

October 23, 2006

Christian J. Scognamillo

VIA EMAIL

T: (650) 843-5196
cscognamillo@cooley.com

Mary Mast
Amy Bruckner
Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

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

Dear Mary and Amy:

Per our telephone conference on Wednesday, October 18, 2006, on behalf of Affymax, Inc. (the "**Company**"), we are providing a draft supplemental response to comment number 3 received from the staff of the Securities and Exchange Commission (the "**Staff**"), by letter dated October 16, 2006 (the "**Comment Letter**"), with respect to the Company's Registration Statement on Form S-1, File No. 333-136125 (the "**Registration Statement**").

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.*

In response to the Staff's request, we will furnish our letter dated September 15, 2006 via EDGAR.

Stock Based Compensation: Stock Option Grants, January 2005 through September 2006

Summary.

In performing its retrospective analysis for the fair value of the common stock issued for the 12 months prior to June 30, 2006, the Company has reviewed the guidance specified under the AICPA Practice Guide, "Valuation of Privately-Held-Company Equity Securities Issued as Compensation" ("**AICPA Guide**") and selected a market approach. Based on this approach, the Company determined that, adjusting for the changes in stock-based compensation as a result of the changes in stock price, the impact on the financial statements was not material and should not result in any revisions to the financial statements. In response to the Staff's comments, the Company has revised pages [] to add additional disclosure regarding its fair value analysis, in particular replacing references to the valuation provided by the underwriters with fair value calculations conducted by the Company.

Background.

In performing its retrospective analysis, the Company utilized a probability-weighted expected return analysis (the "**Model**"), which is one of the methodologies recommended in the AICPA Guide. Due to the inherent uncertainty and judgment of management (or unrelated third parties) involved in preparing estimates of the valuation of a private company's common stock, the amounts are not subject to precise measurement. The Company reviewed the results produced by the Model and compared them to the linear approach as described below.

Key Assumptions

As a privately held enterprise, there has been no active market to determine the fair value of the common stock and stock options issued by the Company. In using the Model for analysis, the Company reviewed various scenarios. At the relevant measurement dates in the Model tied to the grant of options, there were three possible outcomes: (a) successful clinical program followed by an initial public offering ("IPO"), (b) successful clinical program followed by a sale of the Company and (c) an unsuccessful clinical program resulting in a liquidation of the Company and sale of its assets. The Company did not evaluate a "remain private" or stay independent option, because it is not aware of any biotechnology company that has successfully completed a clinical program and launched a commercial drug while remaining private – the significant amount of capital required to obtain FDA approval means that companies either go public or sell themselves in order to finance their clinical programs.

The Company has assigned percentage probabilities to each of these outcomes as they would have been measured in January 2005, October 2005, July 2006 and September 2006, respectively. The discussion below addresses additional dates of grants in between the measurement dates and the reasons the Company believes no change from the most proximate valuation date is required.

The Company used December 31, 2006 as the assumed date of each liquidity event. This was the estimated date of the Company's IPO throughout the relevant period as reflected in management records and board deliberations. The December 31, 2006 date also corresponds to the period between the anticipated end of the first of the ongoing Phase 2 studies and the beginning of Phase 3 of the Company's most advanced clinical trial. Published data indicate that only approximately 44% of clinical programs successfully transition from Phase 2 to Phase 3, so the Company believes that it was a reasonable date to assume clinical failure and liquidation. The Company also looked at the impact of a potential delay of up to six months on its analysis, and determined that the impact was not significant to valuation. While a sale of the Company could occur at any time, it is often triggered by an imminent public offering, so the same date was assumed to be the liquidity date in the case of a sale of the Company.

IPO Scenario. The equity value of the Company was calculated for the IPO scenario using publicly-traded comparable company equity value as a function of revenues (using the multiple prevailing at the time of each date of measurement), and then applying that multiple to the projected revenues of the Company in 2011 (the first full year of revenues as projected by the Company). The value was then discounted back to the end of 2006. The discount rate from the assumed liquidity event date to the valuation date was approximately equal to the risk-free rate (5%), except in the case of the January 2005 valuation date, where a 25% discount was added for financing risk, because the Company could not at that time complete its clinical program without an additional, significant financing prior to December 2006. The discount rate used from 2011 to the end of 2006 was a risk-adjusted range of 35-45%, consistent with the discount rates applied to estimate IPO value for a biotechnology company with no revenues expected for a number of years.

