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BY EDGAR and COURIER

**\*FOIA Confidential Treatment Request\***  
**Confidential Treatment Requested by Milestone Pharmaceuticals Inc.**  
**in connection with Registration Statement on Form S-1 (File No. 333-230846)**

April 19, 2019

Chris Edwards  
Office of Healthcare and Insurance  
Division of Corporation Finance  
U.S. Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549

**Re: Milestone Pharmaceuticals Inc.**  
**Registration Statement on Form S-1**  
**Filed April 12, 2019**  
**File No. 333-230846**

Ladies and Gentlemen:

On behalf of Milestone Pharmaceuticals Inc. (the "**Company**"), we are submitting this supplemental letter in further response to comment 9 received from the staff (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") by letter dated February 8, 2019 with respect to the Company's Confidential Draft Registration Statement on Form S-1 originally submitted to the Commission on December 21, 2018, resubmitted to the Commission on February 28, 2019 and March 15, 2019, and subsequently filed with the Commission on April 12, 2019 (the "**Registration Statement**").

Due to the commercially sensitive nature of information contained in this letter, this submission is accompanied by the Company's request for confidential treatment for selected portions of this letter. The Company has filed a separate letter with the Office of Freedom of Information and Privacy Act Operations in connection with the confidential treatment request pursuant to Rule 83 of the Commission's Rules on Information and Requests, 17 C.F.R. § 200.83. For the Staff's reference, we have enclosed a copy of the Company's letter to the Office of Freedom of Information and Privacy Act Operations as well as a copy of this correspondence, marked to show the portions redacted from the version filed via EDGAR and for which the Company is requesting confidential treatment.

For the convenience of the Staff, we have recited the prior comment from the Staff in italicized type and have followed the comment with the Company's response.

*Critical Accounting Policies and Estimates*  
*Share-Based Compensation, page 69*

9. *Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the initial public offering and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features.*

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## **Preliminary Price Range**

The Company advises the Staff that the Company currently expects a price range of \$[\*\*\*] to \$[\*\*\*] per common share (the “**Preliminary Price Range**”) for its initial public offering (“**IPO**”), which Preliminary Price Range reflects a [\*\*\*]-for-[\*\*\*] reverse share split of the Company’s shares that will be effected prior to the effectiveness of the Registration Statement. This Preliminary Price Range implies a pre-money valuation range for the Company of \$[\*\*\*] million to \$[\*\*\*] million. The share and per-share numbers in this letter are presented on a post-split basis.

The Preliminary Price Range is based in part upon the Company’s prospects, prospects for the biopharmaceutical industry, the general condition of the securities markets and the recent market prices of, and the demand for, publicly traded shares of generally comparable companies in the biopharmaceutical industry, as well as input received from Jefferies LLC, Cowen and Company, LLC and Piper Jaffray & Co., the lead underwriters (the “**Representatives**”) for the IPO. The Company notes that, as is typical in IPOs, the Preliminary Price Range was not derived using a formal determination of fair value, but was determined by discussions between the Company and the Representatives based on the assessment of the foregoing factors.

The Company will include a narrower bona fide price range of the common shares in an amendment to the Registration Statement that will precede the commencement of the Company’s road show, which the Company expects to be a two-dollar range within the Preliminary Price Range. However, the parameters of the bona fide price range will be subject to then-current market conditions, continuing discussions with the Representatives and material business developments impacting the Company, and due to the volatility in the securities markets, in particular the volatility experienced in the market by recent IPO issuers, there is a possibility that the bona fide price range for the IPO may fall outside of the Preliminary Price Range. In any event, the Company confirms to the Staff that the bona fide price range will comply with Item 501(b)(3) of Regulation S-K and C&DI 134.04.

## **Common Share Valuation Methodologies**

As there has been no public market for the Company’s common shares to date, the estimated fair value of its common shares has been determined by the Company’s board of directors (the “**Board**”), as of the date of each option grant, with input from management, considering the Company’s most recent arm’s-length sales of its preferred shares and the most recent third-party valuation of its common shares, as well as the Board’s assessment of additional objective and subjective factors that the Board believed were relevant and which may have changed from the date of the most recent third-party valuation through the date of the grant. The Board considered various objective and subjective factors to determine the fair value of the common shares as of each grant date, including:

- the prices at which the Company sold preferred shares and the superior rights and preferences of the preferred shares relative to the common shares at the time of each grant;
- the progress of the Company’s research and development programs, including the status and results of clinical trials for etripamil;
- the Company’s stage of development and its business strategy;
- external market conditions affecting the healthcare industry in general, and the biopharmaceutical industry in particular, and trends within such industries;
- the Company’s financial position, including cash on hand, and its historical and forecasted performance and operating results;
- the lack of an active public market for the common shares and preferred shares;

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- the likelihood of achieving a liquidity event, such as an IPO, in light of prevailing market conditions;
- the Company's IPO timeline and related activities; and
- the analysis of IPOs and the market performance of similar companies in the healthcare and biopharmaceutical industries.

