Via EDGAR

June 25, 2014

Mr. Jeffrey P. Riedler Assistant Director Division of Corporation Finance - Mail Stop 4720 United States Securities and Exchange Commission Washington, D.C. 20549

Re: Cellectar Biosciences, Inc.

Registration Statement on Form S-1

Filed May 19, 2014 File Number 333-196091

Dear Mr. Riedler:

This letter constitutes supplemental correspondence on behalf of Cellectar Biosciences, Inc., a Delaware corporation (the "Company"), related to the above-referenced filing (the "Registration Statement").

In advance of the Company's filing of an Amendment No. 1 to address the comments of the Staff on the Registration Statement contained in your letter of June 2, 2014 (the "Comment Letter"), the Company has requested further clarification regarding the substance of Comment No. 1 included in the Comment Letter.

We have repeated the Staff's comment below in bold face type.

## 1. Please amend your registration statement to also register the "combinations" being offered, as these appear to be the functional equivalent of units

The Company appreciates the Staff's comment that the combinations, as presented in the Registration Statement, could be construed as the functional equivalent of units. However, the shares of the Company's common stock (the "Shares") and the warrants to purchase shares of the Company's common stock that are proposed to be sold in the offering (the "Warrants") will be immediately severable upon issuance. In addition, it is intended that the Shares and the Warrants will be separately listed on The Nasdaq Capital Market, and they will not be listed in combination as a single security. Given these factors, the Company has inquired whether it would improve the disclosure to remove references to a number of "combinations" or "units" or any other term that would connote the status of a separate security, and instead to offer Shares, together with Warrants in even proportion, as two individual securities. The Company has been advised that this would be better understood and received by the market, particularly given the severable nature and the intended separate listing of the securities.

The Company and the underwriter hope to begin a "road show" and price as soon as possible following clearance from the Staff. Accordingly, we would appreciate the Staff's guidance on this point as soon as it is practicable to be provided.

Should the Staff have any additional comments or questions, please direct such to me at (617) 832-1113 or in my absence to Matthew Eckert at (617) 832-3057.

Very truly yours,

/s/ Paul Bork

Paul Bork

cc: Dr. Simon Pedder (Cellectar)