

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

PLAINTIFF, Individually and on
Behalf of All Others Similarly Situated,

Plaintiff,

v.

JASPER THERAPEUTICS, INC., RONALD A.
MARTELL, HERBERT C. CROSS, and
EDWIN TUCKER,

Defendants.

Case No.

CLASS ACTION

COMPLAINT FOR VIOLATIONS OF THE
FEDERAL SECURITIES LAWS

DEMAND FOR JURY TRIAL

Plaintiff, individually and on behalf of all others similarly situated, by Plaintiff's undersigned attorneys, for Plaintiff's complaint against Defendants, alleges the following based upon personal knowledge as to Plaintiff and Plaintiff's own acts, and information and belief as to all other matters, based upon, *inter alia*, the investigation conducted by and through Plaintiff's attorneys, which included, among other things, a review of the Defendants' public documents, conference calls and announcements made by Defendants, United States ("U.S.") Securities and Exchange Commission ("SEC") filings, wire and press releases published by and regarding Jasper Therapeutics, Inc. ("Jasper" or the "Company"), analysts' reports and advisories about the Company, and information readily obtainable on the Internet.

Plaintiff believes that substantial, additional evidentiary support will exist for the allegations set forth herein after a reasonable opportunity for discovery.

NATURE OF THE ACTION

1. This is a federal securities class action on behalf of a class consisting of all persons and entities other than Defendants that purchased or otherwise acquired Jasper securities between November 30, 2023 and July 3, 2025, both dates inclusive (the “Class Period”), seeking to recover damages caused by Defendants’ violations of the federal securities laws and to pursue remedies under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 (the “Exchange Act”) and Rule 10b-5 promulgated thereunder, against the Company and certain of its top officials.

2. Jasper, a clinical-stage biotechnology company, focuses on developing therapeutics targeting mast cell driven diseases such as Chronic Spontaneous Urticaria (“CSU”), Chronic Inducible Urticaria (“CIndU”), and Asthma. The Company’s lead product candidate is briquilimab, a monoclonal antibody designed to block stem cell factor (“SCF”) from binding to and signaling through the CD117 (“c-Kit”) receptor on mast and stem cells. According to Jasper, the “SCF/c-Kit pathway is a survival signal for mast cells and [the Company] believe[s] that blocking this pathway may lead to depletion of these cells throughout the body, including in the lungs and in the skin, which could lead to significant clinical benefit for patients with mast-cell driven diseases such as asthma and chronic urticarias” and “[t]o that end, [Jasper is] focusing on advancing a portfolio of clinical programs in mast cell driven diseases.” In 2024, to “strengthen [its] balance sheet and support development of briquilimab,” Jasper completed an oversubscribed \$50 million financing “with a syndicate of leading life science investors,” purportedly “extending [its] cash runway through the third quarter of 2025.”

3. In November 2023, the Company commenced a Phase 1b/2a clinical study of subcutaneous briquilimab for the treatment of CSU (the “BEACON Study”). When announcing

the first patient dosing in the BEACON Study, Jasper’s Chief Executive Officer (“CEO”) Defendant Ronald A. Martell (“Martell”) stated, in relevant part, that he was “confident in the ability of our clinical organization to continue to execute at a high level as we advance briquilimab into clinical trials in CIndU and other mast cell-driven diseases.” In December 2024, the Company commenced a Phase 1b/2a clinical study evaluating briquilimab in allergic asthma (the “ETESIAN Study”). In addition, Jasper has attempted to develop briquilimab as a one-time conditioning therapy for severe combined immunodeficiency (“SCID”) patients undergoing a second stem cell transplant.

4. Under the Drug Supply Chain Security Act (“DCSA”)—a law enacted by Congress in 2013 designed to improve and ensure the safety of the U.S pharmaceutical supply chain—all prescription drugs must be labeled with a unique product identifier that includes, among other things, a “lot number.” Drug “lots” are batches of a product that are manufactured, processed, packaged, or stored under the same conditions. If a medication is compromised, pharmaceuticals companies can use lot numbers to trace the affected batches and alert healthcare providers.

5. According to the Company, “[t]he manufacture of pharmaceuticals is subject to extensive [current Good Manufacturing Practices (“cGMP”)] regulations, which impose various procedural and documentation requirements and govern all areas of record keeping, production processes and controls, personnel and quality control.” Because Jasper does not currently own or operate any manufacturing facility, the Company relies on third-party contract manufacturing organizations to produce its drug candidates in purported “accordance with cGMP regulations for use in [its] clinical studies.”

6. Throughout the Class Period, Defendants made materially false and misleading statements regarding the Company’s business, operations, and compliance policies. Specifically,

Defendants made false and/or misleading statements and/or failed to disclose that: (i) Jasper lacked the controls and procedures necessary to ensure that the third-party manufacturers on which it relied were manufacturing products in full accordance with cGMP regulations and otherwise suitable for use in clinical trials; (ii) the foregoing failure increased the risk that results of ongoing studies would be confounded, thereby negatively impacting the regulatory and commercial prospects of the Company's products, including briquilimab; (iii) the foregoing increased the likelihood of disruptive cost-reduction measures; (iv) accordingly, the Company's business and/or financial prospects, as well as briquilimab's clinical and/or commercial prospects, were overstated; and (v) as a result, Defendants' public statements were materially false and misleading at all relevant times.

