Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CRISPR THERAPEUTICS AG

(Exact name of Registrant as specified in its Charter)

Switzerland	**2836**	**Not Applicable**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

CRISPR Therapeutics AG
Aeschenvorstadt 36
4051 Basel
Switzerland
+41 61 228 7800
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Dr. Rodger Novak
Chief Executive Officer
CRISPR Therapeutics, Inc.
200 Sidney St.
Cambridge, Massachusetts 02139
(617) 315-4600
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mitchell S. Bloom	**Patrick O'Brien**
Robert E. Puopolo	**Paul Kinsella**
Goodwin Procter LLP	**Ropes & Gray LLP**
100 Northern Avenue	**Prudential Tower**
Boston, MA 02210	**800 Boylston Street**
(617) 570-1000	**Boston, MA 02199**
	(617) 951-7000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒ (Do not check if a smaller reporting company)	Smaller reporting company	☐

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	**Proposed maximum aggregate offering price(1)(2)**	**Amount of registration fee(3)**
Common shares, nominal value CHF 0.10 per share	$	$

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) Includes offering price of shares that the underwriters have the option to purchase to cover over-allotments, if any.
(3) Calculated pursuant to Rule 457(o) under the Securities Act of 1933, as amended, based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to such Section 8(a), may determine.

EXPLANATORY NOTE:

This Amendment No. 2 to this confidential draft submission of the Registrant's Registration Statement is an exhibits-only submission to file certain exhibits incorporated by reference in Item 16 of Part II of the confidential draft submission of the Registration Statement and to restate the exhibit index incorporated by reference in Item 16. Accordingly, this Amendment No. 2 consists only of the facing page, this explanatory note, Part II of the confidential draft submission of the Registration Statement, including the signature page, the exhibit index, and the exhibits filed herewith. The prospectus is unchanged and has therefore been omitted from this filing.

PART II
INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the sale of common shares being registered. All amounts are estimates except for the Securities and Exchange Commission, or SEC, registration fee, the Financial Industry Regulatory Authority, or FINRA, filing fee and the NASDAQ Global Market, or NASDAQ, listing fee:

Expenses	Amount
U.S. Securities and Exchange Commission registration fee	$ *
NASDAQ Global Market listing fee	125,000
FINRA filing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent fees and expenses	*
Miscellaneous costs	*
Total	$ *

* To be provided by amendment.

All amounts in the table are estimates except the U.S. Securities and Exchange Commission registration fee, the NASDAQ listing fee and the FINRA filing fee. The Company will pay all of the expenses of this offering.

Item 14. Indemnification of Directors and Officers

Under Swiss law, a corporation may indemnify its directors or officers against losses and expenses (except for such losses and expenses arising from willful misconduct or negligence, although legal scholars advocate that at least gross negligence be required), including attorney's fees, judgments, fines and settlement amounts actually and reasonably incurred in a civil or criminal action, suit or proceeding by reason of having been the representative of, or serving at the request of, the corporation.

Subject to Swiss law, Article 29 of our articles of association provides for indemnification of the existing and former members of our board of directors, executive management, and their heirs, executors and administrators, against liabilities arising in connection with the performance of their duties in such capacity, and permits us to advance the expenses of defending any act, suit or proceeding to members of our board of directors and executive management.

In addition, under general principles of Swiss employment law, an employer may be required to indemnify an employee against losses and expenses incurred by such employee in the proper execution of their duties under the employment agreement with the company.

We intend to enter into indemnification agreements with each of the members of our board of directors and executive officers in the form to be filed as an exhibit to this Registration Statement upon the closing of this offering.

In the underwriting agreement that we enter into in connection with the sale of the common shares being registered hereby, a form of which will be filed as Exhibit 1.1 to this Registration Statement, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended, the Securities Act, against certain liabilities.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company, the Company has been advised that, in the opinion of the U.S. Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Item 15. Recent Sales of Unregistered Securities

The following sets forth information regarding all unregistered securities sold during the last three fiscal years. Within the last three years, the registrant has issued and sold the following securities:

1. Since October 31, 2013, the registrant issued and sold 1,068,000 common shares for aggregate consideration of CHF 106,800.
2. On November 5, 2013, the registrant issued and sold 132,000 of its Series A-1 Preferred Shares for aggregate consideration of approximately CHF 501,600.
3. On May 6, 2014, the registrant issued and sold 936,000 of its Series A-2 Preferred Shares for aggregate consideration of approximately CHF 9.5 million.
4. On April 14, 2015, the registrant issued and sold 3,227,401 of its Series A-3 Preferred Shares for aggregate consideration of approximately $45.7 million.
5. On March 24, 2015, the registrant issued 590,428 common shares in exchange for 4,600 ordinary shares of TRACR Hematology Limited and the assignment of certain rights to subscribe for ordinary shares of TRACR Hematology Limited.
6. On May 4, 2015, the registrant issued and sold 1,355,704 of its Series B Preferred Shares for aggregate consideration of approximately CHF 28.0 million.
7. On January 29, 2016, the registrant issued 1,639,382 of its Series B Preferred Shares in connection with the conversion of outstanding convertible loans with aggregate principal and accrued interestof approximately $73.4 million.
8. On June 10, 2016, the registrant issued 850,274 of its Series B Preferred Shares for aggregate consideration of approximately $38.1 million.
9. Since April 15, 2015, the registrant issued options to purchase 715,477 shares of its common shares to its employees at a weighted-average exercise price of 9.89 per share.

We deemed the offers, sales and issuances of the securities described in paragraphs (1) through (8) above to be exempt from registration under the Securities Act, in reliance on Section 4(a)(2) of the Securities Act, regarding transactions by an issuer not involving a public offering. All purchasers of securities in transactions exempt from registration pursuant to Section 4(a)(2) represented to us that they were acquiring the shares for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

We deemed the issuances of our common stock and options to purchase common stock in paragraph (9) to be exempt from registration under the Securities Act either in reliance on Rule 701 of the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701, or in reliance on Section 4(a)(2), as transactions by an issuer not involving a public offering. Each of the recipients of securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

There were no underwritten offerings employed in connection with any of the transactions set forth above.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits. See the Exhibit Index attached to this Registration Statement, which is incorporated by reference herein.

(b) Financial Statement Schedules. Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

1. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
2. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Basel, Switzerland on , 2016.

CRISPR THERAPEUTICS AG

By: _____

Name: Dr. Rodger Novak
Title: Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Dr. Rodger Novak and Marc A. Becker and each of them, individually, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead in any and all capacities, in connection with this registration statement, including to sign in the name and on behalf of the undersigned, this registration statement and any and all amendments thereto, including post-effective amendments and registrations filed pursuant to Rule 462 under the U.S. Securities Act of 1933, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the U.S. Securities and Exchange Commission, granting unto such attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons on the date indicated below in the capacities indicated:

Signature	Title	Date
Dr. Rodger Novak	Chief Executive Officer (principal executive officer)	, 2016
Marc A. Becker	Chief Financial Officer (principal financial officer and principal accounting officer)	, 2016
Dr. N. Anthony Coles	Chairman and Director	, 2016
Dr. Ali Behbahani	Director	, 2016
Dr. Bradley Bolzon	Director	, 2016
Dr. Simeon J. George	Director	, 2016
Kurt von Emster	Director	, 2016
Dr. Thomas Woiwode	Director	, 2016
Dr. Pablo Cagnoni	Director	, 2016
Marc A. Becker	Authorized Representative in the United States	, 2016

EXHIBIT INDEX

The following documents are filed as part of this registration statement:

1.1*	Form of Underwriting Agreement
3.1*	Form of Articles of Association
4.1*	Subscription Agreement, dated December 19, 2015, by and between CRISPR Therapeutics AG and Bayer Global Investments B.V.
5.1*	Opinion of Vischer AG, Swiss counsel of CRISPR Therapeutics AG, as to the validity of the common shares
8.1*	Opinion of Vischer AG, Swiss counsel of CRISPR Therapeutics AG, as to Swiss tax matters
10.1†	Joint Venture Agreement, dated December 19, 2015, between CRISPR Therapeutics AG and Bayer HealthCare LLC
10.2†	IP Contribution Agreement, dated March 16, 2016, by and between CRISPR Therapeutics AG, Bayer HealthCare LLC and Casebia Therapeutics LLP
10.3†	Option Agreement, dated March 16, 2016, by and between CRISPR Therapeutics AG, Bayer HealthCare LLC and Casebia Therapeutics LLP
10.4†	Strategic Collaboration, Option and License Agreement, dated October 26, 2015, by and among CRISPR Therapeutics AG, CRISPR Therapeutics Limited, CRISPR Therapeutics, Inc., TRACR Hematology Limited, Vertex Pharmaceuticals, Incorporated and Vertex Pharmaceuticals (Europe) Limited
10.5†	License Agreement, dated April 15, 2014, by and between CRISPR Therapeutics AG and Emmanuelle Marie Charpentier
10.6†	License Agreement, dated April 15, 2014, by and between TRACR Hematology Limited and Emmanuelle Marie Charpentier
10.7†	Patent Assignment Agreement, dated November 7, 2014, by and between CRISPR Therapeutics AG, Emmanuelle Marie Charpentier, the University of Vienna and Ines Fonfara
10.8*	Form of Indemnification Agreement
10.9*	Registration Rights Agreement, dated June 10, 2016, by and among CRISPR Therapeutics AG and certain shareholders
10.10*	Employment Agreement, dated November 11, 2013, by and between Inception Genomics AG and Rodger Novak
10.11*	Employment Agreement, dated January 18, 2016, by and between CRISPR Therapeutics, Inc. and Marc A. Becker
10.12*	Offer Letter, dated July 10, 2015, by and between CRISPR Therapeutics, Inc. and Samarth Kulkarni
10.13*	Employment Agreement, dated February 18, 2015, by and between CRISPR Therapeutics, Inc. and Sven Ante Lundberg
10.14*	CRISPR Therapeutics AG 2015 Stock Option and Grant Plan
10.15*	CRISPR Therapeutics AG 2016 Stock Option and Incentive Plan
21.1*	Subsidiaries of the Registrant

23.1*	Consent of Ernst & Young LLP
23.2*	Consent of Vischer AG, Swiss counsel of CRISPR Therapeutics AG (included in Exhibit 5.1)
23.3*	Consent of Vischer AG, Swiss counsel of CRISPR Therapeutics AG (included in Exhibit 8.1)
23.4*	Consent of Goodwin Procter LLP (included in Exhibit 8.2)
24.1*	Powers of attorney (included on signature page to the registration statement)

* To be filed by amendment

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment and this exhibit has been filed separately with the SEC.

SPECIFIC TERMS IN THIS EXHIBIT HAVE BEEN REDACTED BECAUSE CONFIDENTIAL TREATMENT FOR THOSE TERMS HAS BEEN REQUESTED. THESE REDACTED TERMS HAVE BEEN MARKED IN THIS EXHIBIT WITH THREE ASTERISKS [***]. AN UNREDACTED VERSION OF THIS EXHIBIT HAS BEEN SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

Exhibit 10.1

EXECUTION VERSION

JOINT VENTURE AGREEMENT

BETWEEN

BAYER HEALTHCARE LLC

- and -

CRISPR THERAPEUTICS AG

December 19, 2015

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

TABLE OF CONTENTS

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULES

APPENDICES

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

JOINT VENTURE AGREEMENT

This Agreement is made as of the 19th day of December 2015

BETWEEN

BAYER HEALTHCARE LLC ("Bayer"), a limited liability company incorporated under the laws of Delaware,

AND

CRISPR THERAPEUTICS AG ("CRISPR"), a corporation organized under the laws of Switzerland.

RECITALS

Bayer is a limited liability company with business activities in the health care industries.

CRISPR is a multinational corporation with business activities in the biopharmaceutical gene editing industry.

Bayer wishes to collaborate with a company having a high reputation in genome editing technology to further its objective of entering the genome editing market.

CRISPR wishes to collaborate with a company having a high reputation in the health care industry throughout the world to further its objective of entering the genome editing market.

Bayer and CRISPR wish to establish a joint venture entity for the development of products in the Fields (the "Company").

Bayer and CRISPR have agreed to define and regulate their relationship to achieve their mutual objectives with respect to the Business through this Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

NOW THEREFORE, THIS AGREEMENT WITNESSES that, in consideration of the mutual promises, covenants, warranties and undertakings set forth herein, and for other good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

ARTICLE 1 - DEFINITIONS

1.1 *Definitions*

The terms appearing in Schedule 1.1 shall have the meanings therein attributed to those terms.

ARTICLE 2 - INTERPRETATION, INCORPORATION OF SCHEDULES AND GOVERNING LAW

2.1 *Reserved*

2.2 *Governing Law*

The Parties agree that this Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

2.3 *Choice of Law*

Notwithstanding that the laws of the State of New York shall apply to and govern this Agreement, any choice of law specified in any of the documents and agreements referred to herein and made a part hereof shall be respected by the Parties and shall take precedence over the choice of law provision specified in Section 2.2.

ARTICLE 3 - OBJECTIVES OF THE COMPANY AND IMPLEMENTATION OF THE JOINT VENTURE

3.1 *Objectives of the Company*

The Parties' objectives in establishing the Company are to Develop and Commercialize Products and Licensed Agents in the Fields identified in Schedule 3.1 (the "Objective") and otherwise engage in the Business, and any activities incidental or ancillary thereto.

The Objectives and means of achieving them will be more fully set out in the Initial Business Plan and thereafter in the annually updated Rolling Business Plan.

3.2 *Implementation of the Joint Venture*

(a) On the date hereof, Bayer Global Investments, B.V. and CRISPR have executed and delivered that certain subscription agreement to document the terms and conditions of Bayer's investment in CRISPR in connection with its public offering attached as Schedule 3.2(a) (the "Subscription Agreement").

(b) The Parties shall take the following actions in furtherance of the Objectives:

(i) The Parties, or their respective wholly-owned subsidiaries, shall form the Company as promptly as practicable following the execution of this Agreement. The Company shall be a limited liability partnership formed under the laws of the United Kingdom with organizational documents to

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

be in a form to be mutually agreed prior to the Effective Date by the Parties (as amended or otherwise modified in accordance with this Agreement and such documents, the "Company Organization Documents").

(ii) Each Party shall contribute, or cause to be contributed, to the capital of the Company the first installment of its respective initial cash capital contributions (the "Initial Contributions"). The amount of each installment of the Initial Contributions of each of Bayer and CRISPR shall be as set forth in Schedule 3.2(b)(ii), it being understood that the first installment of the Initial Contribution of Bayer (the "First Installment") shall amount to (y) US $10,000,000 plus (z) US $35,000,000 which is designated to be used by the Company to pay the consideration under the CRISPR IP Contribution Agreement totaling US $35,000,000 ("Technology Access Fee") to CRISPR, provided that the Parties shall procure that the Company will pay US $15,000,000 of the Technology Access Fee (the "Delayed TAF Amount") to CRISPR only […***…] Business Days after the provision of Evidence Related to Global Filings (unless a TAF Funding Event has occurred, in which case […***…] Business Days after Bayer's funding of the second installment of its Initial Contribution). The payment of the First Installment by Bayer and the Initial Contribution by CRISPR shall occur on the Effective Date. The Delayed TAF Amount shall be reserved by the Company for the payment of the Technology Access Fee to CRISPR in accordance with the terms of the CRISPR IP Contribution Agreement, and not used by the Company or a Local Operating Entity for any other purpose without the prior written consent of CRISPR except as otherwise set forth herein. The Parties agree that if the initial US $10,100,000 paid as part of the First Installment is exhausted in full, the Company may, following written notice to the Parties, use the Delayed TAF Amount to fund operating expenses of the Company prior to the payment of the second installment of the Bayer Initial Contribution (the "TAF Funding Event"); provided, that in no event shall the use of any or all of the Delayed TAF Amount reduce or otherwise impact the Company's obligation to pay the Technology Access Fee to CRISPR in full in accordance with the terms of the CRISPR IP License Agreement, provided that Evidence Related to Global Filings has been provided to Bayer. The second installment of the Initial Contribution by Bayer shall occur within […***…] Business Days of the provision of Evidence Related to Global Filings.

(iii) Bayer shall, and the Parties shall cause the Company to, enter into an agreement between the Company and Bayer (or an Affiliate reasonably acceptable to CRISPR), in a form to be mutually agreed by the Parties prior to the Effective Date and containing provisions in accordance with the Transaction Documents and Schedule 3.2(b)(iii) (the "Bayer Services Agreement").

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(iv) CRISPR shall, and the Parties shall cause the Company to, enter into an agreement between the Company and CRISPR (or an Affiliate reasonably acceptable to Bayer), in a form to be mutually agreed by the Parties prior to the Effective Date and containing provisions in accordance with the Transaction Documents and Schedule 3.2(b)(iv) (the "CRISPR Services Agreement").

(v) Bayer AG shall, and the Parties shall cause the Company to, enter into that certain license agreement between the Company and Bayer AG in substantially the form attached as Schedule 3.2(b)(v) to license the rights to the Bayer Intellectual Property into the Company (the "Bayer IP Contribution Agreement").

(vi) The Parties shall, and the Parties shall cause the Company to, enter into an agreement among the Company, Bayer and CRISPR, in substantially the form attached as Schedule 3.2(b)(vi) (the "Option Agreement") and an out-license agreement in a form to be attached thereto and to be mutually agreed by the Parties prior to the Effective Date (the "Form License Agreement").

(vii) Bayer AG and CRISPR and their respective Affiliates shall enter into that certain cross-license agreement in substantially the form attached as Schedule 3.2(b)(vii) to document the license of certain Intellectual Property of Bayer AG and CRISPR and their respective Affiliates to CRISPR and its Affiliates and Bayer AG, respectively (the "Cross-License Agreement").

(viii) Bayer AG, CRISPR and their respective Affiliates and the Company shall enter into that certain intellectual property management agreement in substantially the form attached as Schedule 3.2(b)(viii) to document the rights and obligations of Bayer AG, CRISPR and its Affiliates and the Company with respect to the ownership of, use, preparation, prosecution, maintenance and enforcement of Know-How and Patents arising under the activities performed in the exercise of rights licensed or retained under the Transaction Documents (the "Intellectual Property Management Agreement").

(ix) The Parties shall cause the formation of a U.S. limited liability company formed under the laws of the state of Delaware to be wholly owned by the Company with organizational documents to be in a form to be mutually agreed by the Parties prior to the Effective Date and containing provisions in accordance with this Agreement for the governance of the Company (as amended or otherwise modified in accordance with this Agreement and such documents, the "Subsidiary Organization Documents").

(x) CRISPR and its Affiliates shall, and the Parties shall cause the Company to, enter into that certain license agreement between the Company and

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

CRISPR and its Affiliates in substantially the form attached as Schedule 3.2(b)(x) to license the rights to the CRISPR Intellectual Property into the Company (the "CRISPR IP Contribution Agreement").

(xi) Bayer and CRISPR shall (a) take promptly all actions necessary to prepare any filings, or cause their "ultimate parent entities" as that term is defined in the Hart-Scott-Rodino Antitrust Improvement Act of 1976 as amended (the "HSR Act") or relevant regulations to promptly prepare any filings required of any of them under the HSR Act, which shall each be filed with the appropriate Governmental Authorities by […***…], and each such filing shall request the early termination of the waiting period required by the HSR Act; (b) use commercially reasonable efforts to comply at the earliest practicable date with any request for additional information received by any of them from the Federal Trade Commission or the Antitrust Division of the Department of Justice or any other Governmental Authority with authority regarding antitrust or competition matters; and (c) reasonably cooperate with each other in connection with the preparation and making of any such filings and the clearance of the contemplated transactions under antitrust or competition Law. […***…] Each Party agrees to notify the other party promptly of any material communication from a Governmental Authority regarding the contemplated transactions. Without limiting the generality of the foregoing, each Party shall provide the other Party (or its representatives) upon request copies of all correspondence and written productions between such Party and any Governmental Authority relating to the contemplated transactions. The Parties may, as they deem advisable, designate any competitively sensitive materials provided to the other party as "outside counsel only." Such materials and the information contained therein shall be given only to outside counsel of the recipient and will not be disclosed by such outside counsel to employees, officers, or directors of the recipient without the advance consent of the Party providing such materials. Subject to applicable Law, the Parties will consult and cooperate with each other in connection with any analyses, appearances, presentations, memoranda, briefs, arguments, and proposals made or submitted to any Governmental Authority regarding the contemplated transactions by or on behalf of any Party.

(xii) The Parties shall have mutually agreed to the initial business plan of the Company covering the same periods as the Initial Budget (the "Initial Business Plan") prior to the Effective Date.

This Agreement, together with the Company Organization Documents, the Bayer Services Agreement, the CRISPR Services Agreement, the CRISPR IP Contribution Agreement, the Bayer IP Contribution Agreement, the Option Agreement, the Subscription Agreement, the Cross-License Agreement, the Intellectual Property Management Agreement and the Subsidiary Organization Documents, shall be referred to herein as the "Transaction Documents." The date on which the actions set forth in

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Sections 3.2(a) and (b) are complete (other than with respect to clause (ii), which shall only require the payment of the First Installment by Bayer and the CRISPR Initial Contribution), unless otherwise waived by the Parties each acting in their sole discretion, and any applicable waiting periods (and any extensions thereof) under the HSR Act have expired or otherwise been terminated (collectively, the "Closing Conditions") shall be the "Effective Date". The Effective Date shall (i) occur as promptly as practicable following the satisfaction (or waiver in accordance with the preceding sentence) of each Closing Condition (other than the payment of the First Installment by Bayer and the CRISPR Initial Contribution, which will occur on the Effective Date), which shall occur no later than […***…] Business Days following such satisfaction, and (ii) occur no later than March 15, 2016 (or such date thereafter as is mutually agreed to by the Parties in writing) (the "Outside Date"). The Bayer Services Agreement, the CRISPR Services Agreement, the CRISPR IP Contribution Agreement, the Bayer IP Contribution Agreement, the Option Agreement, the Cross-License Agreement and the Intellectual Property Management Agreement shall only become effective on the Effective Date upon the satisfaction (or waiver) of all of the Closing Conditions. The Parties shall use reasonable best efforts to come to agreement on the forms of Transaction Documents not entered into on the date hereof as promptly as practicable, and in any event, prior to the Outside Date. If the Effective Date does not occur on or prior to the Outside Date, each Party may terminate this Agreement at its sole discretion by delivering written notice to the other Party. As a consequence, this Agreement shall be of no further force and effect (including any term that survives a termination of this Agreement pursuant to Section 16.1 (including Section 16.2), other than as set forth in Section 16.3).

3.3 *Participation by Affiliate*

The Parties acknowledge and agree that each Party may choose not to hold its equity ownership interest in the Company (collectively, the "Interests") directly, but rather indirectly through an Affiliate of such Party; provided, that in any event, such Party shall remain obligated to perform all of its obligations under the Transaction Documents to which it (or an Affiliate) is a party; provided, further that any such transfer of Interests to any such Affiliate shall not result in tax treatment that is inconsistent with that set forth in the Tax Appendix. The Parties acknowledge and agree that the Company may, subject to Section 7.9, form Local Operating Entities from time to time provided that such Local Operating Entity is wholly-owned (directly or indirectly) by the Company.

3.4 *Commercially Reasonable Efforts*; *Further Assurances*

Following the Effective Date and during the Term, the Parties shall take actions to promote, develop and achieve the Objectives using Commercially Reasonable Efforts, unless otherwise provided in this Agreement or another Transaction Document, and in accordance with the terms and conditions of this Agreement and the applicable Transaction Document.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.5 *Reserved*

3.6 *Non-Compete*

(a) During the Term: Activities Outside the Collaboration. During the Term, except as set forth in this Agreement, the Option Agreement, the other Transaction Documents or pursuant to an Opt-In Transaction, neither Party nor any of its Affiliates, either alone or through any Third Party, shall Develop, Commercialize or otherwise Exploit any Competing Product in the Fields in the Territory; *provided* that either Party can develop, commercialize or otherwise Exploit any other product in the Territory in or outside the Fields (except as set forth in the last sentence herein or as otherwise provided for herein or the other Transaction Documents); *provided*, *further*, that in no event shall the Development, Commercialization or other Exploitation of a Competing Product Targeting an Immunogenicity Target, a Covered Target or a Third-Party Target be considered a breach of this Section 3.6(a). In addition, during the Term, except as set forth in this Agreement, the Option Agreement, the other Transaction Documents or pursuant to an Opt-In Transaction, neither Bayer nor any of its Affiliates, either alone or through any Third Party, shall in-license, acquire, develop or commercialize CRISPR/Cas based products outside the Fields for Human Therapeutic Use.

(b) Non-Compete Post Opt-In and Termination.

(i) In the event that CRISPR consummates an Opt-In Transaction with respect to a particular Licensed Product pursuant to the Option Agreement, then during the period until such time, if any, as such Licensed Product is no longer being clinically developed, Commercialized or otherwise Exploited by or on behalf of CRISPR, its Affiliates or Sublicensees (the "Bayer Non-Compete Period"), Bayer shall, and shall procure that its Affiliates will, not, directly or with or through a Third Party, Develop, Commercialize or otherwise Exploit any product comprising Crispr/Cas Technology Targeting the same Target that is Targeted by such Licensed Product in the Opt-In Fields applicable to such Opt-In Transaction ([…***…]) in any part of the Territory.

(ii) In the event that Bayer consummates an Opt-In Transaction with respect to a particular Licensed Product pursuant to the Option Agreement, then during the period until such time, if any, as such Licensed Product is no longer being clinically developed, Commercialized or otherwise Exploited by or on behalf of Bayer, its Affiliates or Sublicensees in the particular Bayer Field in the Territory (the "CRISPR Non-Compete Period"), CRISPR shall, and shall procure that its Affiliates will, not, directly or with or through a Third Party, Develop, Commercialize or otherwise Exploit any product comprising Crispr/Cas Technology Targeting the same Target that is Targeted by such Licensed Product in the Opt-In Fields applicable to such Opt-In Transaction (together with any Cross

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Field Expansions) in any part of the Territory; *provided*, that in no event shall the Development, Commercialization or other Exploitation of any Crispr/Cas Technology in connection with Targeting a Covered Target, a Third-Party Target or an Immunogenicity Target be considered a breach of this Section 3.6(b)(ii).

(iii) In the event that CRISPR terminates this Agreement pursuant to Section 16.1(b), 16.1(c) or 16.1(h), then during the period starting on the date of such termination becoming effective until the […***…] anniversary of such termination, Bayer shall, and shall procure that its Affiliates will, not, directly or with or through a Third Party, Develop, Commercialize or otherwise Exploit any Competing Product in the CRISPR Field in any part of the Territory.

(iv) In the event that Bayer terminates this Agreement pursuant to Section 16.1(b), 16.1(c) or 16.1(h), then during the period starting on the date of such termination becoming effective until the […***…] anniversary of such termination, CRISPR shall, and shall procure that its Affiliates will not, directly or with or through a Third Party, Develop, Commercialize or otherwise Exploit any Competing Product in the Bayer Field in any part of the Territory; *provided*, that in no event shall the Development, Commercialization or other Exploitation of a […***…] be considered a breach of this Section 3.6(b)(iv).

(v) If a Third-Party licenses a Licensed Product from the Company pursuant to Schedule 3.2(b)(vi) or otherwise, the license agreement between the Company and such Third Party shall contain a non-competition provision consistent with the restrictions in Section 3.6(b)(i) and (ii) binding on the Company, the Local Operating Entities and each of the Parties.

(vi) In the event that a Licensed Product is no longer being clinically developed, Commercialized or otherwise Exploited by or on behalf of a Party that consummated an Opt-In Transaction with respect to such Licensed Product, its Affiliates or Sublicensees in the Opt-In Field applicable to such Opt-In Transaction (together with any Cross Field Expansions) in the Territory, such Party shall, during any period in which the restrictions of Section 3.6 (b)(i) and (ii) remain in effect with respect to the other Party, immediately provide written notice thereof to the other Party.

(c) Bayer Gene-Editing Restriction Upon Termination. Upon termination of this Agreement by CRISPR pursuant to Section 16.1(b), 16.1(c) or 16.1(h) becoming effective and for […***…] thereafter, Bayer shall, and shall procure that its Affiliates will, not, directly or with or through a Third Party, in-license or acquire any Competing Technology.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(d) CRISPR Restriction Upon Termination. Upon termination of this Agreement by Bayer pursuant to Section 16.1(b), 16.1(c) or 16.1(h) becoming effective and for […***…] thereafter, CRISPR shall, and shall procure that its Affiliates will, not, directly or with or through a Third Party, out-license or sell any Pre-IND Products to any Third Party; *provided*, that in no event shall the out-license or sale of a […***…] be considered a breach of this Section 3.6(d).

(e) A Party (the "NC Affected Party") shall not be considered in breach of this Section 3.6 solely by reason of (i) the acquisition by such Party or one of its Affiliates of a Person with a Competing Product in a Field in the Territory or the acquisition of such Party or one of its Affiliates by a Person with a Competing Product in a Field in the Territory or (ii) the determination by such Party that one of its or its Affiliates' internal product candidates would otherwise constitute a Competing Product in a Field or the acquisition from a Third Party by such Party or its Affiliate of rights to a product that would otherwise constitute a Competing Product in a Field, in each case, if one of the following remedies is provided for (taking into account which of this Section 3.6 would be applicable) (A) with respect to CRISPR as the NC Affected Party, if CRISPR or its Affiliates make available and the other Party and the Company agree to (y) include the offending Competing Product(s) in the licenses granted to the Company and/or to Bayer, as applicable, pursuant to this Agreement, including in particular under the CRISPR IP Contribution Agreement and/or the Cross License Agreement, as applicable, or (z) transfer the offending Competing Product(s) to the Company, in each case on mutually agreeable terms, and (B) with respect to Bayer as the NC Affected Party, if Bayer or its Affiliates makes available and the other Party and/or the Company, as applicable, agree to (y) include the offending Competing Product(s) in the licenses granted to the Company and/or to CRISPR pursuant to this Agreement including in particular under the Bayer IP Contribution Agreement and/or the Cross License Agreement, as applicable, or (z) transfer the offending Competing Product(s) to the Company, in each case on mutually agreeable terms, or (C) if prior to the closing of such acquisition (or as of the date such Party makes a determination as to an internal product candidate), the NC Affected Party commits in writing to the other Party and the Company that, promptly following the closing of such acquisition (or the date such Party makes a determination as to an internal product candidate), it will divest itself or cause its Affiliate to divest itself, of the offending rights and/or activity, and the NC Affected Party uses Commercially Reasonable Efforts to pursue such divestiture, and in the event that such divestiture is not completed within […***…] of the closing of such acquisition, the NC Affected Party shall, at its discretion (i) cease, or cause its Affiliate to cease, all development, manufacturing and/or commercialization, as applicable, of the offending Competing Product(s) in the Fields, (ii) include the offending Competing Product(s) in the licenses granted to the Company and/or the other Party, as applicable, pursuant to this Agreement or (iii) transfer the offending Competing Product(s) to the Company, in each case of (ii) and (iii) on mutually agreeable terms. Other than as set forth above with respect to the acquisition of Competing Products (which the preceding portion of this Section shall apply to), Bayer shall not be considered in breach of Section 3.6(c)

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

if prior to the closing of an in-licensing or acquisition transaction referred to Section 3.6(c), Bayer commits in writing to CRISPR and the Company that, promptly following the closing of such transaction, it will divest itself, or cause its Affiliate to divest itself, of the offending rights and/or activity, and Bayer and such Affiliate uses Commercially Reasonable Efforts to pursue such divestiture, and in the event that such divestiture is not completed within […***…] of the closing of such acquisition, Bayer ceases, or causes its Affiliate to cease, all development, manufacturing and/or commercialization, as applicable, of the offending rights and/or activity for the term of Bayer's non-compete obligation set forth in Section 3.6(c).

(f) For the avoidance of doubt, a Party shall be responsible for any breach of this Section 3.6 by its Affiliates as if such Affiliate is a party hereto. In addition, each Party shall require its Sublicensees of Intellectual Property made available to such Party or its Affiliates under the Transaction Documents at any time on or after the Effective Date to agree to adhere to such Party's covenants set forth in subsections (b)(i)-(iv), (c) and (d) in its future sublicense agreements and shall use Commercially Reasonable Efforts to enforce such covenants against any of its Sublicensees.

(g) In the event that the covenants contained in Sections 3.6(a) through (f) are more restrictive than permitted by applicable Law, the Parties agree that the covenants contained in Sections 3.6(a) through (f) shall be enforceable and enforced to the extent permitted by applicable Law.

(h) Each Party acknowledges and agrees that the remedy at law for any breach of the requirements of this Section 3.6 would be inadequate, and agrees and consents that, without intending to limit any additional remedies that may be available, temporary and permanent injunctive and other equitable relief may be granted without proof of actual damage or inadequacy of legal remedy in any proceeding that may be brought to enforce any of the provisions of this Section 3.6.

(i) In no event shall the Targets listed on Schedule 3.6(i) (which schedule may be amended from time to time by the unanimous consent of the Members) (the "Excluded Covered Targets") be deemed to be Covered Targets.

(j) For the avoidance of doubt, it shall not be a violation of this Section 3.6 if a Party or one its Affiliates is taking any action, or pursuing the exercise of any right, set forth in this Agreement, the Option Agreement, the other Transaction Documents or pursuant to an Opt-In Transaction.

3.7 *Third-Party Targets*

During the Term, Bayer agrees that CRISPR and its Affiliates may, at its discretion, enter into any Crispr/Cas Technology Target-based transaction with a Third Party (each, a "Third Party Target Transaction") without the consent of Bayer, the Company or any Local Operating Entity and without violating any terms of this Agreement or any other

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Transaction Document provided, that the definitive documentation for such Third Party Target Transaction shall explicitly include language that […***…]. If CRISPR or one of its Affiliates intends to enter into a Third Party Target Transaction during the Term and the Third Party has requested a […***…] be included in such Third Party Target Transaction, CRISPR may request in writing that the Parties, the Company and the applicable Local Operating Entities promptly enter into good faith negotiations to […***…]; provided, that this shall not require that the Company or such Local Operating Entity […***…] without the approval of the Management Board. For the avoidance of doubt, in no event shall this Section 3.7 apply to the Covered Targets under the Existing Third Party Agreement.

In addition, during the Term, CRISPR may, by written notice to Bayer and the Company, request that following the consummation of a Third Party Target Transaction that the Company and the Local Operating Entities shall no longer pursue the Target(s) covered by such Third Party Target Transaction (each, an "Excluded Target"), which shall be determined by the Management Board as promptly as practicable following receipt of such notice. If the Management Board determines that any or all such Targets are Excluded Targets, the Company and the Local Operating entities shall not Develop, Commercialize or otherwise Exploit such Targets and the Company shall provide the Parties written notice of the same.

The Parties agree to cause the Company and the Local Operating Entities to comply with the terms of this Section 3.7.

ARTICLE 4 - DURATION

4.1 *Duration of Joint Venture Agreement*

This Agreement is effective as of the date set out above and shall be of an indefinite duration thereafter, terminating only in accordance with Section 3.2 or Section 16.1. The "Term" shall be from the Effective Date until such termination of this Agreement becoming effective.

ARTICLE 5 - GO VERNANCE OF THE COMPANY

5.1 *Governance Principles*

The Parties shall participate in the governance and management of the Company and the Local Operating Entities in accordance with the following principles but in any event subject to, and in accordance with, the terms and conditions of this Agreement: (i) the Company's and Local Operating Entities' independence from each of the Parties (except as set forth herein, the other Transaction Documents and the Local Operating Agreements), (ii) efficiency, and (iii) observance of high ethical standards.

5.2 *Governance Bodies*

To the extent permitted under applicable Law, the Company shall have the following governance bodies:

(a) The Members as provided for in Article 6;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) The Management Board as provided for in Article 7; and

(c) The Executive Team as provided for in Article 8.

ARTICLE 6 - AUTHORITY OF THE MEMBERS OF THE COMPANY

6.1 *Holding of Meetings of Members*

Meetings of the Members shall be called and convened in accordance with the provisions of the Company Organization Documents. Any action or decision required or permitted to be taken or made by the Members may be made by unanimous written consent in lieu of a meeting as provided in the Company Organization Documents.

6.2 *Powers and Voting*

The approval of both Members (which may be by written consent) shall only be required for the Company or a Local Operating Entity to take any action listed in Schedule 6.2, other matters reserved for the Members as set forth in this Agreement and to the extent mandated by applicable Law.

ARTICLE 7 - MANAGEMENT BOARD

7.1 *Management Board*

Except with respect to those matters expressly reserved to the Members pursuant to Section 6.2 and the day-to-day operation of the Company and the Local Operating Entities, which is reserved for the Executive Team of the Company and, as applicable, the local operating teams, respectively, the Management Board of the Company (the "Management Board") shall have, subject to applicable Law, the exclusive authority to decide upon all matters of the Company, including, without limitation, supervisory management, strategic planning and policy-making responsibilities for the Company. The approval of the Management Board shall only be required for each of the matters listed in Schedule 7.9(b) and other matters reserved to the Management Board as set forth in this Agreement and to the extent mandated by applicable Law.

7.2 *Composition of Management Board*

(a) Subject to Section 7.2(b), the Management Board shall be initially fixed at four (4) members. Prior to the Effective Date, the Parties shall complete all steps necessary to appoint or cause the appointment of the first four (4) members of the Management Board. Bayer shall have the right to appoint two (2) members of the Management Board. CRISPR shall have the right to appoint or cause the appointment of two (2) members of the Management Board.

(b) Once appointed in accordance with Section 8.3, the CEO of the Company shall become a member of the Management Board. So long as the CEO is an employee,

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

officer, director of or otherwise associated with one of the Members (or its Affiliates) (a "Conflicted CEO"), the CEO shall be one of the members of the Management Board appointed by that Member. If the CEO is not an employee, officer or director of one of the Members (or its Affiliates), then the CEO shall become the fifth member of the Management Board but shall have no voting rights.

7.3 *First Members of the Management Board of the Company*

Each Party shall appoint the persons selected by such Party to fill its designees on the initial Management Board prior to the Effective Date. Each Party will provide the other Party written notice of the same prior to the Effective Date.

7.4 *Chairperson of Management Board*

(a) One member of the Management Board shall serve as its Chairperson. The Chairperson shall preside over meetings of the Management Board.

(b) Each Party shall alternately have the right to appoint the Chairperson of the Management Board for a one (1) fiscal year term. The initial Chairperson of the Company shall be Rodger Nowak, or if Rodger Nowak is unable to serve for any reason, then another designee appointed by CRISPR, and will serve until the first meeting of the Management Board following December 31, 2016. Each Party shall make reasonable efforts to reach consensus with the other Party on the person it nominates to the position of Chairperson of the Management Board.

7.5 *Appointment and Replacement of Members of the Management Board*

Each Party shall have the right at any time by written notice to the other Party and to the Company to remove and replace, or fill any vacancy created by the death, resignation or incapacitation of any member of the Management Board appointed by such Party, such change to be effective two Business Days following such notice or on such other day as provided in such notice or otherwise agreed by the Parties, but in no event in any manner as will nullify any action taken by the Management Board prior to the giving of such notice.

7.6 *Holding of Meetings of the Management Board*

(a) The Management Board shall hold meetings at least once each quarter of the calendar year and upon the call of either Party. Written notice stating the place, date and hour of the meeting and the purpose or purposes for which the meeting is called shall be delivered to all members of the Management Board not less than 72 hours before the time of the meeting to the member at his or her address as it appears on the books of the Company in accordance with the notice provisions set forth in Article 22 hereof. When any notice is required to be given to any member of the Management Board, a waiver thereof in writing signed by the member entitled to such notice, whether before, at or after the time stated therein, shall be equivalent to the giving of such notice. Written notice of a meeting of the

Management Board may be waived by any member in writing or by participating in such meeting except for the purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

(b) A meeting in person of the Management Board may be postponed up to a maximum of 48 hours from the date and hour contained in the written notice related to such meeting in the event of unavoidable travel delays.

(c) In lieu of meeting in person, the Management Board may meet by means of telephone conference or similar communications equipment by means of which all persons participating in the meeting can hear each other.

7.7 *Attendance*

Each of the Parties shall cause the members of the Management Board appointed by it to attend, or be represented at, all properly called meetings of such Management Board. A member of the Management Board may attend in person or by proxy. Such proxy may only be granted to an existing member of the Management Board, a copy of which shall be filed with the Chairperson of such Management Board prior to the voting of such proxy. Each proxy shall be revocable at the pleasure of the member executing it; provided, that, unless a proxy by its terms expressly provides for a specific revocation date, revocation of such proxy shall not be effective unless and until such revocation is executed in writing by the member who executed such proxy and such revocation is filed with the Chairperson of the applicable Management Board prior to the voting of such proxy.

7.8 *Language of Board Meetings*

Meetings of each Management Board shall be conducted in English.

7.9 *Voting of Management Board*

(a) A quorum of the Management Board shall be three voting members (except as otherwise provided for in the Option Agreement). A quorum of the Management Board, once established, shall be deemed present until the meeting for which the quorum was established has been adjourned. In no event, however, shall a member be counted towards the quorum requirement if such member attends the meeting solely for the purpose of contesting the holding of the meeting.

(b) Resolutions of the Management Board taken at a meeting shall be adopted by the affirmative vote of a majority of the voting members of the Management Board (except as set forth in the Option Agreement or as otherwise provided for herein); provided that the matters listed in Schedule 7.9(b) shall require the affirmative vote of at least one member of the Management Board appointed by each Party. Any action or decision required or permitted to be taken or made by the Management Board at a meeting may be made by unanimous written consent in lieu of meeting.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

7.10 *Non-Delegation by Management Board*

The matters within the competence of the Management Board listed in Schedule 7.9(b) shall be reserved exclusively to such Management Board and shall not be delegated by it.

7.11 *Secretary of Management Board*

The Secretary of the Management Board shall be an attorney appointed each fiscal year by the Party not having appointed the Chairperson for that fiscal year. The initial Secretary of the Company shall be determined by the Parties as soon as reasonably possible after the date hereof.

7.12 *Local Operating Entities*

The provisions in Sections 7.1 to 7.11 shall apply *mutatis mutandis* to each Local Operating Entity to the extent permitted by applicable Law and not inconsistent with the terms of the Tax Appendix.

7.13 *Target Selection Process*

(a) Covered Targets. CRISPR is subject to the Existing Third Party Agreement as of the Effective Date.

(b) Target Selection Process. Bayer, CRISPR and the Company shall each be able to nominate Targets by providing written notice to the Management Board, which notice shall include the indication in the Fields (based on scientific publications and data) for which such Target is expected to be Targeting as determined by Bayer or CRISPR in good faith (except as provided below). If the Management Board approves such nominated Target, such Target shall be included in the Initial Business Plan or the next Rolling Business Plan, as applicable. If there is a dispute within the Management Board as to the indication for such Target (i.e., the proposed Target may have an indication for a different Field than that proposed) or if the Management Board otherwise does not approve the inclusion of such Target, then the matter shall be escalated in accordance with the procedures set forth in Section 12.1.

(c) If CRISPR has reasonably determined that the nominated Target is a Covered Target, CRISPR shall provide the Company and Bayer with written notice, and the Parties acknowledge and agree that (i) such nominated Target may not be approved by the Management Board and (ii) the Company and the Local Operating Entities shall not undertake research or Development activities (or otherwise Commercialize or Exploit a Product) directed to such Target. If there is a dispute within the Management Board as to whether such nominated Target is a Covered Target, the Parties shall mutually designate, in their reasonable discretion, a third party law firm ("Third Party Firm") to implement the procedure set forth in this Section 7.13 and determine whether or not the nominated Target is a Covered Target. The decision of the Third Party Firm shall be binding on the Parties. CRISPR shall notify the Third Party Firm of all Targets subject to the

Existing Third Party Agreement (such list, as amended from time to time by CRISPR, the "Covered Target List"). The Company shall deliver a written notice to the Third Party Firm identifying such nominated Target. The Third Party Firm shall then determine within […***…] Business Days whether such Target is included in the Covered Target List. If a Target nominated by Bayer is included in the Covered Target List, such Target may not be included in the Initial Business Plan or any Rolling Business Plan.

(d) Confidentiality. The identity of any Covered Target identified to Bayer, the Company and the applicable Local Operating Entities under Section 7.13(c) shall be treated as Information and subject to the confidentiality obligations under Article 17 or the other confidentiality obligations under the other Transaction Documents and such Person shall not disclose that such Target is subject to any rights from CRISPR or its Affiliates or the subject of any collaboration with CRISPR or its Affiliates or of any collaboration partner or licensee of CRISPR or its Affiliates.

(e) In no event shall a Party or the Company propose a Target, and the Parties shall ensure that neither the Company nor a Local Operating Entity Develop, Commercialize or otherwise Exploit a Target, that is a […***…] Target. In addition, the Parties shall ensure that in no event shall the Company or a Local Operating Entity Develop, Commercialize or otherwise Exploit any Products for the diagnosis, prevention or treatment of cystic fibrosis. "[…***…] Target" means a Target related to the […***…].

ARTICLE 8 - EXECUTIVE TEAM; HUMAN RESOURCES; BUSINESS PLAN

8.1 *Executive Team*

The day-to-day operations of the Company shall be run by an executive team of individuals who shall be officers of the Company (the "Executive Team"). The day-today operations of the Company shall be run by the Executive Team under the supervision of the Management Board.

8.2 *Chief Executive Officer*

One member of the Executive Team shall hold the position within the Company of Chief Executive Officer ("CEO"). The CEO shall not be the Chairperson of the Management Board without the consent of both Parties.

8.3 *Appointment and Continuance of CEO*

(a) The right to appoint the CEO shall be vested in the Management Board upon the vote required by Section 7.9. The Chairperson of the Management Board shall lead the selection process of the replacement to the initial CEO. The Management Board will consult in the identification of candidates to serve as the CEO and will agree on the appointment of the CEO. Such CEO will be evaluated informally by the Management Board every twelve months. The CEO may be replaced upon the

approval of the Management Board, provided that either Party may cause the removal of the CEO for "cause." For purposes of this Section 8.3, a Party shall have "cause" to remove the CEO for (i) habitual drunkenness or drug addiction or willful failure materially to perform and discharge the CEO's duties and responsibilities, or (ii) misconduct that is materially and significantly injurious to the Company or a Local Operating Entity, or (iii) conviction of a felony involving the personal dishonesty of the CEO or moral turpitude, or (iv) conviction of the CEO for any crime or offense involving the property of the Company or a Local Operating Entity. Commencing on the first anniversary date of his or her commencement of service as CEO, and on each anniversary date thereafter, each of Bayer and CRISPR may withdraw its approval of such CEO after reasonable consultation with the other Party. The withdrawal of approval by either Bayer or CRISPR shall cause the selection process for a CEO to recommence as set forth in this Section 8.3.

(b) The initial CEO of the Company shall be Axel Bouchon or, should Axel Bouchon be unable to serve for any reason, the CEO shall be selected as set forth in this Section 8.3; provided, that such initial CEO shall automatically be deemed to resign on the earlier to occur of (i) the selection of the next CEO of the Company in accordance with Section 8.3 and (ii) three (3) months following the Effective Date. The Management Board may unanimously decide to extend the tenure of the initial CEO in such capacity beyond the period mentioned in the previous sentence. The Parties shall take all such required action to effectuate the resignation of the initial CEO as contemplated hereby.

8.4 *Other Officers of the Company*

(a) The CEO of the Company may at his or her option appoint other persons to serve as officers of the Company or designate other persons to serve as officers of a Local Operating Entity, including members of the Executive Team; provided that any such selection and the compensation provided to any such officer is in compliance with the guidelines to be determined by the Parties as soon as reasonably possible after the date hereof but prior to the Effective Date. The CEO may appoint, remove and replace such officers from time to time and they will work under the day-to-day supervision and control of the CEO. Notwithstanding the foregoing, for so long as the CEO is a Conflicted CEO (including the initial CEO), any such decision with respect to the officers, including the hiring of any such officer, shall require the unanimous approval of the Management Board.

8.5 *Role of Executive Team*

The CEO and other members of the Executive Team shall have the power and authority to take actions and make decisions in respect of all those matters not otherwise reserved to the Members or the Management Board pursuant to this Agreement or in the Company Organization Documents to the extent permitted by applicable Law. Notwithstanding the foregoing, the initial CEO shall consult with the Management Board with respect to any and all material decisions regarding the Company so long as he is appointed in such capacity, including any decision regarding Related Party Transactions involving Bayer or one of its Affiliates.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.6 *First Members of the Executive Team of the Company*

The first individuals named to the Executive Team of the Company shall be the persons nominated and appointed in accordance with Sections 8.3 and 8.4. The Management Board shall determine the positions to be held by the initial Executive Team as promptly as practicable after the date hereof, and in any event, prior to the Effective Date.

8.7 *Remuneration*

The remuneration of the members of the Executive Team, should any of them become employees of the Company or a Local Operating Entity pursuant to Section 8.10, shall require the approval of the Management Board in the case of the CEO, but otherwise the approval of the CEO to the extent such remuneration is in compliance with the guidelines developed as set forth in Section 8.4(a) (and otherwise, will require the approval of the Management Board). To the extent the CEO or any other member of the Executive Team is an employee of a Party who is seconded to the Company, such Party shall fix such individual's salary. The Company shall reimburse the seconding Party in accordance with the terms of a secondment agreement. Notwithstanding the foregoing, for so long as the CEO is a Conflicted CEO (including the initial CEO), any such decision with respect to the officers shall be made by the Management Board. In addition, the initial CEO of the Company shall not receive any remuneration for serving in such capacity (or his resignation) without the prior approval of the Management Board.

