

☐ Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL | |
|--|-----------|
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|---|---|--|
| 1. Name and Address of Reporting Person * <u>EMSTER KURT VON</u> (Last) (First) (Middle) <u>C/O CRISPR THERAPEUTICS, INC.</u> <u>200 SIDNEY STREET</u> (Street) <u>CAMBRIDGE MA 02139</u> (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>CRISPR Therapeutics AG [CRSP]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below) |
| | 3. Date of Earliest Transaction (Month/Day/Year) <u>10/18/2016</u> | |
| | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|-------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|--|---|--|-----------------|---|----------------------------|--|--|---|--|
| | | | | | Code | V | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |
| Stock Option (Right to Buy) | \$14 | 10/18/2016 | | A | | | (1) | 10/18/2026 | Common Shares | 30,000 | \$0.00 | 30,000 | D(2)(3) | |

Explanation of Responses:

1. This option was granted on October 18, 2016 with respect to 30,000 Common Shares with 100% of the shares vesting in 36 equal monthly installments beginning October 31, 2016 ("Option").
2. The Reporting Person is a member of Abingworth LLP ("ALLP"). ALLP provides advisory services to Abingworth Bioventures VI, LP ("ABV VI"). Under an agreement between the Reporting Person and ALLP, the Reporting Person is deemed to hold this Option and any shares of common stock issuable upon exercise of the Option, for the benefit of ABV VI, and must exercise the Option solely upon the direction of ALLP.
3. ABV VI may be deemed the indirect beneficial owner of the Option, and the Reporting Person may be deemed the indirect beneficial owner of the Option through his indirect interest in ABV VI. The Reporting Person disclaims beneficial ownership of the Option except to the extent, if any, of his pecuniary interest therein. This report shall not be deemed an admission that the Reporting Person, ALLP, ABV VI or any other person is the beneficial owner of the securities reported herein for purposes of Section 16 of the Securities Exchange Act of 1934, as amended, or for any other purpose.

Remarks:

/s/ Kurt von Emster

10/20/2016

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints each of Marc Becker, Michael Esposito and Robert E. Puopolo, signing singly, the undersigned's true and lawful attorney-in-fact to:

- (1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of CRISPR Therapeutics AG (the "Company"), (i) Form ID, including any attached documents, to effect the assignment of codes to the undersigned to be used in the transmission of information to the United States Securities and Exchange Commission using the EDGAR System, and (ii) Forms 3, 4 and 5 and amendments thereto in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder;
- (2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4 or 5 and amendments thereto and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- (3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934, as amended. The undersigned hereby agrees to indemnify the attorney-in-fact and the Company from and against any demand, damage, loss, cost or expense arising from any false or misleading information provided by the undersigned to the attorney-in-fact.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact. This Power of Attorney may be filed with the United States Securities and Exchange Commission as a confirming statement of the authority granted herein. This Power of Attorney supersedes any prior power of attorney in connection with the undersigned's capacity as an officer and/or director of the Company. This Power of Attorney shall expire as to any individual attorney-in-fact if such attorney-in-fact ceases to be an executive officer of, or legal counsel to the Company.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of September 30, 2016.

/s/ Kurt von Emster

Signature

Kurt von Emster

Print Name