Jasper Therapeutics Reports Second Quarter 2024 Financial Results and Recent Corporate Developments

August 13, 2024

Enrollment in BEACON and SPOTLIGHT studies progressing faster than expected; enrollment in the 240mg single-dose cohort of the BEACON study ongoing

Additional dosing cohort (180mg Q8W) added to BEACON study

Initial data from BEACON study through 240mg dosing cohort to be presented in 4Q24

REDWOOD CITY, Calif., Aug. 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), chronic inducible urticaria (CIndU) and asthma, today announced results for the fiscal quarter ended June 30, 2024, reported recent corporate developments, and provided an update on progress in the BEACON and SPOTLIGHT studies.

"We have continued to make excellent progress advancing briquilimab during the second quarter, with patient enrollment proceeding faster than initially expected in the BEACON and SPOTLIGHT studies," said Ronald Martell, President and Chief Executive Officer of Jasper. "The strong rate of enrollment has given us the opportunity to include additional cohorts in our initial CSU data readout, and we are now planning to present results from dosing cohorts up to 240mg in the fourth quarter of this year. While the company remains blinded to efficacy data from the study, rapid enrollment in BEACON has also given us the flexibility to expand the study to include an additional dosing cohort evaluating briquilimab at 180mg Q8W. This will enable us to generate a more robust dataset to support dose selection for our planned registrational trials in CSU without impacting their timelines."

"We are very pleased with the progress in the BEACON and SPOTLIGHT studies thus far," said Edwin Tucker, M.D., Chief Medical Officer of Jasper. "With the support of our investigators, the efforts of the Jasper team and the timely review and approval by the Independent Data Monitoring Committee (IDMC) we have been able to quickly proceed through dose escalation on the BEACON study and are now enrolling patients at the highest dose, 240mg. This rapid progress and safety affirmation by the IDMC has enabled expansion of the BEACON study to obtain more clinical insights into the potential benefits of briquilimab for patients with CSU, without delaying the program. We look forward to reviewing and presenting initial data from both the BEACON and SPOTLIGHT studies later this year, followed in early 2025 by the full study reports to be presented at a medical conference."

Highlights for Second Quarter 2024 and Recent Weeks

- Completed enrollment in the 80mg Q8W, the 120mg Q8W, the 120mg Q12W and the 180mg Q12W cohorts of the BEACON study in CSU. As of August 13th, 2024, the 240mg, single dose cohort is actively enrolling patients and the newly added 180mg, Q8W cohort is expected to be open for enrollment imminently. Jasper has opened 31 clinical sites in the BEACON study across the U.S. and EU to date.
- Based on the favorable rate of enrollment in the BEACON study, Jasper is now planning to report data from all dosing cohorts initially included in the study in the fourth quarter of 2024, and continued enrollment at the current pace would allow for the inclusion of the recently added 180mg Q8W cohort in the initial data disclosure as well. Endpoints that the company expects to disclose in the readout include UAS7 scores, UCT scores, serum tryptase, and adverse events. Efficacy data from the study remains blinded to the Company until the interim analysis associated with the initial data readout.
- Expanded the Company's Phase 1b/2a BEACON study in CSU with the addition of a cohort evaluating 180mg of briquilimab (N=8) administered on an 8-week dosing schedule. The BEACON study is a dose escalation trial evaluating repeat doses of subcutaneous briquilimab in adult CSU patients who remain symptomatic after treatment with, or who cannot tolerate, omalizumab. Parts 2 and 3 of the study are double-blind and placebo controlled, and the Company remains blinded to all efficacy data in the study until the initial data analysis is conducted, currently planned for the fourth quarter of 2024.
- Enrollment is ongoing in the second cohort (120mg) of the Company's Phase 1b/2a SPOTLIGHT study in CIndU. The SPOTLIGHT study is evaluating a single administration of subcutaneous briquilimab in adult patients with cold urticaria (ColdU) or symptomatic dermographism (SD). Jasper anticipates reporting initial data from the SPOTLIGHT study in the fourth quarter of 2024.
- Announced the expansion of the Company's mast cell portfolio with a new development program in asthma and hosted a KOL webinar on the potential of briquilimab in the indication. Jasper expects to begin enrolling patients in a Phase 1b/2a study in patients with asthma in the fourth quarter of 2024.
- Announced the appointment of Svetlana Lucas, Ph.D., to Jasper's Board of Directors; Dr. Lucas adds particular expertise in strategic planning and business development to the Company's Board.

- Presented preclinical data demonstrating the effect of briquilimab on hematopoietic stem cells at the European Hematology Association (EHA) Hybrid Congress; the presented study evaluated the molecular basis of inhibition of the stem cell factor (SCF)/c-Kit signaling pathway via briquilimab and its functional impact on healthy human HSC survival, proliferation, and differentiation. Results from the study demonstrate that blocking of SCF/c-Kit signaling by briquilimab does not cause apoptosis of HSCs, and that HSCs cultured in the presence of briquilimab differentiate directly into CD34- cells with higher c-Kit expression and without increased CD38 expression.
- Presented data from preclinical and healthy volunteer studies of briquilimab, as well as trial-in-progress presentations from its BEACON and SPOTLIGHT clinical studies, at the EAACI Congress 2024.
    - The two preclinical studies presented showed the potential of briquilimab in asthma and atopic dermatitis (AD), respectively. The asthma study demonstrated that a single dose of briquilimab can deplete mast cells in both inflamed and non-inflamed tissue as well as improve lung function in an allergen-induced asthma model. In the AD study, treatment with briquilimab led to a reduction of dermal mast cells and inflammatory leukocytes, indicating that mast cells play a critical role in the pathogenesis of AD and that briquilimab has the potential to reverse AD pathology by depleting those cells. Both preclinical studies utilized Jasper's proprietary c-Kit Mouse™, which overcomes the limitations of standard models that do not bind antibodies directed at the human c-Kit receptor.
    - Jasper also presented data from the previously disclosed clinical study of briquilimab in healthy volunteers showing that it has a promising safety profile, appears to be well-tolerated, exhibits a favorable pharmacokinetic (PK) profile, and leads to sustained and dose-dependent depletion of mast cells in a cutaneous wound model. The PK and pharmacodynamic (PD) profiles demonstrated in the study support dose selection for Jasper's ongoing BEACON and SPOTLIGHT clinical trials in CSU and CIndU.

