

Accelerate Diagnostics, Inc  
Form SC 13G/A  
February 14, 2018

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

SCHEDULE 13G/A  
Amendment No. 4

Under the Securities Exchange Act of 1934

Accelerate Diagnostics, Inc.

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(Name of Issuer)

Common Stock

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(Title of Class of Securities)

69404D108

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(CUSIP Number)

December 31, 2017

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(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

The information required in 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 (the "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).

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1 NAME OF REPORTING PERSONS  
 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

2 Larry N. Feinberg  
 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

3 (a)  
 (b)  
 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

5 United States  
 SOLE VOTING POWER

6 NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 271,134 SHARED VOTING POWER  
 4,621,203 SOLE DISPOSITIVE POWER

8 271,134 SHARED DISPOSITIVE POWER

9 4,621,203  
 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

10 4,892,337  
 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

12 8.83%\*

TYPE OF REPORTING PERSON  
(See Instructions)

IN

\* Calculated based on a total of 55,397,563 shares of common stock outstanding as of November 1, 2017, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities Exchange Commission (the "SEC") on November 7, 2017 (the "Quarterly Report").

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1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)
2	Oracle Partners, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)
3	(a) (b) SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION  Delaware
5	SOLE VOTING POWER
6	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:
7	0 SHARED VOTING POWER
8	3,354,602 SOLE DISPOSITIVE POWER
9	0 SHARED DISPOSITIVE POWER
9	3,354,602 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
10	3,354,602 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
12	6.06%* TYPE OF REPORTING PERSON (See Instructions)

PN

\* Calculated based on a total of 55,397,563 shares of common stock outstanding as of November 1, 2017, as reported by the Issuer in the Quarterly Report.

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1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

2 Oracle Institutional Partners, L.P.  
CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

3 (a)  
(b)  
SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

5 Delaware  
SOLE VOTING POWER

6 NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 0 SHARED VOTING POWER

8 526,396 SOLE DISPOSITIVE POWER

9 0 SHARED DISPOSITIVE POWER

526,396  
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

10 526,396  
CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

12 0.95%\*

TYPE OF REPORTING PERSON  
(See Instructions)

PN

\* Calculated based on a total of 55,397,563 shares of common stock outstanding as of November 1, 2017, as reported by the Issuer in the Quarterly Report.

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1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

2 Oracle Ten Fund Master, LP  
CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

(a)  
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

6 0 SHARED VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

7 664,666 SOLE DISPOSITIVE POWER

8 0 SHARED DISPOSITIVE POWER

9 664,666  
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

10 664,666  
CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

1.20%\*  
12 TYPE OF REPORTING  
PERSON (See Instructions)

PN

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\* Calculated based on a total of 55,397,563 shares of common stock outstanding as of November 1, 2017, as reported by the Issuer in the Quarterly Report.

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1 NAME OF REPORTING PERSONS  
 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)  
  
 2 Oracle Investment Management  
 Employees Retirement Fund  
 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)  
  
 (a)  
 (b)  
 3 SEC USE ONLY  
  
 4 CITIZENSHIP OR PLACE OF ORGANIZATION  
  
 Connecticut  
 5 SOLE VOTING POWER  
  
 0  
 SHARED VOTING POWER  
 6  
 NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:  
 63,836  
 SOLE DISPOSITIVE POWER  
 7  
 0  
 SHARED DISPOSITIVE POWER  
 8  
 63,836  
 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
  
 10 63,836  
 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See

Instructions)

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

0.12%\*

12 TYPE OF REPORTING  
PERSON (See Instructions)

OO

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\* Calculated based on a total of 55,397,563 shares of common stock outstanding as of November 1, 2017, as reported by the Issuer in the Quarterly Report.

