

Epizyme, Inc.  
Form SC 13D/A  
August 26, 2014

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**SCHEDULE 13D/A**  
**Under the Securities Exchange Act of 1934**  
**(Amendment No. 2)\***

**Epizyme, Inc.**

**(Name of Issuer)**

**Common Stock, par value \$0.0001 per share**

**(Title of Class of Securities)**

**29428V 104**

**(CUSIP Number)**

**Judy Koh**

**Chief Financial Officer**

**Bay City Capital LLC**

**750 Battery Street, Suite 400**

**San Francisco, CA 94111**

**(415) 626-3939**

*with a copy to:*

**Michael L. Lawhead**

**Stradling Yocca Carlson & Rauth, P.C.**

**660 Newport Center Drive, Suite 1600**

**Newport Beach, CA 92660**

**(949) 725-4200**

**(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)**

**August 21, 2014**

**(Date of Event Which Requires Filing of this Statement)**

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. "

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See section 240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a person's initial filing on this form with respect to subject class of securities, and for any subsequent amendment containing information which would alter disclosures in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 ( Act ) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1. Names of Reporting Persons

Bay City Capital LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)  (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

..

6. Citizenship or Place of Organization

Delaware

Number of 7. Sole Voting Power

Shares

Beneficially 2,850,395

8. Shared Voting Power

Owned by

Each

0

Reporting 9. Sole Dispositive Power

Person

With 2,850,395

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,850,395

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

..

13. Percent of Class Represented by Amount in Row (11)

8.5%

14. Type of Reporting Person (See Instructions)

OO

1. Names of Reporting Persons

Bay City Capital Management V LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)  (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

..

6. Citizenship or Place of Organization

Delaware

Number of 7. Sole Voting Power

Shares

Beneficially 2,850,395

8. Shared Voting Power

Owned by

Each

0

Reporting 9. Sole Dispositive Power

Person

With 2,850,395

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,850,395

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

..

13. Percent of Class Represented by Amount in Row (11)

8.5%

14. Type of Reporting Person (See Instructions)

OO

CUSIP No. 29428V 104

13D

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1. Names of Reporting Persons

Bay City Capital Fund V, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)  (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

..

6. Citizenship or Place of Organization

Delaware

Number of 7. Sole Voting Power

Shares

Beneficially 0

8. Shared Voting Power

Owned by

Each

2,850,395

Reporting 9. Sole Dispositive Power

Person

With 0

10. Shared Dispositive Power

2,850,395

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,850,395

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

..

13. Percent of Class Represented by Amount in Row (11)

8.5%

14. Type of Reporting Person (See Instructions)

PN



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1. Names of Reporting Persons

Bay City Capital Fund V Co-Investment Fund, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)  (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

..

6. Citizenship or Place of Organization

Delaware

Number of 7. Sole Voting Power

Shares

Beneficially 0

8. Shared Voting Power

Owned by

Each

2,850,395

Reporting 9. Sole Dispositive Power

Person

With 0

10. Shared Dispositive Power

2,850,395

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,850,395

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

..

13. Percent of Class Represented by Amount in Row (11)

8.5%

14. Type of Reporting Person (See Instructions)

PN

**Explanatory Note**

Pursuant to Rule 13d-2 promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act), this Amendment No. 2 to Schedule 13D (this Amendment No. 2) amends the Schedule 13D originally filed with the United States Securities and Exchange Commission (the SEC) on June 7, 2013, as amended by a Schedule 13D/A on February 10, 2014 (the Schedule 13D) by Bay City Capital LLC, a Delaware limited liability company (BCC), on behalf of the Reporting Persons pursuant to the Joint Filing Agreement attached to the Original Schedule 13D as Exhibit 99.1. Except as specifically amended by this Amendment No. 2, items in the Schedule 13D remain unchanged. Capitalized terms used but not otherwise defined herein have the meanings ascribed to them in the Schedule 13D. BCC is the manager of Bay City Capital Management V LLC, a Delaware limited liability company (Management V), which is the general partner of Bay City Capital Fund V, L.P., a Delaware limited partnership (Fund V), and Bay City Capital Fund V Co-Investment Fund, L.P., a Delaware limited partnership (Co-Investment V). BCC is also an advisor to Fund V and Co-Investment V.

