

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

**OMB APPROVAL**

OMB Number: 3235-0287  
Expires: December 31, 2014  
Estimated average burden  
hours per response 0.5

☐ 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, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

<b>1. Name and Address of Reporting Person*</b> Schneebaum Marc R <hr/> (Last) (First) (Middle) C/O SYNTA PHARMACEUTICALS CORP., 45 HARTWELL AVENUE <hr/> (Street) LEXINGTON MA 02421 <hr/> (City) (State) (Zip)	<b>2. Issuer Name and Ticker or Trading Symbol</b> SYNTA PHARMACEUTICALS CORP [SNTA] <hr/> <b>3. Date of Earliest Transaction (Month/Day/Year)</b> 12/08/2014	<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) SVP and CFO
	<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	12/08/2014		A		75,000 <sup>(1)</sup>	A	\$ 0 <sup>(1)</sup>	75,000	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 Underlying Securities (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				
Employee Stock Option (Right to Buy)	\$ 2.85	12/08/2014		A		225,000		(2)	12/08/2024	Common Stock	225,000	\$ 0	225,000	D	

**Explanation of Responses:**

1. Represents a restricted stock grant subject to the Issuer's lapsing forfeiture right, which lapses as to 25% of the shares on December 8, 2016 and as to the remaining 50% of the shares on December 8, 2017, provided the Reporting Person remains employed by the Issuer on such date.
2. The option vests as to 25% of the shares on December 8, 2015 and as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter, provided the Reporting Person remains employed by the Issuer on such date.

/s/ Garrett Winslow.                      12/10/2014  
Attorney-in-Fact

\*\* Signature of Reporting                      Date  
Person

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.**