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1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)
2	The Feinberg Family Foundation CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)
3	(a) (b)
4	SEC USE ONLY  CITIZENSHIP OR PLACE OF ORGANIZATION
5	Connecticut SOLE VOTING POWER
6	0 SHARED VOTING POWER
7	11,703 SOLE DISPOSITIVE POWER
8	0 SHARED DISPOSITIVE POWER
9	11,703 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

11,703  
CHECK BOX IF THE  
AGGREGATE  
AMOUNT IN ROW (9)  
EXCLUDES CERTAIN  
SHARES (See  
Instructions)

PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

0.02%\*  
TYPE OF REPORTING  
PERSON (See  
Instructions)

OO

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\* Calculated based on a total of 55,397,563 shares of common stock outstanding as of November 1, 2017, as reported by the Issuer in the Quarterly Report.

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1 NAME OF REPORTING PERSONS  
 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

2 Oracle Associates, LLC  
 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

3 (a)  
 (b)  
 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

5 Delaware  
 SOLE VOTING POWER

6 NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:  
 0  
 SHARED VOTING POWER  
 4,545,664  
 SOLE DISPOSITIVE POWER

7 0  
 SHARED DISPOSITIVE POWER

8 4,545,664  
 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9 4,545,664  
 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

10

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

12 8.21%\*  
 TYPE OF REPORTING PERSON (See Instructions)

PN

\* Calculated based on a total of 55,397,563 shares of common stock outstanding as of November 1, 2017, as reported by the Issuer in the Quarterly Report.

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1 NAME OF REPORTING PERSONS  
 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)  
  
 Oracle Investment Management, Inc.  
 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)  
  
 (a)  
 (b)  
 3 SEC USE ONLY  
  
 4 CITIZENSHIP OR PLACE OF ORGANIZATION  
  
 United States  
  
 5 SOLE VOTING POWER  
  
 0  
 6 SHARED VOTING POWER  
 NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:  
 4,609,500  
 7 SOLE DISPOSITIVE POWER  
  
 0  
 8 SHARED DISPOSITIVE POWER  
  
 4,609,500  
 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
  
 4,609,500  
 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

8.32%\*

12 TYPE OF REPORTING  
PERSON (See Instructions)

CO

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\* Calculated based on a total of 55,397,563 shares of common stock outstanding as of November 1, 2017, as reported by the Issuer in the Quarterly Report.

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This Amendment No. 4 to Schedule 13G (this "Amendment No. 4") is being filed with respect to the Common Stock, par value \$.001 ("Common Stock") of Accelerate Diagnostics, Inc., a Delaware corporation (the "Issuer"), to amend the Schedule 13G filed on March 18, 2013, as previously amended by Amendment No. 1, filed on February 7, 2014, by Amendment No. 2, filed on January 30, 2015 and by Amendment No. 3, filed on February 6, 2017 (as so amended, the "Schedule 13G"), in accordance with the annual amendment requirements. This Amendment No. 4 is being filed on behalf of Oracle Partners, LP, a Delaware limited partnership ("Oracle Partners"), Oracle Ten Fund Master, LP, a Cayman Islands exempted company ("Oracle Ten Fund"), Oracle Institutional Partners, LP, a Delaware limited partnership ("Institutional Partners" and, collectively with Oracle Partners and Oracle Ten Fund, the "Oracle Entities"), Oracle Investment Management, Inc. Employees' Retirement Plan, an employee benefit plan organized in Connecticut (the "Retirement Plan"), Oracle Associates, LLC, a Delaware limited liability company and the general partner of Oracle Partners, Oracle Ten Fund and Institutional Partners ("Oracle Associates"), Oracle Investment Management, Inc., a Delaware corporation and the investment manager to Oracle Ten Fund and the Retirement Plan (the "Investment Manager"), The Feinberg Family Foundation, a foundation organized in Connecticut (the "Foundation"), and Larry N. Feinberg, the managing member of Oracle Associates, the sole shareholder, director and president of the Investment Manager and the trustee of the Foundation (each of the foregoing, a "Reporting Person" and collectively, the "Reporting Persons"). Capitalized terms used but not defined herein have the meaning ascribed thereto in the Schedule 13G.

