INTERMOLECULAR INC Form SC 13G/A May 20, 2014

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

SCHEDULE 13G (Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(b)

(Amendment No. 1)1

Intermolecular, Inc. (Name of Issuer)

Common Stock, par value \$0.001 per share (Title of Class of Securities)

45882D 10 9 (CUSIP Number)

April 30, 2014 (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 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).

¹ 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.

CUSIP NO. 45882D 10 9

1	NAME OF REPORTING PERSON		
2 3	Raging Capital Master Fund, Ltd. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION		
NUMBER OF SHARES BENEFICIALLY OWNED BY	CAYMAN ISLANDS 5	SOLE VOTING POWER - 0 - SHARED VOTING POWER	
EACH REPORTING PERSON WITH		9,141,971 SOLE DISPOSITIVE POWER	
	8	- 0 - SHARED DISPOSITIVE POWE	R
9	AGGREGATE AMOUNT BEN	9,141,971 EFICIALLY OWNED BY EACH	REPORTING PERSON
10	9,141,971 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		
12	19.4% TYPE OF REPORTING PERSON		
	CO		

2

CUSIP NO. 45882D 10 9

1	NAME OF REPORTING PERSON			
2	Raging Capital Management, LLC CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY			
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF SHARES	DELAWARE	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH		6	- 0 - SHARED VOTING POWER	
REPORTING PERSON WITH		7	9,141,971 SOLE DISPOSITIVE POWER	
		8	- 0 - SHARED DISPOSITIVE POWE	R
9	AGGREGATE	AMOUNT BEN	9,141,971 EFICIALLY OWNED BY EACH	REPORTING PERSON
10	9,141,971 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	19.4% TYPE OF REPORTING PERSON			
	IA			
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CUSIP NO. 45882D 10 9

1	NAME OF REPORTING PERSON			
2	William C. Martin CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY			
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF	USA	5	SOLE VOTING POWER	
SHARES BENEFICIALLY OWNED BY EACH		6	- 0 - SHARED VOTING POWER	
REPORTING PERSON WITH		7	9,141,971 SOLE DISPOSITIVE POWER	
		8	- 0 - SHARED DISPOSITIVE POWE	R
9	AGGREGATE	AMOUNT BEN	9,141,971 EFICIALLY OWNED BY EACH	REPORTING PERSON
10	9,141,971 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	19.4% TYPE OF REPORTING PERSON			
	IN			
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CUSIP NO. 45882D	0 10 9
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 Person Filing:
Raging Capital Ma	ed by Raging Capital Master Fund, Ltd., a Cayman Islands exempted company ("Raging Master") anagement, LLC, a Delaware limited liability company ("Raging Capital"), and William C foregoing is referred to as a "Reporting Person" and collectively as the "Reporting Persons."
Officer and Manag	the Investment Manager of Raging Master. William C. Martin is the Chairman, Chief Investment ing Member of Raging Capital. By virtue of these relationships, each of Raging Capital and may be deemed to beneficially own the Issuer's Common Stock, par value \$0.001 per share, aging Master.
Item 2(b).	Address of Principal Business Office or, if none, Residence:
228, Rocky Hill, Ne	ess address of each of Raging Capital and William C. Martin is Ten Princeton Avenue, PO Box w Jersey 08553. The principal business address of Raging Master is c/o Ogier Fiduciary Services 89 Nexus Way, Camana Bay, Grand Cayman KY 1-9007, Cayman Islands.
Item 2(c).	Citizenship:
	ganized under the laws of the Cayman Islands. Raging Capital is organized under the laws of the William C. Martin is a citizen of the United States of America.
Item 2(d).	Title of Class of Securities:
Common Stock, par	value \$0.001 per share (the "Shares").
Item 2(e).	CUSIP Number:
45882D 10 9	
Item 3.If this staten filing is a:	nent is filed pursuant to Section 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person
	/ / Not Applicable
(a)	/ / Broker or dealer registered under Section 15 of the Act (15 U.S.C. 78o).
(b)	/ / Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c).

