

**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):
December 6, 2022

MILESTONE PHARMACEUTICALS INC.
(Exact name of registrant as specified in its charter)

Québec
(state or other jurisdiction of
incorporation)

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

001-38899
(Commission File Number)

Not applicable
(I.R.S. Employer Identification No.)

H4M 2X6
(Zip Code)

Registrant's telephone number, including area code: **(514) 336-0444**

Not applicable
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- 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))

Securities 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

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensation Arrangements of Certain Officers.

In connection with the Company's Virtual Commercial Deep-Dive Event on Etripamil for PSVT (the "*Commercial Presentation*"), Mr. Oliveto, the Company's Chief Executive Officer, announced Mr. Francis Plat's intention to retire as Chief Scientific Officer from the Company, effective December 31, 2022.

In connection with the departure, the Company entered into a consulting agreement (the "*Consulting Agreement*") with Mr. Plat. Pursuant to the Consulting Agreement, Mr. Plat has agreed to provide consulting services to the Company following his retirement effective December 31, 2022. The Consulting Agreement provides for monthly compensation of \$15,000 for each month during Stage 1, and an hourly rate of \$300 per hour for services provided during Stage 2 and Stage 3 (each as defined in the Consultant Agreement). Additionally, Mr. Plat's options to purchase shares of Company's common stock will continue to vest. The foregoing summary of the Consulting Agreement between Mr. Plat and the Company does not purport to be complete and is subject to, and qualified in its entirety by the full text of the Consulting Agreement.

Item 7.01. Other Events.

In connection with the Commercial Presentation, the Company provided a presentation that may be used in connection with presentations at conferences and investor meetings. The full text of the Company's corporate presentation is filed as Exhibit 99.1 hereto and incorporated herein by reference, and may also be accessed through the "Investors" section of the Company's website at www.milestonepharma.com.

The Company intends to use its website as a means of disclosing material non-public information and for complying with its disclosure obligations under Regulation FD. Such disclosures will be included on its website in the "Investor Relations" sections. Accordingly, investors should monitor such portions of its website, in addition to following press releases, SEC filings and public conference calls and webcasts.

The information furnished under this Item 7.01, including Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or the Exchange Act, or subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, or the Securities Act. The information in this Item 7.01, including Exhibit 99.1, shall not be deemed incorporated by reference into any other filing with the U.S. Securities Exchange Commission, or the SEC, made by the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1 104	Corporate Presentation dated December 6, 2022. Cover Page Interactive Data File--the cover page XBRL tags are 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
Amit Hasija
Chief Financial Officer

Dated: December 6, 2022



Commercial Opportunity Deep Dive for Milestone Pharmaceuticals

Joe Oliveto

Chief Executive Officer

Lorenz Muller

Chief Commercial Officer

December 6, 2022



The Presentation contains forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, as amended. Words such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “design,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “predict,” “positioned,” “potential,” “project,” “seek,” “should,” “target,” “will,” “would” (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 Presentation. 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 Presentation include statements regarding (i) the design, progress, timing, scope and results of the etripamil clinical trials in PSVT and AFib-RVR, (ii) the potential efficacy, safety and tolerability of etripamil, (iii) the potential of etripamil to deliver a clinically meaningful benefit to patients with PSVT in the home-setting environment and to empower patients to take control of their condition as well as provide value to the healthcare system, (iv) the possibility that data could fulfill the efficacy requirement for an NDA submission with the FDA for etripamil, (v) plans relating to commercializing etripamil, if approved, including the geographic areas of focus and sales strategy and (vi) the potential market size and the rate and degree of market acceptance of etripamil and any future product candidates and the implementation of Milestone’s business model and strategic plans for its business, etripamil and any future product candidates. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, 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 and evaluation of clinical trials, including the RAPID and ReVeRA trials, and whether the clinical trials will validate the safety and efficacy of etripamil for PSVT, AFib-RVR, or other indications, among others, as well as risks related to pandemics and public health emergencies, including those related to COVID-19, and risks related to the sufficiency of our capital resources and our ability to raise additional capital. 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, 2021, under the caption “Risk Factors”, as such discussion may be updated in future filings we make with the SEC. 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.

This Presentation contains trademarks, trade names and service marks of other companies, which are the property of their respective owners. Certain information contained in this Presentation and statements made orally during this Presentation relate to or is based on studies, publications, surveys and other data obtained from third-party sources and Milestone’s own internal estimates and research. While Milestone believes these third-party studies, publications, surveys and other data to be reliable as of the date of the Presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, no independent sources has evaluated the reasonableness or accuracy of Milestone’s internal estimates or research and no reliance should be made on any information or statements made in this Presentation relating to or based on such internal estimates and research.

Etripamil is an investigational new drug, which is not approved for commercial distribution in the United States.



