

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
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>Jones Elaine V</u> (Last) (First) (Middle) <u>C/O TARGACEPT, INC.</u> <u>200 EAST FIRST STREET, SUITE 300</u> (Street) <u>WINSTON-SALEM NC 27101</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>TARGACEPT INC [TRGT]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>02/23/2007</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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	02/23/2007		M		803	A	\$0.075	1,510,883	I	By EuclidSR Partners, L.P. (1)
Common Stock	02/23/2007		M		197	A	\$0.075	371,945	I	By EuclidSR Biotechnology Partners, L.P. (2)

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
Stock Option (Right to Buy)	\$0.075	02/23/2007		M			803	06/07/2006	(3)	Common Stock	803	\$0	0	I	By EuclidSR Partners L.P. (1)
Stock Option (Right to Buy)	\$0.075	02/23/2007		M			197	06/07/2006	(3)	Common Stock	197	\$0	0	I	By EuclidSR Biotechnology Partners L.P. (2)

Explanation of Responses:

- The reporting person is a general partner of EuclidSR Associates, L.P., the general partner of EuclidSR Partners, L.P. The reporting person disclaims beneficial ownership of these securities except to the extent of her pecuniary interest therein.
- The reporting person is a general partner of EuclidSR Biotechnology Associates, L.P., the general partner of EuclidSR Biotechnology Partners, L.P. The reporting person disclaims beneficial ownership of these securities except to the extent of her pecuniary interest therein.
- This stock option would have expired on the later of (1) the date that is two and one-half months following the end of the recipient'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-Fact 02/27/2007

** 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.

Securities and Exchange Commission
Judiciary Plaza
450 Fifth Street, N.W.
Washington, DC 20549

Re: Targacept, Inc.

Gentlemen:

Pursuant to General Instruction 7 to Form 3 (Initial Statement of Beneficial Ownership), Form 4 (Statement of Changes in Beneficial Ownership) and Form 5 (Annual Statement of Changes in Beneficial Ownership) promulgated by the Securities and Exchange Commission pursuant to Section 16 of the Securities Exchange Act of 1934, the undersigned director, officer and/or shareholder of Targacept, Inc. (the "Company") hereby authorizes and designates Peter A. Zorn, Mauri K. Hodges, and Alan A. Musso, and each of them, to execute and file with the Commission on her behalf any and all statements on Form 3, Form 4 or Form 5 relating to her beneficial ownership of securities of the Company as required by Section 16(a) of the Securities Exchange Act of 1934 and the rules of the Commission promulgated thereunder. This authorization and designation shall be effective for so long as the undersigned remains subject to the provisions of Section 16 of the Securities Exchange Act of 1934.

Effective as of July 18, 2006.

/s/ Elaine V. Jones
Elaine V. Jones