The third-party valuations of the Company's common shares that the Board considered in making its determinations were prepared in accordance with the American Institute of Certified Public Accountants Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (the "**Practice Guide**"), which prescribes several valuation approaches for determining the value of an enterprise, such as the cost, market and income approaches, and various methodologies for allocating the value of an enterprise to its capital structure and specifically its common shares.

In accordance with the Practice Guide, the Company considered the following methods for allocating the enterprise value across its classes and series of shares to determine the estimated fair value of its common shares at each valuation date.

- *Option Pricing Method (OPM)*. The OPM estimates the value of the common equity of the Company using the various inputs in the Black-Scholes option pricing model. The OPM treats the rights of the holders of common shares as equivalent to that of call options on any value of the enterprise above certain break points of value based upon the liquidation preferences of the holders of the Company's convertible preferred shares, as well as their rights to participation, and the share prices of the outstanding options. Thus, the value of the common shares can be determined by estimating the value of its portion of each of these call option rights. Under this method, the common shares have value only if the funds available for distribution to shareholders exceed the value of the liquidation preference at the time of a liquidity event, such as a merger or sale. Given the common shares represent a non-marketable equity interest in a private enterprise, an adjustment to the preliminary value estimates had to be made to account for the lack of liquidity that a shareholder experiences. This adjustment is commonly referred to as a discount for lack of marketability ("**DLOM**").
- *Probability-Weighted Expected Return Method (PWERM)*. The PWERM is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes considered by the Company, as well as the economic and control rights of each share class.
- *Current Value Method (CVM)*. The CVM allocates equity by subtracting the liquidation preference of any outstanding preferred shares considering all rights and assumed conversion behavior associated with those shares.
- *Hybrid Method*. The Hybrid Method is a weighted-average method that combines the CVM, OPM and PWERM. Weighting allocations are assigned to the CVM, OPM and PWERM, factoring in possible future liquidity events.

In order for the Board to determine the estimated fair value of the common shares, the OPM was utilized for the independent third-party valuation of the Company's common shares as of July 31, 2017 (the "**July 2017 Valuation**") discussed below. The Hybrid Method was utilized for the independent third-party valuations of the Company's common shares as of August 15, 2018 (the "**August 2018 Valuation**"), as of October 23, 2018 (the "**October 2018 Valuation**") and as of January 31, 2019 (the "**January 2019 Valuation**"), each discussed below, because at those times the Company had better visibility into the

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timing of a potential IPO. As noted below, equity value for each liquidity event scenario was weighted based on a probability of each event's occurrence. In each of the IPO scenarios discussed below, the Company assumed that all outstanding convertible preferred shares would be converted into common shares. In the sale of the Company scenario, the Company allocated the value per share by taking into account the liquidation preferences and participation rights of the convertible preferred shares consistent with the method outlined in the Practice Guide.

At each grant date, the Board evaluated any recent events and their potential impact on the estimated fair value per common share. For grants of share awards made on dates for which there was no contemporaneous independent third-party valuation, the Board determined the estimated fair value of the common shares on the date of grant taking into consideration the immediately preceding valuation report as well as other pertinent information available to it at the time of the grant. In connection with the July 2017 Valuation, the Company considered the most recent arm's length preferred share financings prior to the issuance of any option grants as the basis for the value of its common shares at the date of the option grant. After the July 2017 Valuation, the valuation methodology was changed to the use of a Hybrid Method incorporating the CVM, OPM and PWERM, as the Company had obtained better visibility into the near-term timing of a potential IPO, but still considered the uncertainty surrounding the Company's valuation in the event an IPO did not occur. The Hybrid Method is commonly used in these types of scenarios and is consistent with guidance from the Practice Guide.