Second Quarter Fiscal 2024 Financial Results

- Cash and cash equivalents as of June 30, 2024, totaled $106.8 million.
- Research and development expenses for the quarter ended June 30, 2024, were $11.3 million, including stock-based compensation expenses of $0.5 million.
- General and administrative expenses for the quarter ended June 30, 2024, were $4.7 million, including stock-based compensation expenses of $1.0 million.
- Jasper reported a net loss of $15.0 million, or basic and diluted net loss per share attributable to common stockholders of $0.97, for the quarter ended June 30, 2024.

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 CIndU and is planning to initiate a clinical study in patients with asthma. 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), acute myeloid leukemia (AML), myelodysplastic syndromes (MDS), Fanconi anemia (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, asthma and lower to intermediate risk MDS and as a conditioning agent for stem cell transplants for rare diseases such as SCD, FA and 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, AML, MDS, FA, and SCD. For more information, please visit us at www.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 briquilimab's potential, including with respect to its potential in mast cell driven diseases such as CSU, CIndU, and asthma, its ability to block SCF/c-Kit signaling and not cause apoptosis of HSCs, the potential for HSCs cultured in the presence of briquilimab to differentiate directly into CD34- cells with higher c-Kit expression and without increased CD38 expression, a single dose's ability to deplete mast cells in both inflamed and non-inflamed tissue as well as improve lung function in an allergen-induced asthma model, its potential to lead to a reduction of dermal mast cells and inflammatory leukocytes in AD and its potential to reverse AD pathology by depleting those cells, its potential to lead to sustained and dose-dependent depletion of mast cells in a cutaneous wound model, and the promising safety profile of briquilimab in mast cell diseases; Jasper's expectations regarding its BEACON study, including expected patient enrollment, additional cohorts, expected timing for presentation of data, expected endpoints to be disclosed in the initial readout, including UAS7 scores, UCT scores, serum tryptase, and adverse events, expected expansion of the study, expected generation of a more robust dataset to support dose selection, expected

clinical insights into the potential benefits of briquilimab for patients with CSU, the Company's expectation that the initial data readout for the BEACON will cover up to the 240mg dosing cohort, including the 180mg Q8W cohort, and the planned presentation of the full study report at a medical conference in 2025; Jasper's expectations regarding its SPOTLIGHT study, including patient enrollment, expected timing for reporting initial data and planned presentation of the full study report at a medical conference in 2025; Jasper's expectations regarding its planned registration trials in CSU; and Jasper's expectations regarding a Phase 1b/2a study in asthma patients, including expecting timing of patient enrollment. 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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JASPER THERAPEUTICS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Operating expenses				
Research and development[(1)]	$ 11,296	$ 13,297	$ 21,594	$ 23,102
General and administrative[(1)]	4,697	4,530	9,471	8,672
Total operating expenses	15,993	17,827	31,065	31,774
Loss from operations	(15,993)	(17,827)	(31,065)	(31,774)
Interest income	1,450	1,436	2,836	2,532
Change in fair value of earnout liability	—	420	(20)	(344)
Change in fair value of common stock warrant liability	—	—	—	(575)
Other expense, net	(40)	(109)	(62)	(179)
Total other income, net	1,410	1,747	2,754	1,434
Net loss and comprehensive loss	$ (14,583)	$ (16,080)	$ (28,311)	$ (30,340)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.97)	$ (1.47)	$ (2.00)	$ (3.08)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	14,986,367	10,921,239	14,160,634	9,860,392

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Research and development	$ 473	$ 491	$ 822	$ 959
General and administrative	1,009	900	1,829	1,699
Total	$ 1,482	$ 1,391	$ 2,651	$ 2,658

JASPER THERAPEUTICS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)
(unaudited)

Assets	June 30, 2024	December 31, 2023
Current assets:		
Cash and cash equivalents	$ 106,819	$ 86,887
Prepaid expenses and other current assets	1,861	2,051
Total current assets	108,680	88,938
Property and equipment, net	2,438	2,727
Operating lease right-of-use assets	1,231	1,467
Restricted cash	417	417
Other non-current assets	1,163	1,343
Total assets	$ 113,929	$ 94,892
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,964	$ 4,149
Current portion of operating lease liabilities	1,029	972
Earnout liability	20	-
Accrued expenses and other current liabilities	6,055	7,253
Total current liabilities	10,068	12,374
Non-current portion of operating lease liabilities	1,287	1,814
Other non-current liabilities	2,264	2,264
Total liabilities	13,619	16,452
Commitments and contingencies		
Stockholders' equity:		
Preferred stock	—	—
Common stock	2	1
Additional paid-in capital	298,219	248,039
Accumulated deficit	(197,911)	(169,600)
Total stockholders' equity	100,310	78,440
Total liabilities and stockholders' equity	$ 113,929	$ 94,892