- **Introduction and Overview** of Milestone Pharmaceuticals
- **PSVT Disease Burden** – The Problem
- **Etripamil** – Value Proposition
- **Where Do We Play** – Market Size
- **How Do We Engage** – Commercial Strategy



- **Introduction and Overview** of Milestone Pharmaceuticals
 - **PSVT Disease Burden** – The Problem
 - **Etripamil** – Value Proposition
 - **Where Do We Play** – Market Size
 - **How Do We Engage** – Commercial Strategy

Management Team



Joseph Oliveto
Chief Executive Officer



Amit Hasija
Chief Financial Officer



David Bharucha, MD, PhD
Chief Medical Officer



Francis Plat, MD
Chief Scientific Officer



Lorenz Muller
Chief Commercial Officer



Jeff Nelson
Chief Operating Officer





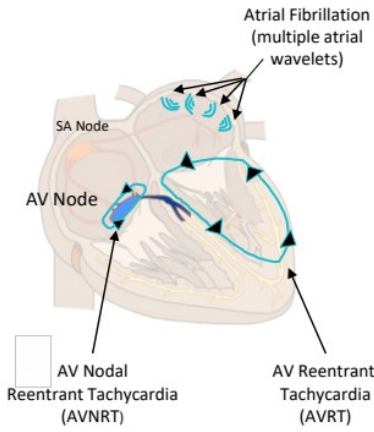
1. Etripamil potentially offers patients with PVST control over their condition through rapid resolution of episodes when and wherever they occur
2. PSVT is a large untapped market with high unmet need for Patients and Health Care Providers
3. Experienced team with deep understanding of the market from 5+ years of stakeholder engagement
4. Phase 3 clinical trials in PSVT deliver clear statistical efficacy and safety appropriate for patient self-use
5. NDA submission expected mid-2023 enables clear path to market
6. Development in AFib with Rapid Ventricular Rate (AFib-RVR) represents potential to drive future growth



Patients with PSVT and AFib-RVR report feeling a loss of control

PSVT (AVNRT and AVRT)	AFib-RVR (a subset of AFib)
Regular rapid heart rate	Irregular rapid heart rate
Commonly 150 - 250 bpm	Commonly 100 - 175 bpm
Episode frequency and duration is highly variable	

Common Symptoms Include	Heart palpitations	Chest pressure or pain
	Shortness of breath	Fatigue
	Light-headedness	Anxiety



PSVT = Paroxysmal Supraventricular Tachycardia; AFib-RVR = Atrial Fibrillation with Rapid Ventricular Rate
 Sources: adapted from https://en.ecgpedia.org/index.php?title=Supraventricular_Rhythms, accessed 2/2021



Chronic / preventive



- Chronic oral BBs and CCBs
- Uncertain efficacy and unpleasant side effects
- 50-65% of patients with PSVT are actively taking at any time



- Catheter ablation
- Only ~10-15% of patients with PSVT opt for ablation

Acute



- IV adenosine or DC cardioversion
- >150K ED visits/hospital per year
- CCBs/BBs used off-label as “Pill-in-Pocket” despite limitations
- Many patients wait out episodes

PSVT = Paroxysmal Supraventricular Tachycardia; AFib-RVR = Atrial Fibrillation with Rapid Ventricular Rate; IV = Intravenous; CCBs = Calcium Channel Blockers; DC = Direct Current; AAD = Anti Arrhythmic Drugs

Sources: Internal estimates based on market research and longitudinal analysis of Truven/Marketscan and Medicare claims data; Page RL et al, 2015 ACC/AHA/HRS guideline for the management of adult patients with supraventricular tachycardia: executive summary: a report of the ACC/AHA Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. Circulation. 2016;133:e471–e505; Quantitative market research conducted by Triangle Insights Group (n=250 cardiologists), June-September 2020



Drawbacks with the current standard of care in the Emergency Department



- Time consuming
- Anxiety provoking
- Costly
- Unpleasant experience with adenosine
- Often results in a hospital admission
- Experienced by patients as a loss of control

Intervention used by the patient when & wherever an episode occurs



Potential to:

- Resolve patient symptoms quickly
- Reduce ED visits / hospital admissions
- Alleviate need for chronic medications
- Be used as an alternative or bridge to ablation procedure



- Developed to rapidly terminate episodes of PSVT
- Designed for patient self-administration where and whenever the episodes occur
- Novel, investigational, L-type calcium channel blocker
- Formulated as intranasal spray with:
 - Rapid onset of action ($T_{\max} \leq 7$ min)
 - Short-lasting duration: eliminated from blood within a few hours



PSVT= paroxysmal supraventricular tachycardia. PK = pharmacokinetic. Error bars = standard error (SE).

