

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

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934

Filed by the Registrant:

Filed by a Party other than the Registrant:

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to Section 240.14a-12

Alliqua BioMedical, Inc.

(Name of Registrant as Specified in Its Charter)

N/A

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (Set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing:

(1) Amount previously paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

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**SUPPLEMENT TO PROXY STATEMENT
FOR THE SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD APRIL 27, 2018**

This is a supplement to the proxy statement, dated March 30, 2018 (the “Definitive Proxy Statement”), of Alliqua BioMedical, Inc. (“Alliqua” or the “Company”) that was mailed to you in connection with the solicitation of proxies for use at the special meeting of stockholders (the “Special Meeting”) to be held on April 27, 2018, at 9:00 a.m. at 1010 Stony Hill Road, Suite 200, Yardley, Pennsylvania 19067. The purpose of the Special Meeting is to consider and vote upon the following proposals: (i) a proposal (the “Asset Sale Proposal”) to approve the Asset Purchase Agreement (the “Asset Purchase Agreement”), dated as of January 5, 2018, by and between the Company and Celularity Inc., a Delaware corporation (“Buyer”), providing for the sale of our advanced biologic wound care business, including our Biovance and Interfyl product lines and MIST Therapy and other therapeutic ultrasound products, which may be deemed to be a sale of all, or substantially all, of our assets to Buyer on the terms and subject to the conditions set forth in the Asset Purchase Agreement (the “Asset Sale Transaction”); (ii) a proposal (the “Advisory Proposal”) to approve, on an advisory, non-binding basis, certain compensation that has, will or may be paid or become payable to the Company’s named executive officers in connection with the asset sale; and (iii) a proposal (the “Adjournment Proposal”) to adjourn or postpone the Special Meeting, if necessary or appropriate, for the purpose of soliciting additional votes for the approval of the Asset Sale Proposal. The Company’s board of directors (the “Board”) previously established March 23, 2018 as the record date for the purpose of determining the stockholders who are entitled to notice of and to vote at the Special Meeting or at any adjournment or postponement thereof.

After careful consideration, our Board determined that the Asset Purchase Agreement and the transactions contemplated thereby, including the Asset Sale Transaction, are fair to, and in the best interests of, the Company and its stockholders and approved, adopted and authorized, and declared advisable the Asset Purchase Agreement and the Asset Sale Transaction and the other transactions contemplated by the Asset Purchase Agreement. The Board made its determination after consultation with its legal and financial advisors and consideration of a number of factors. **THE BOARD RECOMMENDS THAT THE STOCKHOLDERS OF THE COMPANY VOTE “FOR” THE ASSET SALE PROPOSAL, “FOR” THE ADVISORY PROPOSAL AND “FOR” THE ADJOURNMENT PROPOSAL.**

Litigation relating to the Asset Sale Transaction

As previously disclosed, on February 22, 2018 a putative stockholder class action complaint was filed in the United States District Court for the District of Delaware against us and each member of the Board, captioned Ronald Cresta, Individually and on Behalf of All Others Similarly Situated v. Alliqua BioMedical Inc., David Johnson, Joseph M. Leone, Gary Restani, Jeffrey Sklar and Mark Wagner. The complaint alleges, among other things, that we and the Board violated federal securities laws and regulations by soliciting stockholder votes in connection with the Asset Sale Transaction through a proxy statement that omits material facts necessary to make the statements therein not false or misleading. The complaint seeks, among other things, to enjoin us and the Board from conducting the stockholder vote on the Asset Sale Transaction unless and until the allegedly omitted material information is disclosed to the Company’s stockholders, damages allegedly suffered by the plaintiffs as a result of the asserted omissions, as well as related attorneys’ fees and expenses.

On March 28, 2018, the plaintiff in the above lawsuit filed a motion for preliminary injunction seeking to enjoin the Company and the Board from taking any steps to consummate the Asset Sale Transaction unless and until certain allegedly omitted material information is disclosed to the Company’s stockholders.

The Company and the other defendants named in the litigation believe that the claims asserted in the litigation are without merit and no supplemental disclosure is required under applicable law. However, in order to avoid the risk of the litigation delaying or adversely affecting the Asset Sale Transaction and to

minimize the costs, risks and uncertainties inherent in litigation, and without admitting any liability or wrongdoing, the Company has determined to voluntarily supplement the Definitive Proxy Statement as described in this Schedule 14A. Nothing in the Definitive Proxy Statement or in this Schedule 14A shall be deemed an admission by the Company or any such other defendants or any other person or entity of the legal necessity or materiality under applicable laws of any of the disclosures set forth herein. To the contrary, the Company and such other defendants deny all liability with respect to the facts and claims alleged in the litigation and specifically deny all allegations that any additional disclosure was or is required.

Supplemental Disclosures

This supplemental information should be read in conjunction with the Definitive Proxy Statement, which should be read in its entirety. Nothing herein shall be deemed an admission of the legal necessity or materiality of any of the disclosures set forth herein. All page references in the information below are to pages in the Definitive Proxy Statement, and all capitalized terms used below shall have the meanings set forth in the Definitive Proxy Statement.

The section beginning on page 25 entitled “PROPOSAL 1: ASSET SALE PROPOSAL — Background of the Asset Sale Transaction” of the Definitive Proxy Statement is hereby amended as follows:

The eleventh paragraph on page 26 is hereby amended and restated as follows (the additional language is underlined):

On August 21, 2017, Party G entered into a confidentiality agreement with the Company. This confidentiality agreement (and those entered into by Buyer #2, Party A, Party H, Party I and Party J as described below) contained certain standstill provisions that expired by their terms upon Alliqua’s entry into the agreement to sell substantially all of its assets as part of the Asset Sale Transaction.

Forward-looking statements

This communication, and the documents to which the Company refers you in this communication, contains not only historical information, but also forward-looking statements made pursuant to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally identifiable by the use of words like “may,” “will,” “should,” “could,” “expect,” “anticipate,” “estimate,” “believe,” “intend,” or “project” or the negative of these words or other variations on these words or comparable terminology. The reader is cautioned not to put undue reliance on these forward-looking statements, as these statements are subject to numerous factors and uncertainties outside of our control that can make such statements untrue, including, but not limited to, the Asset Sale Transaction not being timely completed, if completed at all; prior to the completion of the Asset Sale Transaction, the Company’s or Buyer’s respective businesses experiencing disruptions due to transaction-related uncertainty or other factors making it more difficult to maintain relationships with employees, business partners or governmental entities; and the parties being unable to successfully implement integration strategies or realize the anticipated benefits of the Asset Sale Transaction, including the possibility that the expected synergies and cost reductions from the proposed acquisition will not be realized or will not be realized within the expected time period. In addition, other factors that could cause actual results to differ materially are discussed in the Company’s filings with the SEC, including its most recent Annual Report on Form 10-K filed with the SEC, and its most recent Form 10-Q filings with the SEC. Investors and security holders are urged to read these documents free of charge on the SEC’s web site at <http://www.sec.gov>. The Company undertakes no obligation to publicly update or revise its forward-looking statements as a result of new information, future events or otherwise.
