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

**SCHEDULE 13D
Under the Securities Exchange Act of 1934**

(Amendment No. 6)*

**Accelaron Pharma Inc.
(Name of Issuer)**

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

**00434H108
(CUSIP Number)**

**Mark J. Alles
Chief Executive Officer
Celgene Corporation
86 Morris Avenue
Summit, New Jersey 07901
(908) 673-9000**

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

**January 18, 2019
(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 which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 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 Rule 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	Name of reporting person: I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) CELGENE CORPORATION 22-2711928	
2	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC use only	
4	Source of funds WC	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware, U.S.A.	
Number of shares beneficially owned by each reporting person with	7	Sole voting power 6,863,664
	8	Shared voting power -0-
	9	Sole dispositive power 6,863,664
	10	Shared dispositive power -0-
11	Aggregate amount beneficially owned by each reporting person 6,863,664	
12	Check box if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/>	
13	Percent of class represented by amount in Row (11) 13.3% (1)	
14	Type of reporting person CO	

(1) The percentage ownership interest is determined based on 51,534,367 shares of Common Stock outstanding as disclosed in the Issuer's prospectus supplement filed on January 17, 2018, and includes (i) 6,118,479 shares of Common Stock and 38,979 shares of Common Stock underlying a warrant held by Celgene Corporation prior to the Issuer's public offering, and (ii) 706,206 shares of Common Stock purchased in the Issuer's public offering.

This Amendment No. 6 amends the Schedule 13D (the “**Schedule 13D**”) filed with the Securities and Exchange Commission (the “**Commission**”) on October 3, 2013, as amended by Amendment No. 1 filed with the Commission on January 30, 2014, Amendment No. 2 filed with the Commission on April 2, 2014, Amendment No. 3 filed with the Commission on May 6, 2014, Amendment No. 4 filed with the Commission on January 11, 2016, and Amendment No. 5 filed with the Commission on September 25, 2017, with respect to common stock, par value \$0.001 per share (“**Common Stock**”), of Acceleron Pharma Inc., a Delaware corporation (“**Acceleron**”). Capitalized terms used, but not defined herein, have the meanings ascribed to them in the Schedule 13D.

Item 1. Security and Issuer.

No modification.

Item 2. Identity and Background.

Item 2 is hereby amended and supplemented by adding the Schedule A hereto. During the past five years, neither Celgene nor, to the knowledge of Celgene, any of the persons listed on Schedule A hereto, has been (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors), or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is 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.

Item 3. Source and Amount of Funds or Other Consideration.

Item 3 is hereby amended and supplemented as follows:

As discussed in Item 5 of this Amendment No. 6, Celgene acquired additional shares of Common Stock in a public offering by the Issuer. The shares of Common Stock were acquired with working capital of Celgene set aside for the general purpose of investing.

Item 4. Purpose of Transaction.

Item 4 is hereby amended and supplemented by adding the following:

The disclosure in Item 5 of this Amendment No. 6 is incorporated by reference into this Item 4.

Item 5. Interest in Securities of the Issuer.

Item 5(a)-(c) is hereby amended and supplemented as follows:

On January 18, 2019, Celgene purchased an aggregate of 706,206 shares of Common Stock in Acceleron’s public offering of 5,348,838 shares of Common Stock for an aggregate purchase price of \$30,366,858 for investment purposes. Following this purchase, Celgene beneficially owns 6,863,664 shares of Common Stock (including 38,979 shares of Common Stock underlying the Warrant that is currently exercisable), representing approximately 13.3% of the shares of Common Stock outstanding as of January 18, 2019 according to the Issuer’s prospectus supplement filed on January 17, 2019.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Pursuant to a lock-up agreement entered into with Citigroup Global Markets Inc., J.P. Morgan Securities LLC and SVB Leerink LLC in connection with the public offering, Celgene is subject to a 60-day lock-up commencing on January 15, 2019, during which time, subject to limited exceptions, Celgene has agreed not to dispose of or hedge any shares or any securities convertible into or exchangeable for shares of the Issuer’s Common Stock.

