INTERMOLECULAR INC Form SC 13D/A April 11, 2016

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

SCHEDULE 13D (Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO § 240.13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO § 240.13d-2(a)

(Amendment No. 1)1

Intermolecular, Inc.

(Name of Issuer)

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

45882D 10 9 (CUSIP Number)

STEVE WOLOSKY, ESQ.
OLSHAN FROME WOLOSKY LLP
Park Avenue Tower
65 East 55th Street
New York, New York 10022
(212) 451-2300

(Name, Address and Telephone Number of Person

Authorized to Receive Notices and Communications)

April 7, 2016 (Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box x.

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 to whom copies are to be sent.

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 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).

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				
3	SEC USE ONL I				
4	SOURCE OF FUNDS				
5	AF CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS '' IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)				
6	CITIZENSHIP OR PLACE OF ORGANIZATION				
NUMBER OF SHARES	DELAWARE	7	SOLE VOTING POWER		
BENEFICIALLY OWNED BY EACH		8	- 0 - SHARED VOTING POWER		
REPORTING PERSON WITH		9	11,349,627 SOLE DISPOSITIVE POWER		
		10	- 0 - SHARED DISPOSITIVE POWE	R	
11	11,349,627 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
12	11,349,627 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) o EXCLUDES CERTAIN SHARES				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
14	22.9% TYPE OF REPORTING PERSON				
	IA				
2					

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				
3	SEC OSE ONI	21			
4	SOURCE OF FUNDS				
5	AF CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS '' IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)				
6	CITIZENSHIP OR PLACE OF ORGANIZATION				
NUMBER OF SHARES	USA	7	SOLE VOTING POWER		
BENEFICIALLY OWNED BY EACH		8	- 0 - SHARED VOTING POWER		
REPORTING PERSON WITH		9	11,349,627 SOLE DISPOSITIVE POWER		
		10	- 0 - SHARED DISPOSITIVE POWE	R	
11	11,349,627 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
12	11,349,627 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) o EXCLUDES CERTAIN SHARES				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
14	22.9% TYPE OF REPORTING PERSON				
	НС				
3					

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The following constitutes Amendment No. 1 to the Schedule 13D filed by the undersigned ("Amendment No. 1"). This Amendment No. 1 amends the Schedule 13D as specifically set forth herein.

Item 2. Identity and Background.

Item 2 is hereby amended and restated to read as follows:

(a) This statement is filed by Raging Capital Management, LLC, a Delaware limited liability company ("Raging Capital"), and William C. Martin. Each of the foregoing is referred to as a "Reporting Person" and collectively as the "Reporting Persons."

Raging Capital is the Investment Manager of Raging Capital Master Fund, Ltd., a Cayman Islands exempted company ("Raging Master"), in whose name the Shares are held. William C. Martin is the Chairman, Chief Investment Officer and Managing Member of Raging Capital. Raging Master has delegated to Raging Capital the sole authority to vote and dispose of the securities held by Raging Master pursuant to an Investment Management Agreement, dated November 9, 2012 (the "IMA"). The IMA may be terminated by any party thereto effective at the close of business on the last day of any fiscal quarter by giving the other party not less than sixty-one days' written notice. As a result, each of Raging Capital and William C. Martin may be deemed to beneficially own the Shares held by Raging Master.

Set forth on Schedule A annexed hereto ("Schedule A") is the name and present principal business, occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted of the executive officers of Raging Capital. To the best of the Reporting Persons' knowledge, except as otherwise set forth herein, none of the persons listed on Schedule A beneficially owns any securities of the Issuer or is a party to any contract, agreement or understanding required to be disclosed herein.

- (b) The address of the principal office of each of the Reporting Persons is Ten Princeton Avenue, P.O. Box 228, Rocky Hill, New Jersey 08553.
- (c) The principal business of Raging Capital is serving as the Investment Manager of Raging Master. The principal occupation of William C. Martin is serving as the Chairman, Chief Investment Officer and Managing Member of Raging Capital.
- (d) No Reporting Person nor any person listed on Schedule A has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) No Reporting Person nor any person listed on Schedule A has, during the last five years, been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) Raging Capital is organized under the laws of the State of Delaware. William C. Martin is a citizen of the United States of America.

