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

SCHEDULE 13D

**Under the Securities Exchange Act of 1934
(Amendment No. 5)***

Alliqua BioMedical, Inc.
(Name of Issuer)

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

019621 200
(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)

March 13, 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

CUSIP No. 019621200		
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 8,025,194 (1)
	8	SHARED VOTING POWER -0-
	9	SOLE DISPOSITIVE POWER 8,025,194 (1)
	10	SHARED DISPOSITIVE POWER -0-
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 8,025,194 (1)	
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) 19.9% (2)	
14	TYPE OF REPORTING PERSON* CO	

(1) Includes 7,046,100 shares of Common Stock and 979,094 shares of Common Stock underlying warrants that are exercisable immediately; provided, however, that the exercise of the warrants is subject to the Ownership Cap described in Item 6 herein.

(2) The percentage ownership is based on 36,137,486 shares of Common Stock outstanding as of February 28, 2017, which includes (i) 35,158,392 shares of Common Stock outstanding as reported by Alliqua BioMedical, Inc. to Celgene Corporation on such date, and (ii) 979,094 shares of Common Stock underlying warrants held by Celgene Corporation that are exercisable immediately; provided, however, that the exercise of the warrants is subject to the Ownership Cap described in Item 6 herein.

This Amendment No. 5 amends the Schedule 13D (the “**Schedule 13D**”) filed with the Securities and Exchange Commission (the “**Commission**”) on November 27, 2013, as amended by Amendment No. 1 filed with the Commission on March 7, 2014, Amendment No. 2 filed with the Commission on April 15, 2014, Amendment No. 3 filed with the Commission on May 4, 2015, and Amendment No. 4 filed with the Commission on March 1, 2017, by Celgene Corporation (“**Celgene**”) with respect to common stock, par value \$0.001 per share (“**Common Stock**”), of Alliqua BioMedical, Inc., a Delaware corporation (“**Alliqua**”). 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.

No modification.

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

No modification.

Item 4. Purpose of Transaction.

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

On March 13, 2017, Celgene entered into the Side Letter (as described in Item 6 herein). As a result of the Ownership Cap in the Side Letter, Celgene’s beneficial ownership percentage decreased to 19.9%.

Item 5. Interest in Securities of the Issuer.

Item 5(a)-(c) is hereby amended and supplemented by adding the following:

On March 13, 2017, Celgene entered into the Side Letter (as described in Item 6 herein). As a result of the Ownership Cap in the Side Letter, Celgene’s beneficial ownership percentage decreased to 19.9%.

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

Item 6 is hereby amended and supplemented by adding the following:

On March 13, 2017, Celgene and Alliqua entered into a side letter agreement (the “**Side Letter**”), pursuant to which Celgene agreed to conditionally waive the MFN Adjustment in the Securities Purchase Agreement to the extent that the MFN Adjustment would cause Celgene (together with its affiliates) to beneficially own or control in excess of 19.9% of the number of shares of Common Stock outstanding or the total voting power of Alliqua’s securities outstanding, immediately after giving effect to such MFN Adjustment, until the earlier of (i) Alliqua obtaining stockholder approval of the issuance of any securities to Celgene as a result of the MFN Adjustment in excess of the foregoing threshold, or (ii) a change of control. In addition, the Side Letter provides that Alliqua will not issue to Celgene any shares of Common Stock upon exercise of the warrants Celgene holds, to the extent such issuance of shares would cause Celgene (together with its affiliates) to beneficially own or control in excess of 19.9% of the number of shares of Common Stock outstanding or the total voting power of Alliqua’s securities outstanding (the “**Ownership Cap**”) unless and until Alliqua obtains stockholder approval permitting such issuances. Alliqua agreed to use its reasonable best efforts to solicit stockholder approval for the MFN Adjustment and the full issuance of shares pursuant to Celgene’s warrants at an annual or special meeting of stockholders of the Company to be promptly called and held prior to May 31, 2017.

As used herein, the “**MFN Adjustment**” means the “most-favored nation” provisions in the Securities Purchase Agreement such that if Alliqua, during 120 days from February 27, 2017, issues or sells any Common Stock or Common Stock equivalents reasonably believed to be more favorable in terms or conditions than the terms and conditions on which Celgene purchased shares of Common Stock from Alliqua on February 27, 2017, Alliqua must amend the terms of the Securities Purchase Agreement to give Celgene (and the other investor parties thereto) the benefit of such more favorable terms or conditions.

A copy of the Side Letter is filed as Exhibit 10.1 to Alliqua’s Current Report on Form 8-K filed with the Commission on March 15, 2017 and incorporated herein by reference.

Item 7. Material to Be Filed as Exhibits.

Item 7 is hereby amended and supplemented by adding the following:

Exhibit 7 – Side Letter, dated March 13, 2017, between Alliqua BioMedical Inc. and Celgene Corporation (incorporated by reference to Exhibit 10.1 to Alliqua’s Current Report on Form 8-K filed with the Commission on March 15, 2017).

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.

March 16, 2017

CELGENE CORPORATION

By: /s/ Peter N. Kellogg
Peter N. Kellogg
Executive Vice President and Chief Financial Officer
