

May 4, 2018

VIA EDGAR

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

Attn: Chris Edwards

Re: **Evelo Biosciences, Inc.**
Registration Statement on Form S-1
File No. 333-224278

Acceleration Request

Requested Date: May 8, 2018

Requested Time: 4:00 p.m., Eastern Standard Time

Ladies and gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended (the "*Act*"), Morgan Stanley & Co. LLC and Cowen and Company, LLC, as representatives of the several underwriters, hereby join Evelo Biosciences, Inc. in requesting that the Securities and Exchange Commission take appropriate action to cause the Registration Statement on Form S-1 (File No. 333-224278) (the "*Registration Statement*") to become effective on Tuesday, May 8, 2018, at 4:00 p.m., Eastern Standard 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/ Jason Russell

Name: Jason Russell

Title: Executive Director

COWEN AND COMPANY, LLC

By: /s/ Grant Miller

Name: Grant Miller

Title: Managing Director, Head of ECM

cc: Balkrishan (Simba) Gill, Ph.D., *Evelo Biosciences, Inc.*
Stuart Cable, *Goodwin Procter LLP*
Edwin O'Connor, *Goodwin Procter LLP*
Peter N. Handrinos, *Latham & Watkins LLP*
Wesley Holmes, *Latham & Watkins LLP*

[Signature Page to Acceleration Request]