AFFYMAX INC Form SC 13G/A February 16, 2010

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 3)* AFFYMAX, INC.

(Name of Issuer)
Common Stock
(Title of Class of Securities)
00826A 10 9
(CUSIP Number)
December 31, 2009

(Date of Event Which Requires Filing of This Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- o Rule 13d-1(b)
- o Rule 13d-1(c)
- b Rule 13d-1(d)

*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 the disclosures provided in a prior cover page.

The information required in 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. 00826A 10 9

NAME OF REPORTING PERSONS

1

MPM BioVentures II, L.P.

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

SOLE VOTING POWER

5

NUMBER OF 109,213

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 0

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 109,213

WITH: SHARED DISPOSITIVE POWER

8

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

109,213

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

0

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

0.6%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

Page 2 of 23

CUSIP No. 00826A 10 9

NAME OF REPORTING PERSONS

1

MPM BioVentures II-QP, L.P.

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

SOLE VOTING POWER

5

NUMBER OF 989,697

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 0

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 989,697

WITH: SHARED DISPOSITIVE POWER

8

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

989,697

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

0

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.2%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

Page 3 of 23

CUSIP No. 00826A 10 9

NAME OF REPORTING PERSONS

1

MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Germany

SOLE VOTING POWER

5

NUMBER OF 348,491

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 0

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 348,491

WITH: SHARED DISPOSITIVE POWER

8

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

1.8%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

CUSIP No. 00826A 10 9

NAME OF REPORTING PERSONS

1

MPM Asset Management Investors 2001 LLC

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

SOLE VOTING POWER

5

NUMBER OF 20,548

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 0

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 20,548

WITH: SHARED DISPOSITIVE POWER

8

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

20,548

| | Page 5 of 23 |
|----|---|
| 12 | 00 |
| | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) |
| 11 | 0.1% |
| | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) |
| | o |
| 10 | CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) |

CUSIP No. 00826A 10 9

NAME OF REPORTING PERSONS

1

MPM BioVentures Strategic Fund, L.P.

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

SOLE VOTING POWER

5

NUMBER OF 132,520

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 0

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 132,520

WITH: SHARED DISPOSITIVE POWER

8

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

132,520

| 10 | CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) |
|----|---|
| 11 | o |
| | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) |
| 12 | 0.7% |
| | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) |
| 12 | PN |
| | Page 6 of 23 |

CUSIP No. 00826A 10 9

9

1,447,401*

NAME OF REPORTING PERSONS 1 MPM Asset Management II, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) o (b) þ SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 Delaware **SOLE VOTING POWER** 5 NUMBER OF 0 **SHARES** SHARED VOTING POWER BENEFICIALLY OWNED BY 1,447,401* **EACH** SOLE DISPOSITIVE POWER 7 REPORTING **PERSON** 0 WITH: SHARED DISPOSITIVE POWER 8 1,447,401*

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

7.6%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

PN

Page 7 of 23

^{*} The shares are held as follows: 989,697 by MPM BioVentures II-QP, L.P. (BV II QP); 109,213 by MPM BioVentures II, L.P. (BV II); and 348,491 by MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG (BV KG). The Reporting Person is the direct general partner of BV II QP, BV II and BV KG.

CUSIP No. 00826A 10 9

9

1,447,401*

NAME OF REPORTING PERSONS 1 MPM Asset Management II LLC CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) o (b) þ SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 Delaware **SOLE VOTING POWER** 5 NUMBER OF 0 **SHARES** SHARED VOTING POWER BENEFICIALLY OWNED BY 1,447,401* **EACH** SOLE DISPOSITIVE POWER 7 REPORTING **PERSON** 0 WITH: SHARED DISPOSITIVE POWER 8 1,447,401* AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

14

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

7.6%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

OO

Page 8 of 23

^{*} The shares are held as follows: 989,697 by BV II QP; 109,213 by BV II; and 348,491 by BV KG. The Reporting Person is the indirect general partner of BV II QP, BV II and BV KG.

CUSIP No. 00826A 10 9

NAME OF REPORTING PERSONS

MPM BioVentures III GP, L.P.

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 132,520*

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 0

WITH: SHARED DISPOSITIVE POWER

8

132,520*

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

132,520*

9

16

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

0.7%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

PN

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 $^{^*}$ The shares are held by MPM BioVentures Strategic Fund, L.P. (MPM SF). The Reporting Person is the direct general partner of MPM SF.

