

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL	
OMB Number:	3235-0287
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1. Name and Address of Reporting Person * <u>Zorn Peter A</u>			2. Issuer Name and Ticker or Trading Symbol <u>TARGACEPT INC [ TRGT ]</u>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>VP, Lg Affrs, GC and Secretary</u>		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <u>10/21/2009</u>					
C/O 200 EAST FIRST STREET, SUITE 300			4. If Amendment, Date of Original Filed (Month/Day/Year)			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		
(Street)	(State)	(Zip)						
WINSTON-SALEM NC 27101								
(City)	(State)	(Zip)						

**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	10/21/2009		M		34,611	A	\$1.75	34,611	D	
Common Stock	10/21/2009		M		4,375	A	\$5.1	38,986	D	
Common Stock	10/21/2009		M		5,749	A	\$2.93	44,735	D	
Common Stock	10/21/2009		M		47,163	A	\$5.55	91,898	D	
Common Stock	10/21/2009		S		91,898	D	\$21.0049	0	D	
Common Stock	10/22/2009		M		6,035	A	\$5.55	6,035	D	
Common Stock	10/22/2009		S		6,035	D	\$20.6438	0	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)		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 Securities Underlying Derivative Security (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: 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				
Stock Option (Right to Buy)	\$1.75	10/21/2009		M			34,611	(1)	03/28/2015	Common Stock	34,611	\$0	0	D	
Stock Option (Right to Buy)	\$5.1	10/21/2009		M			4,375	(2)	02/27/2016	Common Stock	4,375	\$0	0	D	
Stock Option (Right to Buy)	\$5.55	10/21/2009		M			47,163	(3)	08/15/2016	Common Stock	47,163	\$0	18,312	D	
Stock Option (Right to Buy)	\$2.93	10/21/2009		M			5,749	(4)	01/08/2019	Common Stock	5,749	\$0	40,251	D	
Stock Option (Right to Buy)	\$5.55	10/22/2009		M			6,035	(3)	08/15/2016	Common Stock	6,035	\$0	12,277	D	

**Explanation of Responses:**

- This option vested in installments and became vested in full on December 31, 2008.
- This option vests in equal installments on the last day of 16 consecutive calendar quarters beginning March 31, 2006.
- This option vests in equal installments on the last day of 16 consecutive calendar quarters beginning September 30, 2006.
- This option vests in equal installments on the last day of 16 consecutive calendar quarters beginning March 31, 2009.

**Remarks:**

The shares covered by this Form 4 have been sold pursuant to a Rule 10b5-1 Sales Plan dated August 10, 2009, which is intended to comply with Rule 10b5-1(c) promulgated under the Securities Exchange Act of 1934, as amended.

/s/ Peter A. Zorn

10/23/2009

\*\* 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.**