NEOGENOMICS, INC.
12701 COMMONWEALTH DRIVE, SUITE 9
FORT MYERS, FLORIDA 33913

March 31, 2008

Ms. Tia Jenkins
Senior Assistant Chief Accountant
Securities and Exchange Commission
100 F Street, N.E.
Mail Stop 3561
Washington, D.C. 20549

Re: **NeoGenomics, Inc. (the "Company")**
Form 10-KSB/A for the Fiscal Year Ended December 31, 2006
Filed September 11, 2007
File No. 333-72097

Dear Ms. Jenkins:

We are providing this letter in response to the comments included in the Staff's letter dated October 9, 2007 regarding the Company's Annual Report on Form 10-KSB/A for the Fiscal Year Ended December 31, 2006, as filed with the Commission on September 11, 2007.

Form 10-KSB for the Year Ended December 31, 2006

Item 6. Management's Discussion and Analysis or Plan of Operation

Critical Accounting Policies, page 26

COMMENT 1: We have reviewed your response to comment 1. Your response did not address our comment in its entirety, thus the comment has been partially reissued. Disclose in a comparative tabular format, the payor mix concentrations and related aging of accounts receivable. The aging schedule may be based on management's own reporting criteria (i.e, unbilled, less than 30 days, 30 to 60 days etc.) or some other reasonable presentation. At a minimum, the disclosure should indicate the past due amounts and a breakdown by payor classification (i.e., Medicare, Medicaid, Managed care and other, and Self-pay). We would expect Self-pay to be separately classified from any other grouping. If your billing system does not have the capacity to provide an aging schedule of your receivables, disclose that fact and clarify how this affects your ability to estimate your allowance for bad debts.

RESPONSE: **In response to the Staff's comments above, the Company has revised its disclosure in the Amended Annual Report on Form 10-K/A1 with respect to accounts receivable to add the following paragraph and tables with the required aging schedule by payer classifications for each of 2005 and 2006. Our revised disclosure and tabular presentation provides amounts associated with Self-pay.**

Accounts Receivable

We record accounts receivable net of estimated discounts, contractual allowances and allowances for bad debts. We provide for accounts receivable that could become uncollectible in the future by establishing an allowance to reduce the carrying value of such receivables to their estimated net realizable value. We estimate this allowance based on the aging of our accounts receivable and our historical collection experience for each type of payer. Receivables are charged off to the allowance account at the time they are deemed uncollectible. In the event that the actual amount of payment received differs from the previously recorded estimate of an account receivable, an adjustment to revenue is made in the current period at the time of final collection and settlement. During 2006, we recorded approximately $55,000 of net total incremental revenue from tests in which we underestimated the revenue in 2005 relative to the amounts that we were ultimately paid in 2006. This was less than 1% of our total FY 2006 revenue and less than 3% of our FY 2005 revenue. These adjustments are not material to the Company's results of operations in any period presented. Our estimates of net revenue are subject to change based on the contractual status and payment policies of the third party payer's with whom we deal. We regularly refine our estimates in order to make our estimated revenue for future periods as accurate as possible based on our most recent collection experience with each third party payer.

The following tables present the dollars and percentage of the Company's net accounts receivable from customers outstanding by aging category at December 31, 2006 and 2005. All of our receivables were pending approval by third-party payers as of the date that the receivables were recorded.

FY 2006

Payer Group	0-30	%	30-60	%	60-90	%	90-120	%	>120	%	Total	%
Client	$146,005	9%	$150,698	10%	$ 79,481	5%	$ 8,606	1%	$ 33,827	2%	$ 418,618	27%
Commercial Insurance	133,333	8%	105,464	7%	58,026	4%	48,847	3%	35,248	2%	380,919	24%
Medicare	293,298	19%	282,463	18%	71,283	5%	68,830	4%	56,598	4%	772,472	49%
Medicaid	325	0%	650	0%	2,588	0%	400	0%	-	0%	3,963	0%
Self-Pay	135	0%	2,058	0%	723	0%	-	0%	-	0%	2,916	0%
Total	$573,096	36%	$541,334	34%	$212,102	13%	$126,684	8%	$125,672	8%	$1,578,887	100%

