FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

| OMB APPROVAL | | | | | | | |
|--------------|-------------------|-----------|--|--|--|--|--|
| | OMB Number: | 3235-0287 | | | | | |
| | Ectimated average | hurdon | | | | | |

| hours per response: | 0.5 |
|--------------------------|-----|
| Estimated average burden | |

| | ss of Reporting Perso | n* | 2. Issuer Name and Ticker or Trading Symbol TARGACEPT INC [TRGT] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | | |
|----------------------------|-----------------------|-------|---|--|-----------------------------------|---|--------------------------|--|--|
| <u>BVF PARTNERS L P/IL</u> | | | | | Director | Х | 10% Owner | | |
| (Last) (First) (Middle) | | | 3. Date of Earliest Transaction (Month/Day/Year) 11/14/2012 | Officer (give title below) | | | Other (specify below) | | |
| | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Individual or Joint/Group Filing (Check Applicable | | | | | |
| (Street) | | | 11/19/2012 | Line) | | | | | |
| CHICAGO | IL | 60611 | | | Form filed by One Reporting Perso | | • | | |
| (City) | (State) | (Zip) | | | Person | | | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) Date (Month/Day/Y | | 2A. Deemed Execution Date, if any (Month/Day/Year) | Transaction Code (Instr. | | | | | 5. Amount of Securities Beneficially Owned Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership |
|---|------------|---|-----------------------------|---|---------------------------|---------------|-------------------------|---|---|---|
| | | | Code | v | Amount | (A) or (D) | Price | Reported Transaction(s) (Instr. 3 and 4) | | (Instr. 4) |
| Common Stock | 11/16/2012 | | р | | 378,000 ⁽⁶⁾⁽⁸⁾ | A | \$3.9997 ⁽⁷⁾ | 2,977,919 ⁽¹⁰⁾ | I (1)(2) | See Explanation of Responses |
| Common Stock | 11/16/2012 | | Р | | 217,000 ⁽⁶⁾⁽⁹⁾ | A | \$3.9997 ⁽⁷⁾ | 1,713,907(10) | I (1)(3) | See Explanation of Responses |
| Common Stock | | | | | | | | 349,482 ⁽¹⁾⁽⁴⁾⁽⁵⁾ | I ⁽¹⁾⁽⁴⁾ | See Explanation of Responses |

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

| | | | | | | | | | | | | | 1 | | | | | | | | |
|---|---|--|---|------------------------------|---|-----|-----|--|--------------------|--|--|--|---|-----------------|--|--|--|---|--|--|--|
| 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. Transa Code (8) | | of | | of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 | | of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | Expiration Date | | nd 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 | | | | | | | | | | |

1. Name and Address of Reporting Person*

BVF PARTNERS L P/IL

| (Last) | (First) | (Middle) | | | | | | |
|----------------------------------|--|----------|--|--|--|--|--|--|
| 900 N. MICHIGAN AVE., SUITE 1100 | | | | | | | | |
| (Street) | | | | | | | | |
| CHICAGO | IL | 60611 | | | | | | |
| (City) | (State) | (Zip) | | | | | | |
| | ess of Reporting Personal Collogy VALU | | | | | | | |
| (Last) | (First) | (Middle) | | | | | | |
| 900 N. MICHIO | GAN AVE., SUITI | E 1100 | | | | | | |
| (Street) | | | | | | | | |
| CHICAGO | IL | 60611 | | | | | | |

| (City) | (State) | (Zip) |
|--|-----------------------------|-----------|
| 1. Name and Address of BIOTECHNOL | Reporting Person* | JND II LP |
| (Last) 900 N. MICHIGAN | (First) AVE., SUITE 1100 | (Middle) |
| (Street) CHICAGO | IL | 60611 |
| (City) | (State) | (Zip) |
| 1. Name and Address of <u>BVF INC/IL</u> | Reporting Person* | |
| (Last) 900 N. MICHIGAN | (First) AVE., SUITE 1100 | (Middle) |
| (Street) CHICAGO | IL | 60611 |
| (City) | (State) | (Zip) |
| 1. Name and Address of LAMPERT MA | | |
| (Last) 900 N. MICHIGAN | (First) AVE., SUITE 1100 | (Middle) |
| (Street) CHICAGO | IL | 60611 |
| (City) | (State) | (Zip) |
| 1. Name and Address of BVF INVESTM | 1 0 | |
| (Last) 900 N. MICHIGAN | (First) AVE., SUITE 1100 | (Middle) |
| (Street) CHICAGO | IL | 60611 |
| (City) | (State) | (Zip) |
| | | |

