FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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	OMB APPROVAL
- 14	

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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).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

or Section 30(h) of the Investment Company Act of 1940 2. Issuer Name and Ticker or Trading Symbol 5. Relationship of Reporting Person(s) to Issuer 1. Name and Address of Reporting Person TARGACEPT INC [TRGT] (Check all applicable) deBethizy J Donald X Director 10% Owner Officer (give title Other (specify X below) below) (Last) (First) (Middle) 3. Date of Earliest Transaction (Month/Day/Year) President and CEO C/O TARGACEPT, INC. 08/16/2006 200 EAST FIRST STREET, SUITE 300 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable (Street) WINSTON-Form filed by One Reporting Person 27101 NC **SALEM** Form filed by More than One Reporting (City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 2. Transaction Date 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) 5. Amount of Securities 6. Ownership Form: Direct 1. Title of Security (Instr. 3) 7. Nature of (Month/Day/Year) if any (Month/Day/Year) Code (Instr Beneficially (D) or Indirect Beneficial Owned Following Reported Ownership (Instr. 4) 8) (I) (Instr. 4) (A) or Transaction(s) Code Amount Price (Instr. 3 and 4) Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) 1. Title of 2. 5. Number of 6. Date Exercisable and 7. Title and Amount 8. Price of 9. Number of 11. Nature 3. Transaction 3A. Deemed

Derivative Security (Instr. 3)	Conversion or Exercise Price of Derivative Security	Date (Month/Day/Year)	Execution Date, if any (Month/Day/Year)	Transaction Code (Instr. 8)		Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		Expiration Date (Month/Day/Year)		of Securities Underlying Derivative Security (Instr. 3 and 4)		Derivative Security (Instr. 5)	derivative Securities Beneficially Owned Following Reported	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		Transaction(s) (Instr. 4)		
Stock option (right to	\$5.55	08/16/2006		A		229,163		(1)	08/15/2016	Common Stock	229,163	\$0	229,163	D	

Explanation of Responses:

1. This option vests in equal installments on the last day of 16 consecutive calendar quarters beginning with September 30, 2006.

Remarks:

/s/ Peter A. Zorn, Attorney-in-

08/18/2006

Fact

** 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.

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