

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

BIOMARIN PHARMACEUTICAL INC  
Form SC 13G  
February 14, 2001

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

SCHEDULE 13G  
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULES 13d-1(b), (c) AND (d) AND AMENDMENTS THERETO FILED  
PURSUANT TO 13d-2(b)

BIOMARIN PHARMACEUTICAL INC.

-----  
(Name of Issuer)

COMMON STOCK

-----  
(Title of Class of Securities)

09061G 10 1

-----  
(CUSIP Number)

December 31, 2000

-----  
(Date of Event which Requires Filing of this Statement)

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

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

/1/ The remainder of this cover page shall be filled out for a reporting person's initial filing on this 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 (the "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).

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

CUSIP NO. 09061G 10 1  
-----

13G

Page 2 of 17 Pages

-----  
1 NAME OF REPORTING PERSON  
S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

MPM Capital L.P.

-----  
2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)  
(a)   
(b)

-----  
3 SEC USE ONLY

-----  
4 CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

-----  
5 SOLE VOTING POWER  
NUMBER OF 2,810,787 (1)  
SHARES

-----  
6 SHARED VOTING POWER  
BENEFICIALLY OWNED BY None

-----  
7 SOLE DISPOSITIVE POWER  
EACH 2,810,787 (1)  
REPORTING PERSON

-----  
8 SHARED DISPOSITIVE POWER  
WITH None

-----  
9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
2,810,787 (1)

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

-----  
11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
7.65%

-----  
12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

PN

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1

13G

Page 3 of 17 Pages

1 NAME OF REPORTING PERSON  
S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

BB BioVentures L.P.

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

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

5 SOLE VOTING POWER  
NUMBER OF 2,810,787 (1)  
SHARES

6 SHARED VOTING POWER  
BENEFICIALLY OWNED BY None

7 SOLE DISPOSITIVE POWER  
EACH 2,810,787 (1)  
REPORTING PERSON

8 SHARED DISPOSITIVE POWER  
WITH None

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
2,810,787 (1)

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

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

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

7.65%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1

13G

Page 4 of 17 Pages

1 NAME OF REPORTING PERSON  
S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

BAB BioVentures, LP

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

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

5 SOLE VOTING POWER  
NUMBER OF  
SHARES 2,810,787 (1)

6 SHARED VOTING POWER  
BENEFICIALLY OWNED BY  
EACH 8 None

7 SOLE DISPOSITIVE POWER  
REPORTING PERSON 2,810,787 (1)

8 SHARED DISPOSITIVE POWER  
WITH 8 None

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
2,810,787 (1)

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

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

-----  
PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

11

7.65%

-----  
TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

PN

-----  
\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1  
-----

13G

Page 5 of 17 Pages

-----  
NAME OF REPORTING PERSON

1 S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

MPM BioVentures Parallel Fund, L.P.

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

2

(a)

(b)

-----  
SEC USE ONLY

3

-----  
CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

-----  
SOLE VOTING POWER

5

NUMBER OF

2,810,787 (1)

SHARES

-----  
SHARED VOTING POWER

BENEFICIALLY

6

OWNED BY

None

-----  
SOLE DISPOSITIVE POWER

EACH

7

REPORTING

2,810,787 (1)

PERSON

-----  
SHARED DISPOSITIVE POWER

WITH

8

None

-----  
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

2,810,787 (1)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) [ ]

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.65%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1

13G

Page 6 of 17 Pages

1 NAME OF REPORTING PERSON S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

BAB BioVentures, N.V.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) [ ] (b) [X]

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION Netherlands Antilles

5 NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,810,787 (1) SOLE VOTING POWER

6 SHARED VOTING POWER None

7 SOLE DISPOSITIVE POWER 2,810,787 (1) PERSON

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

WITH 8 SHARED DISPOSITIVE POWER  
None

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
2,810,787 (1)

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

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
7.65%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)  
CO

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1 13G Page 7 of 17 Pages

1 NAME OF REPORTING PERSON  
S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

MPM BioVentures I LP

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

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

5 SOLE VOTING POWER  
NUMBER OF 2,810,787 (1)  
SHARES  
6 SHARED VOTING POWER  
BENEFICIALLY OWNED BY None

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

EACH REPORTING PERSON WITH 7 SOLE DISPOSITIVE POWER 2,810,787 (1)

PERSON WITH 8 SHARED DISPOSITIVE POWER None

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,810,787

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) [ ]

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.65%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1