7. On July 7, 2025, Jasper issued a press release reporting updated data from the BEACON Study. The press release stated that “[r]esults from the 240mg Q8W and the 240mg followed by 180mg Q8W dose cohorts appear to be confounded by an issue with one drug product lot used in those cohorts, with 10 of the 13 patients dosed with drug from the lot in question,” that “[t]he Company is investigating the drug product lot in question and expects to have the results of that investigation in the coming weeks,” and that Jasper was “taking steps to ensure that drug product from the lot in question is returned to the Company and that sites have drug product from other lots to continue dosing.” Further, the press release revealed that the Company “has also determined that the drug product lot in question was used to treat participants enrolled in the ETESIAN [Study]. As a result, and in order to focus resources on advancing briquilimab in CSU, the Company is halting the study and pausing development in asthma.” Finally, the press release stated that “the Company is halting development in SCID” and, contrary to its prior representation of having a strong balance sheet and a cash runway extending “through the third quarter of 2025,”

that Jasper “will be implementing a number of other cost cutting measures including a potential restructuring, to extend runway and reduce expenses.”

8. On this news, Jasper’s stock price fell \$3.73 per share, or 55.1%, to close at \$3.04 per share on July 7, 2025.

9. Market analysts were quick to comment on the Company’s announcement. For example, on July 7, 2025, BMO Capital Markets published a report downgrading Jasper to market perform and lowering its price target from \$6.77 per share to \$4.00 per share (the “BMO Report”). The BMO Report stated, in relevant part, that “potential Briquilimab drug lot issues, coupled with existing uncertainty around dose-response [], will pressure the [Jasper] story moving forward” given, among other things, Jasper’s “financing overhang” and market competition.

10. After the end of the Class Period, on July 9, 2025, the Company issued a press release entitled “Jasper Therapeutics Announces Corporate Reorganization and Other Cost Cutting Measures to Extend Cash Runway.” The press release revealed that Jasper was reducing its workforce by approximately 50%, that “[i]n order to focus resources on the development of briquilimab in chronic urticaria, Jasper is halting its other clinical and preclinical programs,” and that Defendant Edwin Tucker (“Tucker”) was departing his role as the Company’s Chief Medical Officer (“CMO”) effective August 1, 2025.

11. As a result of Defendants’ wrongful acts and omissions, and the precipitous decline in the market value of the Company’s securities, Plaintiff and other Class members have suffered significant losses and damages.

JURISDICTION AND VENUE

12. The claims asserted herein arise under and pursuant to Sections 10(b) and 20(a) of the Exchange Act (15 U.S.C. §§ 78j(b) and 78t(a)) and Rule 10b-5 promulgated thereunder by the SEC (17 C.F.R. § 240.10b-5).

13. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. § 1331 and Section 27 of the Exchange Act.

14. Venue is proper in this District pursuant to Section 27 of the Exchange Act (15 U.S.C. § 78aa) and 28 U.S.C. § 1391(b). Jasper is headquartered in this District, Defendants conduct business in this District, and a significant portion of Defendants' activities took place within this District.

15. In connection with the acts alleged in this complaint, Defendants, directly or indirectly, used the means and instrumentalities of interstate commerce, including, but not limited to, the mails, interstate telephone communications, and the facilities of the national securities markets.

PARTIES

16. Plaintiff, as set forth in the attached Certification, acquired Jasper securities at artificially inflated prices during the Class Period and was damaged upon the revelation of the alleged corrective disclosures.

17. Defendant Jasper is a Delaware corporation with principal executive offices located at 2200 Bridge Pkwy, Suite #102, Redwood City, CA 94065. Jasper's common stock trades in an efficient market on the Nasdaq Capital Market ("NASDAQ") under the ticker symbol "JSPR."

18. Defendant Martell has served as Jasper's President and CEO at all relevant times.

19. Defendant Herbert C. Cross ("Cross") has served as Jasper's Chief Financial Officer at all relevant times.

20. Defendant Tucker served as Jasper's CMO at all relevant times.

21. Defendants Martell, Cross, and Tucker are collectively referred to herein as the "Individual Defendants."

22. The Individual Defendants possessed the power and authority to control the contents of Jasper’s SEC filings, press releases, and other market communications. The Individual Defendants were provided with copies of Jasper’s SEC filings and press releases alleged herein to be misleading prior to or shortly after their issuance and had the ability and opportunity to prevent their issuance or to cause them to be corrected. Because of their positions with Jasper, and their access to material information available to them but not to the public, the Individual Defendants knew that the adverse facts specified herein had not been disclosed to and were being concealed from the public, and that the positive representations being made were then materially false and misleading. The Individual Defendants are liable for the false statements and omissions pleaded herein.

23. Jasper and the Individual Defendants are collectively referred to herein as “Defendants.”

SUBSTANTIVE ALLEGATIONS

Background

24. Jasper, a clinical-stage biotechnology company, focuses on developing therapeutics targeting mast cell driven diseases such as CSU, CIndU, and Asthma. The Company’s lead product candidate is briquilimab, a monoclonal antibody designed to block SCF from binding to and signaling through the c-Kit receptor on mast and stem cells.