8.8 *Executive Team Reports to the Management Board*

The Executive Team, through the CEO, shall report to, and shall at all times be subject to the direction of, the Management Board. Without limiting the generality of the foregoing, the Executive Team shall prepare and submit to the Management Board and the Members quarterly reports, in reasonable detail, on the operations of the Company and all applicable Local Operating Entities, as soon as available and, in any event, within thirty (30) days after the end of each calendar quarter (including the last). Such reports shall include quarterly consolidated financial statements (including an unaudited profit and loss statement, balance sheet and cash flow statement) of the Company and each Local Operating Entity for the applicable quarter and the fiscal year-to-date period prepared in accordance with U.S. GAAP and IFRS, setting forth in each case in comparative form the actual, budgeted and prior year figures for the corresponding quarter and the corresponding fiscal year-to-date period.

8.9 *Human Resources*

(a) Transfer of Employees. The initial conditions of service of Company and any Local Operating Entity personnel are to be determined by the Management Board. If at any time the Company or a Local Operating Entity desires to accept transfers of employees from the Parties or their Affiliates to become Company or Local Operating Entity employees, the Parties intend that, as soon as practical thereafter, the human resources policies of the Company and each Local Operating Entity will be determined by the Management Board.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) Employment Liabilities. If at any time the Company or a Local Operating Entity desires to accept transfers of employees from the Parties or their Affiliates, the Parties or their Affiliates will calculate the monetary value of all long term personnel liabilities which are to be transferred to the Company or the Local Operating Entity as a result of negotiations between the Parties or their Affiliates and the employees. These may include such liabilities as pension fund, long service awards and leave, share options, loan guarantees, medical aid and employee savings plans, and such other liabilities as may be agreed to by the Parties or their Affiliates after full disclosure and completion of due diligence by each Party or its Affiliates. All personnel liabilities not transferred to the Company or a Local Operating Entity will remain the responsibility of the Party or its Affiliates. Notwithstanding anything in this Section 8.9 to the contrary, the approval of the Management Board shall be required to assume employment liabilities described herein.

(c) Secondments. The Parties agree that it would be in the best interests of the Parties, the Company and each Local Operating Entity to allow the secondment of the Parties' or its Affiliates' employees (the "Seconded Employees") with the requisite skills and availability to the Company or a Local Operating Entity after the Effective Date in accordance with policies to be set forth by the applicable Management Board. The Parties will identify and allow the secondment of personnel to the Company or a Local Operating Entity in accordance with a secondment agreement to be agreed. The CEO shall have the authority to terminate the secondment agreement of any seconded employees without the consent of the Management Board or the Parties.

(d) IP Matters. As between the (i) Company and the Local Operating Entities, on the one hand, and (ii) CRISPR or Bayer (and their respective Affiliates), on the other hand (each a "Primary Employer"), the Company and each Primary Employer agree that (i) any Seconded Employee's works of authorship, discoveries, inventions and innovations resulting from the services performed by such Seconded Employees for the Company or a Local Operating Entity, or (ii) any proposals, research, records, reports, recommendations, manuals, findings, evaluations, forms, reviews, information, data, computer programs and software originated or created by any Seconded Employee for the Company or a Local Operating Entity or in the performance of such services (such items being hereinafter referred to collectively and severally as "Work Product"), in each case which is an original work of authorship, including but not limited to any computer program or software, is a "work made for hire" within the meaning of 17 United States Code Section 101 in that it is a work that has been specially ordered or commissioned by the Company or such Local Operating Entity for use as a contribution to a collective work, as part of an audiovisual work, as a translation, as a supplementary work, as a compilation and/or as an instructional text. To the extent any Work Product is not a "work made for hire," each Primary Employer

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

hereby agrees to take all action to assign, and to have the Seconded Employees assign, to the Company or such Local Operating Entity all right title and interest in and to such Work Product, including all intellectual property rights therein or based thereon. Notwithstanding the foregoing or anything else herein to the contrary, the rights and obligations under this Section 8.9(d) and the final allocation of ownership with respect to any Work Product (including all intellectual property rights therein) shall be allocated in accordance with, and remain subject to, in all cases the terms and conditions of the Intellectual Property Management Agreement.

8.10 *Local Operating Entities*

The provisions in Sections 8.1 through 8.8 shall apply *mutatis mutandis* to each Local Operating Entity to the extent permitted by applicable Law and not inconsistent with the terms of the Tax Appendix.

8.11 *Business Plans*; *Budgets*

(a) The initial operational budget (the "Initial Budget") and the initial investment budget (the "Initial Investment Budget"), in each case for a period from the date hereof through December 31, 2017, shall be attached hereto as Schedule 8.11 to this Agreement. The Initial Business Plan shall be attached to Schedule 8.11 on or prior to the Effective Date. The Parties acknowledge and agree that the Initial Business Plan, the Initial Budget and the Initial Investment Budget may, upon the approval of the Management Board as set forth in Section 7.9, be amended as appropriate.

(b) On or about […***…] of each fiscal year starting in 2016, the Management Board shall begin discussions regarding the 24-month operational budget for the 24-month period starting on January 1st of the next fiscal year (each, a "Rolling Budget"), an investment budget for the same period (each, a "Rolling Investment Budget") and a business plan for the same period (each, a "Rolling Business Plan"). Each Party shall cause its designees on the Management Board to use reasonable best efforts to obtain the required approval of the Management Board of such Rolling Budget, such Rolling Investment Budget and such Rolling Business Plan until such approval is obtained. If, pursuant to Section 7.9, the Management Board fails to approve an updated Rolling Business Plan, Rolling Budget and Rolling Investment Budget for a fiscal year by […***…] of the prior fiscal year, then the matter shall be escalated in accordance with the procedures set forth in Section 12.1. Once such Rolling Business Plan, such Rolling Budget and such Rolling Investment Budget have been approved, CRISPR designated members of the Management Board shall have final approval with respect to funds allocations to Targets in the CRISPR Fields and the Bayer designated members of the Management Board shall have final approval with respect to funds allocations to Targets in the Bayer Fields.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(c) Once a Rolling Budget and each Rolling Business Plan for any fiscal year is approved pursuant to Section 7.9 by the Management Board, the Executive Team shall manage the Company and each Local Operating Entity according to industry best practices in a commercially reasonable manner to endeavor to achieve the Rolling Budget and each Rolling Business Plan for such fiscal year.

(d) Each Rolling Budget shall include, for informational and planning purposes only, a good faith estimate of the costs required for the Dissolution. Such estimate shall be as detailed as the Management Board determines is appropriate following reasonable analysis. Such costs shall include costs such as lease termination, employee severance and termination and contract termination costs. For the avoidance of doubt, such costs shall not be funded unless and until they are required to be funded in connection with the Dissolution.

(e) If the applicable Rolling Investment Budget is not approved in accordance with Section 8.11(b) prior to […***…] of the fiscal year immediately preceding the period covered by such Rolling Investment Budget, the amount allocated for investment activities for the first fiscal year covered by such Rolling Investment Budget shall be deemed to equal the amount allocated in the Rolling Investment Budget for the immediately preceding fiscal year and for the second year covered by such Rolling Investment Budget shall be deemed to equal the amount for such first fiscal year; provided, that, if such Rolling Investment Budget is later approved in accordance with Section 8.11(b), the allocated amounts shall thereafter equal the respective amounts approved for investments in such Rolling Investment Budget.

ARTICLE 9 - FUNDING

9.1 *Committed Cash Contributions*

(a) Committed Cash Contributions (Capital). As of the date hereof, the aggregate committed cash contributions of each Party to the capital of the Company (which is comprised of its Initial Contribution and its Additional Contribution) are as follows: (i) with respect to CRISPR, US $100,000; and (ii) with respect to Bayer, US $300,000,000 (the "Bayer Commitment Amount"). The Bayer Commitment Amount is to be understood as paid-in capital with deferred payment terms. Each cash contribution to the capital of the Company shall be payable in immediately available funds (in US dollars) pursuant to wire transfer instructions provided to the paying Party prior to the contribution date. In the event that any Party does not make its Initial Contribution set forth on Schedule 3.2(b)(ii) or any additional contribution (including any Additional Contribution) when due, such Party shall be in material breach of this Agreement and the other Party may seek any remedy provided for in this Agreement, which provides that such Party shall first have the ability to cure the breach as set forth in Section 19.1(a); thereafter, such other Party may terminate this Agreement in accordance with Section 16.1(c) and/or pursue any other remedy provided for herein. The Company shall provide Bayer and CRISPR, as the case may be, a written invoice including due date for any capital contribution required to be made to the Company hereunder in advance of the date of such contribution.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) Initial Contributions. Upon receipt of the first installment of the Initial Contributions by the Company from each Party and the execution by CRISPR of the CRISPR IP Contribution Agreement, each Party shall have a 50% Interest in the Company and 50% of the voting rights therein. The second installment of the Initial Contribution by Bayer shall occur within […***…] of the provision of Evidence Related to Global Filings.

(c) Additional Contributions

(i) "Additional Contribution" shall mean an additional cash contribution by a Party to the capital of the Company following its Initial Contribution. As of the date hereof, the aggregate amount of the Additional Contributions to be made by Bayer pursuant to this Agreement shall equal, and not exceed without its consent, the Bayer Commitment Amount minus its Initial Contribution (the "Bayer Additional Contribution Cap"). As of the date hereof, CRISPR shall not be responsible for any Additional Contribution. Each Additional Contribution made to the Company shall not alter Bayer's 50% Interest in the Company or its 50% voting rights in meetings of the Members. For the avoidance of doubt, in no event shall Bayer be required to make an Additional Contribution without its consent (including pursuant to Section 9.1(d)) until CRISPR provides the Evidence Related to Global Filings; provided, that, if any amounts would otherwise have become due under clause (ii) of this Section 9.1(c) prior to such provision of the Evidence Related to Global Filings, any such Additional Contribution(s) shall be made in conjunction with the second installment of the Initial Contribution.

(ii) Bayer shall make an Additional Contribution following the occurrence of any of the following triggers, in an amount calculated and otherwise payable in accordance with the following:

(1) Budget Funding. The Parties agree that the Initial Contributions are intended to fund the Initial Budget. Within […***…] following the approval of each Rolling Budget in accordance with Section 8.11(b), written notice (with respect to such Rolling Budget, a "Budgetary Funding Notice") shall be provided by the CEO to the Parties which details the following: (x) the cash requirements of the Company and the Local Operating Entities based on such Rolling Budget (with respect to such Rolling Budget, the "Cash Requirements"); (y) the expected available cash of the Company and the Local Operating Entities as of January 1st of the first fiscal year covered by such Rolling Budget (with respect to such Rolling Budget, the "Expected Cash"); and (z) the difference between such Cash Requirements and such Expected

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Cash (with respect to such Rolling Budget, the "Additional Budgetary Funding Amount"). Bayer shall make an Additional Contribution equal to the Additional Budgetary Funding Amount as promptly as practicable (and in any event within […***…]) of its receipt of the Budgetary Funding Notice. Notwithstanding the foregoing, if the applicable Rolling Budget is not approved in accordance with Section 8.11(b) prior to […***…] of the fiscal year immediately preceding the period covered by such Rolling Budget, the Cash Requirements for such Rolling Budget shall be deemed to equal […***…] of the Cash Requirements for the immediately preceding fiscal year (the "Deemed Cash Requirements") and the CEO shall deliver the Budgetary Funding Notice assuming the Deemed Cash Requirements; provided, that, if such Rolling Budget is later approved and the actual Cash Requirements are greater than the Deemed Cash Requirements, the CEO shall submit another Budgetary Funding Notice to the Parties as promptly as practicable following such approval with an Additional Budgetary Funding Amount equal to the actual Cash Requirements minus the Deemed Cash Requirements.

(2) Acquisition Transaction Funding. From time to time, the CEO may provide written notice (a "CEO Acquisition Notice") to the Parties of a proposed acquisition of tangible and/or intangible assets (including Intellectual Property) directly relating to or that would be complementary to the Business (an "Acquisition Transaction"), which may take the form of a license of such assets to the Company and/or a Local Operating Entity or the purchase of assets or an entity/entities, that are covered by the Initial Investment Budget or the Rolling Investment Budget, as applicable, and not explicitly covered by the Initial Budget or the Rolling Budget, as applicable. Such CEO Acquisition Notice shall detail the cash contribution amount required to effectuate such Acquisition Transaction (the "Acquisition Transaction Funding Amount"), a summary of the assets to be acquired and the owners thereof and the date that funds would be required to consummate such Acquisition Transaction (the "Acquisition Transaction Funding Date"); provided, that if additional consideration (an "Acquisition Transaction Additional Funding Amount") is required to be paid by the Company or a Local Operating Entity for any such asset after the applicable Acquisition Transaction Funding Date (an "Acquisition Transaction Additional Payment") that (A) would require […***…] or (B) […***…], the prior written consent of the Parties shall be required for such Acquisition Transaction, which consent shall not be unreasonably withheld, conditioned or delayed. Bayer shall make an Additional Contribution equal to (i) the Acquisition Transaction Funding Amount on or prior to the Acquisition Transaction Funding Date (provided, that if the

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Acquisition Transaction Funding Date is less than […***…] Business Days after Bayer's receipt of the CEO Acquisition Notice, the Company or a Local Operating Entity may fund the Acquisition Transaction with available cash and Bayer shall fund the Acquisition Transaction Funding Amount to the Company as promptly as practicable (and in any event within […***…] Business Days of its receipt of such CEO Acquisition Notice)) and (ii) the Acquisition Transaction Additional Funding Amount as promptly as practicable (and in any event within […***…] Business Days of its receipt of written notice from the CEO of the applicable Acquisition Transaction Additional Payment). Without the prior written consent of the Parties, in no event shall Bayer be required to make Additional Contributions pursuant to this Section 9.1(c)(ii)(2) in excess of an amount equal to […***…] of the amount set forth in the Initial Investment Budget or the Rolling Investment Budget, as applicable (the "Investment Cap").

(3) Management Board Approved Funding. The Management Board may approve additional funding of the Company from time to time in accordance with Article 7. The Company shall provide the Parties with written notice of such approval as promptly as practicable following such approval. Bayer shall make an Additional Contribution equal to the amount so approved by the Management Board as promptly as practicable (and in any event within ten (10) Business Days) of its receipt of such notice.

(iii) Provided that this Agreement is not terminated in accordance with Section 16.1 by […***…] (the "Funding Outside Date"), Bayer shall make an Additional Contribution on the Funding Outside Date equal to the Bayer Additional Contribution Cap minus the aggregate amount of all Additional Contributions made by Bayer prior to the Funding Outside Date.

(d) Acquisition Transactions Prior to […***…]

(i) At any time prior to […***…], if the Management Board determines that it is advisable for the Company or a Local Operating Entity to acquire, through license or otherwise, any Intellectual Property or technology from a Third Party, the CEO (or during the tenure of the initial CEO, any member of the Management Board) may provide a CEO Acquisition Notice to the Company and the Parties with respect to such Intellectual Property or technology; provided, that in no event shall the amount required to fund such acquisition (together with other amounts funded under this Section 9.1(d)(i)) exceed the […***…]. Upon its receipt of such CEO Acquisition Notice, […***…] (A) shall have the option, but not the obligation, to […***…] and (B) agrees to promptly present such acquisition to the […***…].[…***…] shall provide the Company and CRISPR written notice of its decision of whether to […***…] within […***…] Business Days of its receipt of such CEO Acquisition Notice.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(1) If […***…] agrees to […***…], it shall make such […***…] as promptly as practicable (and in any event within […***…] of it providing the written notice of its decision).

(2) If […***…] does not agree to […***…],[…***…] shall have the option, but not the obligation, to […***…] the Company the required amount on customary terms […***…]. All […***…] would become […***…] within […***…] Business Days of […***…]. The […***…] shall be […***…] as an […***…] as contemplated by the last sentence of […***…].

(ii) For the avoidance of doubt, following […***…], this Section 9.1(d) shall no longer apply and the other provisions of Section 9.1 shall control all […***…].

9.2 *Future Funding*

Except as otherwise provided in this Article 9 and Section 6.2, all financing beyond the capital contributions set forth in Section 9.1 shall be approved by the Management Board in accordance with Section 7.9.

9.3 *Further Capital Contributions*

No Party shall be required to provide any cash contributions to the capital of the Company without its consent other than those forming part of the Initial Contributions and the Additional Contributions as well as funding approved in accordance with Sections 9.2, 9.5 and 16.2(b).

9.4 *Total Capital of the Company*

For the avoidance of doubt, the total capital of the Company consists of the total cash contributions of the Parties, i.e. the Initial Contributions and the Additional Contributions, as well as the rights licensed to the Company under the CRISPR IP Contribution Agreement.

9.5 *Procedure for Excess Funding*

(a) If, at any time after Bayer has provided to the Company its Initial Contribution and all Additional Contributions required hereunder (the "Initial Period"), the Company's and the Local Operating Entities' operating income and cash on hand is expected to be insufficient to fund its working capital requirements for the next […***…] period, as certified by the CEO to each Member in writing, the Management Board shall, within […***…] days following the CEO's certification, discuss in good faith, and in accordance with the principle set forth in Section 9.1, the most appropriate methods of obtaining financing for the Company and the Local Operating Entities.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

If (i) the Management Board cannot unanimously agree to a method of obtaining financing for the Company within […***…] following the CEO's certification or (ii) the Company cannot obtain any financing approved by the Management Board in accordance with Section 7.9 to fund its working capital requirements within […***…] following the CEO's certification, then the matter shall be escalated in accordance with the procedures set forth in Section 12.1. If (x) a method of obtaining financing for the Company is not determined within […***…] following such escalation or (y) the Company cannot obtain any financing approved by the Management Board in accordance with Section 7.9 to fund its working capital requirements within […***…] following such escalation, either Party shall have the right to terminate this Agreement pursuant to Section 16.1(g) from such earlier date until the CEO provides each Member a further certification in writing that the Company's and the Local Operating Entities' operating income and cash on hand (including any cash receiving in connection with financings approved by the Management Board in accordance with Section 7.9) is expected to be sufficient to fund its working capital requirements for the next […***…] (such period during with a Party may terminate this Agreement pursuant to Section 16.1(g), the "Funding Shortfall Termination Period").

9.6 *Allocation of Cash Contributions to the Capital of the Company*

Unless otherwise approved by the Management Board in accordance with Section 7.9 or as expressly set forth in the Initial Budget or a Rolling Budget, the funding of the Company shall be allocated […***…] to the Development of Products and technology in the Bayer Fields and CRISPR Fields; provided, that there shall be no categorical split within the Bayer Fields or the CRISPR Fields and shall only be subject to the approvals otherwise set forth in Section 8.11(b); provided, further that Bayer and CRISPR shall nominate Targets in accordance with the procedures set forth in Section 7.13 in connection with developing the Initial Business Plan and the Rolling Business Plan, as applicable; provided, further, that in each Rolling Budget covering a period starting on […***…], such Rolling Budget shall provide that at least […***…] of the amount allocated under such Rolling Budget shall be allocated to the Development of Products and technology for […***…] unless otherwise agreed to by the Management Board.

ARTICLE 10 - DISTRIBUTIONS

10.1 *Distributions*

The Parties hereby agree to cause the Management Board to declare and pay distributions to the Members in accordance with the provisions of the Company Organization Documents, which will set forth the mechanics for the allocations of profits and losses of the Company to each Member. The Company Organization Documents shall provide that all proceeds from the Opt-In Transactions as well as other out-license, sale or other

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

similar transaction shall, unless otherwise agreed to by the Parties or otherwise prohibited by applicable Law, be paid equally to the Parties net of transaction costs (such as legal, accounting, investment banking fees as well as transaction and incentive bonus payments); provided, that upon the start of Dissolution proceedings or the termination of this Agreement becoming effective, the Management Board may determine to use such proceeds to pay any costs of such Dissolution or termination.

ARTICLE 11 - TRANSFERS OF INTERESTS

11.1 *Transfers*

Neither Party shall Transfer any or all of its Interest or any right attaching to such Interest, except as permitted by the terms of this Article 11 and the Company Organization Documents. Any attempted Transfer by a Party that is not permitted by the terms of this Agreement and the Company Organization Documents shall be null and void and of no force or effect.

11.2 *Substitution of Affiliates*

(a) The Parties may Transfer any or all of their respective Interests to any of their respective Affiliates or a successor company as the result of an internal corporate reorganization, provided that:

(i) The ownership of such Interests by the Affiliates shall be subject to all the conditions and obligations set forth in this Agreement, the other Transaction Documents and the applicable Local Operating Agreement;

(ii) Such Party shall remain primarily liable for any obligations of such Party under the Transaction Documents and with respect to such Interests;

(iii) Prior notice providing reasonable details of the proposed Transfer shall be provided to the other Party in writing at least fifteen (15) days prior to the completion of the Transfer; and

(iv) That any such Transfer shall not result in tax treatment that is inconsistent with that set forth in the Tax Appendix.

(b) Any Interest that is held by an Affiliate of a Party shall for all purposes of this Agreement be treated as an Interest held by such Party.

11.3 *Transfer in Connection with Sale of All or Substantially all of the Assets of a Party*

A Party may Transfer to a Third Party all of its Interests it owns directly or indirectly in accordance with the terms of this Section if such Transfer is part of a Change of Control, whether through the sale of all or substantially all of the assets of such Party and its Affiliates or otherwise (a "Permitted COC Transfer"). Nothing in this Section 11.3 shall deem any transaction herein […***…].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.4 *Transferee Acceptance of Conditions*

As a condition precedent to the Transfer of any Interests permitted under Section 11.3, any Third Party that thereby acquires any Interests shall have previously agreed in writing to be bound by all the obligations of this Agreement, the Transaction Documents to which such Party is a party and the Local Operating Agreements, and shall have previously delivered to the non-disposing Party a true copy of such agreement.

11.5 *Notice to the Management Board of Transfer*

Any Transfer to a Third Party pursuant to Section 11.3 shall be notified to the other Party, the Management Board and each Local Operating Entity in writing at least […***…] days prior to the completion of such Transfer.

11.6 *Further Restrictions*

Except as permitted under Sections 11.2 and 11.3, no new Members shall be admitted to the Company until the Funding Outside Date, unless approved unanimously by the Members, and thereafter any new Member shall be approved in accordance with Section 7.9.

ARTICLE 12 - DEADLOCK; CONCILIATION

12.1 *Deadlock in the Management Board and Between the Members*

If a matter is required to be escalated by any term of this Agreement pursuant to Section 12.1, the matter shall be referred to the head of Bayer AG's Head of R&D and CRISPR's Chief Executive Officer for resolution. Such individuals shall use reasonable best efforts to resolve such matter and come to agreement within […***…] after referral of such matter to them. If such individuals do not resolve such matter and come to agreement in such […***…] period, then the proposed action shall not be taken or deemed approved, unless otherwise specified in this Agreement. If such individuals resolve such matter and come to agreement in such […***…] period, each Party shall cause its designees on the Management Board to take such actions as are reasonably required to effectuate such resolution and agreement as promptly as practicable thereafter.

ARTICLE 13 - BOOKS, ACCOUNTING AND FINANCIAL STATEMENTS AND FISCAL YEAR

13.1 *Books*

The Company and each Local Operating Entity shall keep proper books and records of account which shall be freely accessible to the representatives of both Parties for inspection and copying during the usual business hours of the Company and such Local Operating Entity upon reasonable advance notice.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

13.2 *Accounts*

The Company shall keep books and records of account in accordance with applicable local accounting standards consistently applied.

13.3 *Annual Financial Statements*

The Company and each Local Operating Entity shall prepare and distribute to the Parties as soon as available and in any event within […***…] days after the end of each fiscal year of the Company and each Local Operating Entity audited annual financial statements including a balance sheet of such Local Operating Entity as of such fiscal year-end and related statements of income, cash flows and changes in owners' equity for such year, together with comparisons of the current fiscal year with previous fiscal years, all in reasonable detail, accompanied by normally prepared supporting statements and schedules.

13.4 *Other Financial Statements*

In addition to the reports and statements provided for in Sections 8.8 and 13.3, the Company and each Local Operating Entity shall furnish each Party with such reports and financial statements as may be reasonably requested by such Party, including without limitation information and documents required for the preparation of consolidated financial statements and tax returns of either Party.

13.5 *Fiscal Year*

Unless otherwise approved by the Members, the Company and each Local Operating Entity shall have a fiscal year starting on January 1st and ending on December 31st.

13.6 *Appointment of Auditor*

The Company and each Local Operating Entity shall have an independent auditor, which shall be recommended by the Executive Team and approved in accordance with Section 7.9. Any change in the independent auditor shall be approved at a meeting of the Management Board as contemplated by Section 7.9. The auditor of the Company and each Local Operating Entity shall always be appointed from among firms having a worldwide reputation. The Company and each Local Operating Entity shall have its books and accounts audited by the independent auditor at the end of each fiscal year at the expense of the Company or such Local Operating Entity.

ARTICLE 14 - REPRESENTATIONS AND WARRANTIES

14.1 *Representations and Warranties of CRISPR*

The representations and warranties of CRISPR are attached as Schedule 14.1.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

14.2 *Representations and Warranties of Bayer*

The representations and warranties of Bayer are attached as Schedule 14.2.

ARTICLE 15 - EXPENSES

15.1 *Expenses*

Unless otherwise provided for herein or in another Transaction Document, each of the Parties shall bear its own costs and expenses (including legal fees) incurred in connection with the preparation, negotiation and execution of this Agreement and the performance of its obligations hereunder, unless otherwise provided for herein. The Company Organization Documents shall provide that the termination and wind down costs for the Company and any Local Operating Entities shall be funded (i) first, by the Company from funds available thereto (other than funds intended for distribution to the Parties pursuant to Article 10 hereto) and (ii) second, by the Company by calling additional funds from Bayer as contemplated by and in accordance with Section 16.2(b).

ARTICLE 16 - TERMINATION

16.1 *Termination*

This Agreement shall be terminated upon the occurrence of any of the following events:

(a) The Parties mutually agree in writing to terminate this Agreement;

(b) Upon the occurrence of […***…], at the election of the non-breaching Party upon delivery of written notice to the breaching Party;

(c) Any failure to […***…] that is not cured in accordance with […***…], at the election of the non-breaching Party upon delivery of written notice to the breaching Party;

(d) A Party becomes subject to voluntary liquidation, winding-up or any similar insolvency proceeding or involuntary proceeding which is not dismissed within […***…] days of the commencement thereof, or applies for protection under any bankruptcy, suspension of payments or similar insolvency Laws of any jurisdiction or has a receiver appointed, at the election of the other Party upon delivery of written notice to such Party;

(e) […***…], at the election of the other Party upon delivery of written notice to such Party within […***…];

(f) For Good Cause, at the election of Bayer upon delivery of written notice to CRISPR;

(g) By either Party […***…];

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(h) Upon the occurrence of a Breach of Section […***…] at the election of the non-breaching Party upon delivery of written notice to the Breaching Party; or

(i) During the period starting on the one (1) year anniversary of the Effective Date and ending thirty (30) days thereafter, at the election of Bayer upon delivery of written notice of Bayer's exercise of such election to CRISPR, in the event that CRISPR has not by such anniversary date obtained and provided […***…] ("Evidence Related to Global Filings"). […***…].

In the event of a dispute as to the occurrence of any of the events in Sections 16.1(b), (d), (e), (f) or (h), prior to a Party terminating this Agreement for the occurrence of any such events, such Party shall be required to first comply with the dispute resolution procedures set forth in Section 20.1 and the procedures set forth in Section 19.1, which Cure Period and Resolution Period shall run concurrently and begin on the date of notice of Breach.

16.2 *Results of Termination*

(a) Upon termination of this Agreement for any reason (other than Section 3.2):

(i) Subject to any existing licenses (including any license entered into in connection with an Opt-In Transaction and any licenses between the Company or a Local Operating Entity and a Third Party), all Company CRISPR/Cas Technology will be co-owned by Bayer and CRISPR, with the right to sublicense through multiple tiers, with (A) Bayer receiving an exclusive license for Non-Human Therapeutic Uses and a non-exclusive license for Human Therapeutic Uses in the Bayer Fields and (B) CXX receiving an exclusive license for Human Therapeutic Uses (other than the Bayer Fields) and a non-exclusive license for Human Therapeutic Uses in the Bayer Fields, provided, that if such termination is pursuant to Section 16.1(c) (as a result of a breach by Bayer) prior to Bayer contributing the Initial Contribution in full or Section 16.1(i), all Company CRISPR/Cas Technology will be exclusively owned by CRISPR.

(ii) Subject to any existing licenses (including any license entered into in connection with an Opt-In Transaction and any licenses between the Company or a Local Operating Entity and a Third Party), all Company Optimized Cas Technology will be co-owned by Bayer and CRISPR, with the right to sublicense through multiple tiers, with (A) Bayer receiving an exclusive license for Non-Human Therapeutic Uses and a non-exclusive license for Human Therapeutic Uses in the Bayer Fields and (B) CXX receiving an exclusive license for Human Therapeutic Uses (other than the Bayer Fields) and a non-exclusive license for Human Therapeutic Uses in the Bayer Fields.

(iii) Subject to any existing licenses (including any license entered into in connection with an Opt-In Transaction and any licenses between the Company or a Local Operating Entity and a Third Party), all Company

Non-Product Technology will be co-owned by Bayer and CRISPR with the right to sublicense through multiple tiers, as joint owners of an undivided interest therein.

(iv) Subject to any existing licenses (including any license entered into in connection with an Opt-In Transaction and any licenses between the Company or a Local Operating Entity and a Third Party), all Company Pre-IND Product Technology will be co-owned by Bayer and CRISPR as joint owners of an undivided interest therein; with the right to sublicense through multiple tiers, provided, that if such termination is pursuant to Section 16.1(b) (as a result of a breach by Bayer), 16.1(c) (as a result of a breach by Bayer), 16.1(d) (as a result of CRISPR providing notice of termination), 16.1(h) (as a result of a breach by Bayer) or 16.1(i), all Company Pre-IND Product Technology will be exclusively owned by CRISPR; provided, further, that if such termination is pursuant to Section 16.1(b) (as a result of a breach by CRISPR), 16.1(c) (as a result of a breach by CRISPR), 16.1(d) (as a result of Bayer providing notice of termination), or 16.1(h) (as a result of a breach by CRISPR) all Company Pre-IND Product Technology will be exclusively owned by Bayer. In addition, subject to any existing licenses (including any license entered into in connection with an Opt-In Transaction), all Company Post-IND Product Technology will be owned exclusively by CRISPR following a termination pursuant to Section 16.1(c) prior to Bayer contributing the Initial Contribution in full or Section 16.1(i); provided, that for all other terminations, the Company Post-IND Product Technology shall be licensed in accordance with the terms of the Option Agreement.

(v) For the Intellectual Property covered by (i) through (iv) above all licenses to the Parties and their respective Affiliates in the CRISPR IP Contribution Agreement and the Bayer IP Contribution Agreement will be terminated (except with respect to existing licenses to Third Parties and any licenses entered into in connection with Opt-In Transactions) and each Party will, and shall cause the Company and the Local Operating Entities to, take reasonable steps and to execute any documents to achieve such ownership or co-ownership, as applicable. Except as and to the extent that rights of joint or co-owners cannot be varied, waived or otherwise determined by mutual agreement under applicable Laws of any country, the joint owners of any technology shall have equal and undivided rights therein with the full right to practice and exploit such rights, including without limitation, granting sublicenses and similar right therein, without accounting to, or obtaining the consent of, the other joint owner and any required consents are hereby deemed provided, in all cases.

(vi) After termination of this Agreement and/or liquidation of the Company and during the period of any such co-ownership of the Company CRISPR/Cas Technology, the Optimized Cas Technology, Company Non-Product Technology and Company Pre-IND Product Technology, the

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Intellectual Property Management Agreement shall survive in accordance with the terms set forth therein and all prosecution and maintenance and enforcement of such Intellectual Property shall be governed by the Intellectual Property Management Agreement.

(b) Upon the termination of this Agreement, neither Party shall be required to make any further contributions except for any unpaid Additional Contributions and any remaining cash capital in the Company shall be repaid to Bayer and, if the requirements set forth in Section 16.2(d) below are met, CRISPR; provided, that such cash shall be used to pay any costs to dissolve and wind-down the Company and each of the Local Operating Entities (the "Dissolution") prior to any such repayment; provided, further, that Bayer shall fund additional amounts required to effectuate the Dissolution, as determined in the reasonable judgment of the CEO, within […***…] Business Days of written notice of such funding requirement to the Members (provided, that in no event shall Bayer be required to fund amounts to the extent such amounts together with its Initial Contribution and all its Additional Contributions exceed the Bayer Commitment Amount). The Parties agree that following a termination of this Agreement, the Company and the applicable Local Operating Entities shall remain in existence for a period of time to orderly wind-down the Business (including to act as a holding company for purposes of distributing proceeds from Opt-In Transactions) and that the Dissolution of the Company shall occur at the time specified in and in accordance with the Company Organization Documents.

(c) Upon the termination of this Agreement, subject to any survival terms set forth therein, each of the Bayer Services Agreement, the CRISPR Services Agreement, the CRISPR IP Contribution Agreement and the Bayer IP Contribution Agreement shall automatically terminate.

(d) Upon the termination of this Agreement pursuant to Section 16.1(b) (as a result of a breach by Bayer), 16.1(c) (as a result of a breach by Bayer), 16.1(d) (as a result of CRISPR providing notice of termination) or 16.1(h) (as a result of a breach by Bayer), any cash capital remaining in the Company and the Local Operating Entities from the Initial Contributions and the Additional Contributions actually made by […***…] that were allocated to the period ending […***…] in the Initial Budget and the applicable Rolling Budget shall be repaid to […***…], and any such cash capital in excess of such amount to be repaid to […***…] shall be repaid to […***…]. Upon the termination of this Agreement pursuant to any other Section, all such cash capital shall be repaid to […***…].

(e) With respect to the Company and each Local Operating Entity, the termination of this Agreement shall also have the consequences set forth in the Company Organization Documents and the Local Operating Agreement of such Local Operating Entity.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(f) The following terms shall survive a termination of this Agreement pursuant to Section 16.1: Sections 3.6(b) through (j) and 16.2 and Articles 1, 2, 10, 11, 15, 17, 19, 20, 21 and 22.

16.3 *Results of Termination under Section 3.2*

(a) Upon termination of this Agreement under Section 3.2, this Agreement shall forthwith become void and have no effect, without any liability or obligation on the part of either Party under this Agreement, except as set forth in Section 16.3(b), and the termination of this Agreement shall not relieve any Party from any liability for fraud or any intentional or willful breach of any covenants or agreements set forth in this Agreement occurring prior to such termination.

(b) The following terms shall survive a termination of this Agreement pursuant to Section 3.2: Sections 16.3 and Articles 1, 2, 17, 21 and 22.

16.4 *No Implied Licenses*

For the avoidance of doubt, no licenses or other rights under any intellectual property rights are granted under this Agreement, by implication, necessity or otherwise, except as expressly set forth herein.

ARTICLE 17 - CONFIDENTIALITY AND PRESS RELEASES

17.1 *Confidentiality*

Each Party shall, and shall cause its Affiliates to, keep confidential any oral or written, tangible or intangible, proprietary or confidential information ("Information") of the other Party or its Affiliates, the Company or a Local Operating Entity, furnished to it by the other Party, its Affiliates or their directors, officers, employees, representatives or agents, or by the Company or a Local Operating Entity or its directors, officers, employees, representatives or agents, or obtained by it in connection with the transactions contemplated by this Agreement or any other Transaction Document. The term "Information" shall be deemed to include those portions of any notes, analyses, compilations, studies, interpretations, memoranda or other documents (regardless of the form thereof) prepared by the receiving Party or its Affiliates or its or their directors, officers, employees, representatives or agents which contain, reflect or are based upon, in whole or in part, any Information of the disclosing Party or its Affiliates, the Company or a Local Operating Entity. In addition, such Party and its Affiliates shall not use such Information except in connection with the transactions or the performance of the obligations of such Party or such Affiliate contemplated hereby or any other Transaction Document, the exercise of any rights hereunder or thereunder or as expressly provided for herein or therein. Neither Party or its Affiliates will disclose the Information of the other Party or its Affiliates, the Company or a Local Operating Entity to its Affiliates or its or their directors, officers, employees, representatives or agents unless such Person has a reasonable need to know such Information in connection with the transactions or the performance of the obligations of such Party or such Affiliates contemplated hereby or any other Transaction Document, the exercise of any rights hereunder or thereunder or as

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

expressly provided for herein or therein. Neither Party or its Affiliates shall release or disclose such Information to any other Person, except those among its auditors, attorneys, financial advisors, bankers and consultants having a need to know such Information in connection with the transactions or the performance of the obligations of such Party or such Affiliate contemplated hereby or any other Transaction Document, the exercise of any rights hereunder or thereunder, as required to comply with applicable Law or reporting requirements, or as expressly provided for herein or therein, or to actual or potential acquirers, collaborators, licensees, sub-licensees investment bankers, investors or lenders. Each Person receiving any such Information shall be subject to customary confidentiality obligations prior to such Person's receipt of such Information and such Party shall be primarily liable and responsible for any breach of this Section 17.1 as if such Person was a party hereto. In addition, each Party and its Affiliates are permitted to disclose such Information to the extent such disclosure is to a Governmental Authority as reasonably necessary in filing or prosecuting Patent, copyright and trademark applications, prosecuting or defending litigation related to this Agreement or any other Transaction Document, complying with applicable governmental regulations with respect to performance under this Agreement or any other Transaction Document or otherwise required by applicable Law. If a Party or any of its Affiliates (the "Compelled Party") is requested to disclose any Information by any governmental or regulatory authority (including stock exchange rules, GAAP or IFRS), the Compelled Party will promptly notify the other Party or the Company, as applicable (the "Affected Party"), to permit it to seek a protective order or take other action that the Affected Party in its discretion deems appropriate, and the Compelled Party will cooperate in any such efforts to obtain a protective order or other reasonable assurance that confidential treatment will be accorded such Information. If, in the absence of a protective order, the Compelled Party is compelled as a matter of Law to disclose any such Information in any proceeding or pursuant to legal process (as advised by its outside legal counsel), the Compelled Party may disclose to the Person compelling disclosure only the part of such Information as is required by Law to be disclosed (in which case, prior to such disclosure, the Compelled Party will advise and consult with the Affected Party and its counsel as to such disclosure and the nature and wording of such disclosure) and the Compelled Party will use its reasonable best efforts to obtain confidential treatment therefor. The confidentiality obligations contained in this Section 17.1 do not apply to Information that can be shown by such Party to have been (i) previously known by the Party or its Affiliates to which it was furnished prior to the date hereof (and not under a confidentiality obligation), (ii) generally available to the public through no fault or breach of such Party or its Affiliates, (iii) later lawfully acquired from other sources (not under a confidentiality obligation) by the Party or its Affiliates to which it was furnished or (iv) independently developed by a Party or its Affiliates or its or their directors, officers, employees, representatives or agents without the use or reference to any Information of the other Party, or its Affiliates, the Company or any Local Operating Entity. For the avoidance of doubt, in no event shall any information provided by a Party or its Affiliates (or one of its directors, officers, employees, representatives or agents) to the Company or a Local Operating Entity be considered Information of the Company or a Local Operating Entity with respect to such Party or its Affiliates under this Section 17.1. Following a termination of this Agreement, such confidentiality obligations and use restrictions shall

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

be maintained, subject to the exceptions set forth above, and all Information of the other Party and its Affiliates (including all copies thereof) shall be returned (or, at the other Party's instructions, destroyed, with certification of the same) to the Party that the other Party and its Affiliates shall be permitted to retain such Information (i) to the extent necessary for purposes of performing any continuing obligations or exercising any ongoing rights hereunder or under a Transaction Document and, in any event, one copy of such Information retained by the other Party's legal department for its records (provided that for so long as such Information is so retained, such Information shall be subject to the confidentiality obligations and restrictions on use as set forth herein), and (ii) any computer records or files containing such Information that have been created solely by such Party's or its Affiliates' automatic archiving and back-up procedures, to the extent created and retained in a manner consistent with such Party's standard archiving and back-up procedures, but not for any other use or purposes.

17.2 *Duration of Confidentiality*

The provisions of Section 17.1 shall continue to apply with respect to each Party and its Affiliates until the date which is […***…] following the termination of this Agreement.

17.3 *Press Releases and Other Public Disclosures*

Neither Party shall issue any press release or otherwise make any public statement with respect to this Agreement or the other Transaction Documents without the prior written consent of the other Party, except in case of public announcements required under the rules of any stock exchange on which the equity interests of a Party or its Affiliates (or any successor entity) are listed or any applicable Law or governmental requirement. Notwithstanding anything to the contrary in this Article 17, a Party (or its Affiliates) may disclose this Agreement and the other Transaction Documents (and a summary thereof) as well as the financial statements of the Company and Local Operating Entities and financial data derived therefrom, in securities filings with the U.S. Securities and Exchange Commission or an equivalent foreign agency to the extent required by applicable Law. In such event, the Party seeking such disclosure shall prepare such summary and a proposed redacted version of this Agreement and/or the other Transaction Documents to request confidential treatment for such agreements, and the other Party may promptly (and in any event, no less than […***…] Business Days after receipt of such summary and proposed redactions) provide its comments. The Party seeking such disclosure shall reasonably consider any comments thereto provided by the other Party within such […***…] Business Day period. The Parties have agreed to issue a joint press release or separate press releases announcing this Agreement and the transactions contemplated hereby, to be issued by the Parties at a mutually agreed date and time, in the form(s) to be agreed by the Parties in their reasonable discretion.

17.4 *Publications*

During the Term, each Party will submit to the Company for review and approval any proposed academic, scientific and medical publication or public presentation related to any Licensed Agent or Product or any activities conducted under the Transaction

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Documents, in each case, to the extent it includes Information of the Company or a Local Operating Entity. In each such instance, such review and approval will be conducted for the purposes of preserving the value of the CRISPR Contributed Technology, the Bayer Licensed Technology and the Company Program Technology, the rights granted under the Transaction Documents and determining whether any portion of the proposed publication or presentation containing the Company's Information should be modified or deleted. Written copies of such proposed publication or presentation required to be submitted hereunder will be submitted to the Company no later than […***…] before submission for publication or presentation (or […***…] in advance in the case of an abstract). The Company will provide its comments with respect to such publications and presentations within […***…] of its receipt of such written copy (or […***…] in the case of an abstract). The review period may be extended for an additional […***…] if the Company reasonably requests such extension including for the preparation and filing of patent applications. Notwithstanding anything to the contrary, the Company may require, in its reasonable discretion, that the requesting Party redact the Company's Information from any such proposed publication or presentation. The Parties will each comply with standard academic practice regarding authorship of scientific publications and recognition of contribution of other parties in any publication. Notwithstanding the foregoing, a Party's obligation to submit any publication to the Company for review and approval under this Section 17.4 will not apply to any publication made by a Party with respect to Licensed Products for which such Party has completed an Opt-In Transaction that does not contain Information or disclose any non-public information of the Company, a Local Operating Entity or the other Party (other than, for the avoidance of doubt, Information relating to the Licensed Products for which such Opt-In Transaction relates); provided, that where reasonably possible, such Party will provide the Company with an advance copy of such publication if such publication is reasonably likely to have a material adverse effect on the value of CRISPR Contributed Technology, Bayer Licensed Technology or the Company Program Technology. For clarity, neither Bayer nor CRISPR are obligated hereunder to submit proposed publications to the other Parties for all proposed publications relating to work conducted outside of the scope of this Agreement and the other Transaction Documents.

17.5 *Attorney-Client Privilege*

Neither Party is waiving, nor will be deemed to have waived or diminished, any of its attorney work product protections, attorney-client privileges or similar protections and privileges as a result of disclosing information pursuant to this Agreement, or any of its Information (including Information related to pending or threatened litigation) to the receiving Party, regardless of whether the disclosing Party has asserted, or is or may be entitled to assert, such privileges and protections. The Parties: (a) share a common legal and commercial interest in such disclosure that is subject to such privileges and protections; (b) are or may become joint defendants in proceedings to which the information covered by such protections and privileges relates; (c) intend that such privileges and protections remain intact should either Party become subject to any actual or threatened proceeding to which the disclosing Party's Information covered by such protections and privileges relates; and (d) intend that after the Effective Date both the receiving Party and the disclosing Party will have the right to assert such protections and privileges.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

17.6 *Prior Agreement*

This Agreement supersedes the Confidentiality Agreement entered into between Bayer AG and CRISPR dated […***…]. All confidential information exchanged between the Parties under such agreement will be subject to the terms of this Agreement.

ARTICLE 18 – RESERVED

ARTICLE 19 – BREACH

19.1 *Breach*

(a) If a Party alleges that the other Party (the "Breaching Party") has failed to perform any of its material covenants, obligations or agreements provided for in this Agreement, including, without limitation, its financial obligations or its obligations concerning the Transfer of Interests, it shall provide written notice of such alleged failure to the Breaching Party. Subject to the proviso set forth below, the Breaching Party shall have […***…] following such written notice (a "Cure Period") to remedy such failure if such Breach is curable and if the non-Breaching Party will not be materially prejudiced thereby, and if it fails to remedy such failure within such Cure Period, the Breaching Party shall be in breach of this Agreement ("Breach"); provided that (i) no notice shall be required and no cure period to remedy a Breach shall apply to failure to make the first installment of the Initial Contribution by Bayer or the Initial Contribution by CRISPR or the failure of CRISPR to execute and deliver the CRISPR IP Contribution Agreement. However, there shall be a notice requirement and a […***…] to remedy failure of Bayer to make the second installment of the Initial Contribution and the Additional Contribution when due.

(b) Upon Breach by one Party, the non-Breaching Party shall have the right to seek all remedies available hereunder (including the termination rights set forth in Section 16.1 if such Breach would trigger any such right), in law or in equity; provided, however, that nothing contained in this Section shall limit the non-Breaching Party's ability to enjoin any Breach of the provisions of this Agreement regarding Transfer of Interests and no […***…] remedy period shall apply in such instance.

(c) In addition to any other remedies set forth in this Agreement, the remedies for any Breach shall include damages and injunctive relief, including specific performance. Unless provided for herein, the rights and remedies provided in this Agreement are cumulative and are not exclusive of any rights or remedies that either Party may otherwise have at law or in equity.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 20 - DISPUTE RESOLUTION

20.1 *Referral to Heads of Businesses*

Unless otherwise specified in this Agreement, the Parties hereby agree that to the extent reasonably practicable and would not materially prejudice a Party, controversies or claims arising out of or relating to this Agreement or the interpretation, performance, breach, termination or validity thereof shall first be referred to the head of Bayer AG's Head of R&D and CRISPR's Chief Executive Officer for resolution. If these individuals are unable to agree upon a resolution within […***…] after referral of the matter to them (a "Resolution Period"), then either Party may pursue any available remedy hereunder, at law or in equity.

20.2 *Attorneys' Fees*

If any action at law or in equity (including, arbitration) is necessary to enforce or interpret the terms of this Agreement or any of the other Transaction Documents, including claims for fraud and/or fraudulent inducement, the prevailing Party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such Party may be entitled.

20.3 *Arbitration*

(a) Any dispute as to the occurrence of any event in Section 16.1(b), (d), (e), (f) or (h) (if the Breaching Party is unable to cure the breach in accordance with the procedures set forth in Section 19.1(a) and the Parties are unable to resolve the dispute following escalation pursuant to the dispute resolution procedures set forth in Section 20.1, as contemplated by and in accordance with the last sentence of Section 16.1) and a Party is seeking to terminate this Agreement pursuant to such Section, or any other claim or dispute that the Parties agree in writing to arbitrate, shall be settled by arbitration administered by the American Arbitration Association in accordance with the then current Commercial Rules of the American Arbitration Association including the Procedures for Large, Complex Commercial Disputes ("AAA Rules"), except that any such arbitration must be conducted in accordance with the remainder of this Section 20.3. For the avoidance of doubt, if there is a dispute as to the occurrence of any of the events in Section 16.1(b), (d), (e), (f) or (h) and a Party is seeking remedies other than to terminate this Agreement, then such dispute shall not be required to be settled by arbitration as contemplated by this Section 20.3.

(b) Number and Selection of Arbitrators. The number of arbitrators shall be […***…], who shall be selected as follows: each of Bayer, on the one hand, and CRISPR on the other hand, shall choose one (1) arbitrator within […***…] of either initiating or receiving notice of an arbitration (as the case may be), and those Party-appointed arbitrators shall unanimously select one (1) chairman arbitrator within […***…] of the appointment of the last Party-appointed arbitrator, who shall be a lawyer admitted to practice in New York for at least

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

fifteen (15) years, and who is experienced with disputes in joint venture transactions ("Qualifications"). If the Party-appointed arbitrators are unable to agree upon the selection of the third arbitrator within […***…] of the appointment of the last Party appointed arbitrator, such chairman arbitrator shall be selected by the AAA within […***…] and shall have Qualifications.

(c) Place and Language of Arbitration. The place of arbitration shall be New York, New York, at a suitable venue to be agreed by the Parties and arbitrators within […***…] of the appointment of the chairman arbitrator. The proceedings shall be conducted in the English language.

(d) Binding Decision. The decision and award of the arbitral tribunal shall be made by majority decision and shall be final, nonappealable and binding on the Parties hereto and their successors and assigns. The arbitral award shall be accompanied by a reasoned opinion.

