

Pacira Pharmaceuticals, Inc.  
Form SC 13D/A  
November 29, 2011

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

**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934  
(Amendment No. 1)\***

Pacira Pharmaceuticals, Inc.  
(Name of Issuer)  
Common Stock  
(Title of Class of Securities)  
695127 10 0  
(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)

November 21, 2011

(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 Rule 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. 695127 10 0

NAMES OF REPORTING PERSONS

1

MPM BioVentures IV-QP, L.P.

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

WC

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Delaware

SOLE VOTING POWER

7

NUMBER OF 3,158,046(2)

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

0

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 3,158,046(2)

WITH SHARED DISPOSITIVE POWER

10

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,158,046(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.0%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

PN

(1) MPM BioVentures IV-QP, L.P. ( BV IV QP ), MPM BioVentures IV GmbH & Co. Beteiligungs KG ( BV IV KG ), MPM Asset Management Investors BV4 LLC ( AM LLC ), MPM BioVentures IV GP LLC ( BV IV GP ), MPM BioVentures IV LLC ( BV IV LLC ) (collectively, the MPM Entities ) and Ansbert Gadicke, Luke Evnin, Steven St. Peter, 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 IV LLC. The MPM Entities and the Listed Persons expressly disclaim status as a group for purposes of this Schedule 13D.

(2) Includes 74,073 shares of Common Stock underlying warrants which are exercisable within 60 days of the date of this filing.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer s common stock outstanding, as adjusted pursuant to Rule 13d-3(d)(1) promulgated under the Securities Exchange Act, which is the sum of: (i) 17,228,827 shares of the Issuer s Common Stock outstanding on September 30, 2011, as set forth in the Issuer s final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011 and (ii) 7,000,000 shares of Common Stock issued pursuant to the Offering.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

MPM BioVentures IV GmbH & Co. Beteiligungs KG

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

WC

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Germany

SOLE VOTING POWER

7

NUMBER OF 121,665(2)

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

0

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 121,665(2)

WITH SHARED DISPOSITIVE POWER

**10**

0

**11** AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

121,665(2)

**12** CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

**13** PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

0.5%(3)

**14** TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

(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) Includes 2,853 shares of Common Stock underlying warrants which are exercisable within 60 days of the date of this filing.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

MPM Asset Management Investors BV4 LLC

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

WC

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Delaware

SOLE VOTING POWER

7

NUMBER OF 89,800(2)

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

0

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 89,800(2)

WITH SHARED DISPOSITIVE POWER

**10**

0

**11** AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

89,800(2)

**12** CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

**13** PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

0.4%(3)

**14** TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

OO

(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) Includes 2,106 shares of Common Stock underlying warrants which are exercisable within 60 days of the date of this filing.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

MPM BioVentures IV GP LLC

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

WC

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Delaware

SOLE VOTING POWER

7

NUMBER OF 0

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,279,711(2)

SOLE DISPOSITIVE POWER

EACH REPORTING 9



PERSON 0

WITH SHARED DISPOSITIVE POWER

10

3,279,711(2)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,279,711(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.5%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

OO

(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) Includes 3,083,973 shares of Common Stock held by BV IV QP and 118,812 shares of Common Stock held by BV IV KG. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing and (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

MPM BioVentures IV LLC

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

WC

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Delaware

SOLE VOTING POWER

7

NUMBER OF 0

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,369,511(2)

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 0

WITH SHARED DISPOSITIVE POWER

10

3,369,511(2)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,369,511(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.9%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

OO

(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) Includes 3,083,973 shares of Common Stock held by BV IV QP, 118,812 shares of Common Stock held by BV IV KG and 87,694 shares of Common Stock held by AM LLC. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing, (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing and (iii) 2,106 shares of Common Stock underlying warrants held by AM LLC, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

Ansbert Gadicke

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States

SOLE VOTING POWER

7

NUMBER OF 0

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,369,511(2)

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 0

WITH SHARED DISPOSITIVE POWER

10

3,369,511(2)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,369,511(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.9%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

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.

