Jasper Therapeutics Reports First Quarter 2022 Financial Results and Provides a Corporate Update

May 12, 2022

- *Successful meeting with the FDA; the Company intends to initiate registrational studies in MDS and AML in Q1-2023*
- *Clinical data from the Phase 1 study of JSP191 as a conditioning regimen in patients with MDS or AML presented at the 2022 Transplantation & Cellular Therapy (TCT) Annual Meeting*
- *Clinical data from the Phase 1/ 2 study of JSP191 as single agent conditioning in SCID patients presented at the 2022 Clinical Immunology Society (CIS) Annual Meeting*
- *Jasper to initiate a new study of JSP191 as a second-line therapy for patients with lower-risk MDS later this year*

REDWOOD CITY, Calif., May 12, 2022 (GLOBE NEWSWIRE) -- Jasper Therapeutics, Inc. (Nasdaq: JSPR) ("Jasper"), a biotechnology company focused on hematopoietic stem cell therapies, today announced first quarter 2022 financial results and provided a corporate update.

"We had a productive first quarter advancing our clinical programs for JSP191, our anti-CD117 monoclonal antibody, including a successful meeting with the FDA to advance JSP191 into a registrational study for AML and MDS patients, and positive data readouts presented at both the *Transplantation & Cellular Therapy ("TCT")* and *Clinical Immunology Society ("CIS")* annual meetings," said Ronald Martell, Jasper's President and CEO. "The updated clinical data presented at the *TCT* meeting demonstrated that conditioning with a single dose of JSP191 on top of a standard course of non-myeloablative ("NMA") conditioning in patients with myelodysplastic syndromes ("MDS") or acute myeloid leukemia ("AML") can be well-tolerated, safe and lead to successful engraftment with neutrophil recovery and full donor myeloid chimerism. Moreover, 20 out of 24 patients were free from morphologic relapse or disease progression at their last follow-up. There is a compelling need for new conditioning regimens with minimal toxicities and enhanced disease control in the growing population of older patients with AML or MDS undergoing transplant. Based on the encouraging data presented at TCT and the positive feedback from the FDA, we now have a path forward to initiate a registrational study of JSP191 in older patients with AML and MDS. We believe that JSP191 has the potential to significantly improve transplantation for patients ineligible for intensive myeloablative conditioning, and are hopeful that this study will be a major step forward in providing much-needed, safe, and effective transplantation for these patients."

First Quarter 2022 and Recent Highlights:

- **Announced plans for the registrational study of JSP191 in patients with MDS/AML:** Jasper held a Type B meeting with the FDA during which a review of the registrational trial comparator arm, patient population, size of the study, statistical assumptions and primary endpoints were discussed. The Company agreed with the FDA to submit a protocol that will allow the initiation of registrational studies in MDS or AML patients. Jasper plans to initiate the registrational study by the end of the first quarter of 2023.
- **Announced updated data from Phase 1 clinical trial of JSP191 as targeted stem conditioning agent in AML and MDS patients:** Data were presented from the Phase 1 clinical trial of JSP191, on top of a standard course of NMA conditioning, in older patients with MDS or AML undergoing allogeneic hematopoietic (blood) cell transplantation as a late-breaking abstract at the 2022 TCT Meetings of the American Society for Transplantation and Cellular Therapy (ASTCT) and the Center for International Blood & Marrow Transplant Research (CIBMTR). JSP191 was shown to be well tolerated with no treatment-related severe adverse events. All 24 patients achieved successful engraftment with neutrophil recovery and 20 of 24 patients were determined to be free from morphologic relapse or disease progression at last follow up.
- **Announced updated data from Phase 1/ 2 clinical trial of JSP191 as targeted, single agent conditioning in SCID patients:** Updated data from an ongoing study of JSP191 as single-agent conditioning prior to allogeneic hematopoietic stem cell (HSC) re-transplant in patients with severe combined immunodeficiency ("SCID") were presented as a late-breaking poster at the 2022 Clinical Immunology Society (CIS) Annual Meeting. Data indicated that JSP191 at a dose of 0.6mg/kg can deplete blood stem cells in the bone marrow, leading to long-term donor cell engraftment and immune reconstitution, which positively affects the clinical status of SCID patients who suffer from poor T cell and negligible B cell immunity due to a failed first transplant.
- **Hosted a KOL event on transforming hematopoietic stem cell therapies:** Lori Muffly, M.D., M.S. of Stanford University and David Sallman, M.D. of Moffitt Cancer Center provided an overview of the current landscape and unmet medical need in hematopoietic stem cell transplant conditioning as well as MDS treatment. Jasper's management discussed how JSP191 may address the limitations of transplant conditioning, and Jasper's management also outlined the potential new therapeutic approach for disease modification in lower-risk MDS patients with JSP191.
- **Appointed Ronald Martell as Chief Executive Officer and made other leadership changes:** Mr. Martell brings valuable expertise and a proven track record of leading public biopharmaceutical companies in all phases of development. He is

focusing his efforts on accelerating the clinical-stage targeted conditioning program and Jasper's research stage novel cellular therapeutics pipeline. Additionally, Jeet Mahal was promoted to Chief Operating Officer and Chief Financial Officer and Dr. Wendy Pang was promoted to Senior Vice President of Research and Translational Medicine.

Upcoming clinical and corporate milestones:

- Initiation of a new study with JSP191 as a second-line therapy for patients with lower-risk MDS is expected to commence in the second half of 2022
- Initiation of a registrational study in AML patients in the first quarter of 2023

First-Quarter 2021 Financial Results

Cash and Cash Equivalents: Cash and cash equivalents as of March 31, 2022 were $70.4 million compared to $84.7 million as of December 31, 2021. The Company expects current cash and cash equivalents to be sufficient to fund its planned operating and capital expenditures through early 2023.