Materially False and Misleading Statements Issued During the Class Period

25. The Class Period begins on November 30, 2023, when the Company issued a press release entitled “Jasper Announces First Patient Dosed in Phase 1b/2a Clinical Study of Briquilimab in Chronic Spontaneous Urticaria.” The press release stated, in relevant part:

“Dosing of the first patient in our BEACON study is an exciting milestone for Jasper as we advance the clinical development of briquilimab in mast cell diseases,” said [Defendant] Tucker[.] “In addition to gathering safety data in CSU patients who are ineligible for, or refractory to, omalizumab, we expect the study to

establish proof of concept for the depletion of mast cells by briquilimab in CSU. Results from the trial should also allow us to determine doses and dosing regimens for future registrational studies in the broader CSU patient population. We look forward to providing enrollment updates as we progress through the cohorts and anticipate reporting preliminary data in mid-2024.”

“We are pleased to announce that the first patient has been dosed in our BEACON study on a timeline consistent with our prior guidance,” said [Defendant] Martell[.] **“Treating the first patient so shortly after IND clearance is a testament to the hard work and diligence that Ed and his team put into the BEACON study’s launch and I’m confident in the ability of our clinical organization to continue to execute at a high level as we advance briquilimab into clinical trials in CIndU and other mast cell-driven diseases.”**¹

26. On January 5, 2024, Jasper issued a press release “[h]ighlight[ing] [r]ecent [a]ccomplishments and [k]ey [u]pcoming [m]ilestones.” The press release stated, in relevant part:

“2023 was a strategically important year for Jasper,” said [Defendant] Martell[.] “We secured IND clearance and CTA authorization for the Phase 1b/2a BEACON study of briquilimab in CSU and successfully dosed the first patient. Additionally, we reported positive data from the Phase 1/2 trial of briquilimab in patients with Fanconi Anemia (FA) along with the final Phase 1 results in patients with acute myeloid leukemia (AML) or myelodysplastic syndromes (MDS) undergoing hematopoietic cell transplant, initiated the LR-MDS Phase 1b trial, and strengthened our leadership team.

Our achievements in 2023 set the stage for a transformational year ahead with multiple key clinical milestones on the horizon across multiple indications. Specifically, we expect to present initial data from the Phase 1b/2a BEACON study in mid-2024, which will provide valuable insight into the therapeutic potential of briquilimab. We also anticipate initiating our Phase 1b/2a SPOTLIGHT study in CIndU following our recently obtained CTA authorization from the EMA, with initial data expected in the second half of the year. Finally, we expect to present data from our Phase 1b LR-MDS study in the first half of 2024.”

27. On March 4, 2024, Jasper issued a press release announcing the Company’s fiscal 2023 financial results. The press release stated, in relevant part:

“2023 was a highly productive year for Jasper, as we shifted our operational focus toward briquilimab development in mast cell driven diseases,” said [Defendant] Martell[.] **“To that end, we successfully filed and obtained regulatory**

¹ All emphases included herein are added unless otherwise indicated.

clearance for our clinical programs in both CSU and CIndU, allowing the launch of our BEACON and SPOTLIGHT clinical trials in chronic urticarias. We also completed an oversubscribed \$50 million financing with a syndicate of leading life science investors to strengthen our balance sheet and support development of briquilimab, extending our cash runway through the third quarter of 2025. As we enter a transformational and data-rich year for Jasper, we look forward to reporting initial results from our BEACON study in CSU in the third quarter of 2024 and our SPOTLIGHT study in CIndU in the second half of 2024, and expect to initiate a new clinical program in at least one additional mast cell driven indication later this year.”

28. On March 5, 2024, Jasper filed an Annual Report on Form 10-K with the SEC, reporting the Company’s financial and operating results for the year ended December 31, 2023 (the “2023 10-K”). In providing an overview of briquilimab, the 2023 10-K stated, in relevant part:

We believe briquilimab is a unique, humanized, monoclonal antibody that targets the underlying biology of mast cell survival to potentially serve as a therapeutic to prevent mast cell driven diseases. In addition we believe briquilimab targets a key differentiation pathway for HSCs and may be developed to improve the efficacy and safety of hematopoietic stem cell transplantation. Briquilimab binds to human c-Kit, the receptor for SCF, which is expressed on the surface of various cells, including mast cells and hematopoietic stem and progenitor cells. The interaction of SCF and c-Kit is required for mast cells to survive and for HSCs to remain in the bone marrow. By blocking SCF from binding to c-Kit and disrupting these critical signals, briquilimab leads to the depletion of mast cells in the skin and the differentiation of stem cells in the bone marrow. Briquilimab is designed to bind to c-Kit with a greater affinity than SCF.

We are focused on advancing Briquilimab in development as a chronic therapy in mast cell driven diseases such as CSU, CIndU and other mast cell driven indications currently under evaluation. We also currently have an ongoing study in LR-MDS, as well as a study as a conditioning agent to clear HSCs from the bone marrow prior to re-transplant in patients with SCID. We partnered with the National Institutes of Health (the “NIH”) and Stanford University in several investigator sponsored trials for patients with a variety of diseases undergoing hematopoietic stem cell transplant.

29. Further, in discussing the Company’s strategy, the 2023 10-K stated, in relevant part:

Our goal is to develop and commercialize briquilimab as a safe and efficacious therapeutic to address the significant unmet medical need for patients suffering from mast cell driven diseases such as CSU and CIndU. As part of our strategy, we aim to:

Build a leading biotechnology company to enable cures via immune modulation. We are bringing together a team of biotech veterans, leading academic institutions and a strong syndicate of healthcare-focused investors to achieve our vision of developing and commercializing therapeutics with a focus on mast cell driven diseases.

