
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

CRISPR Therapeutics AG

(Name of Issuer)

Common Shares, CHF 0.03 nominal value per share
(Title of Class of Securities)

H17182108
(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)

December 4, 2017

(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).

SCHEDULE 13D/A

CUSIP No. H17182108

| | | |
|---|---|---------------------------------------|
| 1 | Name of reporting person: CELGENE ALPINE INVESTMENT CO. III, LLC | |
| 2 | Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC use only | |
| 4 | Source of funds* N/A | |
| 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 -0- |
| | 8 | Shared voting power 3,722,534 |
| | 9 | Sole dispositive power -0- |
| | 10 | Shared dispositive power 3,722,534 |
| 11 | Aggregate amount beneficially owned by each reporting person 3,722,534 | |
| 12 | Check box if the aggregate amount in Row (9) excludes certain shares* <input type="checkbox"/> | |
| 13 | Percent of class represented by amount in Row (9) 9.1% (1) | |
| 14 | Type of reporting person* OO | |

(1) The percentage ownership interest is determined based on 41,019,352 Common Shares outstanding as of November 3, 2017, as reported in the Issuer's Quarterly Report filed with the Securities and Exchange Commission on November 8, 2017.

| | | |
|---|---|---------------------------------------|
| 1 | Name of reporting person: CELGENE CORPORATION | |
| 2 | Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC use only | |
| 4 | Source of funds* N/A | |
| 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 -0- |
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| 12 | Check box if the aggregate amount in Row (9) excludes certain shares* <input type="checkbox"/> | |
| 13 | Percent of class represented by amount in Row (9) 9.1% (1) | |
| 14 | Type of reporting person* CO | |

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SCHEDULE 13D/A

CRISPR Therapeutics AG

Item 1. Security and Issuer.

The class of equity securities to which this Schedule 13D/A relates is the common shares, CHF 0.03 nominal value per share ("Common Shares"), of CRISPR Therapeutics AG, a Swiss corporation ("CRISPR"). The principal business address of CRISPR is Baarerstrasse 14, 6300 Zug, Switzerland.

Item 2. Identity and Background.

This Schedule 13D/A is being filed jointly by the following persons (collectively, "Reporting Persons"):

| <u>Reporting Person</u> | <u>Principal Business</u> | <u>Address Principal Business/Office</u> |
|--|---|--|
| Celgene Alpine Investment Co. III, LLC, a Delaware limited liability company and a Bermuda licensed company ("Alpine") | To make and hold investments | Aon House 30 Woodbourne Ave Pembroke, HM 08 Bermuda |
| Celgene Corporation, a Delaware corporation ("Celgene") | To discover, develop and commercialize innovative therapies designed to treat cancer and immune-inflammatory related diseases | 86 Morris Avenue Summit, New Jersey 07901 |

Alpine is the holder of 3,722,534 Common Shares of CRISPR. The sole member of Alpine is Celgene International II Sàrl, which is a wholly owned subsidiary of Celgene. Set forth on Schedule A hereto, which is incorporated herein by reference, is the name, business address, principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted and citizenship of each of the Reporting Person's directors and executive officers.

During the past five years, none of the Reporting Persons, nor, to the knowledge of the Reporting Persons, 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.

The information set forth or incorporated in Items 4 and 6 hereof are incorporated herein by reference.

The Common Shares of CRISPR beneficially owned by the Reporting Persons were acquired with working capital of Celgene for investment purposes.

Item 4. Purpose of Transaction.

The information set forth or incorporated in Items 3 and 6 hereof are incorporated herein by reference.

Except as set forth above, neither Celgene or Alpine, nor, to the knowledge of Celgene or Alpine, any of the persons listed on Schedule A hereto, has any present plans which relate to or would result in:

- (a) the acquisition by any person of additional securities of CRISPR, or the disposition of securities of CRISPR;
 - (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving CRISPR or any of its subsidiaries;
 - (c) a sale or transfer of a material amount of assets of CRISPR or any of its subsidiaries;
 - (d) any change in the present Board of Directors or management of CRISPR, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the Board of Directors;
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- (e) any material change in the present capitalization or dividend policy of CRISPR;
- (f) any other material change in CRISPR's business or corporate structure;
- (g) changes in CRISPR's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of CRISPR by any person;
- (h) causing a class of securities of CRISPR to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) a class of equity securities of CRISPR becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Exchange Act; or
- (j) any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer.

(a) and (b) — The information contained on the cover pages to this Schedule 13D/A and the information set forth or incorporated in Items 2, 3, 4 and 6 hereof are incorporated herein by reference.