(e) Allocation of Costs. The decision and award of the arbitral tribunal shall include a decision regarding the allocation of costs relating to any such arbitration. For purposes of this subsection, "costs" shall include reasonable attorneys' fees and reasonable experts' fees actually incurred with respect to the arbitration proceeding.

(f) Period for Arbitration.

(i) The arbitration shall be completed no later than […***…] after the selection of the chairman arbitrator, unless the chairman arbitrator determines, at the request of any Party or on his or her own initiative, that such time period should be extended, in which case such time period may not be extended beyond an additional […***…].

(ii) Notwithstanding any provision of the AAA Rules: (i) each of CRISPR and Bayer shall be permitted to serve up to […***…], and to take […***…] of the other Party, in addition to exchange of documents, exhibits and information as provided for in the AAA Rules, on dates and locations to be mutually agreed upon (or, failing such agreement, as the chairman arbitrator shall select after hearing from the Parties); (ii) any documents not in English that are produced by a Party shall be accompanied by a translation into English, which translation shall not be binding upon the other Party or the arbitrators; (iii) each of CRISPR and Bayer covenant and agree that it shall produce documents, information, and deposition and hearing witnesses, as required by this Section and as otherwise required by the AAA Rules; and (iv) subpoenas to non-parties, for production of documents and/or for testimony, shall be issued at the request of a Party, up to […***…] per Party. The Parties will make their respective employees, and will use commercially reasonable efforts to make their former employees, available for depositions and hearing testimony as requested by the other Parties.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(g) Enforcement of Judgment. Judgment on the arbitral award may be entered in any court having jurisdiction thereof.

(h) Confidentiality. Except as required by applicable Law or as required for recognition and enforcement of the arbitral decision and award, the arbitrator may not disclose the existence, content or results of any arbitration hereunder without the prior written consent of the Parties, and the Parties agree that any such information shall be considered Information hereunder and subject to the restrictions set forth in Article 17. Any documents submitted to the arbitrators shall be kept confidential and shall not be disclosed, except that any such documents may be disclosed as permitted by Article 17 or in connection with any action to collect the award, or if any such documents are discoverable or admissible in any action in court contemplated by this Agreement.

(i) Enforcement; Interim Measures; Equitable Relief. Each Party may apply to any court having jurisdiction (a) to enforce the arbitration provisions of this Agreement, (b) to seek provisional injunctive relief so as to maintain the status quo (including, but not limited to, maintaining the confidentiality of any arbitration proceedings and non-public information) until the final arbitration award is rendered and is finally judicially confirmed if challenged judicially, or the dispute is otherwise resolved, or (c) to seek equitable relief.

20.4 *Jurisdiction*

Each Party to this Agreement, by its execution hereof, unless otherwise prohibited by applicable Law (a) hereby irrevocably submits to the exclusive jurisdiction of the state courts of the State of New York in the Borough of Manhattan and to the United States District Court for the Southern District of New York for the purpose of any action between the Parties arising in whole or in part under Section 20.3 or for any dispute not subject to Section 20.3, (b) hereby waives and agrees not to assert, by way of motion, as a defense or otherwise, in any such action, any claim that it is not subject personally to the jurisdiction of the above-named courts, that any such action brought in one of the above-named courts should be dismissed on grounds of forum non conveniens, should be transferred or removed to any court other than one of the above-named courts, or should be stayed by reason of the pendency of some other proceeding in any court other than one of the above-named courts, or that this Agreement or the subject matter hereof may not be enforced in or by such court and (c) to the extent that an action can be commenced in a court and not an arbitration, agrees not to commence any such action in any court other than before one of the above-named courts. Notwithstanding the previous sentence, a Party may commence any action in a court other than the above-named courts for the purpose of enforcing an order or judgment issued by one of the above-named courts.

20.5 *Venue*

Neither Party will assert that venue should properly lie in any other location within the selected jurisdiction.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

20.6 *Specific Performance*

Each of the Parties acknowledges and agrees that the other Party would be damaged irreparably in the event any of the provisions of this Agreement are not performed in accordance with their specific terms or otherwise are breached or violated. Accordingly, each of the Parties agrees that, without posting a bond or other undertaking, the other Party may seek (and obtain) an injunction or injunctions to prevent breaches or violations of the provisions of this Agreement and to enforce specifically this Agreement and the terms and provisions hereof in any Action instituted in any court specified herein. An Action for specific performance as provided herein shall not preclude a Party from pursuing any other remedy to which such Party may be entitled, at law or in equity, in accordance with the terms of this Agreement. Each Party further agrees that, in the event of any action for specific performance in respect of such breach or violation, it will not assert that the defense that a remedy at law would be adequate provided, however, each Party also agrees that any Party can assert any other defense it may have other than the defense of adequate remedy at law.

ARTICLE 21 - ASSIGNMENT

21.1 *Assignment*

Except as permitted under this Agreement (including a Permitted COC Transfer complying with Article 11), (a) any of the rights, interests and obligations created herein shall not be transferred or assigned to any Third Party and such rights and interests shall not inure to the benefit of any other Person, including any trustee in bankruptcy, receiver or other successor of either of the Parties, whether by operation of Law, sub-license, transfer of the assets, merger, liquidation or otherwise, without the prior written consent of the other Party, and (b) any purported or actual transfer or assignment of any such rights, interests or obligations without the prior written consent of the other Party is and shall be null and void ab initio; provided, however, that either of the Parties may, without consent of the other Party, assign its respective rights and obligations under this Agreement to a successor company of such Party as the result of an internal corporate reorganization to a wholly-owned Affiliate of such Party; provided that the assigning Party shall remain primarily liable hereunder. In addition to the requirements of the prior sentence, if this Agreement is assigned to a Third Party by a Party, as a condition to such assignment, all other Transaction Documents to which such Party is a party shall concurrently be assigned to such Third Party and all Interests of such Party and its Affiliates are to be transferred to such Third Party.

ARTICLE 22 - NOTICES AND MISCELLANEOUS

22.1 *Form of Valid Notice*

(a) All notices or other communications provided for in this Agreement or that may otherwise be required must be in writing, clearly legible and shall be sent:

(i) by an internationally recognized courier service with acknowledgment of receipt, properly addressed, and postage pre-paid;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(ii) by e-mail; or

(iii) by personal delivery.

(b) Any notice sent by one of the means described in Section 22.1(a) will be deemed received:

(i) if sent by an internationally recognized courier service, three (3) Business Days after deposit with such courier service,

(ii) if sent by e-mail, when there is effective acknowledgment of receipt, or

(iii) if delivered personally, when delivered.

22.2 *Persons and Addresses*

Except as may otherwise be provided, all notices or other communications provided for in this Agreement or that a Party may otherwise be required to give to the other Party shall be sent as provided in Section 22.1 to the following persons at the addresses stated herein or at such other address as either Party may specify by notice to the other Party given in accordance with this Article 22:

To CRISPR:
CRISPR Therapeutics AG
Aeschenvorstadt 36
4051 Basel
Switzerland
Attention: Chief Executive Officer and Chief Legal Officer

and

CRISPR Therapeutics Ltd.
85 Tottenham Court Road
London W1T 4TQ
United Kingdom
Attention: Chief Legal Officer

With a copy to:
Goodwin Procter LLP
53 State Street
Boston, MA 02109
USA
Attention: Mitchell S. Bloom and Robert E. Puopolo

To Bayer:
Bayer Aktiengesellschaft
Kaiser-Wilhelm-Allee
51368 Leverkusen
Germany
Attention: Dr. Axel Bouchon and Dr. Jan Heinemann

With a copy to:
Norton Rose Fulbright US LLP
801 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2623
USA
Attention: Marilyn Mooney

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

22.3 *Miscellaneous*

(a) No amendment, modification or addition to any provision of this Agreement shall be valid unless the same shall be in writing and approved by the signature of each Party.

(b) The terms and conditions of this Agreement shall be interpreted according to the common sense meaning intended by the Parties and in accordance with the principles of good faith and fair dealing.

(c) The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement. Any reference to any federal, state, local or foreign statute or law shall be deemed also to refer to all rules and regulations promulgated thereunder, unless the context requires otherwise.

(d) Every day commences at 12:00 a.m. and ends at 11:59 p.m. (midnight) New York time. Any reference in this Agreement to a number of days “in” which an action or notice is to be taken or given, shall be interpreted in such way that the term commences the day after the date taken as reference and that the action or notice shall be validly taken or given at the last day. Any reference in this Agreement to a “day” or a number of “days” without explicit qualification of “business” shall be interpreted as a reference to a calendar day or number of calendar days. If any action or notice is to be taken or given on or by a particular calendar day, and such calendar day is not a Business Day, then such action or notice shall be deferred until, or may be taken or given on, the next Business Day.

(e) This Agreement shall constitute the entire agreement and understanding between the Parties and shall supersede and nullify any and all previous agreements, negotiations, commitments, undertakings and declarations heretofore made between the Parties in respect of the subject matter of this Agreement unless expressly provided for herein or in any schedule attached hereto and any other agreement entered in connection herewith.

(f) Words importing gender include all genders.

(g) The division of this Agreement into articles, sections and clauses, the inclusion of a table of contents and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(h) Each provision contained in this Agreement is distinct and severable. A declaration of invalidity, illegality or unenforceability of any provision or a part thereof by an arbitrator, a court or a tribunal of competent jurisdiction shall not affect the validity or enforceability of any other provision of this Agreement. To the extent permitted by law, if any provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (i) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (ii) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

(i) Any mistaken reference to Articles, clauses, Sections, Schedules or paragraphs of this Agreement shall be amended according to common sense and good faith rules. When a reference is made in this Agreement to an Article, clause, Section, Schedule or paragraph, such reference will be to an Article, clause, Section, Schedule or paragraph unless otherwise indicated.

(j) No waiver by any Party of any default, misrepresentation or breach of warranty or covenant hereunder, whether intentional or not, shall be deemed to extend to any prior or subsequent default, misrepresentation or breach of warranty or covenant hereunder or affect in any way any rights arising by virtue of any prior or subsequent such occurrence. No single or partial exercise of any right, power or privilege shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege unless explicitly provided for in this Agreement.

(k) Subject to the terms of and restrictions in this Agreement, the reference to any Party shall include its successors or permitted transferees that have legally acquired its rights, obligations and/or duties. This Agreement shall be binding upon and inure solely to the benefit of the Parties and their respective successors and permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever, unless otherwise specified therein.

(l) EACH OF THE PARTIES HEREBY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY ACTION OR LIABILITY DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT. EACH OF THE PARTIES HEREBY (A) CERTIFIES THAT NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF ANY SUCH ACTION OR LIABILITY, SEEK TO ENFORCE THE FOREGOING WAIVER; AND (B) ACKNOWLEDGES THAT IT HAS BEEN INDUCED TO ENTER INTO

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 22.3(l).

(m) This Agreement may be executed and delivered (including by means of electronic transmission, such as by electronic mail in ".pdf" form) in two or more counterparts, and by the different Parties in separate counterparts, each of which when executed shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement.

(n) Whenever the words "include," "includes" or "including" are used in this Agreement, they will be deemed to be followed by the words "without limitation." The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement will refer to this Agreement as a whole and not to any particular provision of this Agreement. All terms used herein with initial capital letters have the meanings ascribed to them herein and all terms defined in this Agreement will have such defined meanings when used in any certificate or other document made or delivered pursuant hereto unless otherwise defined therein. The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms. Any agreement, instrument or statute defined or referred to herein, or in any agreement or instrument that is referred to herein, means such agreement, instrument or statute as from time to time amended, modified or supplemented, including (in the case of agreements or instruments) by waiver or consent and (in the case of statutes) by succession of comparable successor statutes and references to all attachments thereto and instruments incorporated therein. The use of "or" is not intended to be exclusive unless expressly indicated otherwise. References to sums of money are expressed in lawful currency of the United States (U.S. dollars), unless the Parties otherwise agree in writing to use a different currency.

22.4 *Tax Matters*

The Parties agree that "Appendix – Tax Matters" attached hereto (the "Tax Appendix") shall provide for the treatment of certain tax matters relating to the Company and the Parties.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized officers as of the day and year first above written.

CRISPR THERAPEUTICS AG

By: /s/ Rodger Novak
Name: Rodger Novak
Title: Chief Executive Officer

BAYER HEALTHCARE LLC

By: /s/ Alan Stevenson
Name: Alan Stevenson
Title: Assistant Secretary

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 1.1

Definitions

(a) The following terms shall have the following meanings:

1. "Action" means any claim, action, cause of action, chose in action or suit (whether in contract or tort or otherwise), litigation (whether at law or in equity, whether civil or criminal), controversy, assessment, arbitration, examination, audit, investigation, hearing, charge, complaint, demand, notice or proceeding to, from, by or before any Governmental Authority or arbitrator(s).

2. "Affiliate" or "Affiliates" means, with respect to any entity, any Person that directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such entity; and for the purposes of this definition, "control" (and the terms "controlled by" and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such entity, directly or indirectly, whether through the ownership of voting securities or by contract or otherwise. Without limiting the generality of the foregoing, a Person shall be deemed to control another Person if any of the following conditions is met: (a) in the case of corporate entities, direct or indirect ownership of at least fifty percent (50%) of the stock or shares having the right to vote for the election of directors, and (b) in the case of non-corporate entities, direct or indirect ownership of at least fifty percent (50%) of the equity interest with the power to direct the management and policies of such non-corporate entities. The Parties acknowledge that in the case of certain entities organized under the laws of certain countries outside of the United States, the maximum percentage ownership permitted by law for a foreign investor may be less than fifty percent (50%), and that in such case such lower percentage shall be substituted in the preceding sentence, *provided* that such foreign investor has the power to direct the management and policies of such entity. For the purposes of this Agreement, (i) no Party or any of its Affiliates shall be considered an Affiliate of any other Party or any of its Affiliates or of the Company or any of its Affiliates, and neither the Company nor any of its Affiliates shall be considered an Affiliate of any Party or any of its Affiliates, simply by virtue of this Agreement or the relationships created hereby or by the Company Organization Documents or any Local Operating Agreement, and (ii) no Person shall be considered an Affiliate of a Party solely as a result of their right to designate a member of such Party's board of directors.

3. "Agreement" and "this Agreement" means this Joint Venture Agreement, as may be amended or supplemented from time to time in accordance with Section 1 of Schedule 2.1, including all Schedules attached to this Agreement. The expressions "herein", "hereof", "hereto", "hereunder" and "hereby", as well as similar expressions, refer to this Agreement as a whole and not to any particular article, Section, schedule or other parts.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4. “Animal Models” means laboratory animals useful for medical research because they exhibit characteristics that can be used for evaluating potential treatments of a human disease or disorder.

5. “Approval Application” means, with respect to a Licensed Product in a particular jurisdiction, an application for approval, license, registration or authorization necessary for the Commercialization of such Licensed Product in such jurisdiction, including, with respect to the United States, an application for approval for such Licensed Product by the FDA, and with respect to the European Union, an application for approval for such Licensed Product by the European Commission.

6. “Assay” means a procedure for qualitatively assessing or quantitatively measuring the presence, amount, functional activity, safety profile or other property of an active ingredient, biologic or other analyte.

7. “Background Patents” means the Bayer Background Patents and the CRISPR Background Patents.

8. “Business” means engaging in the activities reasonably necessary or appropriate to achieve the Objective.

9. “Business Day” means any day other than a Saturday, a Sunday or a day on which banks in New York City, United States of America or Frankfurt-Main, Germany or Leverkusen, Germany are authorized or obligated by applicable law or executive order to close.

10. “Bayer Background Know-How” means any and all Know-How Controlled by Bayer, as of the Effective Date or that come into the Control of Bayer during the Technology Term, that might be useful or necessary to Company to Develop, Manufacture or Commercialize CRISPR/Cas Technology, Licensed Agents or Products in the Fields.

11. “Bayer Background Patents” means any and all Patents that are Controlled by Bayer, as of the Effective Date or that come into the Control of Bayer during the Technology Term, and that are not part of the Joint Patents, and that claim or disclose Bayer Background Know-How.

12. “Bayer Background Technology” means all Bayer Background Know-How and Bayer Background Patents.

13. “Bayer Limited Background Know-How” means all Bayer Background Know-How that pertains to Assays, Animal Models, Delivery Technology or Protein Optimization Technology.

14. “Bayer Limited Background Patents” means any Patents Controlled by Bayer claiming or disclosing any Bayer Limited Background Know-How.

15. “Bayer Field” means any Field under the heading “Bayer Field” on Schedule 3.1.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

16. “Change of Control” means, with respect to Party, any of the following events: (a) any Person is or becomes the “beneficial owner” (as such term is used in Section 13(d) of the Securities Exchange Act of 1934, as amended, and Rule 13d-3 thereunder, except that a Person shall be deemed to have “beneficial ownership” of all shares that any such Person has the right to acquire, whether such right may be exercised immediately or only after the passage of time), directly or indirectly, of a majority of the total voting power represented by all classes of capital stock then outstanding of Party normally entitled to vote in elections of directors; (b) Party consolidates with or merges into another corporation or entity, or any corporation or entity consolidates with or merges into Party, other than (i) a merger or consolidation that would result in the voting securities of Party outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) a majority of the combined voting power of the voting securities of Party or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (ii) a merger or consolidation effected to implement a recapitalization of Party (or similar transaction) in which no Person becomes the beneficial owner, directly or indirectly, of voting securities of Party representing a majority of the combined voting power of Party’s then outstanding securities; or (c) Party conveys, transfers or leases all or substantially all of its assets to any Person other than a wholly-owned Affiliate of such Party; provided, that a financing transaction, the primary purpose of which is to raise capital for such Party, shall in no event be considered a Change of Control.

17. “Claims” means any claim, demand, suit, action, investigation, proceeding, governmental action or cause of action of any kind or character (in each case, whether civil, criminal, investigative or administrative), known or unknown, under any theory, including those based on theories of contract, tort, statutory liability, strict liability, employer liability, premises liability, products liability or breach of warranty.

18. “Clinical Trial” means a study in humans that is designed to generate data in support of an Approval Application.

19. “Commercialize” or “Commercialization” means to market, promote, distribute, offer for sale, sell, have sold, import, export or otherwise commercialize a product, to conduct activities, other than, Development and Manufacturing, in preparation for the foregoing activities, including obtaining Price Approval, and to conduct Clinical Trials and post-Marketing Approval studies. When used as a noun, “Commercialization” means any and all activities involved in Commercializing.

20. “Commercially Reasonable Efforts” means with respect to the efforts to be expended by any Person, with respect to any objective, reasonable, diligent and good faith efforts to accomplish such objective. With respect to any Objective relating to the Research, Development or Commercialization of a Licensed Agent or Licensed Product, “Commercially Reasonable Efforts” means that level, caliber and quality of efforts and resources reasonably and normally used (as to CRISPR) by biopharmaceutical companies with adequate financing and resources, (as to Company), by biopharmaceutical companies of similar size to Company with adequate financing and resources and (as to

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Bayer) as Bayer would normally use to accomplish a similar objective under similar circumstances, as to a potential or actual product that is important to such Person's overall strategy or Objectives, taking into account, without limitation, with respect to each Licensed Agent or Licensed Product, (a) issues of safety, efficacy, product profile, (b) likelihood of receiving Marketing Approval for the applicable Product, (c) potential to accelerate the development and regulatory timelines for the Licensed Product, (d) regulatory structure involved, (e) Regulatory Authority-approved labeling, (f) market potential of the Licensed Product, (g) potential benefit of the Licensed Product to patients with the relevant indication, (h) competitiveness in the marketplace, (i) proprietary position and (j) other relevant scientific, technical and business factors deemed relevant by the applicable Party. "Commercially Reasonable Efforts" shall be determined on a country-by-country basis and activities that are conducted in one country that have an effect on achieving the relevant Objective in another country shall be considered in determining whether Commercially Reasonable Efforts have been applied in such other countries.

21. "Companion Diagnostic" means any companion diagnostic tool and/or diagnostic assay, the manufacture, use, sale or importation of which is Covered by the Company Crispr/Cas Technology, Company Optimized Cas Technology, CRISPR Background Know-How and CRISPR Platform Technology Know-How, which is used to (i) […***…], (ii) […***…], and/or (iii) […***…].

22. "Company CRISPR/Cas Know-How" means any Know-How Controlled by the Company that constitutes an addition, amendment or enhancement to the Crispr/Cas Technology that is not Company Optimized Cas Know-How that is (i) […***…] or (ii) […***…].

23. "Company CRISPR/Cas Patents" means any Patents Controlled by Company claiming or disclosing any Company CRISPR/Cas Know-How.

24. "Company CRISPR/Cas Technology" means the Company CRISPR/Cas Know-How and the Company CRISPR/Cas Patents.

25. "Company Non-Product Know-How" means any and all Know-How Controlled by the Company during the Technology Term, including Delivery Technology and excluding Company CRISPR/Cas Know-How, Company Product Know-How and Optimized Cas Know-How, that, is (i) […***…] or (ii) […***…].

26. "Company Non-Product Patents" means any Patents Controlled by the Company claiming or disclosing any Company Non-Product Know-How.

27. "Company Non-Product Technology" means the Company Non-Product Know-How and the Company Non-Product Patents.

28. "Company Optimized Cas Know-How" means all Know-How related to enhancements, amendments or additions in and to any nuclease element of the CRISPR/Cas Technology (i) discovered, developed, invented or created by employees of Company or others acting for or on behalf of the Company, including, without limitation, Bayer or CRISPR in performance of services for the Company or (ii) acquired or licensed by Company from Third Parties, excluding such Know-How in-licensed through the Parties.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

29. “Company Optimized Cas Patents” means any Patents claiming or Covering Optimized Cas Know-How.

30. “Company Optimized Cas Technology” means the Company Optimized Cas Know-How and Company Optimized Cas Patents.

31. “Company Post-IND Product Technology” means, with respect to a Licensed Agent or Product for which an IND has been submitted, Company Product Technology relating to such Licensed Agent or Product that exists at the time of the termination of the Agreement.

32. “Company Pre-IND Product Technology” means, with respect to a Licensed Agent or Product for which an IND has not been submitted (each, a “Pre-IND Product”), Company Product Technology relating to such Licensed Agent or Product that exists at the time of the termination of the Agreement.

33. “Company Product Know-How” means any and all Know-How Controlled by the Company during the Technology Term that relates to the composition or use of a Licensed Agent or Product in the Fields, including […***…].

34. “Company Product Patents” means any Patents Controlled by the Company that claim or disclose any Company Product Know-How.

35. “Company Product Technology” means the Company Product Know-How and the Company Product Patents.

36. “Company Program Know-How” means (i) Company Product Know-How, (ii) Company Non-Product Know-How, (iii) Company CRISPR/Cas Know-How (iv) Company Optimized Cas Know-How and (v) the Company’s interest in any and all Joint Know-How.

37. “Company Program Patents” means (i) Company Product Patents, (ii) Company Non-Product Patents, (iii) Company CRISPR/Cas Patents (iv) Company Optimized Cas Patents and (v) the Company’s interest in any and all Joint Patents.

38. “Company Program Technology” means the Company Program Know-How and the Company Program Patents.

39. “Competing Product” any product comprising Crispr/Cas Technology or comprising modified human cells or tissues produced using Crispr/Cas Technology that Targets a Target that is reasonably believed to have a […***…] that is within the applicable Fields. For clarity, the […***…].

40. “Competing Technology” means Intellectual Property necessary for Development or Commercialization of products for Human Therapeutic Use comprising CRISPR/Cas Technology or comprising modified human cells or tissues produced using Crispr/Cas Technology. For clarity, the […***…].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

41. “Control” means with respect to any Know-How or Patent or other data, information or Materials, possession of the ability by a Party or its Affiliate(s) (whether by sole or joint ownership, license or otherwise, but in all cases not including when such rights are granted or obtained pursuant to the Transaction Documents) to grant, without violating the terms of any agreement with a Third Party, a license, access or other right in, to or under such Know-How or Patent or other data, information or Materials. Notwithstanding anything in the Transaction Documents to the contrary, a Party will be deemed to not Control any Patents or Know-How that are owned or controlled by a Third Party described in the definition of “Change of Control,” or such Third Party’s Affiliates (other than an Affiliate of such Party prior to the Change of Control), (a) prior to the closing of such Change of Control, except to the extent that any such Patents or Know-How were developed prior to such Change of Control through the use of such Party’s technology, or (b) after such Change of Control to the extent that such Patents or Know-How are developed or conceived by such Third Party or its Affiliates (other than such Party) after such Change of Control without using or incorporating such Party’s technology. A Party does not need to amend any existing in-license as of the Effective Date so that such Party “Controls” any IP under such given in-license.

42. “Controlling Party” means the Party having the right under any Transaction Document to conduct and control (i) the Prosecution and Maintenance, (ii) challenges against validity and unenforceability or patentability of Intellectual Property and/or (iii) any Claim or action for enforcement directed to an actual or alleged infringement or misappropriation of Intellectual Property, in all cases, as and for so long as such Party maintains such right.

43. “Cover,” “Covering” or “Covers” means, as to a product and Patent, that, in the absence of a license granted under, or ownership of, such Patent, the making, using, keeping, selling, offering for sale or importation of such product would infringe such Patent or, as to a pending claim included in such Patent, the making, using, selling, offering for sale or importation of such product would infringe such Patent if such pending claim were to issue in an issued patent without modification.

44. “Covered Target” means a Target as and for so long as such Target remains the subject of a license or similar grant of rights under the Existing Third Party Agreement. For the avoidance of doubt, Covered Targets shall not be deemed Third-Party Targets or Excluded Covered Targets.

45. “Crispr/Cas Technology” means clustered regularly interspaced short palindromic repeats (CRISPR)/CRISPR-associated (Cas) protein system that comprises (a) at least one guide RNA element that is complementary to a Target, wherein said guide RNA element can be a guide RNA or a polynucleotide(s) encoding such guide RNA, and (b) a nuclease element, wherein said nuclease element is a Cas nuclease protein.

46. “CRISPR Background Know-How” means any and all Know-How other than CRISPR Platform Technology Know-How Controlled by CRISPR, as of the Effective Date or that

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

comes into the Control of CRISPR during the Technology Term, that is useful to or necessary for the Company to Develop, Manufacture or Commercialize Licensed Agents or Products in the Fields.

47. "CRISPR Background Patents" means any and all Patents other than a Company Program Patent or CRISPR Platform Technology Patent […***…].

48. "CRISPR Background Technology" means all CRISPR Background Know-How and CRISPR Background Patents.

49. "CRISPR Contributed Technology" means all CRISPR Platform Technology Patents, CRISPR Platform Technology Know-How, CRISPR Background Know-How and CRISPR Background Patents.

50. "CRISPR Field" means any Field under the heading "CRISPR Field" on Schedule 3.1.

51. "CRISPR Platform Technology Know-How" means any […***…].

52. "CRISPR Platform Technology Patents" means any and all […***…].

53. "Delivery Technology" means methods, formulations, technologies and systems, including vectors, for transporting a Licensed Agent or Product into or within the human body or into human cells outside of the body.

54. "Develop" or "Development" means, with respect to a Licensed Agent, all clinical and non-clinical research and development activities conducted for such Licensed Agent, including toxicology, pharmacology test method development and stability testing, process development, formulation development, delivery system development, quality assurance and quality control development, statistical analysis, Clinical Trials (other than post-Marketing Approval Clinical Trials), regulatory affairs, pharmacovigilance, Clinical Trial regulatory activities and obtaining and maintaining Regulatory Approval. When used as a verb, "Develop" or "Developing" means to engage in Development.

55. "EMA" means the European Medicines Agency and any successor entity thereto.

56. "European Commission" means the European Commission or any successor entity that is responsible for granting Marketing Approvals authorizing the sale of pharmaceuticals in the European Union.

57. "European Union" or "EU" means each and every country or territory that is officially part of the European Union.

58. "Existing Third Party Agreement" means that certain Strategic Collaboration, Option and License Agreement entered into by and between CRISPR (and certain of its Affiliates) and Vertex Pharmaceuticals, Incorporated (and certain of its Affiliates) dated as of October 26, 2015.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

59. “Exploit” or “Exploitation” means to make, have made, import, export, use, sell, have sold and/or offer for sale or otherwise dispose of.

60. “FDA” means the United States Food and Drug Administration and any successor agency thereto.

61. “Fields” means the CRISPR Fields and the Bayer Fields, provided fields shall not include diagnosis, prevention or treatment of cystic fibrosis.

62. “Focus Areas” means with respect to […***…], each as set forth on Schedule 3.1.

63. “FTE” shall mean a full time equivalent employee (*i.e.*, one fully-committed or multiple partially-committed employees aggregating to one full-time employee) employed or contracted by a Party and assigned to perform specified work, with such commitment of time and effort to constitute one employee performing such work on a full-time basis, which for purposes hereof shall be eighteen hundred (1,800) hours per year.

64. “GAAP” means United States generally accepted accounting principles, consistently applied, as in effect from time to time.

65. “Good Cause” means (x) […***…], or (y) […***…].

66. “Governmental Authority” means any court, agency, authority, department, regulatory body or other instrumentality of any government or country or of any national, federal, state, provincial, regional, county, city or other political subdivision of any such government or any supranational organization of which any such country is a member.

67. “Human Therapeutic Use” means the use of the CRISPR/Cas Technology for use in the discovery, research and development of products for the treatment or prevention of any human disease, disorder or condition, including researching, developing, making, using or selling Licensed Agents or Products and Companion Diagnostics.

68. “IFRS” means International Accounting Standards/International Financial Reporting Standards of the International Accounting Standards Board as amended from time to time.

69. “[…***…]” means a Target that reduces […***…] in humans in combination with other Targets primarily directed toward a field or fields other than the Fields.

70. “IND” means with respect to each Licensed Product in a Field, an Investigational New Drug Application filed with the FDA with respect to such Licensed Product, as described in the FDA regulations, including all amendments and supplements to the application, and any equivalent filing with any Regulatory Authority outside the United States.

71. “In-License Agreement” means the agreements with Third Party licensors under which the CRISPR Contributed Technology or Bayer Licensed Technology is being licensed by CRISPR or Bayer, respectively.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

72. “Intellectual Property” means (i) patents (including utility, design, plant, utility model, reissues, re-examination, and patents of addition), patent applications (filed, unfiled or being prepared), records of invention, (ii) trademarks (registered or unregistered), trademark applications, trade names, copyrights (registered or unregistered), copyright applications, mask works, service marks (registered or unregistered), service mark applications, database rights (registered or unregistered), all together with the goodwill associated with such marks or names, (iii) trade secrets, technology, inventions, know-how, processes and confidential and proprietary information, including any being developed (including but not limited to designs, manufacturing data, design data, test data, operational data, and formulae), whether or not recorded in tangible form through drawings, software, reports, manuals or other tangible expressions, whether or not subject to statutory registration, anywhere, and all rights to any of the foregoing.

73. “Joint Know-How” means Know-How discovered, developed, invented or created jointly by (a) […***…] and (b) […***…].

74. “Joint Patents” means any Patents claiming or Covering any Joint Know-How.

75. “Joint Technology” means (i) Joint Know-How and (ii) Joint Patents.

76. “Know-How” means Intellectual Property, data, results, pre-clinical and clinical protocols and data from studies and Clinical Trials, chemical structures, chemical sequences, information, inventions, know-how, formulas, trade secrets, techniques, methods, processes, procedures and developments, whether or not patentable; *provided* that Know-How does not include Patents claiming any of the foregoing.

77. “Knowledge” means (i) with respect to CRISPR, the actual knowledge of […***…] after having made reasonable inquiries of CRISPR personnel and advisors that would reasonably be anticipated to have knowledge of facts relating to the relevant subject matter and (ii) with respect to Bayer, the actual knowledge of […***…] after having made reasonable inquiries of Bayer personnel and advisors that would reasonably be anticipated to have knowledge of facts relating to the relevant subject matter.

78. “Law” or “Laws” means all applicable laws, statutes, rules, regulations and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, agency or other body, domestic or foreign, including any applicable rules, regulations, guidelines, or other requirements of the Regulatory Authorities that may be in effect from time to time.

79. “Licensed Agent” means a product comprising (a) all components of a Crispr/Cas Technology, for Targeting a Target, where such Crispr/Cas Technology, or any portion thereof is discovered by or on behalf of the Company or a Local Operating Entity (solely or jointly with such entities), or is in the Company’s or a Local Operating Entity’s Control, prior to the Effective Date, or during the Technology Term or (b) modified human cells or tissue, or another cell- or tissue-based product, or any other therapeutic product comprising or produced using the Crispr/Cas Technology, in each case produced using the components referred to in clause (a).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

80. “Licensed Know-How” means any and all Know-How that Company Controls that are necessary or useful to Develop, Manufacture and Commercialize a Licensed Agent or Licensed Product in the Field.

81. “Licensed Patents” means all Patents that Company Controls that are necessary or useful to Develop, Manufacture and Commercialize a Licensed Agent or Licensed Product in the Field.

82. “Licensed Product” means any Product that (i) has been licensed by a Party following opt-in or (ii) licensed to a Third Party. All Products comprising the same Licensed Agent(s) (and no additional Licensed Agents) will be considered the same Licensed Product under this Agreement.

83. “Licensed Technology” means, the Licensed Know-How and the Licensed Patents.

84. “Local Operating Agreement” means, as applicable, any agreement governing the formation and operation of any Local Operating Entity formed pursuant to Section 3.3 of this Agreement.

85. “Local Operating Entity” means any local operating entity formed by the Company pursuant to Section 3.3 of this Agreement.

86. “Loss” means any loss, cost, liability or expense, settlement, damage of any kind, judgment, obligation, charge, fee, fine, penalty, interest, court cost and/or administrative and reasonable attorneys’ fees, expert fees, consulting fees, and disbursements (at all levels, including appellate), but excluding a Person’s indirect corporate and administrative overhead costs, lost profits, lost revenues, loss of use, diminutions in value and special, incidental, exemplary and punitive damages.

87. “Manufacture” or “Manufacturing” means activities directed to making, having made, producing, manufacturing, processing, filling, finishing, packaging, labeling, quality control testing and quality assurance release, shipping or storage of a product.

88. “Marketing Approval” means, with respect to a Licensed Product in a particular jurisdiction, all approvals, licenses, registrations or authorizations necessary for the Commercialization of such Licensed Product in such jurisdiction, including, with respect to the United States, approval of an Approval Application for such Licensed Product by the FDA and with respect to the European Union, approval of an Approval Application for such Licensed Product by the European Commission.

89. “Materials” means all biological materials or chemical compounds arising out of a Party’s activities under this Agreement or otherwise provided by a Party for use by the other Party to conduct activities pursuant to this Agreement, including Licensed Agents, Clinical Trial samples, cell lines, assays, viruses and vectors.

90. “Member” means either Bayer or CRISPR as an owner of an Interest, and any permitted assignees and transferees of an Interest.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

91. “Non-Human Therapeutic Uses” means uses (a) other than Human Therapeutic Uses, and (b) for the discovery and research and preclinical development of products for the diagnosis, treatment or prevention of any human disease, disorder or condition, but excluding research, developing, making, using or selling Licensed Agents or Products or Companion Diagnostics.

92. “Out-of-Pocket Costs” means, with respect to a Party, costs and expenses paid by such Party to Third Parties (or payable to Third Parties and accrued in accordance with GAAP or IFRS), other than Affiliates or employees of such Party.

93. “Party” or “Parties” means, when used in singular, any signatory to the applicable agreement, as the context may require, and when used in plural, all signatories to the applicable agreement, and any permitted successor or assign thereto.

94. “Patents” means the rights and interests in and to issued patents and pending patent applications and similar government-issued rights (e.g., utility models) protecting inventions in any country, jurisdiction or region (including inventor’s certificates and utility models), including all priority applications, international applications, provisionals, non-provisionals, substitutions, continuations, continuations-in-part, divisionals, renewals and all patents granted thereon, and all reissues, reexaminations, extensions, confirmations, revalidations, registrations and patents of addition thereof, including patent term extensions and supplementary protection certificates, international patent applications filed under the Patent Cooperation Treaty (PCT) and any foreign equivalents to any of the foregoing.

95. “Patent Costs” means the reasonable fees and expenses paid to outside legal counsel, and filing, maintenance, disbursement and other reasonable Out-of-Pocket Costs paid to Third Parties, in connection with the Prosecution and Maintenance of Patents.

96. “Person” means any individual, partnership, limited partnership, limited liability company, joint venture, syndicate, sole proprietorship, company or corporation with or without share capital, unincorporated association, trust, trustee, executor, administrator or other legal personal representative or governmental body.

97. “Preclinical Proof of Concept” means the reasonable demonstration of the ability of the Crispr/Cas Technology for Targeting a Target using Assays based on […***…] as applicable and appropriate to such Target which is to be defined in the respective research plan.

98. “Price Approval” means, in any country where a Governmental Authority authorizes reimbursement for, or approves or determines pricing for, pharmaceutical products, receipt (or, if required to make such authorization, approval or determination effective, publication) of such reimbursement authorization or pricing approval or determination.

99. “Primary Indication” means, with respect to a Target, the condition or disease that is most closely associated with the diagnosis, prevention or treatment through Targeting such Target as determined by the then-current weight of reliable scientific authority, for example, as reflected in peer-reviewed publications.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

100. “Product” means any pharmaceutical product, medical therapy, preparation, substance, or formulation comprising or employing, in whole or in part, a Licensed Agent.

101. “Protein Optimization Technology” means the modification of a Cas protein by amino acid substitution, deletion insertion or other molecular biological or biochemical methods to improve its characteristics, including but not limited to activity, stability, deliverability, immunogenicity and specificity.

102. “Prosecution and Maintenance” or “Prosecute and Maintain” means, with regard to a Patent, the preparing, filing, prosecuting and maintenance of such Patent, as well as handling re-examinations and reissues with respect to such Patent, together with the conduct of interferences, the defense of oppositions and other similar proceedings with respect to the particular Patent. For clarification, Prosecution and Maintenance or Prosecute and Maintain will not include any other enforcement actions taken with respect to a Patent.

103. “Regulatory Approval” means the technical, medical and scientific licenses, registrations, authorizations and approvals (including approvals of Approval Applications, supplements and amendments, pre- and post- approvals, and labeling approvals) of any Regulatory Authority, necessary for the Research, Development, clinical testing, commercial manufacture, distribution, marketing, promotion, offer for sale, use, import, export or sale of a pharmaceutical product in a regulatory jurisdiction, including Marketing Approval.

104. “Regulatory Authority” means, with respect to a country in the Territory, any national (e.g., the FDA), supra-national (*e.g.*, the European Commission, the Council of the European Union, or the EMA), regional, state or local regulatory agency, department, bureau, commission, council or other Governmental Authority involved in the granting of Regulatory Approvals or Price Approvals for pharmaceutical products in such country or countries.

105. “Registration Filing” means any submission to a Regulatory Authority of any appropriate regulatory application for Regulatory Approval.

106. “Related Party Transaction” means any transaction, agreement, license, lease or commitment between the Company or any Local Operating Entity, on the one hand, and any Member or any of its Affiliates, on the other hand.

107. “Sublicense” means, directly or indirectly, to sublicense, grant any other right with respect to, or agree not to assert, any licensed right under any Patent, Know-How or other Intellectual Property right. When used as a noun, “Sublicense” means any agreement to Sublicense.

108. “Sublicensee” means an Affiliate or Third Party, other than a distributor, to whom a licensee (or an Affiliate) sublicenses any of the rights granted to the licensee during the term of the applicable agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

109. “Target” means a […***…]. The Targets as of the Effective Date are listed on Schedule A with an indication of […***…]. Additional Targets may be included after the Effective Date solely by updating Schedule A in accordance with Section 7.13.

110. “Targeting” means editing, engineering or modulating (including by means of gene knock-out, gene tagging, gene disruption, gene mutation, gene insertion, gene deletion, gene activation, gene silencing or gene knock-in) a Target or an Excluded Target or a Covered Target by means of hybridizing a guide RNA of the CRISPR/Cas Technology to such Target or Excluded Target or Covered Target.

111. “Technology Term” means from the Effective Date until the Company is no longer Developing Licensed Agents or Products.

112. “Territory” means all the countries of the world.

113. “Third Party” means any Person other than Bayer or CRISPR or any Affiliate of either Party.

114. “Third Party Obligations” means any financial or non-financial encumbrances, obligations, restrictions, or limitations imposed by an In-License Agreement, including field or territory restrictions, covenants, diligence obligations or limitations pertaining to enforcement of intellectual property rights.

115. “Third-Party Target” means a Target that is the subject of a license or similar grant of rights pursuant to an agreement between CRISPR or one of its Affiliates and a Third-Party; provided, that such Target was licensed in accordance with the procedures set forth in Section 3.7. For the avoidance of doubt, Third-Party Targets include all Excluded Targets.

116. “Transfer” means, with respect to any Interests, directly or indirectly, selling, assigning, transferring, conveying, exchanging, donating, devising, bequeathing, mortgaging, pledging, hypothecating or otherwise disposing of such Interests excluding in connection with the sale of all or substantially all the assets of (i) Bayer and its Affiliates and (ii) CRISPR and its Affiliates; provided, that in no event shall the selling, assigning, transferring, conveying, exchanging, donating, devising, bequeathing, mortgaging, pledging, hypothecating or otherwise disposing of any equity interest in a Party (whether directly or indirectly) shall be considered a Transfer of any Interest.

117. “United States” or “U.S.” means the fifty states of the United States of America and all of its territories and possessions and the District of Columbia.

118. “Valid Claim” means a claim (a) of any issued, unexpired United States or foreign Patent, which will not, in the country of issuance, have been donated to the public, disclaimed, nor held invalid or unenforceable by a court of competent jurisdiction in an unappealed or unappealable decision, or (b) of any United States or foreign patent application, which will not, in the country in question, have been cancelled, withdrawn or abandoned. Notwithstanding the foregoing, on a country-by-country basis, a patent application pending for more than seven years, or ten years for filings in Japan, will not be considered to have any Valid Claim for purposes of this Agreement unless and until a patent meeting the criteria set forth in clause (a) above with respect to such application issues.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) The following terms shall have the meanings defined in the Section or Schedule indicated. Unless otherwise noted, the indicated Section or Schedule refers to the appropriate Section or Schedule of the Joint Venture Agreement.

Term	Where defined
AAA Rules	Section 20.3(a)
Abandonment	Section 2.2.3 of the IPMA
Acquisition Transaction	Section 9.1(c)(ii)(2)
Acquisition Transaction Additional Funding Amount	Section 9.1(c)(ii)(2)
Acquisition Transaction Additional Payment	Section 9.1(c)(ii)(2)
Acquisition Transaction Funding Amount	Section 9.1(c)(ii)(2)
Acquisition Transaction Funding Date	Section 9.1(c)(ii)(2)
Additional Budgetary Funding Amount	Section 9.1(c)(ii)(1)
Additional Contribution	Section 9.1(c)(i)
Additional Information	Option Agreement
Affected Party	Section 17.1
Antitrust Condition	Option Agreement
Baseball Arbitration	Option Agreement
Bayer	Preamble
Bayer Additional Contribution Cap	Section 9.1(c)(i)
Bayer Commitment Amount	Section 9.1(a)
Bayer IP Contribution Agreement	Section 3.2(b)(v)
Bayer Non-Compete Period	Section 3.6(b)(i)
Bayer Services Agreement	Section 3.2(b)(iii)
Breach	Section 19.1(a)
Breaching Party	Section 19.1(a)
Budgetary Funding Notice	Section 9.1(c)(ii)(1)
Buffer Period	Option Agreement
Cash Requirements	Section 9.1(c)(ii)(1)
CEO	Section 8.2
CEO Acquisition Notice	Section 9.1(c)(ii)(2)
Closing Conditions	Section 3.2(b)
Company	Recitals
Company Organization Documents	Section 3.2(b)(i)
Compelled Party	Section 17.1
Conflicted CEO	Section 7.2(b)
Contribution Agreement	The first paragraph of the IPCA
Covered Target List	Section 7.13(c)
Third Party Firm	Section 7.13(c)
CRISPR AG	The first paragraph of CRISPR IPCA

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Term	Where defined
CRISPR Inc.	The first paragraph of CRISPR IPCA
CRISPR UK	The first paragraph of CRISPR IPCA
Cross-Field Expansion	Option Agreement
Cross-License Agreement	Section 3.2(b)(vii)
Cure Period	Section 19.1(a)
CRISPR	Preamble
CRISPR IP Contribution Agreement	Section 3.2(b)(x)
CRISPR Non-Compete Period	Section 3.6(b)(ii)
CRISPR Services Agreement	Section 3.2(b)(iv)
Deemed Cash Requirements	Section 9.1(c)(ii)(1)
Delayed TAF Amount	Section 3.2(b)(ii)
Dissolution	Section 16.2(b)
Effective Date	Section 3.2(b)
Evidence Related to Global Filings	Section 16.1(i)
Excluded Covered Targets	Section 3.6(i)
Excluded Target	Section 3.7
Exclusive Field Party	Option Agreement
Exclusive License	Section 2.1.1 of the Bayer and CRISPR IP Contribution Agreements
Executive Team	Section 8.1
Expected Cash	Section 9.1(c)(ii)(1)
First Installment	Section 3.2(b)(ii)
Form License Agreement	Section 3.2(b)(vi)
Funding Outside Date	Section 9.1(c)(iii)
Funding Shortfall Termination Period	Section 9.5(a)
HbF Target	Section 7.13(e)
Information	Section 17.1
Initial Budget	Section 8.11(a)
Initial Business Plan	Section 3.2(b)(xii)
Initial Contributions	Section 3.2(b)(ii)
Initial Investment Budget	Section 8.11(a)
Initial Period	Section 9.5(a)
Insolvency Event	Section 4.2.3 of the Cross License Agreement
Interests	Section 3.3
Intellectual Property Management Agreement	Section 3.2(b)(viii)
Investment Cap	Section 9.1(c)(ii)(2)
Joint Venture Agreement	The Recitals of the Bayer and CRISPR IP Contribution Agreements
JV Expansion	Option Agreement
Key Results Memo	Option Agreement
Management Board	Section 7.1
NC Affected Party	Section 3.6(e)

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Term	Where defined
Objective	Section 3.1
Offer Terms	Option Agreement
Opt-In Closing	Option Agreement
Opt-In Date	Option Agreement
Opt-In Effective Date	Option Agreement
Opt-In Fields	Option Agreement
Opt-In Package	Option Agreement
Opt-In Transaction	Option Agreement
Option Agreement	Section 3.2(b)(vi)
Outside Date	Section 3.2(b)
Permitted COC Transfer	Section 11.3
Preliminary Offer	Option Agreement
Primary Employer	Section 8.9(d)
Primary Indication Field	Option Agreement
Qualifications	Section 20.3(b)
Qualifying Offer	Option Agreement
Resolution Period	Section 20.1
Revised Offer	Option Agreement
Rolling Budget	Section 8.11(b)
Rolling Business Plan	Section 8.11(b)
Rolling Investment Budget	Section 8.11(b)
Seconded Employee	Section 8.9(c)
Signing Date	The first paragraph of each of the Cross License Agreement, the CRISPR IP Contribution Agreement, and the Bayer IP Contribution Agreement
Subsidiary Organization Documents	Section 3.2(b)(ix)
TAF Funding Event	Section 3.2(b)(ii)
Technology Access Fee	Section 3.2(b)(ii)
Technology Term	Section 1.4 of the Cross License Agreement
Term	Section 4.1
Third Party Firm	Section 7.13(c)
Third Party Target Transaction	Section 3.7
TRACR	The first paragraph of the CRISPR IP Contribution Agreements
Transaction Documents	Section 3.2(b)
Winning Offer	Option Agreement
Work Product	Section 8.9(d)

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.1

Fields/Allocation of Rights

[…***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(a)

Subscription Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(b)(ii)

Initial Contributions

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(b)(iii)

Bayer Services Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(b)(iv)

CRISPR Services Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(b)(v)

Form of Bayer IP Contribution Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(vi)

Form of Option Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(b)(vii)

Form of Cross-License Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(b)(viii)

Form of Intellectual Property Management Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.2(b)(x)

Form of CRISPR IP Contribution Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 5.2

CRISPR Disclosures

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 3.6(i)

Excluded Covered Targets

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 6.2

Matters Requiring Approval of Members

1. A Change of Control of the Company or a Local Operating Entity.

2. Except as otherwise provided in this Agreement, offer of securities in the Company (including any Interest) or a Local Operating Entity (or equivalent equity securities in a successor entity) for sale to the public, including the filing of a registration statement with the Securities and Exchange Commission pursuant to the U.S. Securities Act of 1933, as amended.

3. Issuance of securities or any like interests in any successor entity of a Local Operating Entity (or any option on or other security convertible or exchangeable for interests or any such securities) to any Third Party or any existing Member, or the issuance of additional equity in the Company to any Third Party.

4. Any modification, change or alteration in any material respect of the nature of the business of the Company or a Local Operating Entity as it may be conducted from time to time.

5. Except as provided in Article 16, the Company Organization Documents or any Local Operating Agreement, dissolution or liquidation of the Company or any Local Operating Entity or the filing of a petition, or consent to filing, under any applicable bankruptcy law by the Company or any Local Operating Entity.

6. Except as provided in Article 16, the Company Organization Documents or the Local Operating Agreement, the amendment or cancellation of the Certificate of Incorporation of the Company (or other applicable formation document of the Company) or any similar document related to any Local Operating Entity.

7. Increase or decrease the size, or composition of, the Management Board.

8. Make any distribution to the Members (other than those required by the Company Organization Documents or the Agreement).

