ARENA PHARMACEUTICALS INC Form SC 13G February 15, 2002

OMB APPROVAL

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Ammendment No. )

Arena Pharmaceuticals (Name of Issuer)

Common Shares (Title of Class of Securities)

040047102 (CUSIP Number)

December 31, 2001 (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-2(b)

\* 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).

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number. SEC 1745 (3-98) Page 1 of 10

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 1
 NAME OF REPORTING PERSONS

 IRS IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

\_\_\_\_\_

RS Investment Management Co. LLC

2	(a)/ / (b)/ /		A MEMBER OF A GROUP (See Instruction	15)				
3	SEC USE ONLY							
4	CITIZENSHIP OR PLACE OF ORGANIZATION							
	Delaware							
	NUMBER OF 5 SHARES BENEFICIALLY	-0-						
	OWNED BY EACH REPORTING	ь 	SHARED VOTING POWER -2,388,400-					
	PERSON WITH	7	SOLE DISPOSITIVE POWER -0-					
		8	SHARED DISPOSITIVE POWER -2,388,400-					
9	AGGREGATE AMOUNT BENEF -2,388,400-	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON -2,388,400-						
			IN ROW (9) EXCLUDES CERTAIN SHARES	(See				
11	PERCENT OF CLASS REPRE 8.8%	SENTED						
12	TYPE OF REPORTING PERS OO, HC	SON (See						
CUSIP	No. 040047102		13G	Р	age 3 of 10			
1	NAME OF REPORTING PERS IRS IDENTIFICATION NOS	SONS	OVE PERSONS (ENTITIES ONLY)					
	RS Investment Management, L.P.							
2	CHECK THE APPROPRIATE (a)/ / (b)/ /	BOX IF	A MEMBER OF A GROUP (See Instruction	F A GROUP (See Instructions)				
3	SEC USE ONLY							
	CITIZENSHIP OR PLACE OF ORGANIZATION							
	California							
	NUMBER OF 5 SHARES	SOLE	-0-					
	BENEFICIALLY OWNED BY		SHARED VOTING POWER					

	EACH REPORTING PERSON WITH		-2,388,400-				
		7	SOLE DISPOSITIVE POWER -0-				
		8					
9	AGGREGATE AMOUNT BE -2,388,400-		OWNED BY EACH REPORTING PERSON				
	CHECK IF THE AGGREC uctions)		IN ROW (9) EXCLUDES CERTAIN SHARES (Se	e			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 8.8%						
	TYPE OF REPORTING PERSON (See Instructions) PN, IA						
CUSIP	No. 040047102		13G	Page 4 of 10			
1	NAME OF REPORTING PERSONS IRS IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)						
	RS Diversified Grow	th Fund					
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						
	Massachusetts						
	NUMBER OF 5 SHARES		VOTING POWER -0-				
	BENEFICIALLY OWNED BY EACH	6	SHARED VOTING POWER -1,933,400-				
	REPORTING PERSON WITH	7	SOLE DISPOSITIVE POWER -0-				
		8	SHARED DISPOSITIVE POWER -1,933,400-				
9	-1,933,400-		OWNED BY EACH REPORTING PERSON				
10			IN ROW (9) EXCLUDES CERTAIN SHARES (Se	ee			

7.1% \_\_\_\_\_ \_\_\_\_\_ 12 TYPE OF REPORTING PERSON (See Instructions) ΤV \_\_\_\_\_ CUSIP No. 040047102 13G Page 5 of 10 ITEM 1. (a) The name of the issuer is Arena Pharmaceuticals (the "Issuer"). (b) The principal executive office of the Issuer is located at: 6166 Nancy Ridge Drive, San Diego, CA 92121. TTEM 2. (a-c) See Annex I for information on the persons filing this statement (collectively, the "Filers") (d) This statement relates to shares of common stock of the Issuer (the "Stock"). (e) The CUSIP number of the Stock is 040047102. CUSIP No. 040047102 13G Page 6 of 10 ITEM 3. If this statement is filed pursuant to rule 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a: Broker or dealer registered under section 15 of the Act (15 (a) \_\_\_\_ U.S.C. 780). Bank as defined in section 3(a)(6) of the Act (15 U.S.C. (b) \_\_\_\_\_ 78c). Insurance company as defined in section 3(a)(19) of the Act (C) \_\_\_\_\_ (15 U.S.C. 78c). Investment company registered under section 8 of the (d) Investment Company Act of 1940 (15 U.S.C. 80a-8). An investment adviser in accordance with 240.13d-(e) \_\_\_\_ 1(b)(1)(ii)(E). An employee benefit plan or endowment fund in accordance (f) with 240.13d-1(b)(1)(ii)(F). A parent holding company or control person in accordance (a) with 240.13d-1(b)(1)(ii)(G) A savings association as defined in section 3(b) of the (h) Federal Deposit Insurance Act (12 U.S.C. 1813). (i) 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) \_X\_ Group, in accordance with section 240.13d-1(b)(1)(ii)(J)

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ITEM 4. OWNERSHIP

See Items 5-9 and 11 on the cover page for each Filer.

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 /\_\_\_/.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON

The Filer is a registered investment adviser whose clients have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Stock. No individual client's holdings of the Stock, except for the RS Diversified Growth Fund, are more than five percent of the outstanding Stock.

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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

See Annex I

ITEM 9. NOTICE OF DISSOLUTION OF GROUP

Not applicable.

ITEM 10. CERTIFICATION

By signing below I certify that, to the best of my knowledge and belief, 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 of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 8, 2002

RS INVESTMENT MANAGEMENT CO. LLC

By: /s/ G. Randall Hecht G. Randall Hecht Chief Executive Officer

RS INVESTMENT MANAGEMENT, LP. By: /s/ G. Randall Hecht G. Randall Hecht Chief Executive Officer

RS DIVERSIFIED GROWTH FUND By: RS Investment Management, L.P. Investment Adviser By: /s/ G. Randall Hecht G. Randall Hecht Chief Executive Officer

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JOINT FILING AGREEMENT

The undersigned hereby agree that they are filing this statement jointly pursuant to Rule 13d-1(f)(1). Each of them is responsible for the timely filing of the Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is accurate.

Dated: February 8, 2002

RS INVESTMENT MANAGEMENT CO. LLC By: /s/ G. Randall Hecht G. Randall Hecht Chief Executive Officer

RS INVESTMENT MANAGEMENT, LP. By: /s/ G. Randall Hecht G. Randall Hecht Chief Executive Officer

RS DIVERSIFIED GROWTH FUND By: RS Investment Management, L.P. Investment Adviser By: /s/ G. Randall Hecht G. Randall Hecht Chief Executive Officer

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Annex I

The filers are:

 I. (a) RS Investment Management Co. LLC, is a Delaware Limited Liability Company.
 (b) holding company

II. (a) RS Investment Management, L.P. is a California Limited

Partnership (b) registered investment adviser

III. (a) RS Diversified Growth Fund is a series of a Mass. Business Trust.
 (b) investment company