FY 2005

Payer Group	0-30	%	30-60	%	60-90	%	90-120	%	>120	%	Total	%
Client	$ 93,494	16%	$ 91,922	16%	$ 27,619	5%	$ 15,799	3%	$ 14,508	3%	$ 243,341	43%
Commercial Insurance	34,993	6%	46,234	8%	14,132	2%	21,810	4%	14,642	3%	131,811	23%
Medicare	115,484	20%	26,905	5%	16,668	3%	10,618	2%	15,777	3%	185,452	32%
Medicaid	1,183	0%	354	0%	950	0%	1,624	0%	288	0%	4,399	1%
Self-Pay	1,304	0%	1,755	0%	2,382	0%	1,445	0%	-	0%	6,885	1%
Total	$246,457	43%	$167,170	29%	$ 61,750	11%	$ 51,296	9%	$ 45,215	8%	$ 571,888	100%

Notes to Consolidated Financial Statements

Note E - Incentive Stock Options and Awards, page 62

COMMENT 2:

We have reviewed your response to comment 2. It appears that you are unable to utilize an implied volatility as the information obtained was not applicable to the stock options issued, therefore you are looking to historical volatility over a three month period prior to the grant date of the options. This methodology does not appear consistent with paragraph A32(a) of SFAS No. 123(R), which states that entities should consider historical volatility over a period generally commensurate with the expected or contractual term, as applicable, of the share option. Under Question 2 Item 5 of SAB Topic 14D there may be some instances in which, due to a Company's particular business situations a period of historical volatility data is not relevant. In these instances, that period should be disregarded. We believe that if a period of historical is disregarded, you should be prepared to support your conclusion that your historical share price during that previous period is not relevant to estimating expected volatility due to one or more discrete and specific historical events and that similar events are not expected to occur during the expected term of the share option. Please advise or revise.

RESPONSE: **Since we experienced a change of control on April 15, 2003 and subsequently changed our business focus, there is not sufficient historical trading data available in our stock in order to have relevant historical volatility over a period generally commensurate with the expected terms of our options. As a result, in accordance with the guidance outlined in the interpretive response to question 6 of Topic 14D of Staff Accounting Bulletin 107, we identified a peer group of three companies with similar characteristics as the Company, and used a blended average of the historical volatilities of these peers over historical periods which were commensurate with the expected term of each option. We also incorporated NeoGenomics historical volatility into this blended average for those options grants where we had relevant historical data for NeoGenomics.**

In addition, we engaged Lougheed & Company LLC, (a Tampa, Florida based company that specializes, among other areas, in valuing stock-based compensation awards and arrangements for publicly-traded companies) to revalue our stock option grants using a trinomial lattice model instead of the Black-Scholes model we had previously used. As a result, our disclosure around stock-based compensation in our 2006 10-K/A1 has been amended to reflect this change in methodology for calculating stock based compensation. Exhibit A to this letter includes the new language included in our 2006 Amended 10-K/A1 in the following two sections: a) Critical Accounting Policies in MD&A and b) NOTE E of the Financial Statement dealing with Stock-Based Compensation.

As part of the aforementioned process, our share-based payment arrangements and accounting therefore under SFAS123R was scrutinized and reconsidered. Several assumptions underlying the selected valuation technique were modified to comply with SFAS123R and SAB107. Notwithstanding the foregoing, the 2006 stock-based compensation expense we calculated using this revised methodology was only approximately $6,700 higher than what we had previously recorded. As this difference is not material to our financial statements, either quantitatively or qualitatively, we have chosen not to restate our stock-based compensation expense for 2006. We have, however, corrected a few minor disclosure errors in the presentation of our option information in NOTE E to the financial statements and in Item 5 dealing with Securities Authorized for Issuance under Equity Compensation Plans.

