June 26, 2018

Via EDGAR and Federal Express

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Healthcare & Insurance
100 F Street, N.E.
Washington, D.C. 20549
Attention: Dorrie Yale

Re: Replimune Group, Inc.
Amendment No. 1 to Draft Registration Statement
Submitted June 11, 2018
Registration No. 333-225846

Dear Ms. Yale:

On behalf of our client, Replimune Group, Inc. (the "Company"), we submit this letter and the following information in response to comments from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") received by letter dated June 22, 2018 (the "Letter"), relating to the Company's Amendment No. 1 to Draft Registration Statement on Form S-1 confidentially submitted to the Commission on June 11, 2018 (the "Draft Registration Statement").

Immediately prior to the Company's receipt of the Letter, we filed with the Commission via EDGAR a Registration Statement (Registration No. 333-225846) on Form S-1 (the "Public Registration Statement"). On behalf of the Company, we are concurrently filing via EDGAR Amendment No. 1 to the Public Registration Statement (the "Amendment"). We are providing to the Staff, by overnight delivery, a courtesy package containing copies of this letter and the Amendment, including one version marked to show changes to the Public Registration Statement and a second version that is marked to show cumulative changes to the Draft Registration Statement. As you will note, in addition to addressing the comments raised by the Staff in the Letter, the Company has revised both the Draft Registration Statement and the Public Registration Statement to update other disclosures.

For the convenience of the Staff, the numbered paragraphs and headings below correspond to the numbered comments and headings in the Letter. Each of the Staff's comments is set forth in italics, followed by the Company's response to each comment. The page numbers in the italicized captions refer to pages in the Draft Registration Statement, while the page numbers in the Company's responses refer to page numbers in the Amendment. Capitalized terms used in this letter but not defined herein have the meaning given to such terms in the Amendment.

Prospectus summary, page 1

1. *Please revise your pipeline table on page 2 to clarity that you are still conducting preclinical development of RP3.*

Response: In response to the Staff's comment, the Company has revised the pipeline table on pages 2 and 109 of the Amendment to clarify that the Company is still in the process of conducting preclinical development of RP3 as follows:

> "In preclinical development; to enter a Phase 1 clinical trial in 2020, assuming the opening of an IND or foreign equivalent"

2. *We note your response to comment one. Please clarify whether you have determined that any serious adverse events were determined to not be related to RPI or if there have been any serious adverse events that you have not conclusively determined were related to RP1. If there have been serious adverse events that you are not currently able to conclude were not related to RP1, describe the adverse event and disclose the number of trial participants who experienced the event.*

Response: In response to the Staff's comment, the Company respectfully advises the Staff that serious adverse events have been observed in three of the 15 patients enrolled in the Company's ongoing Phase 1/2 clinical trial, but that none of the serious adverse events observed were conclusively determined to be related to RP1. Specifically, one patient died as a result of advancing metastatic malignant melanoma; a second patient with advanced tumors in the lung was hospitalized for a cough, dyspnoea (shortness of breath) and haemoptysis (coughing up blood); and a third patient was hospitalized for dizziness, hypotension, infection and a pathological fracture of the femur. There have been no serious adverse events for which it has not been possible to conclude whether or not they are related to RP1. Accordingly, the Company has added the following disclosure in the last paragraph of page 112 of the Amendment:

> "Although serious adverse events, or SAEs, have been observed in three of the 15 patients enrolled in the first part of our ongoing Phase 1/2 clinical trial of RP1 to date, these SAEs were determined to be related to the patients' underlying advanced cancer and not to treatment with RP1. No SAEs have been observed which were concluded to be related to RP1. One possible dose limiting toxicity, or DLT, elevated lipase levels, which did not meet the definition of an SAE, has been observed in one patient …"

Our product candidate pipeline, page 2

3. *Please revise your pipeline table to identify Additional Indication 1 and 2. Alternatively, remove the last two rows in the RP2 section of your table. If you have not yet identified these additional indications, it is premature to include them in your table.*

Response: In response to the Staff's comment, the Company has revised the pipeline table on pages 2 and 109 of the Amendment by deleting reference to Additional Indication 1 and Additional Indication 2 and inserting the following footnote:

> "Two additional tumor types to be selected for Phase 2 clinical development, with clinical trials expected to commence in H2 2019, assuming in each case the opening of an IND or foreign equivalent."

Our strategy, page 4

4. *We refer to your revised disclosure and response to prior comment 3. Please further explain how you expect to rapidly advance RP1 through the use of a registration-directed clinical trial or other means. Please also explain the term "registration-directed clinical development," what factors will determine your ability to use this method and how it will rapidly advance the development of your lead candidate.*

Response: In response to the Staff's comment, the second paragraph of page 4 and the third paragraph of page 101 of the Amendment have been revised by deleting the word "rapidly" in the title of each such paragraph. Additionally, the phrase "registration-directed clinical development" has been replaced with the phrase "further clinical development" in the first paragraph of pages 3 and 100 and the third full paragraph of pages 4 and 101 of the Amendment. Further, the Company has revised its disclosure in respect of the controlled Phase 2 clinical trial in the third full paragraph on page 1, the first paragraph of page 3, the second paragraph on page 99 and the first full paragraph on page 100 as follows:

> "If compelling clinical data are generated demonstrating the benefits of the combined treatment, we believe the data from this trial could support a filing with regulatory authorities for marketing approval."

Thank you for your prompt attention to the Company's response to the Staff's comments. Please contact me at +44.20.3201.5690 or Gitte Blanchet at 617.951.8211 with any questions or further comments regarding our response to the Staff's comments.

Sincerely,

/s/ Timothy J. Corbett
Timothy J. Corbett

cc: Philip Astley-Sparke, *Replimune Group, Inc.*
Gitte J. Blanchet, *Morgan, Lewis & Bockius LLP*
William V. Fogg, *Cravath, Swaine & Moore LLP*
Johnny G. Skumpija, *Cravath, Swaine & Moore LLP*