

Five Palo Alto Square
3000 El Camino Real
Palo Alto, CA
94306-2155
Main 650 843-5000
Fax 650 849-7400

www.cooley.com

GLEN Y. SATO
(650) 843-5502
gsato@cooley.com

Broomfield, CO
720 566-4000
Reston, VA
703 456-8000
San Diego, CA
858 550-6000
San Francisco, CA
415 693-2000
Washington, DC
202 842-7800

September 1, 2006

VIA FEDEX

Jeffrey Riedler
Zafar Hassan
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, NE
Mail Stop 6010
Washington, DC 20549-6010

Re: Affymax, Inc.

Ladies and Gentlemen:

On behalf of Affymax, Inc. (the "**Company**"), we are writing to provide you with supplemental information with respect to the Company's Registration Statement on Form S-1, File No. 333-136125 (the "**Registration Statement**") in connection with the Company's proposed initial public offering. This supplemental information is being provided to you in response to comment number 7 received from the staff of the Commission (the "**Staff**"), by letter dated August 22, 2006, with respect to the Registration Statement. Comment number 7 is set forth below.

7. *Throughout the registration statement, you cite various estimates, statistics and facts and figures. Where you provide your own estimates, please explain how you arrived at those estimates and disclose any third-party sources you relied upon. For all other figures, please identify your sources in the registration statement and provide us with marked copies of these sources for our review. Set forth below is an illustrative and not exhaustive list of statements that should be supported:*

- *Recombinant EPO generated over \$12 billion in revenue in 2005... \$8 billion in the U.S., p. 1*
- *"We estimate that \$3 billion is attributable to use of rEPO in patients on dialysis, at least \$3 billion to oncology...", p. 1*
- *Two companies own 50% of Medicare-approved dialysis facilities...80% of the independent, for-profit clinics in the US, p. 7*

We note that there are other statistics and figures used in the registration statement, including in the Business section. Our comment applies to those figures as well.

In response to the Staff's comment, the Company has enclosed a binder with this letter containing marked copies of the third party sources marked to highlight the relevant information.

Cooley Godward LLP

Jeffrey Riedler
Zafar Hasan
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Return of Supplemental Information Request

We hereby request, pursuant to Rule 418(b), the return of the supplemental materials provided in this letter. The Company believes that return of the supplemental information will protect the interests of investors and is consistent with the provisions of the Freedom of Information Act by maintaining in confidence the proprietary market information and analysis contained in tabs 4B, 15 and 18 of the enclosed binder that may, if disseminated, negatively impact the Company's competitive position and provide potential and existing competitors significant insight into the product profile of Hematide, the Company's lead product candidate. If you have any questions or comments, my address and telephone number are as follows: Glen Sato, Cooley Godward LLP, Five Palo Alto Square, 3000 El Camino Real, Palo Alto, California 94306, telephone number (650) 843-5502.

Please acknowledge receipt of this letter by file-stamping the enclosed copy and returning it to my attention in the self-addressed stamped envelope provided herewith.

Please do not hesitate to call the undersigned at (650) 843-5502 or Laura Berezin at (650) 843-5128 if you have any questions or would like any additional information regarding this matter.

Sincerely,



Glen Y. Sato

cc: Arlene M. Morris, *Affymax, Inc.*
Paul B. Cleveland, *Affymax, Inc.*
Laura A. Berezin, *Cooley Godward LLP*
Bruce K. Dallas, *Davis Polk & Wardwell*

Enclosure
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