



August 15, 2008

**VIA EDGAR AND FACSIMILE**

Mr. Jay Webb  
Reviewing Accountant  
Securities and Exchange Commission  
Division of Corporation Finance  
Mail Stop 6010  
Washington, DC 20549

Re: MiMedx Group, Inc.  
Form 10-K for the Year Ended March 31, 2008  
Filed June 27, 2008  
File Number 000-52491

Dear Mr. Webb:

The following comments are in response to your letter dated August 4, 2008 to MiMedx Group, Inc. (the "Company") concerning the above-referenced filing.

The comments from your letter are reproduced below in bold-faced text followed by the Company's responses.

**1. Formation and nature of business; page 48**

**Nature of business, page 48**

- 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.***

In future filings, we plan to propose to revise the paragraph that was the second paragraph of Note 1 as set forth below. The additions are underlined:

Under U.S. generally accepted accounting principles ("GAAP"), MiMedx was deemed to be the accounting acquirer since the shareholders of MiMedx own a substantial majority of the issued and outstanding shares, and thus this reverse merger was accounted for as a capital transaction. The historical financial statements are a continuation of the financial statements of the accounting acquirer. The capital structure of the consolidated enterprise is now different from that appearing on the historical financial statements of the accounting acquirer in earlier periods due to the recapitalization.

MiMedx, Inc. • 3802 Spectrum Blvd., Suite 300 • Tampa, FL 33612-9218 • P: 813.866.0000 • F: 813.866.0012 • www.mimedx.com

---

**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.*

The registration rights agreements that we refer to at Note 7 of the financial statements under the heading "Registration Rights Agreement" do not impose either penalties or liquidated damages for any reason. There is no requirement that we transfer consideration to the holders of registration rights if the registration statement is not declared effective or maintained. Accordingly, there is no "registration payment arrangement" as defined in FASB Staff Position on EITF 00-19-2, Accounting for Registration Payment Arrangements ("FSP EITF 00-19-2"). We propose to revise our Note 7 under the heading "Registration Rights Agreement," in future filings to add additional detail as to the major terms of the registration rights as set forth below. The changes are underlined.

*Registration rights:*

Certain shareholders of the Company have registration rights covering 18,420,200 shares of the Company's common stock pursuant to an agreement dated July 23, 2007. The rights will be effective nine months after the Company either closes an underwritten public offering or receives in the aggregate a minimum of \$10,000,000 in cash from the sale or a series of related sales of the Company's securities at a time when its equity securities are registered under Section 12 of the Exchange Act. As such, these are contingent rights subject to events within the Company's control. When and if these events occur and the nine month period expires, the majority of the holders of the registration rights can demand that the Company use its best efforts to register such shares on up to two occasions but not more than once in any 12-month period, subject to certain restrictions. The holders of those shares also have certain piggyback registration rights. The various registration rights expire upon the earlier of the fifth anniversary from when the Company has its first underwritten public offering or the date when the holder of such shares is able to sell the registrable shares under Rule 144. Pursuant to a separate registration rights agreement, dated February 8, 2008, the holders of approximately 17,600 additional shares of the Company's common stock have piggyback registration rights which are substantially the same as those granted in July 2007. The registration rights agreements do not require the Company to pay any consideration to holders if an SEC registration statement is not declared effective or maintained. Beginning February 9, 2009, most, if not all, of the shares subject to the registration rights agreements will be eligible for sale pursuant to Rule 144. Approximately 966,667 of the shares are held by persons who are affiliates. Affiliates will be subject to the condition that the Company be current in its filings before they may utilize Rule 144, and to Rule 144 volume limitations.

**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.*

To determine the proper accounting treatment for the warrants, we performed a thorough review of the accounting literature and in particular relied upon the guidance provided by the SEC Current Accounting and Disclosure Issues in the Division of Corporation Finance on November 2006 (the "November 2006 CADI"), Statement of Financial Accounting Standards No. 150, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity ("SFAS 150"), and Statement of Financial Accounting Standards No. 133, Accounting for Derivative Instruments and Hedging Activities ("SFAS 133"), EITF Issue No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock ("EITF 00-19").

We believe that the warrants do not fall within the scope of SFAS 150 as they do not meet the definition of any of three types of instruments covered by SFAS 150 in that they are not (1) mandatorily redeemable financial instruments, (2) obligations to repurchase the Company's equity shares by transferring assets or (3) obligations to issue a variable number of shares as specified in Paragraph 12 of SFAS 150.