CUSIP No. 00826A 10 9

9

132,520*

NAME OF REPORTING PERSONS 1 MPM BioVentures III LLC CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) o (b) þ SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 Delaware **SOLE VOTING POWER** 5 NUMBER OF 0 **SHARES** SHARED VOTING POWER BENEFICIALLY OWNED BY 132,520* **EACH** SOLE DISPOSITIVE POWER 7 REPORTING **PERSON** 0 WITH: SHARED DISPOSITIVE POWER 8 132,520*

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

0.7%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

OO

* The shares are held by MPM SF. The Reporting Person is the indirect general partner of MPM SF.

Page 10 of 23

CUSIP No. 00826A 10 9

NAME OF REPORTING PERSONS

1

Ansbert Gadicke

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

United States

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 1,600,469*

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 0

WITH: SHARED DISPOSITIVE POWER

8

1,600,469*

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

1,600,469*

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

8.4%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

IN

* The shares are held as follows: 989,697 by BV II QP; 109,213 by BV II; 20,548 by MPM Asset Management Investors 2001 LLC (AM 2001); 348,491 by BV KG; and 132,520 by MPM SF. MPM Asset Management II, L.P. (AM LP) and MPM Asset Management II LLC (AM II LLC) are the direct and indirect general partners of BV II QP, BV II and BV KG. MPM BioVentures III GP, L.P. (BV III GP) and MPM BioVentures III LLC (BV III LLC) are the direct and indirect general partners of MPM SF. The Reporting Person is an investment manager of AM II LLC and AM 2001 and a Series A member of BV III LLC. The Reporting Person disclaims beneficial ownership of all such shares except to the extent of his proportionate pecuniary interests therein.

Page 11 of 23

CUSIP No. 00826A 109 NAME OF REPORTING PERSONS 1 Luke Evnin CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) o (b) þ SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 **United States SOLE VOTING POWER** 5 NUMBER OF 0 **SHARES** SHARED VOTING POWER BENEFICIALLY OWNED BY 1,600,469*

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 0

WITH: SHARED DISPOSITIVE POWER

8

1,600,469*

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,600,469*

9

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

8.4%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

IN

* The shares are held as follows: 989,697 by BV II QP; 109,213 by BV II; 20,548 by AM 2001; 348,491 by BV KG; and 132,520 by MPM SF. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. BV III GP and BV III LLC are the direct and indirect general partners of MPM SF. The Reporting Person is an investment manager of AM II LLC and AM 2001 and a Series A member of BV III LLC. The Reporting Person disclaims beneficial ownership of all such shares except to the extent of his proportionate pecuniary interests therein.

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CUSIP No. 00826A 10 9

NAME OF REPORTING PERSONS

1

Nicholas Galakatos

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

United States

SOLE VOTING POWER

5

NUMBER OF 13,958*

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 1,600,469**

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 13,958*

WITH: SHARED DISPOSITIVE POWER

8

1,600,469**

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

1,614,427* **

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

8.4%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

IN

Page 13 of 23

^{*} Includes 13,958 shares issuable pursuant to options exercisable within 60 days of December 31, 2009.

^{**} The shares are held as follows: 989,697 by BV II QP; 109,213 by BV II; 20,548 by AM 2001; 348,491 by BV KG; and 132,520 by MPM SF. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. BV III GP and BV III LLC are the direct and indirect general partners of MPM SF. The Reporting Person is an investment manager of AM II LLC and AM 2001 and a Series A member of BV III LLC. The Reporting Person disclaims beneficial ownership of all such shares except to the extent of his proportionate pecuniary interests therein.

CUSIP No. 00826A 10 9

NAME OF REPORTING PERSONS

1

Michael Steinmetz

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

2

(a) o

(b) þ

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

United States

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 1,600,469*

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON 0

WITH: SHARED DISPOSITIVE POWER

8

1,600,469*

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

1,600,469*

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

8.4%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

IN

* The shares are held as follows: 989,697 by BV II QP; 109,213 by BV II; 20,548 by AM 2001; 348,491 by BV KG; and 132,520 by MPM SF. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. BV III GP and BV III LLC are the direct and indirect general partners of MPM SF. The Reporting Person is an investment manager of AM II LLC and AM 2001 and a Series A member of BV III LLC. The Reporting Person disclaims beneficial ownership of all such shares except to the extent of his proportionate pecuniary interests therein.