Advance the development of briquilimab as a chronic therapeutic targeted primarily at mast cell driven diseases. We are focused on developing briquilimab as a repeat dose therapy for disorders of mast cells, including CSU, CIndU and additional mast cell driven indications currently under pre-clinical evaluation utilizing our proprietary Jasper Mouse.

Commercialize our product candidates to expand the use of effective and safe mast cell therapies for patients and physicians in our target markets. If approved, we plan to bring our product candidates to the American, European and Japanese markets, focusing on the top physicians and accredited transplant centers and hospital-based prescribers who administer the majority of mast cell therapies.

30. Appended to the 2023 10-K as an exhibit was a signed certification pursuant to the Sarbanes-Oxley Act of 2002 (“SOX”) by Defendants Martell and Cross attesting that “[t]he information contained in the [2023 10-K] fairly presents, in all material respects, the financial condition and results of operations of the Company.”

31. On May 13, 2024, the Company issued a press release entitled “Jasper Therapeutics Announces Briquilimab Development Program in Asthma.” The press release stated, in relevant part:

“Asthma remains a devastating chronic disease affecting millions of patients in the US despite current treatment options,” said [Defendant] Martell[.] “***We believe that briquilimab’s ability to deplete mast cells in the lung may have a significant impact on disease control across all types of asthma, including patients who are not indicated for current biologic agents or who remain refractory to them.*** Clinical proof of concept for the efficacy of c-Kit inhibition in asthma has been previously established with older, less specific c-Kit inhibitors, and we are excited bring the first anti-c-Kit antibody into human studies. With the anticipated launch of the Phase 1b/2a study later this year, we plan to present clinical data in the second

half of 2025. *This trial, along with our ongoing clinical studies in chronic spontaneous and chronic inducible urticarias, is the latest step in our goal of realizing briquilimab's therapeutic potential across numerous mast cell driven diseases affecting tens of millions of patients worldwide.*"

32. On May 14, 2024, Jasper issued a press release announcing the Company's Q1 2024 financial results. The press release stated, in relevant part:

"We have continued to make strong progress advancing briquilimab during the first few months of the year," said [Defendant] Martell[.] *"The BEACON and SPOTLIGHT studies in chronic urticarias are rapidly enrolling patients and we remain on track to disclose initial data from the studies in the third quarter of 2024 and second half of 2024, respectively. In addition, we recently announced our intention to advance briquilimab into clinical development in asthma, an indication in which we believe mast cell depletion via c-Kit inhibition has the potential to significantly impact disease control across all subtypes of the disease. With multiple clinical data readouts on the horizon in addition to the launch of our asthma development program, we are looking forward to an exciting and milestone rich second half of the year."*

33. On August 13, 2024, Jasper issued a press release announcing the Company's Q2 2024 financial results. The press release stated, in relevant part:

"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 [Defendant] Martell[.] *"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 [Defendant] Tucker[.] *"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."*

34. On September 10, 2024, the Company issued a press release entitled “Jasper Therapeutics Announces Health Canada Clearance of Clinical Trial Application for Phase 1b/2a Study of Briquilimab in Asthma.” The press release stated, in relevant part:

“We are excited to announce that Health Canada has issued a no objection letter allowing us to move forward with our first clinical trial evaluating briquilimab in asthma, and we look forward to commencing patient enrollment shortly,” said [Defendant] Tucker[.] “***Our clinical development plan follows an established and efficient pathway beginning with a challenge study in patients with allergic asthma to enable rapid advancement of the program. We aim to demonstrate proof of concept for the depletion of mast cells with briquilimab as an effective mechanism of action in asthma and to inform potential future studies in the broader asthma population.***”

“Clearance of the CTA for the asthma study is an important milestone for Jasper as we continue to build out our pipeline of programs evaluating briquilimab in mast cell driven diseases,” said [Defenadnt] Martell[.] “***Being able to move directly to a 180mg dose in this study as a result of the dose escalation in the BEACON study is an excellent outcome as we believe that driving deep depletion of mast cells in the airways with a higher dose of briquilimab will be key to demonstrating durable clinical benefit in asthma patients.***”

35. On November 7, 2024, Jasper issued a press release announcing the Company’s Q3 2024 financial results. The press release stated, in relevant part:

“***We achieved several significant milestones in our mast cell development programs in recent months***, highlighted by positive initial data from our SPOTLIGHT study in CIndU,” said [Defendant] Martell[.] “We were very excited to present our first dataset evaluating briquilimab in a mast cell disease, which showed that over 90% of patients treated in the 40mg and 120mg dose cohorts achieved a clinical response, with no serious adverse events (SAEs) and no grade 3 or higher adverse events (AEs) reported. We also made significant progress advancing our development programs in chronic urticaria and asthma with the addition of higher dose cohorts in the BEACON and SPOTLIGHT studies as well as the attainment of regulatory clearance in Canada and the EU for our asthma challenge study. We are looking forward to our next major milestone with the presentation of initial data from the BEACON study expected during the week of January 6th, 2025.”

36. On December 2, 2024, the Company issued a press release entitled “Jasper Therapeutics Announces First Patient Dosed in Phase 1b/2a ETESIAN Clinical Study of Briquilimab in Asthma.” The press release stated, in relevant part:

“Dosing of the first patient in our ETESIAN study in asthma is a significant milestone, marking our third clinical program evaluating briquilimab in an inflammatory disease driven by unwanted mast cell activity,” said [Defendant] Tucker[.] “Following dose escalation through Part 2 of the BEACON study in CSU, we obtained regulatory clearance to move directly to a subcutaneous 180mg dose in the ETESIAN study, which we believe will drive deep mast cell depletion in the airways and enable durable clinical benefit for patients with asthma. We look forward to providing enrollment updates as we progress through the study and anticipate reporting the initial data in the second half of 2025.”

