# FORM 4

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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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

1. Name and Address of Reporting Person <sup>*</sup> Kovner Bruce			2. Issuer Name and Ticker or Trading Symbol <u>SYNTA PHARMACEUTICALS CORP</u> [ SNTA ]		tionship of Reporting all applicable) Director	g Pers X	10% Owner				
(Last) C/O CAXTON	(First) CORPORATIO	(Middle) ON	3. Date of Earliest Transaction (Month/Day/Year) 01/06/2012		Officer (give title below)		Other (specify below)				
731 ALEXANDER ROAD, BLDG 2			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line)							
(Street)				X	Form filed by One Reporting Person						
PRINCETON	NJ	08540			Form filed by More Person	One Reporting					
(City)	(State)	(Zip)									
Table I. New Derivative Securities Acquired Dispessed of an Departiculus Owned											

#### 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	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership
			Code	v	Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)	(1150. 4)	(Instr. 4)
Common Stock	12/13/2011		G	v	500,000	D	\$ <mark>0</mark>	4,769,685	D	
Common Stock	12/13/2011		G	v	125,000	A	\$0	125,000	I	By Kovner 2001-A Investmen Trust
Common Stock	12/13/2011		G	v	125,000	A	\$0	125,000	I	By Kovner 2001-B Investmen Trust
Common Stock	12/13/2011		G	v	125,000	A	\$0	125,000	I	By Kovner 2001-C Investmen Trust
Common Stock	12/13/2011		G	v	125,000	A	\$0	125,000	I	By Kovne 2001-D Investmen Trust
Common Stock	01/06/2012		Р		1,136,363	A	\$4.4	5,906,048	D	
Common Stock								125,000	I	By Kovner 2001-A Investmen Trust
Common Stock								125,000	I	By Kovner 2001-B Investmen Trust
Common Stock								125,000	I	By Kovner 2001-C Investmen Trust
Common Stock								125,000	I	By Kovne 2001-D Investmen Trust

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3)			Date	2. Transaction Date (Month/Day/Year)		if any		3. Transaction Code (Instr. 8)				Acquired (A) or (D) (Instr. 3, 4		5. Amount of Securities Beneficially Owned Following		vnership n: Direct r ect (I) r. 4)	7. Nature of Indirect Beneficial Ownership	
								Code	v	Amount	(A) or (D) Price		Repo Trans	Reported Transaction(s) (Instr. 3 and 4)		. 4)	(Instr. 4)	
Common Stock													7,7	61,716		Ι	By CxSynta LLC <sup>(1)</sup>	
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)	ivative Conversion Date Exe urity or Exercise (Month/Day/Year) if a		3A. Deemed Execution Date, if any (Month/Day/Year)	Code	saction le (Instr. E (Instr. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		tive ties red sed 3, 4	Expiration I e (Month/Day s		Date	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivativ Security (Instr. 5)	9. Numbo derivativ Securitie Beneficia Owned Followin Reported Transact (Instr. 4)	e s ally g	10. Ownershi Form: Direct (D) or Indirec (I) (Instr. 4)	Beneficial Ownership	
			Code	v	(A)	(D)	Date Exerci	sable	Expiration Date	Title	Amount or Number of Shares							

Explanation of Responses:

1. These shares are owned directly by CxSynta LLC and indirectly by the Reporting Person as Chairman of Caxton Corporation, the managing member of CxSynta LLC. The Reporting Person disclaims beneficial ownership of these shares except to the extent of his pecuniary interest therein, 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.

### /s/ Scott B. Bernstein, Attorney-in-Fact

01/10/2012

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

 $^{\ast}$  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.