We then considered SFAS 133 which establishes the accounting and reporting standards for derivative instruments. When determining whether the warrants were within the scope of SFAS 133, the Company considered the scope exceptions discussed in paragraph 11(a) thereof. Paragraph 11(a) of SFAS 133 provides that if the contract issued is both (1) indexed to its own stock and (2) classified in stockholders' equity in its statement of financial position, the contract is not subject to derivative accounting and thus not subject to the guidance in SFAS 133. The warrants are indexed to the Company's common stock thus satisfying the first criterion. In addition, under the guidance provided by EITF 00-19, we believe the warrants should be classified in stockholders' equity. (See analysis below.) Therefore, the Company believes the scope exception of FAS 133, paragraph 11 is satisfied and no liability must be recorded.

As discussed in the previous paragraph, we analyzed the guidance provided by EITF 00-19. EITF 00-19 provides guidance on the proper recognition, measurement, and classification of certain freestanding financial instruments that are indexed to, and potentially settled in, any entity's own stock. In the analysis we particularly considered the guidance provided in paragraphs 12 — 31 of EITF 00-19.

Paragraph 12 of EITF 00-19 requires that "contracts that include *any* provision that could require net-cash settlement cannot be accounted for as equity of the Company." The warrants issued in the Financing are not subject to any provision that could require net-cash settlement. Thus, the guidance in paragraph 12 is not applicable to the warrants.

Paragraph 13 through 31 set forth eight conditions that must be met for an instrument to be classified as equity. The conditions and our justification for our conclusion that the warrants meet the conditions are described below:

1. *The contract permits the Company to settle in unregistered shares.*

The warrants must only be settled in shares of the Company's common stock. The terms do not specifically require that the shares be registered, nor do they provide for any penalty should the Company settle in unregistered shares. The warrants contain only piggyback registration rights, which are deemed to be within the control of the Company. Of the total outstanding warrants at March 31, 2008, piggyback registration rights related to 175,251 shares had expired and rights to an additional 524,080 shares expired in April 2008. The piggyback rights for the remaining 10,000 shares expire in October 2008.

Thus, we believe we are permitted to settle the warrants in unregistered shares.

2. *The Company has sufficient authorized and unissued shares available to settle the contract after considering all other commitments that may require the issuance of stock during the maximum period the derivative contract could remain outstanding.*

The Company has sufficient authorized and unissued shares available to settle the warrants after considering all other commitments.

3. *The contract contains an explicit limit on the number of shares to be delivered in a share settlement.*

The number of shares issuable under the warrants is limited to a maximum number of shares, as specified in each Warrant. The exercise price is fixed and subject to change only as the result of normal anti-dilution provisions.

4. *There are no required cash payments to the counterparty in the event the company fails to make timely filings with the SEC.*

The warrants are not subject to any cash payments to the holders in the event that the Company fails to make timely filings with the SEC.

5. *There are no required cash payments to the counterparty if the shares initially delivered upon settlement are subsequently sold by the counterparty and the sales proceeds are insufficient to provide the counterparty with full return of the amount due (that is, there are no cash settled "top-off" or "make-whole" provisions).*

There are no "top-off" or "make-whole" provisions related to the warrants.

6. *The contract requires net-cash settlement only in specific circumstances in which holders of shares underlying the contract also would receive cash in exchange for their shares.*

The warrants do not provide for any circumstance that would trigger net-cash settlements.

7. *There are no provisions in the contract that indicate that the counterparty has rights that rank higher than those of a shareholder of the stock underlying the contract.*

The warrants do not have any provisions that grant the Investor any rights that rank higher than those of a common stock holder. In the event the holders exercise their warrants, the shares issued to them would be shares of common stock, with the holders having the same rights as current holders of the Company's common stock.

8. *There is no requirement in the contract to post collateral at any point or for any reason.*

The warrants do not require the Company to post any type of collateral at any point for any reason.

In future filings, we plan to provide additional disclosure as it relates to warrants in a format similar to the disclosure provided below:

The Company grants common stock warrants to placement agents in connection with direct equity share purchases by investors and as additional compensation to consultants and advisors. The warrants are granted at negotiated prices in connection with the equity share purchases and at the market price of the common stock in other instances. Warrants issued to date have terms of 5 years.