9. Except as provided in Article 16, the Company Organization Documents or the Local Operating Agreement, the adoption, amendment or termination of the Company's Limited Liability Partnership Agreement or any Local Operating Agreement.

10. Admission of new Members except as permitted by the Agreement.

11. The approval, conclusion or filing of any documents or information relating to the Company's or a Local Operating Entity's tax positions with any tax authority from time to time, or making any material tax election of the Company or a Local Operating Entity, other than the tax elections consistent with and made in accordance with the procedures in the Tax Appendix.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

12. Inclusion of additional Targets on the Excluded Covered Targets schedule.

13. Any matter explicitly stipulated in the Agreement for approval of the Members or both Parties.

14. Any change in the fiscal year of the Company or a Local Operating Entity.

15. Enter into any agreement or otherwise commit to take, or cause to be taken, any of the actions set forth above.

Any of the foregoing items involving any direct or indirect subsidiary of the Company, including any Local Operating Entity, shall also require the approval of the Members.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 7.9(b)

Matters Requiring Board Approval

The following matters require approval by the affirmative vote of a majority of the members of the Management Board, including the affirmative vote of at least one member of the Management Board appointed by each Party.

1. Modifications or amendments to the Rolling Budget or the Initial Budget, as applicable, and the Rolling Business Plan or the Initial Business Plan, as applicable, if such modification or amendment, in the aggregate with the other modifications and amendments for the applicable fiscal year, results in an increase to the allocated annual budget amount for such fiscal year in excess of […***…] of such amount.

2. Incurring any debt for borrowed money or the encumbrance of any assets of the Company or any Local Operating Entity, or the issuance of a guarantee to any Third-Party by the Company or any Local Operating Entity.

3. Acquisitions, exclusive licenses and investments, in a transaction or series of related transactions, involving property or fixed assets that are not contemplated by the Initial Business Plan or the applicable Rolling Business Plan, as applicable, or in excess of the amounts approved in the Initial Budget or applicable Rolling Budget, as applicable; provided that no such vote shall be required for any Acquisition Transaction funded pursuant to Section 9.1(c)(ii)(2) or Section 9.1(d) of the Agreement.

4. Except for any transactions consummated pursuant to the Option Agreement, divestitures or exclusive licenses involving property or fixed assets of the Company or a Local Operating Entity, in a transaction or series of related transactions, to the extent not contemplated by the Initial Business Plan or the applicable Rolling Business Plan, as applicable, or in excess of the amounts approved in the Initial Budget or applicable Rolling Budget, as applicable.

5. Entering into, amending or terminating any Related Party Transaction, including the renewal, termination (other than as contemplated by Section 16.2(c) of the Agreement) or amendment of, or waiver of any rights under, the CRISPR Services Agreement, the Bayer Services Agreement, the Bayer IP Contribution Agreement or the CRISPR IP Contribution Agreement.

6. Formation, dissolution or liquidation of any direct or indirect subsidiary of the Company, including any Local Operating Entity, unless otherwise provided for in the Company Organization Document or Local Operating Agreements.

7. Appointment and remuneration of the CEO.

8. Institution, compromise, termination or settlement of litigation or other disputes with Third Parties involving claims directly implicating the Company's Program Technology, or otherwise of […***…] or more, except in each case if a Party has the right to institute, compromise, terminate or settle such litigation or other dispute under the Intellectual Property Management Agreement (in which case, such Management Board approval shall not apply).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9. The adoption or modification of any employee pension plan, bonus or profit-sharing scheme or any option or incentive scheme or employee trust or ownership plan to acquire Interests.

10. Appointment and change of the auditor of the Company or Local Operating Entity; provided, that if the Management Board does not appoint such auditor, the CEO of the Company may appoint an auditor with a national reputation reasonably selected by the CEO.

11. Allocation of contributed cash inconsistent in any material respect with the methodology set forth in Section 9.6.

12. Adoption or material modification of any accounting rules and policies of the Company or a Local Operating Entity, other than as required by GAAP or IFRS.

13. The approval (or amendment to) the officer selection guidelines contemplated by Section 8.4(a).

14. Participation by the Company or a Local Operating Entity in any joint venture or partnership; provided, that this does not apply to any transaction consummated pursuant to the Option Agreement.

15. Cash contributions by one Party that are not contemplated by the Agreement.

16. Any actions explicitly stipulated in the Agreement to be taken by the Management Board.

17. Enter into any agreement or otherwise commit to take, or cause to be taken, any of the actions set forth above.

Any of the foregoing items involving any direct or indirect subsidiary of the Company, including any Local Operating Entity, shall also require the approval of the Management Board as set forth above.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 8.11

Initial Budget and Initial Investment Budget of the Company

	2016	2017
Initial Budget	$[…***…]	$[…***…]
Initial Investment Budget	$[…***…]	$[…***…]

Technology Access Fee (payable to CRISPR): $35

* All amounts in millions of US dollars.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 14.1

Representations and Warranties of CRISPR

CRISPR represents and warrants to Bayer that as of the date hereof, subject to the exceptions provided in the disclosure schedule attached hereto (the "Disclosure Schedule"):

1. Due Organization. CRISPR is duly organized, validly existing and, if applicable in the jurisdiction of organization, in good standing under the laws of the jurisdiction of its organization and has the corporate power and lawful authority to own its assets and properties and to carry on its business.

2. Authority to Execute and Perform Agreement. CRISPR has the full corporate right, power and authority to enter into, execute and deliver the Agreement and, prior to the Effective Date, will have the full corporate right, power and authority to enter into, execute and deliver the other Transaction Documents to which it is or it is currently contemplated will be a party and to perform fully its obligations hereunder and, prior to the Effective Date, thereunder. The execution and delivery by CRISPR of the Agreement, the execution and delivery by CRISPR of the other Transaction Documents to which it is or it is currently contemplated will be a party and the consummation by them of the transactions currently contemplated to occur hereby and thereby have been (or in the case of the other Transaction Documents, prior to the Effective Date will be) duly authorized and approved by all necessary corporate and its respective organizational documents, and if required the approval of their respective stockholders which has been obtained (or will be obtained prior to the Effective Date with respect to the other Transaction Documents). The Agreement has been duly executed and delivered, and the other Transaction Documents to which it is or it is currently contemplated will be a party when they are executed and delivered, by CRISPR and, assuming the due execution and delivery by Bayer, constitutes the valid and binding obligation of CRISPR, enforceable in accordance with its terms, except to the extent that the enforceability thereof may be affected by bankruptcy, insolvency, and other laws of general application affecting the enforcement of creditors' rights and by general principles of equity that may limit the availability of equitable remedies.

3. No Litigation or Proceeding Pending. There is no litigation or proceeding pending or, to the Knowledge of CRISPR, is any investigation pending or litigation, proceeding or investigation threatened in writing involving CRISPR or its Affiliates, which could reasonably be expected to materially and adversely affect the performance of CRISPR's obligations under the Agreement or any other Transaction Document.

4. Lack of Conflicts. Neither the execution and delivery by CRISPR of the Agreement, nor the execution and delivery by CRISPR or its Affiliates of any other Transaction Document to which they are or will be a party, nor the consummation by them of the transactions currently contemplated to occur hereby and thereby, does or will (i) conflict with, or result in the breach of any provision of, the articles of incorporation, by-laws or other constituent documents of CRISPR or any of its Affiliates, (ii) violate in any material respect any applicable Law or any permit, order, award, injunction, decree or judgment of any Governmental Authority applicable to or binding upon CRISPR or any of its Affiliates or to which any of their properties or assets is subject or (iii) violate, conflict with or result in the breach or termination of, or otherwise give

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

any other Person the right to terminate, or constitute a default, event of default or an event that with notice, lapse of time or both, would constitute a default or event of default under the terms of, any material instrument, material contract or other material agreement to which CRISPR or any of its Affiliates is a party.

5. No Governmental Approvals or Third Party Consents. No approvals or other consents from a Governmental Authority ("Governmental Approvals") are required (other than the expiration of the waiting period under the HSR Act) in connection with the execution and delivery by CRISPR or its Affiliates of the Agreement or any other Transaction Document or the closing of the transactions contemplated by the Agreement except for such consents other than Government Approvals as would not, in the aggregate, have a material adverse effect on the consolidated business of CRISPR and its Affiliates. At or prior to the Effective Date, no Government Approval will be required by CRISPR or any of its Affiliates for the consummation of the transactions currently contemplated to occur by the Agreement and the other Transaction Documents to which CRISPR or any of its Affiliates are party. At or prior to the Effective Date, no third party consent (other than Government Approvals) will be required by CRISPR or any of its Affiliates for the consummation of the transactions currently contemplated to occur by the Agreement and the other Transaction Documents to which CRISPR or any of its Affiliates is a party, except for such third party consents as would not, in the aggregate, have a material adverse effect on the consolidated business of CRISPR and its Affiliates.

6. Disclaimer of Other Representations and Warranties. NEITHER CRISPR NOR ANY OF ITS AFFILIATES, NOR ANY OF ITS OR THEIR REPRESENTATIVES, EMPLOYEES, DIRECTORS, MANAGERS, OFFICERS, EMPLOYEES OR EQUITYHOLDERS HAS MADE, AND SHALL NOT BE DEEMED TO HAVE MADE, ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, OF ANY NATURE WHATSOEVER RELATING TO CRISPR OR ITS AFFILIATES OR THE BUSINESS OR ASSETS OF CRISPR OR ANY OF ITS AFFILIATES OR OTHERWISE IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED HEREBY, OTHER THAN THOSE REPRESENTATIONS AND WARRANTIES EXPRESSLY SET FORTH IN THIS SCHEDULE 14.1. Without limiting the generality of the foregoing, neither CRISPR, its Affiliates nor any representative, employee, officer, manager, director or equityholder of CRISPR or its Affiliates, has made, and shall not be deemed to have made, any representations or warranties in the materials relating to the business or assets of CRISPR and its Affiliates made available to Bayer, and no statement contained in any of such materials shall be deemed a representation or warranty hereunder or otherwise or deemed to be relied upon by Bayer in executing, delivering and performing the Agreement and the transactions contemplated thereby.

Certain information set forth in the Disclosure Schedules is included solely for informational purposes and may not be required to be disclosed pursuant hereto. The disclosure of any information shall not be deemed to constitute an acknowledgment that such information is required to be disclosed in connection with the representations and warranties made by CRISPR herein or that such information is material, nor shall such information be deemed to establish a standard of materiality, nor shall it be deemed an admission of any liability of, or concession as to any defense available to, CRISPR. The section number headings in the Disclosure Schedules correspond to the section numbers herein and any information disclosed in any section of the Disclosure Schedules shall be deemed to be disclosed and incorporated into any other section of

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

the Disclosure Schedules where the relevance of such disclosure is reasonably apparent. The information contained in the Disclosure Schedule is solely for purposes of the Agreement, and no information contained herein shall be deemed to be an admission by CRISPR or its Affiliates to any third party of any matter whatsoever, including of any obligation, violation of Law, liability or breach of any agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 14.1 - Disclosure Schedule

Regarding 14.1.2

- *See the matters described in Schedule 5.2.7 of the CRISPR IP Contribution Agreement*

Regarding 14.1.3

- *See the matters described in Schedule 5.2.11 of the CRISPR IP Contribution Agreement*

Regarding 14.1.4

- *See the matters described in Schedule 5.2.7 of the CRISPR IP Contribution Agreement*

Regarding 14.1.5

- *See the matters described in Schedule 5.2.7 of the CRISPR IP Contribution Agreement*

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 14.2

Representations and Warranties of Bayer

Bayer represents and warrants to CRISPR that as of the date hereof:

1. Due Organization. Bayer is duly formed, validly existing and, if applicable in the jurisdiction of organization, in good standing under the laws of the jurisdiction of its organization and has the corporate power and lawful authority to own its assets and properties and to carry on its business.

2. Authority to Execute and Perform Agreement. Bayer has the full corporate right, power and authority to enter into, execute and deliver the Agreement and, prior to the Effective Date, will have the full corporate right, power and authority to enter into, execute and deliver the other Transaction Documents to which it is or it is currently contemplated will be a party and to perform fully its obligations hereunder and, prior to the Effective Date, thereunder. The execution and delivery by Bayer of the Agreement, the execution and delivery by Bayer of the other Transaction Documents to which it is or it is currently contemplated will be a party and the consummation by them of the transactions currently contemplated to occur hereby and thereby have been (or in the case of the other Transaction Documents, prior to the Effective Date will be) duly authorized and approved by all necessary corporate and its respective formation documents. The Agreement has been duly executed and delivered, and the other Transaction Documents to which it is or it is currently contemplated will be a party when they are executed and delivered, by Bayer and, assuming the due execution and delivery by CRISPR, constitute the valid and binding obligation of Bayer, enforceable in accordance with their terms, except to the extent that the enforceability thereof may be affected by bankruptcy, insolvency, and other laws of general application affecting the enforcement of creditors' rights and by general principles of equity that may limit the availability of equitable remedies.

3. No Litigation or Proceeding Pending. There is no litigation or proceeding pending or, to the Knowledge of Bayer, is any investigation pending or litigation, proceeding or investigation threatened in writing involving Bayer or its Affiliates, which could reasonably be expected to materially and adversely affect the performance of Bayer's obligations under the Agreement or any other Transaction Document.

4. Lack of Conflicts. Neither the execution and delivery by Bayer of the Agreement, nor the execution and delivery by Bayer or its Affiliates of any other Transaction Document to which they are or will be a party, nor the consummation by them of the transactions currently contemplated to occur hereby and thereby, does or will (i) conflict with, or result in the breach of any provision of, the certificate of formation, by-laws or other constituent documents of Bayer or any of its Affiliates, (ii) violate in any material respect any applicable Law or any permit, order, award, injunction, decree or judgment of any Governmental Authority applicable to or binding upon Bayer or any of its Affiliates or to which any of their properties or assets is subject or (iii) violate, conflict with or result in the breach or termination of, or otherwise give any other Person the right to terminate, or constitute a default, event of default or an event that with notice, lapse of time or both, would constitute a default or event of default under the terms of, any material instrument, material contract or other material agreement to which Bayer or any of its Affiliates is a party.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5. No Governmental Approvals or Third Party Consents. No approvals or other consents from a Governmental Authority ("Governmental Approvals") are required (other than the expiration of the waiting period under the HSR Act) in connection with the execution and delivery by Bayer or its Affiliates of the Agreement or any other Transaction Document or the closing of the transactions contemplated by the Agreement except for such consents other than Government Approvals as would not, in the aggregate, have a material adverse effect on the consolidated business of Bayer and its Affiliates. At or prior to the Effective Date, no Government Approval will be required by Bayer or any of its Affiliates for the consummation of the transactions currently contemplated to occur by the Agreement and the other Transaction Documents to which Bayer or any of its Affiliates are party. At or prior to the Effective Date, no third party consent (other than Government Approvals) will be required by Bayer or any of its Affiliates for the consummation of the transactions currently contemplated to occur by the Agreement and the other Transaction Documents to which Bayer or any of its Affiliates is a party, except for such third party consents as would not, in the aggregate, have a material adverse effect on the consolidated business of Bayer and its Affiliates.

6. Disclaimer of Other Representations and Warranties. NEITHER BAYER NOR ANY OF ITS AFFILIATES, NOR ANY OF ITS OR THEIR REPRESENTATIVES, EMPLOYEES, DIRECTORS, MANAGERS, OFFICERS, EMPLOYEES OR EQUITYHOLDERS HAS MADE, AND SHALL NOT BE DEEMED TO HAVE MADE, ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, OF ANY NATURE WHATSOEVER RELATING TO BAYER OR ITS AFFILIATES OR THE BUSINESS OR ASSETS OF BAYER OR ANY OF ITS AFFILIATES OR OTHERWISE IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED HEREBY, OTHER THAN THOSE REPRESENTATIONS AND WARRANTIES EXPRESSLY SET FORTH IN THIS SCHEDULE 14.2. Without limiting the generality of the foregoing, neither Bayer, its Affiliates nor any representative, employee, officer, manager, director or equityholder of Bayer or its Affiliates, has made, and shall not be deemed to have made, any representations or warranties in the materials relating to the business or assets of Bayer and its Affiliates made available to CRISPR, and no statement contained in any of such materials shall be deemed a representation or warranty hereunder or otherwise or deemed to be relied upon by Bayer in executing, delivering and performing the Agreement and the transactions contemplated thereby.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Appendix
Tax Matters

RECITALS

Bayer and CRISPR, pursuant to a Joint Venture Agreement, dated December 19, 2015, (the "JV Agreement"), have established a joint venture entity for the development and commercialization of products in the Fields (the "Company").

The Parties wish to provide for the treatment of certain tax matters relating to the Company and the Parties.

NOW THEREFORE, THIS APPENDIX WITNESSES that, in consideration of the mutual promises, covenants, warranties and undertakings set forth herein and in the JV Agreement, and for other good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Definitions

    a. Capitalized terms not defined in this Appendix shall have the meanings attributed to them by the JV Agreement, including Schedule 1.1 thereto.

    b. "Code" means the US Internal Revenue Code of 1986, as amended from time to time (or any corresponding provisions of succeeding law).

    c. The "Net Income" or "Net Loss" of the Company shall be as computed for U.S. Federal income tax purposes, other than with respect to those items specifically allocated in Sections 3(b) and (c) of this Appendix. The Net Income or Net Loss of the Company shall be computed with the adjustments required to comply with the capital account maintenance rules of Treasury Regulations § 1.704-1(b)(2)(iv).

    d. "Regulations" means the US Income Tax Regulations, including Temporary Regulations, promulgated under the Code, as such regulations may be amended from time to time (including corresponding provisions of succeeding regulations).

2. Tax Treatment of Company. Each Party acknowledges that this Agreement creates a partnership for U.S. federal and state income tax purposes. Neither the Company nor any Party may make an election for the Company to be excluded from the application of the provisions of subchapter K of chapter 1 of subtitle A of the Code or any similar provisions of applicable U.S. state law. No officer, agent, director, manager, employee or partner of the Company is authorized to, or may, file Internal Revenue Service Form 8832 (or such alternative or successor form) to elect to have the Company be classified as a corporation for U.S. federal income tax purposes, in accordance with Regulations Section 301.7701-3.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3. Allocations of Profits and Losses

   a. Subject to Sections 3(b) and (c) of this Appendix, Net Income or Net Loss of the Company shall be allocated equally to the Parties.

   b. Notwithstanding Section 3(a) of this Appendix, gain or loss on the sale or other disposition of the CRISPR Contributed Technology, the Bayer Licensed Technology, the Company Program Technology and all other intellectual property beneficially owned by the Company shall be allocable in accordance with the economic terms of the JV Agreement.

   c. The provisions of the JV Agreement, the Company organizational documents and this Appendix relating to the allocations of profits and Losses are intended to comply with Regulations Sections 1.704-1 and 1.704-2. In the event that events cause the allocations set forth in the JV Agreement, the Company organizational documents or this Appendix not to be in accordance with the Regulations, then notwithstanding any other provision of the JV Agreement, the Company organizational or this Appendix, the Tax Matters Partner may make such modifications (including the addition of special allocation provisions specified by Regulations Section 1.704-2) that are necessary to cause such allocations to have substantial economic effect within the meaning of Regulations Section 1.704-1(b)(2) or to be deemed to be in accordance with the partners' interests in the Company under Regulations Section 1.704-1.

4. Tax Allocations. Any elections or other decisions relating to allocations under Section 704(c) of the Code, including the selection of any allocation method permitted under Regulations Section 1.704-3, shall be made as approved by the Tax Matters Partner in any manner that reasonably reflects the purpose and intention of Section 704(c) of the Code.

5. Tax Matters

   a. The Company shall maintain a separate capital account for each Party (each, a "Capital Account") according to the rules of Regulations Section 1.704-1(b)(2)(iv).

   b. All elections and decisions required or permitted to be made by the Company under any applicable tax law shall be made by the Tax Matters Partner. The Tax Matters Partner shall prepare all necessary U.S. federal, state and local income tax returns for the Partnership.

   c. Bayer is hereby designated the initial tax matters partner and partnership representative for the Partnership within the meaning of sections 6231(a)(7) and 6223(a) of the Code (the "Tax Matters Partner").

6. Withholding. The Company shall comply with withholding requirements under U.S. federal, state and local law and foreign law and shall remit amounts withheld to and file required forms with the applicable jurisdictions. Each Party agrees to furnish the Company with any representations and forms as shall reasonably be requested by the Company to assist it in determining the extent of, and in fulfilling, its withholding obligations.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

7. Notwithstanding anything herein to the contrary, the Tax Matters Partner shall not make any material filing, return, or election or take any material position in writing with respect to any U.S. federal, state, local or foreign tax authority (a "Tax Decision"), without consulting in good faith with and obtaining the prior consent of the other Party which shall not be unreasonably withheld, conditioned or delayed, provided that, this requirement shall not prevent the Tax Matters Partner from making a timely Tax Decision as required by law. The Tax Matters Partner shall provide as much advance

8. notice as possible to the other Party, but no less than ten Business Days, in advance of making a Tax Decision, unless such time period is impractical. The other Party shall provide a response to the Tax Matters Partner as soon as possible, but not later than five Business Days prior to the due date or date on which any such Tax Decision is to be made, as applicable, unless such time period is impractical. The other Party may request the Tax Matters Partner to make a Tax Decision which the Tax Matters Partner shall consider in good faith and shall not unreasonably withhold, delay or condition consent to such request.

    a. To the extent that there is a dispute with respect to a Tax Decision and there is sufficient time, an outside law firm or accounting firm agreed to by the Parties shall assist the Parties with the negotiation of the various tax positions until such time as a resolution can be reached. The Parties will cooperate in good faith with each other and with the law firm or accounting firm handling such matter in order to reach such resolution.

8. In any jurisdiction outside the U.S., the Parties agree to cooperate in good faith to come to mutual agreement on all Tax Decisions.

9. As used herein, Parties shall refer to the Party or the affiliate of such Party which holds equity interests in the Company.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SPECIFIC TERMS IN THIS EXHIBIT HAVE BEEN REDACTED BECAUSE CONFIDENTIAL TREATMENT FOR THOSE TERMS HAS BEEN REQUESTED. THESE REDACTED TERMS HAVE BEEN MARKED IN THIS EXHIBIT WITH THREE ASTERISKS [***]. AN UNREDACTED VERSION OF THIS EXHIBIT HAS BEEN SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

Exhibit 10.2

CRISPR IP CONTRIBUTION AGREEMENT

This CRISPR IP Contribution AGREEMENT (this "**Contribution Agreement**") is entered into as of March 16, 2016 (the "**Effective Date**"*)* by and between, on the one hand, **VIVR LLP**, a limited liability partnership duly incorporated under the laws of England and Wales ("**Company**"), and, on the other hand, **CRISPR THERAPEUTICS AG**, a corporation organized under the laws of Switzerland ("**CRISPR AG**"), **CRISPR THERAPEUTICS, INC.,** a corporation organized under the laws of the state of Delaware ("**CRISPR Inc."), CRISPR THERAPEUTICS LIMITED**, a corporation organized under the laws of England and Wales ("**CRISPR UK**") and **TRACR HEMATOLOGY LTD**, a UK limited company ("**TRACR"** and together with CRISPR AG, CRISPR Inc. and CRISPR UK "**CRISPR**").

RECITALS

WHEREAS, Bayer AG ("**Bayer**") and CRISPR AG, pursuant to a Joint Venture Agreement, dated as of December 19, 2015, (the "**Joint Venture Agreement**"), have entered into a joint venture focused on exploring potential targets related to certain diseases and creating therapeutics using gene editing or engineering systems or technology, including the Crispr/Cas Technology, to treat diseases;

WHEREAS, CRISPR possesses certain Patents, Know-How, technology and expertise with respect to the Crispr/Cas Technology; and

WHEREAS, CRISPR desires to license such Crispr/Cas Technology to the Company in furtherance of the joint venture.

NOW, THEREFORE, in consideration of the respective covenants, representations, warranties and agreements set forth herein, the Parties hereto agree as follows:

ARTICLE 1.
DEFINITIONS

For purposes of this Contribution Agreement, the following capitalized terms will have the following meanings:

1.1. "Action" means any claim, action, cause of action, chose in action or suit (whether in contract or tort or otherwise), litigation (whether at law or in equity, whether civil or criminal), controversy, assessment, arbitration, examination, audit, investigation, hearing, charge, complaint, demand, notice or proceeding to, from, by or before any Governmental Authority or arbitrator(s).

1.2. "Affiliate" or "Affiliates" means, with respect to any entity, any Person that directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such entity; and for the purposes of this definition, "control" (and the terms "controlled by" and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such entity, directly or indirectly, whether through the ownership of voting securities or by contract or otherwise. Without limiting the

generality of the foregoing, a Person shall be deemed to control another Person if any of the following conditions is met: (a) in the case of corporate entities, direct or indirect ownership of at least fifty percent (50%) of the stock or shares having the right to vote for the election of directors, and (b) in the case of non-corporate entities, direct or indirect ownership of at least fifty percent (50%) of the equity interest with the power to direct the management and policies of such non-corporate entities. The Parties acknowledge that in the case of certain entities organized under the laws of certain countries outside of the United States, the maximum percentage ownership permitted by law for a foreign investor may be less than fifty percent (50%), and that in such case such lower percentage shall be substituted in the preceding sentence, provided that such foreign investor has the power to direct the management and policies of such entity. For the purposes of this Contribution Agreement, (i) no Party or any of its Affiliates shall be considered an Affiliate of any other Party or any of its Affiliates or of the Company or any of its Affiliates, and neither the Company nor any of its Affiliates shall be considered an Affiliate of any Party or any of its Affiliates, simply by virtue of this Contribution Agreement or the relationships created hereby or by the Company Organization Documents or any Local Operating Agreement, and (ii) no Person shall be considered an Affiliate of a Party solely as a result of their right to designate a member of such Party's board of directors.

1.3. "Approval Application" means, with respect to a Licensed Product in a particular jurisdiction, an application for approval, license, registration or authorization necessary for the Commercialization of such Licensed Product in such jurisdiction, including, with respect to the United States, an application for approval for such Licensed Product by the FDA, and with respect to the European Union, an application for approval for such Licensed Product by the European Commission.

1.4. "Bayer Field" means any Field under the heading "Bayer Field" on Schedule 3.1 of the Joint Venture Agreement.

1.5. "Business Day" means any day other than a Saturday, a Sunday or a day on which banks in New York City, United States of America or Frankfurt-Main, Germany or Leverkusen, Germany are authorized or obligated by applicable law or executive order to close.

1.6. "Change of Control" means, with respect to Party, any of the following events: (a) any Person is or becomes the "beneficial owner" (as such term is used in Section 13(d) of the Securities Exchange Act of 1934, as amended, and Rule 13d-3 thereunder, except that a Person shall be deemed to have "beneficial ownership" of all shares that any such Person has the right to acquire, whether such right may be exercised immediately or only after the passage of time), directly or indirectly, of a majority of the total voting power represented by all classes of capital stock then outstanding of Party normally entitled to vote in elections of directors; (b) Party consolidates with or merges into another corporation or entity, or any corporation or entity consolidates with or merges into Party, other than (i) a merger or consolidation that would result in the voting securities of Party outstanding

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) a majority of the combined voting power of the voting securities of Party or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (ii) a merger or consolidation effected to implement a recapitalization of Party (or similar transaction) in which no Person becomes the beneficial owner, directly or indirectly, of voting securities of Party representing a majority of the combined voting power of Party's then outstanding securities; or (c) Party conveys, transfers or leases all or substantially all of its assets to any Person other than a wholly-owned Affiliate of such Party; provided, that a financing transaction, the primary purpose of which is to raise capital for such Party, shall in no event be considered a Change of Control.

1.7. "Clinical Trial" means a study in humans that is designed to generate data in support of an Approval Application.

1.8. "Commercialize" or "Commercialization" means to market, promote, distribute, offer for sale, sell, have sold, import, export or otherwise commercialize a product, to conduct activities, other than, Development and Manufacturing, in preparation for the foregoing activities, including obtaining Price Approval, and to conduct Clinical Trials and post-Marketing Approval studies. When used as a noun, "Commercialization" means any and all activities involved in Commercializing.

1.9. "Companion Diagnostic" means any companion diagnostic tool and/or diagnostic assay, the manufacture, use, sale or importation of which is Covered by the Company Crispr/Cas Technology, Company Optimized Cas Technology, CRISPR Background Know-How and CRISPR Platform Technology Know-How, which is used to (i) […***…].

1.10. "Company CRISPR/Cas Know-How" means any Know-How Controlled by the Company that constitutes an addition, amendment or enhancement to the Crispr/Cas Technology that is not Company Optimized Cas Know-How that is […***…].

1.11. "Company CRISPR/Cas Patents" means any Patents Controlled by Company claiming or disclosing any Company CRISPR/Cas Know-How.

1.12. "Company CRISPR/Cas Technology" means the Company CRISPR/Cas Know-How and the Company CRISPR/Cas Patents.

1.13. "Company Non-Product Know-How" means any and all Know-How Controlled by the Company during the Technology Term, including Delivery Technology and excluding Company CRISPR/Cas Know-How, Company Product Know-How and Company Optimized Cas Know-How, that, is […***…].

1.14. "Company Non-Product Patents" means any Patents Controlled by the Company claiming or disclosing any Company Non-Product Know-How.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.15. “Company Non-Product Technology” means the Company Non-Product Know-How and the Company Non-Product Patents.

1.16. “Company Optimized Cas Know-How” means all Know-How related to enhancements, amendments or additions in and to any nuclease element of the CRISPR/Cas Technology (i) discovered, developed, invented or created by employees of Company or others acting for or on behalf of the Company, including, without limitation, Bayer or CRISPR in performance of services for the Company or (ii) acquired or licensed by Company from Third Parties, excluding such Know-How in-licensed through the Parties.

1.17. “Company Optimized Cas Patents” means any Patents claiming or Covering Company Optimized Cas Know-How.

1.18. “Company Optimized Cas Technology” means the Company Optimized Cas Know-How and Company Optimized Cas Patents.

1.19. “Company Product Know-How” means any and all Know-How Controlled by the Company during the Technology Term that relates to the composition or use of a Licensed Agent or Product in the Fields, including […***…].

1.20. “Company Product Patents” means any Patents Controlled by the Company that claim or disclose any Company Product Know-How.

1.21. “Company Program Patents” means (i) the Company Product Patents, (ii) Company Non-Product Patents, (iii) Company CRISPR/Cas Patents, (iv) Company Optimized Cas Patents, and (v) the Company’s interest in any and all Joint Patents.

1.22. “Control” means with respect to any Know-How or Patent or other data, information or Materials, possession of the ability by a Party or its Affiliate(s) (whether by sole or joint ownership, license or otherwise, but in all cases not including when such rights are granted or obtained pursuant to the Transaction Documents) to grant, without violating the terms of any agreement with a Third Party, a license, access or other right in, to or under such Know-How or Patent or other data, information or Materials. Notwithstanding anything in the Transaction Documents to the contrary, a Party will be deemed to not Control any Patents or Know-How that are owned or controlled by a Third Party described in the definition of “Change of Control,” or such Third Party’s Affiliates (other than an Affiliate of such Party prior to the Change of Control), (a) prior to the closing of such Change of Control, except to the extent that any such Patents or Know-How were developed prior to such Change of Control through the use of such Party’s technology, or (b) after such Change of Control to the extent that such Patents or Know-How are developed or conceived by such Third Party or its Affiliates (other than such Party) after such Change of Control without using or incorporating such Party’s technology. A Party does not need to amend any existing in-license as of the Effective Date so that such Party “Controls” any IP under such given in-license.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.23. “Cover,” “Covering” or “Covers” means, as to a product and Patent, that, in the absence of a license granted under, or ownership of, such Patent, the making, using, keeping, selling, offering for sale or importation of such product would infringe such Patent or, as to a pending claim included in such Patent, the making, using, selling, offering for sale or importation of such product would infringe such Patent if such pending claim were to issue in an issued patent without modification.

1.24. “Covered Target” means a Target as and for so long as such Target remains the subject of a license or similar grant of rights under the Existing Third Party Agreement. For the avoidance of doubt, Covered Targets shall not be deemed Third-Party Targets or Excluded Covered Targets.

1.25. “CRISPR Background Know-How” means any and all Know-How other than CRISPR Platform Technology Know-How Controlled by CRISPR, as of the Effective Date or that comes into the Control of CRISPR during the Technology Term, that is useful to or necessary for the Company to Develop, Manufacture or Commercialize Licensed Agents or Products in the Fields.

1.26. “CRISPR Background Patents” means any and all Patents other than a Company Program Patent or CRISPR Platform Technology Patent […***…].

1.27. “CRISPR Background Technology” means all CRISPR Background Know-How and CRISPR Background Patents.

1.28. “CRISPR Contributed Technology” means all CRISPR Platform Technology Patents, CRISPR Platform Technology Know-How, CRISPR Background Know-How and CRISPR Background Patents.

1.29. “CRISPR Field” means any Field under the heading “CRISPR Field” on Schedule 3.1 of the Joint Venture Agreement.

1.30. “CRISPR Platform Technology Know-How” means any […***…].

1.31. “CRISPR Platform Technology Patents” means any and […***…].

1.32. “Crispr/Cas Technology” means clustered regularly interspaced short palindromic repeats (CRISPR)/CRISPR-associated (Cas) protein system that comprises (a) at least one guide RNA element that is complementary to a Target, wherein said guide RNA element can be a guide RNA or a polynucleotide(s) encoding such guide RNA, and (b) a nuclease element, wherein said nuclease element is a Cas nuclease protein.

1.33. “Delivery Technology” means methods, formulations, technologies and systems, including vectors, for transporting a Licensed Agent or Product into or within the human body or into human cells outside of the body.

1.34. “Develop” or “Development” means, with respect to a Licensed Agent, all clinical and non-clinical research and development activities conducted for such Licensed

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Agent, including toxicology, pharmacology test method development and stability testing, process development, formulation development, delivery system development, quality assurance and quality control development, statistical analysis, Clinical Trials (other than post-Marketing Approval Clinical Trials), regulatory affairs, pharmacovigilance, Clinical Trial regulatory activities and obtaining and maintaining Regulatory Approval. When used as a verb, "Develop" or "Developing" means to engage in Development.

1.35. "EMA" means the European Medicines Agency and any successor entity thereto.

1.36. "European Commission" means the European Commission or any successor entity that is responsible for granting Marketing Approvals authorizing the sale of pharmaceuticals in the European Union.

1.37. "Existing Third Party Agreement" means that certain Strategic Collaboration, Option and License Agreement entered into by and between CRISPR (and certain of its Affiliates) and Vertex Pharmaceuticals, Incorporated (and certain of its Affiliates) dated as of October 26, 2015.

1.38. "FDA" means the United States Food and Drug Administration and any successor agency thereto.

1.39. "Fields" means the CRISPR Fields and the Bayer Fields, provided fields shall not include diagnosis, prevention or treatment of cystic fibrosis.

1.40. "Governmental Authority" means any court, agency, authority, department, regulatory body or other instrumentality of any government or country or of any national, federal, state, provincial, regional, county, city or other political subdivision of any such government or any supranational organization of which any such country is a member.

1.41. "Human Therapeutic Use" means the use of the CRISPR/Cas Technology for use in the discovery, research and development of products for the treatment or prevention of any human disease, disorder or condition, including researching, developing, making, using or selling Licensed Agents or Products and Companion Diagnostics.

1.42. "In-License Agreement" means the agreements with Third Party licensors under which the CRISPR Contributed Technology is being licensed by CRISPR.

1.43. "Intellectual Property" means (i) patents (including utility, design, plant, utility model, reissues, re-examination, and patents of addition), patent applications (filed, unfiled or being prepared), records of invention, (ii) trademarks (registered or unregistered), trademark applications, trade names, copyrights (registered or unregistered), copyright applications, mask works, service marks (registered or unregistered), service mark applications, database rights (registered or unregistered), all together with the goodwill associated with such marks or names, (iii) trade secrets, technology, inventions, know-how, processes and confidential and proprietary information, including any being developed (including but not

limited to designs, manufacturing data, design data, test data, operational data, and formulae), whether or not recorded in tangible form through drawings, software, reports, manuals or other tangible expressions, whether or not subject to statutory registration, anywhere, and all rights to any of the foregoing.

1.44. "Joint Know-How" means Know-How discovered, developed, invented or created jointly by […***…].

1.45. "Joint Patents" means any Patents claiming or Covering any Joint Know-How.

1.46. "Know-How" means Intellectual Property, data, results, pre-clinical and clinical protocols and data from studies and Clinical Trials, chemical structures, chemical sequences, information, inventions, know-how, formulas, trade secrets, techniques, methods, processes, procedures and developments, whether or not patentable; provided that Know-How does not include Patents claiming any of the foregoing.

1.47. "Knowledge" means, with respect to CRISPR, the actual knowledge of […***…] after having made reasonable inquiries of CRISPR personnel and advisors that would reasonably be anticipated to have knowledge of facts relating to the relevant subject matter.

1.48. "Law" or "Laws" means all applicable laws, statutes, rules, regulations and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, agency or other body, domestic or foreign, including any applicable rules, regulations, guidelines, or other requirements of the Regulatory Authorities that may be in effect from time to time.

1.49. "Licensed Agent" means a product comprising (a) all components of a Crispr/Cas Technology, for Targeting a Target, where such Crispr/Cas Technology, or any portion thereof is discovered by or on behalf of the Company or a Local Operating Entity (solely or jointly with such entities), or is in the Company's or a Local Operating Entity's Control, prior to the Effective Date, or during the Technology Term or (b) modified human cells or tissue, or another cell- or tissue-based product, or any other therapeutic product comprising or produced using the Crispr/Cas Technology, in each case produced using the components referred to in clause (a).

1.50. "Licensed Product" means any Product that (i) has been licensed by a Party following opt-in or (ii) licensed to a Third Party. All Products comprising the same Licensed Agent(s) (and no additional Licensed Agents) will be considered the same Licensed Product under this Contribution Agreement.

1.51. "Local Operating Agreement" means, as applicable, any agreement governing the formation and operation of any Local Operating Entity formed pursuant to Section 3.3 of the Joint Venture Agreement.

1.52. "Local Operating Entity" means any local operating entity formed by the Company pursuant to Section 3.3 of the Joint Venture Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.53. “Manufacture” or “Manufacturing” means activities directed to making, having made, producing, manufacturing, processing, filling, finishing, packaging, labeling, quality control testing and quality assurance release, shipping or storage of a product.

1.54. “Marketing Approval” means, with respect to a Licensed Product in a particular jurisdiction, all approvals, licenses, registrations or authorizations necessary for the Commercialization of such Licensed Product in such jurisdiction, including, with respect to the United States, approval of an Approval Application for such Licensed Product by the FDA and with respect to the European Union, approval of an Approval Application for such Licensed Product by the European Commission.

1.55. “Materials” means all biological materials or chemical compounds arising out of a Party’s activities under this Contribution Agreement or otherwise provided by a Party for use by the other Party to conduct activities pursuant to this Contribution Agreement, including Licensed Agents, Clinical Trial samples, cell lines, assays, viruses and vectors.

1.56. “Party” or “Parties” means, when used in singular, any signatory to the applicable agreement, as the context may require, and when used in plural, all signatories to the applicable agreement, and any permitted successor or assign thereto.

1.57. “Patents” means the rights and interests in and to issued patents and pending patent applications and similar government-issued rights (e.g., utility models) protecting inventions in any country, jurisdiction or region (including inventor’s certificates and utility models), including all priority applications, international applications, provisionals, non-provisionals, substitutions, continuations, continuations-in-part, divisionals, renewals and all patents granted thereon, and all reissues, reexaminations, extensions, confirmations, revalidations, registrations and patents of addition thereof, including patent term extensions and supplementary protection certificates, international patent applications filed under the Patent Cooperation Treaty (PCT) and any foreign equivalents to any of the foregoing.

1.58. “Person” means any individual, partnership, limited partnership, limited liability company, joint venture, syndicate, sole proprietorship, company or corporation with or without share capital, unincorporated association, trust, trustee, executor, administrator or other legal personal representative or governmental body.

1.59. “Price Approval” means, in any country where a Governmental Authority authorizes reimbursement for, or approves or determines pricing for, pharmaceutical products, receipt (or, if required to make such authorization, approval or determination effective, publication) of such reimbursement authorization or pricing approval or determination.

1.60. “Product” means any pharmaceutical product, medical therapy, preparation, substance, or formulation comprising or employing, in whole or in part, a Licensed Agent.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.61. “Prosecution and Maintenance” or “Prosecute and Maintain” means, with regard to a Patent, the preparing, filing, prosecuting and maintenance of such Patent, as well as handling re-examinations and reissues with respect to such Patent, together with the conduct of interferences, the defense of oppositions and other similar proceedings with respect to the particular Patent. For clarification, Prosecution and Maintenance or Prosecute and Maintain will not include any other enforcement actions taken with respect to a Patent.

1.62. “Regulatory Approval” means the technical, medical and scientific licenses, registrations, authorizations and approvals (including approvals of Approval Applications, supplements and amendments, pre- and post- approvals, and labeling approvals) of any Regulatory Authority, necessary for the research, Development, clinical testing, commercial manufacture, distribution, marketing, promotion, offer for sale, use, import, export or sale of a pharmaceutical product in a regulatory jurisdiction, including Marketing Approval.

1.63. “Regulatory Authority” means, with respect to a country in the Territory, any national (*e.g.*, the FDA), supra-national (*e.g.*, the European Commission, the Council of the European Union, or the EMA), regional, state or local regulatory agency, department, bureau, commission, council or other Governmental Authority involved in the granting of Regulatory Approvals or Price Approvals for pharmaceutical products in such country or countries.

1.64. “Sublicense” means, directly or indirectly, to sublicense, grant any other right with respect to, or agree not to assert, any licensed right under any Patent, Know-How or other Intellectual Property right. When used as a noun, “Sublicense” means any agreement to Sublicense.

1.65. “Sublicensee” means an Affiliate or Third Party, other than a distributor, to whom a licensee (or an Affiliate) sublicenses any of the rights granted to the licensee during the term of the applicable agreement.

1.66. “Target” means […***…]. Additional Targets may be included after the Effective Date solely by updating Schedule A in accordance with Section 7.13 of the Joint Venture Agreement.

1.67. “Targeting” means editing, engineering or modulating (including by means of gene knock-out, gene tagging, gene disruption, gene mutation, gene insertion, gene deletion, gene activation, gene silencing or gene knock-in) a Target or an Excluded Target or a Covered Target by means of hybridizing a guide RNA of the CRISPR/Cas Technology to such Target or Excluded Target or Covered Target.

1.68. “Technology Term” means from the Effective Date until the Company is no longer Developing Licensed Agents or Products.

1.69. “Territory” means all the countries of the world.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.70. “Third Party” means any Person other than Bayer or CRISPR or any Affiliate of either Party.

1.71. “Third Party Obligations” means any financial or non-financial encumbrances, obligations, restrictions, or limitations imposed by an In-License Agreement, including field or territory restrictions, covenants, diligence obligations or limitations pertaining to enforcement of intellectual property rights.

1.72. “Third-Party Target” means a Target that is the subject of a license or similar grant of rights pursuant to an agreement between CRISPR or one of its Affiliates and a Third-Party; provided, that such Target was licensed in accordance with the procedures set forth in Section 3.7 of the Joint Venture Agreement. For the avoidance of doubt, Third-Party Targets include all Excluded Targets.

1.73. “United States” or “U.S.” means the fifty states of the United States of America and all of its territories and possessions and the District of Columbia.

1.74. The following terms shall have the meanings defined in the Section or Schedule indicated. Unless otherwise noted, the indicated Section or Schedule refers to the appropriate Section or Schedule of this Contribution Agreement.

Term	Where defined
Bayer	The first recital
Company	The first paragraph
CRISPR	The first paragraph
CRISPR AG	The first paragraph
CRISPR Inc.	The first paragraph
CRISPR UK	The first paragraph
Company Organization Documents	Section 3.2(b)(i) of the Joint Venture Agreement
Contribution Agreement	The first paragraph
Effective Date	The first paragraph
Excluded Covered Targets	Section 3.6 of the Joint Venture Agreement (i)
Exclusive License	Section 2.1.1
Excluded Target	Section 3.7 of the Joint Venture Agreement
HSR Act	Section 2.4
Information	Section 4.1 of the Intellectual Property Management Agreement
Interests	Section 3.3 of the Joint Venture Agreement
Intellectual Property Management Agreement	Section 3.2(b)(viii) of the Joint Venture Agreement
Joint Venture Agreement	The first recital
Permitted COC Transfer	Section 11.3 of the Joint Venture Agreement
TRACR	The first paragraph
Transaction Document	Section 3.2 of the Joint Venture Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 2.
LICENSE GRANTS

2.1. **License Grant to Company.**

2.1.1. **License Grant.** CRISPR hereby grants to Company an irrevocable (except as specified in the Joint Venture Agreement), worldwide, royalty-free, fully paid-up, sublicenseable (solely as permitted by Section 2.1.2), exclusive license under CRISPR's and its Affiliates' interest in and to the CRISPR Contributed Technology to Develop, Manufacture, have Manufactured, use, keep, sell, offer for sale, import, have imported export and Commercialize Licensed Agents and Products in the Fields in the Territory, excluding Licensed Agents and Products to the extent such agents or products are Targeting an Excluded Target or Covered Target (such license, the "**Exclusive License**").

2.1.2. **Sublicenses**. Provided the Company is licensing technology it Controls (other than the technology licensed to it under a Transaction Document) in the same transaction, subject to the terms of this Contribution Agreement, Company may grant sublicenses through multiple tiers of sublicense to one or more Sublicensees of any and all rights granted to Company by CRISPR under the Exclusive License. Each such Sublicense will be subject and subordinate to, and consistent with, the terms and conditions of this Contribution Agreement and will require such Sublicensee to comply with all applicable terms of this Contribution Agreement and all Third Party Obligations. Notwithstanding the grant of any Sublicense, Company shall remain primarily liable to CRISPR for the performance of all of Company's obligations under, and Company's compliance with all provisions of, this Contribution Agreement.

2.1.3. **License Conditions; Limitations**. Any rights and obligations hereunder, including the rights granted pursuant to any Exclusive License are subject to and limited by any applicable license from a Third Party within the CRISPR Contributed Technology.

2.1.4. **Financial Obligations for technology licensed from Third Parties**. To the extent that there are financial obligations associated with any technology licensed by CRISPR from Third Parties, the Party using such technology shall be responsible for such financial obligations; provided that, CRISPR shall provide prior notice of such financial obligations and shall be responsible for any financial obligations if prior notice is not provided.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

2.2. **Company License Grants.**

2.2.1. Except as specified in Article 16 of the Joint Venture Agreement, Company hereby grants to CRISPR AG and Tracr a perpetual, irrevocable, royalty-free, fully paid-up, worldwide, sublicenseable, license in and to the Company Crispr/Cas Technology, which right shall be exclusive, to develop, Manufacture, have Manufactured, use, keep, sell, offer for sale, import, have imported, export and Commercialize products outside of the Fields for Human Therapeutic Uses.

2.2.2. Except as specified in Article 16 of the Joint Venture Agreement, Company hereby grants to CRISPR AG and Tracr a perpetual, irrevocable, royalty-free, fully paid-up, worldwide, sublicenseable, license in and to the Company Non-Product Technology, which right shall be non-exclusive, to make, have made, use, sell, keep, offer for sale and import products.

2.2.3. Except as specified in Article 16 of the Joint Venture Agreement, Company hereby grants to CRISPR AG and Tracr a perpetual, irrevocable, royalty-free, fully paid-up, worldwide, sublicenseable, license in and to the Company Optimized Cas Technology, which right shall be exclusive, to develop, Manufacture, have Manufactured, use, keep, sell, offer for sale, import, have imported, export and Commercialize products outside of the Field for Human Therapeutic Uses.

2.3. **No Implied Licenses**. All rights in and to CRISPR's Intellectual Property not expressly licensed or assigned to Company under this Contribution Agreement are hereby retained by CRISPR or its Affiliates. All rights in and to any Company Intellectual Property not expressly licensed to CRISPR AG and Tracr under this Contribution Agreement, are hereby retained by Company or its Affiliates. Except as expressly provided in this Contribution Agreement, no Party will be deemed by estoppel or implication to have granted the other Party any licenses or other right with respect to any Intellectual Property.

2.4. **HSR**. Prior to granting a license to Patents hereunder, CRISPR shall provide the Company and Bayer with written notice of the same. In furtherance of granting licenses to Patents to the Company hereunder in the future, if required, prior to such Patents being licensed hereunder, CRISPR and Company shall, and Company and CRISPR shall work with Bayer to, (a) take promptly all actions necessary to prepare any filings, or cause their "ultimate parent entities" as that term is defined in the Hart-Scott-Rodino Antitrust Improvement Act of 1976 as amended (the "HSR Act") or relevant regulations to promptly prepare any filings required of any of them under the HSR Act, which shall each be filed with the appropriate Governmental Authorities within […***…] Business Days of the date of the notice, and each such filing shall request the early termination of the waiting period required by the HSR Act; (b) use commercially reasonable efforts to comply at the earliest practicable date with any request for additional information received by any

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

of them from the Federal Trade Commission or the Antitrust Division of the Department of Justice or any other Governmental Authority with authority regarding antitrust or competition matters; and (c) reasonably cooperate with each other in connection with the preparation and making of any such filings and the clearance of the contemplated transactions under antitrust or competition Law. […***…]. Each Party agrees to notify the other Party promptly of any material communication from a Governmental Authority regarding the contemplated transactions. Without limiting the generality of the foregoing, each Party shall provide the other Party (or its representatives) upon request copies of all correspondence and written productions between such Party and any Governmental Authority relating to the contemplated transactions. The Parties may, as they deem advisable, designate any competitively sensitive materials provided to the other Party as "outside counsel only." Such materials and the information contained therein shall be given only to outside counsel of the recipient and will not be disclosed by such outside counsel to employees, officers, or directors of the recipient without the advance consent of the Party providing such materials. Subject to applicable Law, the Parties will consult and cooperate with each other in connection with any analyses, appearances, presentations, memoranda, briefs, arguments, and proposals made or submitted to any Governmental Authority regarding the contemplated transactions by or on behalf of any Party.

