OMB APPROVAL OMB Number: 3235-0145 Expires: December 31, 2005 Estimated average burden hours per response...11

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

SCHEDULE 13G

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

XCYTE THERAPIES, INC.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

98389F 10 1

(CUSIP Number)

December 31, 2004

(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)

🗹 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 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).

1.			f Reporting Person: I.R.S. ioVentures II, L.P.	Identification Nos. of above persons (entities only):
	Che (a) (b)	0	ne Appropriate Box if a Member of a Group:	
3.	SEC	C Use	e Only:	
4.		zensh ware	hip or Place of Organization: e	
			Sole Voting Power: 87,744	
Number Shares Beneficia	lly	6.	Shared Voting Power: 0	
Owned b Each Reportin Person W	g	7.	Sole Dispositive Power: 87,744	
		8.	Shared Dispositive Power: 0	
9.	Agg 87,7		te Amount Beneficially Owned by Each Reporting F	erson:
10.	10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares:o			
11.	11. Percent of Class Represented by Amount in Row (9):0.5%			
12.	12. Type of Reporting Person: PN			

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1.	Nan MPl	ne of M Bi	Reporting Person: oVentures II-QP, L.P.	I.R.S. Identification Nos. of above persons (entities only):	
2.	Che (a) (b)	0	e Appropriate Box if a Member of a Group:		
3.	SEC	C Use	Only:		
4.		zensł ware	nip or Place of Organization:		
		5.	Sole Voting Power: 795,030		
Number Shares Beneficia Owned l	5 ally	6.	Shared Voting Power: 0		
Each Reportir Person W	ng	7.	Sole Dispositive Power: 795,030		
		8.	Shared Dispositive Power: 0		
9.	 Aggregate Amount Beneficially Owned by Each Reporting Person: 795,030 				
10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares:o					
11.	11. Percent of Class Represented by Amount in Row (9):4.8%				
12.	Typ PN	e of I	Reporting Person:		

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	MPI	M Bio	Reporting Person: I.R.S. Identification Nos. of above persons (entities only): Ventures GmbH & Co. Parallel- ngs KG	
	Che (a) (b)	0	e Appropriate Box if a Member of a Group:	
3.	SEC	Use	Only:	
		zensh nany	ip or Place of Organization:	
			Sole Voting Power: 279,889	
Number Shares Beneficia Owned b	lly		Shared Voting Power: 0	
Each Reportin Person W	g		Sole Dispositive Power: 279,889	
			Shared Dispositive Power: 0	
	Agg 279,		e Amount Beneficially Owned by Each Reporting Person:	
10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares:o				
	 Percent of Class Represented by Amount in Row (9): 1.7% 			
	12. Type of Reporting Person: PN			

1.			Reporting Person: I.R.S. Identification Nos. of above persons (entities only): set Management Investors 2000B, LLC	
2.	Che (a) (b)	0	e Appropriate Box if a Member of a Group:	
3.	SEC	C Use	Only:	
4.		zensł aware	ip or Place of Organization:	
		5.	Sole Voting Power: 18,302	
Number Shares Beneficia	lly	6.	Shared Voting Power: 0	
Owned t Each Reportin Person W	ıg	7.	Sole Dispositive Power: 18,302	
		8.	Shared Dispositive Power: 0	
9.	Agg 18,3		e Amount Beneficially Owned by Each Reporting Person:	
10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares:o				
11.	11. Percent of Class Represented by Amount in Row (9):0.1%			
12.	Тур ОО		Reporting Person:	

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13G

CUSIP No. 98389F 10 1

			Reporting Person: I.R.S. Identification Nos. of above persons (entities only): Gadicke	
(8	Check a) o b) ⊑)	e Appropriate Box if a Member of a Group:	
3. S	EC U	Jse	Only:	
4. C	Citize Jniteo	nsh 1 Si	aip or Place of Organization: tates	
	5		Sole Voting Power: 0	
Number of Shares Beneficially Owned by	y o	.	Shared Voting Power: 1,180,965*	
Each Reporting Person Witl	7		Sole Dispositive Power: 0	
	8	3.	Shared Dispositive Power: 1,180,965*	
	 Aggregate Amount Beneficially Owned by Each Reporting Person: 1,180,965* 			
10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares:o				
	 Percent of Class Represented by Amount in Row (9): 7.1% 			
	12. Type of Reporting Person: IN			

* The shares are held as follows: 87,744 shares by MPM BioVentures II, L.P. ("BV II"), 795,030 shares by MPM BioVentures II-QP, L.P. ("BV QP"), 279,889 shares by MPM BioVentures GmbH & Co. Parallel Beteiligungs KG ("BV KG") and 18,302 shares MPM Asset Management Investors 2000B LLC ("AM LLC"). MPM Asset Management II LP ("AM II LP") and MPM Asset Management II LLC ("AM II LLC") are the direct and indirect general partners of BV II, BV QP and BV KG. The Reporting Person is a member of AM II LLC and AM LLC.

