INTERMOLECULAR INC

disclosures provided in a prior cover page.

Form SC 13G February 08, 2012
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Schedule 13G
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)
(Amendment No)*
Intermolecular, Inc.
(Name of Issuer)
Common Stock
(Title of Class of Securities)
45882D 109
(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:
£ Rule 13d-1(b) £ Rule 13d-1(c) S 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 t the subject class of securities, and for any subsequent amendment containing information which would alter

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).

(Continued on following pages)

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Exhibit Index Contained on Page 16

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	NAME OF REPORTING	
1	SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON	
1	U.S. Venture Partners IX, L.P. ("USVP IX")	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	
	(a) £ (b) S	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
•	Delaware	
	SOLE VOTING POWER	
	5,376,719 shares; except that Presidio Management Group IX, L.L.C. ("PMG IX"), the g	
	partner of USVP IX, may be deemed to have sole power to vote such shares, and Irwin F	
	5("Federman"), Winston Fu ("Fu"), Steven M. Krausz ("Krausz"), David Liddle ("Liddle"	* *
NUMBER (• /
SHARES	Philip M. Young ("Young"), the managing members of PMG IX, may be deemed to have	e shared
	ALLY power to vote such shares.	
OWNED BY		
EACH	See response to row 5.	
REPORTIN		
PERSON	5,376,719 shares; except that PMG IX, the general partner of USVP IX, may be deemed	
WITH	7 sole power to dispose of such shares, and Federman, Fu, Krausz, Liddle, Matteucci, Roo	
	Tansey and Young, the managing members of PMG IX, may be deemed to have shared p	ower to
	dispose of such shares.	
	8 SHARED DISPOSITIVE POWER	
	See response to row 7.	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH	5 276 710
	REPORTING PERSON	5,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* £	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	1 / 007
	TYPE OF DEDORTING DEDCOM*	14.8%
12	TYPE OF REPORTING PERSON*	PN
		MN

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	NAME OF REPORTING	
1		
	Presidio Management Group IX, L.L.C. ("PMG IX")	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	
2	(a) £ (b) S	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
4	Delaware	
	SOLE VOTING POWER	
	5,376,719 shares, all of which are directly owned by USVP IX. PMG IX.	, the general partner of
	5USVP IX, may be deemed to have sole power to vote such shares, and Fe	derman, Fu, Krausz,
NUMBER (DF Liddle, Root, Rust, Tansey, Matteucci and Young, the managing member	s of PMG IX, may be
SHARES	deemed to have shared power to vote such shares.	
BENEFICIA	ALLY SHARED VOTING POWER	
OWNED B	Y See response to row 5.	
EACH	SOLE DISPOSITIVE POWER	
REPORTIN	G 5,376,719 shares, all of which are directly owned by USVP IX. PMG IX.	, the general partner of
PERSON	7USVP IX, may be deemed to have sole power to dispose of such shares, a	
WITH	Liddle, Root, Rust, Tansey, Matteucci and Young, the managing member	s of PMG IX, may be
	deemed to have shared power to dispose of such shares.	
	₈ SHARED DISPOSITIVE POWER	
	See response to row 7.	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH	
	REPORTING PERSON	5,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9)	
	EXCLUDES CERTAIN SHARES* £	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	14.8%
12	TYPE OF REPORTING PERSON*	OO

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	NAME OF REPORTING PERSON	
1		
	Irwin Federman	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	
2	(a) £ (b) S	
3	SEC USE ONLY	
1	CITIZENSHIP OR PLACE OF ORGANIZATION	
4	U.S. Citizen	
NUMBER	OF ₅ SOLE VOTING POWER	
	0 shares	
SHARES	SHARED VOTING POWER	
	5,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the gen	eral partner of
BENEFIC	IALLYUSVP IX. Federman, a managing member of PMG IX, may be deemed to have sha	red power to vote
	such shares.	
OWNED	BY ₇ SOLE DISPOSITIVE POWER	
EACH	0 shares	
REPORTI	NG SHARED DISPOSITIVE POWER	
	85,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the gen	eral partner of
PERSON	USVP IX. Federman, a managing member of PMG IX, may be deemed to have sha	red power to
	dispose of such shares.	
WITH		
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH	
	REPORTING PERSON	5,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9)	
10	EXCLUDES CERTAIN SHARES* £	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	
		14.8%
12	TYPE OF REPORTING PERSON*	IN

CUSIP NO. 45882D 109 13 G Page 5 of 18

1	Winston Fu	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) £ (b) S	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen	
NUMBER (SHARED VOTING POWER	
SHARES BENEFICIA OWNED BY EACH REPORTIN PERSON WITH	Y shares. 7 SOLE DISPOSITIVE POWER 7 O shares	te such
	USVP IX. Fu, a managing member of PMG IX, may be deemed to have shared power to dissuch shares. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH	spose of
9	REPORTING PERSON 5	,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* £	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	14.8%
12	TYPE OF REPORTING PERSON*	IN

