Mark A. Goldsmith Chief Executive Officer Revolution Medicines, Inc. 700 Saginaw Drive Redwood City, CA 94063

> Re: Revolution Medicines, Inc. Amendment No.1 to Registration Statement on Form S-1 Filed February 3, 2020 File No. 333-235968

Dear Dr. Goldsmith:

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

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Amendment No. 1 to Form S-1 filed February 3, 2020

Report of Independent Registered Public Accounting Firm, page F-2

We note that your amended Form S-1 has been updated to reflect a 1-for-4.8661 reverse

stock split of your common stock and redeemable convertible preferred stock to be

consummated prior to the effectiveness of your planned initial public offering, which was

approved by your Board of Directors on January 30, 2020. Please address the following:

Please ensure that your auditors provide reports that are fully compliant with Rule

2.02 of Regulation S-X, including the date of the accountants

report. Please ensure that your auditors provide consents that are fully compliant with Item

601 of Regulation S-K, including the date of their consent.

Mark A. Goldsmith Revolution Medicines, Inc. February 4, 2020

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You may contact Bonnie Baynes at 202-551-4924 or Lisa Vanjoske at 202-551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Sonia Bednarowski at 202-551-3666 or Dietrich King at 202-551-8071 with any other questions.

FirstName LastNameMark A. Goldsmith Comapany NameRevolution Medicines, Inc. Sincerely,

Corporation Finance

Division of

February 4, 2020 Page 2 Sciences

Office of Life

FirstName LastName