



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

August 4, 2008

VIA U.S. MAIL AND FAX (770) 424-8236

John C. Thomas Jr.
Principal Financial Officer
Mimedx Group, Inc.
1234 Airport Road, Suite 105
Destin, Florida 32541

Re: Mimedx Group, Inc.
Form 10-K for the year ended March 31, 2008
Filed June 27, 2008
File No. 000-52491

Dear Mr. Thomas:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. 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.

Form 10-K for the year ended March 31, 2008

Financial Statements and Supplementary Data, page 41

1. Formation and nature of business:, page 48

Nature of business:, page 48

1. We note that you accounted for the reverse merger between Alynx, Co. and MiMedx, Inc. as a capital transaction. While we do not object to your accounting, in future filings, please expand your disclosure, if true, to describe that the historical financial statements are a continuation of the financial statements of the accounting acquirer and the capital structure of the consolidated enterprise is now different from that appearing in the historical financial statements of the accounting acquirer in earlier periods due to the recapitalization.

7. Stockholders' equity:, page 55

Registration rights agreement:, page 57

2. We note that certain shareholders of your company presently have registration rights. Please explain to us about the major terms including penalties and liquidated damages (if any) of the registration rights. Please explain to us how you accounted for the registration rights and how you considered the impact of the guidance at FSP EITF 00-19-2. Please revise your disclosure in future filings to address our concerns.

Warrants:, page 60

3. We note that you had 709,331 warrants outstanding at March 31, 2008. Please explain to us and revise your future filings to describe the major terms of these warrants. Also in your explanation, please include how you accounted for the warrants and how you considered the guidance at SFAS 150, EITF 00-19 and SFAS 133.

Controls and Procedures, page 63

Evaluation of Disclosure Controls and Procedures, page 64

4. We note you did not complete the evaluation of disclosure control and procedures as of the end of the period as required by Item 307 of Regulation S-K. Please provide us with a detailed discussion of your basis for your conclusion that you did not have to complete the evaluation and include management's conclusion in this 10-K.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter 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 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 Exchange Act of 1934 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments 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 our review of your filing or in response to our comments on your filing.

You may contact Andri Boerman, Staff Accountant, at (202) 551-3645 or me at (202) 551-3603 if you have any questions regarding these comments. In this regard, do not hesitate to contact Angela Crane, Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb
Reviewing Accountant