

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

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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* CxSynta LLC (Last) (First) (Middle) C/O CAXTON CORPORATION, 731 ALEXANDER ROAD, BUILDING 2 (Street) PRINCETON NJ 08540 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 02/05/2007	3. Issuer Name and Ticker or Trading Symbol SYNTA PHARMACEUTICALS CORP [SNTA]		
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)		5. If Amendment, Date of Original Filed (Month/Day/Year)
		6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person		

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock	6,071,070 ⁽¹⁾	D ⁽²⁾	

Table II - Derivative Securities Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares ^M			
Series A Convertible Preferred Stock	(3)	(4)	Common Stock	2,154,105 (3)	\$ (3)	D (2)	

Explanation of Responses:

- Reflects a 1-for-4 reverse stock split effected on February 2, 2007 in connection with the Issuer's initial public offering, pursuant to which the number of shares of Common Stock was divided by 4.
- These shares are directly owned by CxSynta LLC and indirectly owned by Caxton Corporation, the managing member of CxSynta LLC.
- Upon the closing of the Issuer's initial public offering of Common Stock, each share of Series A Convertible Preferred Stock, plus accrued dividends, will convert into a certain number of shares of Common Stock in accordance with the terms of the Issuer's Restated Certificate of Incorporation, as amended.
- N/A.

By Caxton Corporation,
Managing Member of
CxSynta LLC, by /s/ Scott 02/05/2007
B. Bernstein, Secretary of
Caxton Corporation

** Signature of Reporting Person Date

/s/ Scott B. Bernstein,
Secretary of Caxton 02/05/2007
Corporation

** 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 5(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.