

April 29, 2019

Ms. Christine Westbrook
Ms. Erin Jaskot
Office of Healthcare and Insurance
Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: CRISPR Therapeutics AG
Revised Preliminary Proxy Statement on Schedule 14A
Filed on April 23, 2019
File No. 001-37923

Dear Ms. Westbrook and Ms. Jaskot:

This letter is submitted on behalf of CRISPR Therapeutics AG (the “**Company**”) in response to comments of the staff of the Division of Corporation Finance (the “**Staff**”) of the U.S. Securities and Exchange Commission (the “**Commission**”) with respect to the Company’s Amendment No. 1 to the Preliminary Proxy Statement on Schedule 14A, filed on April 23, 2019 (“**Revised Preliminary Proxy Statement**”), as set forth in the Staff’s letter dated April 25, 2019 (the “**Comment Letter**”). The Company is concurrently filing the Amendment No.2 to the Preliminary Proxy Statement on Schedule 14A (the “**Second Amended Proxy Statement**”), which includes changes to reflect responses to the Staff’s comments and other updates.

For reference purposes, the text of the Comment Letter has been reproduced and italicized herein with responses below each numbered comment. Unless otherwise indicated, page references in the descriptions of the Staff’s comments refer to the Revised Preliminary Proxy Statement, and page references in the responses refer to the Second Amended Proxy Statement. All capitalized terms used and not otherwise defined herein shall have the meanings set forth in the Second Amended Proxy Statement.

The responses provided herein are based upon information provided to Goodwin Procter LLP by the Company. In addition to submitting this letter via EDGAR, we are sending via Federal Express four (4) copies of each of this letter and the Second Amended Proxy Statement (marked to show changes from the Revised Preliminary Proxy Statement).

Revised Preliminary Proxy Statement on Schedule 14A filed on April 23, 2019

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Proposal 11: Amending and Restating art. 3a of the Articles of Association
Proposal 12: Amending and Restating art. 4 of the Articles of Association
Proposal 13: Amending and Restating art. 16 of the Articles of Association
Proposal 14: Amending and Restating art. 17 of the Articles of Association, page 64

1. We note your response to comment 1, which we reissue in part. For each proposal, disclose the rationale for the Board's recommendation and state the effects on your existing shareholders if such amendment is adopted and approved. For example, explain the purpose of the increase in authorized share capital that is the subject of Proposal 11, as well as the potential effects that may result, such as dilution, as an illustrative example only. Please explain the rationale for limiting share ownership in the manner described in Proposal 12, and the rationale for limiting shareholder voting rights in the manner described in Proposal 13, and in each case disclose the impact of these proposals. Similarly, we note your disclosure that Proposal 14 is intended to strengthen the power of the Board of Directors. Please expand your disclosure to provide your shareholders with an explanation of the effects of such provision.

Response to Comment No. 1: The Company respectfully advises the Staff that it has revised the disclosure on pages 64, 68, 75 and 77 of the Second Amended Proxy Statement in response to the Staff's comment.

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Should you have any further comments or questions with regard to the foregoing, please contact the undersigned at (617) 570-1393.

Sincerely,

/s/ Robert E. Puopolo

Enclosures:

cc: James R. Kasinger, Esq., General Counsel, *CRISPR Therapeutics AG*
Seo Salimi, Esq., *Goodwin Procter LLP*