Revolution Medicines, Inc. 700 Saginaw Drive Redwood City, California 94063

February 10, 2020

VIA EDGAR AND E-MAIL

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549-6010

Attention: Sonia Bednarowski

Dietrich King Bonnie Baynes Lisa Vanjoske

Re: Revolution Medicines, Inc. Registration Statement on Form S-1 (Registration No. 333-235968)

Ladies and Gentlemen:

In accordance with Rule 461 of Regulation C of the General Rules and Regulations under the Securities Act of 1933, as amended, we hereby request acceleration of the effective date of the Registration Statement on Form S-1 (File No. 333-235968) (the "*Registration Statement*") of Revolution Medicines, Inc. (the "*Company*"). We respectfully request that the Registration Statement become effective as of 4:00 p.m., Washington, D.C. time, on February 12, 2020, or as soon as practicable thereafter, or at such other time as our legal counsel, Latham & Watkins LLP, may request by telephone to the staff of the U.S. Securities and Exchange Commission. Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Latham & Watkins LLP, by calling Mark Roeder at (650) 463-3043 or John C. Williams at (415) 395-8223.

Under separate cover, you will receive today a letter from the managing underwriters of the proposed offering joining in the Company's request for acceleration of the effectiveness of the Registration Statement.

Thank you for your assistance in this matter.

Very truly yours,

REVOLUTION MEDICINES, INC.

By: /s/ Mark A. Goldsmith

Mark A. Goldsmith, M.D., Ph.D.
President and Chief Executive Officer

CC: Margaret Horn, Revolution Medicines, Inc. Mark Roeder, Latham & Watkins LLP John C. Williams, Latham & Watkins LLP Alexander White, Latham & Watkins LLP Alan F. Denenberg, Davis Polk & Wardwell LLP