



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

May 1, 2018

Gregory Gorgas
Chief Executive Officer
Artelo Biosciences, Inc.
888 Prospect Street, Suite 210
La Jolla, CA 92037

**Re: Artelo Biosciences, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed April 17, 2018
File No. 333-222756**

Dear Mr. Gorgas:

We have reviewed your amended registration statement and have the following 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 this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendments to your filings and the information you provide in response to these comments, we may have additional comments.

Exhibit 10.20

1. We note you entered into a contract effective January 18, 2018 which requires you to reimburse the Foundation for all patent costs incurred pursuant to Section 6.1 of the Stony Brook Agreement, including certain accrued patent costs in the amount of \$170,109.93 as per Section 6.2 of such agreement. Please tell us and disclose how you accounted for your obligation for these accrued patent costs in your February 28, 2018 financial statements, including where you recorded the offsetting entry. Please also tell us how you will account for future patent costs under this agreement. Please provide your basis in GAAP for your accounting.

Gregory Gorgas
Artelo Biosciences, Inc.
May 1, 2018
Page 2

You may contact Courtney Haseley, Staff Attorney, at 202-551-7689, or me at 202-551-3720 with any questions.

Sincerely,

/s/ Mara L. Ransom

Mara L. Ransom
Assistant Director
Office of Consumer Products

cc: Marty Waters, Esq.
Wilson Sonsini Goodrich & Rosati PC