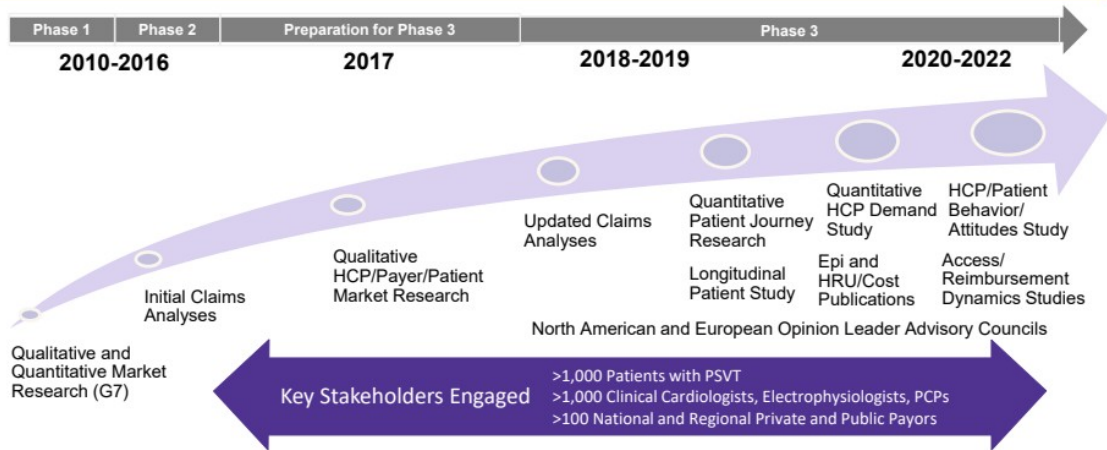
Sources: Stambler BS, et al., J Am Coll Cardiol. 2018; Wight D, et al. J Am Coll Cardiol. 2022 Mar, 79 (9_Supplement); Ip J, et al. manuscript in preparation. ; NODE-PK-101, -103, data on file.



- **Introduction and Overview** of Milestone Pharmaceuticals
- **PSVT Disease Burden – The Problem**
- **Etripamil** – Value Proposition
- **Where Do We Play** – Market Size
- **How Do We Engage** – Commercial Strategy



Robust market and customer understanding shown in interviews with 2,000+ stakeholders



Source: Milestone Market Research and Longitudinal Claims Analyses on file

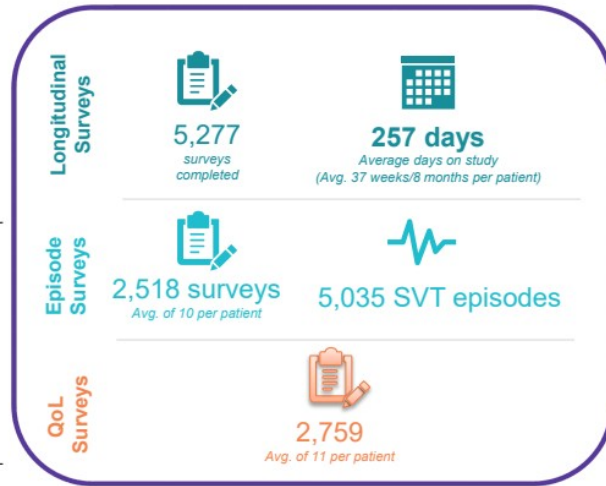


Analysis of Prospective Patient Reported Outcomes (PRO) Longitudinal Data



247 US & UK patients

- **Phase 1: Baseline Survey** (medical and SVT episode history)
- **Phase 2: Longitudinal Weekly Surveys** (episode survey if experienced an episode, QoL survey if not)



Source(s): PSVT patient market research, 2019 (BluePrint Research Group, n=247, n=198 US & n=49 UK)

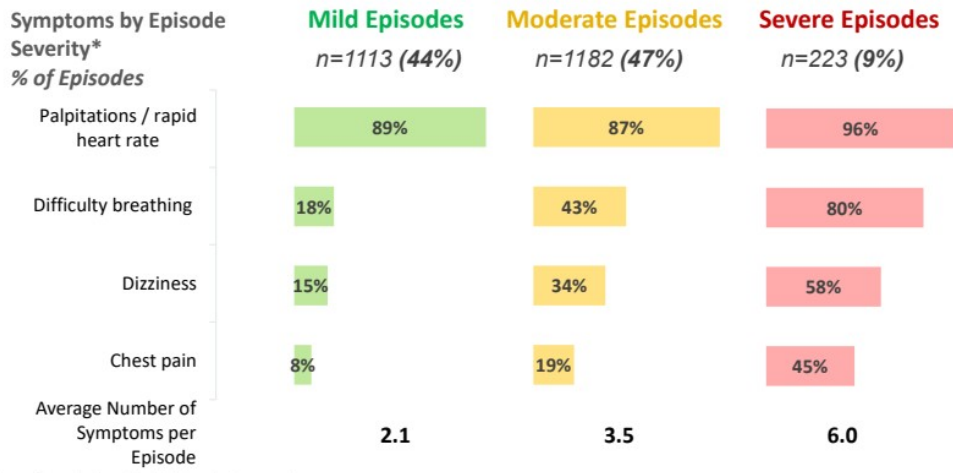


- ~60%** with multiple 10+ minute moderate/severe* episodes per year
- ~45%** experience an average duration ≥ 30 min / episode
- >20%** experience one or more episodes per year that require medical intervention
- 12-15** median episode frequency per year
- 35%** last at least 30 minutes
- 56%** moderate/severe intensity

