# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

## **SCHEDULE 13D**

UNDER THE SECURITIES EXCHANGE ACT OF 1934 (Amendment No. 1)\*

# Verastem, Inc.

(Name of Issuer)

Common Stock (Title of Class of Securities)

> 92337C104 (CUSIP Number)

Luke B. Evnin MPM Asset Management The John Hancock Tower 200 Clarendon Street, 54<sup>th</sup> Floor Boston, MA 02116 Telephone: (617) 425-9200 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

> June 19, 2013 (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 §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 reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided 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).

| CUSI | P No. 923  | 37C1    | 04  |  |  |  |  |  |  |
|------|--|---------|---|--|--|--|--|--|--|
| 1.   | 1. Name of Reporting Persons. I.R.S. Identification No(s). of above person(s) (entities only)  |         |   |  |  |  |  |  |  |
|      | MDM B  | ioVer   | atures VI D   |  |  |  |  |  |  |
| 2.   | MPM BioVentures V, L.P.<br>Check the Appropriate Box if a Member of a Group (See Instructions) |         |   |  |  |  |  |  |  |
|      | (a) □  | ic rip  | propriate Dow if a Memoer of a Group (occ instructions)                 |  |  |  |  |  |  |
|      | (b) $\boxtimes$ (1)  |         |   |  |  |  |  |  |  |
| 3.   | SEC US   | FON     |   |  |  |  |  |  |  |
| 5.   |  |         |   |  |  |  |  |  |  |
| 4.   | Source of  | of Fui  | nds (See Instructions)  |  |  |  |  |  |  |
|      | WC   |         |   |  |  |  |  |  |  |
| 5.   |  | Disc    | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)  |  |  |  |  |  |  |
|      |  |         |   |  |  |  |  |  |  |
| 6.   | Citizens   | hip o   | r Place of Organization   |  |  |  |  |  |  |
|      | Delawaı  | 'n      |   |  |  |  |  |  |  |
|      | Deluwa   | 7.      | Sole Voting Power   |  |  |  |  |  |  |
|      |  |         |   |  |  |  |  |  |  |
|      | mber of  | 0       | 994,702   |  |  |  |  |  |  |
|      | Shares<br>neficially   | 8.      | Shared Voting Power   |  |  |  |  |  |  |
|      | vned by  |         | 0   |  |  |  |  |  |  |
|      | Each   | 9.      | Sole Dispositive Power  |  |  |  |  |  |  |
|      | porting<br>Person  |         | 994,702   |  |  |  |  |  |  |
|      | With:  | 10.     | ,   |  |  |  |  |  |  |
|      |  | 10.     |   |  |  |  |  |  |  |
|      |  |         | 0   |  |  |  |  |  |  |
| 11.  | Aggrega  | te Ar   | nount Beneficially Owned by Each Reporting Person                       |  |  |  |  |  |  |
|      | 994,702  |         |   |  |  |  |  |  |  |
| 12.  | Check if   | f the A | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) |  |  |  |  |  |  |
| 40   | D  | 6.07    |   |  |  |  |  |  |  |
| 13.  | Percent  | ot Cl   | ass Represented by Amount in Row (11)                                   |  |  |  |  |  |  |
|      | 4.7%(2)  |         |   |  |  |  |  |  |  |
| 14.  | Type of  | Repo    | rting Person (See Instructions)   |  |  |  |  |  |  |
|      | PN   |         |   |  |  |  |  |  |  |
|      | T T N  |         |   |  |  |  |  |  |  |

(1) This schedule is filed by MPM BioVentures V, L.P. ("BV V"), MPM Asset Management Investors BV5 LLC ("AM LLC"), MPM BioVentures V GP LLC ("BV V GP"), MPM BioVentures V LLC ("BV V LLC") (collectively, the "MPM Entities") and Ansbert Gadicke, Luke Evnin, Todd Foley, James Paul Scopa, Vaughn Kailian and John Vander Vort (collectively, the "Listed Persons" and together with the MPM Entities, the "Filing Persons"). The Listed Persons are members of BV V LLC and AM LLC. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.

(2) This percentage is calculated based upon 21,289,319, shares of the Issuer's common stock outstanding on April 30, 2013, as disclosed in the Issuer's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 9, 2013.