Note G - Other Related Party Transactions, pape_68

COMMENT 3: We reviewed your response to comment 3, noting the Company utilized a market price of $0.35 in determining the fair value of the warrants. It appears the market price of your common stock on March 23, 2005 was $0.58. Please advise or revise.

RESPONSE: **The measurement date for the subject warrants was, in fact, February 18, 2005 on which date the closing share-price was $0.35. Our policy is to record our share-based payment arrangements on measurement dates established in accounting standards. On February 18, 2005 the Company and the warrant holder had agreed to all of the pertinent terms and conditions and executed a binding agreement regarding such warrants. We have revised the note to clarify the measurement date for these warrants.**

We trust that this response satisfactorily responds to your comments. Attached to this letter is a black-lined copy of our proposed second amended 10-KSB showing the changes from the first amended 10-KSB filed on September 11, 2007. Upon confirmation that this disclosure adequately addresses your concerns, we will file this second amended Form 10-KSB/A. Should you require further information, please contact Clayton Parker, Esq. at (305) 539-3300 or Steven Jones, our Acting Chief Financial Officer at (239) 325-2001, or myself at (239) 768-0600.

Thank you very much for your consideration of this response.

Very truly yours,

/s/ Robert P. Gasparini
Robert P. Gasparini
President and Chief Executive Officer

EXHIBIT A

ITEM 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION

Excerpted discussion on Stock-Based Compensation from Critical Accounting Policies section of MD&A

Stock-Based Compensation

Prior to January 1, 2006, we accounted for stock-based awards and our Employee Stock Purchase Plan using the intrinsic method in accordance with APB Opinion No. 25, "*Accounting for Stock Issued to Employees"*, FASB Interpretation No. 44 ("FIN 44") *"Accounting for Certain Transactions Involving Stock-Based Compensation, an Interpretation of APB Opinion No. 25"*,FASB Technical Bulletin No. 97-1 ("FTB 97-1") *"Accounting under Statement 123 for Certain Employee Stock Purchase Plans with a Look-Back Option",* and related interpretations and provided the required pro forma disclosures of SFAS 123 *"Accounting for Stock-Based Compensation*". In accordance with APB 25, a non-cash, stock-based compensation expense was recognized for any options for which the exercise price was below the market price on the actual grant date and for any grants that were modified from their original terms. The charge for the options with an exercise price below the market price on the actual grant date was equal to the number of options multiplied by the difference between the exercise price and the market price of the option shares on the actual grant date. That expense was amortized over the vesting period of the options. The charge for modifications of options in general was equal to the number of options modified multiplied by the difference between the market price of the options on the modification date and the grant price. The charge for modified options was taken over the remaining service period, if any.

Effective January 1, 2006, we adopted SFAS 123(R), which requires the measurement at fair value and recognition of compensation expense for all stock-based payment awards. We selected the modified prospective method of adoption which recognizes compensation expense for the fair value of all stock-based payments granted after January 1, 2006 and for the fair value of all awards granted to employees prior to January 1, 2006 that remain unvested on the date of adoption. We used the trinomial lattice valuation model to estimate fair value of stock option grants made on or after January 1, 2006. The trinomial lattice option-pricing model requires the estimation of highly complex and subjective variables. These variables include expected volatility, expected life of the award, expected dividend rate and expected risk-free rate of return. The assumptions for expected volatility and expected life are the two assumptions that most significantly affect the grant date fair value. The expected volatility is a blended rate based on both the historical volatility of our stock price and the volatility of certain peer company stock prices. The expected term assumption for our stock option grants was determined using trinomial lattice simulation model which projects future option holder behavior patterns based upon actual historical option exercises. SFAS 123(R) also requires the application of a forfeiture rate to the calculated fair value of stock options on a prospective basis. Our assumption of forfeiture rate represents the historical rate at which our stock-based awards were surrendered prior to vesting over the trailing four years. If our assumption of forfeiture rate changes, we would have to make a cumulative adjustment in the current period. We monitor the assumptions used to compute the fair value of our stock options and ESPP awards on a regular basis and we will revise our assumptions as appropriate. See Note A – Formation and Operations of the Company and Summary of Significant Accounting Policies section, "Stock-based compensation" subsection and Note E – Stock Based Compensation in the Notes to Consolidated Financial Statements for more information regarding the valuation of stock-based compensation.

