

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 * MANUSO JAMES S J (Last) (First) (Middle) C/O RESPIRERX PHARMACEUTICALS INC., 126 VALLEY ROAD, SUITE C (Street) GLEN ROCK, NJ 07452 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol RespireRx Pharmaceuticals Inc. [RSPI]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director _____ 10% Owner <input checked="" type="checkbox"/> Officer (give title below) _____ Other (specify below) President & CEO
3. Date of Earliest Transaction (MM/DD/YYYY) <p align="center">4/7/2016</p>		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
4. If Amendment, Date Original Filed (MM/DD/YYYY)		

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					
Common Stock	4/7/2016		J	(I)			11887779	A	(I)	23775558	D	

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	Title	Amount or Number of Shares				
Common Stock Warrants (right to buy)	(2)	4/7/2016		J	(I)		23775558	8/28/2015	9/30/2020	Common Stock	23775558	(I)	0	D	
Common Stock Warrants (right to buy)	\$0.015	4/7/2016		J	(I)		11887779	4/7/2016	9/30/2020	Common Stock	11887779	(I)	11887779	D	
Common Stock Warrants (right to buy)	\$0.02							2/4/2016	2/4/2019	Common Stock	2630000		2630000	D	
Common Stock Options (to purchase shares of Common Stock)	\$0.0227							(3)	3/31/2021	Common Stock	26500000		26500000	D	
Common Stock Options (to purchase shares of Common Stock)	\$0.0197							(4)	8/18/2025	Common Stock	5081300		5081300	D	
Common Stock Options (to purchase shares of Common Stock)	\$0.0197							(4)	8/18/2025	Common Stock	80000000		80000000	D	

Explanation of Responses:

(On April 7, 2016, the reporting person exchanged, pursuant to an Exchange Agreement, (i) existing Warrants to acquire 23,775,558 shares of Company 1) Common Stock and (ii) cash in the amount of \$178,317 for (i) new Warrants to purchase 11,887,779 shares of the Company's Common Stock and (ii) 11,887,779 shares of Common Stock. The original Warrants were not exercised, in whole or in part, but were exchanged pursuant to the terms of the Exchange Agreement.

(The reported securities were included within 11,887,779 units purchased by the reporting person for \$0.02103 per unit. Each unit consisted of one share of 2) Common Stock and one warrant to purchase two additional shares of Common Stock with an exercise price of \$0.02103 for each share of Common Stock to be issued upon exercise of the warrant.

(These Common Stock Options vest in four equal installments: 25 percent on March 31, 2016 (the grant date), 25 percent on June 30, 2016, 25 percent on 3) September 30, 2016, and 25 percent on December 31, 2016.

(These Common Stock Options vest in three installments: 50 percent on August 18, 2015 (the grant date), 25 percent on February 18, 2016, and 25 percent on 4) August 18, 2016.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
MANUSO JAMES S J C/O RESPIRERX PHARMACEUTICALS INC. 126 VALLEY ROAD, SUITE C GLEN ROCK, NJ 07452	X		Preident & CEO	

Signatures

/s/ James S. J. Manuso

4/11/2016

**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.

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