**Common Share Valuations and Share Option Grants**

During the past 12 months, the Company has granted share options as follows:

Date of the Grant	Numbers of Shares Subject to Options Granted	Exercise Price Per Common Share	Estimated Fair Value Per Common Share at Grant Date
May 31, 2018	***	\$ ***	\$ ***
August 15, 2018	***		***
October 26, 2018	***		***
November 21, 2018	***		***
November 27, 2018	***		***
February 18, 2019	***		***
March 9, 2019	***		***

July 2017 Valuation and May 2018 Option Grants

On May 31, 2018, the Company granted options to purchase a total of \*\*\* common shares at an exercise price of \$\*\*\* per share. The Board determined the estimated fair value of the common shares at the time of the grants was \$\*\*\* per share based on a number of factors, including the July 2017 Valuation, which determined that the estimated fair value of the common shares was \$\*\*\* per share. For the period from the July 2017 Valuation to May 31, 2018, the Board determined there were no internal or external developments since the July 2017 Valuation that warranted a change in the estimated fair value of the common shares. For the July 2017 Valuation, the Company utilized the OPM to derive the implied equity value for the Company. For purposes of the July 2017 Valuation, an option-based analysis was performed in an effort to estimate the appropriate DLOM for the common shares. A DLOM of 25% was used for the July 2017 Valuation. The July 2017 Valuation reflected the closing of the Company's Series C preferred share financing in July 2017, and the May 2017 presentation of results from its Phase 2 trial

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of etripamil for paroxysmal supraventricular tachycardia (“*PSVT*”) at the Heart Rhythm Society’s 38<sup>th</sup> Annual Scientific Late Breaker Session.

August 2018 Valuation and August 2018 Option Grants

On August 15, 2018, the Company granted options to purchase a total of [\*\*\*] common shares at an exercise price of \$[\*\*\*] per share. The Board determined the estimated fair value of the common shares at the time of the grants was \$[\*\*\*] based on a number of factors, including the August 2018 Valuation, which determined that the estimated fair value of the common shares was \$[\*\*\*] per share. For the August 2018 Valuation, the Company utilized a Hybrid Method of the CVM, OPM and PWERM. The analysis applied a weighting of six scenarios: (i) a stay-private scenario assuming the closing of a second tranche of the Company’s Series C financing and using the OPM (weighted at 42.5%), (ii) a stay-private scenario assuming the closing of a Series D financing and using the OPM (weighted at 35%), (iii) a low-value IPO (meaning a pre-money valuation for the Company of \$[\*\*\*] million), and assuming the closing of a second tranche of the Company’s Series C financing and using the CVM (weighted at 5%), (iv) a high-value IPO (meaning a pre-money valuation for the Company of \$[\*\*\*] million), and assuming the closing of a Series D financing and using the CVM (weighted at 2.5%), (v) an M&A exit, using the CVM (weighted at 5%) and (vi) a dissolution scenario (weighted at 10%). The Company applied a 30% DLOM under the stay-private scenarios, a 12.5% DLOM under the IPO scenarios and a 10% DLOM under the M&A scenario. The August 2018 Valuation reflected that the Company had started a Phase 3 clinical trial evaluating etripamil for PSVT. The Company believes that the probability weighting of each potential scenario used in the PWERM analyses was an appropriate methodology in light of the Company’s stage of development, the status of its research and development efforts and financial position, external market conditions affecting the biopharmaceutical industry, the volatility in the capital markets, especially with respect to IPOs, and the relative likelihood of achieving an IPO in light of prevailing market conditions.

October 2018 Valuation and October 2018 through November 2018 Option Grants

On October 26, 2018, November 21, 2018 and November 27, 2018, the Company granted options to purchase a total of [\*\*\*] common shares at an exercise price of \$[\*\*\*] per share. The Board determined the estimated fair value of the common shares at the time of the grants was \$[\*\*\*] based on a number of factors, including the October 2018 Valuation, which determined that the estimated fair value of the common shares was \$[\*\*\*] per share. For the October 2018 Valuation, the Company utilized a Hybrid Method of the CVM, OPM and PWERM. The analysis applied a weighting of four scenarios: (i) a stay-private scenario assuming the closing of a third tranche of the Company’s Series D financing and using the OPM (weighted at 77.5%), (ii) an IPO assuming the closing of a third tranche of the Company’s Series D financing and using the CVM (weighted at 10%), (iii) an M&A exit, using the CVM (weighted at 2.5%) and (iv) a dissolution scenario (weighted at 10%). The Company applied a 30% DLOM under the stay-private scenario, a 10% DLOM under the IPO scenario and a 7% DLOM under the M&A scenario. The October 2018 Valuation reflected the closing of the Company’s Series D preferred share financing in October 2018. The Company believes that the probability weighting of each potential scenario used in the PWERM analyses was an appropriate methodology in light of the Company’s stage of development, the status of its research and development efforts and financial position, external market conditions affecting the biopharmaceutical industry, the volatility in the capital markets, especially with respect to IPOs, and the relative likelihood of achieving an IPO in light of prevailing market conditions. For the period from the October 2018 Valuation to November 27, 2018, the Board determined there were no internal or external developments since the October 2018 Valuation that warranted a change in the estimated fair value. As a