Page 14 of 23

CUSIP No. 00826A 109 NAME OF REPORTING PERSONS 1 Kurt Wheeler CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) o (b) þ SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 **United States SOLE VOTING POWER** 5 NUMBER OF 0 **SHARES** SHARED VOTING POWER BENEFICIALLY OWNED BY 1,600,469* **EACH** SOLE DISPOSITIVE POWER 7 REPORTING **PERSON** 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

SHARED DISPOSITIVE POWER

1,600,469*

8

1,600,469*

WITH:

9

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

8.4%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

IN

* The shares are held as follows: 989,697 by BV II QP; 109,213 by BV II; 20,548 by AM 2001; 348,491 by BV KG; and 132,520 by MPM SF. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. BV III GP and BV III LLC are the direct and indirect general partners of MPM SF. The Reporting Person is an investment manager of AM II LLC and AM 2001 and a Series A member of BV III LLC. The Reporting Person disclaims beneficial ownership of all such shares except to the extent of his proportionate pecuniary interests therein.

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Item 1.

(a) Name of Issuer

Affymax, Inc.

(b) Address of Issuer s Principal Executive Offices

4001 Miranda Avenue

Palo Alto, CA 94304

Item 2.

(a) Name of Person Filing

MPM BioVentures II, LP

MPM BioVentures II-OP, L.P.

MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG

MPM Asset Management Investors 2001 LLC

MPM BioVentures Strategic Fund, L.P.

MPM Asset Management II, L.P.

MPM Asset Management II LLC

MPM BioVentures III GP, L.P.

MPM BioVentures III LLC

Ansbert Gadicke

Luke Evnin

Nicholas Galakatos

Michael Steinmetz

Kurt Wheeler

(b) Address of Principal Business Office or, if none, Residence

c/o MPM Capital L.P.

The John Hancock Tower

200 Clarendon Street, 54th Floor

Boston, MA 02116

(c) Citizenship

All entities were organized in Delaware except MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG, which was organized in Germany. The individuals are all United States citizens.

(d) Title of Class of Securities

Common Stock

(e) CUSIP Number

00826A 109

Item 3. If this statement is filed pursuant to §§240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable

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Item 4. Ownership

(a) Amount Beneficially Owned:

| MPM BioVentures II, L.P. MPM BioVentures II-QP, L.P. MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG MPM Asset Management Investors 2001 LLC MPM BioVentures Strategic Fund, L.P. MPM Asset Management II, L.P. | 109,213 989,697 348,491 20,548 132,520 1,447,401(1) |
|---|--|
| MPM Asset Management II LLC MPM BioVentures III GP, L.P. | 1,447,401(1) 132,520(2) |
| MPM BioVentures III LLC | 132,520(2) |
| Ansbert Gadicke | 1,600,469(3) |
| Luke B. Evnin | 1,600,469(3) |
| Nicholas Galakatos | 1,614,427(3)(4) |
| Michael Steinmetz | 1,600,469(3) |
| Kurt Wheeler | 1,600,469(3) |
| Percent of Class: | |
| MPM BioVentures II, L.P. | 0.6% |
| MPM BioVentures II-QP, L.P. | 5.2% |
| MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG | 1.8% |
| MPM Asset Management Investors 2001 LLC | 0.1% |
| MPM BioVentures Strategic Fund, L.P. | 0.7% |
| MPM Asset Management II, L.P. | 7.6% |
| MPM Asset Management II LLC | 7.6% |
| MPM BioVentures III GP, L.P. | 0.7% |
| MPM BioVentures III LLC | 0.7% |
| Ansbert Gadicke | 8.4% |
| Luke B. Evnin | 8.4% |
| Nicholas Galakatos | 8.4% |
| Michael Steinmetz | 8.4% |
| Kurt Wheeler (b) Number of charge as to which the person has | 8.4% |
| (b) Number of shares as to which the person has:(i) Sole power to vote or to direct the vote | |
| MPM BioVentures II, L.P. | 109,213 |
| MPM BioVentures II-QP, L.P. | 989,697 |
| MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG | 348,491 |
| MPM Asset Management Investors 2001 LLC | 20,548 |
| MPM BioVentures Strategic Fund, L.P. | 132,520 |
| MPM Asset Management II, L.P. Page 17 of 23 | 0 |
| | |