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1	Steven M. Krausz	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	
3	(a) £ (b) S SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	U.S. Citizen SOLE VOTING POWER 5 o	
NUMBER (() charec	
SHARES BENEFICIA	65,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general pa	
OWNED BY	cuch charac	
EACH REPORTIN	0 shares	
PERSON	SHARED DISPOSITIVE POWER	
WITH	85,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general pa USVP IX. Krausz, a managing member of PMG IX, may be deemed to have shared power	tner of
	dispose of such shares. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH	
9	REPORTING PERSON	5,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9)	
10	EXCLUDES CERTAIN SHARES* £	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	14.8%
10	TYPE OF REPORTING PERSON*	17.070
12		IN

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NAME OF REPORTING PERSON

TYPE OF REPORTING PERSON*

12

David Liddle 1 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* 2 (a) £ (b) S 3 SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION 4 U.S. Citizen SOLE VOTING POWER 0 shares NUMBER OF SHARED VOTING POWER 65,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general partner of BENEFICIALLY USVP IX. Liddle, a managing member of PMG IX, may be deemed to have shared power to vote such shares. OWNED BY SOLE DISPOSITIVE POWER **EACH** 0 shares REPORTING SHARED DISPOSITIVE POWER **PERSON** 85,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general partner of WITH USVP IX. Liddle, a managing member of PMG IX, may be deemed to have shared power to dispose of such shares. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH 9 REPORTING PERSON 5,376,719 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) 10 EXCLUDES CERTAIN SHARES* £ PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 11 14.8%

IN

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1	Paul Matteucci	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	
3	(a) £ (b) S SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	U.S. Citizen ₅ SOLE VOTING POWER	
NUMBER (O shares	
SHARES BENEFICIA	65,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general pa USVP IX. Matteucci, a managing member of PMG IX, may be deemed to have shared powers.	
OWNED B' EACH REPORTIN	Y 7 SOLE DISPOSITIVE POWER 0 shares	
PERSON WITH	SHARED DISPOSITIVE POWER 85,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general pa 8 USVP IX. Matteucci, a managing member of PMG IX, may be deemed to have shared po	rtner of wer to
9	dispose of such shares. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	5,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* £	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	14001
12	TYPE OF REPORTING PERSON*	14.8%
12		IN

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1	Jonathan D. Root	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) £ (b) S	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen	
	SOLE VOTING POWER	
NUMBER (() charec	
SHARES BENEFICIA	such shares.	
OWNED B	Y 7SOLE DISPOSITIVE POWER	
EACH REPORTIN	΄ Ω shares	
PERSON	SHARED DISPOSITIVE POWER	
WITH	85,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general pa USVP IX. Root, a managing member of PMG IX, may be deemed to have shared power to	rtner of dispose
	of such shares.	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	5,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9)	
	EXCLUDES CERTAIN SHARES* £	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	
11		14.8%
12	TYPE OF REPORTING PERSON*	
		IN

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1	Christopher Rust	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) £ (b) S	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen	
	SOLE VOTING POWER 5 0 shares	
NUMBER (OF SHARED VOTING POWER	
SHARES BENEFICIA OWNED B	such shares.	
EACH	7 SOLE DISPOSITIVE POWER	
REPORTIN PERSON	SHARED DISPOSITIVE POWER	
WITH	85,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general pa USVP IX. Rust, a managing member of PMG IX, may be deemed to have shared power to	rtner of dispose
	of such shares.	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	5,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* £	
1.1	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	
11		14.8%
12	TYPE OF REPORTING PERSON*	
12		IN

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1	Casey M. Tansey	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) £ (b) S	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen	
NUMBER (SOLE VOTING POWER 5 0 shares SHARED VOTING POWER	
SHARES BENEFICIA OWNED BY EACH	SOLE DISPOSITIVE POWER	
REPORTIN PERSON WITH	G Shares SHARED DISPOSITIVE POWER 8 5,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general part USVP IX. Tansey, a managing member of PMG IX, may be deemed to have shared power dispose of such shares.	ner of
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	5,376,719
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* £	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	14.8%
12	TYPE OF REPORTING PERSON*	IN

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12

NAME OF REPORTING PERSON

Philip M. Young 1 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* 2 (a) £ (b) S 3 SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION 4 U.S. Citizen SOLE VOTING POWER 0 shares NUMBER OF SHARED VOTING POWER 65,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general partner of BENEFICIALLY USVP IX. Young, a managing member of PMG IX, may be deemed to have shared power to vote such shares. OWNED BY SOLE DISPOSITIVE POWER **EACH** 0 shares REPORTING SHARED DISPOSITIVE POWER **PERSON** 85,376,719 shares, all of which are directly owned by USVP IX. PMG IX is the general partner of WITH USVP IX. Young, a managing member of PMG IX, may be deemed to have shared power to dispose of such shares. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH 9 REPORTING PERSON 5,376,719 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) 10 EXCLUDES CERTAIN SHARES* £ PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 11 14.8% TYPE OF REPORTING PERSON*

IN

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ITEM 1(A).

NAME OF ISSUER

Intermolecular, Inc.

ITEM 1(B).

ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

3011 N. First Street San Jose, California 95134

ITEM 2(A).