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result, the Board determined the estimated fair value of the common shares as of October 26, 2018, November 21, 2018 and November 27, 2018 was \$[\*\*\*] per share

### January 2019 Valuation and February 2019 through March 2019 Option Grants

On February 18, 2019 and March 9, 2019, the Company granted options to purchase a total of [\*\*\*] common shares at an exercise price of \$[\*\*\*] per share. The Board determined the estimated fair value of the common shares at the time of the grants was \$[\*\*\*] based on a number of factors, including the January 2019 Valuation. For the January 2019 Valuation, the Company utilized a Hybrid Method of the CVM, OPM and PWERM. The analysis applied a weighting of three scenarios: (i) a stay-private scenario assuming the closing of a third tranche of the Company's Series D financing and using the OPM (weighted at 50%), (ii) an IPO assuming no further sales of Series D preferred shares and using the CVM (weighted at 45%) and (iii) a dissolution scenario (weighted at 5%). The Company applied a 30% DLOM under the stay-private scenario and a 10% DLOM under the IPO scenario. The Company believes that the probability weighting of each potential scenario used in the PWERM analyses was an appropriate methodology in light of the Company's stage of development, the status of its research and development efforts and financial position, external market conditions affecting the biopharmaceutical industry, the volatility in the capital markets, especially with respect to IPOs, and the relative likelihood of achieving an IPO in light of prevailing market conditions. The January 2019 Valuation determined that the estimated fair value of the common shares was \$[\*\*\*] per share. However, the Board determined, as a result of certain objective and subjective factors, including the Company's increased visibility into the timing and the likelihood of an IPO, that the estimated fair value of the common shares was higher as of February 18, 2019 and March 9, 2019.

### ***Explanation of Difference Between Estimated Fair Value of Common Shares at March 9, 2019 and the Preliminary Price Range***

The Company believes that the difference in value reflected between the estimated fair value of its common shares at March 9, 2019 and the Preliminary Price Range is the result of the following key factors, among others:

- The Preliminary Price Range assumes a successful IPO in the near term with no weighting attributed to any other outcome for the Company's business, such as remaining a privately-held company, being sold in a sale transaction or a liquidation of its assets in a dissolution scenario.
- The Preliminary Price Range represents a future price for the common shares that, if issued in the Company's IPO, would be immediately freely tradable in a public market, whereas the estimated fair value of the common shares based on the July 2017 Valuation, August 2018 Valuation, October 2018 Valuation and January 2019 Valuation represents an estimate of the fair value of the shares that were then illiquid, might never become liquid, might be for shares that are never publicly traded and, even if an IPO were to be successfully completed, would remain illiquid at least until the expiration of the 180-day lockup period following the IPO. Additionally, the Preliminary Price Range reflects that, upon a successful IPO, the Company's preferred shares will convert into common shares and will no longer have the liquidation preferences and preferential rights attributable to the preferred shares as compared to the common shares prior to the IPO.
- Updated market conditions used in the determination of the Preliminary Price Range after discussions with the Representatives, based on the current market environment and the supply and demand for such investment opportunities in the marketplace.

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U.S. Securities and Exchange Commission  
April 19, 2019  
Page Seven

- The successful completion of the IPO would strengthen the Company's balance sheet, provide access to public equity and provide enhanced operational flexibility, increasing the value of the Company's common shares compared to that of a private company.

Based on the Preliminary Price Range, the current status of the financial markets and continued uncertainty as to whether the Company will be able to complete its planned IPO within the Preliminary Price Range, or at all, the Company believes that the estimated fair value of its common shares as determined by the Board on March 9, 2019 is consistent with the Company's and the Representatives' estimates of the Preliminary Price Range, and that the prior valuations were consistent with the increasing value of the Company's common shares in connection with its progression towards an IPO.

**Conclusion**

In light of the above, the Company respectfully submits that the per share grant date estimated fair values, as set forth in the table above under "Common Share Valuations and Share Option Grants," which have been used as the basis for determining the share-based compensation in connection with its share option grants during the last 12 months, were reasonable and appropriate for the reasons described herein and in the Registration Statement.

\* \* \*

Please contact me at (202) 728-7096 with any questions or further comments regarding our response to the Staff's comment.

Sincerely,

/s/ Jaime L. Chase  
Jaime L. Chase

cc: Joseph Oliveto, Milestone Pharmaceuticals Inc.  
Timothy Maness, Milestone Pharmaceuticals Inc.  
Ryan Sansom, Cooley LLP  
Nathalie Beauregard, Osler, Hoskin & Harcourt LLP  
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