ITEM 7. FINANCIAL STATEMENTS

Excerpted Note E from the Notes to the Financial Statements

NOTE E - STOCK-BASED COMPENSATION

Stock Option Plan

On October 31, 2006, our shareholders and Board of Directors amended and restated the NeoGenomics Equity Incentive Plan, which was originally approved in October 2003 (the "Plan"). The Plan permits the grant of stock awards and stock options to officers, directors, employees and consultants. Options granted under the Plan are either outright stock awards, Incentive Stock Options ("ISOs") or Non-Qualified Stock Options ("NQSO's). As part of this amendment and restatement, the shareholders and Board of Directors approved an increase in the shares reserved under the Plan from 10% of our outstanding common stock at any given time to 12% of our Adjusted Diluted Shares Outstanding, which equated to 3,819,890 shares of our common stock as of December 31, 2006. Adjusted Diluted Shares Outstanding are defined as basic common shares outstanding on the measurement date plus that number of shares that would be issued if all convertible debt, convertible preferred equity securities and warrants were assumed to be converted into common stock on the measurement date. The definition of Adjusted Diluted Shares Outstanding specifically excludes any unexercised stock options that may be outstanding under either the Stock Option Plan or the ESPP on any measurement date. As of December 31, 2006, option and stock awards totaling 2,107,000 shares were outstanding and 322,049 option and stock awards had been exercised, leaving a total of 1,390,841 options and stock awards available for future issuance. Options typically have a 10 year life and vest over 3 or 4 years but each grant's vesting and exercise price provisions are determined at the time the awards are granted by the Compensation Committee of the Board of Directors or by the President by virtue of authority delegated to him by the Compensation Committee.

Adoption of SFAS 123(R)

Effective January 1, 2006, we adopted SFAS 123(R), which requires the measurement and recognition of compensation expense in the Company's statement of operations for all share-based payment awards made to our employees and directors, including employee stock options and employee stock purchases related to all our stock-based compensation plans based on estimated fair values.

SFAS 123(R) requires companies to estimate the fair value of stock-based compensation on the date of grant using an option-pricing model. The fair value of the award is recognized as expense over the requisite service periods in our consolidated statement of operations using the straight-line method consistent with the methodology used under SFAS 123. Under SFAS 123(R) the attributed stock-based compensation expense must be reduced by an estimate of the annualized rate of stock option forfeitures. The unrecognized expense of awards not yet vested at the date of adoption is recognized in net income (loss) in the periods after the date of adoption, using the same valuation method and assumptions determined under the original provisions of SFAS 123. Additionally, our deferred stock compensation balance of $2,685 as of December 31, 2005, which was accounted for under APB 25, was reclassified into its additional paid in capital upon the adoption of SFAS 123(R) on January 1, 2006.

We estimate the fair value of stock-based awards using the trinomial lattice model. We also used the trinomial lattice model in preparing the pro forma disclosure required under SFAS 123 for the year ended December 31, 2005. This model determines the fair value of stock-based compensation and is affected by our stock price on the date of the grant as well as assumptions regarding a number of highly complex and subjective variables. These variables include expected term, expected risk-free rate of return, expected volatility, and expected dividend yield, each of which is more fully described below. The assumptions for expected term and expected volatility are the two assumptions that significantly affect the grant date fair value.

Expected Term: The expected term of an option is the period of time that such option is expected to be outstanding. The average expected term is determined using the trinomial lattice simulation model.