(2) Includes 3,083,973 shares of Common Stock held by BV IV QP, 118,812 shares of Common Stock held by BV IV KG and 87,694 shares of Common Stock held by AM LLC. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing, (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing and (iii) 2,106 shares of Common Stock underlying warrants held by AM LLC, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC. The Reporting Person is a member of BV IV LLC.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

Luke Evinin

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States

SOLE VOTING POWER

7

NUMBER OF 9,153(2)

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,369,511(3)

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 9,153(2)

WITH SHARED DISPOSITIVE POWER

10

3,369,511(3)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,378,664(2)(3)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.9%(4)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

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) Represents shares of Common Stock issuable pursuant to options exercisable within 60 days of the date of this filing.

(3) Includes 3,083,973 shares of Common Stock held by BV IV QP, 118,812 shares of Common Stock held by BV IV KG and 87,694 shares of Common Stock held by AM LLC. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing, (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing and (iii) 2,106 shares of Common Stock underlying warrants held by AM LLC, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC. The Reporting Person is a member of BV IV LLC.

(4) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

Steven St. Peter

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States

SOLE VOTING POWER

7

NUMBER OF 0

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,369,511(2)

SOLE DISPOSITIVE POWER

EACH REPORTING 9



PERSON 0

WITH SHARED DISPOSITIVE POWER

10

3,369,511(2)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,369,511(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.9%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

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.

(2) Includes 3,083,973 shares of Common Stock held by BV IV QP, 118,812 shares of Common Stock held by BV IV KG and 87,694 shares of Common Stock held by AM LLC. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing, (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing and (iii) 2,106 shares of Common Stock underlying warrants held by AM LLC, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC. The Reporting Person is a member of BV IV LLC.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

Todd Foley

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States

SOLE VOTING POWER

7

NUMBER OF 0

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,369,511(2)

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 0

WITH SHARED DISPOSITIVE POWER

10

3,369,511(2)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,369,511(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.9%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

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.

(2) Includes 3,083,973 shares of Common Stock held by BV IV QP, 118,812 shares of Common Stock held by BV IV KG and 87,694 shares of Common Stock held by AM LLC. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing, (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing and (iii) 2,106 shares of Common Stock underlying warrants held by AM LLC, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC. The Reporting Person is a member of BV IV LLC.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

James Paul Scopa

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States

SOLE VOTING POWER

7

NUMBER OF 0

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,369,511(2)

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 0

WITH SHARED DISPOSITIVE POWER

10

3,369,511(2)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,369,511(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.9%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

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.

(2) Includes 3,083,973 shares of Common Stock held by BV IV QP, 118,812 shares of Common Stock held by BV IV KG and 87,694 shares of Common Stock held by AM LLC. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing, (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing and (iii) 2,106 shares of Common Stock underlying warrants held by AM LLC, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC. The Reporting Person is a member of BV IV LLC.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

Vaughn M. Kailian

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States

SOLE VOTING POWER

7

NUMBER OF 0

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,369,511(2)

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 0

WITH SHARED DISPOSITIVE POWER

10

3,369,511(2)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,369,511(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.9%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

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.

(2) Includes 3,083,973 shares of Common Stock held by BV IV QP, 118,812 shares of Common Stock held by BV IV KG and 87,694 shares of Common Stock held by AM LLC. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing, (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing and (iii) 2,106 shares of Common Stock underlying warrants held by AM LLC, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC. The Reporting Person is a member of BV IV LLC.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

CUSIP No. 695127 10 0

NAMES OF REPORTING PERSONS

1

John Vander Vort

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

- (a)
- (b)  (1)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States

SOLE VOTING POWER

7

NUMBER OF 0

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

3,369,511(2)

SOLE DISPOSITIVE POWER

EACH REPORTING 9



PERSON 0

WITH SHARED DISPOSITIVE POWER

10

3,369,511(2)

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,369,511(2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

13.9%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

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.

(2) Includes 3,083,973 shares of Common Stock held by BV IV QP, 118,812 shares of Common Stock held by BV IV KG and 87,694 shares of Common Stock held by AM LLC. Also includes (i) 74,073 shares of Common Stock underlying warrants held by BV IV QP, which are exercisable within 60 days of the date of this filing, (ii) 2,853 shares of Common Stock underlying warrants held by BV IV KG, which are exercisable within 60 days of the date of this filing and (iii) 2,106 shares of Common Stock underlying warrants held by AM LLC, which are exercisable within 60 days of the date of this filing. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC. The Reporting Person is a member of BV IV LLC.

