MOMENTA PHARMACEUTICALS INC Form SC 13G/A February 13, 2012

CUSIP No. 60877T100

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

OMB APPROVAL OMB Number: 3235-0145 Expires: December 31, 2009 Estimated average burden hours per response 10.4

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 1)

Momenta Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

60877T100

(CUSIP Number)

December 31, 2011

(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)

[] 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 ("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.

	1.	Names of Reporting Persons.			
	William Leland Edwards				
2.	Check the Appro-	opriate Box if a Member of a Group (See Instructions)			
(a)					
(b) X					
3.	SEC Use Only				
4. Citize	enship or Place of Organization	on U.S.A.			
Number of Shares	5. Sole Voting Power	20,050			
Beneficially Owned by	6. Shared Voting Power	2,401,388			
Each Reporting Person With:	7. Sole Dispositive Power	20,050			
	8. Shared Dispositive Power	2,401,388			
9. Aggregate Amount Beneficially Owned by Each 2,421,438 Reporting Person					
10. Check if the A (See Instruction) Excludes Certain Shares			
11. Percent of Class Represented by Amount in Row (9) 4.7%					
12. Type of I	Reporting Person (See Instruc	ctions) IN, HC			

		1.		Names of Reporting Persons.	
	Anthony Joonkyoo Yun, MD				
2.		Check the Ap	opropriate Bo	Box if a Member of a Group (See Instructions)	
(a)					
(b) X					
3.		SEC Use Only _			
4. Citize	enship or l	Place of Organiza	ation U	J.S.A.	
Number of Shares	5. Power	Sole Voting		0	
Beneficially Owned by	6. Power	Shared Voting	2,401	1,388	
Each Reporting Person With:	7.	Sole		0	
Person with:	8.	tive Power Shared tive Power	2,401	1,388	
9. Aggregate Amount Beneficially Owned by Each 2,401,388 Reporting Person					
10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)					
11. Percent of Class Represented by Amount in Row (9) 4.7%					
12. Type of Reporting Person (See Instructions) IN, HC					

	1.	Names of Reporting Persons.			
		Palo Alto Investors			
2.	Check the Appr	ropriate Box if a Member of a Group (See Instructions)			
(a)					
(b) X					
3.	SEC Use Only				
4. Citizen	ship or Place of Organization	on California			
Number of Shares	5. Sole Voting Power	0			
Beneficially Owned by	6. Shared Voting Power	2,401,388			
Each Reporting Person With:	7. Sole Dispositive Power	0			
	8. Shared Dispositive Power	2,401,388			
9. Aggregate Amount Beneficially Owned by Each 2,401,388 Reporting Person					
10. Check if the Ag (See Instruction) Excludes Certain Shares			
11. Percent of Clas	s Represented by Amount i	in Row (9) 4.7%			
12. Type of Re	porting Person (See Instruc	ctions) CO, HC			

			1.	1	Names of Reporting Persons.	
		Palo Alto Investors, LLC				
(a)	2.		Check the Appro	opriate Box i	f a Member of a Group (See Instructions)	
(b) X						
	3.	S	EC Use Only			
4.	Citizen	ship or P	lace of Organizatio	on Calif	ornia	
Number of Shares		5. Power	Sole Voting	0		
Beneficially Owned by		6. Power	Shared Voting	2,401,388		
Each Report		7. Disposi	Sole tive Power	0		
		8.	Shared tive Power	2,401,388		
9. Aggregate Reporting			icially Owned by E	ach	2,401,388	
10. Check if (See Inst			Amount in Row (9)	Excludes Ce	ertain Shares	
11. Percent	of Clas	s Repres	ented by Amount i	n Row (9)	4.7%	
12. Tyj	pe of Re	porting 1	Person (See Instruc	tions) OC), IA	

Item 1.			
		(a)	Name of Issuer
		Momen	ta Pharmaceuticals, Inc.
	(b		dress of Issuer's Principal Executive Offices
	(0		ll Street, Cambridge MA 02142
L 0		075 West Kenda	n Sueet, Cambridge MA 02142
Item 2.			
	(a)	The n	ames of the persons filing this statement are:
		Palo Alto	D Investors, LLC ("PAI")
		P	alo Alto Investors
		Will	iam Leland Edwards
		Anthor	ny Joonkyoo Yun, MD
		(colle	ectively, the "Filers").
	(b)	The princ	cipal business office of the Filers is located at:
		470 University	Avenue, Palo Alto, CA 94301
	(c)	For citizenship of I	Filers, see Item 4 of the cover sheet for each Filer.
	(d)	This statement relates to	shares of Common Stock of the Issuer (the "Stock").
(e)	The CUSIP nu	mber of the Issuer is: 6087	7T100