| MPM Asset Management II LLC | 0 |
|---|--------------|
| MPM BioVentures III GP, L.P. | |
| MPM BioVentures III LLC | 0 |
| Ansbert Gadicke | 0 |
| Luke B. Evnin | 0 |
| Nicholas Galakatos | 13,958(4) |
| Michael Steinmetz | 0 |
| Kurt Wheeler | 0 |
| (ii) Shared power to vote or to direct the vote | |
| MPM BioVentures II, L.P. | 0 |
| MPM BioVentures II-QP, L.P. | 0 |
| MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG | 0 |
| MPM Asset Management Investors 2001 LLC | 0 |
| MPM BioVentures Strategic Fund L.P. | 0 |
| MPM Asset Management II, L.P. | 1,447,401(1) |
| MPM Asset Management II LLC | 1,447,401(1) |
| MPM BioVentures III GP, L.P. | 132,520(2) |
| MPM BioVentures III LLC | 132,520(2) |
| Ansbert Gadicke | 1,600,469(3) |
| Luke B. Evnin | 1,600,469(3) |
| Nicholas Galakatos | 1,600,469(3) |
| Michael Steinmetz | 1,600,469(3) |
| Kurt Wheeler | 1,600,469(3) |
| (iii) Sole power to dispose or to direct the disposition of | |
| MPM BioVentures II, LP | 109,213 |
| MPM BioVentures II-QP, L.P. | 989,697 |
| MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG | 348,491 |
| MPM Asset Management Investors 2001 LLC | 20,548 |
| MPM BioVentures Strategic Fund, L.P. | 132,520 |
| MPM Asset Management II, L.P. | 0 |
| MPM Asset Management II LLC | 0 |
| MPM BioVentures III GP, L.P. | 0 |
| MPM BioVentures III LLC | 0 |
| Ansbert Gadicke | 0 |
| Luke Evnin | 0 |
| Nicholas Galakatos | 13,958(4) |
| Michael Steinmetz | 0 |
| Kurt Wheeler | 0 |
| Page 18 of 23 | |

(iv) Shared power to dispose or to direct the disposition of

| MPM BioVentures II, LP | 0 |
|---|--------------|
| MPM BioVentures II-QP, L.P. | 0 |
| MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG | 0 |
| MPM Asset Management Investors 2001 LLC | 0 |
| MPM BioVentures Strategic Fund L.P. | 0 |
| MPM Asset Management II, L.P. | 1,447,401(1) |
| MPM Asset Management II LLC | 1,447,401(1) |
| MPM BioVentures III GP, L.P. | 132,520(2) |
| MPM BioVentures III LLC | 132,520(2) |
| Ansbert Gadicke | 1,600,469(3) |
| Luke B. Evnin | 1,600,469(3) |
| Nicholas Galakatos | 1,600,469(3) |
| Michael Steinmetz | 1,600,469(3) |
| Kurt Wheeler | 1,600,469(3) |

- (1) The shares are held as follows: 989,697 by BV II QP; 109,213 by BV II; and 348,491 by BV KG. AM LP and AM IILLC are the direct and indirect general partners of BV II QP, BV II and BV KG.
- (2) The shares are held by MPM SF. BV III GP and BV III LLC are the direct and indirect general partners of MPM SF.
- (3) The shares are held as follows: 989,697 by BV II QP; 109,213 by BV II; 20,548 by AM 2001; 348,491 by BV KG; and 132,520 by

MPM SF. AM

LP and AM II

LLC are the

direct and

indirect general

partners of BV

II OP, BV II and

BV KG. BV III

GP and BV III

LLC are the

direct and

indirect general

partners of

MPM SF. The

Reporting

Person is a

managing

member of AM

II LLC and AM

2001 and BV III

LLC. The

Reporting

Person

disclaims

beneficial

ownership of all

such shares

except to the

extent of his

proportionate

pecuniary

interests therein.

(4) Includes 13,958

shares issuable

upon exercise of

options within

60 days of

December 31,

2009.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o.

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person.

Not Applicable

Item 8. Identification and Classification of Members of the Group

Not Applicable

Item 9. Notice of Dissolution of a Group

Not Applicable

Item 10. Certification

Not Applicable

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SIGNATURE

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

Dated: February 11, 2010

MPM BIOVENTURES II, L.P.