Explanation of Responses:

1. This Form 4 is filed jointly by Biotechnology Value Fund, L.P. ("BVF"), Biotechnology Value Fund II, L.P. ("BVF2"), BVF Investments, L.L.C. ("BVFLLC"), BVF Partners L.P. ("Partners"), BVF Inc., and Mark Lampert (collectively the "Reporting Persons"). Each of the Reporting Persons may be deemed to be a member of a section 13G group that collectively owns more than 10% of the Issuer's oustanding shares of Common Stock. Each of the Reporting Persons disclaims beneficial ownership of the shares of Common Stock reported herein except to the extent of his or its pecuniary interest therein.

2. Represents shares of Common Stock owned directly by BVF. As the general partner of BVF, Partners may be deemed to beneficially own the shares of Common Stock owned directly by BVF. As the investment adviser and general partner of Partners, BVF Inc., may be deemed to beneficially own the shares of Common Stock owned directly by BVF. As a director and officer of BVF Inc., Mr. Lampert may be deemed to beneficially own the shares of Common Stock owned directly by BVF.

3. Represents shares of Common Stock owned directly by BVF2. As the general partner of BVF2, Partners may be deemed to beneficially own the shares of Common Stock owned directly by BVF2. As the investment adviser and general partner of Partners, BVF Inc., may be deemed to beneficially own the shares of Common Stock owned directly by BVF2. As a director and officer of BVF Inc., Mr. Lampert may be deemed to beneficially own the shares of Common Stock owned directly by BVF2.

4. Represents shares of Common Stock owned directly by BVFLLC. As the manager of BVFLLC, Partners may be deemed to beneficially own the shares of Common Stock owned directly by BVFLLC. As the investment adviser and general partner of Partners, BVF Inc., may be deemed to beneficially own the shares of Common Stock owned directly by BVFLLC. As a director and officer of BVF Inc., Mr. Lampert may be deemed to beneficially own the shares of Common Stock owned directly by BVFLLC. As a director and officer of BVF Inc., Mr. Lampert may be deemed to beneficially own the shares of Common Stock owned directly by BVFLLC.

5. The shares of Common Stock are directly beneficially owned by BVF Investments, L.L.C., a Delaware limited liability company. Pursuant to the operating agreement of BVFLLC, BVF Partners, L.P., a Delaware limited partnership is authorized, among other things, to invest the contributed capital of Samana Capital, L.P., the majority member of BVFLLC, in the shares of Common Stock and other securities and to vote, exercise or convert and dispose of such securities and is entitled to receive fess based on assets under management and, subject to certain exceptions, allocations based on realized and unrealized gains on such assets.

6. Units may represent aggregation of daily trade activity. Details regarding individual execution amounts and prices are available upon request

7. Price amended from the original filing made on 11/19/2012 which reflected a price of \$5.1083 to the corrected price of \$3.9997

8. Quantity amended from the original filing made on 11/19/2012 which reflected a quantity of 46,700 to the corrected quantity of 378,000.

9. Quantity amended from the original filing made on 11/19/2012 which reflected a quantity of 26,800 to the corrected quantity of 217,000.

10. As a result of the amendment to the shares purchased the amount of securities beneficially owned following the reported transaction has been adjusted from the original filing made on 11/19/2012.

Remarks:

BVF Partners L.P., By: BVFInc., its GP, By: /s/ Mark N.11/20/2012Lampert, President11/20/2012BIOTECHNOLOGY VALUE11/20/2012FUND, L.P. By: BVF Partners11/20/2012

| <u>L.P., its GP, By: BVF Inc., By:</u> /s/ Mark N. Lampert, President | |
|--|-------------------|
| BIOTECHNOLOGY VALUE FUND II, L.P., By: BVF Partners L.P., its GP, By: BVF Inc., By: /s/ Mark N. Lampert, President | <u>11/20/2012</u> |
| <u>BVF INC., By: /s/ Mark N.</u> Lampert, President | <u>11/20/2012</u> |
| <u>Mark N. Lampert, By: /s/ Mark</u> <u>N. Lampert</u> | <u>11/20/2012</u> |
| BVF INVESTMENTS, L.L.C., By: BVF Partners L.P., its Manager, By: BVF Inc., By: /s/ Mark N. Lampert, President | <u>11/20/2012</u> |
| ** 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.