



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 3030

February 23, 2018

David Johnson
Chief Executive Officer
Alliqua BioMedical, Inc.
1010 Stony Hill Road, Suite 200
Yardley, PA 19067

**Re: Alliqua BioMedical, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed January 29, 2018
File No. 001-36278**

Dear Mr. Johnson:

We have limited our review of your filing to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Proposal 1: The Asset Sale Proposal, page 23

1. We note your disclosure that you are proposing to sell your wound care business and retain your hydrogel manufacturing business. We also note your disclosure on pages 50 and 51 regarding the excluded assets and liabilities. Provide us your analysis supporting your conclusion that financial statements of the registrant and the business being sold, along with pro forma information, are not required. For guidance, see Section H.6 of the Division of Corporation Finance's July 2001 Interim Supplement to its Publicly Available Telephone Interpretations, available on the Commission's website.

Background of the Asset Sale Transaction, page 24

2. Clarify the nature of the difficulties and certain closing conditions that you mention in your description of December 22, 2017 events at the bottom of page 29. Also clarify the nature of the circumstances that caused the Board to view the asset sale as the preferred action, according the first paragraph on page 30.

David Johnson
Alliqua BioMedical, Inc.
February 23, 2018
Page 2

3. Clarify why the consideration changed from \$30 million plus a contingent value right of up to \$5 million to \$29 million with no contingent consideration.

SEC Reporting and NASDAQ Listing, page 47

4. We note your disclosure that your common stock could be delisted. Provide us your analysis of the applicability of Rule 13e-3 to the proposed transactions. Address in your response all relationships between Alliqua and the buyer and its affiliates, including common officers or directors, direct or indirect equity ownership, rights to appoint directors, and the ability to terminate material contracts. Also ensure that your response indicates when Dr. Zeldis became associated with the buyer or its affiliates and the extent of his participation in the development, evaluation or negotiation of the proposed transaction for either party.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Tim Buchmiller at (202) 551-3635 or me at (202) 551-3617 with any questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief
Office of Electronics and Machinery

cc: Rick Werner, Esq.
Haynes and Boone, LLP