Target Addressable Market (TAM)

- 40-60%** of patients diagnosed with PSVT
- 4 - 6** burdensome episodes / year

*Patient stated severity of SVT episode (mild, moderate, or severe)
Source: 2019 market research with patients conducted by BluePrint Research Group (n=247)



*Severity as self-reported by patient (mild, moderate, severe)

Source: PSVT patient market research, 2019 (Blueprint Research Group, n=247, n=198 US & n=49 UK)



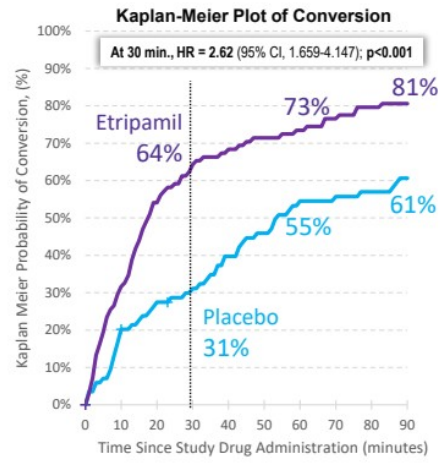
Source: K Wood, Supraventricular Tachycardia and the Struggle to be Believed, Eur J Cardiovasc Nurs., 2007 December



- **Introduction and Overview** of Milestone Pharmaceuticals
- **PSVT Disease Burden** – The Problem
- **Etripamil** – Value Proposition
- **Where Do We Play** – Market Size
- **How Do We Engage** – Commercial Strategy



	Etripamil	Placebo
Conversion to Sinus Rhythm at 30 Minutes	64%	31%
Conversion to Sinus Rhythm at 60 Minutes	73%	55%
Median Time to Conversion	17 minutes	54 minutes
Healthcare Resource Utilization	<ul style="list-style-type: none"> Use of Etripamil resulted in a cumulative ~40% difference in ED visits 	
Relief of specific symptoms potentially associated with an SVT episode	<ul style="list-style-type: none"> Etripamil demonstrated significant improvement in symptoms 	
Generally safe and well tolerated	<ul style="list-style-type: none"> Vast majority of adverse events were mild in which 30% of patients experienced transient nasal discomfort / irritation Less than 1% of patients experienced presyncope or 2nd degree AV block 	



Source: James Ip et al (2022, Nov 7): Self-Administered Etripamil for Termination of Spontaneous Paroxysmal Supraventricular Tachycardia: Primary Analysis from the RAPID Study. AHA 2022 Late-Breaking Science, Chicago, IL, USA



 Patients	 Rapid & Reliable Relief Provide meaningful relief from episode symptoms and duration	 Patient Empowerment Empower in disease management & avoid unneeded healthcare visits	 Quiet Mind Reduce worry between episodes with versatile on-demand treatment	 Active Living Allow a return to normal functional activity between episodes
--	---	---	---	--

Source: Patient Advisory Boards and Focus Groups with Patient Ambassadors, HRW HCP and Patient Behavioral and Attitudinal Research 2022

Etripamil Has Distinct Value Propositions for Patients and Physicians

 <p>Patients</p>	 <p>Rapid & Reliable Relief Provide meaningful relief from episode symptoms and duration</p>	 <p>Patient Empowerment Empower in disease management & avoid unneeded healthcare visits</p>	 <p>Quiet Mind Reduce worry between episodes with versatile on-demand treatment</p>	 <p>Active Living Allow a return to normal functional activity between episodes</p>
 <p>Physicians</p>	 <p>Familiar & Trusted Ca⁺ channel MoA is well known and trusted</p>	 <p>Rapid, Safe, & Reliable Relief Provide meaningful & safe relief from episode symptoms and duration</p>	 <p>Versatile 'On-Demand' Treatment Meet the need for reliable acute outpatient treatment options</p>	 <p>Reduction in Healthcare Utilization Reduce unneeded healthcare use (e.g., unneeded ED visits)</p>

Source: Patient Advisory Boards and Focus Groups with Patient Ambassadors; HRW HCP and Patient Behavioral and Attitudinal Research 2022 ;Triangle Insights Group (Node 301 and Rapid Qual and Quant HCP Demand Research 2020)

Etripamil Has Distinct Value Propositions for All Stakeholder Groups



Patients



Rapid & Reliable Relief
Provide meaningful relief from episode symptoms and duration



Patient Empowerment
Empower in disease management & avoid unneeded healthcare visits



Quiet Mind
Reduce worry between episodes with versatile **on-demand** treatment



Active Living
Allow a return to normal functional activity between episodes



Physicians



Familiar & Trusted
Ca+ channel MoA is well known and trusted



Rapid, Safe, & Reliable Relief
Provide meaningful & safe relief from episode symptoms and duration