| CUSI | P No. 923       | 37C1  | 04  |  |  |  |  |  |
|------|-----------------|---|---|--|--|--|--|--|
| 1.   | Name of         | f Rep   | orting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |  |  |  |  |  |
|      | мрм а           | sset N  | Aanagement Investors BV5 LLC  |  |  |  |  |  |
| 2.   |                 | propriate Box if a Member of a Group (See Instructions) |   |  |  |  |  |  |
|      | (a) 🗆           | - 1   |   |  |  |  |  |  |
|      | (b) 🛛 (         | 1)  |   |  |  |  |  |  |
| 3.   | SEC US          | E ON  | ILY   |  |  |  |  |  |
| 4.   | Source of       | of Fui  | nds (See Instructions)  |  |  |  |  |  |
|      | WC              |   |   |  |  |  |  |  |
| 5.   | Check if        | Disc  | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)          |  |  |  |  |  |
| 6.   | Citizens        | hip o   | r Place of Organization   |  |  |  |  |  |
|      | Delawaı         | e   |   |  |  |  |  |  |
|      |                 | 7.  | Sole Voting Power   |  |  |  |  |  |
| Nu   | mber of         |   | 38,631  |  |  |  |  |  |
| 5    | Shares          | 8.  | Shared Voting Power   |  |  |  |  |  |
|      | neficially      |   |   |  |  |  |  |  |
|      | wned by<br>Each | 0   | 0<br>Sole Dispositive Power   |  |  |  |  |  |
|      | porting         | 9.  | Sole Dispositive Power  |  |  |  |  |  |
|      | Person          |   | 38,631  |  |  |  |  |  |
|      | With:           | 10.   | Shared Dispositive Power  |  |  |  |  |  |
|      |                 |   | 0   |  |  |  |  |  |
| 11.  | Aggrega         | ite Ar  | nount Beneficially Owned by Each Reporting Person                               |  |  |  |  |  |
|      | 38,631          |   |   |  |  |  |  |  |
| 12.  | Check if        | the <i>I</i>  | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)         |  |  |  |  |  |
| 13.  | Percent         | of Cl   | ass Represented by Amount in Row (11)   |  |  |  |  |  |
|      | 0.2%(2)         |   |   |  |  |  |  |  |
| 14.  |                 | Repo  | rting Person (See Instructions)   |  |  |  |  |  |
|      | 00              |   |   |  |  |  |  |  |
| L    |                 |   |   |  |  |  |  |  |

(1) This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.

(2) This percentage is calculated based upon 21,289,319, shares of the Issuer's common stock outstanding on April 30, 2013, as disclosed in the Issuer's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 9, 2013.

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| CUSI | P No. 923  | <b>337C</b> 1 | 04  |  |  |  |  |  |  |
|------|--|---------------|---|--|--|--|--|--|--|
| 1.   | . Name of Reporting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |               |   |  |  |  |  |  |  |
|      | MPM BioVentures V GP LLC   |               |   |  |  |  |  |  |  |
| 2.   | Check the Appropriate Box if a Member of a Group (See Instructions)                          |               |   |  |  |  |  |  |  |
|      | (a) 🗆  |               |   |  |  |  |  |  |  |
|      | (b) $\boxtimes$ (1)  |               |   |  |  |  |  |  |  |
| 3.   | SEC US   | E ON          | NLY   |  |  |  |  |  |  |
| 4.   | Source   | of Fu         | nds (See Instructions)  |  |  |  |  |  |  |
|      | WC   |               |   |  |  |  |  |  |  |
| 5.   |  | f Disc        | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)  |  |  |  |  |  |  |
| 6.   | Citizens   | hip o         | r Place of Organization   |  |  |  |  |  |  |
|      | Delawa   | 'n            |   |  |  |  |  |  |  |
|      |  | 7.            | Sole Voting Power   |  |  |  |  |  |  |
| NT-  |  |               | 0   |  |  |  |  |  |  |
|      | mber of<br>Shares  | 8.            | Shared Voting Power   |  |  |  |  |  |  |
| Ber  | neficially   |               |   |  |  |  |  |  |  |
|      | vned by  |               | 994,702(2)  |  |  |  |  |  |  |
|      | Each<br>porting  | 9.            | Sole Dispositive Power  |  |  |  |  |  |  |
|      | Person   |               | 0   |  |  |  |  |  |  |
|      | With:  | 10.           | Shared Dispositive Power  |  |  |  |  |  |  |
|      |  |               | 994,702(2)  |  |  |  |  |  |  |
| 11.  | Aggrega  | ate Ai        | nount Beneficially Owned by Each Reporting Person                       |  |  |  |  |  |  |
|      | 994,702  | (2)           |   |  |  |  |  |  |  |
| 12.  |  |               | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) |  |  |  |  |  |  |
|      |  |               |   |  |  |  |  |  |  |
| 13.  | Percent  | of Cl         | ass Represented by Amount in Row (11)                                   |  |  |  |  |  |  |
|      | 4.7%(3)  |               |   |  |  |  |  |  |  |
| 14.  | Type of  | Repo          | rting Person (See Instructions)   |  |  |  |  |  |  |
|      | 00   |               |   |  |  |  |  |  |  |
| L    |  |               |   |  |  |  |  |  |  |

(1) This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.

(2)

Represents shares of Common Stock held by BV V. BV V GP and BV V LLC are the direct and indirect general partners of BV V. This percentage is calculated based upon 21,289,319, shares of the Issuer's common stock outstanding on April 30, 2013, as disclosed in the Issuer's (3) Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 9, 2013.

