Sandesh Mahatme Ty Howton Sarepta Therapeutics, Inc. 215 First Street, Suite 7, Cambridge, MA 02142

February 13, 2014

VIA EDGAR

Securities and Exchange Commission 100 F. Street, N.E. Washington, D.C. 20549

Attention: Jeffrey P. Riedler, Assistant Director

Re: Sarepta Therapeutics, Inc.

Form 10-K for Fiscal Year Ended December 31, 2012

Filed March 15, 2013

Form 10-Q for the Quarterly Period Ended June 30, 2013

Filed August 8, 2013

Response dated January 6, 2014

File No. 001-14895

Dear Mr. Riedler:

On behalf of Sarepta Therapeutics, Inc., a Delaware corporation (the "Company"), we are writing in response to the comment letter, dated January 30, 2014, (the "Comment Letter") of the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") relating to the Company's response letter dated January 6, 2014 to the Staff's comment letter dated November 25, 2013. For the convenience of the Staff's review, we have set forth the Staff's comment contained in the Comment Letter in bold followed by the response of the Company.

Patents and Proprietary Rights, page 15

1. We note your response to our prior comment 4 and your proposed additional patent disclosure relating to AVI-7288 and AVI-4658. Please provide similarly expanded disclosure for AVI-7100.

Response:

In response to Staff Comment 1, we plan to include the following disclosure in our next Annual Report on Form 10-K under "Patents and Proprietary Rights" in substantially the following form:

"Our product candidates and our technology are primarily protected by composition of matter and use patents and patent applications. Currently, our lead clinical product candidates are AVI-4658 (Eteplirsen), AVI-7288 (Marburg) and AVI-7100 (Influenza). We have exclusively licensed patents covering composition of matter and methods of use for AVI-4658 in the United States and Europe. We own issued patents covering composition of matter and methods of use for AVI-7288 in the United States. Additionally, we have pending patent applications for composition of matter and methods of use for AVI-7100 and issued and/ or pending patent applications for composition of matter and methods of use for other product candidates, in the United States, Canada, South America, Europe, Asia, Australia, New Zealand, and/or the Middle East. Patent protection based on currently granted patents and patents granting from currently pending patent applications covering our product candidates and our technology will expire over the following time frames:"

The Company hereby acknowledges that:

- It is responsible for the adequacy and accuracy of the disclosure in the filing;
- The Staff's comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- It may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

We hope that the foregoing has been responsive to the Staff's comments. If you should have any questions about this letter or require any further information, please call the undersigned at 1-857-242-3704 or e-mail at SMahatme@Sarepta.com with a copy to THowton@Sarepta.com

Respectfully,

/s/ Sandesh Mahatme

Sandesh Mahatme Senior Vice President Chief Financial Officer