13G

Page 8 of 17 Pages

1 NAME OF REPORTING PERSON S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

MPM BioVentures I LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) [ ] (b) [X]

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION Delaware

5 NUMBER OF SHARES 2,810,787 (1) SOLE VOTING POWER



Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

BENEFICIALLY 6 SHARED VOTING POWER

OWNED BY None

EACH 7 SOLE DISPOSITIVE POWER  
REPORTING 2,810,787 (1)

PERSON 8 SHARED DISPOSITIVE POWER  
WITH None

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
2,810,787 (1)

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

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

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

OO

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1

13G

Page 9 of 17 Pages

1 NAME OF REPORTING PERSON  
S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

MPM Asset Management LLC

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

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

5  
NUMBER OF  
SHARES  
2,810,787 (1)  
-----  
BENEFICIALLY 6 SHARED VOTING POWER  
OWNED BY None  
-----  
EACH 7 SOLE DISPOSITIVE POWER  
REPORTING 2,810,787 (1)  
PERSON  
-----  
WITH 8 SHARED DISPOSITIVE POWER  
None

-----  
9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
2,810,787 (1)  
-----

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

-----  
11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
7.65%

-----  
12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)  
OO

-----  
\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1 13G Page 10 of 17 Pages  
-----

-----  
1 NAME OF REPORTING PERSON  
S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
  
Medical Portfolio Management, LLC

-----  
2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)  
(a)   
(b)

-----  
3 SEC USE ONLY

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

-----  
SOLE VOTING POWER

5

NUMBER OF

2,810,787 (1)

SHARES

-----  
SHARED VOTING POWER

BENEFICIALLY

6

OWNED BY

None

-----  
EACH

SOLE DISPOSITIVE POWER

REPORTING

7

2,810,787 (1)

PERSON

-----  
SHARED DISPOSITIVE POWER

WITH

8

None

-----  
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

2,810,787 (1)

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

10

-----  
PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

11

-----  
TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

OO

-----  
\*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 09061G 10 1

13G

Page 11 of 17 Pages

-----  
NAME OF REPORTING PERSON

1

S. S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

MPM Asset Management Investors 1998 LLC

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

2

(a)

(b)

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

SEC USE ONLY

3

-----  
CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

-----  
SOLE VOTING POWER

5

NUMBER OF

2,810,787 (1)

SHARES

-----  
SHARED VOTING POWER

BENEFICIALLY

6

OWNED BY

None

EACH

-----  
SOLE DISPOSITIVE POWER

REPORTING

7

2,810,787 (1)

PERSON

-----  
SHARED DISPOSITIVE POWER

WITH

8

None

-----  
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

2,810,787 (1)

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

10

-----  
PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

11

7.65%

-----  
TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

OO

-----  
\*SEE INSTRUCTIONS BEFORE FILLING OUT!

STATEMENT ON SCHEDULE 13G

Item 1(a). Name of Issuer:

-----

BioMarin Pharmaceutical Inc.

Item 1(b). Address of Issuer's Principal Executive Offices:

-----

371 Bel Marin Keys Boulevard, Suite 210, Novato, CA 94949

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

Item 2(a). Names of Person Filing:

-----

MPM Capital L.P.  
BB BioVentures L.P.  
BAB BioVentures L.P.  
MPM BioVentures Parallel Fund, L.P.  
BAB BioVentures, N.V.  
MPM BioVentures I LP  
MPM BioVentures I LLC  
MPM Asset Management LLC  
Medical Portfolio Management, LLC  
MPM Asset Management 1998 LLC

Item 2(b). Business Mailing Address for the Person Filing:

-----

c/o MPM Capital L.P.  
One Cambridge Center, 9th Floor  
Cambridge, MA 02142

Item 2(c). Citizenship:

-----

All entities were organized in Delaware, except BAB BioVentures, N.V., which was formed under the laws of the Netherlands Antilles.

Item 2(d). Title of Class of Securities:

-----

Common Stock

Item 2(e). CUSIP Number:

-----

09061G 10 1

Item 3. If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b),

-----

check whether the person filing is a:

-----

Not Applicable

Item 4. Ownership:

-----

(a) Amount Beneficially Owned:

2,810,787 (1)

(b) Percent of Class Owned:

7.65%

(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote:

2,810,787 shares of Common Stock (1)

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

(ii) shared power to vote or to direct the vote:  
None

(iii) sole power to dispose or to direct the disposition of:  
2,810,787 shares of Common Stock (1)