Sale Scenario. The Company's equity value was calculated in the sale scenario using the multiple of revenues achieved in M&A transactions for comparable companies in the 18-month period preceding each valuation date, applying that to the projected revenues of the company in 2011, and discounting the result back to the assumed liquidity event date of December 2006 at rates from 35-45%. The obtained values were then discounted from the assumed liquidity date back to the valuation date at 5%, approximately the risk-free rate, except in the case of the January 2005 valuation date, where (consistent with the IPO scenario) an additional 25% discount was added for financing risk.

Liquidation Scenario. The liquidation value of the Company was calculated by measuring the cash on the balance sheet at the measurement date, net of liabilities such as remaining lease obligations, and then adding the estimated value of the Company's intellectual property. This required management's judgment, bearing in mind that this sale would occur only in the event of clinical failure. The estimated \$30 million represents the post-money valuation of companies in Phase 1 clinical trials that obtained financing, being used here as an indicator of the high end of potential liquidation value, where the assumption is that another company acquires the intellectual property and begins a different set of clinical trials.

The probability of each of these scenarios has been estimated as it would have been on each of the relevant valuation dates. The earlier dates have a higher probability associated with liquidation following clinical failure and M&A, and gradually clinical failure risk goes down and IPO probability goes up. Management's estimate of the clinical failure risk was based in part on published data from Bain & Company and the Tufts Center of the Study of Drug Development, which indicate that the probability of a drug candidate moving from Phase 1 to Phase 2 clinical trials is approximately 70%, and from Phase 2 to Phase 3 is approximately 44%. The ratio of IPO to M&A probabilities moves from M&A most likely in January 2005 to IPO most likely in late 2006, as preliminary M&A discussions terminated and IPO preparations were completed.

After the equity value of the Company was obtained, it was allocated to the various classes of preferred and common stock, taking into effect the rights and preferences of each class and the warrants and options issued at the relevant date of valuation. Chart A reflects the high and low valuation ranges at the various dates of grant reflected in the Model, with the segmented line reflecting the revised management estimate selected by the Company using the Model

Chart A

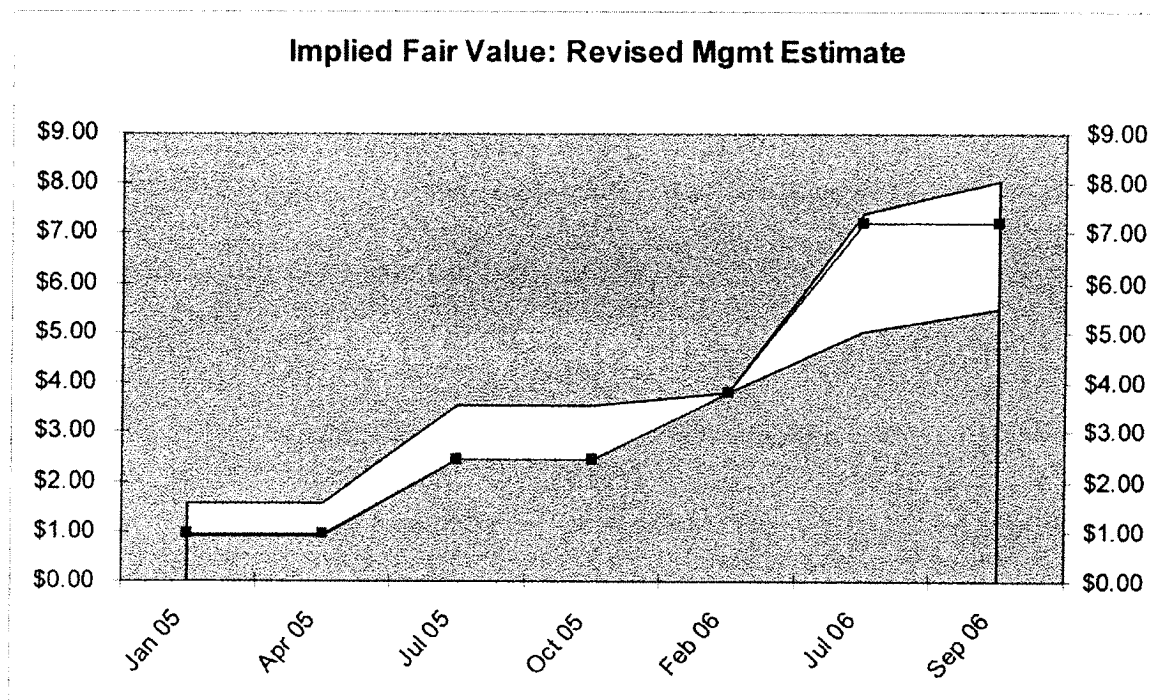


Chart A graphically depicts the following table:

	High	Low	Revised Management Estimate
Jan 05	\$1.57	\$0.90	\$0.97
Apr 05	\$1.57	\$0.90	\$0.97
Jul 05	\$3.53	\$2.45	\$2.45
Oct 05	\$3.53	\$2.45	\$2.45
Feb 06	\$3.80	\$3.80	\$3.80
Jul 06	\$7.41	\$5.02	\$7.20
Sep 06	\$8.05	\$5.48	\$7.20

Chart B depicts the approach used by the Company in its financial statements graphed compared to the range of the high and low prices from the Model.

