Avenue Therapeutics, Inc.

February 26, 2016

VIA EDGAR

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

Re: Avenue Therapeutics, Inc. (CIK 0001644963)
Application for Withdrawal of Registration Statement on Form 10-12G and Form 10-12G/A (File No. 000-55556)

Ladies and Gentlemen:

Avenue Therapeutics, Inc., a Delaware corporation (the "Company"), hereby applies for an order granting the immediate withdrawal of the Company's registration statement on Form 10-12G and Form 10-12G/A. The Company initially filed a registration statement on Form 10-12G with the Securities and Exchange Commission (the "Commission") on December 30, 2015 ("Initial Registration Statement") under File Number 000-55556, and the Company filed an Amendment No. 1 thereto on Form 10-12G/A on February 18, 2016 (together with all exhibits thereto and the Initial Registration Statement, the "Registration Statement").

On February 9, 2016, the Company responded to comments made by the Commission staff in its letter dated January 26, 2016, and we understand that the Commission staff is currently reviewing the Company's responses. In the absence of this withdrawal application, pursuant to Section 12(g)(1) of the Securities Exchange Act of 1934, as amended, the Registration Statement would automatically become effective on February 28, 2016 (60 days after the initial filing of the Registration Statement). The Company is therefore requesting that the Registration Statement be immediately withdrawn.

Following the withdrawal, the Company plans to file a replacement Registration Statement on Form 10-12G/A with the Commission, as necessary, that is responsive to any further comments that may be received from the Commission staff.

Should you have any questions regarding the foregoing application for withdrawal, please contact Mark McElreath, our legal counsel in connection with the Registration Statement, at (212) 210-9595 or mark.mcelreath@alston.com.

Very truly yours,

AVENUE THERAPEUTICS, INC.

By: /s/ Lucy Lu
Lucy Lu, M.D.
Interim President and Chief Executive Officer