## FORM 4

obligations may continue. See

Instruction 1(b).

Check this box if no longer subject to Section 16. Form 4 or Form 5

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Washington, | D.C. | 20549 |
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OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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*  BURRILL STEVEN   |         |                               |                               | 2. Issuer Name <b>and</b> Ticker or Trading Symbol TARGACEPT INC [ TRGT ] |  |   |       |                               |              |   |                                 | Relationship of Reporting Person(s) to Issuer (Check all applicable)     X Director 10% Owner |   |  |  |  |  |  |  |  |
|--|---------|-------------------------------|-------------------------------|---|--|---|-------|-------------------------------|--------------|---|---------------------------------|---|---|--|--|--|--|--|--|--|
|  |         |                               |                               | _   |  |   |       |                               |              |   |                                 |   |   |  |  |  |  |  |  |  |
| (Last) (First) (Middle) C/O TARGACEPT, INC. 200 EAST FIRST STREET, SUITE 300   |         |                               |                               | 3. Date of Earliest Transaction (Month/Day/Year) 03/05/2007               |  |   |       |                               |              |   |                                 | Office<br>below   |   | e title  | Other (<br>below)  | specify  |  |  |  |  |
|  |         |                               |                               | _ 4.1   | 4. If Amendment, Date of Original Filed (Month/Day/Year) |   |       |                               |              |   |                                 |   | 6. Individual or Joint/Group Filing (Check Applicable   |  |  |  |  |  |  |  |
| (Street) WINSTO  | N       | C :                           | 27101                         |   |  |   |       |                               |              |   |                                 |   | l   | Line)  X Form filed by One Reporting Person  Form filed by More than One Reporting  Person |  |  |  |  |  |  |
| (City)   | (S      | tate)                         | (Zip)                         |   |  |   |       |                               |              |   |                                 |   |   |  |  |  |  |  |  |  |
|  |         | Tab                           | le I -                        | Non-Deri  | vative   | e Sec                                   | uriti | ies A                         | cquir        | red, C                                    | Disposed (                      | of, or E  | Benefici  | ially Owne   | d  |  |  |  |  |  |
| Diam's, (mean's)   |         | Date E<br>(Month/Day/Year) if |                               | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year)               |  | 3.<br>Transaction<br>Code (Instr.<br>8) |       | 4. Securities Acquired (A) or |              | (A) or<br>3, 4 and                        | Beneficially<br>Owned Following |   | 6. Ownersh<br>Form: Dire<br>(D) or Indir<br>(I) (Instr. 4)  | ct Indire<br>ect Benef<br>Owne   | 7. Nature of Indirect Beneficial Ownership (Instr.   |  |  |  |  |  |
|  |         |                               |                               |   |  |   |       | Ī                             | Code         | v   | Amount                          | (A) or<br>(D)   | Price   | Reported<br>Transaction(s<br>(Instr. 3 and 4   |  |  | 4)   | 4)   |  |  |
| Common Stock 03/05/200   |         | 07                            | 7                             |   |  | M                                       |       | 1,000                         | A            | \$0.075                                   | 2,000                           | 2,000   |   | I By Bur<br>Compa<br>LLC <sup>(1)</sup>  |  |  |  |  |  |  |
| Common Stock   |         |                               |                               |   |  |   |       |                               |              |   | 778,062                         |   | I By Burn<br>Biotech<br>Capital<br>L.P. <sup>(2)</sup>  |  | chnology<br>tal Fund   |  |  |  |  |  |
|  |         | T                             | able                          |   |  |   |       |                               |              |   | sposed of                       |   |   | lly Owned  |  |  | '  |  |  |  |
| 1. Title of Derivative Security (Instr. 3)  2. Conversion or Exercise Price of Derivative Security  3. Transaction Date (Month/Day/Year) |         | Exec<br>if any                | A. Deemed 4. Tecution Date, T |   | I.<br>Fransaction<br>Code (Instr.<br>3)                  |   |       |                               | ite Exer     | ercisable and Date 7. Title and Amount of |                                 | and<br>t of<br>es<br>ring<br>ive Securit  | 8. Price of Speriodic Control |  | umber of<br>vative<br>urities<br>eficially<br>ned<br>owing<br>orted<br>nsaction(s)<br>tr. 4) | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |  |  |
|  |         |                               |                               |   | Code   | v                                       | (A)   | (D)                           | Date<br>Exer | cisable                                   | Expiration<br>Date              | Title   | Amour<br>or<br>Number<br>of<br>Shares   | er   |  |  |  |  |  |  |
| Stock<br>Option<br>(Right to<br>Buy)   | \$0.075 | 03/05/2007                    |                               |   | М  |   |       | 1,000                         | 06/0         | 7/2006                                    | (3)                             | Commo<br>Stock  |   | 0 \$0  |  | 0  | I  | By Burrill<br>&<br>Company<br>LLC <sup>(1)</sup> |  |  |

## **Explanation of Responses:**

- 1. The reporting person is the chief executive officer of Burrill & Company LLC. The reporting person disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein.
- 2. The reporting person is the managing member of Burrill & Company (Biotechnology GP), LLC, the general partner of Burrill Biotechnology Capital Fund L.P. The reporting person disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein.
- 3. This stock option would have expired on the later of (1) the date that is two and one-half months following the end of Burrill & Company LLC's first taxable year during which the option vested, or (2) the date that is two and one-half months following the end of the issuer's taxable year in which the option vested, and in no event after March 15, 2007.

## Remarks:

/s/ Peter A Zorn, Attorney-in-

03/07/2007

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.

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.