

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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* <u>MANUSO JAMES S J</u> (Last) (First) (Middle) <u>C/O RESPIRERX PHARMACEUTICALS INC.</u> <u>126 VALLEY ROAD, SUITE C</u> (Street) <u>GLEN ROCK NJ 07452</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>RespireRx Pharmaceuticals Inc. [RSPI]</u>	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) <u>President & CEO</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>01/18/2017</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	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. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction 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 Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction 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 (Month/Day/Year)		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: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Common Stock Options (to purchase shares of Common Stock)	\$3.9	01/18/2017		A		75,000		(1)	01/18/2017	Common Stock	75,000	\$0	75,000	D	
Common Stock Warrants (right to buy)	\$4.875 ⁽²⁾							(1)	04/07/2016 09/30/2020	Common Stock	36,578 ⁽²⁾		36,578 ⁽²⁾	D	
Common Stock Warrants (right to buy)	\$6.5 ⁽²⁾							(1)	02/04/2016 02/04/2019	Common Stock	8,093 ⁽²⁾		8,093 ⁽²⁾	D	
Common Stock Options (to purchase shares of Common Stock)	\$7.3775 ⁽²⁾							(3)	03/31/2021	Common Stock	81,539 ⁽²⁾		81,539 ⁽²⁾	D	
Common Stock Options (to purchase shares of Common Stock)	\$6.396 ⁽²⁾							(4)	08/18/2025	Common Stock	15,634 ⁽²⁾		15,634 ⁽²⁾	D	
Common Stock Options (to purchase shares of Common Stock)	\$6.396 ⁽²⁾							(4)	08/18/2025	Common Stock	246,154 ⁽²⁾		246,154 ⁽²⁾	D	

Explanation of Responses:

- These Common Stock Options vest in three installments: 25 percent on January 18, 2017 (the grant date), 25 percent on March 31, 2017, and 50 percent on June 30, 2017.
- The exercise price and number of shares of these securities have been adjusted to reflect the Company's 325-to-1 reverse stock split effective September 1, 2016.
- These Common Stock Options vested in four equal installments: 25 percent on March 31, 2016 (the grant date), 25 percent on June 30, 2016, 25 percent on September 30, 2016, and 25 percent on December 31, 2016.
- These Common Stock Options vested in three installments: 50 percent on August 18, 2015 (the grant date), 25 percent on February 18, 2016, and 25 percent on August 18, 2016.

/s/ James S. J. Manuso 01/20/2017
 ** 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 Number.