

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

SCHEDULE 13D
Under The Securities Exchange Act of 1934 (Amendment No. 1)

MIMEDX GROUP, INC.

(Name of Issuer)

Common Stock, \$0.001 par value per share
(Title of Class of Securities)

602496 10 1
(CUSIP Number)

G. Donald Johnson
Womble Carlyle Sandridge & Rice, PLLC
Suite 2400
271 17th Street NW
Atlanta, GA 30363
(404) 888-7456

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

June 4, 2009

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).

Parker H. Petit

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) £

(b) £

3. SEC Use Only

4. Source of Funds (See Instructions)

SC, PF

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

£

6. Citizenship or Place of Organization:

United States of America

7. Sole Voting Power

NUMBER OF **5,100,000 (1)**

SHARES

8. Shared Voting Power

BENEFICIALLY

OWNED BY

0

EACH

9. Sole Dispositive Power

REPORTING

PERSON

5,100,000 (1)

WITH

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

5,100,000 (1)

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

£

13. Percent of Class Represented by Amount in Row (11)

11.6% (2)

14. Type of Reporting Person (See Instructions)

IN

SCHEDULE 13D

CUSIP No. 602496 10 1

Footnotes:

(1) Includes 975,000 shares of Common Stock and currently exercisable warrants to purchase 325,000 shares of Common Stock held by each of Cox Road Partners, LLLP, Cox Road Partners II, LLLP, and Petit Investments II, L.L.L.P., limited liability limited partnerships over which Mr. Petit possesses sole voting and investment control and for which Mr. Petit serves as General Partner. Also includes 700,000 shares subject to options owned by Mr. Petit which are exercisable within the next 60 days. Does not include 300,000 shares subject to stock options owned by Mr. Petit which will become exercisable after 60 days. Mr. Petit also owns 3% convertible senior secured promissory notes in the original principal amount of \$250,000, which may be converted into 500,000 shares of Common Stock of MiMedx Group, Inc. The 500,000 shares are also included in Mr. Petit's beneficial ownership.

(2) Based on 43,909,628 shares of Common Stock, which is comprised of 41,734,628 shares outstanding as of June 4, 2009; 700,000 shares of Common Stock subject to options; 975,000 shares of Common Stock subject to warrants; and 500,000 shares which may be acquired upon conversion of 3% convertible senior secured promissory notes, all deemed to be beneficially owned by Mr. Petit pursuant to Exchange Act Rule 13d-3, as of the date hereof.

SCHEDULE 13D

CUSIP No. 602496 10 1

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).

Cox Road Partners, LLLP

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) £

(b) £

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization:

Georgia

7. Sole Voting Power

NUMBER OF **1,300,000 (1)**

SHARES

8. Shared Voting Power

BENEFICIALLY

OWNED BY **0**

EACH

9. Sole Dispositive Power

REPORTING

PERSON

1,300,000 (1)

WITH

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,300,000 (1)

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

£

13. Percent of Class Represented by Amount in Row (11)

3.1% (2)

14. Type of Reporting Person (See Instructions)

PN

Footnotes:

(1) Includes 975,000 shares of Common Stock and currently exercisable warrants to purchase 325,000 shares of Common Stock held by Cox Road Partners, LLLP, a limited liability limited partnership over which Parker H. Petit possesses sole voting and investment control and for which Mr. Petit serves as General Partner.

(2) Based on 41,734,628 shares of Common Stock outstanding as of June 4, 2009 plus 325,000 shares of Common Stock subject to warrants deemed to be beneficially owned by Cox Road Partners, LLLP pursuant to Exchange Act Rule 13d-3, as of the date hereof.

SCHEDULE 13D

CUSIP No. 602496 10 1

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).

Cox Road Partners II, LLLP

2. Check the Appropriate Box if a Member of a Group (See Instructions)

- (a)
- (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization:

Georgia

7. Sole Voting Power

NUMBER OF **1,300,000 (1)**

SHARES

8. Shared Voting Power

BENEFICIALLY

OWNED BY **0**

EACH

9. Sole Dispositive Power

REPORTING

PERSON **1,300,000 (1)**

WITH

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,300,000 (1)

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)

3.1% (2)

14. Type of Reporting Person (See Instructions)

PN

(1) Includes 975,000 shares of Common Stock and currently exercisable warrants to purchase 325,000 shares of Common Stock held by Cox Road Partners II, LLLP, a limited liability limited partnership over which Parker H. Petit possesses sole voting and investment control and for which Mr. Petit serves as General Partner.

