SECTORAL ASSET MANAGEMENT INC Form SC 13G February 13, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Original filing)*

ACHILLION PHARMACEUTICALS

(Name of Issuer)

COMMON STOCK

(Title of Class of Securities)

00448Q201

(CUSIP Number)

DECEMBER 31, 2006

(Date of Event Which Requires Filing of this Statement)

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

x Rule 13d-1(b)

- o Rule 13d-1(c)
- o 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. 00448Q201

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only) Sectoral Asset Management Inc.			
2.	Check the Appropriate Box if a Member of a Group (See Instructions)			
	(a)	0		
	(b)	0		
3.	SEC Use Only			
4.	Citizenship or Place of Organization Canada			
	5.		Sole Voting Power 213,783	
Number of Shares	6.		Shared Voting Power	
Beneficially	6.		643,720	
Owned by				
Each	7.		Sole Dispositive Power	
Reporting			1,062,228	
Person With	8.		Shared Dispositive Power	
	0.		-0-	
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,062,228			
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o			
11.	Percent of Class Represented by Amount in Row (9) 6.8%			
12.	Type of Reporting Person (See Instructions) IA			

CUSIP No. 00448Q201

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only) Jérôme G. Pfund		
2.	Check the Appropriate (a) (b)	e Box if a Member of a Gro o o	oup (See Instructions)
3.	SEC Use Only		
4.	Citizenship or Place of Organization Swiss		
	5.		Sole Voting Power 213,783
Number of Shares Beneficially Owned by	6.		Shared Voting Power 643,720
Each Reporting Person With	7.		Sole Dispositive Power 1,062,228
	8.		Shared Dispositive Power -0-
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,062,228		
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) O		
11.	Percent of Class Represented by Amount in Row (9) 6.8%		
12.	Type of Reporting Person (See Instructions) IN		
2			

CUSIP No. 00448Q201

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only) Michael L. Sjöström				
2.	Check the Appropria	Check the Appropriate Box if a Member of a Group (See Instructions)			
	(a)	0			
	(b)	0			
3.	SEC Use Only				
4.	Citizenship or Place of Organization Swiss				
	5.		Sole Voting Power		
			213,783		
Number of			,		
Shares	6.		Shared Voting Power		
Beneficially			643,720		
Owned by					
Each	7.		Sole Dispositive Power		
Reporting Person With			1,062,228		
Person with	8.		Shared Dispositive Power		
	0.		-0-		
			-		
9.	Aggregate Amount Beneficially Owned by Each Reporting Person				
	1,062,228				
10.					
10.	Check II the Aggrega	ate Amount in Row (9) Ex	cludes Certain Shares (See Instructions) O		
11.	Percent of Class Represented by Amount in Row (9)				
	6.8%				
12.	Type of Reporting Po	erson (See Instructions)			
	IN				

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Item 1.			
	(a)	Name of Issuer	
	(b)	Achillion Pharmaceuticals Address of Issuer s Principal Executive Offices	
	(0)	300 George Street, New Have	
Item 2.			
	(a)	Name of Person Filing Sectoral Asset Management Ir	
		Sectoral Asset Management II	
		Jérôme G. Pfund	
		Michael L. Sjöström	
	(b)	Address of Principal Business	
		The principal business address	s of each person filing is:
		2120-1000 Sherbrooke St. We	st Montreal PQ H3A 3G4 Canada
	(c)	Citizenship	
		Sectoral Asset Management Ir	c. is a Canadian corporation
		Jérôme G. Pfund is a Swiss cit	izen
		Michael L. Sjöström is a Swis	s citizen
	(d)	Title of Class of Securities	
		Common Stock	
	(e)	CUSIP Number	
		00448Q201	
Item 3.	If this statement is file	ed pursuant to §§240.13d-1(b) o	r 240.13d-2(b) or (c), check whether the person filing is a:
	(a)	0	Broker or dealer registered under section 15 of the Act (15 U.S.C.
			780).
	(b)	0	Bank as defined in section $3(a)(6)$ of the Act (15 U.S.C. 78c).
	(c)	0	Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
	(d)	0	Investment company registered under section 8 of the Investment
			Company Act of 1940 (15 U.S.C 80a-8).
	(e)	х	An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
	(f)	0	An employee benefit plan or endowment fund in accordance with 8240 12d 1(b)(1)(ii)(E):
	(g)	X	<pre>\$240.13d-1(b)(1)(ii)(F); A parent holding company or control person in accordance with \$</pre>
	(8)	A	240.13d-1(b)(1)(ii)(G);
	(h)	0	A savings associations as defined in Section 3(b) of the Federal
			Deposit Insurance Act (12 U.S.C. 1813);
	(i)	0	A church plan that is excluded from the definition of an investment
			company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
	(j)	0	Group, in accordance with §240.13d-1(b)(1)(ii)(J).
	U/		