(3) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.

This Amendment No. 1 to Schedule 13D ( Amendment No. 1 ) is being filed as an amendment to the initial statement on Schedule 13D relating to the Common Stock, par value \$0.001 per share, of Pacira Pharmaceuticals, Inc., a Delaware corporation (the Issuer ), as filed with the Securities and Exchange Commission (the SEC ) on February 18, 2011 (the Original Schedule 13D ).

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 2. Identity and Background**

Item 2. Identity and Background of the Original Schedule 13D is hereby amended and restated in its entirety as follows:

(a) The entities and persons filing this statement are MPM BioVentures IV-QP, L.P. ( BV IV QP ), MPM BioVentures IV GmbH & Co. Beteiligungs KG ( BV IV KG ), MPM Asset Management Investors BV4 LLC ( AM LLC ), MPM BioVentures IV GP LLC ( BV IV GP ), MPM BioVentures IV LLC ( BV IV LLC ) (collectively, the MPM Entities ) and Ansbert Gadicke, Luke Evin, Steven St. Peter, Todd Foley, James Paul Scopa, Vaughn Kailian and John Vander Vort (collectively, the Listed Persons and together with the MPM Entities, the Filing Persons ).

(b) The address of the principal place of business for each of the MPM Entities and Ansbert Gadicke, Luke Evin, Steven St. Peter, Vaughn Kailian, Todd Foley and John Vander Vort is The John Hancock Tower, 200 Clarendon Street, 54<sup>th</sup> Floor, Boston, MA 02116 and the address of the principal place of business for James Paul Scopa is 601 Gateway Blvd., Suite 350, S. San Francisco, CA 94080.

(c) The principal business of each of the Filing Persons is the venture capital investment business.

(d) During the last five years, none of the Filing Persons has been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years, none of the Filing Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree, or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Each of the Listed Persons is a United States citizen and each of the MPM Entities is a Delaware limited partnership or limited liability company, except BV IV KG, which was organized in Germany.

In accordance with the provisions of General Instruction C to Schedule 13D, information concerning the managers and each other person controlling the general partners of the MPM Entities required by Item 2 of Schedule 13D is listed on Schedule 1 hereto and is incorporated by reference herein.

**Item 3. Source and Amount of Funds or Other Consideration**

Item 3. Source and Amount of Funds or Other Consideration of the Original Schedule 13D is hereby amended by adding the following at the end thereof:

On November 21, 2011, the Issuer completed an underwritten public offering of 7,000,000 shares of its Common Stock at a public offering price of \$6.50 per share resulting in gross proceeds to the Issuer of approximately \$45,500,000, before deducting underwriting discounts and offering fees and expenses (the Offering ). The MPM Entities participated in the Offering and acquired an aggregate of 461,538 shares of Common Stock of the Issuer (the Shares ), for a total purchase price of \$2,999,997. BV IV QP purchased 432,573 shares, BV IV KG purchased 16,665 shares and AM LLC purchased 12,300 shares.

The funds used by the MPM Entities to pay the cash purchase price of the stock were obtained from the capital contributions from the partners of the MPM Entities pursuant to pre-existing capital commitments under the terms of the respective limited partnership agreements and operating agreements of the MPM Entities.

**Item 4. Purpose of Transaction**

Item 4. Purpose of Transaction of the Original Schedule 13D is hereby amended by adding the following to the end thereof:

The Issuer completed the Offering on November 21, 2011. The MPM Entities participated in the Offering and acquired the Shares for a total purchase price of \$2,999,997. The MPM Entities participated in the Offering for investment purposes and in order to provide funding to the Issuer.

Subject to applicable legal requirements, one or more of the Reporting Persons may purchase additional securities of the Issuer from time to time in open market or private transactions, depending on their evaluation of the Issuer's business prospects or financial condition, the market for the Issuer's securities, developments concerning the Issuer, the reaction of the Issuer to the Reporting Persons' ownership of the Issuer's securities, other opportunities available to the Reporting Persons, and general economic, money market and stock market conditions. In addition, depending upon the factors referred to above, the Reporting Persons may dispose of all or a portion of their securities of the Issuer at any time. Each of the Reporting Persons reserves the right to increase or decrease its holdings on such terms and at such times as each may decide.

