



DIVISION OF  
CORPORATION FINANCE

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

December 2, 2014

Via E-mail

David Hall  
Chief Executive Officer  
Replicel Life Sciences, Inc.  
Suite 2020 – 401 West Georgia Street  
Vancouver, British Columbia, Canada  
V6B5A1

**Re: Replicel Life Sciences, Inc.**  
**Form 20-F for the Year Ended December 31, 2013**  
**Filed March 18, 2014**  
**Response Dated November 14, 2014**  
**File No. 000-50112**

Dear Mr. Hall:

We have reviewed your filing and response 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 within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing any information you provide in response to these comments, we may have additional comments.

Form 20-F for the Year Ended December 31, 2013

Item 7. Major Shareholders and Related Party Transactions, page 30

B. Related Party Transactions, page 31

1. We note in your response to comment one of our letter dated October 29, 2014 that you have identified the names of the related parties regarding the trade payables and accrued liabilities. However, you have not clarified the nature and extent of the transactions underlying the trade payables and accrued liabilities. Please provide us with draft disclosure that includes a description of the transactions as required by Item 7.B.1 of Form 20-F or advise us why you believe such disclosure is not required.

Notes to the Consolidated Financial Statements, page 8

9. Licensing Revenue, page 26

2. We note your response to comment three of our letter dated October 29, 2014 and it appears to us that you recognized revenue of \$4,120,000 in 2013 on the basis that you transferred pre-clinical data and clinical protocol documentation to Shiseido and completed a training plan in 2013; and because you are not contemplating development work with, or for, Shiseido. Per review of your Collaboration and Technology Transfer Agreement (“Agreement”), it appears to us that the Transfer Technology will also include any future enhancement, addition, modification or upgrade to RCH-01, which RepliCel will produce not jointly with Shiseido (Article 1.25). In addition, it appears to us that the Agreement requires the Collaboration and Cooperation between RepliCel and Shiseido on the Joint Development of the Collaboration Product (Articles 2.1.3, 2.2.1 and 5.3.1); and also requires the establishment and Regular Meeting of a Joint Steering Committee to “oversee progress towards and to ensure the Technology Transfer and Joint Development through...” (Article 2.3). Given the Company’s continuing obligations that appear to be required under the Agreement and that the Technology Transfer appears to be an ongoing process under the Agreement, please further explain to us why you believe it was appropriate to recognize the entire upfront payment of \$4,120,000 as revenue in fiscal 2013 under IAS 18. In your response, please include your consideration of the Agreement Articles referenced above with respect to your accounting conclusion.

You may contact Steve Lo at 202-551-3394 or John Archfield at 202-551-3315 if you have questions regarding comments on the financial statements and related matters. Please contact Hillary Daniels at 202-551-3959 or James Lopez at 202-551-3536 with any other questions.

Sincerely,

/s/Tia L. Jenkins

Tia L. Jenkins  
Senior Assistant Chief Accountant  
Office of Beverages, Apparel, and  
Mining