Item 4. Ownership:

Item 4 of the Schedule 13G is hereby amended and restated as follows:

A. Larry N. Feinberg

- (a) Amount beneficially owned: 4,892,337
- (b) Percent of class: 8.83%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote: 271,134
  - (ii) Shared power to vote or direct the vote: 4,621,203
  - (iii) Sole power to dispose or direct the disposition: 271,134
  - (iv) Shared power to dispose or direct the disposition: 4,621,203

B. Oracle Partners

- (a) Amount beneficially owned: 3,354,602
- (b) Percent of class: 6.06%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote: 0
  - (ii) Shared power to vote or direct the vote: 3,354,602
  - (iii) Sole power to dispose or direct the disposition: 0
  - (iv) Shared power to dispose or direct the disposition: 3,354,602

C. Institutional Partners

- (a) Amount beneficially owned: 526,396
- (b) Percent of class: 0.95%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote: 0
  - (ii) Shared power to vote or direct the vote: 526,396
  - (iii) Sole power to dispose or direct the disposition: 0
  - (iv) Shared power to dispose or direct the disposition: 526,396



**D. Oracle Ten Fund**

- (a) Amount beneficially owned: 664,666
- (b) Percent of class: 1.20%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote: 0
  - (ii) Shared power to vote or direct the vote: 664,666
  - (iii) Sole power to dispose or direct the disposition: 0
  - (iv) Shared power to dispose or direct the disposition: 664,666

**E. Retirement Plan**

- (a) Amount beneficially owned: 63,836
- (b) Percent of class: 0.12%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote: 0
  - (ii) Shared power to vote or direct the vote: 63,836
  - (iii) Sole power to dispose or direct the disposition: 0
  - (iv) Shared power to dispose or direct the disposition: 63,836

**F. Foundation**

- (a) Amount beneficially owned: 11,703
- (b) Percent of class: 0.02%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote: 0
  - (ii) Shared power to vote or direct the vote: 11,703
  - (iii) Sole power to dispose or direct the disposition: 0
  - (iv) Shared power to dispose or direct the disposition: 11,703

**G. Oracle Associates**

- (a) Amount beneficially owned: 4,545,664
- (b) Percent of class: 8.21%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote: 0
  - (ii) Shared power to vote or direct the vote: 4,545,664
  - (iii) Sole power to dispose or direct the disposition: 0
  - (iv) Shared power to dispose or direct the disposition: 4,545,664

**H. Investment Manager**

- (a) Amount beneficially owned: 4,609,500
  - (b) Percent of class: 8.32%
  - (c) Number of shares as to which such person has:
    - (i) Sole power to vote or direct the vote: 0
    - (ii) Shared power to vote or direct the vote: 4,609,500
    - (iii) Sole power to dispose or direct the disposition: 0
    - (iv) Shared power to dispose or direct the disposition: 4,609,500
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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.

Dated: February 14, 2018

ORACLE PARTNERS, L.P.

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg  
Larry N. Feinberg, Managing Member

ORACLE TEN FUND PARTNERS, LP

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg  
Larry N. Feinberg, Managing Member

ORACLE INSTITUTIONAL PARTNERS, LP

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg  
Larry N. Feinberg, Managing Member

ORACLE INVESTMENT MANAGEMENT, INC.  
EMPLOYEES' RETIREMENT PLAN

By: /s/ Larry N. Feinberg  
Larry N. Feinberg, Trustee



THE FEINBERG FAMILY FOUNDATION

By: /s/ Larry N. Feinberg  
Larry N. Feinberg, Trustee

ORACLE INVESTMENT MANAGEMENT, INC.

By: /s/ Larry N. Feinberg  
Larry N. Feinberg, President

ORACLE ASSOCIATES, LLC

By: /s/ Larry N. Feinberg  
Larry N. Feinberg, Manager Member

/s/ Larry N. Feinberg  
Larry N. Feinberg, individually