At March 31, 2008 we had 709,331 warrants outstanding. Of the total amount outstanding, 524,080 warrants with an exercise price of \$1.25 per share, related to placement agent fees paid in conjunction with our Series A Convertible Preferred Stock offering which occurred in March 2007. On May 16, 2008 the warrant holder executed a cashless exercise related to these warrants and we issued 417,594 shares of our common stock.

Warrants totaling 175,251, with exercise prices of \$1.80 per share and expiration dates of October 24, 2009, were assumed by the Company in conjunction with our acquisition of Spinemedica Corp. in July 2007.

Warrants for 10,000 shares, with an exercise price of \$3.00 per share, were issued in October 2007 for services provided by a consultant. These warrants have piggyback registration rights which expire on October 9, 2008 and do not require the Company to pay any consideration to the holder if a registration statement is not declared effective or maintained.

Warrants may be exercised in whole or in part by:

- notice given by the holder accompanied by payment of an amount equal to the warrant exercise price multiplied by the number of warrant shares being purchased; or
- election by the holder to exchange the warrant (or portion thereof) for that number of shares equal to the product of (a) the number of shares issuable upon exercise of the warrant (or portion) and (b) a fraction, (x) the numerator of which is the market price of the shares at the time of exercise minus the warrant exercise price per share at the time of exercise and (y) the denominator of which is the market price per share at the time of exercise.

The warrants require that the Company deliver shares as part of a physical settlement or a net-share settlement, at the option of the holder, and do not provide for a net-cash settlement.

The Company has evaluated the terms of each of these warrants and determined that they qualify for equity accounting.

**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.***

The Company's predecessor, Alynx, Co. was previously a shell company with the objective to acquire an existing business. On February 8, 2008, Alynx, Co. acquired MiMedx, Inc., a privately-held, development-stage company, and its affiliated companies, in a transaction accounted for as a reverse merger ( the "Acquisition"). Upon consummation of the Acquisition, Alynx, Co.'s former internal controls and management were supplanted by those of MiMedx, Inc. and its affiliates.

Because of the abbreviated period of less than two months during which the Company, operating as MiMedx, was a reporting company during the fiscal year ended March 31, 2008, management had not completed as of March 31, 2008, an assessment of the Company's internal control over financial reporting under a recognized control framework, and reported as such in Item 9A(T) "Management's Report on Internal Control over Financial Reporting" in our Form 10-K for the year ended March 31, 2008.

We erroneously relied on the above fact pattern to conclude that we were also not required and did not complete an evaluation and conclude on our disclosure controls and procedures.

August 15, 2008

Page 6

Upon receipt of your letter, we have reevaluated our disclosure as required by Item 307 of Regulation S-K, and as a result, performed an evaluation of our disclosure controls and procedures as they existed at March 31, 2008.

Based on the limited number of employees and the relatively low volume of transactions and events which occurred during our history, our procedures and controls as of March 31, 2008 were primarily informal, and we relied on frequent communication amongst our executive group to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is accumulated and communicated to the Company's management team.

Our formal procedures and controls which we followed prior to filing or submitting reports to the SEC under the Exchange Act, were as follows:

- We distributed completed forms and supplemental information to appropriate executives and others with adequate knowledge of related transactions or forms for a review of the factual accuracy of the documents.
- We facilitated reviews and edited reports, as necessary, based on comments and discussions we had with our legal counsel and independent auditors.

Based on the above evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures at March 31, 2008 were effective.

Our management recognizes it is responsible for establishing and maintaining a system of disclosure controls and procedures and has performed an evaluation for the period ended June 30, 2008 and will perform an evaluation for each quarterly period in the future. Management has included its evaluation of disclosure controls and procedures, in which it has determined that such controls are effective, for the period ended June 30, 2008, in the Company's Form 10-Q, dated August 14, 2008.

The Company acknowledges:

- the Company is responsible for the adequacy and accuracy of the disclosures in its filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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.

Sincerely,

/s/ John C. Thomas, Jr.

\_\_\_\_\_  
John C. Thomas, Jr.

Chief Financial Officer and Secretary

cc: G. Donald Johnson

MiMedx, Inc. • 3802 Spectrum Blvd., Suite 300 • Tampa, FL 33612-9218 • P: 813.866.0000 • F: 813.866.0012 • www.mimedx.com