### CUCID N. 00007C104

| CUSI | P No. 923   | 337C1   | 04  |  |  |  |  |  |  |
|------|---|---------|---|--|--|--|--|--|--|
| 1.   | 1. Name of Reporting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |         |   |  |  |  |  |  |  |
|      | MDM D   | ioVor   |   |  |  |  |  |  |  |
| 2.   | MPM BioVentures V LLC<br>Check the Appropriate Box if a Member of a Group (See Instructions)  |         |   |  |  |  |  |  |  |
| ۷.   | (a) $\Box$  |         |   |  |  |  |  |  |  |
|      | (b) ⊠ (1)   |         |   |  |  |  |  |  |  |
| 3.   | SEC US  | E ON    | ILY   |  |  |  |  |  |  |
| 4.   | Source  | of Fu   | nds (See Instructions)  |  |  |  |  |  |  |
|      | WC  |         |   |  |  |  |  |  |  |
| 5.   |   | f Disc  | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)  |  |  |  |  |  |  |
| 6.   | Citizens  | hip o   | r Place of Organization   |  |  |  |  |  |  |
|      | Delawa  | re      |   |  |  |  |  |  |  |
|      |   | 7.      | Sole Voting Power   |  |  |  |  |  |  |
| •    | 1 6   |         | 0   |  |  |  |  |  |  |
|      | mber of<br>Shares   | 8.      | Shared Voting Power   |  |  |  |  |  |  |
| Ber  | eficially   |         |   |  |  |  |  |  |  |
|      | vned by   |         | 1,033,333(2)  |  |  |  |  |  |  |
|      | Each<br>porting   | 9.      | Sole Dispositive Power  |  |  |  |  |  |  |
|      | Person  |         | 0   |  |  |  |  |  |  |
|      | With:   | 10.     | Shared Dispositive Power  |  |  |  |  |  |  |
|      |   |         | 1,033,333(2)  |  |  |  |  |  |  |
| 11.  | Aggrega   | te Ai   | nount Beneficially Owned by Each Reporting Person                       |  |  |  |  |  |  |
|      |   |         |   |  |  |  |  |  |  |
| 12.  | 1,033,33  |         | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) |  |  |  |  |  |  |
| 12,  |   | i ine i | Agregate Amount in Now (11) Excludes Certain Suales (See Instructions)  |  |  |  |  |  |  |
| 13.  | Percent   | of Cl   | ass Represented by Amount in Row (11)                                   |  |  |  |  |  |  |
|      | 4.9%(3)   |         |   |  |  |  |  |  |  |
| 14.  |   |         | rting Person (See Instructions)   |  |  |  |  |  |  |
|      | 00  |         |   |  |  |  |  |  |  |
|      | 00  |         |   |  |  |  |  |  |  |

This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for (1) purposes of this Schedule 13D.

(2) Includes 994,702 shares of Common Stock held by BV V and 38,631 shares of Common Stock held by AM LLC. BV V GP and BV V LLC are the direct and indirect general partners of BV V and BV V LLC is the manager of AM LLC.

This percentage is calculated based upon 21,289,319, shares of the Issuer's common stock outstanding on April 30, 2013, as disclosed in the Issuer's (3) Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 9, 2013.

| CUSI | SIP No. 92337C104  |   |  |  |  |  |  |  |  |
|------|--|---|--|--|--|--|--|--|--|
| 1.   | Name of Reporting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |   |  |  |  |  |  |  |  |
|      | Ansbert Gadicke  |   |  |  |  |  |  |  |  |
| 2.   |  |   |  |  |  |  |  |  |  |
|      | (a) $\Box$ (b) $\boxtimes$ (1)   |   |  |  |  |  |  |  |  |
|      | (b) 🖾 (1)  |   |  |  |  |  |  |  |  |
| 3.   | SEC USE ONLY   |   |  |  |  |  |  |  |  |
| 4.   | Source of Funds (See Instructions)   |   |  |  |  |  |  |  |  |
|      | 00   |   |  |  |  |  |  |  |  |
| 5.   | Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)        | - |  |  |  |  |  |  |  |
| 6.   | Citizenship or Place of Organization   |   |  |  |  |  |  |  |  |
|      | United States  |   |  |  |  |  |  |  |  |
|      | 7. Sole Voting Power   |   |  |  |  |  |  |  |  |
| NL   | Jumber of 0  |   |  |  |  |  |  |  |  |
|      | Jumber of     0       Shares     8.       Shared Voting Power                              |   |  |  |  |  |  |  |  |
|      | eneficially  |   |  |  |  |  |  |  |  |
|      | Dwned by 1,033,333(2)  |   |  |  |  |  |  |  |  |
|      | Each 9. Sole Dispositive Power   |   |  |  |  |  |  |  |  |
| Re   | Reporting  |   |  |  |  |  |  |  |  |
|      | Person 0   |   |  |  |  |  |  |  |  |
| 1    | With: 10. Shared Dispositive Power   |   |  |  |  |  |  |  |  |
|      | 1,033,333(2)   |   |  |  |  |  |  |  |  |
| 11.  | . Aggregate Amount Beneficially Owned by Each Reporting Person                             |   |  |  |  |  |  |  |  |
|      | 1,033,333(2)   |   |  |  |  |  |  |  |  |
| 12.  | . Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)     |   |  |  |  |  |  |  |  |
| 13.  | <ul> <li>Percent of Class Represented by Amount in Row (11)</li> </ul>                     |   |  |  |  |  |  |  |  |
|      | 4.9%(3)  |   |  |  |  |  |  |  |  |
| 14.  |  |   |  |  |  |  |  |  |  |
|      | IN   |   |  |  |  |  |  |  |  |
|      |  |   |  |  |  |  |  |  |  |

