



DIVISION OF
CORPORATION FINANCE

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

May 8, 2017

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

**Re: Mersana Therapeutics, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted April 21, 2017
CIK No. 0001442836**

Dear Ms. Protopapas:

We have reviewed your amended draft registration statement 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 by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

DRS/A filed 04/21/2017

Prospectus Summary
Overview, page 1

1. We note your response to prior comment 2. While we would not object if you retain the two undisclosed programs in your chart in the Business section on page 82, please revise the chart on page 1 to remove undisclosed candidates that remain in the discovery phase. Given the prominence of Summary disclosure, it is not appropriate to highlight undisclosed programs that may never advance to the preclinical development phase in the chart on page 1 of your Prospectus Summary.

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Notes to Financial Statements

3. Collaboration Agreements, page F-17

2. We acknowledge your response to prior comment 9. In your response you indicate the Company has concluded that individual milestones are not material or useful to investors as a result of the number of milestones in the Company's arrangements, the inherent uncertain probability that the milestones will be achieved and the extended time frame over which the milestones will be achieved, if at all. To help us evaluate your conclusion, please provide us a description of each material milestone included in each category (development, regulatory and commercial) and quantify related contingent consideration. Refer to ASC 605-28-50.

7. Convertible Preferred Stock, page F-27

3. Please describe the redemption feature of your convertible preferred stock.

You may contact Keira Nakada at 202-551-3659 or Sharon Blume at 202-551-3474 if you have questions regarding comments on the financial statements and related matters. Please contact Mary Beth Breslin at 202-551-3625 with any other questions.

Division of Corporation Finance
Office of Healthcare and
Insurance

cc: Marc A. Rubenstein