

CRISPR Therapeutics AG  
Form SC 13D/A  
December 26, 2018

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
SCHEDULE 13D  
Under the Securities Exchange Act of 1934  
(Amendment No. 1)\*  
CRISPR THERAPEUTICS AG

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(Name of Issuer)  
Common Shares, par value CHF 0.03 per share

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(Title of Class of Securities)  
H17182108

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(CUSIP Number)  
Ian F. Smith  
Vertex Pharmaceuticals Incorporated  
50 Northern Avenue  
Boston, Massachusetts 02210  
(617) 341-6100

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(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)  
December 21, 2018

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(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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NAMES OF  
REPORTING  
PERSONS I.R.S.  
IDENTIFICATION  
NOS. OF ABOVE  
PERSONS  
1. (ENTITIES ONLY)

Vertex  
Pharmaceuticals  
Incorporated (“Vertex  
US”)

CHECK THE  
APPROPRIATE BOX  
IF A MEMBER OF A  
2. GROUP  
(see instructions)  
(a)  
(b)

3. SEC USE ONLY

SOURCE OF FUNDS  
4. (see instructions)

WC  
CHECK BOX IF  
DISCLOSURE OF  
LEGAL  
5. PROCEEDINGS IS  
REQUIRED  
PURSUANT TO  
ITEMS 2(d) or 2(e)  
CITIZENSHIP OR  
PLACE OF  
6. ORGANIZATION

Massachusetts

NUMBER   SOLE VOTING  
OF       POWER  
7  
SHARES  
BENEFICIALY  
OWNED

BY SHARED VOTING  
EACH POWER  
REPORTING

PERSON 5,340,742 (1)  
WITH SOLE  
DISPOSITIVE  
9. POWER

0  
10. SHARED  
DISPOSITIVE  
POWER

5,340,742 (1)

AGGREGATE  
AMOUNT  
BENEFICIALLY  
11. OWNED BY EACH  
REPORTING  
PERSON

5,340,742 (1)  
CHECK BOX IF THE  
AGGREGATE

12. AMOUNT IN ROW  
(11) EXCLUDES  
CERTAIN SHARES  
(see instructions)  
PERCENT OF  
CLASS

13. REPRESENTED BY  
AMOUNT IN ROW  
(11)

10.29% (2)  
TYPE OF  
REPORTING

14. PERSON (see  
instructions)

CO

(1) Amount consists of  
5,340,742 Common Shares  
held by Vertex Europe.  
Vertex US may be deemed  
to have beneficial  
ownership over such shares  
since Vertex Europe is an  
indirect wholly-owned

subsidiary of Vertex US.

(2) The ownership percentage has been calculated on the basis of 51,896,995 Common Shares outstanding as of November 1, 2018 as reported in the Company's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2018.

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NAMES OF  
REPORTING PERSONS  
I.R.S.  
IDENTIFICATION  
NOS. OF ABOVE  
PERSONS (ENTITIES  
ONLY)

1.

Vertex Pharmaceuticals  
(Europe) Limited (“Vertex  
Europe”)

CHECK THE  
APPROPRIATE BOX IF  
A MEMBER OF A  
GROUP

2.

(see instructions)  
(a)  
(b)

SEC USE ONLY

3.

SOURCE OF FUNDS  
(see instructions)

4.

WC  
CHECK BOX IF  
DISCLOSURE OF  
LEGAL PROCEEDINGS  
IS REQUIRED  
PURSUANT TO ITEMS

5.

2(d) or 2(e)  
CITIZENSHIP OR  
PLACE OF  
ORGANIZATION

6.

England and Wales

NUMBER OF SHARES	7.	SOLE VOTING POWER
BENEFICIALLY OWNED BY	8.	0 SHARED VOTING POWER

EACH REPORTING PERSON WITH	5,340,742
9.	SOLE DISPOSITIVE POWER
10.	0 SHARED DISPOSITIVE POWER
	5,340,742

11. AGGREGATE  
AMOUNT  
BENEFICIALLY  
OWNED BY EACH  
REPORTING PERSON

5,340,742

12. CHECK BOX IF THE  
AGGREGATE  
AMOUNT IN ROW (11)  
EXCLUDES CERTAIN  
SHARES  
(see instructions)

13. PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (11)

10.29% (1)

14. TYPE OF REPORTING  
PERSON (see  
instructions)

OO

(1) The ownership percentage has been calculated on the basis of 51,896,995 Common Shares outstanding as of November 1, 2018 as reported in the Company's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2018.

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Item 1. Security and Issuer.

This Amendment No. 1 to Schedule 13D amends and supplements the statement on Schedule 13D filed with the Securities and Exchange Commission on December 21, 2018 (the "Schedule 13D") with respect to the common shares, par value CHF 0.03 per share (the "Shares"), of CRISPR Therapeutics AG, which is organized under the laws of Switzerland (the "Company"). The principal business address of the Company is Baarerstrasse 14, 6300 Zug, Switzerland. Unless otherwise indicated, each capitalized term used but not defined herein shall have the meaning assigned to such term in the Schedule 13D.

Item 3. Source or Amount of Funds or Other Consideration.

Item 3 of the Schedule 13D is hereby amended and supplemented as follows:

Between December 21 and December 24, 2018 Vertex Europe acquired 90,742 Shares for an aggregate of \$2,184,965.57 in the public market.

Item 5. Interest in Securities of the Issuer.

The responses set forth in Items 5(a) – (c) of the Schedule 13D are hereby amended by deleting the previous responses in their entirety and replacing them with the following:

(a) Vertex Europe holds and beneficially owns 5,340,742 Shares. As Vertex Europe is an indirect wholly-owned subsidiary of Vertex US, Vertex US beneficially owns the same 5,340,742 Shares. This number represents approximately 10.29% of the outstanding Shares of the Company, based on 51,896,995 Shares outstanding on November 1, 2018, as reported in the Company's 10-Q filed on November 7, 2018, as calculated under Rule 13d-3 of the Securities Exchange Act of 1934, as amended. To the knowledge of Vertex Europe and Vertex US, no director or officer of either Vertex Europe or Vertex US, respectively, beneficially owns any Shares.

(b) As Vertex Europe is indirectly wholly-owned by Vertex US, Vertex Europe and Vertex US share voting and investment power over the 5,340,742 Shares.

(c) Between December 21 and December 24, 2018 Vertex Europe acquired 90,742 Shares in the public market using funds from Vertex's working capital. Other than the transactions described in this Item 5, neither Vertex US nor Vertex Europe nor, to the knowledge of Vertex US or Vertex Europe, any director or executive officer of Vertex US or Vertex Europe, respectively, has effected any transaction in the Shares since the filing of the Schedule 13D.

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

VERTEX PHARMACEUTICALS INCORPORATED

/s/ Ian F. Smith  
EVP, Chief Operating Officer and interim Chief Financial Officer  
December 26, 2018

VERTEX PHARMACEUTICALS (EUROPE) LIMITED

/s/ Ian F. Smith  
Ian F. Smith  
Director  
December 26, 2018