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| CUSI | USIP No. 92337C104   |            |  |  |  |  |  |  |
|------|--|------------|--|--|--|--|--|--|
| 1.   | Name of Reporting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |            |  |  |  |  |  |  |
|      | Luka Ermin   |            |  |  |  |  |  |  |
|      | Luke Evnin   |            |  |  |  |  |  |  |
| 2.   |  | he Ap      | propriate Box if a Member of a Group (See Instructions)                  |  |  |  |  |  |
|      | (a) □<br>(b) ⊠ (   | 1)         |  |  |  |  |  |  |
|      | (0) 🖾 (  | 1)         |  |  |  |  |  |  |
| 3.   | SEC US   | E ON       | ILY  |  |  |  |  |  |
|      |  |            |  |  |  |  |  |  |
| 4.   | Source of  | of Fui     | nds (See Instructions)   |  |  |  |  |  |
|      | 00   |            |  |  |  |  |  |  |
| 5.   |  | f Disc     | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)   |  |  |  |  |  |
|      |  |            |  |  |  |  |  |  |
| 6.   | Citizens   | hip o      | r Place of Organization  |  |  |  |  |  |
|      | TT . 1/  | <b>.</b> . |  |  |  |  |  |  |
|      | United S   |            | Sole Voting Power  |  |  |  |  |  |
|      |  | 7.         | Sole vollig Power  |  |  |  |  |  |
| Nu   | mber of  |            | 0  |  |  |  |  |  |
| S    | Shares   | 8.         | Shared Voting Power  |  |  |  |  |  |
|      | neficially   |            |  |  |  |  |  |  |
|      | vned by  |            | 1,033,333(2)   |  |  |  |  |  |
|      | Each   | 9.         | Sole Dispositive Power   |  |  |  |  |  |
|      | eporting<br>Person   |            | 0  |  |  |  |  |  |
|      | With:  | 10.        | Shared Dispositive Power   |  |  |  |  |  |
|      |  |            |  |  |  |  |  |  |
|      |  |            | 1,033,333(2)   |  |  |  |  |  |
| 11.  | Aggrega  | ate Ar     | nount Beneficially Owned by Each Reporting Person                        |  |  |  |  |  |
|      | 1,033,33   | 22(7)      |  |  |  |  |  |  |
| 12.  |  |            | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)  |  |  |  |  |  |
| 14.  | CHECK I  | uit I      | apprender innount in row (11) Excludes certain onders (occ instructions) |  |  |  |  |  |
| 13.  | Percent  | of Cl      | ass Represented by Amount in Row (11)                                    |  |  |  |  |  |
|      |  |            |  |  |  |  |  |  |
|      | 4.9%(3)  |            |  |  |  |  |  |  |
| 14.  | Type of  | Repo       | rting Person (See Instructions)  |  |  |  |  |  |
|      | IN   |            |  |  |  |  |  |  |
|      |  |            |  |  |  |  |  |  |

(1) This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.

(2) Includes 994,702 shares of Common Stock held by BV V and 38,631 shares of Common Stock held by AM LLC. BV V GP and BV V LLC are the direct and indirect general partners of BV V and BV V LLC is the manager of AM LLC. The Reporting Person is a member of BV V LLC.

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| CUSI | P No. 923   | 337C1       | 104   |  |  |  |  |  |  |
|------|---|-------------|---|--|--|--|--|--|--|
| 1.   |   | -           | orting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |  |  |  |  |  |  |
|      | Todd Fo   | -           |   |  |  |  |  |  |  |
| 2.   | Check the Appropriate Box if a Member of a Group (See Instructions) |             |   |  |  |  |  |  |  |
|      | (a) 🗆   |             |   |  |  |  |  |  |  |
|      | (b) ⊠ (1)   |             |   |  |  |  |  |  |  |
| 3.   | SEC US  |             |   |  |  |  |  |  |  |
| 5.   | SEC US  | E OF        |   |  |  |  |  |  |  |
| 4.   | Source  | of Fu       | nds (See Instructions)  |  |  |  |  |  |  |
|      | oource  | 51 I U      |   |  |  |  |  |  |  |
|      | 00  |             |   |  |  |  |  |  |  |
| 5.   | Check i   | f Disc      | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)          |  |  |  |  |  |  |
|      |   |             |   |  |  |  |  |  |  |
| 6.   | Citizens  | hip o       | r Place of Organization   |  |  |  |  |  |  |
|      |   | 1           |   |  |  |  |  |  |  |
|      | United S  | States      |   |  |  |  |  |  |  |
|      |   | 7.          | Sole Voting Power   |  |  |  |  |  |  |
|      |   |             |   |  |  |  |  |  |  |
| Nu   | imber of  |             | 0   |  |  |  |  |  |  |
|      | Shares  | 8.          | Shared Voting Power   |  |  |  |  |  |  |
|      | neficially  |             |   |  |  |  |  |  |  |
|      | wned by   |             | 1,033,333(2)  |  |  |  |  |  |  |
|      | Each  | 9.          | Sole Dispositive Power  |  |  |  |  |  |  |
|      | eporting  |             |   |  |  |  |  |  |  |
|      | Person  |             | 0   |  |  |  |  |  |  |
|      | With:   | 10.         | Shared Dispositive Power  |  |  |  |  |  |  |
|      |   |             |   |  |  |  |  |  |  |
|      | i .   |             | 1,033,333(2)  |  |  |  |  |  |  |
| 11.  | Aggrega   | ate Ai      | nount Beneficially Owned by Each Reporting Person                               |  |  |  |  |  |  |
|      | 1 0 2 2 2   | <u>רירי</u> |   |  |  |  |  |  |  |
| 10   | 1,033,33  |             | A zavazete Area unit in Des e (11) Early des Castein Channe (Cas Jastos etime)  |  |  |  |  |  |  |
| 12.  | Check I   | t the A     | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)         |  |  |  |  |  |  |
| 13.  | Dorcont   | of Cl       | ass Represented by Amount in Row (11)   |  |  |  |  |  |  |
| 13.  | Percent   |             | ass represented by Annount III row (11)   |  |  |  |  |  |  |
|      | 4.9%(3)   |             |   |  |  |  |  |  |  |
| 14.  |   |             | rting Person (See Instructions)   |  |  |  |  |  |  |
| 17.  | Type of   | richo       |   |  |  |  |  |  |  |
|      | IN  |             |   |  |  |  |  |  |  |
|      |   |             |   |  |  |  |  |  |  |