Item 4.	Ownership			
Provide the follow	Sectoral Asset Mana of shares of common	gement Inc, in its capacity as an stock of the Issuer set forth in th	rcentage of the class of securities of the issuer identified in Item 1. investment adviser, has the sole right to dispose of or vote the number his filing. Jérôme G. Pfund and Michael L. Sjöström are the sole toral Asset Management, Inc. and Messrs. Pfund and Sjöström	
	disclaim beneficial ownership of the Issuer s common stock held by Sectoral Asset Management Inc.			
	(a)	(a) Amount beneficially owned:		
		Sectoral Asset Management Inc.: 1,062,228 shares Jérôme G. Pfund: 1,062,228 shares Michael L. Sjöström: 1,062,228 shares		
	(b)	Percent of class:		
		Sectoral Asset Management I Jérôme G. Pfund: 6.8% Michael L. Sigetröm: 6.8%	nc.: 6.8%	
	(c)	Michael L. Sjöström: 6.8% Number of shares as to which	the person has:	
		runder of shares as to which		
		(i)	Sole power to vote or to direct the vote	
			Sectoral Asset Management Inc.: 213,783 shares	
			Jérôme G. Pfund: 213,783 shares	
			Michael L. Sjöström: 213,783 shares	
		(ii)	Shared power to vote or to direct the vote	
			Sectoral Asset Management Inc.: 643,720 shares Jérôme G. Pfund: 643,720 shares	
			Michael L. Sjöström: 643,720 shares	
		(iii)	Sole power to dispose or to direct the disposition of	
			Sectoral Asset Management Inc.: 1,062,228 shares Jérôme G. Pfund: 1,062,228 shares	
			Michael L. Sjöström: 1,062,228 shares	
		(iv)	Shared power to dispose or to direct the disposition of	
			Not applicable.	
Item 5.	Ownership of Five D	ercent or Less of a Class		
			ne reporting person has ceased to be the beneficial owner of more than	
	class of securities, chec		the reporting person has ceased to be the bencheral owner of more than	
Item 6.	Ownership of More than Five Percent on Behalf of Another Person Various persons, as investment advisory clients of Sectoral Asset Management, Inc., have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the common stock of the Issuer. To the knowledge of Sectoral Asset Management, Inc., no one such person s interest in the common stock of the Issuer is more than five percent of the total outstanding common stock of the Issuer.			
Item 7.	Identification and Cla Company or Control Not applicable.		nich Acquired the Security Being Reported on By the Parent Holding	
Item 8.	Identification and Cla Not applicable.	assification of Members of the G	roup	

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

By signing below the undersigned each certifies that, to the best knowledge and belief of the undersigned, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

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

Dated: February 2, 2007

SECTORAL ASSET MANAGEMENT INC.

/s/Jérôme G. Pfund By: Jérôme G. Pfund Its: CEO

Dated: February 2, 2007

Dated: February 2, 2007

/s/Jérôme G. Pfund Jérôme G. Pfund

/s/Michael L. Sjöström Michael L. Sjöström

Exhibit A

AGREEMENT

Each of the undersigned, pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, hereby agrees that only one statement containing the information required by Schedule 13G needs be filed with respect to the ownership by each of the undersigned of the shares of common stock of Achillion Pharmaceuticals, and that the Schedule 13G to which this Agreement is appended as <u>Exhibit A</u> is to be filed with the Securities and Exchange Commission on behalf of each of the undersigned on or about the date hereof.

EXECUTED as a sealed instrument this 2nd day of February 2007.

SECTORAL ASSET MANAGEMENT INC.

/s/Jérôme G. Pfund By: Jérôme G. Pfund Its: CEO

/s/Jérôme G. Pfund Jérôme G. Pfund

/s/Michael L. Sjöström Michael L. Sjöström