Item 7. Material to Be Filed as Exhibits.

No modification.

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: January 22, 2019

CELGENE CORPORATION

By: /s/ David V. Elkins

Name: David V. Elkins

Title: Executive Vice President and Chief Financial Officer

SCHEDULE A

Name, business address, present principal occupation or employment and place of citizenship of the directors and executive officers of the Reporting Persons

The name, business address and present principal occupation or employment of each of the directors and executive officers of the Reporting Persons are set forth below. The business address of each director and executive officer is c/o 86 Morris Avenue, Summit, New Jersey 07901. Unless otherwise indicated, each director and executive officer is a citizen of the United States.

CELGENE CORPORATION - BOARD OF DIRECTORS

<u>Name and Position</u>	<u>Present Principal Occupation or Employment</u>
Mark J. Alles Chief Executive Officer Chairman of the Board of Directors	Chief Executive Officer and Chairman of the Board of Directors of Celgene Corporation
Richard W. Barker, D.Phil. Director (Citizen of the United Kingdom)	Director of the Centre for Accelerating Medical Innovations; Director of Precision Medicine PLC; Chairman of the Health Innovation Network of South London, UK; Chairman of International Health Partners; Chairman of Image Analysis Group.
Hans E. Bishop Director	Former Chief Executive Officer of Juno Therapeutics, Inc.
Michael W. Bonney Director	Chief Executive Officer and Chairman of the Board of Directors of Kaleido Biosciences, Inc.; Formerly Chief Executive Officer and a director of Cubist Pharmaceuticals Inc.; Chairman of the Board of Alnylam Pharmaceuticals, Inc.; member of the Board of Directors of Global Blood Therapeutics, Inc.; Trustee of the Tekla complex of life sciences and dedicated funds; Board of Trustee Chair of Bates College
Michael D. Casey Director	Independent Lead Director of Celgene Corporation; Formerly Chairman, President, Chief Executive Officer and a director of Matrix Pharmaceutical, Inc.; Director of Abaxis, Inc.
Carrie S. Cox Director	Chairman of the Board of Directors and Chief Executive Officer of Humacyte, Inc.; member of Board of Directors of Texas Instruments; member of Board of Directors of Cardinal Health, Inc.
Michael A. Friedman, M.D. Director	Emeritus Chief Executive Officer of City of Hope; member of Board of Directors of MannKind Corporation; member of Board of Directors of Smith & Nephew plc; member of the Board of Directors of Intuitive Surgical Inc.; member of Board of Trustees of Tulane University
Julia A. Haller, M.D. Director	Ophthalmologist-in-Chief of the Wills Eye Hospital, Philadelphia, PA; Professor and Chair of the Department of Ophthalmology at Jefferson Medical College of Thomas Jefferson University and Thomas Jefferson University Hospitals
Patricia A. Hemingway Hall Director	Former Chief Executive Officer of Health Care Service Corporation; member of Board of Directors of Cardinal Health, Inc.; member of Board of Directors of ManpowerGroup Inc.
James J. Loughlin Director	Formerly National Director of the Pharmaceuticals Practice at KPMG LLP; member of Board of Directors of each of Edge Therapeutics, Inc.
Ernest Mario, Ph.D. Director	Chairman of the Board of each of Soleno Therapeutics Inc. (formerly Capnia, Inc.) and Chimerix Inc.; member of the Board of Directors of Tonix Pharmaceutical Holding Corp.; member of the Board of Directors of Eyenovia Inc.
John H. Weiland Director	Former President and Chief Operating Officer of C. R. Bard, Inc.

CELGENE CORPORATION - EXECUTIVE OFFICERS

Name	Title
Mark J. Alles	Chief Executive Officer
David V. Elkins	Executive Vice President and Chief Financial Officer
Nadim Ahmed	President, Global Hematology and Oncology
Terrie Curran	President, Global Inflammation and Immunology
Jonathan Biller	Executive Vice President and General Counsel
Rupert Vessey	President, Research and Early Development
Alise Reicin, M.D.	President, Global Clinical Development