Research and Development ("R&D") Expenses: R&D expenses for the quarter ended March 31, 2022 were $8.2 million compared to $4.4 million for the corresponding quarter in 2021. The increase of $3.8 million was primarily due to additional costs associated with advancing clinical trials and clinical manufacturing expenses. The increases also relate to higher research spending and employee-related costs, including stock-based compensation expenses following recent hiring to support the ongoing development of Jasper's product candidates.

General and Administrative ("G&A") Expenses: G&A expenses for the quarter ended March 31, 2022, were $4.6 million compared to $1.8 million for the quarter ended March 31, 2021. The increases were primarily related to professional fees, employee compensation related expenses, including stock-based compensation, supporting the growth in Jasper's operations and costs associated with its status as a public company.

Net Loss: For the quarter ended March 31, 2022, net loss was $2.2 million compared to a net loss of $9.8 million for the corresponding quarter in 2021. Net loss for the quarter ended March 31, 2022 includes income recognized from the decrease in fair values of common stock warrant liability of $6.1 million and earnout liability of $4.6 million. Net loss for the quarter ended March 31, 2021 includes loss recognized of $3.5 million resulting from the increase in the fair value of derivative liability.

About JSP191

JSP191 is a humanized monoclonal antibody that blocks stem cell factor receptor signaling leading to the clearance of hematopoietic stem and progenitor cells from the bone marrow. JSP191 is in clinical development as a stem cell transplant conditioning agent where it helps create an empty space for donor or gene-corrected transplanted stem cells to engraft. While hematopoietic cell transplantation can be curative for patients, its use is limited because standard high-dose myeloablative conditioning is associated with severe toxicities and standard low-dose conditioning has limited efficacy. To date, JSP191 has been evaluated in more than 90 healthy volunteers and patients. Three clinical trials for myelodysplastic syndromes (MDS)/ acute myeloid leukemia (AML), severe combined immunodeficiency (SCID) and Fanconi anemia (FA) undergoing allogeneic transplant are currently enrolling. JSP191 is also planned to enter clinical development as a second-line therapeutic in transfusion dependent, lower risk MDS patients to preferentially drive recovery of healthy hematopoietic stem cells in order to help restore normal hematopoiesis.

About Jasper Therapeutics

Jasper 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, and potentially curative, allogeneic hematopoietic cell transplants and gene therapies. A clinical study of JSP191 as a novel, disease-modifying, therapeutic for patients with lower risk MDS is also planned to begin in 2022. In parallel, Jasper is advancing its preclinical mRNA hematopoietic stem cell grafts 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 initiation of a registrational study of JSP191 in older patients with AML and MDS, the potential for JSP191 to significantly improve transplantation and its safety and efficacy, the potential for JSP191 to address the limitations of transplant conditioning, the expected timing for initiating clinical studies and trials and the Company's expectations regarding its cash and cash equivalents and planned operating and capital expenditures. 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 Therapeutics. 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 prior study results may not be replicated; the risk that final study data may not be consistent with preliminary study data; the risk that Jasper's product candidates may not be beneficial to patients or successfully commercialized; the risk that Jasper

has overestimated the size of the target patient population, their 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 public 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. There may be additional risks that Jasper does not presently know, or that Jasper currently believes are immaterial, that could also cause actual results to differ from those contained in the 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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JASPER THERAPEUTICS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended March 31,	
	2022	**2021**
Operating expenses		
Research and development[(1)]	$ 8,188	$ 4,420
General and administrative[(1)]	4,590	1,834
Total operating expenses	12,778	6,254
Loss from operations	(12,778)	(6,254)
Change in fair value of earnout liability	4,593	—
Change in fair value of common stock warrants liability	6,050	—
Change in fair value of derivative liability	—	(3,501)
Other income (expense), net	(72)	1
Total other income (expense), net	10,571	(3,500)
Net loss and comprehensive loss	$ (2,207)	$ (9,754)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.06)	$ (4.92)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	36,309,683	1,980,910

(1) Amounts include non-cash stock based compensation expense as follows (in thousands):

	Three Months Ended March 31,	
	2022	**2021**
Research and development	$ 222	$ 199
General and administrative	556	128
Total	$ 778	$ 327

JASPER THERAPEUTICS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)
(unaudited)

Assets	**March 31, 2022**	**December 31, 2021**
Current assets:		
Cash and cash equivalents	$ 70,400	$ 84,701
Prepaid expenses and other current assets	3,399	3,130
Total current assets	73,799	87,831
Property and equipment, net	3,499	3,686
Operating lease right-of-use assets	2,222	1,147
Restricted cash	417	345
Other non-current assets	611	645
Total assets	$ 80,548	$ 93,654
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,466	$ 3,919
Current portion of operating lease liabilities	521	505
Accrued expenses and other current liabilities	3,982	3,596
Total current liabilities	5,969	8,020
Non-current portion of operating lease liabilities	3,383	2,380
Common stock warrant liability	1,300	7,350
Earnout liability	1,150	5,743
Other non-current liabilities	641	643
Total liabilities	12,443	24,136
Commitments and contingencies		
Stockholders' equity:		
Preferred stock	—	—
Common stock	4	4
Additional paid-in capital	137,758	136,964
Accumulated deficit	(69,657)	(67,450)
Total stockholders' equity	68,105	69,518
Total liabilities and stockholders' equity	$ 80,548	$ 93,654