Risk-free Interest Rate: We base the risk-free interest rate used in the trinomial lattice valuation method on the implied yield at the grant date of the U.S. Treasury zero-coupon issue with an equivalent term to the stock-based award being valued. Where the expected term of a stock-based award does not correspond with the term for which a zero coupon interest rate is quoted, we used the nearest interest rate from the available maturities.

Expected Stock Price Volatility: Effective January 1, 2006, we evaluated the assumptions used to estimate volatility and determined that, under SAB 107, we should use a blended average of our volatility and the volatility of the nearest peer companies. We believe that the use of this blended average peer volatility is more reflective of market conditions and a better indicator of our expected volatility due to the limited trading history available for our Company since its last change of control, prior to which we operated under a different business model.

Dividend Yield: Since we have never paid a dividend and do not expect to begin doing so in the foreseeable future, we have assumed a 0% dividend yield in valuing our stock-based awards.

The fair value of stock option awards granted during the years ended December 31, 2006 and 2005 were estimated as of the grant date using the trinomial lattice model with the following weighted average assumptions:

	2006	2005
xpected term (in years)	5.5	5.8
isk-free interest rate (%)	4.8%	3.7%
Expected volatility (%)	36%	37%
ividend yield (%)	0.0%	0.0%
Weighted average fair value/share at grant date	$ 0.23	$ 0.08

As a result of adopting SFAS No. 123(R), the Company's net loss for the year ended December 31, 2006 was approximately $60,000 greater than if the Company had continued to account for share-based compensation under Accounting Principles Bulletin no. 25, "Accounting for Stock Issued to Employees" ("APB No. 25"). Basic and diluted loss per share for the year ended December 31, 2006 would have been ($0.00) had the Company not adopted SFAS No. 123(R), compared to reported basic and diluted loss per share of ($0.00) that was reported for such period.

The effect of recording stock-based compensation related to stock option grants under the Plan in accordance with SFAS 123(R) for the year-ended December, 2006 was as follows:

	2006
Stock-based compensation for employee stock options	$ 63,730
ıx effect on stock-based compensation	-
ɛt effect of stock-based compensation	$ 63,730
Effect on net loss per weighted average share	
Basic	$ 0.00
Diluted	$ 0.00

Periods prior to the adoption of SFAS 123(R)

Prior to January 1, 2006, we accounted for employee stock-based awards using the intrinsic value method in accordance with APB 25, FASB Interpretation No. 44 ("FIN 44") *"Accounting for Certain Transactions Involving Stock-Based Compensation, an Interpretation of APB Opinion No. 25",* FASB Technical Bulletin No. 97-1 ("FTB 97-1") "*Accounting under Statement 123 for Certain Employee Stock Purchase Plans with a Look-Back Option*", and related interpretations. The Company accounted for non-employee stock-based awards under the fair value method in accordance with EITF No. 96-18 " *Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*". Under the intrinsic value method, no stock-based compensation expense for options had been recognized in the Company's Consolidated Statement of Operations if the exercise price of the Company's stock options granted to employees and directors equaled the fair market value of the underlying stock at the date of grant.

Had stock-based compensation for 2005 been determined based on the estimated fair value at the grant date for all equity awards consistent with the provisions of SFAS 123, the Company's net income and earnings per share for the years ended December 31, 2005 would have been adjusted to the following pro forma amounts:

	2005
Net loss, as reported	$ (997,160)
Add: Stock-based compensation expense included in reported net earnings, net of tax	2,953
Deduct: Stock-based compensation expense determined under the fair value method, net of tax	(57,162)
Pro forma, net loss	$ (1,051,369)
Basic and Diluted net loss per weighted average share	
As reported	$ (0.04)
Pro forma	$ (0.05)

The following table summarizes stock option activity under the Plan for the two years ended December 31, 2006:

