

July 11, 2018

Anna Protopapas  
President and Chief Executive Officer  
Mersana Therapeutics, Inc.  
840 Memorial Drive  
Cambridge, Massachusetts 02139

Re: Mersana Therapeutics, Inc.  
Registration Statement on Form S-3  
Filed on July 2, 2018  
File No. 333-226055

Dear Ms. Protopapas:

We have limited our review of your registration statement to the issue we have addressed in our comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

Form S-3 filed July 2, 2018

Incorporation of Certain Documents by Reference, page 14

1. Please revise this section to include the Current Report on Form 8-K that you filed on June 29, 2018. Refer to Item 12 of Form S-3.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Anna Protopapas  
Mersana Therapeutics, Inc.  
July 11, 2018  
Page 2

You may contact Abigail Jacobs at 202-551-2909 or Erin Jaskot at 202-551-3442 if you have any questions.

FirstName LastNameAnna Protopapas

Corporation Finance  
Comapany NameMersana Therapeutics, Inc.

Division of

Insurance  
July 11, 2018 Page 2  
cc: Marc Rubenstein  
FirstName LastName

Office of Healthcare &