Versatile 'On-Demand' Treatment
Meet the need for reliable acute outpatient treatment options



Reduction in Healthcare Utilization
Reduce unneeded healthcare use (e.g., unneeded ED visits)



Payers



Addresses Unmet Need
Fill a gap in current treatment with the first indicated, **reliable, on-demand** option

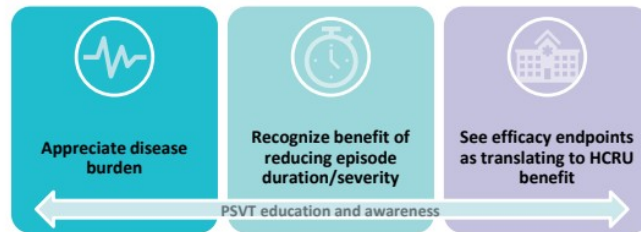


Reduction in Healthcare Utilization
Demonstrate measurable reduction in healthcare utilization and cost-offsets



Novel Formulation
New molecule using Ca+ channel MoA

Source: Patient Advisory Boards and Focus Groups with Patient Ambassadors; HRW HCP and Patient Behavioral and Attitudinal Research 2022; Triangle Insights Group (Node 301 and Rapid Qual and Quant HCP Demand Research 2020); Trinity Life Sciences analysis of IBM Market Scan and IQVIA PharMetrics Data 2021-2022; CRA Research (US Strategic Pricing Research with Payers 2021, Etripamil Pricing Corridor Research with HCPs and Patients 2022); Payer Ad Board 2022



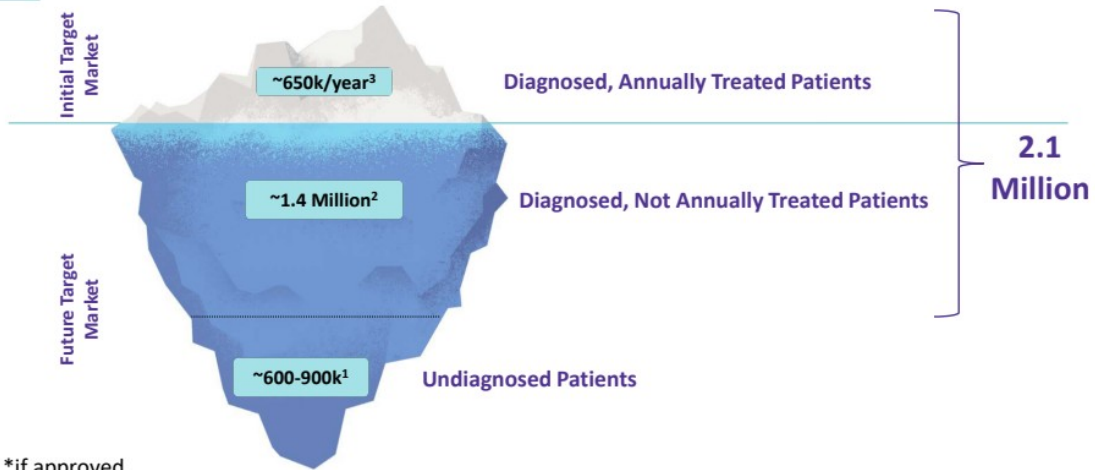
- Most US payers are expected to understand the burden of PSVT and the value prop for etripamil
- Not expected to be “budget-impacting” enough to warrant active management
- Minimal market competition less likely to drive large rebate pressure
- Tier placement and utilization management employed are expected to determine physician willingness to prescribe and patient willingness to pay

Sources: CRA Research (US Strategic Pricing Research with Payers 2021, Etripamil Pricing Corridor Research with HCPs and Patients 2022), Payer Ad Board 2022



- **Introduction and Overview** of Milestone Pharmaceuticals
- **PSVT Disease Burden** – The Problem
- **Etripamil** – Value Proposition
- **Where Do We Play** – Market Size
- **How Do We Engage** – Commercial Strategy

Core PSVT Market is Addressable Now*, with Large Potential for Expansion



*if approved

Sources: 1) assumes annual incidence rate for PSVT of ~300k from longitudinal claims analysis and the average time to diagnosis (currently 2-3 years) can be reduced to <6 months 2) Calculated as the difference between PSVT prevalence of 2.1M and annual treatment rate of ~650k from Truven MarketScan data, 2008-2016 analyzed by Precision Xtract, 2019 3) Estimated number of unique patients with annual claims for PSVT from Truven MarketScan data, 2008-2016 analyzed by Precision Xtract, 2019.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Unique Patients	648,518	417,249	379,346	344,891	311,771	2,101,775

↑

Annually Treated Patients

↑

5-year Incidence Patients

↑

5-year Prevalence Patients

Analyzed commercial and Medicare claims data over a 9-year period, where patients were required to have five years of continuous enrollment

- ✓ 1+ PSVT code required in the Emergency Department or inpatient setting (unique patients managed acutely) or,
- ✓ 2+ PSVT codes required in the outpatient setting (additional unique patients managed chronically)

Source: Data on file from IBM MarketScan® Commercial Research Database (<65y) and the Medicare Limited Dataset (≥65y), with demographic, enrollment and claims data for commercially insured (Truven) and Medicare covered patients using PSVT code 427.0 or I47.1 for up to a 9-year interval between 2008 and 2016 inclusive.