CUSIP No. 60877T100

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:

	(a)	[]		Brok	er or dealer registered under section 15 of the Act (15 U.S.C. 780).
	(b)		[]		Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
	(c)	[]		Insu	irance	e company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
(d)[]Investme	ent cor	npany	regis	tered	under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8)
	(e) []	x]	An	inves	tment	t adviser in accordance with section 240.13d-1(b)(1)(ii)(E) (as to PAI).
(f)) [] .	An em	ploye	e bene	efit pl	an or endowment fund in accordance with section 240.13d-1(b)(1)(ii)(F).
 (g)[x A parent holding company or control person in accordance with 240.13d-1(b)(1)(ii)(G) (as to Palo Alto] Investors, Mr. Edwards and Dr. Yun). 						
(h)	[] A savi	ings as	socia	tion as	defir	ned in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
(i)[-				rom the definition of an investment company under section $3(c)(14)$ of the 40 (15 U.S.C. 80a-3).
	(j)		[]		A non-U.S. institution in accordance with §240.13d-1(b)(ii)(J).
	()	c)		[]	Group, in accordance with Rule 13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution

Item 4.

Ownership.

See Items 5-9 and 11 of 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 [x].

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

PAI is a registered investment adviser and is the general partner and investment adviser of investment limited partnerships and is the investment adviser to other investment funds. PAI's 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 separately holds more than five percent of the outstanding Stock.

Item Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By theParent Holding Company.

Not applicable.

Item 8.

Identification and Classification of Members of the Group.

Palo Alto Investors is the manager of PAI. Mr. Edwards is the controlling shareholder of Palo Alto Investors. Dr. Yun is the President of PAI and Palo Alto Investors. The Filers are filing this Schedule 13G jointly, but not as members of a group, and each of them expressly disclaims membership in a group. Each Filer disclaims beneficial ownership of the Stock except to the extent of that Filer's pecuniary interest therein.

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.

Exhibits.

Exhibit A Joint Filing Agreement. 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 13, 2012

PALO ALTO INVESTORS
PALO ALTO INVESTORS, LLC
By: /s/ Mark Shamia
Mark Shamia, Chief Operating Officer
/s/ William L. Edwards
PALO ALTO INVESTORS, LLC
By: Palo Alto Investors, Manager
By: /s/ Mark Shamia
Mark Shamia, Chief Operating Officer

/s/ William L. Edwards William L. Edwards /s/ Anthony Joonkyoo Yun Anthony Joonkyoo Yun, MD

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EXHIBIT A AGREEMENT REGARDING JOINT FILING OF STATEMENT ON SCHEDULE 13D OR 13G

The undersigned agree to file jointly with the Securities and Exchange Commission (the "SEC") any and all statements on Schedule 13D or Schedule 13G (and any amendments or supplements thereto) required under section 13(d) of the Securities Exchange Act of 1934, as amended, in connection with purchases and sales by the undersigned of the securities of any issuer until such time as the undersigned file with the SEC a statement terminating this Agreement Regarding Joint Filing of Statement on Schedule 13D or 13G. For that purpose, the undersigned hereby constitute and appoint Palo Alto Investors, LLC, a California limited liability company, as their true and lawful agent and attorney-in-fact, with full power and authority for and on behalf of the undersigned to prepare or cause to be prepared, sign, file with the SEC and furnish to any other person all certificates, instruments, agreements and documents necessary to comply with section 13(d) and section 16(a) of the Securities Exchange Act of 1934, as amended, in connection with said purchases and sales, and to do and perform every act necessary and proper to be done incident to the exercise of the foregoing power, as fully as the undersigned might or could do if personally present, until such time as the undersigned file with the SEC a statement Regarding Joint Filing of Statement Regarding Joint Filing of Statement Regarding Joint Filing of Statement and section 13(d) and section 16(a) of the Securities Exchange Act of 1934, as amended, in connection with said purchases and sales, and to do and perform every act necessary and proper to be done incident to the exercise of the foregoing power, as fully as the undersigned might or could do if personally present, until such time as the undersigned file with the SEC a statement terminating this Agreement Regarding Joint Filing of Statement on Schedule 13D or 13G.

Dated: February 11, 2011

PALO ALTO INVESTORS

PALO ALTO INVESTORS, LLC

By: /s/ Mark Shamia Mark Shamia, Chief Operating Officer By: /s/ Mark Shamia Mark Shamia, Chief Operating Officer

/s/ William Leland Edwards William Leland Edwards /s/ Anthony Joonkyoo Yun Anthony Joonkyoo Yun, MD