2.5. If the filings under the HSR Act are required, the effective date of the license of any applicable Patents shall be delayed until any applicable waiting periods (and any extensions thereof) under the HSR Act have expired or otherwise been terminated.

ARTICLE 3.
CONSIDERATION

3.1. **Consideration.** As partial consideration for the license granted pursuant to Section 2.1, the Company shall pay to CRISPR a fee in the aggregate amount of up to US $35,000,000 in accordance with the terms set forth in Section 3.2 (b)(ii) of the Joint Venture Agreement.

ARTICLE 4.
INTELLECTUAL PROPERTY MATTERS

4.1. **Intellectual Property Matters.** Subject to the rights and licenses granted herein, the rights and obligations of the Parties with respect to the ownership of, use, preparation, prosecution, maintenance and enforcements of Know-How and Patents arising under the activities performed in the exercise of rights licensed or retained hereunder shall be governed by the Intellectual Property Management Agreement.

4.2. **No Other Rights.** Except as otherwise expressly provided in this Contribution Agreement, under no circumstances will a Party or any of its Affiliates, as a result of this Contribution Agreement, obtain any ownership interest, license or other right in or to any Know-How, Patents or other Intellectual Property of the other Party,

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

including tangible or intangible items owned, controlled or developed by the other Party, or provided by the other Party to the receiving Party at any time, pursuant to this Contribution Agreement. Neither Party nor any of its Affiliates will use or practice any Know-How, Materials or Patents licensed or provided to such Party or any of its Affiliates outside the scope of or otherwise not in compliance with the rights and licenses granted to such Party and its Affiliates under this Contribution Agreement, except to the extent an unlicensed Third Party could use such CRISPR Contributed Technology or materials.

4.3. **Unauthorized Use of CRISPR Contributed Technology.** Company shall institute reasonable procedures to prevent CRISPR Contributed Technology from being used for anything outside of the Field in the Territory. After receiving notice from CRISPR alleging a specific breach, Company will investigate (with CRISPR having the right to participate in such investigation) such use of CRISPR Contributed Technology, and if Company identifies any such unauthorized use of CRISPR Contributed Technology, Company shall immediately cease such use and implement reasonable procedures to prevent such unauthorized use of CRISPR Contributed Technology in the future.

4.4. **CRISPR Contributed Technology that is licensed by CRISPR from a Third Party**. With regard to CRISPR Background Technology that is licensed by CRISPR from a Third Party, and which the Company has notified CRISPR it wishes to use in connection with Development of a Product, CRISPR shall use reasonable efforts to obtain the right to further license such Technology to the Company and for the Company to license such Technology to Bayer if it opts into a Licensed Product or to a Third Party that acquires a license to a Licensed Product if such rights are necessary for the commercialization of the Licensed Product. Nothing in this Section will require CRISPR to incur any additional cost or expense to obtain such rights or to amend any existing license except to the extent of acquiring such rights as described in this Section. If additional costs or expenses are necessary to obtain such rights, the Parties shall discuss in good faith the payment of such costs or expenses.

ARTICLE 5.
REPRESENTATIONS AND WARRANTIES

5.1. **Representations and Warranties of Company**. Company hereby represents and warrants to CRISPR, as of the Effective Date, that:

5.1.1. Company is a limited liability partnership, duly incorporated and validly existing under the laws of England and Wales;

5.1.2. Company (a) has the requisite power and authority and the legal right to enter into this Contribution Agreement and to perform its obligations hereunder and (b) has taken all requisite action on its part to authorize the execution and delivery of this Contribution Agreement and the performance of its obligations hereunder;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.1.3. Company has the requisite resources and expertise to perform its obligations hereunder;

5.1.4. the execution, delivery and performance of this Contribution Agreement by Company (a) will constitute legal, valid, binding and enforceable obligations on it and (b) will not constitute a default under or conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it is bound, or violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over Company; and

5.1.5. Company has obtained all necessary consents, approvals and authorizations of all Governmental Authorities and other Persons or entities required to be obtained by it in connection with the execution and delivery of this Contribution Agreement.

5.2. **Representations and Warranties of CRISPR**. Each of the CRISPR entities, jointly and severally, hereby represents and warrants to Company, as of the Effective Date, that, except as otherwise set forth on Schedule 5.2:

5.2.1. Each of CRISPR AG, CRISPR Inc., CRISPR UK and TRACR are duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization and has full corporate power and authority to enter into this Contribution Agreement and to carry out the provisions hereof;

5.2.2. Each of CRISPR AG, CRISPR Inc., CRISPR UK and TRACR (a) has the requisite power and authority and the legal right to enter into this Contribution Agreement and to perform its obligations hereunder and (b) has taken all requisite action on its part to authorize the execution and delivery of this Contribution Agreement and the performance of its obligations hereunder;

5.2.3. this Contribution Agreement has been duly executed and delivered on behalf of CRISPR, and constitutes a legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, except to the extent that the enforceability may be affected by bankruptcy, insolvency, and other laws of general application affecting the enforcement of creditors' rights and by general principles of equity that may limit the availability of equitable remedies;

5.2.4. the execution, delivery and performance of this Contribution Agreement by CRISPR will not constitute a default under or conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it is bound, or violate any Law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2.5. CRISPR has obtained all necessary consents, approvals and authorizations of all Governmental Authorities and other Persons or entities required to be obtained by CRISPR in connection with the execution and delivery of this Contribution Agreement;

5.2.6. CRISPR is the sole and exclusive owner or exclusive licensee of the CRISPR Contributed Technology, all of which is free and clear of any liens, charges and encumbrances, and, as of the Effective Date, neither any license granted by CRISPR to any Third Party, nor any license granted by any Third Party to CRISPR conflicts with the license grants to Company hereunder and CRISPR is entitled to grant all rights and licenses (or sublicenses, as the case may be) under such CRISPR Contributed Technology it purports to grant to Company under this Contribution Agreement;

5.2.7. Schedule 5.2.7 sets forth a true, correct and complete list of (i) all CRISPR Platform Technology Patents or CRISPR Background Patents as of the Effective Date, indicating for each such patent (a) whether it is the subject of an application, certificate, filing, registration or other document issued, filed with, or recorded by any governmental entity, and specifying, where applicable, the jurisdiction in which such Patents Controlled by CRISPR have been issued or registered or in which jurisdiction an application for such issuance and registration has been filed, including, as applicable, the respective registration and application numbers, the names of all registered owners or applicants, and the filing and expiration dates thereof , (b) whether each such Patent is a CRISPR Platform Technology Patent or a CRISPR Background Patent, and (c) whether such Patent is owned by CRISPR or licensed by CRISPR from a Third Party and if so, identifies the licensor or sublicensor from which the Patent is licensed, and (ii) all material agreements relating to CRISPR Contributed Technology, including but not limited to, licenses, royalty-bearing agreements, material transfer agreements, manufacturing agreements, service agreements, pre-clinical/clinical trial agreements, research agreements, joint venture agreements, and collaboration agreements;

5.2.8. the CRISPR Contributed Technology constitutes all of the Patents and Know-How Controlled by CRISPR that are necessary to Develop, Manufacture or Commercialize Licensed Agents and Products in the Field as contemplated under the Joint Venture Agreement;

5.2.9. CRISPR has independently developed all CRISPR Contributed Technology or otherwise has a valid right to use, and to permit Company and Company's Sublicensees to use, the CRISPR Contributed Technology for all permitted purposes under this Contribution Agreement;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2.10. the CRISPR Background Know-How and CRISPR Platform Technology Know-How is free and clear of liens, charges or encumbrances other than licenses granted to Third Parties that are not inconsistent with the rights and licenses granted to Company hereunder;

5.2.11. No Third Party has challenged the extent, validity or enforceability of CRISPR Platform Technology Patents and the CRISPR Background Patents (including by way of example through the institution or written threat of institution of interference, nullity or similar invalidity proceedings before the United States Patent and Trademark Office or any analogous foreign Governmental Authority), and to CRISPR's Knowledge (a) no Third Party is infringing any such Patents and (b) such Patents are, or, upon issuance, will be, valid and enforceable patents.

5.2.12. CRISPR has not challenged any Third Party Intellectual Property by filing any interference, derivation, reexamination, inter partes review, post grant challenge, cancellation, nullity action, Third Party observations, or opposition proceeding;

5.2.13. it has complied with all applicable Laws, including any disclosure requirements of the United States Patent and Trademark Office or any analogous foreign Governmental Authority, in connection with the Prosecution and Maintenance of the CRISPR Platform Technology Patents and CRISPR Background Patents and has timely paid all filing and renewal fees payable with respect to any such Patents for which it controls Prosecution and Maintenance;

5.2.14. there are no contracts which require the payment of royalties by CRISPR or its Affiliates with respect to the use of the CRISPR Platform Technology Patents CRISPR Platform Technology Know-How, CRISPR Background Know-How and CRISPR Background Patents. For each contract disclosed on Schedule 5.2.14, the Schedule 5.2.14 sets forth the date on which such royalty was first paid, the royalty rate being paid by CRISPR as of the Effective Date, and the royalty term;

5.2.15. it has obtained assignments from the inventors of all inventorship rights relating to the CRISPR Platform Technology Patents and CRISPR Background Patents that it owns, and all such assignments of inventorship rights relating to such Patents are valid and enforceable and properly recorded;

5.2.16. except for CRISPR's In-License Agreements, there is no agreement between CRISPR (or any of its Affiliates) and any Third Party pursuant to which CRISPR has acquired Control of any of the CRISPR

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Contributed Technology, and no Third Party has any right, title or interest in or to, or any license under, any of the CRISPR Contributed Technology. All of CRISPR's In-License Agreements are in full force and effect and have not been modified or amended (except for amendments provided to Company prior to the Effective Date). Neither CRISPR nor, to any CRISPR entity's Knowledge, the Third Party licensor in any of CRISPR's In-License Agreements is in default with respect to a material obligation under any of such In-License Agreements, and neither such party has claimed or has grounds upon which to claim that the other party is in default with respect to a material obligation under, any of CRISPR's In-License Agreements;

5.2.17. CRISPR and its Affiliates have taken commercially reasonable measures consistent with industry practices to protect the secrecy, confidentiality and value of all CRISPR Background Know-How and CRISPR Platform Technology Know-How that constitutes trade secrets under applicable Law (including requiring all employees, consultants and independent contractors to execute binding and enforceable agreements requiring all such employees, consultants and independent contractors to maintain the confidentiality of such CRISPR Background Know-How and CRISPR Platform Technology Know-How) and, to CRISPR's Knowledge, such CRISPR Background Know-How and CRISPR Platform Technology Know-How has not been used, disclosed to or discovered by any Third Party except pursuant to such confidentiality agreements and there has not been a breach by any party to such confidentiality agreements;

5.2.18. no CRISPR Contributed Technology is subject to any funding agreement with any government or governmental agency and CRISPR is not subject to any domestic manufacturing requirement and is free to manufacture any goods for its business as contemplated in any country;

5.2.19. to each CRISPR entity's Knowledge, the Development, Manufacture, use, sale, offer for sale, supply or importation by CRISPR or Company (or their respective Affiliates or Sublicensees) of a Licensed Agent or Product does not and will not infringe any issued patent of any Third Party or, if and when issued, any claim within any patent application of any Third Party or misappropriate any Third Party technology;

5.2.20. CRISPR has not filed or made any oral or written claim against any Person alleging any infringement, misappropriation, or other violation of any CRISPR Contributed Technology;

5.2.21. there are no judgments or settlements against or owed by CRISPR, pending or, to CRISPR's Knowledge threatened claims or litigation, in either case relating to the CRISPR Contributed Technology;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2.22. there is no action, claim, demand, suit, proceeding, arbitration, grievance, citation, summons, subpoena, inquiry or investigation of any nature, civil, criminal, regulatory or otherwise, in law or in equity, pending or, to CRISPR's Knowledge, threatened against CRISPR, any of its Affiliates or any Third Party, in each case in connection with the CRISPR Contributed Technology or relating to the transactions contemplated by this Contribution Agreement; and

5.2.23. CRISPR has not employed (and, to such CRISPR entity's Knowledge, has not used a contractor or consultant that has employed) any Person debarred by the FDA (or subject to a similar sanction of EMA or foreign equivalent), or any Person that is the subject of an FDA debarment investigation or proceeding (or similar proceeding of EMA or foreign equivalent), in any capacity in connection with this Contribution Agreement.

5.3. **CRISPR Covenants**. Each of the CRISPR entities, jointly and severally, hereby covenants to Company that, except as expressly permitted under this Contribution Agreement:

5.3.1. It will not amend, modify or terminate any of CRISPR's In-License Agreements in a manner that would have a material adverse effect on Company's rights hereunder without first obtaining Company's consent; and

5.3.2. It will not enter into any new agreement or other obligation with any Third Party, or amend an existing agreement with a Third Party, in each case that would have a material adverse effect on Company's rights hereunder without first obtaining Company's consent.

5.4. **Consequence of Breach of Representations and Warranties.** In addition to any consequences as specified in Section 6.2, CRISPR acknowledges and agrees that Company would be damaged irreparably in the event CRISPR breaches any of the provisions of Sections 5.2 or 5.3. Accordingly, CRISPR agrees that, without posting a bond or other undertaking, Company may seek an injunction or injunctions to prevent breaches or violations or specific performance of the provisions of Sections 5.2 or 5.3 and to enforce specifically such Sections and the terms and provisions thereof in any Action instituted in any court hereby irrevocably submits to the exclusive jurisdiction of the state courts of the State of New York in the Borough of Manhattan and to the United States District Court for the Southern District of New York for the purpose of any Action between the Parties arising in whole or in part under or in connection with Sections 5.2 and 5.3. An Action for specific performance as provided herein shall not preclude a Party from pursuing any other remedy to which such Party may be entitled, at law or in equity, in accordance with the terms of this Contribution Agreement. CRISPR further agrees that, in the event of any Action for an injunction or specific performance in respect of such breach or violation, it will not assert that the defense that a remedy at law would be adequate.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.5. **Disclaimer**. Except as otherwise expressly set forth in this Contribution Agreement, neither Party nor its Affiliates makes any representation or extends any warranty of any kind, either express or implied, including any warranty of merchantability or fitness for a particular purpose. Company and CRISPR understand that each Product is the subject of ongoing research and Development and that neither Party can assure the safety, usefulness or commercial or technical viability of any Product.

ARTICLE 6.
TERM; TERMINATION

6.1. **Contribution Agreement Term; Expiration**. This Contribution Agreement is effective as of the Effective Date and shall terminate upon termination of the Joint Venture Agreement.

6.2. **Consequences of Expiration or Termination of the Contribution Agreement**.

6.2.1. If this Contribution Agreement terminates in accordance with Section 6.1, the terms of Section 16.2 of the Joint Venture Agreement shall determine the consequences of termination of the Contribution Agreement.

6.2.2. The following provisions of this Contribution Agreement will survive termination of this Contribution Agreement: 5.5 and Articles 7, 8, 9 and 10.

ARTICLE 7.
CONFIDENTIALITY

7.1. **Confidentiality.** All Information under this Contribution Agreement shall be governed by the Confidentiality provisions specified in Article 4 of the Intellectual Property Management Agreement and such Article 4 is hereby incorporated by reference.

ARTICLE 8.
DISPUTE RESOLUTION

8.1. **Referral to Heads of Businesses.** Unless otherwise specified in this Contribution Agreement, the Parties hereby agree that to the extent reasonably practicable and would not materially prejudice a Party, controversies or claims arising out of or relating to this Contribution Agreement or the interpretation, performance, breach, termination or validity thereof shall first be referred to CRISPR's Chief Executive Officer and Company's Chief Executive Officer for resolution. If these individuals are unable to agree upon a resolution within thirty (30) days after referral of the matter to them, then either Party may pursue any available remedy hereunder, at law or in equity.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.2. **Attorneys' Fees.** If any action at law or in equity (including, arbitration) is necessary to enforce or interpret the terms of this Contribution Agreement, including claims for fraud and/or fraudulent inducement, the prevailing Party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such Party may be entitled.

8.3. **Jurisdiction.** Unless otherwise specified in this Contribution Agreement, each Party to this Contribution Agreement, by its execution hereof, unless otherwise prohibited by applicable Law (i) hereby irrevocably submits to the exclusive jurisdiction of the state courts of the State of New York in the Borough of Manhattan and to the United States District Court for the Southern District of New York for the purpose of any action among the Parties, (ii) hereby waives and agrees not to assert, by way of motion, as a defense or otherwise, in any such action, any claim that it is not subject personally to the jurisdiction of the above-named courts, that any such action brought in one of the above-named courts should be dismissed on grounds of forum non conveniens, should be transferred or removed to any court other than one of the above-named courts, or should be stayed by reason of the pendency of some other proceeding in any court other than one of the above-named courts, or that this Contribution Agreement or the subject matter hereof may not be enforced in or by such court and (iii) to the extent that an action can be commenced in a court, agrees not to commence any such action in any court other than before one of the above-named courts. Notwithstanding the previous sentence, a Party hereto may commence any action in a court other than the above-named courts for the purpose of enforcing an order or judgment issued by one of the above-named courts.

8.4. **Venue**. No Party hereto will assert that venue should properly lie in any other location within the selected jurisdiction.

8.5. **Specific Performance**. Each of the Parties hereto acknowledges and agrees that the other Party would be damaged irreparably in the event any of the provisions of this Contribution Agreement are not performed in accordance with their specific terms or otherwise are breached or violated. Accordingly, each of the Parties hereto agrees that, without posting a bond or other undertaking, the other Party may seek (and obtain) an injunction or injunctions to prevent breaches or violations of the provisions of this Contribution Agreement and to enforce specifically this Contribution Agreement and the terms and provisions hereof in any Action instituted in any court specified herein. An Action for specific performance as provided herein shall not preclude a Party hereto from pursuing any other remedy to which such Party may be entitled, at law or in equity, in accordance with the terms of this Contribution Agreement. Each Party hereto further agrees that, in the event of any action for specific performance in respect of such breach or violation, it will not assert that the defense that a remedy at law would be adequate provided, however, each Party hereto also agrees that any Party hereto can assert any other defense it may have other than the defense of adequate remedy at law.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.6. **Governing Law.** The Parties agree that this Contribution Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

ARTICLE 9.
ASSIGNMENT

9.1. **Assignment**. Except as permitted under the Joint Venture Agreement (including a Permitted COC Transfer complying with Article 11 of the Joint Venture Agreement) or this Contribution Agreement, (a) any of the rights, interests and obligations created herein shall not be transferred or assigned to any Third Party and such rights and interests shall not inure to the benefit of any other Person, including any trustee in bankruptcy, receiver or other successor of either of the Parties, whether by operation of Law, sub-license, transfer of the assets, merger, liquidation or otherwise, without the prior written consent of the other Party, and (b) any purported or actual transfer or assignment of any such rights, interests or obligations without the prior written consent of the other Party is and shall be null and void ab initio; provided, however, that either of the Parties may, without consent of the other Party, assign its respective rights and obligations under this Contribution Agreement to a successor company of such Party as the result of an internal corporate reorganization to a wholly-owned Affiliate of such Party; provided that the assigning Party shall remain primarily liable hereunder. In addition to the requirements of the prior sentence, if this Contribution Agreement is assigned to a Third Party by a Party, as a condition to such assignment, all other Transaction Documents to which such Party is a party shall concurrently be assigned to such Third Party and all Interests of such Party and its Affiliates are to be transferred to such Third Party.

ARTICLE 10.
NOTICES AND MISCELLANEOUS

10.1. **Form of Valid Notice**.

(a) All notices or other communications provided for in this Contribution Agreement or that may otherwise be required must be in writing, clearly legible and shall be sent:

(i) by an internationally recognized courier service with acknowledgment of receipt, properly addressed, and postage pre-paid;

(ii) by e-mail; or

(iii) by personal delivery.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) Any notice sent by one of the means described in Section 10.1(a) will be deemed received:

(i) if sent by an internationally recognized courier service, three (3) Business Days after deposit with such courier service,

(ii) if sent by e-mail, when there is effective acknowledgment of receipt, or

(iii) if delivered personally, when delivered.

10.2. **Persons and Addresses**. Except as may otherwise be provided, all notices or other communications provided for in this Contribution Agreement or that a Party may otherwise be required to give to the other Party shall be sent as provided in Section 10.1 to the following persons at the addresses stated herein or at such other address as either Party may specify by notice to the other Party given in accordance with this Article 10:

To CRISPR:

CRISPR Therapeutics AG
Aeschenvorstadt 36
4051 Basel
Switzerland
Attention: Chief Executive Officer and Chief Legal Officer

and

CRISPR Therapeutics Ltd.
85 Tottenham Court Road
London W1T 4TQ
United Kingdom
Attention: Chief Legal Officer

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

With a copy to: Goodwin Procter LLP
53 State Street
Boston, MA 02109
USA
Attention: Mitchell S. Bloom and Robert E. Puopolo

and

Bayer Aktiengesellschaft
Kaiser-Wilhelm-Allee
51368 Leverkusen
Germany
Attention: Dr. Axel Bouchon and Dr. Jan Heinemann

Norton Rose Fulbright US LLP
801 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2623
USA
Attention: Marilyn Mooney

To Company: VIVR LLP
c/o Taylor Wessing
5 New Street Square
London EC4A 3TW
Attn: Andrew Davis

With a copy to:

Taylor Wessing
5 New Street Square
London EC4A 3TW
Attn: Andrew Davis

Solely for purposes of enforcing its rights to receive copies of notices to CRISPR under this Section 10.2, Bayer shall be an express Third Party beneficiary of Section 10.2 of this Contribution Agreement.

10.3. **Miscellaneous.**

(a) No amendment, modification or addition to any provision of this Contribution Agreement shall be valid unless the same shall be in writing and approved by the signature of each Party.

(b) The terms and conditions of this Contribution Agreement shall be interpreted according to the common sense meaning intended by the Parties and in accordance with the principles of good faith and fair dealing.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(c) The Parties have participated jointly in the negotiation and drafting of this Contribution Agreement. In the event an ambiguity or question of intent or interpretation arises, this Contribution Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Contribution Agreement. Any reference to any federal, state, local or foreign statute or law shall be deemed also to refer to all rules and regulations promulgated thereunder, unless the context requires otherwise.

(d) Every day commences at 12:00 a.m. and ends at 11:59 p.m. (midnight) New York time. Any reference in this Contribution Agreement to a number of days "in" which an action or notice is to be taken or given, shall be interpreted in such way that the term commences the day after the date taken as reference and that the action or notice shall be validly taken or given at the last day. Any reference in this Contribution Agreement to a "day" or a number of "days" without explicit qualification of "business" shall be interpreted as a reference to a calendar day or number of calendar days. If any action or notice is to be taken or given on or by a particular calendar day, and such calendar day is not a Business Day, then such action or notice shall be deferred until, or may be taken or given on, the next Business Day.

(e) In the event either Party becomes a debtor under Title 11 of the U.S. Code, this Contribution Agreement shall be deemed to be, for purposes of Section 365(n) of Title 11, a license to "Intellectual Property" as defined therein and the other Party and its Affiliates, and each of their successors and assigns as licensees shall have the rights and elections as specified in Section 365(n) of Title 11 of the U.S. Code. Without limiting the foregoing, upon termination of this Contribution Agreement by a trustee or executor of either Party which has rejected this Contribution Agreement pursuant to any non-contractual rights afforded to it by applicable bankruptcy law and/or a U.S. or foreign bankruptcy court or other tribunal of competent jurisdiction, all rights and licenses herein granted to the other Party shall nonetheless continue in full force and effect in accordance with the terms of this Contribution Agreement. The debtor Party shall take such actions to provide similar protections for the non-debtor Party pursuant to similar laws in other jurisdictions.

(f) This Contribution Agreement shall constitute the entire agreement and understanding between the Parties and shall supersede and nullify any and all previous agreements, negotiations, commitments, undertakings and declarations

heretofore made between the Parties in respect of the subject matter of this Contribution Agreement unless expressly provided for herein or in any schedule attached hereto and any other agreement entered in connection herewith.

(g) Words importing gender include all genders.

(h) The division of this Contribution Agreement into articles, sections and clauses, the inclusion of a table of contents and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Contribution Agreement.

(i) Each provision contained in this Contribution Agreement is distinct and severable. A declaration of invalidity, illegality or unenforceability of any provision or a part thereof by an arbitrator, a court or a tribunal of competent jurisdiction shall not affect the validity or enforceability of any other provision of this Contribution Agreement. To the extent permitted by law, if any provision of this Contribution Agreement, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (i) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (ii) the remainder of this Contribution Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

(j) Any mistaken reference to Articles, clauses, Sections, Schedules or paragraphs of this Contribution Agreement shall be amended according to common sense and good faith rules. When a reference is made in this Contribution Agreement to an Article, clause, Section, Schedule or paragraph, such reference will be to an Article, clause, Section, Schedule or paragraph unless otherwise indicated.

(k) No waiver by any Party of any default, misrepresentation or breach of warranty or covenant hereunder, whether intentional or not, shall be deemed to extend to any prior or subsequent default, misrepresentation or breach of warranty or covenant hereunder or affect in any way any rights arising by virtue of any prior or subsequent such occurrence. No single or partial exercise of any right, power or privilege shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege unless explicitly provided for in this Contribution Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(l) Subject to the terms of and restrictions in this Contribution Agreement, the reference to any Party shall include its successors or permitted transferees that have legally acquired its rights, obligations and/or duties. This Contribution Agreement shall be binding upon and inure solely to the benefit of the Parties and their respective successors and permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever, unless otherwise specified therein.

(m) EACH OF THE PARTIES HEREBY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY ACTION OR LIABILITY DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS CONTRIBUTION AGREEMENT OR THE TRANSACTIONS CONTEMPLATED BY THIS CONTRIBUTION AGREEMENT. EACH OF THE PARTIES HEREBY (A) CERTIFIES THAT NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF ANY SUCH ACTION OR LIABILITY, SEEK TO ENFORCE THE FOREGOING WAIVER; AND (B) ACKNOWLEDGES THAT IT HAS BEEN INDUCED TO ENTER INTO THIS CONTRIBUTION AGREEMENT AND THE TRANSACTIONS CONTEMPLATED BY THIS CONTRIBUTION AGREEMENT, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 10.3(m).

(n) This Contribution Agreement may be executed and delivered (including by means of electronic transmission, such as by electronic mail in ".pdf" form) in two or more counterparts, and by the different Parties in separate counterparts, each of which when executed shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement.

(o) Whenever the words "include," "includes" or "including" are used in this Contribution Agreement, they will be deemed to be followed by the words "without limitation." The words "hereof," "herein" and "hereunder" and words of similar import when used in this Contribution Agreement will refer to this Contribution Agreement as a whole and not to any particular provision of this Contribution Agreement. All terms used herein with initial

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

capital letters have the meanings ascribed to them herein and all terms defined in this Contribution Agreement will have such defined meanings when used in any certificate or other document made or delivered pursuant hereto unless otherwise defined therein. The definitions contained in this Contribution Agreement are applicable to the singular as well as the plural forms of such terms. Any agreement, instrument or statute defined or referred to herein, or in any agreement or instrument that is referred to herein, means such agreement, instrument or statute as from time to time amended, modified or supplemented, including (in the case of agreements or instruments) by waiver or consent and (in the case of statutes) by succession of comparable successor statutes and references to all attachments thereto and instruments incorporated therein. The use of "or" is not intended to be exclusive unless expressly indicated otherwise. References to sums of money are expressed in lawful currency of the United States (U.S. dollars), unless the Parties otherwise agree in writing to use a different currency.

(p) Both Parties are independent contractors under this Contribution Agreement. Nothing herein contained will be deemed to create an employment, agency, joint venture or partnership relationship between the Parties hereto or any of their agents or employees, or any other legal arrangement that would impose liability upon one Party for the act or failure to act of the other Party, except to the extent specifically agreed to in a written agreement signed by the Parties. Neither Party will have any express or implied power to enter into any contracts or commitments or to incur any liabilities in the name of, or on behalf of, the other Party, or to bind the other Party in any respect whatsoever.

[SIGNATURE PAGE FOLLOWS]

* - * - * - *

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the Parties have caused this Contribution Agreement to be executed by their representatives thereunto duly authorized as of the Effective Date.

VIVR LLP

By: /s/ Axel Bouchon
Name: Axel Bouchon
Title: General Manager

CRISPR THERAPEUTICS AG

By: /s/ Rodger Novak
Name: Rodger Novak
Title: CEO

CRISPR THERAPEUTICS, INC.

By: /s/ Rodger Novak
Name: Rodger Novak
Title: CEO

CRISPR THERAPEUTICS LIMITED

By: /s/ Rodger Novak
Name: Rodger Novak
Title: CEO

TRACR HEMATOLOGY LTD

By: /s/ Rodger Novak
Name: Rodger Novak
Title: CEO

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule 5.2

CRISPR Disclosures

5.2.2.

See Schedule 5.2.7 regarding […***…] *(as defined in 5.2.7).*

5.2.4.

See Schedule 5.2.7 regarding […***…].

5.2.5.

See Schedule 5.2.7 regarding […***…].

5.2.6.

See Schedule 5.2.7 regarding […***…]*; and reference to cases that are licensed in Section A.*

5.2.7.

CRISPR Platform Technology Patents

A. CRISPR Platform Technology Patents Licensed from Emmanuelle Charpentier

Foundational patent applications related to Crispr-Cas9 gene editing technologies licensed to CRISPR by Emmanuelle Charpentier:

[…***…].

The named applicant co-owners of the foregoing patent applications are Dr. Emmanuelle Charpentier, the Regents of the University of California and the University of Vienna.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Emmanuelle Charpentier has licensed her rights in the inventions to CRISPR AG and TRACR Hematology Ltd. for the commercialisation of therapeutic products; and has retained the nontransferable right, without the right to license or sublicense, to use the inventions for her own research purposes and in research collaborations.

[…***…].

[…***…].

B. CRISPR Platform Technology Patents Filed by the Company

The following cases represent CRISPR Platform Technology Patents filed by the Company that relate to various improvements and uses of Crispr-Cas9 gene editing.

[…***…]

CRISPR Background Technology Patents

The patents listed on the attached Appendix 1 to this Schedule are patents related to […***…]

Material Agreements Relating to Contributed Technology

Material agreements relating to CXX Contributed Technology:

- *License Agreement of April 15, 2014 by and between Emmanuelle Marie Charpentier and Crispr Therapeutics AG*
- *License Agreement of April 15, 2014 by and between Emmanuelle Marie Charpentier and Tracr Hematology Ltd*
- *Patent Assignment Agreement of November 7, 2014 by and among Emmanuelle Marie Charpentier, The University of Vienna, Ines Fonfara and Crispr Therapeutics AG*
- *Non-Exclusive License Agreement of November 23, 2014 between Childrens Medical Center Corporation and Tracr Hematology Ltd*
- *Non-Exclusive License Agreement of July 1, 2015 between Georgia Tech Research Corporation and Crispr Therapeutics AG*

5.2.9

See Schedule 5.2.7 regarding Certain Co-Owner Consents ex-US.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2.11

The Charpentier-licensed IP identified in Schedule 5.2.7 has been the subject of third party observations filed in the following patent offices: European Patent Office, the UK Intellectual Property Office, the US Patent and Trademark Office and the World Intellectual Property Office ("Third Party Observations").

The Broad Institute is the applicant or owner of a series of competing cases claiming Crispr-Cas9 gene editing (which cases generally claim priority to one or more provisional applications identifying at least Feng Zhang as an inventor, including without limitation U.S. provisional patent application 61/736,527, dated December 12, 2012, as well as foreign counterparts thereof). The Broad Institute has filed Information Disclosure Statements in its various U.S. cases attacking the Charpentier-licensed IP, and it and/or related entities are considered to be among the parties filing third party observations.

The Charpentier-UC applicants have filed a Suggestion of Interference Pursuant to 37 C.F.R. § 41.202 with the U.S. Patent & Trademark Office in connection with numerous U.S. patents issued to the Broad Institute (the "Potential Interference"). The Suggestion of Interference was filed in U.S. Serial No. 13/842,859 on April 13, 2015.

CRISPR has not, of record, filed any third party observations against adverse applicants ("TPOs Against Others"); […***…].

CRISPR has filed an opposition ("Opposition") against the following grant to the Broad Institute in the European Patent Office: EP B1 277 1468.

The patent applications listed below and counterparts thereof generally include claims to Crispr-Cas9 gene editing with priority applications filed in 2012, and there have since been numerous additional patent applications claiming variations of Crispr-Cas gene editing and various uses of Crispr-Cas gene editing for the development of potential products filed after 2012 that are readily identifiable by searching patent databases for Crispr-Cas gene editing, which Third Party applicants, applications or patents (individually and collectively "Third Party IP") could become involved in challenges related to the Licensed Technology and/or to products to be developed pursuant to such technology (together with the Third Party Observations and the Potential Interference referred to in the preceding paragraphs being individually and collectively the "Third Party Matters"):

[…***…]

[…***…]

[…***…]

[…***…]

[…***…]

5.2.12

See Schedule 5.2.11 regarding the Potential Interference, TPOs Against Others and an Opposition (each as defined in Schedule 5.2.11).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2.14

See Material Agreements Relating to Contributed Technology (as provided in Schedule 5.2.7), each of which (except for the non-exclusive license agreement with Georgia Tech Research Corporation) provides for the payment of royalties in connection with commercialisation of licensed products - but no commercialisation has yet occurred and therefore no royalties have yet been paid.

5.2.15.

See Schedule 5.2.7, in connection with which it is noted that CRISPR is not an owner of the Platform Technology Patents listed in Part A, nor of the Background Patent non-exclusively licensed to CRISPR from […***…].

5.2.16.

See Schedule 5.2.7, in connection with which it is noted that Charpentier is a co-owner of numerous patent applications as noted, and other co-owners and their licensees and certain governmental and non-profit entities also have rights in such cases.

5.2.17.

See Schedule 5.2.7, in connection with which it is noted that Charpentier is a co-owner (and co-developer) of know-how related to the technologies described in the patent applications as noted, and therefore other co-owners and their licensees and certain non-profit entities have also had access to such know-how, as well as patent applications.

5.2.18.

See Schedule 5.2.7, in connection with which it is noted that Charpentier is a co-owner of numerous patent applications as noted with the University of California, which has indicated that the invention was made with government support under Grant No. GM081879 awarded by the National Institutes of Health, and that the U.S. government has certain rights in the invention; […***…].

5.2.19.

See Schedule 5.2.11 regarding Third Party IP (as defined in Schedule 5.2.11).

5.2.21.

See Schedule 5.2.11 regarding Third Party Matters (as defined in Schedule 5.2.11).

5.2.22.

See Schedule 5.2.11 regarding Third Party Matters (as defined in Schedule 5.2.11).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

APPENDIX 1

Patent Rights

[…***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SPECIFIC TERMS IN THIS EXHIBIT HAVE BEEN REDACTED BECAUSE CONFIDENTIAL TREATMENT FOR THOSE TERMS HAS BEEN REQUESTED. THESE REDACTED TERMS HAVE BEEN MARKED IN THIS EXHIBIT WITH THREE ASTERISKS [***]. AN UNREDACTED VERSION OF THIS EXHIBIT HAS BEEN SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

Exhibit 10.3

THIS OPTION AGREEMENT (the "Agreement") is made and entered into as of March 16, 2016 (the "Effective Date"), by and among, CRISPR Therapeutics AG, a stock corporation (*Aktiengesellschaft)* organized under the laws of Switzerland and registered under the registration number CHE-494.642.722 ("CRISPR"), and Bayer HealthCare LLC, a limited liability company incorporated under the laws of Delaware ("Bayer") and VIVR, LLP ,a limited liability partnership incorporated under the laws of England and Wales ("Company"). Bayer and CRISPR, collectively, are the "Optionees" and each, individually, is an "Optionee". Terms not otherwise defined herein shall have the meaning set forth in that certain Joint Venture Agreement, dated as of December 19, 2015 (as amended, restated, or otherwise modified from time to time, the "JV Agreement").

WHEREAS, CRISPR and Bayer are parties to the JV Agreement; and

WHEREAS, the Company desires to provide for an option to each Optionee with respect to Licensed Products developed under the JV Agreement.

NOW THEREFORE, the Optionees and the Company agree as follows:

ARTICLE 1 DEFINITIONS

The following terms shall have the following meanings:

1.1 "Affiliate" or "Affiliates" means, with respect to any entity, any Person that directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such entity; and for the purposes of this definition, "control" (and the terms "controlled by" and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such entity, directly or indirectly, whether through the ownership of voting securities or by contract or otherwise. Without limiting the generality of the foregoing, a Person shall be deemed to control another Person if any of the following conditions is met: (a) in the case of corporate entities, direct or indirect ownership of at least fifty percent (50%) of the stock or shares having the right to vote for the election of directors, and (b) in the case of non-corporate entities, direct or indirect ownership of at least fifty percent (50%) of the equity interest with the power to direct the management and policies of such non-corporate entities. The Parties acknowledge that in the case of certain entities organized under the laws of certain countries outside of the United States, the maximum percentage ownership permitted by law for a foreign investor may be less than fifty percent (50%), and that in such case such lower percentage shall be substituted in the preceding sentence, provided that such foreign investor has the power to direct the management and policies of such entity. For the purposes of this Agreement, (i) no Party or any of its Affiliates shall be considered an Affiliate of any other Party or any of its Affiliates or of the Company or any of its Affiliates, and neither the Company nor any of its Affiliates shall be considered an Affiliate of any Party or any of its Affiliates, simply by virtue of this Agreement or the relationships created hereby or by the Company Organization Documents or any Local Operating Agreement, and (ii) no Person shall be considered an Affiliate of a Party solely as a result of their right to designate a member of such Party's board of directors.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.2 “Approval Application” means, with respect to a Licensed Product in a particular jurisdiction, an application for approval, license, registration or authorization necessary for the Commercialization of such Licensed Product in such jurisdiction, including, with respect to the United States, an application for approval for such Licensed Product by the FDA, and with respect to the European Union, an application for approval for such Licensed Product by the European Commission.

1.3 “Bayer Field” means any Field under the heading “Bayer Field” on Schedule 3.1 of the JV Agreement.

1.4 “Business Day” means any day other than a Saturday, a Sunday or a day on which banks in New York City, United States of America or Frankfurt-Main, Germany or Leverkusen, Germany are authorized or obligated by applicable law or executive order to close.

1.5 “Change of Control” means, with respect to Party, any of the following events: (a) any Person is or becomes the “beneficial owner” (as such term is used in Section 13(d) of the Securities Exchange Act of 1934, as amended, and Rule 13d-3 thereunder, except that a Person shall be deemed to have “beneficial ownership” of all shares that any such Person has the right to acquire, whether such right may be exercised immediately or only after the passage of time), directly or indirectly, of a majority of the total voting power represented by all classes of capital stock then outstanding of Party normally entitled to vote in elections of directors; (b) Party consolidates with or merges into another corporation or entity, or any corporation or entity consolidates with or merges into Party, other than (i) a merger or consolidation that would result in the voting securities of Party outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) a majority of the combined voting power of the voting securities of Party or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (ii) a merger or consolidation effected to implement a recapitalization of Party (or similar transaction) in which no Person becomes the beneficial owner, directly or indirectly, of voting securities of Party representing a majority of the combined voting power of Party’s then outstanding securities; or (c) Party conveys, transfers or leases all or substantially all of its assets to any Person other than a wholly-owned Affiliate of such Party; provided, that a financing transaction, the primary purpose of which is to raise capital for such Party, shall in no event be considered a Change of Control.

1.6 “Clinical Trial” means a study in humans that is designed to generate data in support of an Approval Application.

1.7 “Commercialize” or “Commercialization” means to market, promote, distribute, offer for sale, sell, have sold, import, export or otherwise commercialize a product, to conduct activities, other than, Development and Manufacturing, in preparation for the foregoing activities, including obtaining Price Approval, and to conduct Clinical Trials and post-Marketing Approval studies. When used as a noun, “Commercialization” means any and all activities involved in Commercializing.

1.8 “Commercially Reasonable Efforts” means with respect to the efforts to be expended by any Person, with respect to any objective, reasonable, diligent and good faith efforts to

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

accomplish such objective. With respect to any Objective relating to the research, Development or Commercialization of a Licensed Agent or Licensed Product, "Commercially Reasonable Efforts" means that level, caliber and quality of efforts and resources reasonably and normally used (as to CRISPR) by biopharmaceutical companies with adequate financing and resources, (as to Company), by biopharmaceutical companies of similar size to Company with adequate financing and resources and (as to Bayer) as Bayer would normally use to accomplish a similar objective under similar circumstances, as to a potential or actual product that is important to such Person's overall strategy or Objectives, taking into account, without limitation, with respect to each Licensed Agent or Licensed Product, (a) issues of safety, efficacy, product profile, (b) likelihood of receiving Marketing Approval for the applicable Licensed Product, (c) potential to accelerate the development and regulatory timelines for the Licensed Product, (d) regulatory structure involved, (e) Regulatory Authority-approved labeling, (f) market potential of the Licensed Product, (g) potential benefit of the Licensed Product to patients with the relevant indication, (h) competitiveness in the marketplace, (i) proprietary position and (j) other relevant scientific, technical and business factors deemed relevant by the applicable Party. "Commercially Reasonable Efforts" shall be determined on a country-by-country basis and activities that are conducted in one country that have an effect on achieving the relevant Objective in another country shall be considered in determining whether Commercially Reasonable Efforts have been applied in such other countries.

1.9 "Control" means with respect to any Know-How or Patent or other data, information or Materials, possession of the ability by a Party or its Affiliate(s) (whether by sole or joint ownership, license or otherwise, but in all cases not including when such rights are granted or obtained pursuant to the Transaction Documents) to grant, without violating the terms of any agreement with a Third Party, a license, access or other right in, to or under such Know-How or Patent or other data, information or Materials. Notwithstanding anything in the Transaction Documents to the contrary, a Party will be deemed to not Control any Patents or Know-How that are owned or controlled by a Third Party described in the definition of "Change of Control," or such Third Party's Affiliates (other than an Affiliate of such Party prior to the Change of Control), (a) prior to the closing of such Change of Control, except to the extent that any such Patents or Know-How were developed prior to such Change of Control through the use of such Party's technology, or (b) after such Change of Control to the extent that such Patents or Know-How are developed or conceived by such Third Party or its Affiliates (other than such Party) after such Change of Control without using or incorporating such Party's technology. A Party does not need to amend any existing in-license as of the Effective Date so that such Party "Controls" any IP under such given in-license.

1.10 "Covered Target" means a Target as and for so long as such Target remains the subject of a license or similar grant of rights under the Existing Third Party Agreement. For the avoidance of doubt, Covered Targets shall not be deemed Third-Party Targets or Excluded Covered Targets.

1.11 "Crispr/Cas Technology" means clustered regularly interspaced short palindromic repeats (CRISPR)/CRISPR-associated (Cas) protein system that comprises (a) at least one guide RNA element that is complementary to a Target, wherein said guide RNA element can be a guide RNA or a polynucleotide(s) encoding such guide RNA, and (b) a nuclease element, wherein said nuclease element is a Cas nuclease protein.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.12 “CRISPR Field” means any Field under the heading “CRISPR Field” on Schedule 3.1 of the JV Agreement.

1.13 “Develop” or “Development” means, with respect to a Licensed Agent, all clinical and non-clinical research and development activities conducted for such Licensed Agent, including toxicology, pharmacology test method development and stability testing, process development, formulation development, delivery system development, quality assurance and quality control development, statistical analysis, Clinical Trials (other than post-Marketing Approval Clinical Trials), regulatory affairs, pharmacovigilance, Clinical Trial regulatory activities and obtaining and maintaining Regulatory Approval. When used as a verb, “Develop” or “Developing” means to engage in Development.

1.14 “EMA” means the European Medicines Agency and any successor entity thereto.

1.15 “Existing Third Party Agreement” means that certain Strategic Collaboration, Option and License Agreement entered into by and between CRISPR (and certain of its Affiliates) and Vertex Pharmaceuticals, Incorporated (and certain of its Affiliates) dated as of October 26, 2015.

1.16 “European Commission” means the European Commission or any successor entity that is responsible for granting Marketing Approvals authorizing the sale of pharmaceuticals in the European Union.

1.17 “European Union” or “EU” means each and every country or territory that is officially part of the European Union.

1.18 “FDA” means the United States Food and Drug Administration and any successor agency thereto.

1.19 “Fields” means the CRISPR Fields and the Bayer Fields, provided fields shall not include diagnosis, prevention or treatment of cystic fibrosis.

1.20 “FTE” shall mean a full time equivalent employee (*i.e.*, one fully-committed or multiple partially-committed employees aggregating to one full-time employee) employed or contracted by a Party and assigned to perform specified work, with such commitment of time and effort to constitute one employee performing such work on a full-time basis, which for purposes hereof shall be eighteen hundred (1,800) hours per year.

1.21 “GAAP” means United States generally accepted accounting principles, consistently applied, as in effect from time to time.

1.22 “Governmental Authority” means any court, agency, authority, department, regulatory body or other instrumentality of any government or country or of any national, federal, state, provincial, regional, county, city or other political subdivision of any such government or any supranational organization of which any such country is a member.

1.23 “IFRS” means International Accounting Standards/International Financial Reporting Standards of the International Accounting Standards Board as amended from time to time.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.24 “IND” means with respect to each Licensed Product in a Field, an Investigational New Drug Application filed with the FDA with respect to such Licensed Product, as described in the FDA regulations, including all amendments and supplements to the application, and any equivalent filing with any Regulatory Authority outside the United States.

1.25 “Intellectual Property” means (i) patents (including utility, design, plant, utility model, reissues, re-examination, and patents of addition), patent applications (filed, unfiled or being prepared), records of invention, (ii) trademarks (registered or unregistered), trademark applications, trade names, copyrights (registered or unregistered), copyright applications, mask works, service marks (registered or unregistered), service mark applications, database rights (registered or unregistered), all together with the goodwill associated with such marks or names, (iii) trade secrets, technology, inventions, know-how, processes and confidential and proprietary information, including any being developed (including but not limited to designs, manufacturing data, design data, test data, operational data, and formulae), whether or not recorded in tangible form through drawings, software, reports, manuals or other tangible expressions, whether or not subject to statutory registration, anywhere, and all rights to any of the foregoing.

1.26 “Intellectual Property Management Agreement” means that certain Intellectual Property Management Agreement by and among the Company, Bayer, CRISPR and certain of CRISPR’s Affiliates dated as of March 16, 2016.

1.27 “Know-How” means Intellectual Property, data, results, pre-clinical and clinical protocols and data from studies and Clinical Trials, chemical structures, chemical sequences, information, inventions, know-how, formulas, trade secrets, techniques, methods, processes, procedures and developments, whether or not patentable; *provided* that Know-How does not include Patents claiming any of the foregoing.

1.28 “Law” or “Laws” means all applicable laws, statutes, rules, regulations and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, agency or other body, domestic or foreign, including any applicable rules, regulations, guidelines, or other requirements of the Regulatory Authorities that may be in effect from time to time.

1.29 “Licensed Agent” means a product comprising (a) all components of a Crispr/Cas Technology, for Targeting a Target, where such Crispr/Cas Technology, or any portion thereof is discovered by or on behalf of the Company or a Local Operating Entity (solely or jointly with such entities), or is in the Company’s or a Local Operating Entity’s Control, prior to the Effective Date, or during the Technology Term or (b) modified human cells or tissue, or another cell- or tissue-based product, or any other therapeutic product comprising or produced using the Crispr/Cas Technology, in each case produced using the components referred to in clause (a).

1.30 “Licensed Product” means any Product that (i) has been licensed by a Party following opt-in or (ii) licensed to a Third Party. All Products comprising the same Licensed Agent(s) (and no additional Licensed Agents) will be considered the same Licensed Product under this Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.31 “Local Operating Agreement” means, as applicable, any agreement governing the formation and operation of any Local Operating Entity formed pursuant to Section 3.3 of the JV Agreement.

1.32 “Local Operating Entity” means any local operating entity formed by the Company pursuant to Section 3.3 of the JV Agreement.

1.33 “Manufacture” or “Manufacturing” means activities directed to making, having made, producing, manufacturing, processing, filling, finishing, packaging, labeling, quality control testing and quality assurance release, shipping or storage of a product.

1.34 “Marketing Approval” means, with respect to a Licensed Product in a particular jurisdiction, all approvals, licenses, registrations or authorizations necessary for the Commercialization of such Licensed Product in such jurisdiction, including, with respect to the United States, approval of an Approval Application for such Licensed Product by the FDA and with respect to the European Union, approval of an Approval Application for such Licensed Product by the European Commission.

1.35 “Materials” means all biological materials or chemical compounds arising out of a Party’s activities under this Agreement or otherwise provided by a Party for use by the other Party to conduct activities pursuant to this Agreement, including Licensed Agents, Clinical Trial samples, cell lines, assays, viruses and vectors.