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(3) This percentage is calculated based upon 21,289,319, shares of the Issuer's common stock outstanding on April 30, 2013, as disclosed in the Issuer's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 9, 2013.

| CUSI | USIP No. 92337C104  |                  |   |  |  |  |  |  |  |  |
|------|---|------------------|---|--|--|--|--|--|--|--|
| 1.   | 1. Name of Reporting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |                  |   |  |  |  |  |  |  |  |
|      | I D   | James Paul Scopa |   |  |  |  |  |  |  |  |
| 2.   | Check the Appropriate Box if a Member of a Group (See Instructions)                           |                  |   |  |  |  |  |  |  |  |
| ۷.   | (a) □   |                  |   |  |  |  |  |  |  |  |
|      | (b) $\boxtimes$ (1)   |                  |   |  |  |  |  |  |  |  |
| 2    | CEC III   |                  |   |  |  |  |  |  |  |  |
| 3.   | SEC US  | EOr              |   |  |  |  |  |  |  |  |
| 4.   | Source  | of Fu            | nds (See Instructions)  |  |  |  |  |  |  |  |
|      | 00  |                  |   |  |  |  |  |  |  |  |
| 5.   | 00<br>Chack is  | Dice             | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)      |  |  |  |  |  |  |  |
| э.   | CHECK I   | Disc             | Josure of Legal Froceedings is Keydined Fulsually to hemis 2(d) of 2(e)     |  |  |  |  |  |  |  |
| 6.   | Citizens  | hip o            | r Place of Organization   |  |  |  |  |  |  |  |
|      | TT 1. 1/  |                  |   |  |  |  |  |  |  |  |
|      | United S  | 7.               | Sole Voting Power   |  |  |  |  |  |  |  |
|      |   | 7.               | Sole volling rower  |  |  |  |  |  |  |  |
| Nu   | mber of   |                  | 0   |  |  |  |  |  |  |  |
|      | Shares  | 8.               | Shared Voting Power   |  |  |  |  |  |  |  |
|      | neficially<br>wned by   |                  | 1,033,333(2)  |  |  |  |  |  |  |  |
|      | Each  | 9.               |   |  |  |  |  |  |  |  |
|      | porting   | 5.               |   |  |  |  |  |  |  |  |
|      | Person  |                  | 0   |  |  |  |  |  |  |  |
|      | With:   | 10.              | Shared Dispositive Power  |  |  |  |  |  |  |  |
|      |   |                  | 1,033,333(2)  |  |  |  |  |  |  |  |
| 11.  | Aggrega   | te Ai            | nount Beneficially Owned by Each Reporting Person                           |  |  |  |  |  |  |  |
|      |   |                  |   |  |  |  |  |  |  |  |
| 10   | 1,033,33  |                  | A zavazata Arranunt in Dara (11) Englisha Cantain Change (Can Instructions) |  |  |  |  |  |  |  |
| 12.  | CHECK I   | i ine i          | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)     |  |  |  |  |  |  |  |
| 13.  | Percent   | of Cl            | ass Represented by Amount in Row (11)                                       |  |  |  |  |  |  |  |
|      | 4.00//22  |                  |   |  |  |  |  |  |  |  |
| 14.  | 4.9%(3)   |                  | rting Person (See Instructions)   |  |  |  |  |  |  |  |
| 14.  | Type of   | repu             |   |  |  |  |  |  |  |  |
|      | IN  |                  |   |  |  |  |  |  |  |  |
|      |   |                  |   |  |  |  |  |  |  |  |

