

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

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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

<b>1. Name and Address of Reporting Person*</b> <u>EMANUELE ROBERT MARTIN</u> _____ (Last) (First) (Middle) <u>12390 EL CAMINO REAL, SUITE 150</u> _____ (Street) <u>SAN DIEGO CA 92130</u> _____ (City) (State) (Zip)	<b>2. Issuer Name and Ticker or Trading Symbol</b> <u>Mast Therapeutics, Inc. [ MSTX ]</u>	<b>5. Relationship of Reporting Person(s) to Issuer</b> (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Senior VP, Development</u>
	<b>3. Date of Earliest Transaction (Month/Day/Year)</b> <u>05/30/2013</u>	
<b>4. If Amendment, Date of Original Filed (Month/Day/Year)</b>		

**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			
Common Stock	05/30/2013		A <sup>(1)</sup>		52,543 <sup>(1)</sup>	A	(1)	294,598	D	

**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		Date Exercisable	Expiration Date					

**Explanation of Responses:**

1. The Reporting Person became entitled to receive the shares of the Issuer's common stock reported in this Form 4 on May 30, 2013 pursuant to an earn-out provision in the merger agreement pursuant to which the Issuer acquired SynthRx, Inc. on April 8, 2011. The merger agreement provided that the former stockholders of SynthRx, including the Reporting Person, would receive, for no additional consideration, additional shares of the Issuer's common stock in connection with achievement of specified development milestones related to SynthRx's lead product candidate. The Reporting Person's right to receive such milestone shares, including the shares reported in this Form 4, became fixed and irrevocable on April 8, 2011, the effective date of the merger.

**Remarks:**

/s/ Brian M. Culley, Attorney-  
in-Fact for R. Martin 05/31/2013  
Emanuele

\*\* 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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