1.36 “Out-of-Pocket Costs” means, with respect to a Party, costs and expenses paid by such Party to Third Parties (or payable to Third Parties and accrued in accordance with GAAP or IFRS), other than Affiliates or employees of such Party.

1.37 “Party” or “Parties” means, when used in singular, any signatory to the applicable agreement, as the context may require, and when used in plural, all signatories to the applicable agreement, and any permitted successor or assign thereto.

1.38 “Patents” means the rights and interests in and to issued patents and pending patent applications and similar government-issued rights (e.g., utility models) protecting inventions in any country, jurisdiction or region (including inventor’s certificates and utility models), including all priority applications, international applications, provisionals, non-provisionals, substitutions, continuations, continuations-in-part, divisionals, renewals and all patents granted thereon, and all reissues, reexaminations, extensions, confirmations, revalidations, registrations and patents of addition thereof, including patent term extensions and supplementary protection certificates, international patent applications filed under the Patent Cooperation Treaty (PCT) and any foreign equivalents to any of the foregoing.

1.39 “Person” means any individual, partnership, limited partnership, limited liability company, joint venture, syndicate, sole proprietorship, company or corporation with or without share capital, unincorporated association, trust, trustee, executor, administrator or other legal personal representative or governmental body.

1.40 “Price Approval” means, in any country where a Governmental Authority authorizes reimbursement for, or approves or determines pricing for, pharmaceutical products, receipt (or, if required to make such authorization, approval or determination effective, publication) of such reimbursement authorization or pricing approval or determination.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.41 “Primary Indication” means, with respect to a Target, the condition or disease that is most closely associated with the diagnosis, prevention or treatment through Targeting such Target as determined by the then-current weight of reliable scientific authority, for example, as reflected in peer-reviewed publications.

1.42 “Product” means any pharmaceutical product, medical therapy, preparation, substance, or formulation comprising or employing, in whole or in part, a Licensed Agent.

1.43 “Registration Filing” means any submission to a Regulatory Authority of any appropriate regulatory application for Regulatory Approval.

1.44 “Regulatory Approval” means the technical, medical and scientific licenses, registrations, authorizations and approvals (including approvals of Approval Applications, supplements and amendments, pre- and post- approvals, and labeling approvals) of any Regulatory Authority, necessary for the research, Development, clinical testing, commercial manufacture, distribution, marketing, promotion, offer for sale, use, import, export or sale of a pharmaceutical product in a regulatory jurisdiction, including Marketing Approval.

1.45 “Regulatory Authority” means, with respect to a country in the Territory, any national (*e.g.*, the FDA), supra-national (*e.g.*, the European Commission, the Council of the European Union, or the EMA), regional, state or local regulatory agency, department, bureau, commission, council or other Governmental Authority involved in the granting of Regulatory Approvals or Price Approvals for pharmaceutical products in such country or countries.

1.46 “Target” means […***…]. The Targets as of the Effective Date are listed on Schedule A of the JV Agreement with an indication of […***…]. Additional Targets may be included after the Effective Date solely by updating Schedule A of the JV Agreement in accordance with Section 7.13 of the JV Agreement.

1.47 “Targeting” means editing, engineering or modulating (including by means of gene knock-out, gene tagging, gene disruption, gene mutation, gene insertion, gene deletion, gene activation, gene silencing or gene knock-in) a Target or an Excluded Target or a Covered Target by means of hybridizing a guide RNA of the Crispr/Cas Technology to such Target or Excluded Target or Covered Target.

1.48 “Technology Term” means from the Effective Date until the Company is no longer Developing Licensed Agents or Licensed Products.

1.49 “Territory” means all the countries of the world.

1.50 “Third Party” means any Person other than Bayer or CRISPR or any Affiliate of either Party.

1.51 “Third-Party Target” means a Target that is the subject of a license or similar grant of rights pursuant to an agreement between CRISPR or one of its Affiliates and a Third-Party;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

provided, that such Target was licensed in accordance with the procedures set forth in Section 3.7 of the JV Agreement. For the avoidance of doubt, Third-Party Targets include all Excluded Targets.

The following terms shall have the meanings defined in the Section or Schedule indicated. Unless otherwise noted, the indicated Section or Schedule refers to the appropriate Section or Schedule of this Agreement.

Additional Information	Section 2.4(a)
Agreement	First Paragraph
Antitrust Approval	Exhibit C
Antitrust Authority	Exhibit C
Antitrust Condition	Exhibit C
Antitrust Filing	Exhibit C
Antitrust Law	Exhibit C
[…***…]	[…***…]
Bayer	First Paragraph
Buffer Period	Section 2.4(a)
CRISPR	First Paragraph
[…***…]	[…***…]
Company	First Paragraph
Company Organization Documents	Section 3.2(b)(i) of the JV Agreement
Effective Date	First Paragraph
Excluded Covered Targets	Section 3.6(i) of the JV Agreement
Exclusive Field Party	Section 2.5(b)
Excluded Target	Section 3.7 of the JV Agreement
Form License Agreement	Section 2.4(a)
Information	Section 4.1 of the Intellectual Property Management Agreement
Initial Budget	Section 8.11(a) of the JV Agreement
Initial Business Plan	Section 3.2(b)(xii) of the JV Agreement
Interests	Section 3.3 of the JV Agreement
JV Agreement	First Paragraph
[…***…]	[…***…]
Key Results Memo	Section 2.4(a)
Management Board	Section 7.1 of the JV Agreement
Objective	Section 3.1 of the JV Agreement
Offer Terms	Section 2.4(a)
Opt-In Closing	Section 2.5(h)
Opt-In Effective Date	Section 2.6(a)
Opt-In Field	Section 2.6(a)
Opt-In Package	Section 2.4(a)
Opt-In Package Delivery Date	Section 2.4(a)
Opt-In Transaction	Section 2.5(h)
Optionee; Optionees	First Paragraph
Permitted COC Transfer	Section 11.3 of the JV Agreement
Preliminary Offer	Section 2.5(f)
Primary Indication Field	Section 2.5(c)
Qualifying Offer	Section 2.4(a)
Resolution Period	Section 5.1
Revised Offer	Section 2.5(g)
Rolling Budget	Section 8.11(b) of the JV Agreement
Rolling Business Plan	Section 8.11(b) of the JV Agreement
Term	Section 3.1
Transaction Documents	Section 3.2(b) of the JV Agreement
Winning Offer	Section 2.5(g)

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 2

2.1 *General.* The Company shall and does hereby grant each Optionee the option, as more fully set forth herein, to opt-in to a Licensed Product as more specifically set forth below.

2.2 *Development of Products*. Unless and until an Optionee or a Third Party effects the closing of a transaction hereunder with respect to a Licensed Product, the Company (and/or Local Operating Entities) shall have the sole right to Develop such Licensed Product in the Fields in the Territory and shall use Commercially Reasonable Efforts to undertake all Development activities with respect to such Licensed Product in the Fields pursuant to the Initial Business Plan, the Initial Budget, the Rolling Business Plan and the Rolling Budget. For clarity, the Company (and/or Local Operating Entities) shall be the lead regulatory party with respect to such Licensed Product in the Fields in the Territory prior to the Opt-In Effective Date with respect to such Licensed Product, and the Company (and/or Local Operating Entities) shall submit and own all Regulatory Approvals and Registration Filings with respect to the Development of Licensed Products in the Fields in the Territory.

2.3 *Development Updates*. Prior to a termination of this Agreement, the Company shall provide to each Optionee at least […***…] a written high-level summary of all Development activities performed and any results achieved and progress against timelines and budgets. The Parties hereto agree that each such summary shall be deemed Information subject to Article 4.

2.4 *Key Results and Opt-In Package*.

(a) The Company shall provide to both Optionees a copy of the key results memorandum that the Company delivers to its senior management in connection with any IND submission in an Optionee's Field (such memorandum, the "Key Results Memo"), the IND submission (including all data, exhibits and related correspondence with the FDA), the letter from the FDA accepting the Company's IND submission and the other data and information reasonably necessary to evaluate the advisability of, and the preparation of, an offer (such data and information, the "Additional Information" and together with the Key Results Memo, the

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

"Opt-In Package") within […***…] after the date that the Company receives the FDA letter notifying it of the FDA's acceptance of the IND submission (the last day of this period being the "Opt-in Package Delivery Date"). The Company shall endeavor to provide each Optionee with at least […***…] days' advance written notice of delivery of the Opt-In Package in order to facilitate such Optionee ensuring that it has sufficient resources to undertake a prompt and efficient review of the Opt-In Package when received. In addition, if reasonably requested by either Optionee, appropriate functional Company representatives shall meet with both Optionees' functional representatives in person or by phone, at times mutually agreed to, to discuss the contents of the Opt-In Package and either Optionee's request(s) for additional information and data. For purposes of clarity, any notice of estimated timeline for the delivery of the Opt-In Package or exchange of information described in this Section 2.4 will not impact or modify any of the other provisions, including timelines, of this Article. Following the Company's delivery of the Opt-In Package, either Optionee may request in writing that the Company provide specific additional background information and data (although not including raw data) to further clarify the contents of the Opt-In Package, which information and data, the Company shall promptly make available to both Optionees to the extent that such request(s) are commercially reasonable and to the extent and in such form as such information and data are in the Company's possession and Control. […***…].

(b) During the […***…]-day period after receipt of the Opt-In Package (the "Buffer Period"), the Optionees shall have the exclusive right to review the Opt-In Package and to submit an offer to opt-in to the Licensed Product described in the Opt-In Package. Each Optionee agrees to only make offers in good faith. In addition to the Opt-In Package, the Company shall provide, at the same time as the Opt-in Package, each Optionee with the Company's current offer terms ("Offer Terms") which shall include a license agreement in the form attached hereto as Exhibit A (the "Form License Agreement"). The Offer Terms shall be adopted by the Management Board and revised as determined by approval of the Management Board. The Offer Terms shall include a requirement that offers […***…]. An offer from either Optionee or a Third Party which meets the Offer Terms in all material respects shall be a ("Qualifying Offer"). Each Optionee agrees to cause its designees on the Management Board to consider and evaluate any Third Party offer in good faith and if the Management Board determines in its reasonable discretion that despite such Third Party not satisfying the Offer Terms in all material respects, that such offer may provide the highest value to the Company, such offer shall be deemed a Qualifying Offer for all purposes hereunder. The determination of highest value shall be evaluated upon such factors as the Management Board may, in its discretion, determine.

(c) At any time after the Buffer Period, either Optionee may demand that the Company seek binding Third Party offers with such offers due within […***…] days of the date such Third Party receives the Opt-In Package, the Offer Terms and the Form License Agreement. The Management Board shall determine in its reasonable discretion the timing and process for seeking Third Party offers. For clarity, either Optionee may submit a Qualifying Offer during or after the Buffer Period until Third Party offers are due.

(d) A copy of each Qualifying Offer (including a copy of the offer and all related documents) shall be delivered to the Management Board. The Company shall promptly deliver all Qualifying Offers to each […***…]. The Parties hereto agree that all Qualifying Offers shall be deemed Information subject to Article 4. For clarity, the decision as to whether an offer is a Qualifying Offer shall be made by the entire Management Board in accordance with the Offer Terms.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

2.5 *Opt-In Right*.

(a) Upon receipt of all Qualifying Offers or on the expiration of the submission time, the Management Board of the Company shall evaluate the Qualifying Offers and determine which provides the highest value to the Company. For the avoidance of doubt, […***…].

(b) If only […***…] has been submitted, the Management Board shall […***…], determine, by approval of all voting members, whether to accept or reject such Qualifying Offer. If the Qualifying Offer is […***…].

(c) If both Optionees have submitted Qualifying Offers (and no Qualifying Offers from Third Parties have been received), then the Management Board may, by approval of all voting members, determine that one of the Qualifying Offers provides the highest value to the Company. If the voting members of the Management Board cannot make such a determination, then the Qualifying Offers shall […***…].

(d) If both Optionees and at least one Third Party make a Qualifying Offer, all voting members of the Management Board shall be entitled to participate in the evaluation, discussion and voting regarding the determination of which Qualifying Offer provides the highest value to the Company. If the Management Board cannot agree as to which Qualifying Offer provides the highest value to the Company, then […***…] shall determine what Qualifying Offer […***…] believes provides the highest value to the Company and these two Qualifying Offers shall be […***…] to determine which of the Qualifying Offers provides the highest value to the Company. If the Qualifying Offer finally determined to provide the highest value to the Company was the […***…], such Qualifying Offer shall be referred to as the Winning Offer.

(e) If only one Optionee has submitted a Qualifying Offer and at least one Third Party makes a Qualifying Offer, then the Management Board may, by approval of the voting members in accordance with Section 2.5(j) below, determine that one of the Qualifying Offers provides the highest value to the Company. If the voting members of the Management Board cannot make such a determination, then […***…] shall determine what Qualifying Offer […***…] believes provides the highest value to the Company and these […***…]. If the Qualifying Offer finally determined to provide the highest value to the Company is the […***…], such Qualifying Offer shall be referred to as the Winning Offer.

(f) The Qualifying Offer (provided such Qualifying Offer is not a Winning Offer) which provides the highest value to the Company (whether finally determined by the […***…]) is referred to as (the "Preliminary Offer"). The Company shall provide each Optionee with written notice of the Preliminary Offer, the terms thereof and the name of the party submitting such offer. The Optionees agree that the Preliminary Offer shall be deemed Information subject to Article 4.

(g) The […***…] shall have […***…] Business Days after receipt of the Preliminary Offer to provide a new offer consistent with the Offer Terms (the "Revised Offer"). Upon receipt of the Revised Offer, the Management Board shall evaluate such Revised Offer. If

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

the Revised Offer is finally determined […***…] to (i) equal or exceed the Preliminary Offer in the event that the Preliminary Offer was submitted by the other Optionee, or (ii) exceed […***…] in the event that the Preliminary Offer was submitted by a Third Party, then such Revised Offer shall be referred to as the Winning Offer. Otherwise, the Preliminary Offer shall be referred to as the Winning Offer. The "Winning Offer" shall be the Qualifying Offer or Revised Offer, as the case may be, which is accepted by the Management Board or […***…] pursuant to the provisions hereof or otherwise deemed to be the Winning Offer as set forth in Section 2.5(b).

(h) The Company shall close the transaction with the party providing the Winning Offer as soon as possible following the satisfaction of the Antitrust Condition (as defined in Exhibit C), if applicable to such transaction. Upon completion of such transaction, the license agreement substantially on the terms as set forth in the Winning Offer entered into between the prevailing Optionee or a Third Party on one side and the Company on the other side shall become effective (an "Opt-In Transaction") and the party providing such Winning Offer shall have completed an "Opt-In Closing". At the Opt-In Closing, each Optionee not a party to such transaction shall use reasonable best efforts to assist the Company in completing the applicable Opt-In Transaction. In connection with any Opt-In Transaction, the Company and each Optionee, as applicable, shall comply with the covenants set forth in Exhibit C. If the Antitrust Condition is not satisfied, the Management Board shall determine in its discretion the process for effecting an alternative transaction with respect to the applicable Licensed Product.

(i) Notwithstanding anything herein to the contrary, the Optionees may agree to delay the Opt-In Package Delivery Date until any future date by unanimous written consent.

(j) Notwithstanding anything herein to the contrary, in evaluating Qualifying Offers, all members of the Management Board shall be entitled to participate in the evaluation and discussion regarding the determination of which Qualifying Offer provides the highest value to the Company. If only one Optionee and at least one Third Party have submitted a Qualifying Offer (Section 2.5(e) above), […***…] regarding the Management Board's determination of which Qualifying Offer provides the highest value to the Company, […***…].

(k) Upon termination of the JV Agreement, the Company shall promptly proceed to prepare an Opt-In Package for each Licensed Product for which the FDA has accepted an IND submission but which is not subject to an Opt-In Transaction yet. Such Opt-In Package(s) shall be delivered to each Optionee (but not to Third Parties). The Optionees shall have the right, but not the obligation, to make an offer during the Buffer Period. […***…] All other provisions of this Agreement shall apply to such offers.

2.6 *Effect of Optionee Opt-In Transaction*.

(a) Exclusive Rights. In the event that an Optionee successfully effects an Opt-In Closing, such Optionee shall, from and after the date of consummation of the Opt-In Transaction (the "Opt-In Effective Date"), have the exclusive right to Develop, Manufacture and Commercialize Licensed Products for all indications in the Primary Indication Field which was subject to the Opt-In Transaction in the Territory (the "Opt-In Field"), as more fully set forth in the Form License Agreement. If a Third Party successfully effects an Opt-In Closing, such Third

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Party shall, from and after the Opt-In Effective Date, have the exclusive right to Develop, Manufacture and Commercialize Licensed Products for which it opts-in for all indications in the Opt-In Field in the Territory. No Optionee shall have the right to Develop, Manufacture, Commercialize or otherwise exploit Licensed Products in any Field during the Term unless and until it successfully effects an Opt-In Closing (unless otherwise agreed by the Optionees in writing).

(b) […***…]

(c) […***…] Upon receipt of a […***…] notice, the Parties shall negotiate in good faith […***…] for such Licensed Product and the […***…]. If, and to the extent, there is a dispute regarding the […***…] for the […***…] notice and such dispute cannot be resolved within […***…] days from the receipt of such notice, the Parties shall escalate such dispute in accordance with Section 5.1 of this Agreement. If the Parties cannot resolve the dispute after such escalation within the Resolution Period, either Optionee may elect to submit such matter for determination by […***…]. If, and to the extent, that the Optionees have a dispute regarding either (i) the extent to which the data supports a […***…] or (ii) the Opt-In Field to which such Licensed Product […***…], and such dispute cannot be resolved within […***…] from the receipt of such notice, the Parties shall escalate such dispute in accordance with Section 5.1 of this Agreement. As promptly as practicable after the agreement of the Parties or final resolution of any dispute, the license agreement related to such Opt-in Transaction shall be amended to […***…] therein consistent with the final agreement of the Parties or final resolution of any dispute thereof. Notwithstanding the foregoing, the scope of the […***…] shall be subject to any prior Opt-In Transaction or a license of the Company to a Third Party.

(d) […***…] Upon receipt of a […***…] notice from Bayer, the applicable Parties shall negotiate in good faith for an expansion of the […***…] for such Licensed Product and the […***…]. The […***…] for any […***…] shall be […***…]. Neither Optionee shall have any obligation to grant a license upon receipt of a […***…].

(e) Obligations. In the event that an Optionee effects an Opt-In Closing (i) the non-opting-in Optionee, the Company and the Local Operating Entities shall not be responsible for bearing any remaining ongoing Development costs relating to the applicable Licensed Product; (ii) the opting-in Optionee shall be responsible for paying […***…] of all amounts owed by Company and any Local Operating Entities to Third Parties and all reasonable Out-of-Pocket Costs and FTE costs incurred by Company or any Local Operating Entity in meeting its obligations under any existing licenses, in each case, as a result of such Optionee's (or its Affiliate's or Sublicensee's) Development, Manufacture or Commercialization of any opted-in Licensed Product relating to a period of time as from the applicable Opt-in Effective Date; and (iii) the applicable subsections of Section 3.6 of the JV Agreement (Non-Compete) shall apply.

ARTICLE 3 TERM; TERMINATION

3.1 **Agreement Term; Expiration**. This Agreement is effective as of the Effective Date and shall terminate upon termination of the JV Agreement (the "Term").

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.2 **Consequences of Expiration or Termination of the Agreement.**

(a) If this Agreement terminates in accordance with Section 3.1, the terms of Section 16.2 of the JV Agreement shall determine the consequences of termination of the Agreement.

(b) The following provisions of this Agreement will survive any termination of this Agreement: Article 1, Article 2.5(k) (and any provisions required to give effect to Article 2.5(k)), Article 2.6(a), Article 2.6(e), Article 3.2, Article 4, Article 5 and Article 6.

ARTICLE 4 CONFIDENTIALITY

Confidentiality. All Information under this Agreement shall be governed by the Confidentiality provisions specified in Article 4 of the Intellectual Property Management Agreement and such Article 4 is hereby incorporated by reference.

ARTICLE 5 DISPUTE RESOLUTION

5.1 **Referral to Heads of Businesses.** Unless otherwise specified in this Agreement, the Parties hereto hereby agree that to the extent reasonably practicable and would not materially prejudice any such party, controversies or claims arising out of or relating to this Agreement or the interpretation, performance, breach, termination or validity thereof shall first be referred to the head of Bayer AG's Head of R&D, CRISPR's Chief Executive Officer and the Company's Chief Executive Officer for resolution. If these individuals are unable to agree upon a resolution within thirty (30) days after referral of the matter to them (a "Resolution Period"), then any Party hereto may pursue any available remedy hereunder, at law or in equity.

5.2 **Attorneys' Fees**. If any action at law or in equity (including, arbitration) is necessary to enforce or interpret the terms of this Agreement, including claims for fraud and/or fraudulent inducement, the prevailing Party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

5.3 **Jurisdiction.** Unless otherwise specified in this Agreement, each Party to this Agreement, by its execution hereof, unless otherwise prohibited by applicable Law (i) hereby irrevocably submits to the exclusive jurisdiction of the state courts of the State of New York in the Borough of Manhattan and to the United States District Court for the Southern District of New York for the purpose of any action among the Parties, (ii) hereby waives and agrees not to assert, by way of motion, as a defense or otherwise, in any such action, any claim that it is not subject personally to the jurisdiction of the above-named courts, that any such action brought in one of the above-named courts should be dismissed on grounds of forum non conveniens, should be transferred or removed to any court other than one of the above-named courts, or should be stayed by reason of the pendency of some other proceeding in any court other than one of the above-named courts, or that this Agreement or the subject matter hereof may not be enforced in or by such court and (iii) to the extent that an action can be commenced in a court, agrees not to commence any such action in any court other than before one of the above-named courts. Notwithstanding the previous sentence, a Party hereto may commence any action in a court other than the above-named courts for the purpose of enforcing an order or judgment issued by one of the above-named courts.Venue**.** No Party hereto will assert that venue should properly lie in any other location within the selected jurisdiction.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.4 **Specific Performance.** Each of the Parties hereto acknowledges and agrees that the other Party would be damaged irreparably in the event any of the provisions of this Agreement are not performed in accordance with their specific terms or otherwise are breached or violated. Accordingly, each of the Parties hereto agrees that, without posting a bond or other undertaking, the other Party may seek (and obtain) an injunction or injunctions to prevent breaches or violations of the provisions of this Agreement and to enforce specifically this Agreement and the terms and provisions hereof in any Action instituted in any court specified herein. An Action for specific performance as provided herein shall not preclude a Party hereto from pursuing any other remedy to which such Party may be entitled, at law or in equity, in accordance with the terms of this Agreement. Each Party hereto further agrees that, in the event of any action for specific performance in respect of such breach or violation, it will not assert that the defense that a remedy at law would be adequate provided, however, each Party hereto also agrees that any Party hereto can assert any other defense it may have other than the defense of adequate remedy at law.

ARTICLE 6 ASSIGNMENT

6.1 **Assignment**. Except as permitted under the JV Agreement (including a Permitted COC Transfer complying with Article 11 of the JV Agreement) or this Agreement, (a) any of the rights, interests and obligations created herein shall not be transferred or assigned to any Third Party and such rights and interests shall not inure to the benefit of any other Person, including any trustee in bankruptcy, receiver or other successor of either of the Parties, whether by operation of Law, sub-license, transfer of the assets, merger, liquidation or otherwise, without the prior written consent of the other Parties, and (b) any purported or actual transfer or assignment of any such rights, interests or obligations without the prior written consent of the other Parties is and shall be null and void ab initio; provided, however, that either of the Parties may, without consent of the other Parties, assign its respective rights and obligations under this Agreement to a successor company of such Party as the result of an internal corporate reorganization to a wholly-owned Affiliate of such Party; provided that the assigning Party shall remain primarily liable hereunder. In addition to the requirements of the prior sentence, if this Agreement is assigned to a Third Party by a Party, as a condition to such assignment, all other Transaction Documents to which such Party is a party shall concurrently be assigned to such Third Party and all Interests of such Party and its Affiliates are to be transferred to such Third Party.

ARTICLE 7 NOTICES AND MISCELLANEOUS

7.1 **Form of Valid Notice**

(a) All notices or other communications provided for in this Agreement or that may otherwise be required must be in writing, clearly legible and shall be sent:

(i) by an internationally recognized courier service with acknowledgment of receipt, properly addressed, and postage pre-paid;

(ii) by e-mail; or

(iii) by personal delivery.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) Any notice sent by one of the means described in Section 7.1(a) will be deemed received:

(i) if sent by an internationally recognized courier service, three (3) Business Days after deposit with such courier service,

(ii) if sent by e-mail, when there is effective acknowledgment of receipt, or

(iii) if delivered personally, when delivered.

7.2 **Persons and Addresses**

Except as may otherwise be provided, all notices or other communications provided for in this Agreement or that a Party may otherwise be required to give to the other Party shall be sent as provided in Section 7.1 to the following persons at the addresses stated herein or at such other address as either Party may specify by notice to the other Party given in accordance with this Article 7:

To Company:
VIVR LLP
c/o Taylor Wessing
5 New Street Square
London EC4A 3TW
Attn: Andrew Davis

With a copy to:
Taylor Wessing
5 New Street Square
London EC4A 3TW
Attn: Andrew Davis

To CRISPR:
CRISPR Therapeutics AG
Aeschenvorstadt 36
4051 Basel
Switzerland
Attention: Chief Executive Officer and Chief Legal Officer

and

CRISPR Therapeutics Ltd.
85 Tottenham Court Road
London W1T 4TQ
United Kingdom
Attention: Chief Legal Officer

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

With a copy to: Goodwin Procter LLP
53 State Street
Boston, MA 02109
USA
Attention: Mitchell S. Bloom and Robert E. Puopolo

To Bayer: Bayer Aktiengesellschaft
Kaiser-Wilhelm-Allee
51368 Leverkusen
Germany
Attention: Dr. Axel Bouchon and Dr. Jan Heinemann

With a copy to: Norton Rose Fulbright US LLP
801 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2623
USA
Attention: Marilyn Mooney

7.3 Miscellaneous

(c) No amendment, modification or addition to any provision of this Agreement shall be valid unless the same shall be in writing and approved by the signature of each Party.

(d) The terms and conditions of this Agreement shall be interpreted according to the common sense meaning intended by the Parties and in accordance with the principles of good faith and fair dealing.

(e) The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement. Any reference to any federal, state, local or foreign statute or law shall be deemed also to refer to all rules and regulations promulgated thereunder, unless the context requires otherwise.

(f) Every day commences at 12:00 a.m. and ends at 11:59 p.m. (midnight) New York time. Any reference in this Agreement to a number of days “in” which an action or notice is to be taken or given, shall be interpreted in such way that the term commences the day after the date taken as reference and that the action or notice shall be validly taken or given at the last day. Any reference in this Agreement to a “day” or a number of “days” without explicit qualification of “business” shall be interpreted as a reference to a calendar day or number of calendar days. If any action or notice is to be taken or given on or by a particular calendar day, and such calendar day is not a Business Day, then such action or notice shall be deferred until, or may be taken or given on, the next Business Day.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(g) This Agreement shall constitute the entire agreement and understanding between the Parties and shall supersede and nullify any and all previous agreements, negotiations, commitments, undertakings and declarations heretofore made between the Parties in respect of the subject matter of this Agreement unless expressly provided for herein or in any schedule attached hereto and any other agreement entered in connection herewith.

(h) Words importing gender include all genders.

(i) The division of this Agreement into articles, sections and clauses, the inclusion of a table of contents and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Agreement.

(j) Each provision contained in this Agreement is distinct and severable. A declaration of invalidity, illegality or unenforceability of any provision or a part thereof by an arbitrator, a court or a tribunal of competent jurisdiction shall not affect the validity or enforceability of any other provision of this Agreement. To the extent permitted by law, if any provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (i) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (ii) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

(k) Any mistaken reference to Articles, clauses, Sections, Schedules or paragraphs of this Agreement shall be amended according to common sense and good faith rules. When a reference is made in this Agreement to an Article, clause, Section, Schedule or paragraph, such reference will be to an Article, clause, Section, Schedule or paragraph unless otherwise indicated.

(l) No waiver by any Party of any default, misrepresentation or breach of warranty or covenant hereunder, whether intentional or not, shall be deemed to extend to any prior or subsequent default, misrepresentation or breach of warranty or covenant hereunder or affect in any way any rights arising by virtue of any prior or subsequent such occurrence. No single or partial exercise of any right, power or privilege shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege unless explicitly provided for in this Agreement.

(m) Subject to the terms of and restrictions in this Agreement, the reference to any Party shall include its successors or permitted transferees that have legally acquired its rights, obligations and/or duties. This Agreement shall be binding upon and inure solely to the benefit of the Parties and their respective successors and permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever, unless otherwise specified therein.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(n) EACH OF THE PARTIES HEREBY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY ACTION OR LIABILITY DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT. EACH OF THE PARTIES HEREBY (A) CERTIFIES THAT NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF ANY SUCH ACTION OR LIABILITY, SEEK TO ENFORCE THE FOREGOING WAIVER; AND (B) ACKNOWLEDGES THAT IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 22.3(l).

(o) This Agreement may be executed and delivered (including by means of electronic transmission, such as by electronic mail in ".pdf" form) in two or more counterparts, and by the different Parties in separate counterparts, each of which when executed shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement.

(p) Whenever the words "include," "includes" or "including" are used in this Agreement, they will be deemed to be followed by the words "without limitation." The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement will refer to this Agreement as a whole and not to any particular provision of this Agreement. All terms used herein with initial capital letters have the meanings ascribed to them herein and all terms defined in this Agreement will have such defined meanings when used in any certificate or other document made or delivered pursuant hereto unless otherwise defined therein. The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms. Any agreement, instrument or statute defined or referred to herein, or in any agreement or instrument that is referred to herein, means such agreement, instrument or statute as from time to time amended, modified or supplemented, including (in the case of agreements or instruments) by waiver or consent and (in the case of statutes) by succession of comparable successor statutes and references to all attachments thereto and instruments incorporated therein. The use of "or" is not intended to be exclusive unless expressly indicated otherwise. References to sums of money are expressed in lawful currency of the United States (U.S. dollars), unless the Parites otherwise agree in writing to use a different currency.

(q) The Parties agree that this Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

[Signature page follows]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as of the date first set forth above.

CRISPR

CRISPR Therapeutics AG

Signature: /s/ Rodger Novak
Print Name: Rodger Novak
Title: CEO

BAYER

Bayer HealthCare LLC

Signature: /s/ Alan Stevenson
Print Name: Alan Stevenson
Title: Assistant Secretary

Company:

VIVR LLP:

Signature: /s/ Axel Bouchon
Print Name: Axel Bouchon
Title: General Manager

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit A

Form License Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SPECIFIC TERMS IN THIS EXHIBIT HAVE BEEN REDACTED BECAUSE CONFIDENTIAL TREATMENT FOR THOSE TERMS HAS BEEN REQUESTED. THESE REDACTED TERMS HAVE BEEN MARKED IN THIS EXHIBIT WITH THREE ASTERISKS [***]. AN UNREDACTED VERSION OF THIS EXHIBIT HAS BEEN SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

Exhibit 10.4

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. Triple asterisks denote omissions.

STRATEGIC COLLABORATION, OPTION AND LICENSE AGREEMENT

BETWEEN

VERTEX PHARMACEUTICALS INCORPORATED

VERTEX PHARMACEUTICALS (EUROPE) LIMITED

AND

CRISPR THERAPEUTICS AG

CRISPR THERAPEUTICS LIMITED

CRISPR THERAPEUTICS, INC.

TRACR HEMATOLOGY LTD.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

STRATEGIC COLLABORATION, OPTION AND LICENSE AGREEMENT

This **STRATEGIC COLLABORATION, OPTION AND LICENSE AGREEMENT** (this "**Agreement**") is entered into as of October 26, 2015 (the "**Effective Date**") by and between, on the one hand, VERTEX PHARMACEUTICALS INCORPORATED, a corporation organized and existing under the laws of The Commonwealth of Massachusetts ("**Vertex Parent**"), and VERTEX PHARMACEUTICALS (EUROPE) LIMITED, a private limited liability company organized under the laws of England and Wales ("**Vertex UK**" and, together with Vertex Parent, "**Vertex**") and, on the other hand, CRISPR THERAPEUTICS AG, a corporation organized under the laws of Switzerland ("**CRISPR AG**"), CRISPR THERAPEUTICS, INC., a corporation organized under the laws of the state of Delaware ("**CRISPR Inc.**"), CRISPR THERAPEUTICS LIMITED, a corporation organized under the laws of England and Wales ("**CRISPR UK**") and TRACR HEMATOLOGY LTD, a UK limited company ("**Tracr**" and together with CRISPR AG, CRISPR Inc. and CRISPR UK "**CRISPR**"). Vertex and CRISPR each may be referred to herein individually as a "**Party**" or collectively as the "**Parties.**"

RECITALS

WHEREAS, CRISPR possesses certain Patents, Know-How, technology and expertise with respect to the CRISPR/Cas System (as defined below);

WHEREAS, Vertex possesses expertise in developing and commercializing human therapeutics;

WHEREAS, Vertex and CRISPR desire to enter into a strategic collaboration focused on exploring potential targets related to certain diseases and creating therapeutics using gene editing [***], including the CRISPR/Cas System, to treat such diseases; and

WHEREAS, simultaneously with the execution of this Agreement, the Parties are entering into a convertible debt instrument, pursuant to which Vertex will provide CRISPR AG with a total of $30,000,000 in funding, which funding will be converted into shares of CRISPR AG's preferred stock in accordance with the terms thereof;

NOW, THEREFORE, in consideration of the respective covenants, representations, warranties and agreements set forth herein, the Parties hereto agree as follows:

ARTICLE 1
DEFINITIONS

For purposes of this Agreement, the following capitalized terms will have the following meanings:

1.1 "**Acceptance**" means, with respect to an Approval Application filed for a Product, (a) in the United States, the receipt of written notice from the FDA that such Approval Application is officially "*filed*" or (b) in the European Union, the receipt of written notice of acceptance by the EMA of such Approval Application for filing under the centralized European

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

procedure in accordance with any feedback received from EU Regulatory Authorities; *provided* that if the centralized filing procedure is not used, then Acceptance will be determined upon the acceptance of such Approval Application by the applicable Regulatory Authority in a Major Market Country in the EU.

1.2 "**Additional Research**" has the meaning set forth in Section 2.12.

1.3 "**Additional Research Budget**" has the meaning set forth in Section 2.12.

1.4 "**Additional Research Plan**" has the meaning set forth in Section 2.12.

1.5 "**Adverse Event**" has the meaning set forth in the Applicable Law for such term (or comparable term), and will generally mean any untoward medical occurrence in a subject in any Clinical Trial who has received a Licensed Agent or Product, medical device or placebo, and which does not necessarily have a causal relationship with such Licensed Agent, Product, medical device or placebo, including any unfavorable and unintended sign (including an abnormal laboratory finding), symptom or disease temporally associated with the use of the applicable Licensed Agent or Product, whether or not related to such Licensed Agent or Product.

1.6 "**Affiliate**" means, as of any point in time and for so long as such relationship continues to exist with respect to any Person, any other Person that controls, is controlled by or is under common control with such Person. A Person will be regarded as in control of another Person if it (a) owns or controls more than 50% of the equity securities of the subject Person entitled to vote in the election of directors (or, in the case of a Person that is not a corporation, for the election of the corresponding managing authority); *provided*, *however*, that the term "Affiliate" will not include subsidiaries or other entities in which a Person owns a majority of the ordinary voting power necessary to elect a majority of the board of directors or other governing board, but is restricted from electing such majority by contract or otherwise, until such time as such restrictions are no longer in effect, or (b) possesses, directly or indirectly, the power to direct or cause the direction of the management or policies of an such Person (whether through ownership of securities or other ownership interests, by contract or otherwise).

1.7 "**Agreement**" has the meaning set forth in the Preamble.

1.8 "**Agreement Term**" means the period commencing on the Effective Date and ending on the expiration of this Agreement pursuant to Section 11.1, unless terminated earlier as provided herein.

1.9 "**Alliance Manager**" has the meaning set forth in Section 3.4.1.

1.10 "**Applicable Law**" means all applicable laws, statutes, rules, regulations and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, agency or other body, domestic or foreign, including any applicable rules, regulations, guidelines, or other requirements of the Regulatory Authorities that may be in effect from time to time.

1.11 "**Approval Application**" means a BLA, NDA or similar application or submission for a Product filed with a Regulatory Authority in a country or group of countries to obtain marketing approval for a biological or pharmaceutical product in that country or group of countries.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.12 "**Audited Party**" has the meaning set forth in Section 7.9.

1.13 "**Auditing Party**" has the meaning set forth in Section 7.9.

1.14 "**Available**" has the meaning set forth in Section 1.34.

1.15 "**BLA**" means a Biological License Application that is submitted to the FDA for marketing approval for a Licensed Agent or Product pursuant to 21 C.F.R. § 601.2.

1.16 [***].

1.17 [***].

1.18 "**Breaching Party**" means the Party that is believed by the other Party to be in material breach of this Agreement.

1.19 "**Business Day**" means a Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in Boston, Massachusetts are authorized or obligated to close.

1.20 "**Calendar Quarter**" means the respective periods of three consecutive calendar months ending on March 31, June 30, September 30 or December 31, during the Agreement Term, or the applicable part thereof during the first or last calendar quarter of the Agreement Term.

1.21 "**Calendar Year**" means any calendar year ending on December 31, or the applicable part thereof during the first or last year of the Agreement Term.

1.22 "**cGMP**" means current Good Manufacturing Practices as specified in the United States Code of Federal Regulations, ICH Guideline Q7A, or equivalent laws, rules, or regulations of an applicable Regulatory Authority at the time of manufacture.

1.23 "**Change of Control**" means, with respect to a Party, (a) a merger or consolidation of such Party with a Third Party that results in the voting securities of such Party outstanding immediately prior thereto, or any securities into which such voting securities have been converted or exchanged, ceasing to represent more than 50% of the combined voting power of the surviving entity or the parent of the surviving entity immediately after such merger or consolidation, or (b) a transaction or series of related transactions in which a Third Party, together with its Affiliates, becomes the beneficial owner of more than 50% of the combined voting power of the outstanding securities of such Party, or (c) the sale or other transfer to a Third Party of all or substantially all of such Party's business to which the subject matter of this Agreement relates. Notwithstanding the foregoing, with respect to CRISPR, the term "Change of Control" will not include any sale of shares of capital stock of CRISPR, in a single transaction or series of related transactions in which CRISPR issues new securities solely to institutional investors for cash or the cancellation or conversion of indebtedness or a combination thereof where such transaction(s) are conducted primarily for bona fide equity financing purposes.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.24 "**Clinical Trial**" means a study in humans that is conducted in accordance with GCP and is designed to generate data in support of an Approval Application.

1.25 "**Collaboration Program**" means, on a Collaboration Target-by-Collaboration Target basis, a Research program dedicated to the design, optimization and Research of Licensed Agents and Products directed to such Collaboration Target pursuant to a Research Plan and, upon Vertex's exercise of the Option for a Collaboration Target, Vertex's (or with respect to any Hemoglobinopathy Target [***], the Parties') Research, Development, Manufacture and Commercialization of such Licensed Agents and Products.

1.26 "**Collaboration Program Working Group**" has the meaning set forth in Section 3.2.

1.27 "**Collaboration Target**" means a Vertex Target that Vertex has selected as the subject of a Research Plan in accordance with Section 2.3.3.

1.28 "**Combination Product**" has the meaning set forth in Section 1.117.

1.29 "**Commercialize**" or "**Commercializing**" means to market, promote, distribute, offer for sale, sell, have sold, import, export or otherwise commercialize a product, to conduct activities, other than Research, Development and Manufacturing, in preparation for the foregoing activities, including obtaining Price Approval, and to conduct post-Marketing Approval studies (including Clinical Trials). When used as a noun, "**Commercialization**" means any and all activities involved in Commercializing.

1.30 "**Commercially Reasonable Efforts**" means with respect to the efforts to be expended by any Person, with respect to any objective, reasonable, diligent and good faith efforts to accomplish such objective. With respect to any objective relating to the Research, Development or Commercialization of a Licensed Agent or Product, "Commercially Reasonable Efforts" means [***], taking into account, without limitation, with respect to each Licensed Agent or Product, (a) [***], (b) [***], (c) [***], (d) [***], (e) [***], (f) [***], (g) [***], (h) [***], (i) [***] and (j) [***]. "Commercially Reasonable Efforts" shall be [***].

1.31 "**Competitive Infringement**" has the meaning set forth in Section 8.6.1.

1.32 "**Competitive Program**" has the meaning set forth in Section 1.33.

1.33 "**Competitor**" means any pharmaceutical company that is conducting a research, development or commercial program for a product that is intended to (a) [***], (b) [***] or (c) [***] (each of (a) - (c), a "**Competitive Program**").

1.34 "**Confidential Information**" means, with respect to each Party, all Know-How or other information, including proprietary information (whether or not patentable) regarding or embodying such Party's technology, products, business information or objectives, that is communicated in any way or form by or on behalf of the Disclosing Party to the Receiving Party

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

or its permitted recipients, prior to, on or after the Effective Date, whether or not such Know-How or other information is identified as confidential at the time of disclosure. The terms and conditions of this Agreement will be considered Confidential Information of both Parties, with both Parties deemed to be the Receiving Party of such Confidential Information. The Vertex Target List and the identity of the Collaboration Targets hereunder will be the Confidential Information of both Parties; provided, that if Vertex exercises the Option for a Collaboration Target, the identity of such Collaboration Target will be Vertex's Confidential Information and will no longer be CRISPR's Confidential Information; and provided, further, [***] Notwithstanding any provision of this Section 1.34 to the contrary, Confidential Information does not include any Know-How or information that: (a) was already known by the Receiving Party (other than under an obligation of confidentiality to the Disclosing Party) at the time of disclosure by or on behalf of the Disclosing Party; (b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the Receiving Party; (c) became generally available to the public or otherwise part of the public domain after its disclosure to the Receiving Party, other than through any act or omission of the Receiving Party in breach of its obligations under this Agreement; (d) was disclosed to the Receiving Party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the Disclosing Party not to disclose such information to the Receiving Party; or (e) was independently discovered or developed by or on behalf of the Receiving Party without the use of any Confidential Information belonging to the Disclosing Party; *provided*, in connection with the foregoing exclusions from protection, that specific Confidential Information shall not be deemed to be known, generally available, in the public domain, disclosed, independently discovered or developed (individually and collectively "**Available**"), merely because broader or related information is Available, nor shall combinations of elements or principles be considered to be Available merely because individual elements thereof are Available.

1.35 "**Continuation Notice**" has the meaning set forth in Section 2.6.

1.36 "**Continuation Research**" has the meaning set forth in Section 2.6.

1.37 "**Control**" or "**Controlled**" means with respect to any Know-How or Patent or other data, information or Materials, possession of the ability by a Party or its Affiliate(s) (whether by sole or joint ownership, license or otherwise, other than pursuant to this Agreement) to grant, without violating the terms of any agreement with a Third Party, a license, access or other right in, to or under such Know-How or Patent or other data, information or Materials. Notwithstanding anything in this Agreement to the contrary, a Party will be deemed to not Control any Patents or Know-How that are owned or controlled by a Third Party described in the definition of "Change of Control," or such Third Party's Affiliates (other than an Affiliate of such Party prior to the Change of Control), (a) prior to the closing of such Change of Control, except to the extent that any such Patents or Know-How were developed prior to such Change of Control through the use of such Party's technology, or (b) after such Change of Control to the extent that such Patents or Know-How are developed or conceived by such Third Party or its Affiliates (other than such Party) after such Change of Control without using or incorporating such Party's technology.

1.38 "**Cost Report**" has the meaning set forth in Section 7.4.2.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.39 "**Cover**," "**Covering**" or "**Covers**" means, as to a product and Patent, that, in the absence of a license granted under, or ownership of, such Patent, the making, using, keeping, selling, offering for sale or importation of such product would infringe such Patent or, as to a pending claim included in such Patent, the making, using, selling, offering for sale or importation of such product would infringe such Patent if such pending claim were to issue in an issued patent without modification.

1.40 "**CREATE Act**" means the Cooperative Research and Technology Enhancement Act of 2004, 35 U.S.C. § 103(c)(2)-(c)(3).

1.41 "**CRISPR**" has the meaning set forth in the Preamble.

1.42 "**CRISPR Activities**" means any and all Research activities other than Vertex Activities under any Research Plan.

1.43 "**CRISPR Agreement Breach**" has the meaning set forth in Section 11.2.3(a).

1.44 "**CRISPR Background Know-How**" means any Know-How, other than Joint Program Know-How and CRISPR Program Know-How, that (a) [***] and (b) [***]. On a Collaboration Target-by-Collaboration Target basis, CRISPR Background Know-How will exclude [***]. For the avoidance of doubt, the CRISPR Background Know-How includes the Know-How claimed or disclosed in the CRISPR Platform Technology Patents.

1.45 "**CRISPR Background Patents**" means any Patent, other than a Joint Program Patent, CRISPR Program Patent or CRISPR Platform Technology Patent that (a) [***] and (b) [***]. On a Collaboration Target-by-Collaboration Target basis, CRISPR Background Patents will exclude [***].

1.46 "**CRISPR Breach Event**" has the meaning set forth in Section 11.2.3(a).

1.47 "**CRISPR Entity**" means, when used in the singular, any one of CRISPR UK, CRISPR AG, CRISPR Inc. or Tracr. "**CRISPR Entities**" means, when used in the plural, CRISPR UK, CRISPR AG, CRISPR Inc. and Tracr.

1.48 "**CRISPR Indemnified Party**" has the meaning set forth in Section 10.1.

1.49 "**CRISPR In-License Agreements**" has the meaning set forth in Section 7.6.1.

1.50 "**CRISPR Platform Technology Patents**" means all Patents that are owned, used, developed by, or licensed to CRISPR or its Affiliates, in each case to the extent Controlled by CRISPR or its Affiliates on the Effective Date or at any time during the Agreement Term, claiming [***]. For clarity, the CRISPR Platform Technology Patents (i) will not include [***] and (ii) will include all [***].

1.51 "**[***] Patent**" has the meaning set forth in Section 8.1.3(a).

1.52 "**CRISPR Program Breach**" has the meaning set forth in Section 11.2.3(a).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.53 "**CRISPR Program Know-How**" has the meaning set forth in Section 8.1.2(a).

1.54 "**CRISPR Program Patents**" has the meaning set forth in Section 8.1.2(a).

1.55 "**CRISPR Program Technology**" has the meaning set forth in Section 8.1.2(a).

1.56 "**CRISPR Reserved Target**" means all Targets described or identified on Schedule A.

1.57 "**CRISPR/Cas System**" means a clustered regularly interspaced short palindromic repeats (CRISPR)/CRISPR-associated (Cas) protein system that comprises (a) [***] and (b) [***].

1.58 "**Development**" means, with respect to a Licensed Agent, all clinical and non-clinical research and development activities conducted after filing of an IND for such Licensed Agent, including toxicology, pharmacology test method development and stability testing, process development, formulation development, delivery system development, quality assurance and quality control development, statistical analysis, Clinical Trials (other than post-Marketing Approval Clinical Trials), regulatory affairs, pharmacovigilance, Clinical Trial regulatory activities and obtaining and maintaining Regulatory Approval. When used as a verb, "**Develop**" or "**Developing**" means to engage in Development.

1.59 "**Disclosing Party**" has the meaning set forth in Section 12.1.

1.60 "**Distracting Product**" means a product containing (a) [***] or (b) [***].

1.61 "**Distributor**" means a Third Party to whom Vertex grants a right to sell or distribute a Product, that does not make payments to Vertex that are calculated on the basis of a percentage of, or profit share on, such Third Party's sales of Products.

1.62 "**Divestiture**" means, with respect to a Distracting Product, the sale, exclusive license or other transfer by the applicable Party and its Affiliates of all of their development and commercialization rights with respect to such Distracting Product to a Third Party without the retention or reservation of any development or commercialization obligation, interest or participation rights (other than solely an economic interest or the right to enforce customary terms and conditions contained in the relevant agreements effectuating such transaction). When used as a verb, "**Divest**" means the to engage in a Divestiture.

1.63 "**DOJ**" has the meaning set forth in Section 4.1.2(a).

1.64 "**Effective Date**" has the meaning set forth in the Preamble.

1.65 "**EMA**" means the European Medicines Agency and any successor entity thereto.

1.66 "**Establishment of POC**" with respect to a Product, [***] that [***] (a) [***] and (b) [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.67 "**European Commission**" means the European Commission or any successor entity that is responsible for granting marketing approvals authorizing the sale of pharmaceuticals in the European Union.

1.68 "**European Union**" or "**EU**" means each and every country or territory that is officially part of the European Union.

1.69 "**Exclusive License**" has the meaning set forth in Section 5.3.1.

1.70 "**Executive Officers**" means the Chief Scientific Officer of CRISPR AG, initially Sven Ante (Bill) Lundberg, and the Chief Scientific Officer of Vertex, initially David Altshuler; *provided*, that for purposes of Section 11.3.4(a), "Executive Officers" means the Chief Executive Officer of CRISPR AG, initially Rodger Novak, and the Chief Financial Officer of Vertex, initially Ian Smith.

1.71 "**FDA**" means the United States Food and Drug Administration and any successor entity thereto.