Received 13 December 2021 | Revised 4 April 2022 | Accepted 13 May 2022
DOI: 10.1111/jc.15494

ORIGINAL ARTICLES

WILEY

Prevalence and Incidence of patients with paroxysmal supraventricular tachycardia in the United States

Michael Rehers MD, MS¹ | Naomi C. Sacks PhD^{1,2} | Maja R. Emdin BA³ |
Bridget Healey MD⁴ | Matthew T. Fivola MPH⁴ | Philip L. Cox MPH⁴ |
Sean D. Pokorney MD, MBA¹

¹These authors contributed equally to this work.
²These authors contributed equally to this work.
³These authors contributed equally to this work.
⁴These authors contributed equally to this work.

Correspondence: Michael Rehers, MD, MS, Division of Cardiology, Massachusetts General Hospital, Boston, MA 02114, USA.
Email: mrehers@mgh.harvard.edu

Conflict of Interest: The authors have nothing to disclose.

© 2022 Wiley Periodicals, Inc.

This is an open access article under the terms of the [Creative Commons Attribution License](https://onlinelibrary.wiley.com/terms-and-conditions), which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

Wiley Online Library on [Date], at [Time]. See the Terms and Conditions (<https://onlinelibrary.wiley.com/terms-and-conditions>) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

1097-4644/22/1111-150-157

Journal of Internal Medicine 2022; 292: 150–157

ISSN 0954-6820

© 2022 The Author(s)

Published by John Wiley & Sons Ltd

on behalf of the Association for Academic Surgeons

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

and the Association of Surgeons in Training

MESA Study

1097-4644/22/1111-150-157
DOI: 10.1111/jc.15494

ELECTROPHYSIOLOGY

Paroxysmal Supraventricular Tachycardia in the General Population

LEONARDO A. OREJARENA, MD, HUMBERTO VIDALLE, JR., MD, FACC, FRANK D'ESTEFANO, MD, MPH, DAVID L. NORDSTROM, PhD, ROBERT A. VIERKANT, MD, PETER N. SMITH, MD, FACC, JOHN J. HAYES, MD, FACC
Baltimore, Maryland

ORIGINAL RESEARCH

PREEMPT Study

1097-4644/22/1111-150-157
DOI: 10.1111/jc.15494

ELECTROPHYSIOLOGY

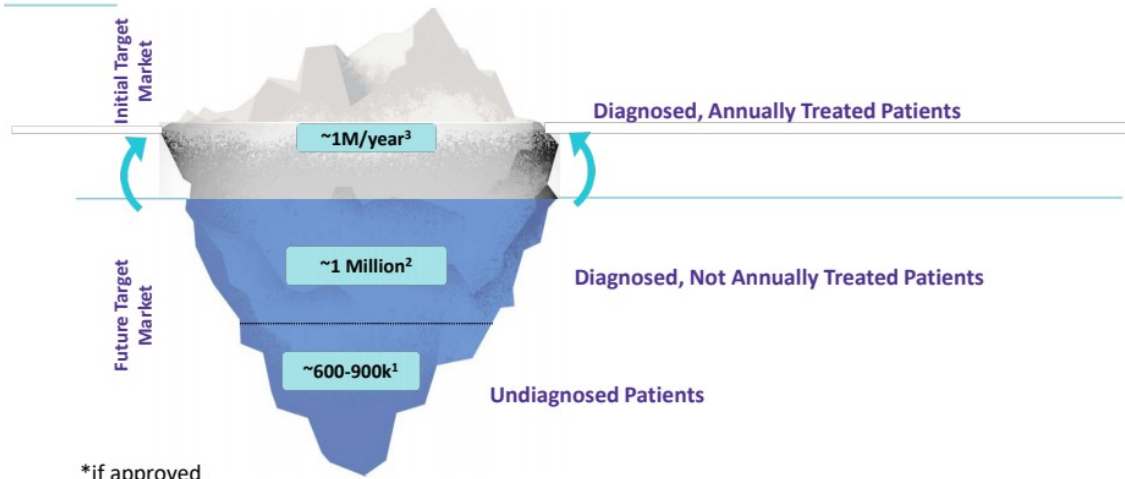
Contemporary Burden and Correlates of Symptomatic Paroxysmal Supraventricular Tachycardia