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Item 3. Source and Amount of Funds or Other Consideration.

Item 3 is hereby amended and restated to read as follows:

The aggregate purchase price of the 11,349,627 Shares held directly by Raging Master is approximately \$31,179,604, including brokerage commissions. Such Shares were acquired with the working capital of Raging Master.

Raging Master effects purchases of securities primarily through margin accounts maintained for it with prime brokers, which may extend margin credit to it as and when required to open or carry positions in the margin accounts, subject to applicable federal margin regulations, stock exchange rules and the prime brokers' credit policies. In such instances, the positions held in the margin accounts are pledged as collateral security for the repayment of debit balances in the accounts.

Item 4. Purpose of Transaction.

Item 4 is hereby amended to add the following:

Raging Capital and the Issuer have engaged in discussions on the potential nomination by the Issuer of a representative of Raging Capital to the Board of Directors of the Issuer at its upcoming annual meeting of shareholders.

Item 5. Interest in Securities of the Issuer.

Items 5(a) - (c) are hereby amended and restated to read as follows:

(a) The aggregate percentage of Shares reported owned by each person named herein is based upon 49,521,793 Shares outstanding as of March 24, 2016, which is the total number of Shares outstanding as reported in the Issuer's Form 10-K filed with the Securities and Exchange Commission on March 28, 2016.

As of the close of business on the date hereof, each of Raging Capital and William C. Martin may be deemed to beneficially own the 11,349,627 Shares, constituting approximately 22.9% of the Shares outstanding, held by Raging Master by virtue of their relationships with Raging Master discussed in further detail in Item 2.

Each of the Reporting Persons, as a member of a "group" with the other Reporting Persons for purposes of Rule 13d-5(b)(1) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), may be deemed to beneficially own the Shares owned by the other Reporting Persons. The filing of this Schedule 13D shall not be deemed an admission that the Reporting Persons are, for purposes of Section 13(d) of the Exchange Act, the beneficial owners of any Shares he or it does not directly own. Each of the Reporting Persons specifically disclaims beneficial ownership of the Shares reported herein that he or it does not directly own. Without limiting the foregoing sentence, Raging Master specifically disclaims beneficial ownership of the securities of the Issuer held by it by virtue of its inability to vote or dispose of such securities as a result of the IMA.

- (b) Raging Capital and William C. Martin may be deemed to share the power to vote and dispose of the Shares held by Raging Master.
- (c) The Reporting Persons have not entered into any transactions in the Shares during the past 60 days.

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Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer.

Item 6 is hereby amended to add the following:

On April 11, 2016, the Reporting Persons entered into a Joint Filing Agreement in which the Reporting Persons agreed to the joint filing on behalf of each of them of statements on Schedule 13D with respect to the securities of the Issuer. A copy of this agreement is attached as an exhibit hereto and is incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

Item 7 is hereby amended to add the following exhibit:

99.1 Joint Filing Agreement by and between Raging Capital Management, LLC and William C. Martin, dated April 11, 2016.

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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: April 11, 2016 Raging Capital Management, LLC

By: /s/ William C. Martin

Name: William C. Martin

Title: Chairman, Chief Investment

Officer and Managing Member

/s/ William C. Martin William C. Martin

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SCHEDULE A

Executive Officers of Raging Capital Management, LLC

Name and Position	Present Principal Occupation	Business Address
William C. Martin, Chairman, Chief Investment Officer and Managing Member	Chairman, Chief Investment Officer and Managing Member of Raging Capital Management, LLC	c/o Raging Capital Management, LLC Ten Princeton Avenue, P.O. Box 228 Rocky Hill, New Jersey 08553
Frederick C. Wasch, Chief Financial Officer	Chief Financial Officer of Raging Capital Management, LLC	c/o Raging Capital Management, LLC Ten Princeton Avenue, P.O. Box 228 Rocky Hill, New Jersey 08553