37. On January 8, 2025, the Company issued a press release entitled “Jasper Therapeutics Reports Positive Data from BEACON Study of Briquilimab in Chronic Spontaneous Urticaria.” The press release stated, in relevant part:

“We are very pleased to present the positive preliminary data from the BEACON study, which demonstrates the potential of briquilimab as a leading therapeutic for CSU patients,” said [Defendant] Tucker[.] “The profound reduction in UAS7 from baseline in multiple cohorts, the dose dependent durability of response and the significant and prolonged drops in mean serum tryptase from baseline demonstrate the potential for deep and durable efficacy of briquilimab in CSU. ***Combined with the favorable safety profile enabled by our optimal biologic dosing approach, we believe briquilimab has demonstrated the potential to be a leading therapeutic option for patients with CSU.*** On behalf of the entire Jasper team, I’d like to thank the investigators and the patients who are participating in the study, along with their families and caregivers.”

38. On February 27, 2025, Jasper issued a press release announcing the Company’s Q4 and full year 2024 financial results. The press release stated, in relevant part:

“The past year has been a transformational period for Jasper, highlighted by positive data readouts from the BEACON study in CSU and the SPOTLIGHT study in CIndU, our first two clinical studies evaluating Briquilimab in mast cell diseases,” said [Defendant] Martell[.] *“Data from both studies demonstrate the ability of briquilimab to drive rapid and deep response profiles in patients with chronic urticaria, along with the potential for a favorable and differentiated safety profile. We believe the preliminary results from the BEACON study support advancing briquilimab into a pivotal program in CSU beginning with an operationally adaptive Phase 2b study that we expect to commence later this year.* Final dose selection for the Phase 2b study will be further informed by a substantial

array of additional clinical data at doses of 180mg and higher coming mid-year, including results from approximately 40 additional patients in the BEACON study and SPOTLIGHT study, as well as results from approximately 30 patients in the open-label extension study.”

39. On February 28, 2025, Jasper filed an Annual Report on Form 10-K with the SEC, reporting the Company’s financial and operating results for the year ended December 31, 2024 (the “2024 10-K”). The 2024 10-K contained a substantively similar discussion of briquilimab and the Company’s strategy as discussed, *supra*, in ¶¶ 28-29.

40. Appended to the 2024 10-K as an exhibit was a signed certification pursuant to SOX by Defendants Martell and Cross attesting that “[t]he information contained in the [2024 10-K] fairly presents, in all material respects, the financial condition and results of operations of the Company.”

41. On May 12, 2025, Jasper issued a press release announcing the Company’s Q1 2025 financial results. The press release stated, in relevant part:

“During the first quarter of 2025 we made great progress advancing briquilimab toward important data readouts later this year from all three of our clinical programs in mast cell diseases,” said [Defendant] Martell[.] “Updated data from the BEACON study in CSU presented at the AAAAI annual meeting continued to demonstrate the potential of briquilimab to deliver differentiated onset of action, depth of response, and tolerability. We look forward to our mid-year data update in the first half of Q3 2025, which will include additional CSU patients treated in the BEACON study and in the open-label extension study. These data will inform final dose selection for our planned Phase 2b study, expected to commence in the fourth quarter of 2025. We also remain on track to present additional data from the SPOTLIGHT study in CIndU in the second quarter as well as initial data from the ETESIAN study in asthma in the second half of 2025.”

42. The statements referenced in ¶¶ 25-41 were materially false and misleading because Defendants made false and/or misleading statements, as well as failed to disclose material adverse facts about the Company’s business, operations, and compliance policies. Specifically, Defendants made false and/or misleading statements and/or failed to disclose that: (i) Jasper lacked the controls and procedures necessary to ensure that the third-party manufacturers on

which it relied were manufacturing products in full accordance with cGMP regulations and otherwise suitable for use in clinical trials; (ii) the foregoing failure increased the risk that results of ongoing studies would be confounded, thereby negatively impacting the regulatory and commercial prospects of the Company's products, including briquilimab; (iii) the foregoing increased the likelihood of disruptive cost-reduction measures; (iv) accordingly, the Company's business and/or financial prospects, as well as briquilimab's clinical and/or commercial prospects, were overstated; and (v) as a result, Defendants' public statements were materially false and misleading at all relevant times.

The Truth Emerges

43. On July 7, 2025, the Company issued a press release entitled "Jasper Therapeutics Reports Clinical Data Update from Briquilimab Studies in Chronic Spontaneous Urticaria." The press release stated, in relevant part:

Jasper [. . .] is reporting updated data from Company's BEACON Phase 1b/2a study of subcutaneous briquilimab in adult participants with CSU and providing an update on the program. Briquilimab administration resulted in deep and rapid disease control in the 240mg and 360mg single-dose cohorts, with 8 of 9 (89%) of participants enrolled across both cohorts achieving a complete response, and with 7 of 9 (78%) achieving a clinical response by week 2. In addition, BEACON participants who rolled over into the open-label extension study dosing at 180mg Q8W demonstrated robust clinical efficacy with 8 of 11 (73%) participants achieving a complete response at 12 weeks.