**Item 5. Interest in Securities of the Issuer.**

Items 5(a) and (b) of the Schedule 13D are amended and restated in their entirety to read as follows:

| <b>Reporting Person</b> | <b>Shares Held Directly (5)</b> | <b>Sole Voting Power</b> | <b>Shared Voting Power</b> | <b>Sole Dispositive Power</b> | <b>Shared Dispositive Power</b> | <b>Beneficial Ownership (1)</b> | <b>Percentage of Class (2)</b> |
|-------------------------|---------------------------------|--------------------------|----------------------------|-------------------------------|---------------------------------|---------------------------------|--------------------------------|
| Fund V                  | 2,797,094                       | 0                        | 2,850,395                  | 0                             | 2,850,395                       | 2,850,395                       | 8.5%                           |
| Co-Investment V         | 53,301                          | 0                        | 2,850,395                  | 0                             | 2,850,395                       | 2,850,395                       | 8.5%                           |
| Management V(3)         | 0                               | 2,850,395                | 0                          | 2,850,395                     | 0                               | 2,850,395                       | 8.5%                           |
| BCC(4)                  | 0                               | 2,850,395                | 0                          | 3,050,395                     | 0                               | 2,850,395                       | 8.5%                           |

- (1) Fund V and Co-Investment V constitute a group under Section 13(d) of the Exchange Act and consequently are deemed to have beneficial ownership of all shares held by members of the group.
- (2) This percentage is calculated based upon 33,608,532 shares of the Issuer's common stock outstanding as of August 8, 2014 as computed in accordance with Rule 13d-3(d)(1)(i) promulgated under the Exchange Act.
- (3) Management V holds no shares of common stock directly. Management V is deemed to have beneficial ownership of common stock owned by Fund V and Co-Investment V due to its role as general partner of such funds. Investment and voting decisions by Management V are exercised by BCC as manager.
- (4) BCC holds no shares of common stock directly. Due to its role as manager of Management V, BCC is deemed to have beneficial ownership of common stock deemed to be beneficially owned by Management V.
- (5) Amounts in this column include 24,532 shares for Fund V and 467 shares for Co-Investment V underlying stock options issued to Carl Goldfischer, a director of the Issuer, Managing Director of BCC and a Member of Management V, in connection with his service as a director of the Issuer. Dr. Goldfischer shall have the right to exercise (a) the stock option with respect to 17,666 shares upon the earlier of (i) the expiration of Dr. Goldfischer's initial term of office as a director of the Issuer, scheduled to occur on the 2015 meeting of the Issuer's stockholders and (ii) June 30, 2015, and (b) the stock option with respect to 7,333 shares on July 23, 2015. Dr. Goldfischer has entered into an agreement with Fund V and Co-Investment V to immediately transfer any shares obtained via such stock options to Fund V and Co-Investment V upon exercise.

The information required by Item 5 with respect to persons with whom voting or dispositive power is shared is set forth in Items 2 and 3 of the Original Schedule 13D.

(c) On August 21, 2014, Fund V and Co-Investment Fund sold an aggregate of 38,666 shares of Common Stock in open market transactions, at a weighted average price of \$33.0352 per share. These shares were sold in multiple open market transactions at prices ranging from \$32.75 per share to \$33.50 per share, inclusive. On August 22, 2014, Fund V and Co-Investment Fund sold an aggregate of 128,000 shares of Common Stock in open market transactions, at a weighted average price of \$32.4591 per share. These shares were sold in multiple open market transactions at prices ranging from \$32.40 per share to \$33.00 per share, inclusive. On August 25, 2014, Fund V and Co-Investment Fund sold an aggregate of 200,000 shares of Common Stock in open market transactions, at a weighted average price of \$35.139 per share. These shares were sold in multiple open market transactions at prices ranging from \$35.09 per share to \$36.41 per share, inclusive.

**Item 7. Material to be Filed as Exhibits.**

| <b>Exhibit No.</b> | <b>Description of Exhibit</b>   |
|--------------------|---|
| 99.1               | Joint Filing Agreement (Previously filed with the Statement on Schedule 13D filed with the SEC on June 7, 2013 (File No. 005-87481)). |

**SIGNATURE**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: August 25, 2014

/s/ Carl Goldfischer

Carl Goldfischer, Managing Director

Bay City Capital LLC

for itself, for and on behalf of Bay City Capital Management V LLC in its capacity as manager thereof, and for and on behalf of Bay City Capital Fund V, L.P. and Bay City Capital Fund V Co-Investment Fund, L.P. in its capacity as manager of Bay City Capital Management V LLC, the general partner of Bay City Capital Fund V, L.P. and Bay City Capital Fund V Co-Investment Fund, L.P.