(2) Based on 41,734,628 shares of Common Stock outstanding as of June 4, 2009 plus 325,000 shares of Common Stock subject to warrants deemed to be beneficially owned by Cox Road Partners II, LLLP pursuant to Exchange Act Rule 13d-3, as of the date hereof.

SCHEDULE 13D

CUSIP No. 602496 10 1

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).

Petit Investments II, L.L.L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

- (a)
- (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization:

Georgia

7. Sole Voting Power

NUMBER OF **1,300,000 (1)**
SHARES

8. Shared Voting Power

BENEFICIALLY OWNED BY **0**
EACH

9. Sole Dispositive Power

REPORTING PERSON **1,300,000 (1)**
WITH

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,300,000 (1)

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)

3.1% (2)

14. Type of Reporting Person (See Instructions)

PN

(1) Includes 975,000 shares of Common Stock and currently exercisable warrants to purchase 325,000 shares of Common Stock held by Petit Investments II, L.L.L.P., a limited liability limited partnership over which Parker H. Petit possesses sole voting and investment control and for which Mr. Petit serves as General Partner.

(2) Based on 41,734,628 shares of Common Stock outstanding as of June 4, 2009 plus 325,000 shares of Common Stock subject to warrants deemed to be beneficially owned by Petit Investments II, L.L.L.P. pursuant to Exchange Act Rule 13d-3, as of the date hereof.

SCHEDULE 13D

CUSIP No. 602496 10 1

ITEM 1. SECURITY AND ISSUER

This statement on Schedule 13D (the "Schedule 13D") relates to the common stock, par value \$0.001 per share (the "Common Stock"), of MiMedx Group, Inc., a Florida corporation ("MiMedx" or the "Issuer"). The Issuer's business address is 1234 Airport Road, Suite 105, Destin, Florida 32541.

ITEM 2. IDENTITY AND BACKGROUND

(a)-(c) This Schedule 13D is being filed by Parker H. Petit, a Florida resident, individually, and in his capacity as General Manager of Cox Road Partners, LLLP, Cox Road Partners II, LLLP, and Petit Investments II, L.L.L.P. Mr. Petit serves as Chairman of the Board, President, and Chief Executive Officer of the Issuer. Prior to his appointment to the Board and as an officer, Mr. Petit, through the Partnerships, invested approximately \$1.462 million in the Issuer.

This Schedule 13D is being filed jointly by Mr. Petit and Cox Road Partners, LLLP, Cox Road Partners II, LLLP, and Petit Investments II, L.L.L.P. (the "Partnerships"). Each of the Partnerships' principal occupation is investing in securities and their business address is 1850 Parkway Place, Suite 1200, Marietta Georgia 30067. Mr. Petit and the Partnerships are hereinafter referred to as the "Reporting Persons."

(d) The Reporting Persons have not, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) The Reporting persons have not, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction where, as a result of such proceeding, he became subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Mr. Petit is a citizen of the United States. The Partnerships were formed under the laws of the State of Georgia.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

The Reporting Persons received the MiMedx Common Stock, other than the options to purchase MiMedx Common Stock, upon entering into a Stock Subscription and Purchase Agreement on September 25, 2008, as amended on February 19, 2009. Through Cox Road Partners, LLLP, Cox Road Partners II, LLLP, and Petit Investments II, L.L.L.P., Mr. Petit invested approximately \$1.462 million and received total consideration of 2,925,000 shares of the Issuer's Common Stock and 975,000 five-year warrants of the Issuer's Common Stock, with an exercise price of \$0.73 per share. The 2,925,000 shares, in the aggregate, includes 1,755,000 shares issued on June 4, 2009, as described in the Issuer's Form 8-K filed June 9, 2009, which is incorporated herein by reference.

Mr. Petit was granted options for 1,000,000 shares, 700,000 of which are deemed beneficially owned, which have an exercise price of \$0.73 per share, by the Issuer's Board of Directors on February 24, 2009, as compensation in connection with his appointment as Chairman of the Board, President, and Chief Executive Officer.