Maja R. Emdin, MD, MPH, Taylor L. Liu, MD, PhD, Dongjie Fan, MSPhD, Elisha A. Garcia, BS, Sue Hee Sung, MPH, Matthew D. Solomon, MD, PhD
Baltimore, Maryland

- 1.3-2.1M diagnosed patients with PSVT
- MESA/PREEMPT identify only patients presenting to healthcare settings acutely, with the episode confirmed on ECG during the encounter
- Less than 25% of patients in RAPID on placebo sought medical intervention
- Less than 40% of incident cases in MESA would have been detected by PSVT ICD-9 Code 427.0
- Potential 2.5X under-reporting of diagnosed patients with PSVT

Source: Orejarena LA, Vidalle H Jr, DeStefano F, Nordstrom DL, Vierkant RA, Smith PN, Hayes JJ. Paroxysmal supraventricular tachycardia in the general population. *J Am Coll Cardiol*. 1998;31:150–157. Alan S. Go, MD; Mark A. Hlatky, MD; Taylor L. Liu, MD, PhD; Dongjie Fan, MSPhD; Elisha A. Garcia, BS; Sue Hee Sung, MPH; Matthew D. Solomon, MD, PhD. Contemporary Burden and Correlates of Symptomatic Paroxysmal Supraventricular Tachycardia. *J Am Heart Assoc*. 2018;7:e008759. DOI: 10.1161/JAHA.118.008759.

Core PSVT Market is Addressable Now*, with Large Potential for Expansion



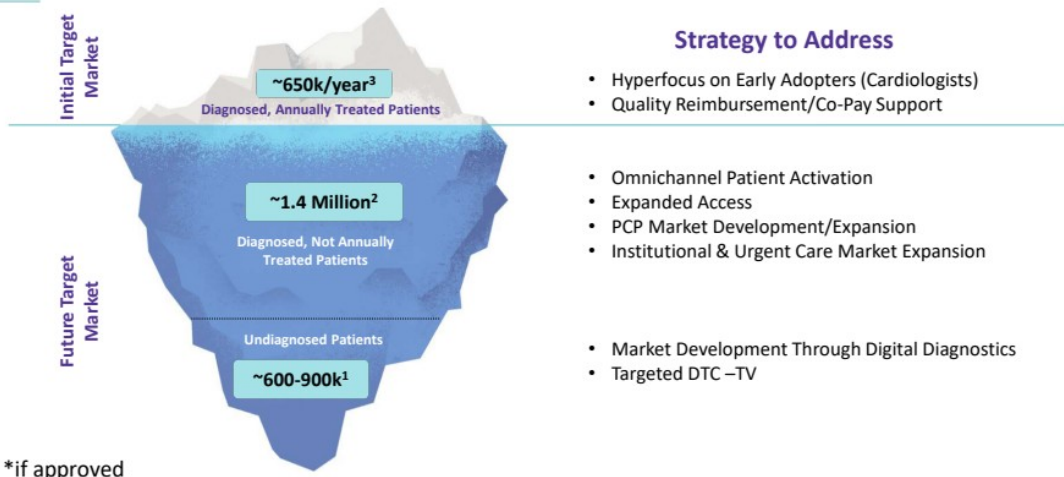
*if approved

Sources: 1) assumes annual incidence rate for PSVT of ~300k from longitudinal claims analysis and the average time to diagnosis (currently 2-3 years) can be reduced to <6 months 2) Calculated as the difference between PSVT prevalence of 2.1M and annual treatment rate of ~650k from Truven MarketScan data, 2008-2016 analyzed by Precision Xtract, 2019 3) Estimated number of unique patients with annual claims for PSVT from Truven MarketScan data, 2008-2016 analyzed by Precision Xtract, 2019.



- **Introduction and Overview** of Milestone Pharmaceuticals
- **PSVT Disease Burden** – The Problem
- **Etripamil** – Value Proposition
- **Where Do We Play** – Market Size
- **How Do We Engage** – Commercial Strategy

Core PSVT Market is Addressable Now*, with Large Potential for Expansion



*if approved

Source: 1) assumes annual incidence rate for PSVT of ~300k from longitudinal claims analysis and the average time to diagnosis (currently 2-3 years) can be reduced to <6 months 2) Calculated as the difference between PSVT prevalence of 2.1M and annual treatment rate of ~650k from Truven MarketScan data, 2008-2016 analyzed by Precision Xtract, 2019 3) Estimated number of unique patients with annual claims for PSVT from Truven MarketScan data, 2008-2016 analyzed by Precision Xtract, 2019.