	Number of Shares	Weighted Average Exercise Price
Outstanding at December 31, 2004	882,329	$ 0.16
Granted	1,442,235	0.27
Exercised	(42,235)	0.00
Canceled	(547,329)	0.11
Outstanding at December 31, 2005	1,735,000	0.27
Granted	1,011,897	0.68
Exercised	(211,814)	0.30
Canceled	(428,083)	0.42
Outstanding at December 31, 2006	2,107,000	0.43
Exercisable at December 31, 2006	1,161,416	$ 0.28

The following table summarizes the information about stock options outstanding and exercisable as of December 31, 2006:

Options Outstanding, Expected to Vest				Options Exercisable		
Ranges of Exercise Prices	**Number Outstanding**	**Weighted Average Remaining Contractual Life**	**Weighted Average Exercise price**	**Number Exercisable**	**Weighted Average Remaining Life**	**Weighted Average Exercise price**
0.00 – 0.30	1,287,000	7.6	$ 0.25	1,030,500	7,5	$ 0.25
0.31 – 0.46	179,250	8.6	0.35	82,166	8.5	0.35
0.47 – 0.71	407,750	9.4	0.62	28,750	7.7	0.61
0.72 – 1.08	85,000	9.7	0.99	-	0.0	0.00
1.09 – 1.47	148,000	9.9	1.29	20,000	9.9	1.29
	2,107,000	**8.3**	**$ 0.43**	**1,161,416**	**7.6**	**$ 0.28**

As of December 31, 2006, the aggregate intrinsic value of all stock options outstanding and expected to vest was approximately $2.3 million and the aggregate intrinsic value of currently exercisable stock options was approximately $1.4 million. The Intrinsic value of each option share is the difference between the fair market value of NeoGenomics common stock and the exercise price of such option share to the extent it is “in-the-money”. Aggregate Intrinsic value represents the value that would have been received by the holders of in-the-money options had they exercised their options on the last trading day of the year and sold the underlying shares at the closing stock price on such day. The intrinsic value calculation is based on the $1.50 closing stock price of NeoGenomics Common Stock on December 29, 2006, the last trading day of 2006. The total number of in-the-money options outstanding and exercisable as of December 31, 2006 was 1,161,416.

The total intrinsic value of options exercised during the years ended December 31, 2006 and 2005 was approximately $215,000 and $0, respectively. Intrinsic value of exercised shares is the total value of such shares on the date of exercise less the cash received from the option holder to exercise the options. The total cash proceeds received from the exercise of stock options was approximately $63,000 and $0 for the years ended December 31, 2006 and 2005, respectively. No tax benefits were realized by the Company in either 2006 or 2005 as a result of stock option exercises. The total fair value of option shares vested during the years ended December 31, 2006 and 2005, was approximately $96,000 and $67,000, respectively.

As of December 31, 2006, there was approximately $126,000 of total unrecognized stock-based compensation cost, net of expected forfeitures, related to unvested stock options granted under the Plan. This cost is expected to be recognized over a weighted-average period of 2.3 years.

Employee Stock Purchase Plan

On October 31, 2006, our shareholders and Board of Directors approved an Employee Stock Purchase Plan (“ESPP”) effective January 1, 2007. The ESPP as approved stipulates that the rights to purchase shares granted under the plan be considered options issued under an "employee stock purchase plan," as that term is defined in Section 423(b) of the Code. The number of shares reserved for issuance under the ESPP has been set to equal 1% of the Adjusted Diluted Shares Outstanding (as defined above) at any given time. Under the terms of the ESPP, the Board of Directors has been authorized to set the parameters of any particular offering, provided, however, that no rights to purchase shares may be offered to employees at a price which is less than 95% of the fair market value of our common stock. The Board of Directors has further delegated the authority to administer the ESPP to the Compensation Committee and directed the Compensation Committee to ensure that no offerings under the plan are compensable events under SFAS 123(R), which effectively limits any offering period under the plan to 30 days. The Company’s ESPP plan is considered exempt from fair value accounting under SFAS No. 123R since the discount offered to employees is only 5%.