Chart B

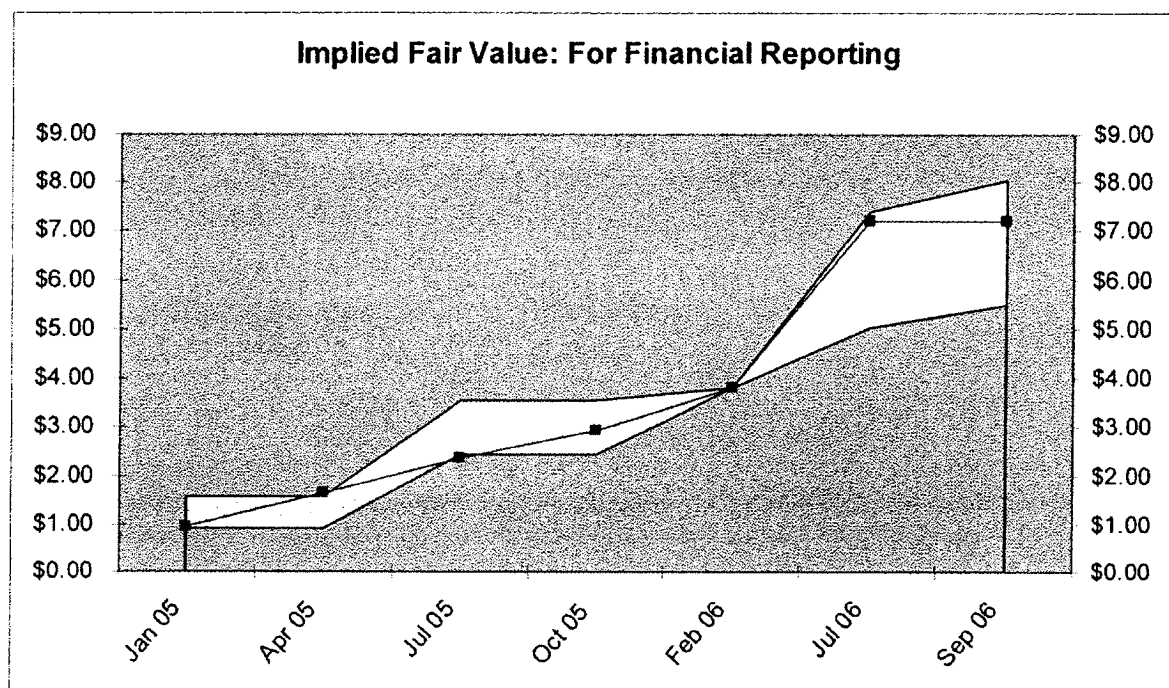


Chart B graphically depicts the following table:

	High	Low	For Financial Reporting
Jan 05	\$1.57	\$0.90	\$0.97
Apr 05	\$1.57	\$0.90	\$1.64
Jul 05	\$3.53	\$2.45	\$2.35
Oct 05	\$3.53	\$2.45	\$2.92
Feb 06	\$3.80	\$3.80	\$3.80
Jul 06	\$7.41	\$5.02	\$7.20
Sep 06	\$8.05	\$5.48	\$7.20

The values and related compensation expense indicated in our letter to the Staff dated October 2, 2006 and reflected in our financial statements, are listed in Table B together with revised implied fair value calculations resulting from the Model for the grants made in 2005 and 2006.

Table B

Grants to Employees and Directors

Grant Date	Options Granted	Exercise Price Per Share	Implied Fair Value for Financial Reporting Purposes of Common Stock Per Share	Implied Intrinsic Value Per Share	Revised Implied Fair Value Per Share	Revised Implied Intrinsic Value Per Share
1/19/2005	65,100	0.20	0.97	0.77	0.97	0.77
4/20/2005	39,000	0.20	1.64	1.44	0.97	0.77
7/26/2005	140,000	0.20	2.35	2.15	2.45	2.25
10/12/2005	32,800	0.20	2.92	2.72	2.45	2.25
2/7/2006	642,891	1.09	3.78	2.69	3.80	2.71
2/10/2006	1,415,000	1.09	3.80	2.71	3.80	2.71
7/28/2006	872,600	4.71	7.20	2.49	7.20	2.49
9/27/2006	249,820	4.71	7.20	2.49	7.20	2.49

On these measurement dates, the key factors considered by the Company and the revision to the valuations from the Model were as follows:

Throughout 2005, the Company elected to use the low end of its valuation range as the Company faced significant risks and the proposals for potential financing transactions in that period of time indicated that the Company was early stage and therefore a significant distance from a more typical IPO company as described in the AICPA Guide.

