



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

February 27, 2018

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

**Re: Artelo Biosciences, Inc.
Registration Statement on Form S-1
Filed January 29, 2018
File No. 333-222756**

**Form 10-Q for Fiscal Quarter Ended November 30, 2017
Filed January 16, 2018
File No. 333-199213**

Dear Mr. Gorgas:

We have reviewed your filings 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.

With respect to your registration statement on Form S-1, we have limited our review of your registration statement to the issues we have addressed in our comments. With respect to your Form 10-Q for the fiscal year ended November 30, 2017, please respond to our comment 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 any amendments to your filings and the information you provide in response to these comments, we may have additional comments.

Registration Statement on Form S-1

General

1. We note that your selling shareholders intend to sell their shares at market prices and that your shares are presently quoted on the OTC Pink marketplace. In order to sell shares at market prices, we require an existing trading market for the shares and we do not consider the OTC Pink Marketplace to be an existing trading market for purposes of

satisfying Item 501(b)(3) of Regulation S-K. Please revise your prospectus to set a fixed price at which the selling security holders will offer and sell their shares until such time as your shares are listed on a national securities exchange or quoted on the OTCQX, OTCQB or OTCBB marketplaces. Please make the appropriate revisions throughout your prospectus.

2. Please consistently identify the market on which your shares are quoted. In this regard, we note that you reference the OTCBB in the fee table to this registration statement as well as on your web-site.
3. We note that you conducted a private placement on January 26, 2018. We note further your statement on page F-20 that “[a]s of January 29, 2018, \$71,950 is still owed by the investors to the Company” related to such offering. To the extent any selling security holders are registering for resale shares acquired in such offering, please provide us with your analysis of whether such private placement was complete, and the investors irrevocably bound, prior to filing this registration statement. Refer to Question 134.01 of the Securities Act Compliance and Disclosure Interpretations located at our web-site.

Corporate Overview, page 2

4. Please enhance your disclosure to clearly explain the terms “endocannabinoid system” and ECS “modulators” and their significance to your currently proposed business model.
5. Please enhance your disclosure to clearly identify which kinds of patients or indicators you intend to address, whether using the NEO1940 compound, your own novel cannabinoid composition (ART 12.11), an inhibitor (ART 26.12), new chemical entities (ART27.13), or otherwise. In this regard, we note statements made in your February 2018 corporate presentation, available on your web-site, regarding potential treatment of cachexia and cancer, planning for clinical development in rare and orphan diseases, and identifying several diseases for which modulating ECS activity could have therapeutic potential.
6. Please revise to disclose the material terms of the Stony Brook Agreement and file such agreement as an exhibit to the registration statement pursuant to Item 601(b)(10) of Regulation S-K, or advise.
7. We note several press releases announcing a supply agreement between you and Phivida Holdings Inc., as well as a clinical study relating to encapsulated cannabidiol. If material, please revise your disclosure to reflect the material terms of such agreements and file such agreements as an exhibit to the registration statement pursuant to Item 601(b)(10) of Regulation S-K, or advise.

Intellectual Property, page 5

8. If material to your ongoing diligence and technical analysis regarding the NEO1940 compound, please enhance your disclosure to describe the results of the clinical studies conducted by NEOMED's prior sponsor with respect to NEO1940, including any endpoints and results. Otherwise, please remove the language which indicates that "NEO1940 was dosed in over 200 subjects."

Selling Stockholders, page 28

9. We note that David Moss is a significant shareholder who intends to sell shares in this offering. Pursuant to Item 507 of Regulation S-K, please revise to disclose whether any material relationship exists between Mr. Moss and the company or advise.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Year Ended August 31, 2017

Liquidity and Financial Condition, page 38

10. We note your disclosure that you have insufficient funds to develop your business over the next 12 months. Please revise your disclosure to explain how, in light of your lack of revenues and minimal operations, you intend to finance future operations and implement your business plan. Please provide a discussion and analysis of the types of financing that are reasonably likely to be available, the anticipated amount of financing you intend to seek and the anticipated impact on the company's cash position, liquidity and results of operations. Refer to Item 303(a) of Regulation S-K and Section IV.B.2 of SEC Release No. 33-8350.

Business, page 40

11. In your discussion of research and development, you state that you have invested \$200,000 on direct research and development activities and yet on page 5 you state that you have commitments to invest approximately \$200,000 on direct research and development related activities. Please revise to clarify your disclosure.

Transactions with Related Persons, page 51

12. We note your disclosure on page F-11 describing share issuances to related parties that appear to be in excess of \$120,000. Please revise your disclosure to describe any transactions required to be disclosed pursuant to Item 404 of Regulation S-K, or advise.

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Principal Stockholders, page 52

13. The amounts held by certain of your stockholders, such as Messrs. Gorgas and Moss, appear to differ from those presented on page 28. Please revise.

Form 10-Q for Fiscal Quarter Ended November 30, 2017

Item 4. Controls and Procedures, page 15

14. It appears that you provide management's report on internal controls over financial reporting under the "Management's Report on Disclosure Controls and Procedures" caption. Please note that you are not required to provide management's report on internal controls over financial reporting for interim periods and such disclosure does not satisfy the requirement to provide management's conclusions regarding the effectiveness of your disclosure controls and procedures. Accordingly, please amend your filing to provide the disclosures required by Item 307 of Regulation S-K.

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.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Sondra Snyder, Staff Accountant, at (202) 551-3332 or Andrew Blume, Staff Accountant, at (202) 551-3254 if you have questions regarding comments on the financial statements and related matters. Please contact Courtney Haseley, Staff Attorney, at 202-551-7689, or me at 202-551-3720 with any other questions.

Sincerely,

/s/ Mara L. Ransom

Mara L. Ransom
Assistant Director
Office of Consumer Products

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