MPM BIOVENTURES II-QP, L.P.

By: MPM Asset Management II, L.P.,

its General Partner

By: MPM Asset Management II, L.P.,

its General Partner

By: MPM Asset Management II LLC,

its General Partner

By: MPM Asset Management II LLC,

its General Partner

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Investment Manager By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Investment Manager

MPM BIOVENTURES GMBH & CO.

PARALLEL-

BETEILIGUNGS KG

MPM ASSET MANAGEMENT

INVESTORS 2001 LLC

By: MPM Asset Management II LP, in its

capacity as the

Special Limited Partner

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Investment Manager

By: MPM Asset Management II LLC, its

General Partner

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Investment Manager

MPM ASSET MANAGEMENT II L.P.

MPM ASSET MANAGEMENT II LLC

By: MPM Asset Management II LLC, its

General Partner

By: /s/ Luke B. Evnin

By: /s/ Luke B. Evnin

Name: Luke B. Evnin

Title: Investment Manager

Name: Luke B. Evnin

Title: Investment Manager

MPM BIOVENTURES STRATEGIC FUND,

L.P.

MPM BIOVENTURES III GP, L.P.

By: MPM BioVentures III GP, L.P., By: MPM BioVentures III LLC,

its General Partner its General Partner

By: MPM BioVentures III LLC, By: /s/ Luke B. Evnin

its General Partner

Name: Luke B. Evnin Title: Series A Member

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Series A Member

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MPM BIOVENTURES III LLC

By: /s/ Luke B. Evnin /s/ Ansbert Gadicke

Name: Luke B. Evnin Ansbert Gadicke

Title: Series A Member

/s/ Luke B. Evnin /s/ Nicholas Galakatos

Luke B. Evnin Nicholas Galakatos

/s/ Michael Steinmetz /s/ Kurt Wheeler

Michael Steinmetz Kurt Wheeler

EXHIBITS

A: Joint Filing Agreement

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EXHIBIT A JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the undersigned agree to the joint filing on behalf of each of them of a statement on Schedule 13G (including amendments thereto) with respect to the Common Stock of Affymax, Inc. and further agree that this agreement be included as an exhibit to such filing. Each party to the agreement expressly authorizes each other party to file on its behalf any and all amendments to such statement. Each party to this agreement agrees that this joint filing agreement may be signed in counterparts. In evidence whereof, the undersigned have caused this Agreement to be executed on their behalf this 11th day of February, 2010.

MPM BIOVENTURES II, L.P.

By: MPM Asset Management II, L.P.,

its General Partner

By: MPM Asset Management II LLC,

its General Partner

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Investment Manager

MPM BIOVENTURES GMBH & CO.

PARALLEL-

BETEILIGUNGS KG

By: MPM Asset Management II LP, in its

capacity as the

Special Limited Partner

MPM BIOVENTURES II-QP, L.P.

By: MPM Asset Management II, L.P.,

its General Partner

By: MPM Asset Management II LLC,

its General Partner

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Investment Manager

MPM ASSET MANAGEMENT

INVESTORS 2001 LLC

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Investment Manager

By: MPM Asset Management II LLC, its

General Partner

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Investment Manager

MPM ASSET MANAGEMENT II L.P. MPM ASSET MANAGEMENT II LLC

By: MPM Asset Management II LLC, its

General Partner

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

Name: Luke B. Evnin
Title: Investment Manager
Title: Investment Manager

MPM BIOVENTURES STRATEGIC FUND, MPM BIOVENTURES III GP, L.P.

L.P.

By: MPM BioVentures III GP, L.P., By: MPM BioVentures III LLC,

its General Partner its General Partner

By: MPM BioVentures III LLC, By: /s/ Luke B. Evnin

its General Partner
Name: Luke B. Evnin

Title: Series A Member

By: /s/ Luke B. Evnin

Name: Luke B. Evnin Title: Series A Member

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MPM BIOVENTURES III LLC

By: /s/ Luke B. Evnin /s/ Ansbert Gadicke

Name: Luke B. Evnin Ansbert Gadicke

Title: Series A Member

/s/ Luke B. Evnin /s/ Nicholas Galakatos

Luke B. Evnin Nicholas Galakatos

/s/ Michael Steinmetz /s/ Kurt Wheeler

Michael Steinmetz Kurt Wheeler

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