

June 16, 2020

**VIA EDGAR**

U.S. Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549

Attn: Ms. Tracey McKoy  
Ms. Kate Tillan  
Mr. Tim Buchmiller  
Ms. Celeste Murphy

Re: **Repare Therapeutics Inc.**  
**Registration Statement on Form S-1**  
**Registration No. 333-238822**

**Acceleration Request**

**Requested Date: June 18, 2020**

**Requested Time: 4:00 PM, Eastern Daylight Time**

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended (the "**Act**"), Morgan Stanley & Co. LLC, Goldman Sachs & Co. LLC, Cowen and Company, LLC and Piper Sandler & Co., as representatives of the several underwriters, hereby join Repare Therapeutics Inc. in requesting that the Securities and Exchange Commission (the "**Commission**") take appropriate action to cause the Registration Statement on Form S-1 (File No. 333-238822) (the "**Registration Statement**") to become effective on June 18, 2020, at 4:00 PM, Eastern Daylight Time, or as soon as practicable thereafter.

Pursuant to Rule 460 under the Act, please be advised that we will take reasonable steps to secure adequate distribution of the preliminary prospectus, to underwriters, dealers, institutions and others, prior to the requested effective time of the Registration Statement.

We have been informed by the participating underwriters that they will comply with the requirements of Rule 15c2-8 under the Securities Exchange Act of 1934, as amended, to the extent applicable.

*[Signature Page Follows]*

Very truly yours,

Morgan Stanley & Co. LLC

By: /s/ Kalli Dircks  
Name: Kalli Dircks  
Title: Executive Director

Goldman Sachs & Co. LLC

By: /s/ Matthew Leskowitz  
Name: Matthew Leskowitz  
Title: Managing Director

Cowen and Company, LLC

By: /s/ Bill Follis  
Name: Bill Follis  
Title: Managing Director

Piper Sandler & Co.

By: /s/ Neil Riley  
Name: Neil Riley  
Title: Managing Director

cc: Lloyd M. Segal, Repare Therapeutics Inc.  
Mitchell S. Bloom, Goodwin Procter LLP  
Seo Salimi, Goodwin Procter LLP  
Divakar Gupta, Cooley LLP  
Ryan S. Sansom, Cooley LLP  
Marc A. Recht, Cooley LLP  
Courtney T. Thorne, Cooley LLP

*[Signature Page to Acceleration Request]*