UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 29, 2024

MILESTONE PHARMACEUTICALS INC.

(Exact name of registrant as specified in its charter)

| Québec | 001-38899 | Not applicable |
|--|--------------------------|-------------------------------------|
| (state or other jurisdiction of incorporation) | (Commission File Number) | (I.R.S. Employer Identification No. |

1111 Dr. Frederik-Philips Boulevard, Suite 420 Montréal, Québec CA (Address of principal executive offices)

H4M 2X6 (Zip Code)

| | Registrant's teleph | none number, including area code: (51 | 4) 336-0444 | |
|------|--|--|---|--|
| | (Former name | or former address, if changed since la | st report.) | |
| | eck the appropriate box below if the Form 8-K filing is owing provisions (see General Instruction A.2. below): | intended to simultaneously satisfy | the filing obligation of the registrant under any of the | |
| | Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) | | | |
| | Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) | | | |
| | Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) | | | |
| | Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)) | | | |
| Seci | purities registered pursuant to Section 12(b) of the Act: | | | |
| | Title of each class Common Shares | Trading Symbol(s) MIST | Name of each exchange on which registered The Nasdaq Stock Market LLC | |
| | icate by check mark whether the registrant is an emerging a his chapter) or Rule 12b–2 of the Securities Exchange Act | | | |
| Eme | erging growth company 🗵 | | | |
| | n emerging growth company, indicate by check mark if the revised financial accounting standards provided pursuant to | | | |

Item 8.01. Other Events.

On May 29, 2024, Milestone Pharmaceuticals Inc. ("Milestone" or the "Company") issued a press release announcing that its resubmitted New Drug Application for CARDAMYST (etripamil) nasal spray, its lead investigational product for the management of paroxysmal supraventricular tachycardia, has been accepted for filing by the U.S. Food and Drug Administration and that the Prescription Drug User Fee Act target date is 10 months from the acceptance date of May 26, 2024. A copy of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits.

Exhibit No. Description

99.1 Press release, dated May 29, 2024.

104 Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MILESTONE PHARMACEUTICALS INC.

By: /s/ Amit Hasija

Date: May 29, 2024

Amit Hasija

Chief Financial Officer Principal Financial Officer



Milestone Pharmaceuticals Announces FDA Acceptance of New Drug Application for CARDAMYSTTM

Montreal and Charlotte, N.C., May, 29, 2024 -- Milestone® Pharmaceuticals Inc. (Nasdaq: MIST), a biopharmaceutical company focused on the development and commercialization of innovative cardiovascular medicines, today announced that the United States Food and Drug Administration (FDA) accepted the Company's New Drug Application (NDA) on May 26, 2024 for CARDAMYST (etripamil) nasal spray, its lead investigational product for the management of paroxysmal supraventricular tachycardia (PSVT). The FDA Prescription Drug User Fee Act (PDUFA) target date is 10 months from the acceptance date of May 26, 2024.

"The FDA's acceptance of our NDA for CARDAMYST brings Milestone one step closer in our mission in providing a new, convenient and effective treatment option for patients with PSVT," said Joseph Oliveto, President, and Chief Executive Officer of Milestone Pharmaceuticals. "We understand the frequent impact that PSVT has on patients, as well as the underappreciated burden it places on their families and caregivers. Our progress toward providing a sense of security for patients is a result of the dedicated Milestone team, patients, and investigators to whom we are thankful."

The CARDAMYST clinical trial program represents the largest data package ever studied for an acute drug treatment intended for patient self-management of PSVT events. Milestone continues to advance commercial preparations to support the anticipated launch of etripamil with the proposed trade name, CARDAMYST. The brand name is conditionally approved by the FDA.