(c) Between November 3, 2017 and December 4, 2017, the Reporting Persons sold an aggregate of 1,112,446 Common Shares of CRISPR held by them in a series of transactions at various prices as follows:

| <u>Trade Date</u> | <u>Shares Sold</u> | <u>Weighted Average Price Per Share</u> | <u>Total Principal Amount</u> |
|-------------------|--------------------|---|-------------------------------|
| 3-Nov-17 | 22,759 | \$19.0963 | \$434,612.69 |
| 6-Nov-17 | 79,327 | \$18.8854 | \$1,498,122.13 |
| 7-Nov-17 | 23,000 | \$18.5368 | \$426,346.40 |
| 8-Nov-17 | 16,875 | \$18.0596 | \$304,755.75 |
| 9-Nov-17 | 20,000 | \$17.0806 | \$341,612.00 |
| 10-Nov-17 | 10,000 | \$17.2815 | \$172,815.00 |
| 13-Nov-17 | 65,093 | \$17.7638 | \$1,156,299.03 |
| 14-Nov-17 | 14,907 | \$17.1900 | \$256,251.33 |
| 15-Nov-17 | 15,000 | \$17.6735 | \$265,102.50 |
| 16-Nov-17 | 105,000 | \$18.3857 | \$1,930,498.50 |
| 17-Nov-17 | 51,282 | \$18.4445 | \$945,870.85 |
| 20-Nov-17 | 158,718 | \$19.0227 | \$3,019,244.90 |
| 21-Nov-17 | 80,000 | \$19.2493 | \$1,539,944.00 |
| 22-Nov-17 | 256,000 | \$19.7560 | \$5,057,536.00 |
| 24-Nov-17 | 26,010 | \$20.0015 | \$520,239.02 |
| 27-Nov-17 | 27,990 | \$19.7481 | \$552,749.32 |
| 28-Nov-17 | 5,080 | \$19.2225 | \$97,650.30 |
| 29-Nov-17 | 4,263 | \$19.2539 | \$82,079.38 |
| 30-Nov-17 | 12,666 | \$19.0360 | \$241,109.98 |
| 1-Dec-17 | 87,991 | \$19.1002 | \$1,680,645.70 |
| 4-Dec-17 | 30,485 | \$19.4749 | \$593,692.33 |
| | | | |
| Total | 1,112,446 | \$18.9827 | \$ 21,117,177.09 |

(d) Not applicable.

(e) Not applicable.

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

To the Reporting Persons' knowledge, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of CRISPR.

Item 7. Material to Be Filed as Exhibits.

None

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.

Date: December 6, 2017

CELGENE ALPINE INVESTMENT CO. III, LLC

By: /s/ Kevin Mello

Kevin Mello

Manager

Date: December 6, 2017

CELGENE CORPORATION

By: /s/ Thomas M. Perone

Thomas M. Perone

Assistant Secretary

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. Unless otherwise indicated, 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> |
|---|---|
| Robert J. Hugin Executive Chairman | Executive Chairman of Celgene Corporation |
| Mark J. Alles Chief Executive Officer and Director | Chief Executive Officer of Celgene Corporation |
| Richard W. Barker, D.Phil. Director (Citizen of the United Kingdom) | Director of the Centre for Accelerating Medical Innovations; Chairman of the Health Innovation Network of South London, UK; a member of the Board of iCO Therapeutics, Inc.; Chairman of Stem Cells for Safer Medicine; Chairman of International Health Partners; Chairman of Precision Medicine Catapult plc. |
| Michael W. Bonney Director | Formerly Chief Executive Officer and a director of Cubist Pharmaceuticals Inc.; Chairman of the Board of Alnylam Pharmaceuticals, Inc.; Trustee of the Tekla complex of life sciences and dedicated funds; Board of Trustee Chair of Bates College |
| Michael D. Casey Director | 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 Board of Trustees of Tulane University |
| Julia A. Haller, M.D. Director | Ophthalmologist-in-Chief of the Wills Eye Hospital, Philadelphia, PA |
| Gilla Kaplan, Ph.D. Director | Director of the Global Health Program, Tuberculosis, at the Bill and Melinda Gates Foundation |
| 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. and InspireMD |
| Ernest Mario, Ph.D. Director | Chairman of the American Foundation for Pharmaceutical Education; Chairman of the Board of each of Capnia, Inc. and Chimerix Inc.; member of the Board of Directors of Tonix Pharmaceutical Holding Corp. |

CELGENE CORPORATION — EXECUTIVE OFFICERS

| Name | Title |
|-------------------------|---|
| Robert J. Hugin | Executive Chairman |
| Mark J. Alles | Chief Executive Officer |
| Peter N. Kellogg | Executive Vice President and Chief Financial Officer |
| Scott A. Smith | President and Chief Operating Officer |
| Terrie Curran | President, Inflammation & Immunology |
| Rupert Vessey | President, Research and Early Development |
| Nadim Ahmed | President, Hematology & Oncology |
| Gerald Masoudi | Executive Vice President, General Counsel and Corporate Secretary |

CELGENE ALPINE INVESTMENT CO. III, LLC (“Alpine”)

| Name and Position | Present Principal Occupation Or Employment |
|--|---|
| Kevin Mello (Citizen of Bermuda) | Manager of Alpine |
