

ARATANA THERAPEUTICS, INC.
Form SC 13D/A
April 10, 2014

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13D
UNDER THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No. 2)*

Aratana Therapeutics, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

03874P 10 1

(CUSIP Number)

Ansbert Gadicke

MPM Asset Management

The John Hancock Tower

200 Clarendon Street, 54th Floor

Boston, MA 02116

Telephone: (617) 425-9200

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

April 8, 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 §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).

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

MPM BioVentures V, L.P.

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

WC

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

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

Shares

1,979,668

Beneficially

8. Shared Voting Power

Owned by

Each

0

9. Sole Dispositive Power

Reporting

Person

1,979,668

With:

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,979,668

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

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

6.7%(2)

14. Type of Reporting Person (See Instructions)

PN

- (1) This Amendment No. 2 to the statement on Schedule 13D 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), MPM Capital LLC (MPM Capital), Medical Portfolio Management LLC (Med Portfolio) (collectively, the MPM Entities) and Ansbert Gadicke, Luke Evnin, Todd Foley, James Paul Scopa and Vaughn Kailian (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. Ansbert Gadicke and Luke Evnin are members of Med Portfolio. 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 29,477,246 shares of Aratana Therapeutics, Inc. s (the Issuer) common stock, par value \$0.001 per share (the Common Stock) outstanding on March 10, 2014, as disclosed in the Issuer s Annual Report on Form 10-K, filed with the Securities and Exchange Commission (the Commission) on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

MPM Asset Management Investors BV5 LLC

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

WC

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

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

Shares

77,060

Beneficially

8. Shared Voting Power

Owned by

Each

0

9. Sole Dispositive Power

Reporting

Person

77,060

With:

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

77,060

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

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

0.3%(2)

14. Type of Reporting Person (See Instructions)

OO

- (1) This Amendment No. 2 to the statement on Schedule 13D 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 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

MPM BioVentures V GP LLC

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

WC

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

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

Shares

0

Beneficially

8. Shared Voting Power

Owned by

Each

1,979,668(2)

9. Sole Dispositive Power

Reporting

Person

0

With:

10. Shared Dispositive Power

1,979,668(2)

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,979,668(2)

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

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

6.7%(3)

14. Type of Reporting Person (See Instructions)

OO

- (1) This Amendment No. 2 to the statement on Schedule 13D 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.
- (3) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

MPM BioVentures V LLC

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

WC

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

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

Shares

0

Beneficially

8. Shared Voting Power

Owned by

Each

2,056,728(2)

9. Sole Dispositive Power

Reporting

Person

0

With:

10. Shared Dispositive Power

2,056,728(2)

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,056,728(2)

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

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

7.0%(3)

14. Type of Reporting Person (See Instructions)

OO

- (1) This Amendment No. 2 to the statement on Schedule 13D 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) Includes 1,979,668 shares of Common Stock held by BV V and 77,060 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.
- (3) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

MPM Capital LLC

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

WC

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

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

Shares

37,117

Beneficially 8. Shared Voting Power

Owned by

Each

0

9. Sole Dispositive Power

Reporting

Person

37,117

With: 10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

37,117

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

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

0.1%(2)

14. Type of Reporting Person (See Instructions)

OO

- (1) This Amendment No. 2 to the statement on Schedule 13D 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 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

Medical Portfolio Management LLC

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

WC

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

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

Shares

0

Beneficially

8. Shared Voting Power

Owned by

Each

37,117(2)

9. Sole Dispositive Power

Reporting

Person

0

With:

10. Shared Dispositive Power

37,117(2)

11. Aggregate Amount Beneficially Owned by Each Reporting Person

37,117(2)

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

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

0.1%(3)

14. Type of Reporting Person (See Instructions)

OO

- (1) This Amendment No. 2 to the statement on Schedule 13D 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) Shares held by MPM Capital, of which the Reporting Person is the managing member.
- (3) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

Ansbert Gadicke

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

OO

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

Number of

Shares

0

Beneficially

8. Shared Voting Power

Owned by

Each

2,093,845(2)

9. Sole Dispositive Power

Reporting

Person

0

With:

10. Shared Dispositive Power

2,093,845(2)

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,093,845(2)

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

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

7.1%(3)

14. Type of Reporting Person (See Instructions)

IN

- (1) This Amendment No. 2 to the statement on Schedule 13D 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) Includes 1,979,668 shares of Common Stock held by BV V, 77,060 shares of Common Stock held by AM LLC and 37,117 shares of Common Stock held by MPM Capital. 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. Med Portfolio is the managing member of MPM Capital. The Reporting Person is a member of BV V LLC and Med Portfolio.
- (3) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