Results from the 240mg Q8W and the 240mg followed by 180mg Q8W dose cohorts appear to be confounded by an issue with one drug product lot used in those cohorts, with 10 of the 13 patients dosed with drug from the lot in question. The Company is investigating the drug product lot in question and expects to have the results of that investigation in the coming weeks. Key observations noted in those 10 patients were lower than expected drops in mean tryptase levels and no discernable impact on UAS7 scores. The 2 participants enrolled in the cohorts that have been confirmed as being dosed with drug product from a different lot both achieved complete response.

The Company has also determined that the drug product lot in question was used to treat participants enrolled in the ETESIAN trial evaluating briquilimab in

asthma. As a result, and in order to focus resources on advancing briquilimab in CSU, the Company is halting the study and pausing development in asthma. In addition, the Company is halting development in SCID and will be implementing a number of other cost cutting measures, including a potential restructuring, to extend runway and reduce expenses.

“We were pleased that results from the 240mg and 360mg single dose cohorts continue to indicate that briquilimab treatment can lead to deep and durable disease control in patients with CSU,” said [Defendant] Martell[.] “We are also very excited by the performance of the 180mg Q8W dose in the open label extension study with the strong efficacy observed, in combination with the encouraging safety data, supporting a differentiated profile. While we are very disappointed by the confounded results seen in the two multi-dose cohorts of the BEACON study, we are currently investigating the cause and are taking steps to ensure that drug product from the lot in question is returned to the Company and that sites have drug product from other lots to continue dosing. We plan to enroll an additional 10-12 patients across the two impacted cohorts to inform final dose selection for the Phase 2b study, *and will be implementing a number of cost cutting measures to reduce burn and extend our cash runway in light of this delay.*”

44. Market analysts were quick to comment on the Company’s announcement. For example, on July 7, 2025, BMO Capital Markets published a report entitled “Downgrade to Mkt; Manuf Issue Adds High Uncertainty to an Already Ambiguous Story.” The BMO Report stated, in relevant part:

Bottom Line:

Management update on Briquilimab’s CSU trial includes: (1) 240mg/360mg single-dose data suggesting plateauing exposure/efficacy; (2) 240mg and 240mg/180mg Q8W efficacy/safety data, likely confounded by product lot issues; (3) Preliminary 180mg Q8W OLE data, in line with blinded data. Although the new data appear somewhat encouraging, *the potential manufacturing issue, and underlying uncertainty/questions, make it challenging to separate the signal from the noise. Given the market environment and previous setback here, we believe investors won’t feel comfortable coming back to the story following today’s update.* Downgrading to Market Perform, PT to \$4.

The use of lot A34954 Briquilimab material challenges assessments of efficacy/safety profile in 240mg and 240mg/180mg Q8W cohorts. Lot A34954 material shows lack of efficacy on UAS7 (N=10) *following Briquilimab 240mg single-dose vs. 88% CR (N=7/8) with other lots, preventing clear assessment of the drug effect. Similarly, Briquilimab safety evaluation is challenged by the inclusion of lot A34954-treated patients.* We await further updates on lot A34954 in the coming weeks.

We downgrade JSPR to Market Perform to reflect high uncertainty around Briquilimab development. *Although today's data appear somewhat encouraging, we believe potential Briquilimab drug lot issues, coupled with existing uncertainty around dose-response [], will pressure the JSPR story moving forward given: (1) JSPR's financing overhang (runway to 4Q25), wherein 240mg and 240mg/180mg Q8W data are now expected by 4Q25; (2) Development delays vs. competitor CLDX (CSU PhIII enrollment completion by summer 2026) and competition from SNY following BPMC acquisition []; (3) Market's high sensitivity (and low tolerance) around ambiguous updates[.]*

45. On this news, Jasper's stock price fell \$3.73 per share, or 55.1%, to close at \$3.04 per share on July 7, 2025.

46. As a result of Defendants' wrongful acts and omissions, and the precipitous decline in the market value of the Company's securities, Plaintiff and other Class members have suffered significant losses and damages.

POST-CLASS PERIOD DEVELOPMENTS

47. After the end of the Class Period, on July 9, 2025, the Company issued a press entitled "Jasper Therapeutics Announces Corporate Reorganization and Other Cost Cutting Measures to Extend Cash Runway." The press release stated, in relevant part:

Jasper [. . .] today announced a corporate reorganization to extend its cash runway, *including a workforce reduction of approximately 50%. As part of the reorganization, [Defendant Tucker.] is departing as Jasper's [CMO], and Daniel Adelman, M.D., a member of Jasper's Scientific Advisory Board, will assume the role of Acting [CMO]. In order to focus resources on the development of briquilimab in chronic urticaria, Jasper is halting its other clinical and preclinical programs.*

Corporate Updates and Revised Guidance

- Jasper has refined its operating plan to focus on its briquilimab programs in chronic urticaria, *and as a result has executed a workforce reduction of approximately 50% of its current employees.*

- In order to focus on developing briquilimab in chronic urticaria and completing the BEACON, SPOTLIGHT and open label extension studies, Jasper is *halting its other clinical and preclinical programs, including the ETESIAN study in asthma, the SCID study and the ongoing investigator-sponsored studies. Jasper no longer plans to initiate additional mast cell focused clinical development program this year.*
- *[Defendant] Tucker is departing his role as [CMO] effective August 1, 2025.* Dr. Daniel Adelman, an experienced clinical development executive and member of Jasper’s scientific advisory board, will assume the role of Acting [CMO] as of that date.

