MITCHELL **D.** GOLDSMITH Direct: 312-836-4006

Facsimile: 312-966-8479

E-mail: mgoldsmith@taftlaw.com

IN REFERENCE TO: XEN03-GN003

June 23, 2016

VIA FEDERAL EXPRESS

Suzanne Hayes, Assistant Director Division of Corporation Finance U.S. Securities & Exchange Commission 100 F Street, NE Washington, D.C. 20549

Re: Xenetic Biosciences, Inc.

Registration Statement on Form S-1 Filed: May 9, 2016

File No.:333-211249

Dear Ms. Hayes:

We are writing on behalf of our client, Xenetic Biosciences, Inc. (the "Company"), in response to the comments of the staff of the Division of Corporation Finance (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") with respect to the Company's Registration Statement on Form S-1, filed on May 9, 2016 (the "Registration Statement"), as set forth in the Staff's letter dated May 23, 2016 addressed to Michael Scott Maguire, the President and Chief Executive Officer of the Company (the "Comment Letter"). The Company is concurrently filing its Amendment to the Registration Statement ("Amendment No.1"), which includes changes to the Registration Statement in response to the Staff's comments.

For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment. For your convenience, we have italicized the reproduced Staff comments from the Comment Letter. Unless otherwise indicated, page references in the descriptions of the Staff's comments refer to the Draft Registration Statement, and page references in the responses refer to Amendment No. 1. All capitalized terms used and not otherwise defined herein shall have the meanings set forth in Amendment No. 1.

In addition to filing this letter via EDGAR, we are sending via Federal Express five (5) copies of each of this letter and Amendment No. 1 (marked to show changes from the Registration Statement).

Calculation of Registration Fee

1. Your prospectus indicates that this is a unit offering. Accordingly, please revise the fee table to reflect that you are registering units. Also, refer to the Division's Compliance and Disclosure Interpretations, Securities Act Rules, Questions 240.05 and 240.06, and revise (i) the fee table and (ii) the accompanying note discussion to clarify the basis for your fee calculation.

Response: In response to the Staff's comment, the Company has revised the fee table in Amendment No. 1 to reflect that the Company is registering units and the accompanying note discussion has been revised to clarify the basis for the fee calculation.

Prospectus Cover Page

2. Please revise the cover page to explain that there is no established public trading market for your common stock and that share prices on an over-the-counter marketplace may not be indicative of the market price of your common stock on the NASDAQ Capital Market

Response: In response to the Staff's comment, the Company has revised the cover page to explain that there is no established public trading market for the Company's common stock and that share prices on an over-the-counter marketplace may not be indicative of the market price of the Company's common stock on the NASDAQ Capital Market.

Use of Proceeds, page 39

3. We note your disclosure on page 96 that you entered into a forbearance agreement relating to the outstanding loan amount of \$395,000 due to SynBio, which deferred collection until the earlier of the completion of a \$7 million capital raise or June 30, 2016. Accordingly, please disclose, as applicable, the use of proceeds to repay the loan as well as the interest rate of the loan. Refer to Instruction 4 of Item 504(b) [sic] of Regulation S-K.

Response: The Company respectfully submits to the Staff that in first quarter of 2016, the Company made a series of payments, totaling \$237,048, on the SynBio loan. Accordingly, as of March 31, 2016, the outstanding loan amount was \$157,952. Item 504 of Regulation S-K requires the registrant to disclose "the principal purposes for which the net proceeds to the registrant from the securities to be offered are intended to be used." (Emphasis added.) Further, Instruction 4 of Item 504(b) of Regulation S-K requires the registrant, "[i]f any material amount of the proceeds is to be used to discharge indebtedness," (emphasis added) to disclose the interest rate and maturity of such indebtedness. If the Company raises net \$15 million, \$157,952 (outstanding loan balance as of March 31, 2016) represents approximately 1.1% of net proceeds. The Company does not believe that use of proceeds to pay off a loan that represents approximately 1.1% of net proceeds constitute a principal purpose. Moreover, the Company does not consider this to constitute a material amount. The Company will primarily use the net proceeds to further research and develop its Virexxa, OncoHist and PolyXen technologies, and towards other working capital expenditures including general operating expenses (e.g., personnel costs and rent), each of which are expected to be significantly greater than the settlement of the loan. As such, the Company does not believe it necessary pursuant to Item 504 of Regulation S-K to disclose that it may use offering proceeds to pay off the loan in the "Use of Proceeds" section of the S-1. Further, the Company does not believe Instruction 4 of Item 504 requires it to disclose interest rate and the maturity of the loan. The Company has revised the disclosure on page 96 of Amendment No. 1 to clarify the terms of the loan and that the proceeds of the offering will be used to pay off the loan.

With respect to the loan disclosure on page 96, we updated the language as follows:

"In May 2011, we entered intoreceived a short term unsecured loan facility of up to \$1.7 million from SynBio-The loan earried an initial stated, of which \$157,952 was outstanding as of March 31, 2016. In connection with the APA, we made a series of payments during the first quarter of 2016 totaling \$237,048 to creditors of Kevelt. Pursuant to the Kevelt APA such payments are considered direct offsets to the loan with SynBio. The loan had an interest rate of 8.04% per annum as of the date of grant, with interest payable upon repayment of the loan. The initial due, which was to be seven months after the closing date of the SynBio loan was December 2011. By written agreement, the initial due date was extended to June 2012.loan. During 2012, the loan matured and it was agreed by both the parties agreed that the loan can be called with full repayment of the outstanding principal including accrued interest upon future agreement by both parties. It was also agreed at this point that as of July 1, 2012,2012 that no further interest on the outstanding loan balance will be accrued. No payments were made to SynBio in repayment of the loan during the year ended December 31, 2015. As of December 31, 2015, the loan amount outstanding was \$395,000; would accrue. During 2015, we entered into a forbearance agreement with SynBio in regards to the loan which provided for the deferral of all collection efforts and waiver of any default on the loan until the earlier of the completion of a \$7 million capital raise or June 30, 2016."

Report of Independent Registered Public Accounting Firm, pages F-1 and F-2

4. Please include a report that provides for the audit and opinion related to the financial statements as of and for the year ended December 31, 2014 after the effects of the adjustments to retrospectively apply the change in par value described in Note 11.

Response: Please find enclosed Marcum's audit report that, among others, provides that:

"The financial statements of Xenetic Biosciences, Inc. as of and for the year ended December 31, 2014, were audited by other auditors whose report dated April 15, 2015, expressed an unmodified opinion on those financial statements. As discussed in Notes 11 and 2 to the financial statements, the Company has adjusted its 2014 financial statements to retrospectively apply the change in par value and the reverse stock split that occurred subsequent to the year ended December 31, 2015. The other auditors reported on the financial statements before the retrospective adjustments.

Suzanne Hayes, Assistant Director U.S. Securities & Exchange Commission June 23, 2016 Page 4

As part of our audit of the 2015 financial statements, we also audited the adjustments to the 2014 financial statements to retroactively apply the change in par value and the reverse stock split that occurred subsequent to the year ended December 31, 2015 as described in Notes 11 and 2. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to Xenetic Biosciences' 2014 financial statements other than with respect to the adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2014 financial statements as whole."

* * *

The Company hereby confirms that:

- (a) should the Commission or the Staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- (b) the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- (c) the Company may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact the undersigned at (312) 836-4006 with any questions or comments you may have regarding this letter or the amendment.

Sincerely,

Taft Stettinius & Hollister LLP

/s/ Mitchell D. Goldsmith

Mitchell D. Goldsmith

Enclosures

MDG/CRM/16225246.6