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* Singh Amar (Last) (First) (Middle) C/O SYNTA PHARMACEUTICALS CORP. 45 HARTWELL AVENUE (Street) LEXINGTON MA 02421						2. Issuer Name and Ticker or Trading Symbol SYNTA PHARMACEUTICALS CORP [SNTA] 3. Date of Earliest Transaction (Month/Day/Year) 11/29/2010 4. If Amendment, Date of Original Filed (Month/Day/Year)								S. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title Other (specify below) below) Sr. VP, Business & Comm. Dvp. 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person Person					
(City) (State) (Zip)																			
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																			
1. Title of Security (Instr. 3) 2. Transacti Date (Month/Day						Execution			Transaction Disp Code (Instr. and			rities Acquired (A) ed Of (D) (Instr. 3, 4			5. Amou Securitie Benefici Owned	es ally	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership
									Code	v	Amount (A		or Pr	ice	Followir Reported Transact (Instr. 3	on(s)		. 4)	(Instr. 4)
Common Stock 11/29/20)10		A		25,000 ⁽¹⁾ A		. \$	0 (1)	25,000			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)		ı of		6. Date Exercisab Expiration Date (Month/Day/Year)		е	Amount of				9. Numbe derivative Securities Beneficia Owned Following Reported Transacti (Instr. 4)	e s Ily	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership
					Code	v	(A)	(D)	Date Exercisab		expiration Date	Title	Amor or Numl of Share	ber					
Employee Stock Option (Right to Buy)	\$4.25	11/29/2010			A		150,000		(2)	1	1/29/2020	Common Stock	150,0	000	\$0	150,00	00	D	

Explanation of Responses:

- 1. Represents a restricted stock grant subject to the Issuer's lapsing forfeiture right, which lapses as to 50% of the shares on November 29, 2012, and as to the remaining 50% of the shares on November 29, 2013, provided the Reporting Person remains employed by the Issuer on such dates.
- $2. \ The option \ vests \ as \ to \ 25\% \ of the shares \ on \ November \ 29, \ 2011 \ and \ as \ to \ an \ additional \ 6.25\% \ of the shares \ on the last \ day \ of each \ successive \ three-month \ period \ thereafter.$

/s/ Ann Margaret Eames, Attorney-in-Fact 11/30/2010

** 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.