

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

July 31, 2017

Chad Kolean Vice President and Chief Financial Officer Cellectar Biosciences, Inc. 3301 Agriculture Drive Madison, WI 53716

Re: Cellectar Biosciences, Inc.

Preliminary Proxy Statement on Schedule 14A

Filed July 26, 2017 File No. 001-36598

Dear Mr. Kolean:

We have limited our review of your filing to the issues we have addressed in our comment.

Please respond to this comment letter 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 comment applies to your facts and circumstances, please tell us why in your response.

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

Preliminary Proxy Statement on Schedule 14A filed July 26, 2017

General

1. We note your disclosure that you filed a Certificate of Amendment with the Delaware Secretary of State following the 2017 Annual Meeting increasing the number of authorized shares of common stock. We also note your disclosure that if the Special Meeting Proposal does not receive the requisite vote to ratify the approval of the Amendment, the Board will consider "whether to implement a plan to conserve shares and assess any further actions that may be appropriate." Please expand your disclosure to clarify the legal consequence of the vote in the event that you do not receive the requisite vote to ratify the approval of the Amendment. For instance, state whether you will revert to having 40,000,000 shares of authorized common stock.

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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.

Please contact Irene Paik at (202) 551-6553 or Mary Beth Breslin at (202) 551-3625 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Sarah Fortt, Vinson & Elkins LLP