Luke Evin

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

OO

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

Number of

Shares

38,386

Beneficially

8. Shared Voting Power

Owned by

Each

2,093,845(2)

9. Sole Dispositive Power

Reporting

Person

38,386

With:

10. Shared Dispositive Power

2,093,845(2)

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,132,231(2)

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

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

7.2%(3)

14. Type of Reporting Person (See Instructions)

IN

- (1) This Amendment No. 2 to the statement on Schedule 13D 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) Includes 1,979,668 shares of Common Stock held by BV V, 77,060 shares of Common Stock held by AM LLC and 37,117 shares of Common Stock held by MPM Capital. 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. Med Portfolio is the managing member of MPM Capital. The Reporting Person is a member of BV V LLC and Med Portfolio.
- (3) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

Todd Foley

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

OO

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

Number of

Shares

0

Beneficially

8. Shared Voting Power

Owned by

Each

2,056,728(2)

9. Sole Dispositive Power

Reporting

Person

0

With:

10. Shared Dispositive Power

2,056,728(2)

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,056,728(2)

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

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

7.0%(3)

14. Type of Reporting Person (See Instructions)

IN

- (1) This Amendment No. 2 to the statement on Schedule 13D 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) Includes 1,979,668 shares of Common Stock held by BV V and 77,060 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.
- (3) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

James Paul Scopa

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

OO

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

Number of

Shares

22,767

Beneficially

8. Shared Voting Power

Owned by

Each

2,056,728(2)

9. Sole Dispositive Power

Reporting

Person

22,767

With:

10. Shared Dispositive Power

2,056,728(2)

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,079,495(2)

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

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

7.1%(3)

14. Type of Reporting Person (See Instructions)

IN

- (1) This Amendment No. 2 to the statement on Schedule 13D 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) Includes 1,979,668 shares of Common Stock held by BV V and 77,060 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.
- (3) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

CUSIP No. 03874P 10 1

1. Name of Reporting Persons.

Vaughn M. Kailian

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

(a) (b) (1)

3. SEC USE ONLY

4. Source of Funds (See Instructions)

OO

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

Number of

Shares

17,937(2)

Beneficially

8. Shared Voting Power

Owned by

Each

2,056,728(3)

9. Sole Dispositive Power

Reporting

Person

17,937

With:

10. Shared Dispositive Power

2,056,728(3)

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,074,665(3)

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

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

7.0%(4)

14. Type of Reporting Person (See Instructions)

IN

- (1) This Amendment No. 2 to the statement on Schedule 13D 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) 2,627 of the shares are held by The Vaughn and Patricia Kailian Revocable Trust u/a/dtd 12/18/1992, of which the Reporting Person is trustee.
- (3) Includes 1,979,668 shares of Common Stock held by BV V and 77,060 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.
- (4) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

This Amendment No. 2 (the "Amendment") to the statement on Schedule 13D is being filed by the Filing Persons (as defined below) and amends the Schedule 13D filed with the Commission on August 7, 2013 as amended by Amendment No.1 filed March 13, 2014 (as amended, the "Original Schedule 13D"), and relates to shares of Common Stock, \$0.001 par value per share ("Common Stock"), of Aratana Therapeutics, Inc., a Delaware corporation (the "Issuer"). This Amendment is being filed by the Filing Persons to report the open market sales of shares of the Issuer's Common Stock by certain Filing Persons.

Items 4, 5 and 7 of the Original Schedule 13D are hereby amended and supplemented to the extent hereinafter expressly set forth and, except as amended and supplemented hereby, the Original Schedule 13D remains in full force and effect. All capitalized terms used in this Amendment but not defined herein shall have the meanings ascribed thereto in the Original Schedule 13D.

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:

On April 8, 2014, BV V sold 668,306 shares and AM LLC sold 26,014 shares of the Issuer's Common Stock for aggregate gross proceeds of \$9,512,184.

