FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB Number: 3235-0104
Estimated average burden
hours per response: 0.5

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* ROESCHLEIN BILL			2. Date of Ever Requiring State (Month/Day/Ye	ement	3. Issuer Name and Ticker or Trading Symbol INTERMOLECULAR INC [IMI]					
			04/03/2017		Relationship of Reporting Person(s) to Issuer (Check all applicable)			5. If Amendment, Date of Original Filed (Month/Day/Year)		
C/O INTERMOLECULAR, INC. 3011 NORTH FIRST STREET (Street) SAN JOSE CA 95134 (City) (State) (Zip)				Director 10% Owner X Officer (give title Other (specify below) Chief Financial Officer		cify 6. In	6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person			
Table I - Non-Derivative Securities Beneficially Owned										
1. Title of Security (Instr. 4)					2. Amount of Securities Beneficially Owned (Instr. 4)	1 1 1 1 1 1		l. Nature of Indirect Beneficial Ownership Instr. 5)		
No securities beneficially owned as of April 3, 2017					0	D				
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)										
1. Title of Derivative Security (Instr. 4)			2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securi Underlying Derivative Securi		4. Conversion or	5. Ownership Form:	6. Nature of Indirect Beneficial Ownership (Instr. 5)	
			Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Exercise Price of Derivative Security	Direct (D) or Indirect (I) (Instr. 5)		
Stock Option	(right to buy)		(1)	08/30/2025	Common Stock	100,000	2.04	D		
Stock Option	(right to buy)		(2)	09/20/2026	Common Stock	54,000	0.99	D		

Explanation of Responses:

- 1. Twenty-five percent (25%) of the shares shall vest and become exercisable on August 10, 2016 and 1/48th of the shares shall vest and become exercisable on each monthly anniversary thereafter.
- 2. The option grant vests monthly over 4 years from the date of grant.

Remarks:

This Form 3 is filed late.

/s/ Bill Roeschlein 03/08/2018

** Signature of Reporting Person Date

 $Reminder: Report \ on \ a \ separate \ line \ for \ each \ class \ of \ securities \ beneficially \ owned \ directly \ or \ indirectly.$

- * If the form is filed by more than one reporting person, see Instruction 5 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.