

Ms. Vanessa Robertson
Mr. Kevin Vaughn
Office of Life Sciences
Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: CRISPR Therapeutics AG
Form 10-K for the fiscal year ended December 31, 2021
Filed February 15, 2022
File No. 001-37923

Dear Ms. Robertson and Mr. Vaughn:

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 annual report on Form 10-K for the fiscal year ended December 31, 2021, filed on February 15, 2022 (the “10-K”), as set forth in the Staff’s letter dated June 13, 2022 to Brendan Smith, Chief Financial Officer of the Company (the “**Comment Letter**”).

For reference purposes, the text of the Comment Letter has been reproduced and italicized herein with responses below each numbered comment.

Form 10-K for the Fiscal Year Ended December 31, 2021

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

Research and Development Expenses, page 130

1. *We note your disclosure that except for activities you perform in connection with your collaborations with Vertex and ViaCyte, as well as in connection with the Bayer Transaction, you do not track research and development costs on a program-by-program basis. Please provide us with proposed disclosure to be included in future periodic reports which separately quantifies your research and development expense related to ViaCyte and in connection with the Bayer Transaction. For the remaining expenses, please disclose by disease area or stage of development (i.e. pre-clinical and clinical). If this break out is not possible, provide disclosure of total research and development expenses incurred during each period presented by nature which should reconcile to total research and development expense on the Statements of Operations.*

Response to Comment No. 1. The Company respectfully acknowledges the Staff’s comment and advises the Staff that with respect to research and development expenses attributable to its collaborations with Vertex, ViaCyte and the Bayer Transaction (as such terms are defined in the Company’s filings with the Commission), the Company has disclosed such expenses that in its judgement are material to the understanding of its results of operations. Specifically, with respect to Vertex, beginning with the Company’s Quarterly Report on Form 10-Q for the quarter ending March 31, 2022 that was filed with the Commission on May 9, 2022, the Company has separately disclosed collaboration costs under its collaboration with Vertex as, “Collaboration Expense, Net”, on its own line under “Operating Expenses” on pages 21-22 and described in more detail on page 20. Management has determined that expenses attributable to the Company’s other collaborations and partnerships, including with ViaCyte and in connection with the Bayer Transaction, are not material to an understanding of its results of operations at this time and therefore do not warrant separate disclosure. If, and to the extent, management determines research and development expenses in connection with any of its collaborations or partnerships are material to the understanding of the Company’s results of operations, such expenses will be separately disclosed in future periodic reports.

In addition, the Company respectfully advises the Staff that it classifies its research and development expenses as either external or internal. The Company’s external research and development expenses support its various preclinical and clinical programs, and as such the Company does not break down external research and development expenses further. The Company’s internal research and development expenses consist of payroll and benefits expenses, facilities expense, and other indirect research and development expenses incurred in support of overall research and development activities and as such are not allocated to a specific development stage or therapeutic area.

Further, the Company respectfully advises the Staff that, in addition to its existing tabular disclosure regarding the Company's results of operations (which is inclusive of research and development expenses) and discussion of research and development expenses across periods, the Company intends to include the following disclosure in its future periodic reports to provide additional detail about its' external and internal research and development expenses:

Research and Development Expenses

Research and development expenses were \$[] for the [period] ended [date], compared to \$[] for the [period] ended [date]. The following table summarizes our research and development expenses for the [period] ended [date] and [date], together with the changes in those items in dollars (in thousands):

	[Year][X-months] ended [DATE] [Year]	[Year] [Year]	Change
External research and development expenses	\$ []	\$ []	\$ []
Employee related expenses	[]	[]	[]
Facility expenses	[]	[]	[]
Stock-based compensation expenses	[]	[]	[]
Other expenses	[]	[]	[]
Sublicense and license fees	[]	[]	[]
Total	\$ []	\$ []	\$ []

The [increase][decrease] of approximately \$[] was primarily attributable to the following:

- \$[] of [increased][decreased] external research and development costs, primarily related to [];
- \$[] of [increased][decreased] employee related expenses, primarily related to [];
- \$[] of [increased][decreased] facility-related expenses, primarily related to [];
- \$[] of [increased][decreased] stock-based compensation expenses, primarily related to [];
- \$[] of [increased][decreased] other expenses, primarily related to []; and
- \$[] of [increased][decreased] sublicenses and license fees, primarily related to [].

* * * * *

Should you have any further comments or questions with regard to the foregoing, please contact the undersigned at +1 617 315 4526.

Sincerely,

/s/ James R. Kasinger

James R. Kasinger
General Counsel and Secretary

CRISPR Therapeutics AG

cc: Samarth Kulkarni, Chief Executive Officer, *CRISPR Therapeutics AG*
Brendan Smith, Chief Financial Officer, *CRISPR Therapeutics AG*
Elizabeth Ryland, Associate General Counsel, *CRISPR Therapeutics AG*
Robert Puopolo, *Goodwin Procter LLP*
Marishka DeToy, *Goodwin Procter LLP*