1.72 "**FD&C Act**" means the United States Federal Food, Drug, and Cosmetic Act, as amended, and the rules and regulations promulgated thereunder.

1.73 "**Field**" means the diagnosis, treatment or prevention of disease in humans or animals in [***].

1.74 "**Final Target Selection Period**" means the [***] period following the Initial Target Selection Period.

1.75 "**First Commercial Sale**" means with respect to a Product, the first sale of such Product by Vertex, its Affiliate or its Sublicensee to a Third Party resulting in Net Sales in a particular country after any required Marketing Approval for the Product has been obtained in such country.

1.76 "**Force Majeure**" means a condition, the occurrence and continuation of which is beyond the reasonable control of a Party, including an act of God, voluntary or involuntary compliance with any regulation, law or order of any government, war, civil commotion, labor strike or lock-out, epidemic, flood, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe.

1.77 "**Foundational Intellectual Property Rights**" means all rights, title and interest in [***]; and any worldwide patents and patent applications claiming priority thereto and all inventions covered or claimed by such patent applications (together with all provisionals, non-provisionals, substitutions, continuations, continuations-in-part, divisionals, renewals and all patents granted thereon, and all reissues, reexaminations, extensions, confirmations, revalidations, registrations and patents of addition thereof, including patent term extensions and supplementary protection certificates, international patent applications filed under the Patent Cooperation Treaty (PCT) and any foreign equivalents to any of the foregoing).

1.78 "**FTC**" has the meaning set forth in Section 4.1.2(a).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.79 "**FTE Rate**" means, [***]; *provided* that such rates will increase or decrease on [***] over the twelve month period preceding each such January 1.

1.80 "**GAAP**" means United States generally accepted accounting principles, consistently applied.

1.81 "**GCP**" means good clinical practices, which are the then-current standards for Clinical Trials for pharmaceuticals, as set forth in the FD&C Act or other Applicable Law, and such standards of good clinical practice as are required by the Regulatory Authorities of the European Union and other organizations and governmental authorities in countries for which the applicable Licensed Agent is intended to be Developed, to the extent such standards are not less stringent than United States standards.

1.82 "**[***] Joint Program Know-How**" has the meaning set forth in Section 8.1.2(d).

1.83 "**[***] Joint Program Patents**" has the meaning set forth in Section 8.1.2(d).

1.84 "**[***] Joint Program Technology**" has the meaning set forth in Section 8.1.2(d).

1.85 "**[***]**" means [***], including, but not limited to, [***], and any variation thereof, in each case [***]

1.86 "**Generic Product**" means, with respect to a particular Product in a particular country, a product on the market in such country commercialized by any Third Party that is not a Sublicensee and that did not purchase such product in a chain of distribution that included any of Vertex or its Affiliates or Sublicensees, that (a) is approved by the applicable Regulatory Authority, under any then-existing laws and regulations in the applicable country pertaining to approval of generic or biosimilar biologic products, as a "generic" or "biosimilar" version of such Product, which approval uses such Product as a reference product and relies on or references pivotal safety or efficacy data in the Approval Application for such Product or (b) otherwise meets the criteria for constituting a "biosimilar" or "interchangeable" product pursuant to Section 351(k) of the Public Health Service Act (42 U.S.C. § 262(k)) or EMA Directive 2001/83/EC or any foreign equivalent thereof or successors thereto.

1.87 "**GLP**" means the then-current good laboratory practice standards promulgated or endorsed by the FDA as defined in 21 C.F.R. Part 58 or the successor thereto, or comparable regulatory standards in jurisdictions outside of the United States, to the extent such standards are not less stringent than United States standards.

1.88 "**Governmental Authority**" means any court, agency, department, authority or other instrumentality of any national, state, county, city or other political subdivision.

1.89 "**Hemoglobinopathy Target**" means a Target related to the [***].

1.90 "**HSR Act**" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations promulgated thereunder.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.91 "**HSR Clearance Date**" means the earliest date on which the Parties have actual knowledge that all applicable waiting periods under the HSR Act with respect to the transactions contemplated hereunder have expired or have been terminated.

1.92 "**HSR Filing**" means a filing by Vertex and CRISPR with the FTC and the DOJ of a Notification and Report Form for Certain Mergers and Acquisitions (as that term is defined in the HSR Act) with respect to the matters set forth in this Agreement, together with all required documentary attachments thereto.

1.93 "**IND**" means any Investigational New Drug application, filed with the FDA pursuant to Part 312 of Title 21 of the U.S. Code of Federal Regulations, including any supplements or amendments thereto. References herein to IND will include, to the extent applicable, any comparable filings outside the United States.

1.94 "**Indemnified Party**" has the meaning set forth in Section 10.3.

1.95 "**Indemnifying Party**" has the meaning set forth in Section 10.3.

1.96 "**Initial Collaboration Targets**" means the Targets set forth on Schedule B under the heading "Initial Collaboration Targets."

1.97 "**Initial Target Selection Period**" means the first [***] of the Research Term.

1.98 "**Initiation**" or "**Initiate**" means, with respect to any Clinical Trial, dosing of the first human subject in such Clinical Trial.

1.99 "**Insolvency Event**" has the meaning set forth in Section 11.2.5.

1.100 "**Joint Development & Commercialization Agreement**" has the meaning set forth in Section 6.1.2(c).

1.101 "**Joint Program Know-How**" means [***] Joint Program Know-How, [***] Joint Program Know-How and Other Joint Program Know-How.

1.102 "**Joint Program Patents**" means [***] Joint Program Patents, [***] Joint Program Patents and Other Joint Program Patents.

1.103 "**Joint Program Technology**" means [***] Joint Program Technology, [***] Joint Program Technology and Other Joint Program Technology.

1.104 "**Joint Research Committee**" or "**JRC**" has the meaning set forth in Section 3.1.1.

1.105 "**Know-How**" means intellectual property, data, results, pre-clinical and clinical protocols and data from studies and Clinical Trials, chemical structures, chemical sequences, information, inventions, know-how, formulas, trade secrets, techniques, methods, processes, procedures and developments, whether or not patentable; *provided* that Know-How does not include Patents claiming any of the foregoing.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.106 "**Knowledge**" means [***] of [***] after [***].

1.107 "**Liability**" has the meaning set forth in Section 10.1.

1.108 "**Licensed Agent**" means a product comprising (a) [***], where such [***], or any portion thereof is [***] or (b) [***] by such [***].

1.109 "**Licensed Know-How**" means (a) CRISPR Background Know-How, (b) CRISPR Program Know-How and (c) CRISPR's interest in the Joint Program Know-How.

1.110 "**Licensed Patents**" means (a) CRISPR Background Patents, (b) CRISPR Platform Technology Patents, (c) CRISPR Program Patents, (d) [***] Patents (until [***]) and (e) CRISPR's interest in the Joint Program Patents.

1.111 "**Licensed Technology**" means, subject to Section 5.3.2 and Section 7.6.6, any and all Licensed Patents and Licensed Know-How.

1.112 "**Major Market Country**" means any one of the following countries: [***].

1.113 "**Manufacture**" or "**Manufactured**" or "**Manufacturing**" means activities directed to making, having made, producing, manufacturing, processing, filling, finishing, packaging, labeling, quality control testing and quality assurance release, shipping or storage of a product.

1.114 "**Marketing Approval**" means, with respect to a Product in a particular jurisdiction, all approvals, licenses, registrations or authorizations necessary for the Commercialization of such Product in such jurisdiction, including, with respect to the United States, approval of an Approval Application for such Product by the FDA and with respect to the European Union, approval of an Approval Application for such Product by the European Commission.

1.115 "**Materials**" means all biological materials or chemical compounds arising out of a Party's activities under this Agreement or otherwise provided by a Party for use by the other Party to conduct activities pursuant to this Agreement, including Licensed Agents, Clinical Trial samples, cell lines, assays, viruses and vectors.

1.116 "**NDA**" means a new drug application that is submitted to the FDA for marketing approval for a Licensed Agent or Product, pursuant to 21 C.F.R. § 314.3.

1.117 "**Net Sales**" means the gross invoiced price for Products sold by Vertex, its Affiliates or Sublicensees (the "**Selling Party**") to Third Parties, less the following deductions from such gross amounts:

(a) credits or allowances, if any are actually allowed, on account of price adjustments, recalls, claims, damaged goods, rejections or returns of items previously sold (including product returned in connection with recalls or withdrawals) and amounts written off by reason of uncollectible debt, provided that if the debt is thereafter paid, the corresponding amount shall be added to the Net Sales for the period during which it is paid;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) import taxes, export taxes, excise taxes (including annual fees due under Section 9008 of the United States Patient Protection and Affordable Care Act of 2010 (Pub. L. No. 111-48)), sales taxes, value-added taxes, consumption taxes, duties or other taxes levied on, absorbed, determined or imposed with respect to such sales (excluding income or net profit taxes or franchise taxes of any kind), to the extent not reimbursed by a non-related party;

(c) insurance, customs charges, freight, shipping and other transportation costs incurred in shipping product to such non-related parties, to the extent incurred by a Selling Party and not reimbursed by a non-related party;

(d) reasonable discounts (including trade, quantity and cash discounts) actually allowed, cash and non-cash coupons, retroactive price reductions, and charge back payments and rebates granted to any non-related party (including to governmental entities or agencies, purchasers, reimbursers, customers, Distributors, wholesalers, and group purchasing organizations and managed care organizations (and other similar entities and institutions)); and

(e) rebates (or their equivalent), administrative fees, chargebacks and retroactive price adjustments and any other similar allowances granted to non-related Parties (including to Governmental Authorities, purchasers, reimbursers, customers, Distributors, wholesalers, and managed care organizations (and other similar entities and institutions)) which effectively reduce the gross invoiced sales price of the Product.

Generally, only items that are deducted from the Selling Party's gross invoiced sales price of Product(s), as included in the Selling Party's published financial statements and that are in accordance with GAAP, applied on a consistent basis, will be deducted from such gross invoiced sales price for purposes of the calculation of Net Sales. However, compulsory payments required by federal or state governments based upon sales volume or market share of Products (but for clarity excluding taxes on the Selling Party's net income), to the extent borne by the Selling Party, will be deducted from "Net Sales" regardless of its classification in the Selling Party's published financial statements; *provided* that any such deduction will be limited to that share of such compulsory payment proportional to the share of the total sales volume or market share of the Selling Party used to compute the compulsory payment represented by applicable Net Sales of Products.

A qualifying amount may be deducted only once regardless of the number of the preceding categories that describe such amount. If a Selling Party makes any adjustment to such deductions after the associated Net Sales have been reported pursuant to this Agreement, the adjustments and payment of any royalties due will be reported with the next quarterly report. Sales between or among Vertex, its Affiliates and Sublicensees will be excluded from the computation of Net Sales if such sales are not intended for end use, but Net Sales will include the subsequent final sales to Third Parties by Vertex or any such Affiliates or Sublicensees. A Product will not be deemed to be sold if the Product is provided free of charge to a Third Party in reasonable quantities as a sample consistent with industry standard promotional and sample practices. For clarity, [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

If a sale, transfer or other disposition with respect to Products involves consideration other than cash or is not at arm's length, then the Net Sales from such sale, transfer or other disposition will be calculated on the [***].

Solely for purposes of calculating Net Sales, if Vertex or its Affiliates or any permitted Sublicensee sells a Product in the form of a combination product containing a Licensed Agent and one or more other therapeutically or prophylactically active ingredients or delivery devices (whether combined in a single formulation or package, as applicable, or formulated separately but packaged under a single label approved by a Regulatory Authority and sold together for a single price) (a "**Combination Product**"), Net Sales of such Combination Product for the purpose of determining the payments due to CRISPR pursuant to this Agreement will be calculated by multiplying actual Net Sales of such Combination Product as determined in the first paragraph of the definition of "Net Sales" by the fraction A/(A+B) where [***]. The weighted average invoice prices referenced above will be calculated with reference to the prevailing prices during the applicable Calendar Quarter in those top selling countries that equate to [***] of Net Sales of the applicable Product in the Territory, with the prices weighted in the calculation to reflect the actual relative sales value of the Product in each of the countries to which the calculation relates. If it is not possible to determine the fraction A/(A+B) based on the criteria specified in the preceding sentence (*e.g.*, if a Product component is not sold separately), the Parties shall determine Net Sales for the Product in such Combination Product in good faith by mutual agreement [***].

1.118 "**[***]**" has the meaning set forth in Section 7.6.2(a).

1.119 "**Non-Breaching Party**" means the Party that believes the other Party is in material breach of this Agreement.

1.120 "**Non-Disclosing Party**" has the meaning set forth in Section 12.5.3.

1.121 "**Option**" has the meaning set forth in Section 4.1.1.

1.122 "**Option Cap**" has the meaning set forth in Section 4.1.1.

1.123 "**Option Deadline**" has the meaning set forth in Section 4.1.1.

1.124 "**Option Exercise**" means, with respect to a Collaboration Target, Vertex's exercise of an Option as provided in Section 4.1.1; *provided*, that if Vertex notifies CRISPR that an HSR Filing is required as provided, in Section 4.1.1, Option Exercise will not occur until the HSR Clearance Date.

1.125 "**Option Exercise Data Package**" means, with respect to a Collaboration Program, a data package containing the information set forth on Schedule C.

1.126 "**Other Joint Program Know-How**" has the meaning set forth in Section 8.1.2(e).

1.127 "**Other Joint Program Patents**" has the meaning set forth in Section 8.1.2(e).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.128 "**Other Joint Program Technology**" has the meaning set forth in Section 8.1.2(e).

1.129 "**Out-of-Pocket Costs**" means, with respect to a Party, costs and expenses paid by such Party to Third Parties (or payable to Third Parties and accrued in accordance with GAAP), other than Affiliates or employees of such Party.

1.130 "**Party**" or "**Parties**" has the meaning set forth in the Preamble.

1.131 "**Patent Coordinator**" has the meaning set forth in Section 8.3.

1.132 "**Patent Costs**" means the reasonable fees and expenses paid to outside legal counsel, and filing, maintenance, disbursement and other reasonable Out-of-Pocket Costs paid to Third Parties, in connection with the Prosecution and Maintenance of Patents.

1.133 "**Patents**" means the rights and interests in and to issued patents and pending patent applications in any country, jurisdiction or region (including inventor's certificates and utility models), including all provisionals, non-provisionals, substitutions, continuations, continuations-in-part, divisionals, renewals and all patents granted thereon, and all reissues, reexaminations, extensions, confirmations, revalidations, registrations and patents of addition thereof, including patent term extensions and supplementary protection certificates, international patent applications filed under the Patent Cooperation Treaty (PCT) and any foreign equivalents to any of the foregoing.

1.134 "**Person**" means an individual, sole proprietorship, partnership, limited partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, incorporated association, joint venture or similar entity or organization, including a government or political subdivision or department or agency of a government.

1.135 "**Phase 2 Clinical Trial**" means any human Clinical Trial conducted in patients that is intended to provide preliminary evidence suggesting effectiveness of the drug, including Clinical Trials described in 21 C.F.R. §312.21(b), or, with respect to a jurisdiction other than the United States, a similar Clinical Trial.

1.136 "**Phase 3 Clinical Trial**" means, with respect to a Product, a pivotal Clinical Trial in humans performed to gain evidence with statistical significance of the efficacy of such Product in a target population, and to obtain expanded evidence of safety for such Product that is needed to evaluate the overall benefit-risk relationship of such Product, to form the basis for approval of an Approval Application by a Regulatory Authority and to provide an adequate basis for physician labeling, as described in 21 C.F.R. 312.21(c), as amended from time to time, or the corresponding regulations in jurisdictions other than the United States.

1.137 "**Price Approval**" means, in any country where a Governmental Authority authorizes reimbursement for, or approves or determines pricing for, pharmaceutical products, receipt (or, if required to make such authorization, approval or determination effective, publication) of such reimbursement authorization or pricing approval or determination.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.138 "**Proceeding**" means an action, suit or proceeding.

1.139 "**Product**" means any pharmaceutical product, medical therapy, preparation, substance, or formulation comprising or employing, in whole or in part, a Licensed Agent. All Products comprising the same Licensed Agent(s) (and no additional Licensed Agents) will be considered the same Product under this Agreement.

1.140 "**[***] Claim**" means a claim in any Patent that [***].

1.141 "**Product Development & Commercialization Plan**" has the meaning set forth in Section 6.4.

1.142 "**Prosecution and Maintenance**" or "**Prosecute and Maintain**" means, with regard to a Patent, the preparing, filing, prosecuting and maintenance of such Patent, as well as handling re-examinations and reissues with respect to such Patent, together with the conduct of interferences, the defense of oppositions and other similar proceedings with respect to the particular Patent. For clarification, "**Prosecution and Maintenance**" or "**Prosecute and Maintain**" will not include any other enforcement actions taken with respect to a Patent.

1.143 "**[***] Patent**" has the meaning set forth in Section 8.2.2.

1.144 "**Receiving Party**" has the meaning set forth in Section 12.1.

1.145 "**Regulatory Approval**" means the technical, medical and scientific licenses, registrations, authorizations and approvals (including approvals of Approval Applications, supplements and amendments, pre- and post- approvals, and labeling approvals) of any Regulatory Authority, necessary for the Research, Development, clinical testing, commercial manufacture, distribution, marketing, promotion, offer for sale, use, import, export or sale of a pharmaceutical product in a regulatory jurisdiction, including Marketing Approval.

1.146 "**Regulatory Authority**" means, with respect to a country in the Territory, any national (*e.g.*, the FDA), supra-national (e.g., the European Commission, the Council of the European Union, or the EMA), regional, state or local regulatory agency, department, bureau, commission, council or other Governmental Authority involved in the granting of Regulatory Approvals or Price Approvals for pharmaceutical products in such country or countries.

1.147 "**Regulatory Filings**" means, collectively: (a) all INDs, Approval Applications, establishment license applications, Drug Master Files, applications for designation as an "**Orphan Licensed Product(s)**" under the Orphan Drug Act, for "**Fast Track**" status under Section 506 of the FD&C Act (21 U.S.C. § 356) or for a Special Protocol Assessment under Section 505(b)(4)(B) and (C) of the FD&C Act (21 U.S.C. § 355(b)(4)(B)) and all other similar filings (including counterparts of any of the foregoing in any country or region in the Territory); (b) any applications for Regulatory Approval or Price Approval and other applications, filings, dossiers or similar documents submitted to a Regulatory Authority in any country for the purpose of obtaining Regulatory Approval or Price Approval from that Regulatory Authority; (c) all supplements and amendments to any of the foregoing; and (d) any correspondence with Regulatory Authorities in connection with any of the foregoing.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.148 "**Research**" means conducting research activities to discover and advance Licensed Agents and Products, including pre-clinical studies and optimization, but specifically excluding Development and Commercialization. When used as a verb, "**Researching**" means to engage in Research.

1.149 "**Research Budget**" has the meaning set forth in Section 2.2.

1.150 "**Research Costs**" means the costs and expenses that are actually incurred by or on behalf of CRISPR and specifically identifiable or specifically allocable to the Research activities conducted under a Research Plan (including Continuation Research) or an Additional Research Plan, including: (a) CRISPR's and its Affiliates fully absorbed internal costs with respect to such activities; and (b) all Out-of-Pocket Costs incurred by CRISPR or its Affiliates, including payments made to Third Parties with respect to such Research activities (except to the extent that such costs have been included in internal costs). CRISPR's fully absorbed internal costs will be determined at the [***]. All other costs will be determined from the books and records of CRISPR and its Affiliates maintained in accordance with GAAP.

1.151 "**Research Plan**" means each plan meeting the requirements set forth in Section 2.2 to design and optimize Licensed Agents and Products for a specified Target and to generate the data and information required to prepare the applicable Option Exercise Data Package.

1.152 "**Research Term**" has the meaning set forth in Section 2.4.

1.153 "**Residual Knowledge**" means knowledge, techniques, experience and Know-How that are (a) reflected in any Confidential Information owned or Controlled by the Disclosing Party and (b) retained in the unaided memory of any authorized representative of the Receiving Party after having access to such Confidential Information. A Person's memory will be considered to be unaided if the Person has not intentionally memorized the Confidential Information for the purpose of retaining and subsequently using or disclosing it. In no event, however, will Residual Knowledge include any knowledge, techniques, experience and Know-How to the extent (at any time, for such time) within the scope of any valid patent claim owned or Controlled by the Disclosing Party.

1.154 "**Royalty Term**" means, with respect to a Product in a country, the period commencing on the first sale of such Product in such country and ending upon the later of: (a) the expiration of the last Valid Claim of a Licensed Patent that Covers such Product in such country; (b) [***] after the First Commercial Sale of such Product in such country; or (c) expiration of all applicable regulatory exclusivity periods, including data exclusivity, in such country with respect to such Product.

1.155 "**Safety Data Exchange Agreement**" has the meaning set forth in Section 6.6.3.

1.156 "**Selling Party**" has the meaning set forth in Section 1.117.

1.157 "**Setoff Amount**" has the meaning set forth in Section 11.3.3.

1.158 [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.159 "**Shared Product**" has the meaning set forth in Section 6.1.2(a).

1.160 "**Subcontractor**" has the meaning set forth in Section 2.9.

1.161 "**Sublicense**" means, directly or indirectly, to sublicense, grant any other right with respect to, or agree not to assert, any licensed right under any Patent, Know-How or other intellectual property right. When used as a noun, "**Sublicense**" means any agreement to Sublicense.

1.162 "**Sublicensee**" means an Affiliate or Third Party, other than a Distributor, to whom Vertex (or a Sublicensee or Affiliate) sublicenses any of the rights granted to Vertex hereunder during the Agreement Term.

1.163 "**Substitution Cap**" has the meaning set forth in Section 2.3.2(a).

1.164 "**Target**" means a [***] the [***] of which is associated with a human disease and which is to be edited, [***] in order to treat, ameliorate or prevent such disease.

1.165 "**Target Cap**" has the meaning set forth in Section 2.3.2(a).

1.166 "**Target Selection Period**" means the Initial Target Selection Period and the Final Target Selection Period.

1.167 "**[***] Joint Program Know-How**" has the meaning set forth in Section 8.1.2(c).

1.168 "**[***] Joint Program Patents**" has the meaning set forth in Section 8.1.2(c).

1.169 "**[***] Joint Program Technology**" has the meaning set forth in Section 8.1.2(c).

1.170 "**Targeting**" means [***] a Target or the [***] thereof.

1.171 "**Territory**" means all countries of the world.

1.172 "**Third Party**" means any Person other than Vertex, CRISPR or their respective Affiliates.

1.173 "**Third Party Obligations**" means any non-financial encumbrances, obligations, restrictions, or limitations imposed by a CRISPR In-License Agreement or [***] that are required to be passed through to a sublicensee and relate to a Product or a Collaboration Target, including field or territory restrictions, covenants, diligence obligations or limitations pertaining to enforcement of intellectual property rights.

1.174 "**United States**" or "**U.S.**" means the fifty states of the United States of America and all of its territories and possessions and the District of Columbia.

1.175 "**Valid Claim**" means a claim (a) of any issued, unexpired United States or foreign Patent, which will not, in the country of issuance, have been donated to the public, disclaimed, nor held invalid or unenforceable by a court of competent jurisdiction in an unappealed or unappealable decision, or (b) of any United States or foreign patent application,

which will not, in the country in question, have been cancelled, withdrawn or abandoned. Notwithstanding the foregoing, on a country-by-country basis, a patent application pending for more than [***] years, or [***], will not be considered to have any Valid Claim for purposes of this Agreement unless and until a patent meeting the criteria set forth in clause (a) above with respect to such application issues.

1.176 "**Vertex**" has the meaning set forth in the Preamble.

1.177 "**Vertex Activities**" means, under any Research Plan, any and all Research activities that Vertex agrees to conduct and for which it is specifically designated as the responsible Party under the Research Plan.

1.178 "**Vertex Background Know-How**" means any Know-How, other than Joint Program Know-How and Vertex Program Know-How, that (a) Vertex or any of its Affiliates Control as of the Effective Date or that comes into the Control of Vertex or any of its Affiliates during the Agreement Term and (b) [***].

1.179 "**Vertex Background Patents**" means any Patent, other than a Joint Program Patent or Vertex Program Patent that (a) Vertex or any of its Affiliates Control as of the Effective Date or that comes into the Control of Vertex or any of its Affiliates during the Agreement Term and (b) [***].

1.180 "**Vertex Indemnified Party**" has the meaning set forth in Section 10.2.

1.181 "**Vertex Parent**" has the meaning set forth in the Preamble.

1.182 "**Vertex Program Know-How**" has the meaning set forth in Section 8.1.2(b).

1.183 "**Vertex Program Patents**" has the meaning set forth in Section 8.1.2(b).

1.184 "**Vertex Program Technology**" has the meaning set forth in Section 8.1.2(b).

1.185 "**Vertex Share**" has the meaning set forth in Section 7.6.4.

1.186 "**Vertex Target**" has the meaning set forth in Section 2.3.1.

1.187 "**Vertex Target List**" has the meaning set forth in Section 2.3.1.

1.188 "**Vertex Technology**" means (a) the Vertex Background Know-How, (b) the Vertex Background Patents, (c) the Vertex Program Technology, and (d) Vertex's interest in any Joint Program Technology.

1.189 "**Vertex UK**" has the meaning set forth in the Preamble.

ARTICLE 2
RESEARCH

2.1 Collaboration Overview. The Parties will collaborate by performing the activities set forth in each Research Plan for the purpose of designing and optimizing Licensed Agents and Products for Vertex (or with respect to the Shared Products, for the Parties) to advance through Clinical Trials and bring to patients as commercial products in the Field.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

2.2 Research Plans. During the Research Term CRISPR and Vertex will conduct Collaboration Programs, each under a separate Research Plan, focused on the design and optimization of Licensed Agents and Products for a specific Collaboration Target. The components of the initial Research Plans to be developed for the Collaboration Targets are attached hereto as Schedule D. Each Research Plan will be generally consistent with such initial Research Plans with respect to the scope and content thereof. The Collaboration Program Working Group will update each ongoing Research Plan and submit the updated Research Plans to the JRC for its review and approval on an as-needed basis, but in no event less than once every [***]. Each Research Plan will include (a) a description of the process and criteria to be used by the Parties to design and optimize Licensed Agents to be used in Products directed to the applicable Collaboration Target, (b) projected timelines for activities under the Research Plan, (c) a budget for activities under such Research Plan (each, a "**Research Budget**"), (d) decision points and associated criteria for the Research Plan, including, without limitation, pre-specified criteria for establishing the elements of the Option Exercise Data Package for the applicable Collaboration Target, (e) a description of which Party will be responsible for each activity under the Research Plan; *provided* that unless otherwise specified in the applicable Research Plan, each Party will be responsible for the activities for which it is listed under the heading "**Responsible Party**" on Schedule C, and (f) the content of an Option Exercise Data Package, and, to the extent practicable, the specific criteria for acceptance of the Option Exercise Data Package (*e.g.*, [***]).

2.3 Target Selection.

2.3.1 Vertex Target List. The Collaboration Targets will be selected from a list of Targets selected by Vertex (each such Target, a "**Vertex Target**," and collectively, the "**Vertex Targets**" and such list, the "**Vertex Target List**"). As of the Effective Date, the initial Collaboration Targets and initial Vertex Targets are included on Schedule B.

2.3.2 Process to Update the Vertex Target List.

(a) Subject to Section 2.3.2(c), Vertex may [***] Targets as Vertex Targets on the Vertex Target List [***] a Target for a Vertex Target on the Vertex Target List (subject to the [***] Cap) upon written notice to CRISPR; *provided* that (i) [***], and (ii) [***] (the "**Target Cap**"). If the [***] to the Vertex Target List would cause the number of Vertex Targets on the Vertex Target List to [***] or if Vertex is [***] during the Final Target Selection Period, such notice also will specify the Vertex Target to be [***] on the Vertex Target List by such [***] Target. Vertex shall be permitted to [***] of (A) [***] and (B) [***] ((A) or (B), as applicable, the "**[***] Cap**").

(b) For the avoidance of doubt, (1) after the Initial Target Selection Period, Vertex may [***] Targets as Vertex Targets and (2) after the first [***] of the Final Target Selection Period Vertex may [***] Targets within the Vertex Target List, in each case, [***]. The Parties will in good faith discuss any request by Vertex during the Research Term to [***] Targets on the Vertex Target List made at any time when Vertex does not have the right to make such [***] under Section 2.3.2(a).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(c) If Vertex proposes to [***] a CRISPR Reserved Target to the Vertex Target List or [***] a CRISPR Reserved Target for a Vertex Target on the Vertex Target List pursuant to Section 2.3.2(a) above, such [***] shall not be effective, and CRISPR shall notify Vertex in writing within [***] after the date on which CRISPR receives notice of the proposed [***], that such Target is a CRISPR Reserved Target. CRISPR shall, if requested by Vertex in writing, [***] and, if CRISPR [***] that such Target is a [***] based, in whole or in part, on [***], it shall so notify Vertex. If after providing [***] Vertex will so notify CRISPR, then CRISPR will, [***]. If CRISPR [***] that such Target is a [***] under [***], Vertex may [***]. The [***] shall promptly [***]. The [***]; *provided*, that if, notwithstanding [***], CRISPR believes that a Target is a CRISPR Reserved Target under paragraph 3 of Schedule A, CRISPR may pursue [***] solely with respect to [***]. If a proposed Target is not [***] due to the provisions of this Section 2.3.2(c), such Target will not count against the Substitution Cap (if applicable) and the Vertex Target on the Vertex Target List that was to be replaced by such Target shall remain on the Vertex Target List (if applicable). If, during the Research Term, any Target excluded from the Vertex Target List pursuant to this Section 2.3.2(c) ceases to be a CRISPR Reserved Target, CRISPR will promptly notify Vertex that such Target is no longer a CRISPR Reserved Target, and, thereafter, Vertex may at its option (exercisable at any time within [***] of such notice) add such Target to the Vertex Target List, subject to the limitations set forth in this Section 2.3.2. Vertex may remove Targets from the Vertex Target List upon written notice to CRISPR and thereafter such removed Target will no longer be a Vertex Target (unless such Target is later added again as a Vertex Target in accordance with this Section 2.3.2).

2.3.3 Collaboration Target Selection. Vertex may elect to designate a Vertex Target as a Collaboration Target at any time during the Research Term upon written notice to CRISPR. Within [***] after the designation of a Collaboration Target, the Collaboration Program Working Group will be formed and will provide the JRC an initial draft Research Plan for such Collaboration Target. Subject to Section 3.1.3, the JRC will review such plan and agree upon a final Research Plan for such Collaboration Target. Collaboration Targets continue to be included as Vertex Targets for purposes of the Target Cap.

2.3.4 [***]. The Parties acknowledge that [***] is included as an Initial Collaboration Target [***]. During the Research Term, CRISPR will periodically disclose to Vertex any material findings generated by CRISPR in connection with CRISPR's internal research supporting the conclusion [***]. Following Vertex's receipt of such data, Vertex may elect to [***], as applicable. If any such [***] (other than [***]) is [***], (a) Vertex will [***] and (b) the Collaboration Program Working Group will prepare a Research Plan for [***] and submit such plan to the JRC for its approval as provided in Section 2.3.3.

2.4 Research Term. The term for the conduct of the Collaboration Programs (the "**Research Term**") will begin on the Effective Date and will end on the earlier of (a) the date on which [***] and [***] with respect to six Collaboration Targets and (b) the [***] of the Effective Date; *provided*, *however*, that if any Research activities under a Research Plan (including any Continuation Research) are incomplete on such [***] (and Vertex has not [***]), the Parties will complete such activities in accordance with the applicable Research Plan, and the Research Term will be extended with respect to such Research Plan(s) for up to [***] to complete such activities

or [***]; and *provided further*, that during any portion of the Research Term after the [***] of the Effective Date, the Vertex Target List will be dissolved and neither Party will have any further obligation under this Agreement (including under Section 2.13.1) with respect to any Vertex Target that was not selected as a Collaboration Target.

2.5 Research Activities. Following the JRC's approval of a Research Plan, each Party will use Commercially Reasonable Efforts to perform activities for which such Party is responsible under such Research Plan in accordance with the timelines set forth therein. Vertex will be responsible for carrying out all Vertex Activities under a Research Plan, and CRISPR will be responsible for carrying out all CRISPR Activities under each Research Plan. Each Party will, and will require its Affiliates and Subcontractors to, comply with all Applicable Laws in its and their conduct of the activities under a Research Plan, including where appropriate cGMP, GCP and GLP (or similar standards). No more than [***] Research Plans shall be conducted at any given time during the Initial Target Selection Period and no more than [***] Research Plans shall be conducted at any given time during the Final Target Selection Period. CRISPR will dedicate such number of FTEs as is reasonably required to perform the CRISPR Activities under the Research Plans during the Target Selection Period, which CRISPR currently anticipates will be no fewer than an average of [***] FTEs to the performance of Research Plans during the Initial Target Selection Period and no fewer than an average of [***] FTEs to the performance of Research Plans during the Final Target Selection Period.

2.6 Option Exercise Data Package. Within [***] after completion of activities under a Research Plan, CRISPR will provide Vertex with an Option Exercise Data Package for the relevant Collaboration Program. Following Vertex's receipt of the Option Exercise Data Package for a Collaboration Program, Vertex may exercise the Option for the relevant Collaboration Target as provided in Section 4.1; *provided*, that if, within [***] after receipt of the Option Exercise Data Package, Vertex notifies the JRC [***] that [***] with respect to [***] should be [***] of such [***] (such notice, a "**[***]**" and such [***]), and either (a) the requested [***] can reasonably be [***] within [***] following the initiation thereof through the use of [***] or (b) the requested [***] cannot reasonably be [***] within [***] following the initiation thereof, but the Parties mutually agree to [***], the Collaboration Program Working Group will meet and in good faith determine such amendments to the Research Plan as are required to define the activities to be conducted in connection with such Continuation Research and will submit such amendments to the JRC for approval. Following the JRC's approval of such amendment, (i) the Parties will conduct the Continuation Research in accordance with Section 2.5, subject to any limitations or conditions that may be agreed to by the Parties in agreeing to conduct the Continuation Research under the foregoing clause (b), (ii) Vertex will fund such activities as provided in Section 2.10 and (iii) the Collaboration Program Working Group will monitor performance of such Continuation Research and meet no less than [***] (or more frequently as determined by the JRC) to discuss the status thereof. Within [***] following the completion of the Continuation Research, CRISPR will provide Vertex with a revised Option Exercise Data Package reflecting the results of the Continuation Research. CRISPR will provide to Vertex any additional Know-How or data Controlled by CRISPR relating to the applicable Collaboration Target as Vertex may reasonably request after delivery of the Option Exercise Data Package. For clarity, the preceding sentence shall not impose any obligation on CRISPR to generate additional Know-How or data.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

2.7 End of Research Term. At the end of the Research Term, (a) neither CRISPR nor Vertex will have an obligation to perform any additional activities under any Research Plan and (b) CRISPR's obligations and Vertex's rights under this Agreement with respect to any Vertex Target that has not been designated as a Collaboration Target will terminate and the Vertex Target list will be dissolved. For clarity, the expiration of the Research Term will not affect Vertex's rights or CRISPR's obligations with respect to any Collaboration Target for which Vertex has exercised its Option as provided in Section 4.1 or for which the Option Deadline has not occurred.

2.8 Briefing the JRC. At each regularly scheduled meeting of the JRC, which shall be no less frequent than [***], each Party will provide detailed progress updates on activities conducted under each Research Plan along with a summary of data associated with such Research activities under such Research Plans, which updates and summaries will be provided to JRC members at least [***] in advance of any JRC meeting. The agenda for meetings of the JRC will be set by the JRC representatives. Each Collaboration Program will be reviewed by the JRC at minimum every [***].

2.9 Subcontractors. CRISPR may engage consultants, subcontractors, or other vendors (each, a "**Subcontractor**") to perform any work under a Research Plan with Vertex's prior written consent; *provided*, that [***] or (b) identified on Schedule E. Vertex may engage Subcontractors to perform Vertex Activities. Each contract between a Party and a Subcontractor will be consistent with the provisions of this Agreement (including ARTICLE 8 and ARTICLE 12). Each Party will be responsible for the effective and timely management of and payment of its Subcontractors. The engagement of any Subcontractor in compliance with this Section 2.9 will not relieve the applicable Party of its obligations under this Agreement or the Research Plan. Each Party will be solely responsible for any taxes, including income, withholding, payroll, VAT, sales tax or the like, that arise from the use of a Subcontractor.

2.10 Research Costs. Vertex will reimburse CRISPR for Research Costs incurred by CRISPR in accordance with Section 7.4. All costs incurred by Vertex in connection with Vertex Activities will be borne solely by Vertex.

2.11 Transfer of Materials. To facilitate the conduct of activities under each Research Plan, each Party will provide any Materials required by the Research Plan to be transferred to the other Party, and each Party may provide to the other Party certain other Materials. All Materials (a) will remain the sole property of the supplying Party, (b) will be used only in the fulfillment of the receiving Party's obligations or exercise of rights under this Agreement, (c) will remain solely under the control of the receiving Party, (d) will not be used or delivered by the receiving Party to or for the benefit of any Third Party (other than a permitted Subcontractor or Sublicensee) without the prior written consent of the supplying Party, and, (e) except with respect to any Materials provided by CRISPR to Vertex hereunder for use in a Clinical Trial, will not be used in research or testing involving human subjects, unless expressly agreed. Subject to Section 9.2, all Materials supplied under this Section 2.11 are supplied "as is", with no warranties of fitness for a particular purpose and must be used with prudence and appropriate caution in any experimental work, since not all of their characteristics may be known.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

2.12 Additional Research. At any time following exercise of an Option for a Collaboration Target, Vertex may request that CRISPR provide additional Research services to Vertex, with respect to such Collaboration Target ("**Additional Research**"). Upon such request, the Parties will meet and discuss in good faith whether CRISPR is able to provide those services and a mutually-agreeable plan (the "**Additional Research Plan**"), including a timeline, and budget, which will be subject to the approval of the JRC (the "**Additional Research Budget**") therefor; *provided* that CRISPR may, in its sole discretion, refuse to perform Additional Research. Vertex will reimburse CRISPR for Research Costs incurred in performing activities under the Additional Research Plan as provided in Section 7.4. CRISPR will provide Vertex with the results of any Additional Research promptly following the completion thereof.

2.13 Exclusivity Covenants.

2.13.1 [***]. Subject to Section 2.13.4(a) and Section 2.13.5, during [***], each Party agrees that, except in the performance of its obligations or exercise of its rights under this Agreement, [***] with respect to the discovery, research, development, manufacture or commercialization in the Field of (a) [***] or (b) [***]. For the avoidance of doubt, each Party's obligations under this Section 2.13.1 will terminate (i) with respect to [***] and (ii) with respect to [***].

2.13.2 [***]. Subject to Section 2.13.4(a) and Section 2.13.5, during [***], each Party agrees that, except in the performance of its obligations or exercise of its rights under this Agreement, [***] with respect to the discovery, research, development, manufacture or commercialization in the Field of (a) [***] or (b) [***]. For the avoidance of doubt, each Party's obligations under this Section 2.13.2 will terminate with respect to a [***] upon [***].

2.13.3 [***]. Subject to Section 2.13.4(a) and Section 2.13.5, commencing on the Effective Date and [***] hereunder, [***] with respect to the discovery, research, development, manufacture or commercialization in the Field of (a) [***] or (b) [***]; *provided*, *however*, that notwithstanding the foregoing, during such period, [***].

2.13.4 Cystic Fibrosis.

(a) Notwithstanding anything to the contrary contained herein, the provisions of Sections 2.13.1, 2.13.2 and 2.13.3 will not apply with respect to the discovery, research, development, manufacture or commercialization of any product for the treatment of cystic fibrosis by Vertex or its Affiliates and Vertex and its Affiliates will not be restricted from conducting such activities.

(b) During the Agreement Term, CRISPR agrees that neither it nor any of its Affiliates will work independently or for the benefit of or with any Third Party (including the grant of any license to any Third Party) with respect to the discovery, research, development, manufacture or commercialization of any product containing (a) [***] or (b) [***], *provided* that there is [***].

2.13.5 Delivery Technology. Notwithstanding the provisions of Sections 2.13.1, 2.13.2, 2.13.3 and 2.13.4(b), either Party may, independently or for the benefit of or with any Third Party, discover, research, develop, manufacture or commercialize technology for use in [***].

2.13.6 Acquisition of Distracting Product. Notwithstanding the provisions of Sections 2.13.1, 2.13.2, 2.13.3 and 2.13.4(b), if a Party or any of its Affiliates (such Party, the "**Distracted Party**") acquires rights to research, develop or commercialize a Distracting Product in the Field as the result of a merger, acquisition or combination with or of a Third Party other than a Change of Control (each, an "**Acquisition Transaction**") and, on the date of the completion of such Acquisition Transaction, such Distracting Product is being researched, developed or commercialized and such activities would, but for the provisions of this Section 2.13.6, constitute a breach of Section 2.13.1, 2.13.2, 2.13.3 or 2.13.4(b), as applicable, then the Distracted Party or such Affiliate will, within [***] after the completion of such Acquisition Transaction notify the other Party of such acquisition and either:

(a) request that such Distracting Product be included in this Agreement on terms to be negotiated, in which case, the Parties will discuss the matter in good faith for a period of no less than [***] (or such longer period as may be agreed by the Parties) and, if unable to reach agreement on the terms on which such Distracting Product would be included hereunder within such period, the Distracted Party will elect to take the action specified in either clause (b) or (c) below; *provided* that the time periods specified in such clauses will be tolled for so long as the Parties are engaged in discussion under this clause (a);

(b) notify the other Party that the Distracted Party or its Affiliate will Divest its rights to such Distracting Product, in which case, within [***] after the completion of the Acquisition Transaction, the Distracted Party or its Affiliate will Divest such Distracting Product; or

(c) notify the other Party in writing that it is ceasing all such research, development and commercialization activities with respect to the Distracting Product, in which case, within [***] thereafter the Distracted Party and its Affiliates will cease all such activities.

During the discussion period under clause (a), prior to the time of Divestiture pursuant to clause (b) or prior to the termination of activities pursuant to clause (c), as applicable, the Distracted Party and its Affiliates will use Commercially Reasonable Efforts to segregate all research, development or commercialization activities relating to the Distracting Product from Research, Development and Commercialization with respect to Licensed Agents or Products under this Agreement, including using Commercially Reasonable Efforts to ensure that (i) no personnel involved in performing the research, development or commercialization of such Distracting Product have access to non-public plans or information relating to the Research, Development or Commercialization of Products (*provided* that management personnel may review and evaluate plans and information regarding the Research, Development and Commercialization of Products in connection with portfolio decision-making) and (ii) no personnel involved in performing the Development or Commercialization of Products have access to non-public plans or information relating to the Development or Commercialization of such Distracting

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Product (*provided* that management personnel may review and evaluate plans and information regarding the Development and Commercialization of such Distracting Product in connection with portfolio decision-making).

2.13.7 Change of Control. If there is a Change of Control involving a Party (where such Party is the acquired entity), the obligations of Sections 2.13.1, 2.13.2, 2.13.3 and 2.13.4(b), as applicable, will not apply to any product containing a (a) a [***] or (b) a [***], in each case, that is Controlled by the relevant acquirer or its Affiliates that exists prior to the closing of such Change of Control; *provided* that (i) the acquired Party and the acquirer and its Affiliates existing immediately prior to the effective date of such Change of Control establish and enforce internal processes, policies, procedures and systems to segregate information relating to any such product from any Confidential Information related to the Licensed Agents and Products under this Agreement, (ii) the acquirer and its Affiliates existing immediately prior to the effective date of such Change of Control do not use, directly or indirectly, any Patents, Know-How or Confidential Information of the acquired Party (including any Patents, Know-How or Confidential Information licensed or acquired from the other Party under this Agreement) in connection with such product, and (iii) no personnel who were employees or consultants of the acquired Party or its Affiliates at any time prior to or after the Change of Control will conduct any activities relating to such product.

ARTICLE 3
GOVERNANCE

3.1 Joint Research Committee.

3.1.1 Formation. Within 30 days after the Effective Date, the Parties will establish a joint research committee (the "**Joint Research Committee**" or "**JRC**") to oversee and coordinate activities under this Agreement. The JRC will be comprised of [***] representatives from each Party, with one such representative to have [***]. The JRC will conduct its responsibilities hereunder in good faith and with reasonable care and diligence. The JRC will meet in person at least once each Calendar Quarter on such dates and at such times and places as agreed to by the members of the JRC. The purpose of the JRC will be to provide the members periodic updates regarding progress of activities pursuant to this Agreement and to address the matters set forth in Section 3.1.2. Each Party will be responsible for its own expenses relating to attendance at or participation in JRC meetings.

3.1.2 Responsibilities. The JRC will:

(a) review and approve any initial or amended Research Plan, including the corresponding Research Budget, the planned content of an Option Exercise Data Package, and, to the extent practicable, the specific criteria for acceptance of the Option Exercise Data Package;

(b) prioritize the performance of activities under the Research Plans (including Continuation Research) for Collaboration Targets;

(c) provide comments and recommendations to each Party with respect to the conduct of activities under each Research Plan;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(d) assist in planning and facilitating the transfer of Research responsibility and activities from CRISPR to Vertex upon Option Exercise as needed;

(e) provide a forum for the Parties to discuss the objectives and progress under each Research Plan and to exchange and review scientific information and data relating to the activities being conducted under each Research Plan;

(f) during the [***], discuss the [***];

(g) during the [***], discuss the [***]; and

(h) perform such other duties as are specifically assigned to the JRC under this Agreement.

3.1.3 Decision-Making. The JRC members will use reasonable efforts to reach agreement on any and all matters that the JRC has the authority to decide and endeavor to reach consensus on all such matters, taking into consideration the views of each Party. If the JRC is unable to reach consensus with respect to any such matter within [***], the matter will be referred to the Executive Officers, who will use reasonable efforts to reach agreement on such matter. If such Executive Officers are unable to reach consensus with respect to such matter with [***] after such matter is first referred to such Executive Officers, then [***] will have the right to make the final decision with respect to the relevant matter; *provided* that [***] (i) will take into reasonable consideration the recommendations and concerns raised by [***], (ii) will make such decisions in good faith using reasonable business judgment, which will not be unreasonably delayed, and (iii) will not have the right to: (A) amend, modify or waive compliance with any term or condition of this Agreement; (B) make any decision that is expressly stated to require the mutual agreement of the Parties; (C) resolve any claim or dispute regarding whether or in what amount a payment is owed under this Agreement; (D) exercise its final decision-making authority in a manner that would require [***] to perform any act that [***] reasonably believes would constitute a violation of an Applicable Law; (E) make a determination that a Party is in material breach of any obligation under this Agreement or (F) amend or modify a Research Plan if such amendment or modification would require [***] to expend additional resources, whether internal or external, including capital expenditures for which [***] as provided herein.

3.1.4 Discontinuation of the JRC. The JRC's authority with respect to a given Collaboration Program will continue to exist until the first to occur of (a) the Parties mutually agreeing to terminate the JRC's authority with respect to such Collaboration Program and (b) the completion of all activities under the Research Plan for such Collaboration Program. The JRC will disband when it ceases to have authority over any Collaboration Program pursuant to the preceding sentence.

3.2 Collaboration Program Working Group. Within [***] after Vertex designates a Vertex Target as a Collaboration Target as provided in Section 2.3.3 (or with respect to the Initial Collaboration Targets, within [***] after the Effective Date), the Parties will form a working group (a "**Collaboration Program Working Group**") comprised of an equal number of representatives from each Party having relevant expertise with respect to the given

Collaboration Program. The Collaboration Program Working Group shall be chaired by a project leader from [***], whose appointment shall be subject to the reasonable approval by [***]. The Collaboration Program Working Group will create the initial Research Plan and Research Budget, the planned content of an Option Exercise Data Package, and, to the extent practicable, the specific criteria for acceptance of the Option Exercise Data Package for the applicable Collaboration Program. The Collaboration Program Working Group will also oversee and coordinate the performance of activities under the Research Plan for such Collaboration Program and perform such other activities as the JRC may delegate to the Collaboration Program Working Group from time to time. Any disputes arising out of the Collaboration Program Working Group will be escalated to the JRC for resolution.

3.3 Other Committees. The Parties may, by mutual agreement, form such other committees or working groups as may be necessary or desirable to facilitate the activities under this Agreement. Any dispute arising from such committees or working groups will be escalated to the JRC for resolution.

3.4 Alliance Managers.

3.4.1 Appointment. Within [***] following the Effective Date each Party will appoint (and notify the other Party of the identity of) a representative of such Party to act as its alliance manager under this Agreement (each an "**Alliance Manager**"). Each Party may replace its Alliance Manager at any time by written notice to the other Party.