CUSIP No. 98389F 10 1

		ne of e Ev		.S. Identification Nos. of above persons (entities only):	
(Che (a) (b)	0	he Appropriate Box if a Member of a Group:		
3.	SEC	C Use	e Only:		
4.	Citiz Unit	zensł ted S	hip or Place of Organization: States		
		5.	Sole Voting Power: 0		
Number o Shares Beneficial Owned by	ly	6.	Shared Voting Power: 1,180,965*		
Each Reporting Person Wi	g	7.	Sole Dispositive Power: 0		
		8.	Shared Dispositive Power: 1,180,965*		
	 Aggregate Amount Beneficially Owned by Each Reporting Person: 1,180,965* 				
10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares:0					
	 Percent of Class Represented by Amount in Row (9): 7.1% 				
	12. Type of Reporting Person: IN				

* The shares are held as follows: 87,744 shares by MPM BioVentures II, L.P. ("BV II"), 795,030 shares by MPM BioVentures II-QP, L.P. ("BV QP"), 279,889 shares by MPM BioVentures GmbH & Co. Parallel Beteiligungs KG ("BV KG") and 18,302 shares MPM Asset Management Investors 2000B LLC ("AM LLC"). MPM Asset Management II LP ("AM II LP") and MPM Asset Management II LLC ("AM II LLC") are the direct and indirect general partners of BV II, BV QP and BV KG. The Reporting Person is a member of AM II LLC and AM LLC.

Item 1

- (a) Name of Issuer Xcyte Therapies, Inc.
- (b) Address of Issuer's Principal Executive Offices 1124 Columbia Street, Suite 130 Seattle, WA 98104

Item 2.

- (a) Name of Person Filing MPM BioVentures II, LP MPM BioVentures II-QP, L.P. MPM BioVentures GmbH & Co Parallel-Beteiligungs KG MPM Asset Management Investors 2000B, LLC Ansbert Gadicke Luke Evnin
- (b) Address of Principal Business Office or, if none, Residence c/o MPM Capital L.P. 111 Huntington Avenue, 31st floor Boston, MA 02199

(c) Citizenship

- All entities were organized in Delaware, except MPM BioVentures GmbH & Co Parallel-Beteiligungs KG which was organized in Germany. All individuals are United States citizens.
- (d) Title of Class of Securities Common Stock
- (e) CUSIP Number 98389F 10 1

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

Item 4. Ownership

(a) Amount Beneficially Owned:

MPM BioVentures II, LP	87,744
MPM BioVentures II-QP, L.P.	795,030
MPM BioVentures GmbH & Co Parallel-Beteiligungs KG	279,889
MPM Asset Management Investors 2000B, LLC	18,302
Ansbert Gadicke	1,180,965*
Luke Evnin	1,180,965*

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MPM BioVentures II, LP	0.5%
MPM BioVentures II-QP, L.P.	4.8%
MPM BioVentures GmbH & Co Parallel-Beteiligungs KG	1.7%
MPM Asset Management Investors 2000B, LLC	0.1%
Ansbert Gadicke	7.1%
Luke Evnin	7.1%

(b) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote

MPM BioVentures II, LP	87,744
MPM BioVentures II-QP, L.P.	795,030
MPM BioVentures GmbH & Co Parallel-Beteiligungs KG	279,889
MPM Asset Management Investors 2000B, LLC	18,302
Ansbert Gadicke	0
Luke Evnin	0

(ii) Shared power to vote or to direct the vote

MPM BioVentures II, LP	0
MPM BioVentures II-QP, L.P.	0
MPM BioVentures GmbH & Co Parallel-Beteiligungs KG	0
MPM Asset Management Investors 2000B, LLC	0
Ansbert Gadicke	1,180,965*
Luke Evnin	1,180,965*

(iii) Sole power to dispose or to direct the disposition of

MPM BioVentures II, LP	87,744
MPM BioVentures II-QP, L.P.	795,030
MPM BioVentures GmbH & Co Parallel-Beteiligungs KG	279,889
MPM Asset Management Investors 2000B, LLC	18,302
Ansbert Gadicke	0
Luke Evnin	0

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

	0
MPM BioVentures II, LP	0
MPM BioVentures II-QP, L.P.	0
MPM BioVentures GmbH & Co Parallel-Beteiligungs KG	0
MPM Asset Management Investors 2000B, LLC	0
Ansbert Gadicke	1,180,965*
Luke Evnin	1,180,965*

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* The shares are held as follows: 87,744 shares by MPM BioVentures II, L.P. ("BV II"), 795,030 shares by MPM BioVentures II-QP, L.P. ("BV QP"), 279,889 shares by MPM BioVentures GmbH & Co. Parallel Beteiligungs KG ("BV KG") and 18,302 shares MPM Asset Management Investors 2000B LLC ("AM LLC"). MPM Asset Management II LP ("AM II LP") and MPM Asset Management II LLC ("AM II LLC") are the direct and indirect general partners of BV II, BV QP and BV KG. The Reporting Person is a member of AM II LLC and AM LLC.

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 9, 2005

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

MPM CAPITAL GMBH. & CO. PARALLEL-BETEILIGUNGS KG

- By: MPM Asset Management II LP, in its capacity as the Special Limited Partner
- By: MPM Asset Management II LLC, its General Partner
- By: <u>Luke B. Evnin</u> Name: Luke B. Evnin Title: Manager
- By: /s/ Ansbert Gadicke Name: Ansbert Gadicke

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

MPM ASSET MANAGEMENT INVESTORS 2000B LLC

By: Luke B. Evnin Name: Luke B. Evnin

Title: Manager

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

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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 Xcyte Therapies, 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 9th day of February, 2005.

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

MPM CAPITAL GMBH. & CO. PARALLEL-BETEILIGUNGS KG

- By: MPM Asset Management II LP, in its capacity as the Special Limited Partner
- By: MPM Asset Management II LLC, its General Partner
- By: Luke B. Evnin Name: Luke B. Evnin Title: Manager
- By: /s/ Ansbert Gadicke Name: Ansbert Gadicke

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

MPM ASSET MANAGEMENT INVESTORS 2000B LLC

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

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

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