

August 9, 2018

VIA EDGAR

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

RE: REGENXBIO Inc.  
Application for Withdrawal of Registration Statement on Form S-3  
Filed August 8, 2018  
File No. 333-226673

Ladies and Gentlemen:

REGENXBIO Inc., a Delaware corporation (the "Company"), hereby requests that its Registration Statement on Form S-3 (File No. 333-226673), originally filed with the U.S. Securities and Exchange Commission (the "Commission") on August 8, 2018 (the "Registration Statement"), together with all exhibits thereto, be withdrawn, with such withdrawal to be effective as of the date hereof pursuant to Rule 477 under the Securities Act of 1933, as amended.

The Company is requesting withdrawal of the Registration Statement because of a filing error relating to the EDGAR coding. The Registration Statement was incorrectly coded and filed as an "S-3," whereas the Company intended for the Registration Statement to be filed with the Commission with the code "S-3ASR" reflecting the Company's status as a well-known seasoned issuer. The Company accordingly has refiled the Registration Statement with the code "S-3ASR." No securities were sold pursuant to the Registration Statement.

If you have any questions regarding the foregoing application for withdrawal, please contact Kerry S. Burke of Covington & Burling LLP at 202-662-5297 or Matthew C. Franker of Covington & Burling LLP at 202-662-5895.

Very truly yours,

REGENXBIO INC.

By: /s/ Patrick J. Christmas II  
Name: Patrick J. Christmas II  
Title: Senior Vice President, General Counsel