FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

OMB APPROVAL								
OMB Number:	3235-0287							
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 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person*  Kovner Bruce  (Last) (First) (Middle)  C/O CAXTON ASSOCIATES LP						2. Issuer Name and Ticker or Trading Symbol SYNTA PHARMACEUTICALS CORP [ SNTA ] 3. Date of Earliest Transaction (Month/Day/Year) 04/14/2011									Relationship of Reporting P     Check all applicable)     X Director     Officer (give title below)				X 10% C	Owner (specify	
ľ					4. If A	4. If Amendment, Date of Original Filed (Month/Day/Year)									Indivi ne) X	Form	al or Joint/Group Filing (Check Applicable orm filed by One Reporting Person orm filed by More than One Reporting erson				
(City)	(Sta		Zip)																		
Table I - Non-Deriva  1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day/				ion	on 2A. Deemed Execution Date			3. Transaci Code (In 8)	tion	4. Securities Acquired (, Disposed Of (D) (Instr. 3				(A) or 3, 4 and		5. Amount of Securities Beneficially Owned Following		Ownership rm: Direct or irect (I) str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
									Code	v	Amount		(A) or (D)	Price		Reported Transaction(s) (Instr. 3 and 4)					
Common Stock 04/14/					)11				P		1,431,493		A	\$4.89		4,757,266		D			
Common Stock																7,7	61,716		I	By CxSynta LLC <sup>(1)</sup>	
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																					
Derivative C Security (Instr. 3) P	titive Conversion Date Execution Date, ity or Exercise (Month/Day/Year) if any				4. Transac Code (I 8)		of Deriv Secu Acqu (A) o Disp	r osed ) r. 3, 4	6. Date Expiration (Month/I	on Da Day/Y	ear)	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)  Amoun or Numbe of Title Shares					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)	

## **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

04/18/2011

\*\* 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.