(iv) shared power to dispose or to direct the disposition of:  
None

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

Not Applicable

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

Various persons have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares to which this statement relates. No one person's interest in such shares is more than five percent of the total outstanding stock of the Issuer.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company:  
-----

Not Applicable

Item 8. Identification and Classification of Members of the Group:  
-----

Not Applicable

Item 9. Notice of Dissolution of Group:  
-----

Not Applicable

Item 10. Certification:  
-----

Not Applicable

(1) Includes shares held through interests in MPM Capital L.P. ("MPM Capital") and in entities directly or indirectly controlled by it. MPM Capital is a direct or indirect parent and/or a control person of MPM Asset Management LLC and funds managed or advised by it, and of the general partners of such funds. Also includes shares held through interests in Medical Portfolio Management LLC, the general partner of MPM Capital. Among the shares included, 2,690,912 shares are held by MPM BioVentures L.P.; 30,083 shares are held by MPM BioVentures Parallel Fund, L.P.; 4,792 shares are held by MPM Asset Management Investors 1998 LLC and 85,000 shares are shares issuable upon the exercise of options held by Ansbert S. Gadicke exercisable within 60 days of December 31, 2000. Among such shares issuable upon the exercise of options held by Dr. Gadicke, 30,000 may also be beneficially owned by BB BioVentures L.P. and MPM BioVentures Parallel Fund, L.P., and 55,000 may also be beneficially owned by MPM Asset Management LLC. Each reporting person herein disclaims beneficial ownership of shares not directly held by such reporting person.

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

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 14, 2001

MPM CAPITAL L.P.

By: Medical Portfolio Management LLC,  
its General Partner

By: /s/        Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

BB BIOVENTURES L.P.

By: BAB BioVentures L.P.,  
its General Partner

By: BAB BioVentures N.V.,  
its General Partner

By: /s/        Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

BAB BIOVENTURES L.P.

By: BAB BioVentures, N.V.,  
its General Partner

By: /s/        Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

MPM BIOVENTURES PARALLEL FUND, L.P.

By: MPM BioVentures I LP,  
its General Partner

By: MPM BioVentures I LLC,  
its General Partner

By: /s/        Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

BAB BIOVENTURES, N.V.

By: /s/        Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

MPM BIOVENTURES I LP

By: MPM BioVentures I LLC,  
its General Partner

By: /s/        Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

MPM BIOVENTURES I LLC

MPM ASSET MANAGEMENT LLC

By: /s/        Ansbert S. Gadicke  
-----  
Name:   Ansbert S. Gadicke  
Title:  Manager

By: /s/        Ansbert S. Gadicke  
-----  
Name:   Ansbert S. Gadicke  
Title:  Manager

MEDICAL PORTFOLIO MANAGEMENT, LLC

MPM ASSET MANAGEMENT 1998 LLC

By: /s/        Ansbert S. Gadicke  
-----  
Name:   Ansbert S. Gadicke  
Title:  Manager

By: /s/        Ansbert S. Gadicke  
-----  
Name:   Ansbert S. Gadicke  
Title:  Manager

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 BioMarin Pharmaceutical 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 \_\_\_ day of February, 2001

MPM CAPITAL L.P.

BB BIOVENTURES L.P.

By: Medical Portfolio Management LLC,  
its General Partner

By: BAB BioVentures L.P.,  
its General Partner

By: BAB BioVentures N.V.,  
its General Partner

By: /s/        Ansbert S. Gadicke  
-----  
Name:   Ansbert S. Gadicke  
Title:  Manager

By: /s/        Ansbert S. Gadicke  
-----



Edgar Filing: BIOMARIN PHARMACEUTICAL INC - Form SC 13G

Name: Ansbert S. Gadicke  
Title: Manager

BAB BIOVENTURES L.P.

By: BAB BioVentures, N.V.,  
its General Partner

By: /s/ Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

MPM BIOVENTURES PARALLEL FUND, L

By: MPM BioVentures I LP,  
its General Partner

By: MPM BioVentures I LLC,  
its General Partner

By: /s/ Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

BAB BIOVENTURES, N.V.

By: /s/ Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

MPM BIOVENTURES I LP

By: MPM BioVentures I LLC,  
its General Partner

By: /s/ Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

MPM BIOVENTURES I LLC

By: /s/ Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

MPM ASSET MANAGEMENT LLC

By: /s/ Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

MEDICAL PORTFOLIO MANAGEMENT, LLC

By: /s/ Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager

MPM ASSET MANAGEMENT 1998 LLC

By: /s/ Ansbert S. Gadicke

-----  
Name: Ansbert S. Gadicke  
Title: Manager