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 Filing Persons is provided as of April 9, 2014:

Reporting Person	Shares Held Directly	Sole Voting Power	Shared Voting Power	Sole Dispositive Power	Shared Dispositive Power	Beneficial Ownership	Percentage of Class (1)
BV V	1,979,668	1,979,668	0	1,979,668	0	1,979,668	6.7%
AM LLC	77,060	77,060	0	77,060	0	77,060	0.3%
MPM Capital	37,117	37,117	0	37,117	0	37,117	0.1%
BV V GP(2)	0	0	1,979,668	0	1,979,668	1,979,668	6.7%
BV V LLC(3)	0	0	2,056,728	0	2,056,728	2,056,728	7.0%
Med Portfolio(4)	0	0	37,117	0	37,117	37,117	0.1%
Ansbert Gadicke(5)	0	0	2,093,845	0	2,093,845	2,093,845	7.1%
Luke Evnin(5)	38,386	38,386	2,093,845	38,386	2,093,845	2,132,231	7.2%
Todd Foley(6)	0	0	2,056,728	0	2,056,728	2,056,728	7.0%
James Paul Scopa(6)	22,767	22,767	2,056,728	22,767	2,056,728	2,079,495	7.1%
Vaughn Kailian(6)(7)	17,937	17,937	2,056,728	17,937	2,056,728	2,074,665	7.0%

(1) This percentage is calculated based upon 29,477,246 shares of the Issuer's common stock outstanding on March 10, 2014, as disclosed in the Issuer's Annual Report on Form 10-K, filed with the Commission on March 26, 2014.

- (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) Securities held by MPM Capital, of which the Reporting Person is the managing member.
- (5) Includes securities held by BV V, AM LLC and MPM Capital. Med Portfolio is the managing member of MPM Capital. The Reporting Person is a member of BV V LLC and Med Portfolio.
- (6) Includes securities held by BV V and AM LLC. The Reporting Person is a member of BV V LLC.
- (7) 2,627 of the shares are held by The Vaughn and Patricia Kailian Revocable Trust u/a/dtd 12/18/1992, of which the Reporting Person is trustee.

(c) On April 8, 2014, BV V and AM LLC sold the following shares of Common Stock in the open market, which are the only transactions by the Reporting Persons involving the Issuer's securities since the filing of Amendment No. 1 to the Schedule 13D on March 13, 2014:

Date of Sale	Sold By	Shares Sold	Price Per Share
4/8/14	BV V	668,306	\$13.70
4/8/14	AM LLC	26,014	\$13.70

(d) Inapplicable.

(e) Inapplicable.

Item 7. Material to Be Filed as Exhibits

A. Agreement regarding filing of joint Schedule 13D.

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: April 9, 2014

MPM BioVENTURES V GP LLC

By: MPM BioVentures V LLC,
its Managing Member

By: /s/ Ansbert Gadicke
Name: Ansbert Gadicke
Title: Member

MPM BioVENTURES V LLC

By: /s/ Ansbert Gadicke
Name: Ansbert Gadicke
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/ Ansbert Gadicke
Name: Ansbert Gadicke
Title: Member

MPM ASSET MANAGEMENT INVESTORS BV5 LLC

By: MPM BioVentures V LLC
Its: Manager

By: /s/ Ansbert Gadicke
Name: Ansbert Gadicke
Title: Member

MPM CAPITAL LLC

By: Medical Portfolio Management LLC,
its Managing Member

By: /s/ Ansbert Gadicke

Name: Ansbert Gadicke

Title: Member

MEDICAL PORTFOLIO MANAGEMENT LLC

By: /s/ Ansbert Gadicke
Name: Ansbert Gadicke
Title: Member

By: /s/ Ansbert Gadicke
Name: Ansbert Gadicke

By: /s/ Luke 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

Schedule I

General Partners/Members

Ansbert Gadicke

c/o MPM Asset Management

The John Hancock Tower

200 Clarendon Street, 54th Floor

Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures V, L.P. and member of the manager of MPM Asset Management Investors BV5 LLC.

Citizenship: USA

Luke Evin

c/o MPM Asset Management

The John Hancock Tower

200 Clarendon Street, 54th Floor

Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures V, L.P. and member of the manager of MPM Asset Management Investors BV5 LLC.

Citizenship: USA

Todd Foley

c/o MPM Asset Management

The John Hancock Tower

200 Clarendon Street, 54th Floor

Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures V, L.P. and member of the manager of MPM Asset Management Investors BV5 LLC.

Citizenship: USA

James Paul Scopa

c/o MPM Asset Management

601 Gateway Blvd. Suite 350

S. San Francisco, CA 94080

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures V, L.P. and member of the manager of MPM Asset Management Investors BV5 LLC.

Citizenship: USA

Vaughn M. Kailian

c/o MPM Asset Management

The John Hancock Tower

200 Clarendon Street, 54th Floor

Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures V, L.P. and member of the manager of MPM Asset Management Investors BV5 LLC.

Citizenship: USA

Exhibit Index

A. Agreement regarding filing of joint Schedule 13D.

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