The Reporting Persons have no current plan or proposal which relates to, or may result in, any of the matters listed in Items 4(a) - (j) of Schedule 13D.

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

Item 5. Interest in Securities of the Issuer 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 November 21, 2011:

Reporting Person	Shares Held	Shares Issuable Upon Exercise of Warrants or Options to Purchase Common Stock			Shared Voting Power	Sole Dispositive Power	Shared Dispositive Power	Beneficial Ownership	Percentage of Class (1)
		Directly Held	Indirectly Held	Power					
BV IV QP	3,083,973	74,073	3,158,046	0	3,158,046	0	3,158,046	13.0%	
BV IV KG	118,812	2,853	121,665	0	121,665	0	121,665	0.5%	
AM LLC	87,694	2,106	89,800	0	89,800	0	89,800	0.4%	
BV IV GP(2)	0	0	0	3,279,711	0	3,279,711	3,279,711	13.5%	
BV IV LLC(3)	0	0	0	3,369,511	0	3,369,511	3,369,511	13.9%	
Ansbert Gadicke(4)	0	0	0	3,369,511	0	3,369,511	3,369,511	13.9%	
Luke Evnin(4)(5)	0	9,153	9,153	3,369,511	9,153	3,369,511	3,378,664	13.9%	
Steven St. Peter(4)	0	0	0	3,369,511	0	3,369,511	3,369,511	13.9%	
Todd Foley (4)	0	0	0	3,369,511	0	3,369,511	3,369,511	13.9%	
James Paul									
Scopa(4)	0	0	0	3,369,511	0	3,369,511	3,369,511	13.9%	
Vaughn Kailian(4)	0	0	0	3,369,511	0	3,369,511	3,369,511	13.9%	
John Vander Vort(4)	0	0	0	3,369,511	0	3,369,511	3,369,511	13.9%	

- (1) This percentage is calculated based upon 24,228,827 shares of the Issuer's Common Stock outstanding upon completion of the Offering (as defined herein), as disclosed in the Issuer's final prospectus dated November 15, 2011, filed with the Securities and Exchange Commission on November 16, 2011.
- (2) Includes securities held by BV IV QP and BV IV KG. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG.
- (3) Includes securities held by BV IV QP, BV IV KG and AM LLC. BV IV GP and BV IV LLC are the direct and indirect general partners of BV IV QP and BV IV KG and BV IV LLC is the manager of AM LLC.
- (4) Includes securities held by BV IV QP, BV IV KG and AM LLC. The Reporting Person is a member of BV IV LLC.
- (5) Includes shares issuable pursuant to options exercisable within 60 days of the date of this filing.



**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer**

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer of the Original Schedule 13D is hereby amended by adding the following to the end thereof:

**Lock-up Letter Agreement**

The MPM Entities and Mr. Evnin, along with all of the Issuer's officers, directors, and certain holders of more than 5% of the Issuer's outstanding shares of Common Stock, have agreed with the underwriters for the Offering, subject to certain exceptions, not to dispose of or hedge any of their Common Stock or securities convertible into or exchangeable for shares of Common Stock for a period through the date 90 days after November 15, 2011, as modified as described below, except with the prior written consent of Barclays Capital Inc. and Jefferies & Company, Inc. on behalf of the underwriters.

The 90-day restricted period will be automatically extended or reduced under the following circumstances: (1) during the last 17 days of the 90-day restricted period, if Issuer issues an earnings release or announce material news or a material event, the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or material event; or (2) prior to the expiration of the 90-day restricted period, if the Issuers announces that it will release earnings results or other material news during the 16-day period following the last day of the 90-day period, the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or other material news.

The foregoing description of the terms of the Lock-up Agreement is intended as a summary only and is qualified in its entirety by reference to the Form of Letter Lock-up Agreement, which is filed as an exhibit to this Schedule 13D and incorporated by reference herein.

Other than as described in this Schedule 13D, to the best of the Filing Persons' knowledge, there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer.

