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

**SCHEDULE 13G/A
Amendment No. 5**

Under the Securities Exchange Act of 1934

Accelerate Diagnostics, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

69404D108

(CUSIP Number)

December 31, 2018

(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).

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Larry N. Feinberg	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 324,834
	6	SHARED VOTING POWER 4,486,688
	7	SOLE DISPOSITIVE POWER 324,834
	8	SHARED DISPOSITIVE POWER 4,486,688
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,811,522	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 8.88%*	
12	TYPE OF REPORTING PERSON (See Instructions) IN	

* Calculated based on a total of 54,198,743 shares of common stock outstanding as of November 2, 2018, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities Exchange Commission on November 6, 2018 (the "Quarterly Report").

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Oracle Partners, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 3,250,638
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 3,250,638
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,250,638	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 6.00%*	
12	TYPE OF REPORTING PERSON (See Instructions) PN	

* Calculated based on a total of 54,198,743 shares of common stock outstanding as of November 2, 2018, as reported by the Issuer in its Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Oracle Institutional Partners, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 452,774
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 452,774
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 452,774	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.84%*	
12	TYPE OF REPORTING PERSON (See Instructions) PN	

* Calculated based on a total of 54,198,743 shares of common stock outstanding as of November 2, 2018, as reported by the Issuer in its Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Oracle Ten Fund, LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)	
	(a) <input type="checkbox"/>	
	(b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
		0
	6	SHARED VOTING POWER
		657,976
	7	SOLE DISPOSITIVE POWER
		0
	8	SHARED DISPOSITIVE POWER
		657,976
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	657,976	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)	
	<input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
	1.21%*	
12	TYPE OF REPORTING PERSON (See Instructions)	
	PN	

* Calculated based on a total of 54,198,743 shares of common stock outstanding as of November 2, 2018, as reported by the Issuer in its Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Oracle Investment Management Employees Retirement Fund	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)	
	(a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Connecticut	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
		0
	6	SHARED VOTING POWER
		93,000
	7	SOLE DISPOSITIVE POWER
		0
	8	SHARED DISPOSITIVE POWER
		93,000
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	93,000	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)	
	<input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
	0.17%*	
12	TYPE OF REPORTING PERSON (See Instructions)	
	OO	

* Calculated based on a total of 54,198,743 shares of common stock outstanding as of November 2, 2018, as reported by the Issuer in its Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	The Feinberg Family Foundation	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)	
	(a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Connecticut	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
		0
	6	SHARED VOTING POWER
		32,300
	7	SOLE DISPOSITIVE POWER
		0
	8	SHARED DISPOSITIVE POWER
		32,300
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	32,300	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)	
	<input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
	0.06%*	
12	TYPE OF REPORTING PERSON (See Instructions)	
	OO	

* Calculated based on a total of 54,198,743 shares of common stock outstanding as of November 2, 2018, as reported by the Issuer in its Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Oracle Associates, LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)	
	(a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
		0
	6	SHARED VOTING POWER
		4,361,388
	7	SOLE DISPOSITIVE POWER
		0
	8	SHARED DISPOSITIVE POWER
		4,361,388
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	4,361,388	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)	
	<input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
	8.05%*	
12	TYPE OF REPORTING PERSON (See Instructions)	
	PN	

* Calculated based on a total of 54,198,743 shares of common stock outstanding as of November 2, 2018, as reported by the Issuer in its Quarterly Report.

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) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
		0
	6	SHARED VOTING POWER
		4,454,388
	7	SOLE DISPOSITIVE POWER
		0
	8	SHARED DISPOSITIVE POWER
		4,454,388
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	4,454,388	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)	
	<input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
	8.22%*	
12	TYPE OF REPORTING PERSON (See Instructions)	
	CO	

* Calculated based on a total of 54,198,743 shares of common stock outstanding as of November 2, 2018, as reported by the Issuer in its Quarterly Report.

This Amendment No. 5 to Schedule 13G (this "Amendment No. 5") 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, by Amendment No. 3, filed on February 6, 2017 and by Amendment No. 4, filed on February 6, 2018 (as so amended, the "Schedule 13G"), in accordance with the annual amendment requirements. This Amendment No. 5 is being filed on behalf of Oracle Partners, LP, a Delaware limited partnership ("Oracle Partners"), Oracle Ten Fund, LP, a Delaware limited partnership ("Oracle Ten Fund"), Oracle Institutional Partners, LP, a Delaware limited partnership ("Institutional Partners" and, collectively with Oracle Partners and Oracle Ten Fund, the "Oracle Partnerships"), 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 the Oracle Partnerships 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: 4,811,522
- (b) Percent of class: 8.88%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 324,834
 - (ii) Shared power to vote or direct the vote: 4,486,688
 - (iii) Sole power to dispose or direct the disposition: 324,834
 - (iv) Shared power to dispose or direct the disposition: 4,486,688

B. Oracle Partners

- (a) Amount beneficially owned: 3,250,638
- (b) Percent of class: 6.00%
- (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: 3,250,638
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 3,250,638

C. Institutional Partners

- (a) Amount beneficially owned: 452,774
 - (b) Percent of class: 0.84%
 - (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: 452,774
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 452,774
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D. Oracle Ten Fund

- (a) Amount beneficially owned: 657,976
- (b) Percent of class: 1.21%
- (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: 657,976
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 657,976

E. Retirement Plan

- (a) Amount beneficially owned: 93,000
- (b) Percent of class: 0.17%
- (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: 93,000
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 93,000

F. Foundation

- (a) Amount beneficially owned: 32,300
- (b) Percent of class: 0.06%
- (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: 32,300
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 32,300

G. Oracle Associates

- (a) Amount beneficially owned: 4,361,388
- (b) Percent of class: 8.05%
- (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: 4,361,388
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 4,361,388

H. Investment Manager

- (a) Amount beneficially owned: 4,454,388
 - (b) Percent of class: 8.22%
 - (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: 4,454,388
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 4,454,388
-

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 6, 2019

ORACLE PARTNERS, L.P.

By: ORACLE ASSOCIATES, LLC, its general partner

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

ORACLE TEN FUND, 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