NAME OF PERSONS FILING

This Schedule 13G is filed by Presidio Management Group IX, L.L.C., a Delaware limited liability company ("PMG IX"), U.S. Venture Partners IX, L.P., a Delaware limited partnership ("USVP IX"), Irwin Federman ("Federman"), Winston Fu ("Fu"), Steven M. Krausz ("Krausz"), David Liddle ("Liddle"), Paul Matteucci ("Matteucci"), Jonathan D. Root ("Root") Christopher Rust ("Rust"), Casey M. Tansey ("Tansey") and Philip M. Young ("Young"). The foregoing entities and individuals are collectively referred to as the "Reporting Persons."

PMG IX, the general partner of USVP IX, may be deemed to have sole power to vote and sole power to dispose of shares of the issuer directly owned by USVP IX. Federman, Fu, Krausz, Liddle, Matteucci, Root, Rust, Tansey and Young are managing members of PMG IX and may be deemed to have shared power to vote and shared power to dispose of shares of the issuer directly owned by USVP IX.

ITEM 2(B).

ADDRESS OF PRINCIPAL OFFICE

The address for each of the Reporting Persons is:

U.S. Venture Partners 2735 Sand Hill Road Menlo Park, California 94025

ITEM 2(C)

CITIZENSHIP

USVP IX is a Delaware limited partnership. PMG IX is a Delaware limited liability company. Federman, Fu, Krausz, Liddle, Matteucci, Root, Rust, Tansey and Young are United States citizens.

ITEM

2(D)

AND TITLE OF CLASS OF SECURITIES AND CUSIP NUMBER

(E).

Common Stock CUSIP # 45882D 109

ITEM 3. Not Applicable.

ITEM 4. OWNERSHIP

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

Amount beneficially owned:

(a)

See Row 9 of cover page for each Reporting Person.

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(b) Percent of Class:

See Row 11 of cover page for each Reporting Person.

- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or to direct the vote:

See Row 5 of cover page for each Reporting Person.

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

See Row 6 of cover page for each Reporting Person.

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

See Row 7 of cover page for each Reporting Person.

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

See Row 8 of cover page for each Reporting Person.

 $\overset{\text{ITEM}}{\sim} \text{ OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS}$

Not applicable.

 $\overset{\text{ITEM}}{\cdot}$ OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

Under certain circumstances set forth in the limited partnership agreement of USVP IX and the limited liability company agreement of PMG IX, the general and limited partners or members, as the case may be, of each of such entities may be deemed to have the right to receive dividends from, or the proceeds from, the sale of shares of the issuer owned by each such entity of which they are a partner or member, as the case may be.

ITEM IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE

7. SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

Not applicable.

IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

Not applicable.

 $\frac{\text{ITEM}}{9}$ NOTICE OF DISSOLUTION OF GROUP.

Not applicable.

 $\frac{\text{ITEM}}{10}$ CERTIFICATION.

Not applicable.

CUSIP NO.	45882D	109	13 G Page	15	of 18	
COSH NO.	TJ002D	107	15 O I ago	1	01 10	,

SIGN.	ATI	IRES
DIOI1		

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, 2012	
	Irwin Federman
	Winston Fu
	Steven M. Krausz
	David Liddle
PRESIDIO MANAGEMENT GROUP IX, L.L.C.	Paul Matteucci
U.S. Venture Partners IX, L.P. By Presidio Management Group IX, L.L.C. Its General Partner	Jonathan D. Root Christopher Rust
	CASEY M. TANSEY
	Philip M. Young
By: /s/ Michael Maher	By: /s/ Michael Maher

Michael Maher, Chief Financial Officer/Attorney-In-Fact for the Michael Maher, Attorney-In-Fact for the above-listed above-listed entities individuals

^{*}Signed pursuant to a Power of Attorney already on file with the appropriate agencies.

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. *See* §240.13d-7 for

other parties for whom copies are to be sent.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)

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EXHIBIT INDEX

Found on Sequentially

Exhibit Numbered Page

Exhibit A: Agreement of Joint Filing 17

Exhibit B: Power of Attorney 18

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exhibit A		
Agreement of Joint Filing		
The undersigned hereby agree that a single Schedule 13G (or any amendment thereto) relating to the Common Stock of Intermolecular, Inc. shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an exhibit to such Schedule 13G.		
Date: February 8, 2012		
	Irwin Federman	
	Winston Fu	
	Steven M. Krausz	
	David Liddle	
PRESIDIO MANAGEMENT GROUP IX, L.L.C.	Paul Matteucci	
U.S. Venture Partners IX, L.P. By Presidio Management Group IX, L.L.C. Its General Partner	Jonathan D. Root	
	Christopher Rust	
	CASEY M. TANSEY	
	Philip M. Young	
By: /s/ Michael Maher	By: <u>/s/ Michael Maher</u>	
Michael Maher, Chief Financial Officer/Attorney-In-Fact for the Michael Maher, Attorney-In-Fact for the above-listed above-listed entities* individuals* *Signed pursuant to a Power of Attorney already on file with the appropriate agencies.		

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exhibit B

Power of Attorney

Michael Maher has signed this Schedule 13G as Attorney-In-Fact. Note that copies of the applicable Power of Attorney are already on file with the appropriate agencies.