

Mail Stop 6010

October 16, 2006

Arlene Morris
President and Chief Executive Officer
Affymax, Inc.
4001 Miranda Avenue
Palo Alto, CA 94304

Re: Affymax, Inc.
File 333-136125
Form S-1 filed July 28, 2006

Dear Ms. Morris:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. We note that in your risk factor titled "We have initiated binding arbitration..." you have added disclosure relating to J&J's patent application and state that a patent could be issued this year. Does this revised disclosure reflect new facts which suggest that the patent might be issued? If so, please describe any such facts in the risk factor.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Significant Judgments and Estimates
Revenue Recognition, page 36

2. We acknowledge your response to comment 2. We note that you recognize revenue related to third-party development expense reimbursement pursuant to your arrangement with Takeda as you incur the related expenses. We also note that you recognize revenue related to the manufacture and supply arrangement for Hematide API on a cost basis upon delivery and defer the profit margin indefinitely. Tell us how your accounting treatment for both of these transactions correlates to EITF No. 00-21 and your conclusion that all of the elements involved in the Takeda arrangement represent a single unit of accounting.

Stock-Based Compensation, page 38

3. We acknowledge your response to comment 9 of our letter dated August 31, 2006. Please furnish your letter dated September 15, 2006 regarding stock compensation via EDGAR. Please also revise your filing to disclose and/or provide us with the information that follows.
 - Please tell us and disclose which methodology (i.e. income, market, etc.) management used to retrospectively value the equity instruments issued during the 12 months prior to the most recent balance sheet date, June 30, 2006. Please also disclose the assumptions used in conjunction with that methodology.
 - Please disclose the significant factors underlying the difference between the fair value of your employee share options as of each grant date and your estimated IPO price. That is, disclose how the achievement of each internal milestone discussed on page 5 of the October 2, 2006 letter impacted your fair value assessment at each different point in time. Tell us why you believe that the milestone achievements outlined on page 5 of the October 2, 2006 letter were not considered “true measures” of the company’s fair value, given that you disclose on page 38 that management relied on those milestones in determining the fair value of all compensatory equity instruments leading up to the third-party valuation date of February 10, 2006.
 - It appears you have simply relied on the initial underwriter estimate of fair value for all periods subsequent to February 10, 2006. The underwriter’s preliminary estimate of the ultimate IPO price does not appear to be an appropriate valuation methodology for your pre-IPO equity transactions. In addition, it is not appropriate to revise your valuations based on a change in the IPO price since the fair value on a given date should not change based on subsequent events.
 - Please tell us why a linear, look-back approach, as discussed in your letter dated October 2, 2006, is appropriate given that you achieved significant internally specified milestones during the period, such as your entry into the agreements with Takeda. The linear approach does not appear to be an appropriate valuation methodology.

Notes to Consolidated Financial Statements

Note 8. Stock-Based Compensation, page F-33

4. We acknowledge your response to comment 11 and reissue our comment, as you have not yet disclosed your estimated IPO price. Please revise/update the vested/unvested intrinsic value option information included on page 39 of your MD&A based on your estimated IPO price through the date of the most recent balance sheet presented.
5. We acknowledge your response to comment 12 and will continue to reissue our comment until you have disclosed an estimated offering price. Therefore, please disclose in your financial statements, at a minimum, the following information for equity instruments granted during the 12 months prior to the date of the most recent balance sheet included in the filing: the number of options or shares granted at each applicable date; the related exercise price; the underlying fair value of the common stock; and the intrinsic value, if any. Additionally, please provide all of the above information to us, supplementally, for equity instruments that you issue subsequent to the date of the latest balance sheet that you include in your filing through the date of your latest response.

As appropriate, please amend your filing in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR under the form type label CORRESP. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Amy Bruckner (202) 551-3657 if you have questions regarding comments on the financial statements and related matters. Please contact Zafar Hasan at (202) 551-3653 or me

at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Laura Berezin, Esq.
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