FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287

Estimated average burden
hours per response: 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person CELGENE CORP /DE/ | CRISPR Th | | | | | Relationship of Reporting Person(s) to Issuer (Check all applicable) Director X 10% Owner | | | | | |
|--|--|---|---|-----------------|--|--|------------------------|--|--|---|--|
| , , | liddle) | 3. Date of Earliest Transaction (Month/Day/Year) 11/03/2017 Officer (give title below) bel | | | | | | | | | |
| 86 MORRIS AVENUE (Street) SUMMIT NJ 0' | 4. If Amendment, | Date of C | Prigina | al Filed (Month | | 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting | | | | | |
| (City) (State) (Z | | | | | | Person | | | | | |
| Table | l - Non-Deriva | tive Securities | Acqui | red, | Disposed | of, or | Benefici | ially Owned | | | |
| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 ar 5) | | | 5. Amount of Securities Beneficially Owned Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | Code V | | Amount | (A) or (D) | Price | Reported Transaction(s) (Instr. 3 and 4) | (1130. 4) | (111341. 4) | |
| Common Stock | 11/03/2017 | | S | | 22,759 | D | \$19.1(1) | 4,812,221 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| Common Stock | 11/06/2017 | | s | | 79,327 | D | \$18.89 ⁽¹ | 4,732,894 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| Common Stock | 11/07/2017 | | S | | 23,000 | D | \$18.54 ⁽¹⁾ | 4,709,894 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| Common Stock | 11/08/2017 | | S | | 16,875 | D | \$18.06(1 | 4,693,019 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| Common Stock | 11/09/2017 | | S | | 20,000 | D | \$17.08(1 | 4,673,019 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| Common Stock | 11/10/2017 | | S | | 10,000 | D | \$17.28(1 | 4,663,019 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| Common Stock | 11/13/2017 | | S | | 65,093 | D | \$17.76(1 | 4,597,926 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| Common Stock | 11/14/2017 | | s | | 14,907 | D | \$17.19(1 | 4,583,019 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| Common Stock | 11/15/2017 | | S | | 15,000 | D | \$17.67(1 | 4,568,019 | I | See explanation of responses ⁽²⁾⁽³⁾ | |
| | | | <u> </u> | | | | | 1 | | responses(2)(3) | |

| | Table I - Non-Deriva | tive Securities | Acqui | red, | Disposed | of, o | Beneficia | ally Owned | | |
|---------------------------------|--|---|---------------------------------|------|---|--------------------|------------------------|---|--|---|
| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transac Code (II 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owner | 6. Ownership Form: Direct (D) or Indirect (I) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | Code | v | Amount | t (A) or Price (D) | | Following Reported Transaction(s) (Instr. 3 and 4) | (Instr. 4) | |
| Common Stock | 11/16/2017 | | S | | 105,000 | D | \$18.39 ⁽⁴⁾ | 4,463,019 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/17/2017 | | S | | 51,282 | D | \$18.44(4) | 4,411,737 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/20/2017 | | S | | 158,718 | D | \$19.02(4) | 4,253,019 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/21/2018 | | S | | 80,000 | D | \$19.25 ⁽⁴⁾ | 4,173,019 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/22/2017 | | S | | 256,000 | D | \$19.76(4) | 3,917,019 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/24/2017 | | S | | 26,010 | D | \$20(4) | 3,891,009 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/27/2017 | | S | | 27,990 | D | \$19.75 ⁽⁴⁾ | 3,863,019 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/28/2017 | | S | | 5,080 | D | \$19.22(4) | 3,857,939 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/29/2017 | | S | | 4,263 | D | \$19.25 ⁽⁴⁾ | 3,853,676 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 11/30/2017 | | s | | 12,666 | D | \$19.04 ⁽⁴⁾ | 3,841,010 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 12/01/2017 | | S | | 87,991 | D | \$19.1(4) | 3,753,019 | I | See explanation of responses ⁽²⁾⁽³⁾ |
| Common Stock | 12/04/2017 | | S | | 30,485 | D | \$19.47 ⁽⁴⁾ | 3,722,534 | I | See explanation of responses ⁽²⁾⁽³⁾ |

| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | |
|--|---|--|---|----------------------------------|---|------|-----|--|---|-------|--|--|---|--|--|
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transact Code (In 8) | | of E | | 6. Date Exerc Expiration D (Month/Day/ | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

- 1. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from: \$19.00 to \$19.30 on 11/3/2017; \$18.75 to \$19.23 on 11/6/2017; \$18.02 to \$18.87 on 11/7/2017; \$17.93 to \$18.35 on 11/8/2017; \$17.00 to \$17.50 on 11/9/2017; \$17.10 to \$17.46 on 11/10/2017; \$17.50 to \$17.99 on 11/13/2017; \$17.03 to \$17.45 on 11/14/2017; \$17.55 to \$17.75 on 11/15/2017, inclusive. The reporting person undertakes to provide any security holder of the Issuer or the staff of the Securities Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote (1) to this Form 4
- 2. These securities are held of record by Celgene Alpine Investment Co. III, LLC, an indirectly wholly-owned subsidiary of Celgene Corporation ("Celgene"). Celgene may be deemed to have voting and investment power over these securities and as a result may be deemed to have beneficial ownership over such securities.
- 3. Celgene disclaims beneficial ownership of the securities reported herein for purposes of Rule 16a-1(a) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), except to the extent of its pecuniary interest therein, if any. This report shall not be deemed an admission that Celgene is a beneficial owner of such securities for the purpose of Section 16 and the Exchange Act, or for any other purpose.
- 4. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from: \$17.86 to \$18.57 on 11/16/2017; \$18.30 to \$18.65 on 11/17/2017; \$18.60 to \$19.26 on 11/20/2017; \$19.02 to \$19.46 on 11/21/2017; \$19.02 to \$20.01 on 11/22/2017; \$19.84 to \$20.27 on 11/24/2017; \$19.41 to \$20.20 on 11/27/2017; \$19.00 to \$19.76 on 11/28/2017; \$19.20 to \$19.39 on 11/29/2017; \$19.00 to \$19.20 on 11/30/2017; \$19.02 to \$19.22 on 12/1/2017; and \$19.20 to 19.64 on 12/4/2017, inclusive. The reporting person undertakes to provide any security holder of the Issuer or the staff of the Securities Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote (4) to this Form 4.

Remarks:

/s/ Peter N. Kellogg, Executive 12/06/2017 Vice President and Chief Financial Officer

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.