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| CUSI | P No. 923   | 337C1             | 04  |  |  |  |  |  |  |  |  |
|------|---|-------------------|---|--|--|--|--|--|--|--|--|
| 1.   | 1. Name of Reporting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |                   |   |  |  |  |  |  |  |  |  |
|      |   |                   |   |  |  |  |  |  |  |  |  |
| -    | -   | Vaughn M. Kailian |   |  |  |  |  |  |  |  |  |
| 2.   | Check the Appropriate Box if a Member of a Group (See Instructions)                           |                   |   |  |  |  |  |  |  |  |  |
|      | (a) $\Box$<br>(b) $\boxtimes$ (1)   |                   |   |  |  |  |  |  |  |  |  |
|      |   |                   |   |  |  |  |  |  |  |  |  |
| 3.   | SEC US  | E ON              | ILY   |  |  |  |  |  |  |  |  |
| 4.   | Source  | of Fu             | nds (See Instructions)  |  |  |  |  |  |  |  |  |
|      | 00  |                   |   |  |  |  |  |  |  |  |  |
| 5.   |   | f Disc            | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)  |  |  |  |  |  |  |  |  |
| 6.   | Citizens  | hip o             | r Place of Organization   |  |  |  |  |  |  |  |  |
|      |   | -                 |   |  |  |  |  |  |  |  |  |
|      | United S  |                   |   |  |  |  |  |  |  |  |  |
|      |   | 7.                | Sole Voting Power   |  |  |  |  |  |  |  |  |
| Nu   | mber of   |                   | 0   |  |  |  |  |  |  |  |  |
|      | Shares  | 8.                | Shared Voting Power   |  |  |  |  |  |  |  |  |
|      | neficially  |                   |   |  |  |  |  |  |  |  |  |
|      | vned by   |                   | 1,033,333(2)  |  |  |  |  |  |  |  |  |
|      | Each<br>porting   | 9.                | Sole Dispositive Power  |  |  |  |  |  |  |  |  |
|      | Person  |                   | 0   |  |  |  |  |  |  |  |  |
|      | With:   | 10.               | Shared Dispositive Power  |  |  |  |  |  |  |  |  |
|      |   |                   |   |  |  |  |  |  |  |  |  |
| 11.  | Aggreg  | to Δι             | 1,033,333(2)<br>nount Beneficially Owned by Each Reporting Person       |  |  |  |  |  |  |  |  |
| 111  | 1991690   |                   | Nour Deteriorary Owned by Lach Reporting Ferson                         |  |  |  |  |  |  |  |  |
|      | 1,033,33  |                   |   |  |  |  |  |  |  |  |  |
| 12.  | Check i   | f the A           | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) |  |  |  |  |  |  |  |  |
| 13.  | Percent   | of Cl             | ass Represented by Amount in Row (11)                                   |  |  |  |  |  |  |  |  |
|      | 4.9%(3)   |                   |   |  |  |  |  |  |  |  |  |
| 14.  |   |                   | rting Person (See Instructions)   |  |  |  |  |  |  |  |  |
|      | IN  |                   |   |  |  |  |  |  |  |  |  |
|      |   |                   |   |  |  |  |  |  |  |  |  |

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| CUSI | P No. 923   | 337C1   | 104   |  |  |  |  |  |  |  |
|------|---|---------|---|--|--|--|--|--|--|--|
| 1.   |   | -       | orting Persons. I.R.S. Identification No(s). of above person(s) (entities only) |  |  |  |  |  |  |  |
|      | John Vander Vort  |         |   |  |  |  |  |  |  |  |
| 2.   | Check the Appropriate Box if a Member of a Group (See Instructions) |         |   |  |  |  |  |  |  |  |
|      | (a) 🗆   |         |   |  |  |  |  |  |  |  |
|      | (b) 🖾 (1)   |         |   |  |  |  |  |  |  |  |
| 2    | SEC US  |         |   |  |  |  |  |  |  |  |
| 3.   | SEC US  | E OF    |   |  |  |  |  |  |  |  |
| 4.   | Source  | of Fu   | nds (See Instructions)  |  |  |  |  |  |  |  |
|      | bource  | <i></i> |   |  |  |  |  |  |  |  |
|      | 00  |         |   |  |  |  |  |  |  |  |
| 5.   | Check i   | f Disc  | losure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)          |  |  |  |  |  |  |  |
|      |   |         |   |  |  |  |  |  |  |  |
| 6.   | Citizens  | hip o   | r Place of Organization   |  |  |  |  |  |  |  |
|      |   | 1       |   |  |  |  |  |  |  |  |
|      | United S  | States  |   |  |  |  |  |  |  |  |
|      |   | 7.      | Sole Voting Power   |  |  |  |  |  |  |  |
|      |   |         |   |  |  |  |  |  |  |  |
| Nu   | mber of   |         | 0   |  |  |  |  |  |  |  |
|      | Shares  | 8.      | Shared Voting Power   |  |  |  |  |  |  |  |
|      | eficially   |         |   |  |  |  |  |  |  |  |
|      | vned by   |         | 1,033,333(2)  |  |  |  |  |  |  |  |
|      | Each  | 9.      | Sole Dispositive Power  |  |  |  |  |  |  |  |
|      | porting   |         |   |  |  |  |  |  |  |  |
|      | erson   |         | 0   |  |  |  |  |  |  |  |
| · `  | With:   | 10.     | Shared Dispositive Power  |  |  |  |  |  |  |  |
|      |   |         |   |  |  |  |  |  |  |  |
|      |   |         | 1,033,333(2)  |  |  |  |  |  |  |  |
| 11.  | Aggrega   | ate Ai  | nount Beneficially Owned by Each Reporting Person                               |  |  |  |  |  |  |  |
|      | 1,033,33  | 22(2)   |   |  |  |  |  |  |  |  |
| 12.  |   |         | Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)         |  |  |  |  |  |  |  |
| 12.  | CHECK I   | i ule i | Aggregate Annount in Now (11) Excludes Certain Silates (See Instructions)       |  |  |  |  |  |  |  |
| 13.  | Dercont   | of Cl   | ass Represented by Amount in Row (11)   |  |  |  |  |  |  |  |
| 13.  | reitellt  |         |   |  |  |  |  |  |  |  |
|      | 4.9%(3)   |         |   |  |  |  |  |  |  |  |
| 14.  |   |         | rting Person (See Instructions)   |  |  |  |  |  |  |  |
| 1    | 1, PC 01  | repo    |   |  |  |  |  |  |  |  |
|      | IN  |         |   |  |  |  |  |  |  |  |
|      |   |         |   |  |  |  |  |  |  |  |