CUSIP NO. 4:	5882D 10 9		
(c)	//	Insurance con	mpany as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c).
(d)//Investr	ment company	registered under	r Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
(e)	/X/	Investn	ment adviser in accordance with Section 240.13d-1(b)(1)(ii)(E).
(f) / /	' Employee	e benefit plan or	endowment fund in accordance with Section 240.13d-1(b)(1)(ii)(F).
(g) /	/ Parent ho	olding company o	or control person in accordance with Section 240.13d-1(b)(1)(ii)(G).
(h) // Sa	vings associat	tion as defined in	n Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
	•	excluded from t Act (15 U.S.C. 8	the definition of an investment company under Section $3(c)(14)$ of the 80a-3).
(j)	/ /	Non-U.S	S. institution in accordance with Section 240.13d-1(b)(1)(ii)(J).
	(k)	/ /	Group, in accordance with Section 240.13d-1(b)(1)(ii)(J).
Item 4.			Ownership.
All ownership	information r	reported in this It	tem 4 is as of the close of business on May 19, 2014.
Raging Maste	r		
		(a)	Amount beneficially owned:
9,141,971 Sha	ares		
		(b)	Percent of class:
			anding, which is the total number of Shares outstanding as of May 1, 2014 on Form 10-Q filed with the Securities and Exchange Commission on May
	(c)		Number of shares as to which such person has:
	(i)		Sole power to vote or to direct the vote
0 Shares			
	(ii)		Shared power to vote or to direct the vote
9,141,971 Sha	ares		
	(iii)		Sole power to dispose or to direct the disposition of

0 Shares

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(i	iv)	Shared power to dispose or to direct the disposition of
9,141,971 Shares		
Raging Capital		
	(a)	Amount beneficially owned:
9,141,971 Shares*		
	(b)	Percent of class:
_		outstanding, which is the total number of Shares outstanding as of May 1, 2014 out on Form 10-Q filed with the Securities and Exchange Commission on May
	(c)	Number of shares as to which such person has:
	(i)	Sole power to vote or to direct the vote
0 Shares		
	(ii)	Shared power to vote or to direct the vote
9,141,971 Shares*		
	(iii)	Sole power to dispose or to direct the disposition of
0 Shares		
(i	iv)	Shared power to dispose or to direct the disposition of
9,141,971 Shares*		
	*	Shares directly owned by Raging Master.
Mr. Martin		
	(a)	Amount beneficially owned:
9,141,971 Shares*		
	(b)	Percent of class:

19.4% (based upon 47,207,061 Shares outstanding, which is the total number of Shares outstanding as of May 1, 2014 as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May

6, 2014).			
	(c)	Number of shares as to which such person has:	
	(i)	Sole power to vote or to direct the vote	
0 Shares			
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	(ii)	Shared power to vote or to direct the vote
9,141	,971 Shares*	
	(iii)	Sole power to dispose or to direct the disposition of
0 Sha	nres	
	(iv)	Shared power to dispose or to direct the disposition of
9,141	,971 Shares*	
	*	Shares directly owned by Raging Master.
owne	d by Raging Master.	of Raging Master, Raging Capital may be deemed to beneficially own the Shares directly As the Chairman, Chief Investment Officer and Managing Member of Raging Capital, Mr. eneficially own the Shares directly owned by Raging Master.
Section herein	on 13(d) of the Securit	13G shall not be construed as an admission that the Reporting Persons are, for purposes of ies Exchange Act of 1934, as amended, the beneficial owners of any of the Shares reported ing Persons specifically disclaims beneficial ownership of the Shares reported herein that ach Reporting Person.
Item	5.	Ownership of Five Percent or Less of a Class.
	_	iled to report the fact that as of the date hereof the reporting person has ceased to be the an five percent of the class of securities, check the following [].
Item	6.	Ownership of More than Five Percent on Behalf of Another Person.
Not A	Applicable.	
Item 7.		lassification of the Subsidiary Which Acquired the Security Being Reported on by the pany or Control Person.
Not A	Applicable.	
Item	8.	Identification and Classification of Members of the Group.
	Exhibit 99.1 to the Scharch 10, 2014.	edule 13G filed by the Reporting Persons with the Securities and Exchange Commission
Item	9.	Notice of Dissolution of Group.

Not Applicable.

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Item 10. Certifications.

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.

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SIGNATURES

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

Dated: May 19, 2014 Raging Capital Master Fund, Ltd.

By: Raging Capital Management, LLC

Investment Manager

By: /s/ Frederick C. Wasch

Name: Frederick C. Wasch Title: Chief Financial Officer

Raging Capital Management, LLC

By: /s/ Frederick C. Wasch

Name: Frederick C. Wasch Title: Chief Financial Officer

/s/ Frederick C. Wasch

Frederick C. Wasch as attorney-in-fact for

William C. Martin

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