



DIVISION OF  
CORPORATION FINANCE

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

January 26, 2015

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 January 6, 2015**  
**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.

Response dated November 14, 2014

1. We note that counsel provided the three acknowledgements requested at the end of our letter dated October 29, 2014. Please note that these representations must come directly from the company. Please provide these representations from the company with your next response.

Form 20-F for the Year Ended December 31, 2013  
Notes to the Consolidated Financial Statements, page 8  
Note 9. Licensing Revenue, page 26

2. In response to comment two of our letter dated October 29, 2014, you state that you believe the sale of goods criteria in IAS 18.14 were met upon the technology transfer and completion of the training plan in fiscal 2013. You also state that the upfront payment represents consideration for the sale of the license to develop the product and then sell the product in a specific geographic location. Please advise us of the following:
  - Please confirm our understanding that the Company continues to own all right, title and interest to the Transfer Technology (Articles 5.1 and 1.25) and, if so, further explain to us why you believe that conditions (a) and (b) in paragraph 14 of IAS 18 were satisfied upon the Technology Transfer and completion of the training plan.
  - Please confirm our understanding that a saleable product using the transfer technology did not exist as of the Technology Transfer and that the Agreement requires the Collaboration and Cooperation between the Company and Shiseido on the Joint Development of a Collaboration Product. If so, tell us how you considered, by analogy, the first example in paragraph 20 of the Appendix to IAS 18 when a licensee has the right to use certain technology for a specified period of time.
3. We note from your response to comment two of our letter dated December 2, 2014 that the definition of Transfer Technology in Article 1.25 does not require the Company to continue to transfer developments made independently by the Company after the Technology Transfer, and that such an interpretation would be contrary to the definition of Improvement in Article 5.2. You also state that the Company owns all Improvements that are created by it and it has no obligation to transfer them to Shiseido. Please advise us of the following:
  - Please confirm our understanding that the Company continues to own all right, title and interest to the Transfer Technology included in the initial Technology Transfer (Articles 5.1 and 1.25) and, if so, further explain to us why the Company's ownership of any subsequent Improvement, which it will not produce jointly with Shiseido, would prevent such an Improvement from being part of the Transfer Technology.
  - Identify any and all enhancement, addition, modification or upgrade to RCH-01 (i.e. Improvement) subsequent to the initial 2013 Technology Transfer, which the Company did not produce jointly with Shiseido. To the extent there were any such Improvements, tell us whether you have notified Shiseido of them pursuant

to Section 2.3.5 and whether you have provided or transferred them to Shiseido as part of the Transfer Technology.

- Identify the date of any and all communications between the Company and Shiseido with respect to the Agreement subsequent to the initial Technology Transfer, including any Regular Meeting by the Joint Steering Committee, and briefly describe the general nature of each communication.
4. In your response to comment two of our letter dated December 2, 2014, you state that the Company views the provisions in the Agreement that relate to its collaboration efforts with Shiseido as mutually beneficial and not as future services to be provided by the Company in connection with the Upfront Payment. You also state that the provisions in the Agreement regarding collaboration efforts, including Articles 2.1.3, 2.2.1 and 5.3.1, are for Shiseido's benefit since Shiseido will be able to progress quicker with the research and development of the RCH-01. Please further explain to us why you believe that your obligations under the Agreement, including those in the Articles referenced in the prior sentence, do not represent services to be provided by the Company. To the extent that you do not believe the provisions in the Agreement regarding collaboration efforts are for the Company's benefit, tell us how you considered the future milestone and royalty payments payable by Shiseido to the Company pursuant to Article 4 of the Agreement.

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