(1) This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.

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(3) This percentage is calculated based upon 21,289,319, shares of the Issuer's common stock outstanding on April 30, 2013, as disclosed in the Issuer's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 9, 2013.

This Amendment No. 1 to Schedule 13D (this "Schedule 13D") amends and supplements the Schedule 13D previously filed by the undersigned with the Securities and Exchange Commission on February 10, 2012 (as amended, the "Original Schedule 13D"). This Schedule 13D/A is being filed to report the open market sales of shares of common stock of Verastem, Inc. (the "Issuer") by the MPM Entities.

All capitalized terms not otherwise defined herein shall have the meaning ascribed to the terms in the Original Schedule 13D. The Original Schedule 13D is hereby further amended and supplemented as follows and, except as expressly amended below, the Original Schedule 13D remains in full force and effect.

#### Item 4. Purpose of Transaction

Item 4 of the Original Schedule 13D is hereby amended and supplemented by adding the following paragraph at the end of Item 4:

The MPM Entities sold an aggregate of 1,000,000 shares of Common Stock in open market transactions from January 7, 2013 through July 8, 2013 for aggregate proceeds of \$13,122,040.

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

"Item 5 of the Original Schedule 13D is hereby amended and restated in its entirety as follows:

(a) – (b) The following information with respect to the ownership of the common stock of the Issuer by the Reporting Persons is provided as of July 8, 2013:

| Reporting Person    | Shares<br>Held<br>Directly | Sole<br>Voting<br>Power | Shared<br>Voting<br>Power | Sole<br>Dispositive<br>Power | Shared<br>Dispositive<br>Power | Beneficial<br>Ownership | Percentage<br>of Class<br>(1) |
|---------------------|----------------------------|-------------------------|---------------------------|------------------------------|--------------------------------|-------------------------|-------------------------------|
| BV V                | 994,702                    | 994,702                 | 0                         | 994,702                      | 0                              | 994,702                 | 4.7%                          |
| AM LLC              | 38,631                     | 38,631                  | 0                         | 38,631                       | 0                              | 38,631                  | 0.2%                          |
| BV V GP(2)          | 0                          | 0                       | 994,702                   | 0                            | 994,702                        | 994,702                 | 4.7%                          |
| BV V LLC(3)         | 0                          | 0                       | 1,033,333                 | 0                            | 1,033,333                      | 1,033,333               | 4.9%                          |
| Ansbert Gadicke(4)  | 0                          | 0                       | 1,033,333                 | 0                            | 1,033,333                      | 1,033,333               | 4.9%                          |
| Luke Evnin(4)       | 0                          | 0                       | 1,033,333                 | 0                            | 1,033,333                      | 1,033,333               | 4.9%                          |
| Todd Foley(4)       | 0                          | 0                       | 1,033,333                 | 0                            | 1,033,333                      | 1,033,333               | 4.9%                          |
| James Paul Scopa(4) | 0                          |                         | 1,033,333                 | 0                            | 1,033,333                      | 1,033,333               | 4.9%                          |
| Vaughn Kailian(4)   | 0                          |                         | 1,033,333                 | 0                            | 1,033,333                      | 1,033,333               | 4.9%                          |
| John Vander Vort(4) | 0                          | 0                       | 1,033,333                 | 0                            | 1,033,333                      | 1,033,333               | 4.9%                          |

(1) This percentage is calculated based upon 21,289,319, shares of the Issuer's common stock outstanding on April 30, 2013, as disclosed in the Issuer's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 9, 2013.

(2) Includes securities held by BV V. BV V GP and BV V LLC are the direct and indirect general partners of BV V.

(3) Includes securities held by BV V and AM LLC. BV V GP and BV V LLC are the direct and indirect general partners of BV V and BV V LLC is the manager of AM LLC.

(4) Includes securities held by BV V and AM LLC. The Reporting Person is a member of BV V LLC.