January and April 2005. No adjustment was made for the January 2005 grant as the implied fair value in the financial statements was consistent with the Model. At this time, the Company was in need of a significant financing in order to complete its near-term clinical plan, with approximately \$23 million in cash in the bank, and the pending initiation of significant and expensive Phase 2 studies. For April 2005, the fair value estimate from the Model remained unchanged from January 2005 and was lower than the \$1.64 in the financial statements. The Model estimate was unchanged as the Company had made incremental progress in initiating the Phase 2a study for pre-dialysis treatment in the first quarter of 2005, but the initiation of this study did not justify an increase in valuation in the Model.

July and October 2005. The July 2005 implied fair value from the Model increased the price per share to \$2.45 from the \$2.35 reflected in the financial statements. In October 2005, the fair value from the Model reduced the price per share from \$2.92 to \$2.45. In both instances, the Model resulted in revisions based upon the factors affecting value at that time. Specifically, the Company's increase in valuation from April 2005 to July 2005 included consideration of the sale of Series D preferred stock in an arms' length transaction at a price of \$3.773 per share in July 2005 and the initiation of the Phase 2b study for dialysis treatment in August 2005, offset by the departure of the Company's Vice President of Business Development during critical partnering discussions which were not progressing well. In the period from July through October 2005, the status of the Company did not change substantively when considered under the Model. The Company notes that the change in valuation for the July 2005 grants did not have a significant impact on stock-based compensation as all of those options were granted and subsequently cancelled within 3 months of the date of grant.

After the retrospective independent valuation by Duff & Phelps in February 2006 based on an income approach, the Company reviewed its assumptions about the possibility of an IPO or acquisition exit. Following the first Takeda collaboration agreement, it became clear that the Company could successfully consider an IPO or acquisition as a reasonable possibility. At that time, the Company determined that the high end of the valuation range was more appropriate for use in determining the stock-based compensation expense.

February 2006. The Company had an unrelated party valuation as the basis for determining the value of the common stock at this time. Specifically, the Duff & Phelps unrelated party valuation, while using an income approach, took into account the higher probabilities of cash flows for an IPO or acquisition stemming from the Takeda collaboration and the significant possibility of a global collaboration as well as the continued progress of the Company's clinical programs, including the commencement of an additional Phase 2a clinical trial in the treatment of cancer.

July and September 2006. These values are within the ranges indicated by the probability weighted expected return analysis of the Model and factored in the higher probability of an IPO. The Company signed the worldwide collaboration agreement with Takeda that brought the Company over \$100 million in cash upfront and commenced the IPO process. The Company's financial model formed the basis for the valuations provided by the underwriters in establishing the price range. The Company determined that \$7.20 per share fair value in the financial statements is reasonable and consistent with the higher end of the potential range of values in the Model and was based on advice at the beginning of the IPO process. The Company elected not to use the high end of the valuation range in the Model as the market was unreceptive to biotechnology IPOs at that time and the Company also delayed moving forward from its originally projected timeline for commencing an IPO.

The Company believes that the additional information provided by the retrospective valuation using the Model provides appropriate evidence to support the reasonable basis for the Company's common stock valuation used in its financial statements. Accordingly, the financial statements have not been revised.



Department of Corporation Finance
October 23, 2006
Page 9 of 9

Finally, we note that all information in this submission is based on a pre-split analysis. The Company's Board of Directors has approved a 1-for-4 reverse stock split and corresponding adjustments will be made the financial information in the Registration Statement in the Company's next filing.

Once we receive the Staff's feedback on the foregoing analysis, the Company will formally respond to comments 3, 4 and 5 of the Comment Letter, file its responses on EDGAR and revise the Registration Statement accordingly.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Scognamillo", with a long horizontal flourish extending to the right.

Christian J. Scognamillo

cc: Paul B. Cleveland, *Affymax, Inc.*
Laura A. Berezin, *Cooley Godward Kronish LLP*
Glen Y. Sato, *Cooley Godward Kronish LLP*
Greg N. Vlahos, *PricewaterhouseCoopers*
Bruce K. Dallas, *Davis Polk & Wardwell*
Tania Devilliers, *PricewaterhouseCoopers*

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