

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

1. Name and Address of Reporting Person * Gollust Keith R (Last) (First) (Middle) C/O SYNTA PHARMACEUTICALS CORP., 45 HARTWELL AVENUE (Street) LEXINGTON MA 02421 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol SYNTA PHARMACEUTICALS CORP [SNTA] 3. Date of Earliest Transaction (Month/Day/Year) 01/23/2013 4. If Amendment, Date of Original Filed (Month/Day/Year)	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) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person 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			
Common Stock ⁽¹⁾	01/23/2013		M		75,000	A	\$ 10.843	277,005	D	
Common Stock	01/23/2013		M		5,500	A	\$ 7.03	282,505	D	
Common Stock	01/23/2013		M		2,500	A	\$ 7.03	285,005	D	
Common Stock	01/23/2013		M		5,500	A	\$ 2.38	290,505	D	
Common Stock	01/23/2013		M		2,500	A	\$ 2.38	293,005	D	
Common Stock	01/23/2013		M		5,500	A	\$ 2.59	298,505	D	
Common Stock	01/23/2013		M		2,500	A	\$ 2.59	301,005	D	
Common Stock	01/23/2013		M		5,500	A	\$ 5.09	306,505	D	
Common Stock	01/23/2013		M		2,500	A	\$ 5.09	309,005	D	
Common Stock	01/23/2013		M		5,000	A	\$ 5.47	314,005	D	
Common Stock	01/23/2013		M		2,250	A	\$ 5.47	316,255	D	
Common Stock								2,673,383	I	By Wyandanch Partners, L.P. ⁽²⁾

Common Stock								175,000	I	By Keith R. Gollust Roth IRA
-----------------	--	--	--	--	--	--	--	---------	---	------------------------------------

**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				
Director Stock Option (Right to Buy)	\$ 10.843	01/23/2013		M			75,000	(3)	05/27/2014	Common Stock	75,000	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 7.03	01/23/2013		M			5,500	(3)	06/11/2018	Common Stock	5,500	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 7.03	01/23/2013		M			2,500	(3)	06/11/2018	Common Stock	2,500	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 2.38	01/23/2013		M			5,500	(3)	07/01/2019	Common Stock	5,500	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 2.38	01/23/2013		M			2,500	(3)	07/01/2019	Common Stock	2,500	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 2.59	01/23/2013		M			5,500	(3)	07/01/2020	Common Stock	5,500	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 2.59	01/23/2013		M			2,500	(3)	07/01/2020	Common Stock	2,500	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 5.09	01/23/2013		M			5,500	(3)	07/01/2021	Common Stock	5,500	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 5.09	01/23/2013		M			2,500	(3)	07/01/2021	Common Stock	2,500	\$ 0	0	D	
Director Stock Option (Right to Buy)	\$ 5.47	01/23/2013		M			5,000	(4)	07/01/2022	Common Stock	5,000	\$ 0	5,000	D	
Director Stock Option (Right to Buy)	\$ 5.47	01/23/2013		M			2,250	(5)	07/01/2022	Common Stock	2,250	\$ 0	2,250	D	

Explanation of Responses:

1. This Form 4 is being filed by the Reporting Person solely to report the exercise of stock options. The Reporting Person has not sold any of the shares of common stock resulting from the exercise of such stock options.
2. The Reporting Person disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein, if any, and the inclusion of these shares in this report shall not be deemed an admission of the beneficial ownership of all of the reported shares for purposes of Section 16 or for any other purpose.
3. All shares underlying this option have vested.
4. The option vested as to 2,500 shares on each of September 30, 2012 and December 31, 2012 and will vest as to 2,500 shares on each of March 31, 2013 and June 30, 2013, provided the Reporting Person continues to serve as a director of the Issuer on such date.
5. The option vested as to 1,125 shares on each of September 30, 2012 and December 31, 2012 and will vest as to 1,125 shares on each of March 31, 2013 and June 30, 2013, provided the Reporting Person continues to serve as Chairman of the Board of Directors of the Issuer on such date.

/s/ Brian Keane, Attorney-in-Fact 01/24/2013

** 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.