SCIENTER ALLEGATIONS

48. During the Class Period, Defendants had both the motive and opportunity to commit fraud. They also had actual knowledge of the misleading nature of the statements they made, or acted in reckless disregard of the true information known to them at the time. In so doing, Defendants participated in a scheme to defraud and committed acts, practices, and participated in a course of business that operated as a fraud or deceit on purchasers of the Company’s securities during the Class Period.

PLAINTIFF’S CLASS ACTION ALLEGATIONS

49. Plaintiff brings this action as a class action pursuant to Federal Rule of Civil Procedure 23(a) and (b)(3) on behalf of a Class, consisting of all those who purchased or otherwise acquired Jasper securities during the Class Period (the “Class”); and were damaged upon the revelation of the alleged corrective disclosures. Excluded from the Class are Defendants herein, the officers and directors of the Company, at all relevant times, members of their immediate families and their legal representatives, heirs, successors or assigns and any entity in which Defendants have or had a controlling interest.

50. The members of the Class are so numerous that joinder of all members is impracticable. Throughout the Class Period, Jasper securities were actively traded on the NASDAQ. While the exact number of Class members is unknown to Plaintiff at this time and

can be ascertained only through appropriate discovery, Plaintiff believes that there are hundreds or thousands of members in the proposed Class. Record owners and other members of the Class may be identified from records maintained by Jasper or its transfer agent and may be notified of the pendency of this action by mail, using the form of notice similar to that customarily used in securities class actions.

51. Plaintiff's claims are typical of the claims of the members of the Class as all members of the Class are similarly affected by Defendants' wrongful conduct in violation of federal law that is complained of herein.

52. Plaintiff will fairly and adequately protect the interests of the members of the Class and has retained counsel competent and experienced in class and securities litigation. Plaintiff has no interests antagonistic to or in conflict with those of the Class.

53. Common questions of law and fact exist as to all members of the Class and predominate over any questions solely affecting individual members of the Class. Among the questions of law and fact common to the Class are:

- whether the federal securities laws were violated by Defendants' acts as alleged herein;
- whether statements made by Defendants to the investing public during the Class Period misrepresented material facts about the business, operations and management of Jasper;
- whether the Individual Defendants caused Jasper to issue false and misleading financial statements during the Class Period;
- whether Defendants acted knowingly or recklessly in issuing false and misleading financial statements;
- whether the prices of Jasper securities during the Class Period were artificially inflated because of the Defendants' conduct complained of herein; and
- whether the members of the Class have sustained damages and, if so, what is the proper measure of damages.

54. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy since joinder of all members is impracticable. Furthermore, as the damages suffered by individual Class members may be relatively small, the expense and burden of individual litigation make it impossible for members of the Class to individually redress the wrongs done to them. There will be no difficulty in the management of this action as a class action.

55. Plaintiff will rely, in part, upon the presumption of reliance established by the fraud-on-the-market doctrine in that:

- Defendants made public misrepresentations or failed to disclose material facts during the Class Period;
- the omissions and misrepresentations were material;
- Jasper securities are traded in an efficient market;
- the Company's shares were liquid and traded with moderate to heavy volume during the Class Period;
- the Company traded on the NASDAQ and was covered by multiple analysts;
- the misrepresentations and omissions alleged would tend to induce a reasonable investor to misjudge the value of the Company's securities; and
- Plaintiff and members of the Class purchased, acquired and/or sold Jasper securities between the time the Defendants failed to disclose or misrepresented material facts and the time the true facts were disclosed, without knowledge of the omitted or misrepresented facts.

56. Based upon the foregoing, Plaintiff and the members of the Class are entitled to a presumption of reliance upon the integrity of the market.

57. Alternatively, Plaintiff and the members of the Class are entitled to the presumption of reliance established by the Supreme Court in *Affiliated Ute Citizens of the State of Utah v. United States*, 406 U.S. 128, 92 S. Ct. 2430 (1972), as Defendants omitted material

information in their Class Period statements in violation of a duty to disclose such information, as detailed above.

COUNT I

(Violations of Section 10(b) of the Exchange Act and Rule 10b-5 Promulgated Thereunder Against All Defendants)

58. Plaintiff repeats and re-alleges each and every allegation contained above as if fully set forth herein.

59. This Count is asserted against Defendants and is based upon Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b), and Rule 10b-5 promulgated thereunder by the SEC.

60. During the Class Period, Defendants engaged in a plan, scheme, conspiracy and course of conduct, pursuant to which they knowingly or recklessly engaged in acts, transactions, practices and courses of business which operated as a fraud and deceit upon Plaintiff and the other members of the Class; made various untrue statements of material facts and omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and employed devices, schemes and artifices to defraud in connection with the purchase and sale of securities. Such scheme was intended to, and, throughout the Class Period, did: (i) deceive the investing public, including Plaintiff and other Class members, as alleged herein; (ii) artificially inflate and maintain the market price of Jasper securities; and (iii) cause Plaintiff and other members of the Class to purchase or otherwise acquire Jasper securities and options at artificially inflated prices. In furtherance of this unlawful scheme, plan and course of conduct, Defendants, and each of them, took the actions set forth herein.

61. Pursuant to the above plan, scheme, conspiracy and course of conduct, each of the Defendants participated directly or indirectly in the preparation and/or issuance of the quarterly and annual reports, SEC filings, press releases and other statements and documents described

above, including statements made to securities analysts and the media that were designed to influence the market for Jasper securities. Such reports, filings, releases and statements were materially false and misleading in that they failed to disclose material adverse information and misrepresented the truth about Jasper's finances and business prospects.