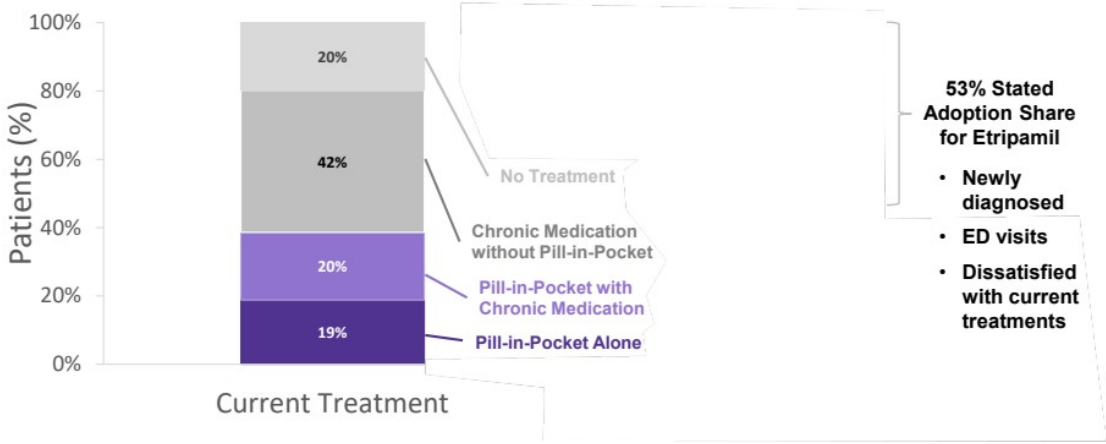
Majority of patients with PSVT managed by CV specialists, leading to commercial efficiencies

		Clinical Cardiologists	Primary Care Physicians	Electro-physiologists
% of patients managed		~60%	~30%	~10%
Long-term Use	Add to or Replace Chronic Medications	Primary Target		
Medium-term Use	Defer Ablation			
Short-term Use	Bridge to Ablation			
		Secondary Target		

- Targeted sales force to reach majority of available opportunity
- Significant overlap with most common CV portfolio call points (e.g., heart failure, OACs, lipidemia, diabetes)

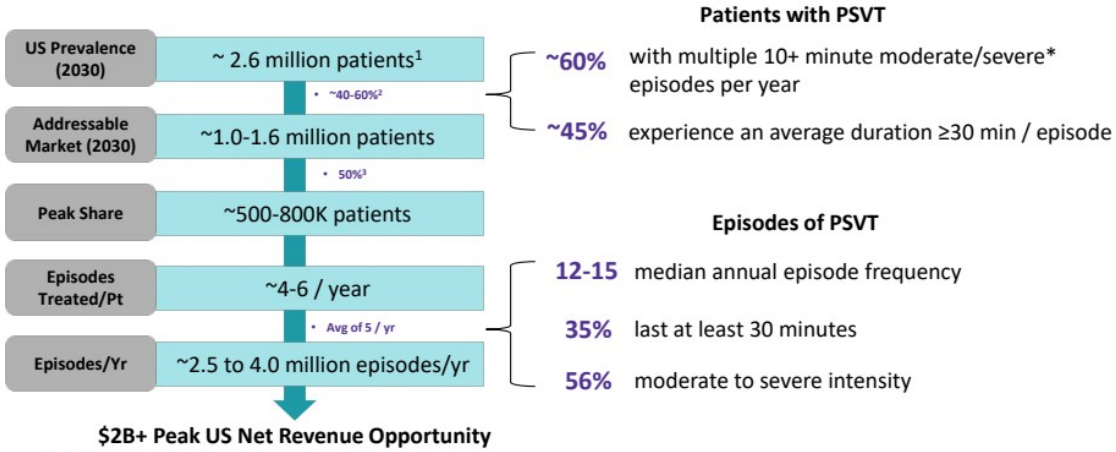
PSVT = Paroxysmal Supraventricular Tachycardia; CV = Cardiovascular; OAC = Oral Anti-Coagulants
Source: Milestone Market Research on file

Cardiologists Report >50% Stated Adoption of Etripamil when Shown RAPID Study Product Profile



Source: Quantitative market research conducted by Triangle Insights Group (n=250 cardiologists), June-September 2020

Peak US Market Opportunity for Etripamil in PSVT



\$2B+ Peak US Net Revenue Opportunity

*Patient stated severity of SVT episode (mild, moderate, or severe)

Peak US net revenue estimates assume a net price of \$500-\$1,000/Rx at launch and that patients prescribed etripamil use the product on average to treat 4 episodes per year

Sources: Internal estimates based on market and outcomes research, Milestone Pharmaceuticals. 1. Rehorn et al. Journal of Cardiovascular Electrophysiology. 2021 Aug; 32(8): 2199-2206. doi: 10.1111/jce.15109. Epub 2021 Jun 14. 2. 2019 market research with patients conducted by Blueprint Research Group (n=247). 3. 2020 market research with HCPs conducted by Triangle Insights Group, 2020 (n=250).



- PSVT represents a large and actionable population in the US with significant potential for expansion
- Most patients with PSVT experience episodes that could benefit from etripamil
- RAPID study results enable a target product profile that appeals to physicians and patients while not overly burdening payers
- PSVT market dynamics allow for early success and substantial room to expand
- Milestone has the foundational market understanding and commercialization expertise to successfully launch etripamil in the US

Thank you
