansion study as a conditioning agent to enable stem cell engraftment in patients with severe combined immunodeficiency (SCID) who received a prior stem cell transplant that resulted in poor outcome. Initial positive results from this ongoing clinical trial were presented in an [oral session](#) at the American Society of Hematology (ASH) Annual Meeting in December 2019. Jasper plans to expand the Phase 1/2 clinical study to include patients with acute myeloid leukemia (AML) or myelodysplastic syndromes (MDS) receiving hematopoietic cell transplant. The development of JSP191 is supported by a collaboration with the California Institute for Regenerative Medicine (CIRM).

About Hematopoietic Cell Transplantation

Blood-forming, or hematopoietic, stem cells are rare cells that reside in the bone marrow and are responsible for the generation and maintenance of all blood and immune cells. These stem cells can harbor inherited or acquired abnormalities that lead to a variety of disease states, including immune deficiencies, blood disorders or hematologic cancers. Replacement of the defective or malignant hematopoietic stem cells in the patient's bone marrow by transplantation and engraftment of healthy stem cells is the only cure for most of these life-threatening conditions. Successful transplantation is currently achieved by subjecting patients to toxic treatment with radiation and/or chemotherapy followed by transplantation of a donor or gene-corrected hematopoietic cell graft. These toxic regimens cause DNA damage and lead to short- and long-term toxicities, including unwanted damage to organs and prolonged hospitalization. As a result, many patients who could benefit from a hematopoietic cell transplant are not eligible. New approaches that are effective but have minimal to no toxicity are urgently needed so more patients who could benefit from a curative stem cell transplant could receive the procedure.

Safer and more effective hematopoietic cell transplantation regimens could overcome these limitations and enable the broader application of hematopoietic cell transplants in the cure of many disorders. These disorders include hematologic cancers (e.g., myelodysplastic syndrome [MDS] and acute myeloid leukemia [AML]), autoimmune diseases (e.g., lupus, rheumatoid arthritis, multiple sclerosis and Type 1 diabetes), and genetic diseases that could be cured with genetically-corrected autologous stem cells (e.g., severe combined immunodeficiency syndrome [SCID], sickle cell disease, beta thalassemia, Fanconi anemia and other monogenic diseases).

About JSP191

JSP191 (formerly AMG 191) is a first-in-class humanized monoclonal antibody in clinical development as a conditioning agent that clears hematopoietic stem cells from bone marrow. JSP191 binds to human CD117, a receptor for stem cell factor (SCF) that is expressed on the surface of hematopoietic stem and progenitor cells. The interaction of SCF and CD117 is required for stem cells to survive. JSP191 blocks SCF from binding to CD117 and disrupts critical survival signals, causing the stem cells to undergo cell death and creating an empty space in the bone marrow for donor or gene-corrected transplanted stem cells to engraft.

Preclinical studies have shown that JSP191 as a single agent safely depletes normal and diseased hematopoietic stem cells, including in an animal model of MDS. This creates the space needed for transplanted normal donor or gene-corrected hematopoietic stem cells to successfully engraft in the host bone marrow. To date, JSP191 has been evaluated in more than 80 healthy volunteers and patients. It is currently being evaluated as a sole conditioning agent in a Phase 1/2 dose-escalation and expansion trial to achieve donor stem cell engraftment in patients undergoing hematopoietic cell transplant for SCID, which is curable only by this type of treatment. For more information about the design of the clinical trial, visit www.clinicaltrials.gov ([NCT02963064](#)). Clinical development of JSP191 will be expanded to also study patients with AML or MDS who are receiving hematopoietic cell transplant. IND-enabling studies are planned to advance JSP191 as a conditioning agent for patients with other rare and ultra-rare monogenic disorders and autoimmune diseases.

About Jasper Therapeutics

Jasper Therapeutics is a biotechnology company focused on hematopoietic cell transplant therapies. The company's lead compound, JSP191, is in clinical development as a conditioning antibody that clears hematopoietic stem cells from bone marrow in patients undergoing a hematopoietic cell

transplant. This first-in-class conditioning antibody is designed to enable safer and more effective curative hematopoietic cell transplants and gene therapies. For more information, please visit us at <https://jaspertherapeutics.com>.



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