

Targacept, Inc.
200 East First Street, Suite 300
Winston-Salem, NC 27101

March 16, 2005

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
450 Fifth Street, N.W.
Judiciary Plaza
Washington, D.C. 20549
Attention: Sonia Barros, Esq.

Re: **Targacept, Inc.**
Registration Statement on Form S-1 (SEC File No. 333-115538)

Ladies and Gentlemen:

Pursuant to Rule 477 under the Securities Act of 1933, as amended, we respectfully request that the Registration Statement on Form S-1 of Targacept, Inc. (File Number 333-115538), as amended and together with all exhibits (the "Registration Statement"), be withdrawn. The Registration Statement was initially filed on May 14, 2004, Amendment No. 1 to the Registration Statement was filed on June 21, 2004, Amendment No. 2 to the Registration Statement was filed on July 9, 2004, Amendment No. 3 to the Registration Statement was filed on December 15, 2004, Amendment No. 4 to the Registration Statement was filed on January 20, 2005, Amendment No. 5 to the Registration Statement was filed on February 4, 2005 and Amendment No. 6 to the Registration Statement was filed on February 22, 2005.

This withdrawal request is being made due to difficult market conditions that currently exist for initial public offerings in the life science industry. No securities were sold in connection with the offering described in the Registration Statement.

Please be advised that Targacept may undertake a subsequent private offering of securities in reliance upon Rule 155(c) of the Securities Act.

If you have any questions regarding this request, please call Peter A. Zorn, Targacept's corporate counsel, at 336-480-2115 or Megan N. Gates of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Company, at (617) 348-4443.

Very truly yours,

/s/ J. Donald deBethizy
J. Donald deBethizy
President and Chief Executive Officer

cc: Peter A. Zorn, Esq.
Megan N. Gates, Esq.

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Attention: Sonia Barros, Esq.

Re: **Targacept, Inc.**
Registration Statement on Form 8-A (SEC File No. 000-51173)

Ladies and Gentlemen:

We hereby withdraw the Registration Statement on Form 8-A of Targacept, Inc. (File No. 000-51173), effective as of the date hereof or as soon as practicable hereafter.

If you have any questions regarding this withdrawal, please call Peter A. Zom, Targacept's corporate counsel, at (336) 480-2115 or Megan N. Gates of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to Targacept, at (617) 348-4443.

Very truly yours,

/s/ J. Donald deBethizy
J. Donald deBethizy
President and Chief Executive Officer

cc: Peter A. Zom, Esq.
Megan N. Gates, Esq.