

INTERMOLECULAR INC

Reported by
FEDERMAN IRWIN

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 05/24/17 for the Period Ending 05/16/17

Address	3011 NORTH FIRST STREET SAN JOSE, CA 95134
Telephone	(408) 582-5700
CIK	0001311241
Symbol	IMI
Fiscal Year	12/31

FORM 4

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

OMB APPROVAL
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STATEMENT OF CHANGES IN 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 * FEDERMAN IRWIN (Last) (First) (Middle) C/O INTERMOLECULAR, INC., 3011 NORTH FIRST STREET (Street) SAN JOSE, CA 95134 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol INTERMOLECULAR INC [IMI] 3. Date of Earliest Transaction (MM/DD/YYYY) <p align="center">5/16/2017</p>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director _____ 10% Owner _____ Officer (give title below) _____ Other (specify below)
4. If Amendment, Date Original Filed (MM/DD/YYYY)		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			

Table II - Derivative Securities Beneficially Owned (e.g. , puts, calls, warrants, options, convertible securities)

1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Trans. Date	3A. Deemed Execution Date, if any	4. Trans. Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	6. Date Exercisable and Expiration Date		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		(A)	(D)	Date Exercisable	Expiration Date				
Stock Option (right to buy)	\$0.85	5/16/2017		A		25000		5/15/2027	Common Stock	25000	\$0.00	25000	D	

Explanation of Responses:

(1) The shares subject to the option will vest in full on the earlier to occur of (i) the first anniversary of the date of grant and (ii) the date of the annual meeting immediately following the date of grant, subject in each case to Reporting Person's continued service through the vesting date.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
FEDERMAN IRWIN C/O INTERMOLECULAR, INC. 3011 NORTH FIRST STREET SAN JOSE, CA 95134	X			

Signatures

/s/ **Bill Roeschlein, as Attorney-in-fact**

5/24/2017

** 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 4(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 control number.