**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:

- A. Form of Lock-up Letter Agreement
- B. 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: November 28, 2011

**MPM BioVentures IV GP LLC**

By: MPM BioVentures IV LLC,  
its Managing Member

By: /s/ Vaughn M. Kailian

Name: Vaughn M. Kailian

Title: Member

**MPM BioVentures IV LLC**

By: /s/ Vaughn M. Kailian

Name: Vaughn M. Kailian

Title: Member

**MPM BioVentures IV-QP, L.P.**

By: MPM BioVentures IV GP LLC, its General  
Partner

By: MPM BioVentures IV LLC, its Managing  
Member

By: /s/ Vaughn M. Kailian

Name: Vaughn M. Kailian

Title: Member

**MPM BioVentures IV GmbH & Co.**

**Beteiligungs KG**

By: MPM BioVentures IV GP LLC, in its  
capacity as  
the Managing Limited Partner

By: MPM BioVentures IV LLC, its Managing  
Member

By: /s/ Vaughn M. Kailian

Name: Vaughn M. Kailian

Title: Member

**MPM Asset Management Investors BV4 LLC**

By: MPM BioVentures IV LLC  
Its: Manager

By: /s/ Vaughn M. Kailian

Name: Vaughn M. Kailian  
Title: Member

By: /s/ Ansbert Gadicke

Name: Ansbert Gadicke

By: /s/ Luke Evnin

Name: Luke Evnin

By: /s/ Steven St. Peter

Name: Steven St. Peter

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



**Schedule I**  
**General Partners/Members**

Ansbert Gadicke

c/o MPM Asset Management  
The John Hancock Tower  
200 Clarendon Street, 54<sup>th</sup> Floor  
Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures IV-QP, L.P., member of the managing member of the managing limited partner of MPM BioVentures IV GmbH & Co. Beteiligungs KG and member of the manager of MPM Asset Management Investors BV4 LLC.

Citizenship: USA

Luke Evin

c/o MPM Asset Management  
The John Hancock Tower  
200 Clarendon Street, 54<sup>th</sup> Floor  
Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures IV-QP, L.P., member of the managing member of the managing limited partner of MPM BioVentures IV GmbH & Co. Beteiligungs KG and member of the manager of MPM Asset Management Investors BV4 LLC.

Citizenship: USA

Steven St. Peter

c/o MPM Asset Management  
The John Hancock Tower  
200 Clarendon Street, 54<sup>th</sup> Floor  
Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures IV-QP, L.P., member of the managing member of the managing limited partner of MPM BioVentures IV GmbH & Co. Beteiligungs KG and member of the manager of MPM Asset Management Investors BV4 LLC.

Citizenship: USA

Todd Foley

c/o MPM Asset Management  
The John Hancock Tower  
200 Clarendon Street, 54<sup>th</sup> Floor  
Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures IV-QP, L.P., member of the managing member of the managing limited partner of MPM BioVentures IV GmbH & Co. Beteiligungs KG and member of the manager of MPM Asset Management Investors BV4 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 IV-QP, L.P., member of the managing member of the managing limited partner of MPM BioVentures IV GmbH & Co. Beteiligungs KG and member of the manager of MPM Asset Management Investors BV4 LLC.

Citizenship: USA

Vaughn M. Kailian  
c/o MPM Asset Management  
The John Hancock Tower  
200 Clarendon Street, 54<sup>th</sup> Floor  
Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures IV-QP, L.P., member of the managing member of the managing limited partner of MPM BioVentures IV GmbH & Co. Beteiligungs KG and member of the manager of MPM Asset Management Investors BV4 LLC.

Citizenship: USA

John Vander Vort  
c/o MPM Asset Management  
The John Hancock Tower  
200 Clarendon Street, 54<sup>th</sup> Floor  
Boston, MA 02116

Principal Occupation: Member of the managing member of the general partner of MPM BioVentures IV-QP, L.P., member of the managing member of the managing limited partner of MPM BioVentures IV GmbH & Co. Beteiligungs KG and member of the manager of MPM Asset Management Investors BV4 LLC.

Citizenship: USA

**Exhibit Index**

- A. Form of Lock-up Letter Agreement
- B. Agreement regarding filing of joint Schedule 13D/A.

Page 22