In April 2009 Mr. Petit also purchased the Issuer's 3% convertible senior secured promissory notes in the original principal amount of \$250,000. Those notes are convertible into 500,000 shares of the Issuer's Common Stock.

SCHEDULE 13D

CUSIP No. 602496 10 1

ITEM 4. PURPOSE OF TRANSACTION

The acquisitions of the Common Shares were undertaken by the Reporting Persons for investment purposes, except the award of stock options, which were made by the Issuer's Board of Directors for compensation purposes. The Reporting Persons intend to participate in and influence the affairs of the Issuer through the exercise of their voting rights with respect to their shares of Common Stock. In addition, Mr. Petit will influence the affairs of the Issuer in his capacity as the Chairman of the Board, President, and Chief Executive Officer of the Issuer. From time to time, the Reporting Persons intend to review the performance of their investments and consider or explore variety of alternatives, including, without limitation: (a) the acquisition of additional securities of the Issuer or the disposition of securities of the Issuer; (b) an extraordinary corporate transaction, such as a merger, reorganization, or liquidation, involving the Issuer or any of its subsidiaries; (c) a sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries; (d) a change in the present Board of Directors or management of the Issuer; (e) a material change in the present capitalization or dividend policy of the Issuer; (f) any other material change in the Issuer's business or corporate structure; (g) changes in the Issuer's charter, bylaws, or instruments corresponding thereto, or other actions that may impede the acquisition of control of the Issuer by any person; (h) causing a class of securities of the Issuer to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (i) causing a class of equity securities of the Issuer to become eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934, as amended; or (j) any action similar to any of those enumerated above. Any alternatives that the Reporting Persons may pursue will depend upon a variety of factors, including, without limitation, current and anticipated future trading prices for the Common Stock; the financial condition, results of operations, and prospects of the Issuer; general economic, financial market, and industry conditions; and the investment objectives of the Reporting Persons. Except as set forth above, the Reporting Persons have no present plans or proposals with respect to any of the matters set forth in paragraphs (a) through (j) of Item 4 of Schedule 13D.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

(a)-(b) The aggregate number of shares of the Issuer's Common Stock beneficially owned by the Reporting Persons is 5,100,000. Of these, (i) 975,000 shares and warrants to purchase 325,000 shares are held by each of Cox Road Partners, LLLP, Cox Road Partners II, LLLP, and Petit Investments II, L.L.L.P., limited liability limited partnerships, as to which Mr. Petit has sole voting and investment power, and (ii) 700,000 shares are options, exercisable within 60 days, beneficially owned by Mr. Petit. The number does not include 300,000 shares representing options that that are exercisable after 60 days. Mr. Petit is also the beneficial owner of the right to acquire up to 500,000 shares of the Issuer's Common Stock upon conversion of the \$250,000 3% convertible senior secured promissory note of the Issuer held by him.

(c) The Reporting Persons acquired their beneficial ownership interests as described in Item 3. Those were the only transactions effected within the past 60 days by the Reporting Persons.

(d) Not applicable.

(e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER

The information set forth in Items 3 through 5 of this Schedule 13D is hereby incorporated herein by reference. Except as described in this Schedule 13D, there are at present no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 above and between such persons and any person with respect to any securities of the Issuer.

SCHEDULE 13D

CUSIP No. 602496 10 1

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

Exhibit 1. The Joint Filing Agreement dated March 6, 2009, by and between the Reporting Persons and filed with their Schedule 13D on March 6, 2009, is incorporated herein by reference.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: June 18, 2009

/s/ Parker H. Petit

Parker H. Petit, individually

/s/ Parker H. Petit

Cox Road Partners, LLLP

By: Parker H. Petit

Title: General Partner

/s/ Parker H. Petit

Cox Road Partners II, LLLP

By: Parker H. Petit

Title: General Partner

/s/ Parker H. Petit

Petit Investments II, LLLP

By: Parker H. Petit

Title: General Partner

ATTENTION: INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACT CONSTITUTE FEDERAL CRIMINAL VIOLATIONS (See 18 U.S.C. 1001).