62. By virtue of their positions at Jasper, Defendants had actual knowledge of the materially false and misleading statements and material omissions alleged herein and intended thereby to deceive Plaintiff and the other members of the Class, or, in the alternative, Defendants acted with reckless disregard for the truth in that they failed or refused to ascertain and disclose such facts as would reveal the materially false and misleading nature of the statements made, although such facts were readily available to Defendants. Said acts and omissions of Defendants were committed willfully or with reckless disregard for the truth. In addition, each Defendant knew or recklessly disregarded that material facts were being misrepresented or omitted as described above.

63. Information showing that Defendants acted knowingly or with reckless disregard for the truth is peculiarly within Defendants' knowledge and control. As the senior managers and/or directors of Jasper, the Individual Defendants had knowledge of the details of Jasper's internal affairs.

64. The Individual Defendants are liable both directly and indirectly for the wrongs complained of herein. Because of their positions of control and authority, the Individual Defendants were able to and did, directly or indirectly, control the content of the statements of Jasper. As officers and/or directors of a publicly-held company, the Individual Defendants had a duty to disseminate timely, accurate, and truthful information with respect to Jasper's businesses, operations, future financial condition and future prospects. As a result of the dissemination of the aforementioned false and misleading reports, releases and public statements, the market price of

Jasper securities was artificially inflated throughout the Class Period. In ignorance of the adverse facts concerning Jasper's business and financial condition which were concealed by Defendants, Plaintiff and the other members of the Class purchased or otherwise acquired Jasper securities at artificially inflated prices and relied upon the price of the securities, the integrity of the market for the securities and/or upon statements disseminated by Defendants, and were damaged thereby.

65. During the Class Period, Jasper securities were traded on an active and efficient market. Plaintiff and the other members of the Class, relying on the materially false and misleading statements described herein, which the Defendants made, issued or caused to be disseminated, or relying upon the integrity of the market, purchased or otherwise acquired shares of Jasper securities at prices artificially inflated by Defendants' wrongful conduct. Had Plaintiff and the other members of the Class known the truth, they would not have purchased or otherwise acquired said securities, or would not have purchased or otherwise acquired them at the inflated prices that were paid. At the time of the purchases and/or acquisitions by Plaintiff and the Class, the true value of Jasper securities was substantially lower than the prices paid by Plaintiff and the other members of the Class. The market price of Jasper securities declined sharply upon public disclosure of the facts alleged herein to the injury of Plaintiff and Class members.

66. By reason of the conduct alleged herein, Defendants knowingly or recklessly, directly or indirectly, have violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder.

67. As a direct and proximate result of Defendants' wrongful conduct, Plaintiff and the other members of the Class suffered damages in connection with their respective purchases, acquisitions and sales of the Company's securities during the Class Period, upon the disclosure that the Company had been disseminating misrepresented financial statements to the investing public.

COUNT II

(Violations of Section 20(a) of the Exchange Act Against the Individual Defendants)

68. Plaintiff repeats and re-alleges each and every allegation contained in the foregoing paragraphs as if fully set forth herein.

69. During the Class Period, the Individual Defendants participated in the operation and management of Jasper, and conducted and participated, directly and indirectly, in the conduct of Jasper's business affairs. Because of their senior positions, they knew the adverse non-public information about Jasper's misstatement of income and expenses and false financial statements.

70. As officers and/or directors of a publicly owned company, the Individual Defendants had a duty to disseminate accurate and truthful information with respect to Jasper's financial condition and results of operations, and to correct promptly any public statements issued by Jasper which had become materially false or misleading.

71. Because of their positions of control and authority as senior officers, the Individual Defendants were able to, and did, control the contents of the various reports, press releases and public filings which Jasper disseminated in the marketplace during the Class Period concerning Jasper's results of operations. Throughout the Class Period, the Individual Defendants exercised their power and authority to cause Jasper to engage in the wrongful acts complained of herein. The Individual Defendants, therefore, were "controlling persons" of Jasper within the meaning of Section 20(a) of the Exchange Act. In this capacity, they participated in the unlawful conduct alleged which artificially inflated the market price of Jasper securities.

72. Each of the Individual Defendants, therefore, acted as a controlling person of Jasper. By reason of their senior management positions and/or being directors of Jasper, each of the Individual Defendants had the power to direct the actions of, and exercised the same to cause, Jasper to engage in the unlawful acts and conduct complained of herein. Each of the Individual

Defendants exercised control over the general operations of Jasper and possessed the power to control the specific activities which comprise the primary violations about which Plaintiff and the other members of the Class complain.

73. By reason of the above conduct, the Individual Defendants are liable pursuant to Section 20(a) of the Exchange Act for the violations committed by Jasper.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff demands judgment against Defendants as follows:

A. Determining that the instant action may be maintained as a class action under Rule 23 of the Federal Rules of Civil Procedure, and certifying Plaintiff as the Class representative;

B. Requiring Defendants to pay damages sustained by Plaintiff and the Class by reason of the acts and transactions alleged herein;

C. Awarding Plaintiff and the other members of the Class prejudgment and post-judgment interest, as well as their reasonable attorneys' fees, expert fees and other costs; and

D. Awarding such other and further relief as this Court may deem just and proper.

DEMAND FOR TRIAL BY JURY

Plaintiff hereby demands a trial by jury.
