



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-5546

Mail Stop 3561

December 30, 2008

Mr. Robert P. Gasparini, President
NeoGenomics, Inc.
12701 Commonwealth Drive, Suite 9
Fort Myers, Florida 33913

Re: NeoGenomics, Inc.
Registration Statement on Form S-1
File No. 333-155784
Filed November 28, 2008

Dear Mr. Gasparini:

We have limited our review of your filing to those issues we have addressed in our 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 information so we may better understand your disclosure. After reviewing this information, we may 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 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 you are registering the resale of up to seven million shares of common stock, three million of which relate to the Fusion Capital transaction. Given the size of the shares to be registered pursuant to the Fusion Capital transaction relative to the number of shares outstanding held by non-affiliates, the nature of the offering, and the total amount of shares being sold by selling shareholders, we view the transaction to be a primary offering that can only

proceed on an at-the-market basis under Rule 415(a)(4) if the company is eligible to conduct a primary offering on Form S-3. Please revise accordingly.

2. Also, we note that you are registering the sale of over three million shares on behalf of, among others, your acting principal financial officer, Mr. Steven Jones, and what appears to be your largest shareholder, an entity described on page 15 as a controlling shareholder and whose general partner is controlled by Mr. Jones. Given the size of the selling shareholder offering and the proposed sales by what appear to be controlling shareholders and affiliates, please advise the staff of the company's basis for determining that the transaction is appropriately characterized as a transaction that is eligible to be made on a shelf basis under Rule 415(a)(1)(i).
3. With a view to disclosure, advise us of any discount to market or similar provision for the Fusion Capital shares. In this regard, it is unclear whether or not dilution caused by the Fusion Capital transaction, as described in the first risk factor on page 19, would be caused solely by the a large number of shares sold at the market price.

Condensed Consolidated Balance Sheet, F-1

4. Please revise to include an audited balance sheet for the fiscal year ended December 31, 2006 in accordance with Rule 8-02 of Regulation S-X.

Form 10-KSB, Filed April 14, 2008

5. Please amend your Form 10-KSB for the fiscal year end December 31, 2007 to include the proper certifications required by Sections 302 and 906 of the Sarbanes-Oxley Act of 2002. See Items 601(a)(31) and (32) of Regulation S-K.

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As appropriate, please amend your registration statement 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 information. Detailed cover letters greatly facilitate our review. 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 filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as 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.

Please contact Edwin Kim at (202) 551-3297, Jim Lopez, Legal Branch Chief, at (202) 551-3536, or me at (202) 551-3790 with any questions.

Sincerely,

John Reynolds
Assistant Director

cc: Clayton E. Parker, Esq.
Fax: (305) 358-7095