About Paroxysmal Supraventricular Tachycardia

An estimated two million people in the United States are currently diagnosed with PSVT which is a type of arrhythmia or abnormal heart rhythm. PSVT is characterized by episodes of sudden onset rapid heartbeats often exceeding 150 to 200 beats per minute. The heart rate spike is unpredictable and may last several hours. The rapid heart rate often causes disabling severe palpitations, shortness of breath, chest discomfort, dizziness or lightheadedness, and distress, forcing patients to limit their daily activities. The uncertainty of when an episode of PSVT will strike or how long it will persist can provoke anxiety in patients and negatively impact their day-to-day life between episodes. The impact and morbidity from an attack can be especially detrimental in patients with underlying cardiovascular or medical conditions, such as heart failure, obstructive coronary disease, or dehydration. Many health care providers are dissatisfied with the lack of effective treatment options with patients often requiring prolonged, burdensome, and costly trips to the emergency department or even invasive cardiac ablation procedures.



About CARDAMYST (etripamil) nasal spray

CARDAMYST is Milestone's lead investigational product. It is a novel calcium channel blocker nasal spray under clinical development for frequent and often highly symptomatic episodes of PSVT and AFib-RVR. It is designed as a self-administered rapid response therapy for patients thereby bypassing the need for immediate medical oversight. If approved, etripamil is intended to provide health care providers with a new treatment option to enable on-demand care and patient self-management. This portable, self-administered treatment may provide patients with active management and a greater sense of control over their condition. The clinical trial program for CARDAMYST includes a completed Phase 3 clinical-stage program for the treatment of PSVT and Phase 2 trial for the treatment of patients with AFib-RVR.

About Milestone Pharmaceuticals

Milestone Pharmaceuticals Inc. (Nasdaq: MIST) is a biopharmaceutical company developing and commercializing innovative cardiovascular solutions to improve the lives of people living with complex and life-altering heart conditions. The Company's focus on understanding unmet patient needs and improving the patient experience has led us to develop new treatment approaches that provide patients with an active role in self-managing their care. Milestone's lead investigational product is CARDAMYST (etripamil) nasal spray, a novel calcium channel blocker that is being studied for patients to self-administer without medical supervision to treat symptomatic episodic attacks associated with PSVT and AFib-RVR.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "believe," "continue," "could," "demonstrate," "designed," "develop," "estimate," "expect," "may," "pending," "plan," "potential," "progress," "will", "intend" and similar expressions (as well as other words or expressions referencing future events, conditions, or circumstances) are intended to identify forward-looking statements. These forward-looking statements are based on Milestone's expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties. Actual results may differ materially from these forward-looking statements. Forward-looking statements contained in this press release include statements regarding our ability to bring a new PSVT therapeutic option to market; the timing and outcomes of future interactions with U.S. and foreign regulatory bodies, including the FDA; the timing of the launch of etripamil; and our ability to advance commercial preparations to support the anticipated launch of etripamil. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, whether our future interactions with the FDA will have satisfactory outcomes; the risks inherent in biopharmaceutical product development and clinical trials, including the lengthy and uncertain regulatory approval process; uncertainties related to the timing of initiation, enrollment, completion, evaluation and results of our clinical trials; risks and uncertainty related to the complexity inherent in cleaning, verifying and analyzing trial data; and whether the clinical trials will validate the safety and efficacy of etripamil for PSVT or other indications, among others, general economic, political, and market conditions, including deteriorating market conditions due to investor concerns regarding inflation, Russian hostilities in Ukraine and ongoing disputes in Israel and Gaza and overall fluctuations in the financial markets in the United States and abroad, risks related to pandemics and public health emergencies, and risks related the sufficiency of Milestone's capital resources and its ability to raise additional capital in the current economic climate. These and other risks are set forth in Milestone's filings with the U.S. Securities and Exchange Commission, including in its annual report on Form 10-K for the year ended December 31, 2023, under the caption "Risk Factors," as such discussion may be updated from time to time by subsequent filings Milestone may make with the U.S. Securities & Exchange Commission. Except as required by law, Milestone assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.



Contact:

Kim Fox, Vice President, Communications, kfox@milestonepharma.com

Investor Relations

 $Chris\ Calabrese, \underline{ccalabrese@lifesciadvisors.com} \\ Kevin\ Gardner, \underline{kgardner@lifesciadvisors.com} \\$