(c) The Reporting Persons sold the following shares of Common Stock in the open market in the sixty days preceding the date of this filing:

| Date of Sale | Sold by<br>MPM<br>BV V | Sold By<br>AM<br>LLC | Price<br>Per<br>Share |
|--------------|------------------------|----------------------|-----------------------|
| 6/13/2013    | 33,577                 | 1,305                | \$11.12               |
| 6/14/2013    | 12,514                 | 486                  | \$11.13               |
| 6/17/2013    | 21,177                 | 823                  | \$11.12               |
| 6/18/2013    | 20,729                 | 805                  | \$11.70               |
| 6/19/2013    | 40,429                 | 1,571                | \$12.24               |
| 6/20/2013    | 16,364                 | 636                  | \$12.33               |
| 6/21/2013    | 13,476                 | 524                  | \$12.58               |
| 6/24/2013    | 24,807                 | 964                  | \$12.44               |
| 6/25/2013    | 11,661                 | 453                  | \$12.58               |
| 6/26/2013    | 67,484                 | 2,621                | \$13.28               |
| 6/27/2013    | 96,260                 | 3,740                | \$13.59               |
| 6/28/2013    | 74,482                 | 2,894                | \$13.87               |
| 7/1/2013     | 21,177                 | 823                  | \$14.15               |
| 7/2/2013     | 19,252                 | 748                  | \$14.24               |
| 7/3/2013     | 8,663                  | 337                  | \$14.08               |
| 7/5/2013     | 30,802                 | 1,198                | \$14.51               |
| 7/8/2013     | 14,783                 | 574                  | \$14.68               |
| 7/8/2013     | 343,648                | 13,352               | \$14.00               |

The information provided and incorporated by reference in Item 3 and Item 6 is hereby incorporated by reference in this Item 5.

(d) Not applicable.

(e) On July 8, 2013, the Reporting Persons ceased to be beneficial owners of more than 5% of the issued and outstanding Common Stock of the Company. The reporting obligations of the Reporting Persons with respect to the Common Stock pursuant to Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder are therefore terminated.

#### Item 7. Material to Be Filed as Exhibits

Item 7 of the Original Schedule 13D is hereby supplemented by adding the following in appropriate order:

C. Agreement regarding filing of joint Schedule 13D/A.

#### Signatures

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: July 15, 2013

#### MPM BIOVENTURES V GP LLC

| By: | MPM BioVentures V LLC, |
|-----|------------------------|
|     | its Managing Member    |

| By:    | /s/ Luke B. Evnin |
|--------|-------------------|
| Name:  | Luke B. Evnin     |
| Title: | Member            |

#### MPM BIOVENTURES V LLC

| By:    | /s/ Luke B. Evnin |
|--------|-------------------|
| Name:  | Luke B. Evnin     |
| Title: | Member            |

#### MPM BIOVENTURES V, L.P.

| By: | MPM BioVentures V GP LLC, its General Partner |
|-----|---|
| By: | MPM BioVentures V LLC, its Managing Member    |

| By: | /s/ Luke B. Evnin |
|-----|-------------------|
|     |                   |

Name: Luke B. Evnin Title: Member

### MPM ASSET MANAGEMENT INVESTORS BV5 LLC

| By:    | MPM BioVentures V LLC<br>Its: Manager |
|--------|---------------------------------------|
| By:    | /s/ Luke B. Evnin                     |
| Name:  | Luke B. Evnin                         |
| Title: | Member                                |
|        |                                       |
| By:    | /s/ Ansbert Gadicke                   |
| Name:  | Ansbert Gadicke                       |
|        |                                       |
| By:    | /s/ Luke B. Evnin                     |
| Name:  | Luke Evnin                            |
|        |                                       |
| By:    | /s/ Todd Foley                        |
| Name:  | Todd Foley                            |
|        |                                       |

 By:
 /s/ James Paul Scopa

 Name:
 James Paul Scopa

 By:
 /s/ Vaughn M. Kailian

 Vaughn M. Kailian

 By:
 /s/ John Vander Vort

 Name:
 John Vander Vort

#### Exhibit Index

C. Agreement regarding filing of joint Schedule 13D.

#### Exhibit C

#### Joint Filing Statement

I, the undersigned, hereby express my agreement that the attached Schedule 13D (and any amendments thereto) relating to the beneficial ownership by the undersigned of the equity securities of Verastem, Inc. is filed on behalf of each of the undersigned.

Date: July 15, 2013

#### MPM BIOVENTURES V GP LLC

By: MPM BioVentures V LLC, its Managing Member

By: /s/ Luke B. Evnin Name: Luke B. Evnin Title: Member

#### MPM BIOVENTURES V LLC

By: /s/ Luke B. Evnin Name: Luke B. Evnin Title: Member

#### MPM BIOVENTURES V, L.P.

By: MPM BioVentures V GP LLC, its General Partner By: MPM BioVentures V LLC, its Managing Member

By: \_\_\_\_\_ /s/ Luke B. Evnin

Name: Luke B. Evnin

Title: Member

#### MPM ASSET MANAGEMENT INVESTORS BV5 LLC

By: MPM BioVentures V LLC Its: Manager

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Member

By: /s/ Ansbert Gadicke Name: Ansbert Gadicke

By: /s/ Luke B. Evnin Name: Luke Evnin

By: /s/ Todd Foley Name: Todd Foley

By: /s/ James Paul Scopa Name: James Paul Scopa

By: /s/ Vaughn M. Kailian Name: Vaughn M. Kailian

By: /s/ John Vander Vort

Name: John Vander Vort