3.4.2 Specific Responsibilities. The Alliance Managers may be, but will not be required to be, members of the JRC. The Alliance Managers will serve as the primary contact point between the Parties for the purpose of providing each Party with information regarding the other Parties' activities pursuant to this Agreement and will have the following responsibilities:

(a) schedule meetings of the JRC and circulate draft written minutes from each meeting within [***] after each such meeting;

(b) facilitate the flow of information and otherwise promoting communication, coordination and collaboration between the Parties;

(c) coordinate the various functional representatives of each Party, as appropriate, in developing and executing strategies and plans for Licensed Agents and Products;

(d) provide a single point of communication for seeking consensus both internally within the respective Party's organization and between the Parties regarding key strategy and planning issues;

(e) coordinate and facilitate budget, finance and billing activities as overseen by the JRC; and

(f) perform such other functions as requested by the JRC.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 4
EXCLUSIVE OPTION

4.1 Option.

4.1.1 Option and Option Deadline. CRISPR hereby grants to Vertex and its Affiliates an exclusive option to obtain the Exclusive License with respect a maximum of six Collaboration Targets (each, an "**Option,**" and such six Collaboration Target maximum, the "**Option Cap**"). Within [***] after Vertex's receipt of an Option Exercise Data Package for the applicable Collaboration Program (the "**Option Deadline**"), Vertex will notify CRISPR as to whether or not Vertex is exercising the applicable Option; *provided*, that if, following receipt of the applicable Option Exercise Data Package, Vertex delivers a [***] to the JRC, the Option Deadline will be extended until the date that is [***] after Vertex's receipt of a revised Option Exercise Data Package reflecting the results of the Continuation Research as provided in Section 2.6. If Vertex or its designated Affiliate notifies CRISPR in writing that it wishes to exercise the applicable Option, CRISPR will, and hereby does, grant to Vertex or its designated Affiliate the Exclusive License with respect to Licensed Agents and Products directed to such Collaboration Target and, except with respect to Collaboration Targets that are [***] with respect to such Collaboration Target; *provided, however*, if Vertex determines that an HSR Filing is required to be made under the HSR Act to exercise an Option and notifies CRISPR of such determination within [***] after Vertex's receipt of the complete Option Exercise Data Package, the Parties will promptly file an HSR Filing in accordance with Section 4.1.2(a) and Vertex's election to exercise the applicable Option will not be effective (and Vertex will not be obligated to make any payment under Section 7.3.1) until the HSR Clearance Date. If Vertex fails to timely exercise an Option in accordance with this Section 4.1.1, the Option shall expire and be of no further force or effect, both Party's obligations under Section 2.13.1 shall terminate with respect to the relevant Collaboration Target, such Collaboration Target shall no longer be a Collaboration Target nor a Vertex Target and Vertex shall be deemed to have terminated the relevant Collaboration Program for purposes of ARTICLE 11 of this Agreement.

4.1.2 HSR Compliance.

(a) HSR Filing. If Vertex notifies CRISPR pursuant to Section 4.1.1 that an HSR Filing is required for Vertex to receive the Exclusive License with respect to a Collaboration Target, each of Vertex and CRISPR will, within [***] after such notice from Vertex (or such later time as may be agreed to in writing by the Parties), file with the United States Federal Trade Commission ("**FTC**") and the Antitrust Division of the United States Department of Justice ("**DOJ**"), any HSR Filing required with respect to the transactions contemplated hereby. The Parties will cooperate with one another to the extent necessary in the preparation of any such HSR Filing. Each Party will be responsible for its own costs and expenses (other than filing fees, which Vertex will pay) associated with any HSR Filing.

(b) HSR Clearance. In furtherance of obtaining clearance for an HSR Filing filed pursuant to this Section 4.1.2, CRISPR and Vertex will use their respective Commercially Reasonable Efforts to resolve as promptly as practicable any objections that may be asserted with respect to this Agreement or the transactions contemplated by

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

this Agreement under any antitrust, competition or trade regulatory law. In connection with obtaining such HSR clearance from the FTC, the DOJ or any other governmental authority, Vertex and its Affiliates will not be required to (i) sell, divest (including through a license or a reversion of licensed or assigned rights), hold separate, transfer or dispose of any assets, operations, rights, product lines, businesses or interest therein of Vertex or any of its Affiliates (or consent to any of the foregoing actions); or (ii) litigate or otherwise formally oppose any determination (whether judicial or administrative in nature) by a governmental authority seeking to impose any of the restrictions referenced in clause (i) above.

ARTICLE 5
LICENSE GRANTS

5.1 Non-Exclusive Research License from CRISPR to Vertex. Subject to the terms and conditions of this Agreement, CRISPR and, following the Subsidiary Transfer, the CRISPR Subsidiary, hereby grants Vertex UK and its Affiliates a non-exclusive, royalty-free, fully paid-up, worldwide license, with no right to grant sublicenses except to permitted Subcontractors under Section 2.9, to use the Licensed Technology solely to perform the Vertex Activities during the Research Term.

5.2 Non-Exclusive Research and Development License from Vertex to CRISPR. Subject to the terms and conditions of this Agreement, Vertex hereby grants to CRISPR a non-exclusive, royalty-free, fully paid-up, worldwide license, with no right to grant sublicenses except to permitted Subcontractors under Section 2.9, under the Vertex Technology solely to perform Research under the Research Plan for each Collaboration Program during the Research Term.

5.3 License Grants to Vertex.

5.3.1 Development and Commercialization Licenses. Subject to the terms and conditions of this Agreement, on a Collaboration Target-by-Collaboration Target basis, effective upon Vertex's exercise of the Option for a particular Collaboration Target in accordance with this Agreement, CRISPR and, following the Subsidiary Transfer, the CRISPR Subsidiary, grants to Vertex UK and its Affiliates an exclusive (subject to Section 6.1.2(b)), royalty-bearing, license under CRISPR's and its Affiliates' interest in the Licensed Technology to Research, Develop, Manufacture, have Manufactured, use, keep, sell, offer for sale, import, export and Commercialize Licensed Agents and Products directed to the relevant Collaboration Target in the Field in the Territory (such license, the "**Exclusive License**"). Vertex may grant sublicenses through multiple tiers of sublicense to one or more Sublicensees of any and all rights granted to Vertex by CRISPR under the Exclusive License; *provided* that Vertex shall only be permitted to grant a Sublicense to conduct any Commercialization activities with respect to a Licensed Agent or Product [***] with CRISPR's prior written consent, such consent not to be unreasonably withheld, conditioned or delayed; and *provided*, *further*, that no such consent will be needed with respect to any Sublicense (a) granted to a Third Party to conduct Commercialization activities with respect to a Licensed Agent or Product in [***] (and not any other [***]), (b) any Sublicense granted to a Distributor or other Third Party conducting activities on Vertex's behalf or (c) any Sublicensee granted to a Third Party to Manufacture Licensed Agent or Product on

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Vertex's behalf. Each such Sublicense will be subject and subordinate to, and consistent with, the terms and conditions of this Agreement and will require such Sublicensee to comply with all applicable terms of this Agreement and all Third Party Obligations. Vertex shall promptly provide CRISPR with a copy of the fully executed Sublicense agreement covering any sublicense granted hereunder (which copy may be redacted to remove provisions which are not necessary to monitor compliance with this Section 5.3.1). Notwithstanding the grant of any Sublicense, Vertex shall remain primarily liable to CRISPR for the performance of all of Vertex's obligations under, and Vertex's compliance with all provisions of, this Agreement.

5.3.2 License Conditions; Limitations. Subject to Section 7.6, any rights and obligation hereunder, including the rights granted pursuant to any Exclusive License with respect to a Collaboration Target, are subject to and limited by any applicable Third Party Obligations to the extent the provisions of such obligations or agreements are specifically disclosed to Vertex in writing (or via electronic data room) (a) with respect to Third Party Obligations existing as of the Effective Date, prior to the Effective Date, (b) with respect to Third Party Obligations arising between the Effective Date and the delivery of the relevant Option Exercise Data Package, at the time of delivery of the Option Exercise Data Package and (c) with respect to Third Party Obligations arising after the date the applicable Exclusive License is granted hereunder, on or prior to the date on which such Third Party Obligations arise. Vertex will have the right to [***] any Third Party Patents and Know-How to which such Third Party Obligations [***] by providing CRISPR [***] (with respect to any Third Party Obligations existing at the time the relevant Option Exercise Data Package is delivered) or [***], in which case, such Third Party Patents and Know-How [***] this Agreement. If Vertex does not provide CRISPR [***] Third Party Patents and Know-How as provided above, such Third Party Patents and Know-How [***] under this Agreement and Vertex will be subject to the Third Party Obligations [***].

5.4 Licenses to Improvements.

5.4.1 License to CRISPR. Subject to the terms and conditions of this Agreement, Vertex hereby grants to CRISPR a perpetual, irrevocable, non-exclusive, royalty-free, fully paid-up, worldwide, sublicensable, license to all improvements or modifications to the CRISPR Platform Technology Patents, CRISPR Background Patents (to the extent existing on the Effective Date or otherwise claiming the CRISPR Background Know-How set forth on Schedule F), [***] or CRISPR Background Know-How set forth on Schedule F (as may be supplemented by mutual written agreement of the Parties from time to time), whether or not patentable, that arise in the course of performing activities under a Research Plan or in the course of Developing and Commercializing a Licensed Agent or Product and are Controlled by Vertex or its Affiliates to make, have made, use, sell, keep, offer for sale and import products other than Licensed Agents and Products.

5.4.2 License to Vertex. Subject to the terms and conditions of this Agreement, CRISPR, and, following the Subsidiary Transfer, to the extent necessary, the CRISPR Subsidiary, hereby grants to Vertex a perpetual, irrevocable, non-exclusive, royalty-free, fully paid-up, worldwide, sublicensable, license to all improvements or modifications to the Vertex Background Know-How or Vertex Background Patents, whether or not patentable, that arise in the course of performing activities under a Research Plan and are Controlled by CRISPR or its Affiliates to make, have made, use, sell, keep, offer for sale and import products other than Licensed Agents and Products.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.5 Technology Transfer after Option Exercise.

5.5.1 Transition Agreement. Upon each exercise by Vertex of an Option, the Parties will negotiate and execute an agreement setting forth the Parties' respective obligations with respect to the transfer of data and Materials relating to the relevant Collaboration Target from CRISPR to Vertex, all in accordance with this Section 5.5.

5.5.2 Licensed Know-How. On a Collaboration Target-by-Collaboration Target basis, CRISPR will promptly, but no later than [***] after Vertex exercises its Option for such Collaboration Target hereunder, make available and, at Vertex's request, deliver to Vertex or one or more designated Affiliates all documented Licensed Know-How in CRISPR's possession that has not previously been provided hereunder, for use in accordance with the exercise of the applicable Exclusive License. To assist with the transfer of such Licensed Know-How, CRISPR will make its personnel reasonably available to Vertex during normal business hours to transfer such Licensed Know-How under this Section 5.5.2 and Vertex will reimburse CRISPR for the reasonable costs of such assistance at the FTE Rate within 30 days after its receipt of an invoice therefor.

5.5.3 Transfer of Manufacturing Know-How and Materials. Without limiting CRISPR's obligations under Section 5.5.2, within [***] following the exercise of an Option, and thereafter, promptly following Vertex's request, CRISPR will, or will cause the applicable Third Party (including any contract manufacturing organization engaged by CRISPR to Manufacture any Licensed Agent or Product) to, transfer to Vertex (a) all Licensed Know-How that is necessary or useful to enable the Manufacture of each Licensed Agent or Product for the applicable Collaboration Target, and not previously transferred to Vertex under this Agreement, by providing copies or samples of relevant documentation, materials and other embodiments of such Licensed Know-How, and by making available its, or the applicable Third Party's, qualified technical personnel on a reasonable basis to consult with Vertex with respect to such Licensed Know-How and (b) at Vertex's request, any Materials used by CRISPR or its Affiliates or Subcontractors in the Manufacture of such Licensed Agent or Product.

5.5.4 Transfer of Regulatory Filings and Data. On a Collaboration Target-by-Collaboration Target basis and effective as of the date on which Vertex is granted the Exclusive License for a Collaboration Target, CRISPR will, and hereby does, assign to Vertex any and all Regulatory Filings or any other rights or permissions granted by any Regulatory Authority to Vertex related to any Licensed Agent or Product directed to such Collaboration Target, together with all Research, Development and Manufacturing data relating to such Collaboration Target, in each case, not previously assigned by CRISPR to Vertex. Further, CRISPR will take all actions and provide all assistance reasonably requested by Vertex to effect the assignments in this Section 5.5.4.

5.5.5 Right of Reference. Vertex hereby grants to CRISPR the right to rely upon and a right to copy, access, and otherwise use, all Adverse Event information pertaining to each Product as reasonably required in connection with the Development and Commercialization

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(subject to Section 2.13) of products, and Vertex shall, if requested by CRISPR, provide a signed statement that CRISPR may rely on, and the Regulatory Authority may access, in support of CRISPR's application for Regulatory Approval of such products.

5.6 No Implied Licenses. All rights in and to Licensed Technology not expressly licensed or assigned to Vertex under this Agreement are hereby retained by CRISPR or its Affiliates. All rights in and to any Vertex Technology not expressly licensed to CRISPR under this Agreement, are hereby retained by Vertex or its Affiliates. Except as expressly provided in this Agreement, no Party will be deemed by estoppel or implication to have granted the other Party any licenses or other right with respect to any intellectual property.

ARTICLE 6
PROFIT/LOSS SHARING, DEVELOPMENT, MANUFACTURING AND COMMERCIALIZATION

6.1 CRISPR Profit/Loss Sharing.

6.1.1 Profit/Loss Sharing. CRISPR will jointly (with Vertex or Affiliate(s) designated by Vertex) Research, Develop and Commercialize Products containing (a) any Licensed Agent directed to a Collaboration Target that is a Hemoglobinopathy Target or (b) [***] and, in each case, for which Vertex has obtained the Exclusive License, as provided herein, unless, in each case, CRISPR exercises an Opt-Out in accordance with Schedule G.

6.1.2 Effects of Co-Commercialization. For each Collaboration Target set forth in clauses (a) or (b) of Section 6.1.1:

(a) each Product for the relevant Collaboration Target will be deemed a "**Shared Product**";

(b) the Exclusive License with respect to the relevant Collaboration Target will become co-exclusive (with CRISPR);

(c) within [***] after Vertex has exercised the Option to obtain the Exclusive License for such Collaboration Target, CRISPR and Vertex (or any Affiliates designated by Vertex) will enter into an agreement (the "**Joint Development & Commercialization Agreement**"), which the Parties will negotiate in good faith and which will include appropriate plans and budgets, for the joint Development and Commercialization of Shared Products (or provisions for establishing such plans) and will include (i) terms and conditions that are substantially the same as those set forth in Schedule G and (ii) other reasonable and customary provisions for transactions of this type as the Parties may agree. If the terms of this Agreement conflict with the terms of the Joint Development & Commercialization Agreement, the terms of the Joint Development & Commercialization Agreement will control with respect to the Collaboration Program that is the subject thereof and the terms of this Agreement will control with respect to all other matters; and

(d) [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.2 Responsibility. Following an Option Exercise, Vertex will be solely responsible for all Research, Development, Manufacturing and Commercialization of Licensed Agents and Products for the relevant Collaboration Target that are performed after the date on which the Option was exercised and for all costs and expenses associated therewith, except (a) as may be otherwise provided in a Joint Development & Commercialization Agreement, (b) with respect to any incomplete activities under the relevant Research Plan or any agreed-upon Additional Research and (c) for the transfer of activities to Vertex as contemplated by Section 5.5.

6.3 Vertex Diligence.

6.3.1 Development Diligence. Except with respect to Shared Products, following Vertex's exercise of the Option for a Collaboration Target, Vertex (acting directly or through one or more Affiliates or Sublicensees) will use Commercially Reasonable Efforts to Develop, obtain Marketing Approvals for [***] in [***].

6.3.2 Commercial Diligence. Except with respect to Shared Products, Vertex (acting directly or through one or more Affiliates or Sublicensees) will use Commercially Reasonable Efforts to Commercialize, including seeking Price Approval on appropriate terms, [***] in [***].

6.4 Product Development & Commercialization Plan. On a Collaboration Program-by-Collaboration Program basis, Vertex will prepare a Development and Commercialization plan setting forth in reasonable detail (which detail shall be at least sufficient for CRISPR to evaluate Vertex's compliance with its obligations under this Agreement) Vertex's plans for (a) the Development of each Product for the relevant Collaboration Target through Clinical Trials designed to show Establishment of POC, (b) starting after Establishment of POC, the Development of each Product through Marketing Approval and (c) starting upon Marketing Approval for a Product and continuing thereafter until the expiration of the applicable Royalty Term, Commercialization for the Product, as appropriate for the stage of the Product, including a launch plan for each Major Market Country (each, an "**Product Development & Commercialization Plan**"). If Vertex is Developing or Commercializing more than one Product directed to a Collaboration Target, the Product Development & Commercialization Plan will include the foregoing information for each such Product. Vertex will prepare the initial Product Development & Commercialization Plan for a Collaboration Program no later than [***] after Option Exercise by performing the activities set forth in each Research Plan for the relevant Collaboration Target. Once Vertex has prepared such Product Development & Commercialization Plan, Vertex will update such plan no less than [***] so that such Product Development & Commercialization Plan is an accurate reflection of Vertex's then-current plans with respect to the Development and Commercialization of the relevant Product and Vertex will provide such updates to CRISPR for its review. All Product Development & Commercialization Plans are provided solely for informational purposes, and Vertex's failure to follow a Product Development & Commercialization Plan will not constitute a breach of this Agreement. Notwithstanding the foregoing, Vertex will have no obligation under this Section 6.4 with respect to any Shared Product.

6.5 Applicable Laws. Each Party will, and will require its Affiliates, Sublicensees and Subcontractors to, comply with all Applicable Law in its and their Research, Development, Manufacture and Commercialization of Products, including where appropriate cGMP, GCP and GLP (or similar standards).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.6 Regulatory Matters; Safety Data Exchange Agreement.

6.6.1 Responsibilities. Vertex or its designated Affiliates and Sublicensees will have the sole authority to prepare and file Regulatory Filings, each in its own name, and applications for Regulatory Approval and Price Approval for any and all Licensed Agents and Products directed to each Collaboration Target, and will have the sole responsibility for communicating with any Regulatory Authority both prior to and following Regulatory Approval and Price Approval, including all communications and decisions with respect to (a) pricing of Products and (b) the negotiation of Product pricing with Regulatory Authorities and other Third Parties.

6.6.2 Ownership. Ownership of all right, title and interest in and to any and all Regulatory Filings, Regulatory Approvals and Price Approvals directed to any Licensed Agent or any Product directed to each Collaboration Target in each country of the Territory will be held in the name of Vertex, its Affiliate, designee or Sublicensee.

6.6.3 Pharmacovigilance. Upon Vertex's request, the Parties will negotiate and enter into a separate safety data exchange agreement (a "**Safety Data Exchange Agreement**"). The Safety Data Exchange Agreement will set forth guidelines and procedures for the receipt, investigation, recording, review, communication, reporting and exchange between the Parties of adverse event reports (which, for purposes of information exchange between the Parties, will include adverse events and serious adverse events, and any other information concerning the safety of any Product or Licensed Agent and, with respect to information provided by CRISPR, concerning the safety of products containing a [***] or [***]). Without limiting the foregoing, the Parties will meet to establish a safety oversight working group comprised of members of both Parties, which, except as otherwise provided in the Safety Data Exchange Agreement, will discuss processes and procedures for sharing information needed to support each Party's regulatory responsibilities and to comply with applicable regulatory pharmacovigilance requirements. Any such procedures will not be construed to restrict either Party's ability to take any action that it deems to be appropriate or required of it under the applicable regulatory requirements, if permitted by Applicable Laws. Vertex (a) will maintain a unified worldwide adverse event database for Products, and be responsible for reporting adverse events and serious adverse events to the applicable Regulatory Authorities and (b) will be responsible for all signal detection and risk management activities and will develop and approve the contents of all safety communications to Regulatory Authorities, including but not limited to expedited non-clinical and clinical safety reports and aggregate reports to health authorities, institutional review boards and ethics committees.

6.7 Commercialization.

6.7.1 General. Vertex will have sole and exclusive control over all matters relating to the Commercialization of Products, except as may be otherwise provided in a Joint Development & Commercialization Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.7.2 Branding. Vertex or its designated Affiliates or Sublicensees will select and own all trademarks used in connection with the Commercialization of any and all Products. CRISPR will not use nor seek to register, anywhere in the world, any trademark that is confusingly similar to any trademark used by or on behalf of Vertex, its Affiliates or Sublicensees in connection with any Product.

6.8 Manufacturing. Vertex will have the exclusive right to Manufacture and supply Licensed Agents and Products itself or through one or more Affiliates or Third Parties selected by Vertex in its sole discretion. The Parties may share information relating to the Manufacture of Products, and other products to be commercialized by CRISPR, to determine whether and how to leverage their respective manufacturing efforts, but shall have no obligation hereunder to enter into an agreement with respect thereto.

ARTICLE 7
FINANCIAL PROVISIONS

7.1 Up-Front Fee to CRISPR AG (Switzerland). Within four Business Days following the Effective Date, Vertex UK will pay CRISPR AG a one-time, non-refundable, non-creditable, upfront fee of $75,000,000 payable by wire transfer of immediately available funds.

7.2 [***]. if Vertex [***], Vertex will [***] within [***] after Vertex notifies CRISPR that it is [***]. The [***] that are [***].

7.3 Milestone Payments.

7.3.1 Development Milestones. Subject to Section 7.3.4, Vertex will pay CRISPR the milestone payments set forth in this Section 7.3.1 with respect to each Collaboration Target [***], whether such milestone event is achieved by CRISPR, Vertex or their respective Affiliates or any Sublicensees. Each milestone payment set forth below, is payable only once per Collaboration Target, regardless of the number of Products directed to such Collaboration Target that achieve the relevant milestone event.

Milestone Number	Milestone Event	Milestone Payment
1	[***]	[***]
2	[***]	[***]
3	[***]	[***]
4	[***]	[***]
5	[***]	[***]
6	[***]	[***]
7	[***]	[***]
8	[***]	[***]
9	[***]	[***]
10	[***]	[***]
11	[***]	[***]

7.3.2 Commercial Milestones. Subject to Section 7.3.4, Vertex will pay CRISPR the milestone payments set forth in this Section 7.3.2 with respect to each Collaboration

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Target [***], whether such milestone event is achieved by Vertex or its Affiliates or any of their Sublicensees. Each milestone payment set forth below, is payable only once per Collaboration Target, regardless of the number of Products directed to such Collaboration Target that achieve the relevant milestone event or the number of times Product(s) achieve such milestone event.

Milestone Number	Milestone Event	Milestone Payment
12	[***]	[***]
13	[***]	[***]

7.3.3 Notice; Payment; Skipped Milestones. Vertex will provide CRISPR with written notice upon the achievement of each of the milestone events set forth in Section 7.3.1 or 7.3.2, such notice to be provided, (a) with respect to milestones under Section 7.3.1, within [***] after achievement, and (b) with respect to milestones under Section 7.3.2, [***] for the Calendar Quarter in which such milestone is first achieved. Following receipt of such notice, CRISPR will promptly invoice Vertex for the applicable milestone and Vertex will make the appropriate milestone payment within [***] after receipt of such invoice. The milestones numbered [***] as set forth in Section 7.3.1 are intended to be successive; if a Product for a Collaboration Target is not required to undergo the event associated with any such milestone event, such skipped milestone will be deemed to have been achieved upon the achievement by such Product of the next successive milestone event. Payment for any such skipped milestone that is owed in accordance with the provisions of the foregoing sentence with respect to a given Product will be due concurrently with the payment for the next successive milestone event by such Product, it being agreed that if a Product for a Collaboration Target is not required to undergo the milestone numbered [***], the corresponding payment will be made upon the first to occur of the milestones numbered [***].

7.3.4 Failure to Obtain Necessary Agreements. If, at the time any milestone event under Section 7.3.1 or Section 7.3.2 is achieved, CRISPR has not obtained all necessary consents and agreements and taken all actions provided for under Section 9.3.10, [***].

7.4 Research Costs.

7.4.1 As soon as practicable, but in any event within [***] after the end of each [***], CRISPR will provide Vertex with a flash report estimating reimbursable Research Cost, if any, incurred by it and its Affiliates during the just-ended [***].

7.4.2 Within [***] after the end of each [***], CRISPR will submit to Vertex an itemized report of Research Costs, if any, incurred by CRISPR and its Affiliates during such [***] (the "**Cost Report**"), including reasonable supporting documentation.

7.4.3 Vertex will reimburse CRISPR for all Research Costs in accordance with the applicable Research Budget or Additional Research Budget within [***] after its receipt of the applicable Cost Report. If the Research Costs for a Research Plan or Additional Research Plan exceed the applicable Research Budget or Additional Research Budget, CRISPR may include such excess costs in the applicable Cost Report, and Vertex will reimburse such excess costs, [***].

7.4.4 Notwithstanding anything to the contrary contained herein, except as may be otherwise provided in a Joint Development & Commercialization Agreement, Vertex will not be obligated to reimburse CRISPR for any Research Costs incurred in connection with the Research of a Shared Product following Option Exercise for the relevant Collaboration Program.

7.5 Royalties.

7.5.1 Royalty Rates. Subject to Sections 7.5.2, 7.5.3 and 7.5.4, on a Product-by-Product and country-by-country basis, Vertex will pay CRISPR royalties based on the aggregate Net Sales of each Product sold by Vertex, its Affiliates or Sublicensees in the Field in the Territory during a Calendar Year at the rates set forth in the table below; *provided*, that Vertex will have no obligation under this Section 7.5.1 with respect to any Shared Product. The obligation to pay royalties will be imposed only once with respect to the same unit of a Product.

Calendar Year Net Sales (in Dollars) for such Product in the Territory	**Royalty Rates as a Percentage (%) of Net Sales**
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

7.5.2 Royalty Term. Vertex will pay royalties to CRISPR under this Section 7.5 on a Product-by-Product and a country-by-country basis during the Royalty Term. Upon the expiration of the Royalty Term for a given Product in a given country, the Exclusive License with respect to such Product will become fully-paid, perpetual and irrevocable.

7.5.3 [***] Generic Competition. If one or more Generic Products with respect to a Product is marketed and sold in a given country by one or more Third Parties during any Calendar Quarter during the Royalty Term and the [***] of such Product sold during such Calendar Quarter have [***] relative to average quarterly sales ([***]) of such Product in such country during the [***] Calendar Quarters immediately prior to the Calendar Quarter during which such Generic Product(s) was first marketed and sold in such country, then the royalty rate for such Product in such country, on a Product-by-Product and country-by-country basis, will thereafter be [***] of the applicable royalty rate set forth in Section 7.5.1 for so long as such reduction in [***] persists.

7.5.4 Third Party Licenses. Vertex may [***] from the royalties payable to CRISPR under this Section 7.5 the following amounts: (a) [***]; (b) [***]; and (c) [***]; *provided*, *however*, that in no event will the royalties that would otherwise be payable to CRISPR, as reduced by Section 7.5.3 [***] under this Section 7.5.4; and *provided further*, that Vertex will be entitled to [***] any amounts with respect to which Vertex would have been [***] pursuant to this Section 7.5.4 but [***] in this Section 7.5.4.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

7.5.5 [***]. If, at the time any royalties are payable pursuant to Section 7.5, [***].

7.5.6 Royalty Reports. During the Agreement Term, following the first sale of a Product (other than a Shared Product) giving rise to Net Sales, within [***] after the end of each Calendar Quarter, Vertex will deliver a report to CRISPR specifying on a Product-by-Product and country-by-country basis: (a) gross sales in the relevant Calendar Quarter, (b) Net Sales in the relevant Calendar Quarter, including an accounting of deductions applied to determine Net Sales; (c) a summary of the then-current exchange rate methodology then in use by Vertex, and (d) royalties payable on such Net Sales. All royalty payments due under Section 7.5 for each Calendar Quarter will be due and payable within [***] after Vertex's delivery of the applicable report under this Section 7.5.5.

7.6 CRISPR In-License Agreements; [***].

7.6.1 CRISPR In-License Agreements. Certain of the Licensed Technology Controlled by CRISPR or CRISPR Affiliates as of the Effective Date was in-licensed or acquired by CRISPR under the agreements with Third Party licensors or sellers listed on Schedule H (such agreements, together with each consent and agreement obtained by CRISPR pursuant to Section 9.3.10, the "**CRISPR In-License Agreements**"). Subject to Section 10.1, [***].

7.6.2 [***].

(a) Certain Licensed Technology [***] during the Term pursuant to [***]. For any [***] pursuant to which [***], CRISPR will use Commercially Reasonable Efforts to ensure that [***] with the same [***] (including the right for Vertex [***] would be [***] and [***], [***] and other potential or actual [***]. If CRISPR is [***], (a) CRISPR will so notify Vertex, and the Parties will [***] and (b) CRISPR will not [***].

(b) Notwithstanding anything to the contrary contained herein, if, following Vertex's exercise of the Option for a particular Collaboration Target, Vertex believes, in its reasonable judgment, that it may be necessary to obtain rights under any Patent having claims which Cover Licensed Agents or Products that are the subject of the Option, Vertex shall have the right to negotiate a license to such Patent.

7.6.3 [***]. Vertex shall [***] by Vertex, its Affiliates or Sublicensees. If the [***] based on the [***] across such [***] by Vertex, its Affiliates or Sublicensees. [***] with and to the extent [***].

7.6.4 [***]. Subject to Section [***], [***] arising under any [***]. [***] shall take into consideration the [***]. [***], the matter shall [***]. [***] if and when such [***].

7.6.5 [***]. If CRISPR [***] which provides [***] set forth on [***], then, [***], [***]

7.6.6 [***]. Notwithstanding the foregoing provisions of this Section 7.6, Vertex may [***] with respect to one or more [***] and, thereafter, [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

7.7 Payment Method; Currency.

7.7.1 All payments under this Agreement will be paid in U.S. Dollars, by wire transfer to an account designated by CRISPR (which account CRISPR may update from time to time in writing).

7.7.2 If any amounts that are relevant to the determination of amounts to be paid under this Agreement or any calculations to be performed under this Agreement are denoted in a currency other than U.S. Dollars, then such amounts will be converted to their U.S. Dollar equivalent using Vertex's then-current standard procedures and methodology, including its then-current standard exchange rate methodology for the translation of foreign currency expenses into U.S. Dollars or, in the case of Sublicensees, such similar methodology, consistently applied.

7.8 Withholding Tax. Where any sum due to be paid to CRISPR hereunder is subject to any withholding or similar tax, Vertex will pay such withholding or similar tax to the appropriate Government Authority and deduct the amount paid from the amount then due CRISPR, in a timely manner and promptly transmit to CRISPR an official tax certificate or other evidence of such withholding sufficient to enable CRISPR to claim such payment of taxes. The Parties agree to cooperate with one another and use reasonable efforts to reduce or eliminate tax withholding or similar obligations in respect of royalties, milestone payments, and other payments made by Vertex to CRISPR under this Agreement. CRISPR will provide Vertex any tax forms that may be reasonably necessary in order for Vertex not to withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty. Each Party will provide the other with reasonable assistance to enable the recovery, as permitted by Applicable Laws, of withholding taxes, value added taxes, or similar obligations resulting from payments made under this Agreement, such recovery to be for the benefit of the Party bearing such withholding tax or value added tax.

7.9 Records. During the Agreement Term, Vertex will keep and maintain accurate and complete records regarding Net Sales during the [***] preceding Calendar Years and CRISPR will keep and maintain accurate and complete records regarding the Research Cost covering the [***] preceding Calendar Years. Upon [***] prior written notice from the other Party (the "**Auditing Party**"), the Party required to maintain such records (as applicable, the "**Audited Party**") will permit an independent certified public accounting firm of internationally recognized standing, selected by the Auditing Party and reasonably acceptable to the Audited Party, to examine the relevant books and records of the Audited Party and its Affiliates, as may be reasonably necessary to verify the royalty reports submitted by Vertex in accordance with Section 7.5.5, or Research Cost reported by CRISPR in accordance with Section 7.4, as applicable. An examination by the Auditing Party under this Section 7.9 will occur not more than [***] in any Calendar Year and will be limited to the pertinent books and records for any Calendar Year ending not more than [***] before the date of the request. The accounting firm will be provided access to such books and records at the Audited Party's facility or facilities where such books and records are normally kept and such examination will be conducted during the Audited Party's normal business hours. The Audited Party may require the accounting firm to sign a customary non-disclosure agreement before providing the accounting firm access to its facilities or records. Upon completion of the audit, the accounting firm will provide both the Auditing Party and the Audited Party a written report disclosing whether the reports submitted

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

by Vertex, or the Research Cost reported by CRISPR, as applicable, are correct or incorrect and the specific details concerning any discrepancies. No other information will be provided to the Auditing Party. If the report or information submitted by the Audited Party results in an underpayment or overpayment, the Party owing underpaid or overpaid amount will promptly pay such amount to the other Party, and, if, as a result of such inaccurate report or information, such amount is more than [***] of the amount that was owed the Audited Party will reimburse the Auditing Party for the reasonable expense incurred by the Auditing Party in connection with the audit.

7.10 Late Payment. Any payments or portions thereof due hereunder that are not paid when due will accrue interest from the date due until paid at an annual rate equal to [***] (or the maximum allowed by Applicable Law, if less).

ARTICLE 8
INTELLECTUAL PROPERTY

8.1 Ownership; Assignment. For the avoidance of doubt, the rights and obligations of the Parties under this ARTICLE 8 are subject to and limited by any applicable Third Party Obligations to the extent the provisions of such obligations or agreements are specifically disclosed to Vertex in writing (or via electronic data room) (a) with respect to Third Party Obligations existing as of the Effective Date, prior to the Effective Date, (b) with respect to Third Party Obligations arising between the Effective Date and the delivery of the relevant Option Exercise Data Package, at the time of delivery of the Option Exercise Data Package and (c) with respect to Third Party Obligations arising after the date the applicable Exclusive License is granted hereunder, on or prior to the date on which such Third Party Obligations arise.

8.1.1 CRISPR Technology and Vertex Technology. As between the Parties, CRISPR will own and retain all of its rights, title and interest in and to the CRISPR Background Know-How, CRISPR Background Patents and CRISPR Platform Technology Patents and Vertex will own and retain all of its rights, title and interest in and to any Vertex Background Know-How and Vertex Background Patents, subject to any assignments, rights or licenses expressly granted by one Party to the other Party under this Agreement.

8.1.2 Agreement Technology.

(a) As between the Parties, CRISPR will be the sole owner of any Know-How discovered, developed, invented or created solely by CRISPR or its Affiliates or Third Parties acting on their behalf in connection with activities under this Agreement ("**CRISPR Program Know-How**") and any Patents that cover or claim such Know-How ("**CRISPR Program Patents**" and together with the CRISPR Program Know-How, the "**CRISPR Program Technology**"), and will retain all of its rights, title and interest thereto, subject to any assignment, rights or licenses expressly granted by CRISPR to Vertex under this Agreement.

(b) As between the Parties, Vertex will be the sole owner of any Know-How discovered, developed, invented or created solely by Vertex or its Affiliates or Third Parties acting on their behalf in connection with activities under this Agreement

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

("**Vertex Program Know-How**") and any Patents that cover or claim Vertex Program Know-How ("**Vertex Program Patents**" and together with the Vertex Program Know-How, the "**Vertex Program Technology**"), and will retain all of its rights, title and interest thereto, subject to any rights or licenses expressly granted by Vertex to CRISPR under this Agreement.

(c) (i) [***]: Any Know-How discovered, developed, invented or created jointly under this Agreement by both (a) Vertex, its Affiliates or Third Parties acting on Vertex's behalf and (b) CRISPR, its Affiliates or Third Parties acting on CRISPR's behalf, while conducting activities under this Agreement, to the extent [***] ("**[***] Joint Program Know-How**"), and any Patents that [***] ("**[***] Joint Program Patents,**" and together with the [***] Joint Program Know-How, the "**[***] Joint Program Technology**"), will be owned [***], including all rights, title and interest thereto, subject to any assignment, rights or licenses expressly granted by one Party to the other Party under this Agreement. Except as expressly provided in this Agreement, [***] with respect to, or to [***] Joint Program [***], and each Party hereby [***].

(ii) [***]: All [***] Joint Program Know-How, [***] Joint Program Patents, and [***] Joint Program Technology, in each case to the extent pertaining to [***], will be [***]. Within [***], [***] will, and hereby [***], [***] or [***] designated Affiliates, [***] Joint Program Patents. [***] will take all actions and provide [***] with all [***] and will [***].

(d) Any Know-How discovered, developed, invented or created jointly under this Agreement by both (a) Vertex, its Affiliates or Third Parties acting on Vertex's behalf and (b) CRISPR, its Affiliates or Third Parties acting on CRISPR's behalf, while conducting activities under this Agreement, to the extent pertaining to [***] but not exclusively pertaining to [***] ("**[***] Joint Program Know-How**"), and any Patents that claim or cover such [***] Joint Program Know-How ("**[***] Joint Program Patents,**" and together with the [***] Joint Program Know-How, the "**[***] Joint Program Technology**"), will be [***]. [***] will, and hereby does, assign to [***] or one or more of its designated Affiliates, [***] ownership interest in all [***] Joint Program Patents. Within [***], [***] will take all actions and provide [***] with all reasonably requested assistance to effect such assignment and will execute any and all documents necessary to perfect such assignment. Any Patents [***] under this Section [***]. In addition, [***].

(e) Any Know-How discovered, developed, invented or created jointly under this Agreement by both (a) Vertex, its Affiliates or Third Parties acting on Vertex's behalf and (b) CRISPR, its Affiliates or Third Parties acting on CRISPR's behalf, while conducting activities under this Agreement, that is not [***] Joint Program Know-How or [***] Joint Program Know-How (the "**Other Joint Program Know-How**"), and any Patents that solely claim or cover such Other Joint Program Know-How (the "**Other Joint Program Patents,**" and together with the Other Joint Program Know-How, the "**Other Joint Program Technology**"), will be [***], including all rights, title and interest thereto, subject to any assignment, rights or licenses expressly granted by one Party to the other Party under this Agreement. Except as expressly provided in this

Agreement, neither Party will have any obligation [***] with respect to, or to [***], Other Joint Program Technology by reason of [***] thereof, and each Party [***] the laws of any jurisdiction [***]. If such [***], each Party [***] to the [***] without [***] other Party. Notwithstanding the foregoing, if either Party [***] such Other Joint Program Technology, it shall [***] of the other Party, such [***].

(f) CRISPR will promptly disclose to Vertex in writing, and will cause its Affiliates to so disclose, the discovery, development, invention or creation of any CRISPR Program Technology under this Agreement. In addition, each Party will promptly disclose to the other Party in writing, and will cause its Affiliates to so disclose, the discovery, development, invention or creation of any Joint Program Technology under this Agreement.

8.1.3 [***] CRISPR Product-Specific Patents to [***].

(a) Within [***] following the exercise of an Option by Vertex, if not previously completed by [***], CRISPR will [***], including without limitation a [***] as defined below, or as a new case to be determined by [***], consisting of [***] for the [***] that are [***] (each such [***]). Upon Vertex's exercise of an Option, all [***] will no longer be [***] and will thereafter be [***].

(b) Effective upon and following Vertex's exercise of the Option for a particular Collaboration Target, CRISPR will, and hereby does, [***] related to [***] that are [***] (whether [***]), and thereafter [***] will have [***]. CRISPR will take all actions and provide Vertex with [***] and will [***]. Any [***] under this Section 8.1.3(b) will be excluded [***] but will be included in the [***] for purposes of determining the [***].

8.1.4 [***] CRISPR. Effective upon [***] pursuant to Section 8.1.3, Vertex will, [***], [***] any such [***] to (a) conduct activities [***], (b) conduct [***] and

(a) [***].

8.2 Prosecution and Maintenance of Patents. The Parties hereby agree as follows with respect to the Prosecution and Maintenance of certain Patents, for the avoidance of doubt, in each case, subject to Third Party Obligations.

8.2.1 CRISPR Platform Technology Patents. Anything herein to the contrary notwithstanding, and subject to Section 8.2.5, CRISPR will control and be responsible for all aspects of the Prosecution and Maintenance of the CRISPR Platform Technology Patents.

8.2.2 CRISPR Patents. CRISPR will control and be responsible for all aspects of the Prosecution and Maintenance of CRISPR Background Patents, CRISPR Program Patents, [***] Patents and [***] Program Patents. CRISPR will use Commercially Reasonable Efforts to Prosecute and Maintain all CRISPR Background Patents, CRISPR Program Patents, [***] Patents, other Joint Program Patents if applicable, and [***] Joint Program Patents, in each case to the extent Covering Licensed Agents or Products directed to particular Collaboration Targets using counsel reasonably acceptable to Vertex. In advance of Option Exercise for a particular

Collaboration Target (*i.e.*, during the course of and in connection with each Research Plan conducted by the Parties under this Agreement), (a) CRISPR will undertake the Prosecution and Maintenance of one or more patent applications which could claim [***] Claims to the extent permitted by applicable law (each such Patent a "**[***] Patent**") and (b) prior to the filing of any Patent application that Covers Licensed Agents or Products, the Patent Coordinators will meet and in good faith discuss the best strategy for such filing (which, for clarity may [***] Patents). The Parties will use good faith efforts to agree on such strategy, with the goal of maximizing the value of the Parties' respective patent portfolios.

8.2.3 Vertex Patents. Vertex will control and be responsible for all aspects of the Prosecution and Maintenance of all Vertex Background Patents, Vertex Program Patents, [***] and [***] Joint Program Patents. Vertex will use Commercially Reasonable Efforts to Prosecute and Maintain all [***] Patents and [***] Joint Program Patents, if applicable, using counsel reasonably acceptable to CRISPR.

8.2.4 Other Joint Program Patents. The Parties will discuss and agree upon an allocation of responsibility for the prosecution and maintenance of the Other Joint Program Patents.

8.2.5 Other Matters Pertaining to Prosecution and Maintenance of Patents.

(a) Each Party will keep the other Party informed through their respective Patent Coordinators as to material developments with respect to the Prosecution and Maintenance of the CRISPR Platform Technology Patents, CRISPR Background Patents, CRISPR Program Patents, [***] Patents and Joint Program Patents for which such Party has responsibility for Prosecution and Maintenance pursuant to this Section 8.2, including by providing copies of any office actions or office action responses or other correspondence that such Party provides to or receives from any patent office, including notice of all interferences, reissues, re-examinations, or oppositions, and all patent-related filings, and by providing the other Party the timely opportunity to have reasonable input into the strategic aspects of such Prosecution and Maintenance.

(b) If, during the Agreement Term, Vertex intends to abandon patent applications for any Patent that Vertex is responsible for Prosecuting and Maintaining under Section 8.2.3 (excluding Vertex Background Patents and Vertex Program Patents that Cover technology other than Licensed Agents and Products, but including, for the avoidance of doubt, [***] Patents) in a particular country, then Vertex will so notify CRISPR of such intention at least [***] before such Patent will become abandoned, and CRISPR will have the right, but not the obligation, to assume responsibility for the Prosecution and Maintenance thereof at its own expense with counsel of its own choice.

(c) If, during the Agreement Term, CRISPR intends to abandon any CRISPR Background Patent (excluding any CRISPR Platform Technology Patents), CRISPR Program Patent, [***] Patent, [***] Joint Program Patent or Other Joint Program Patent Covering a Licensed Agent or Product that CRISPR is responsible for Prosecuting and Maintaining in a particular country, then, if Vertex's right to obtain an Exclusive License to such Patent or have such Patent assigned pursuant to Section 8.1.3,

as applicable, has not expired or terminated, CRISPR will notify Vertex of such intention at least [***] before such Patent will become abandoned, and Vertex will have the right, but not the obligation, to assume responsibility for the Prosecution and Maintenance thereof at its own expense with counsel of its own choice.

8.3 Patent Coordinators. Each Party will appoint a patent coordinator reasonably acceptable to the other Party (each, a "**Patent Coordinator**") to serve as such Party's primary liaison with the other Party on matters relating to the Prosecution and Maintenance and enforcement of Licensed Patents and Joint Program Patents. The Patent Coordinators will meet in person or by means of telephone or video conference at least once each Calendar Quarter during the Agreement Term. Each Party may replace its Patent Coordinator at any time by providing notice in writing to the other Party. The initial Patent Coordinators will be:

For Vertex: Kerry Flynn

For CRISPR: Tyler Dylan-Hyde

8.4 Patent Costs. Patent Costs arising after the Effective Date will be borne by the Parties as provided in Schedule K for the relevant period (*i.e.*, before or after Option Exercise) except as otherwise set forth in the Joint Development & Commercialization Agreement.

8.5 Defense of Claims Brought by Third Parties. If a Third Party initiates a Proceeding against either Party claiming a Patent owned by or licensed to such Third Party is infringed by the Research, Development, Manufacture or Commercialization of a Licensed Agent or Product, each Party that is named as a defendant in such Proceeding will have the right to defend itself in such Proceeding. The other Party will reasonably assist the defending Party in defending such Proceeding and cooperate in any such litigation at the request and expense of the defending Party. The defending Party will provide the other Party with prompt written notice of the commencement of any such Proceeding and will keep the other Party apprised of the progress of such Proceeding and will promptly furnish the other Party with a copy of each communication relating to the alleged infringement that is received by such Party. If both Parties are named as defendants in any Proceeding, both Parties may defend such Proceeding and the Parties will reasonably cooperate with respect to such defense.

8.6 Enforcement of Patents Against Competitive Infringement.

8.6.1 Duty to Notify of Competitive Infringement. If either Party learns of an infringement, unauthorized use, misappropriation or threatened infringement by a Third Party with respect to any Licensed Patents by reason of the making, using, offering to sell, selling or importing of (a) a product containing [***] or (b) the resulting [***] by such [***] (a "**Competitive Infringement**") or any other infringement, unauthorized use, misappropriation or threatened infringement by a Third Party with respect to any CRISPR Platform Technology Patent, such Party will promptly notify the other Party in writing and will provide such other Party with available information regarding such Competitive Infringement or other infringement.

8.6.2 Prior to License Grant. For any Competitive Infringement with respect to a Licensed Agent or Product pertaining to a Collaboration Target that is then subject to an Option, which Competitive Infringement occurs after the Effective Date but before the date

Vertex is granted the Exclusive License with respect to such Licensed Agent or Product, CRISPR will have the first right, but not the obligation, to institute, prosecute, and control a Proceeding with respect thereto, by counsel of its own choice. Vertex will have the right to engage counsel of its own choice in connection with such Proceeding at its own expense but shall not be permitted to become party to such Proceeding unless required by Applicable Law. CRISPR will provide Vertex with prompt written notice of the commencement of any such Proceeding, and CRISPR will keep Vertex apprised of the progress of such Proceeding. Notwithstanding anything the contrary contained herein, CRISPR will at all times have the sole right to institute, prosecute, and control any Proceeding under this Section 8.6.2 to the extent involving any CRISPR Platform Technology Patents but will (a) keep Vertex reasonably apprised of the progress of such Proceeding, (b) reasonably consider Vertex's comments with respect to the conduct of such Proceeding and (c) not enter a settlement, consent judgment or other voluntary final disposition of a Proceeding that disclaims, limits the scope of, admits the invalidity or unenforceability of, or grants a license, covenant not to sue or similar immunity that has an adverse effect on Vertex's rights hereunder with respect to, a CRISPR Platform Technology Patent without Vertex's prior written consent, not to be unreasonably withheld.

8.6.3 Following License Grant. For any Competitive Infringement with respect to a particular Licensed Agent or Product occurring after the date Vertex is granted the Exclusive License with respect to such Licensed Agent or Product, Vertex will have the first right, but not the obligation, to institute, prosecute, and control a Proceeding with respect to such Competitive Infringement by counsel of its own choice at its own expense, and CRISPR will have the right, at its own expense, to be represented in that action by counsel of its own choice; *provided* that in such Proceeding, Vertex shall reasonably consider CRISPR's comments with respect to which Patents to seek to enforce against such infringing party, taking into consideration the overall value of the Patents Covering the relevant Licensed Agent or Product to CRISPR and its licensees. If Vertex fails to initiate a Proceeding within a period of [***] after written notice of such Competitive Infringement is first provided by a Party under Section 8.6.1, CRISPR will have the right to initiate and control a Proceeding with respect to such Competitive Infringement by counsel of its own choice, and Vertex will have the right to be represented in any such action by counsel of its own choice at its own expense; *provided*, that if Vertex notifies CRISPR during such [***] period that it is electing in good faith not to institute any Proceeding against such Competitive Infringement for strategic reasons intended to maintain the commercial value of the relevant Patent and any Licensed Agent or Product Covered thereby, CRISPR will not have the right to initiate and control any Proceeding with respect to such Competitive Infringement. Notwithstanding anything to the contrary contained herein, CRISPR will at all times have the sole right to institute, prosecute, and control any Proceeding under this Section 8.6.3 to the extent involving any CRISPR Platform Technology Patents but will (a) keep Vertex reasonably apprised of the progress of such Proceeding, (b) reasonably consider Vertex's comments with respect to the conduct of such Proceeding and (c) not enter a settlement, consent judgment or other voluntary final disposition of a Proceeding that disclaims, limits the scope of, admits the invalidity or unenforceability of, or grants a license, covenant not to sue or similar immunity that has an adverse effect on Vertex's rights hereunder with respect to, a CRISPR Platform Technology Patent without Vertex's prior written consent, not to be unreasonably withheld.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.6.4 Joinder.

(a) If a Party initiates a Proceeding in accordance with this Section 8.6 or Section 8.7 the other Party agrees to be joined as a party plaintiff where necessary and to give the first Party reasonable assistance and authority to file and prosecute the Proceeding. Subject to Section 8.6.5, the costs and expenses of each Party incurred pursuant to this Section 8.6.4 will be borne by the Party initiating such Proceeding. CRISPR agrees to use Commercially Reasonable efforts to cause Third Parties to be joined as a party plaintiff where necessary.

(b) If one Party initiates a Proceeding in accordance with this Section 8.6, the other Party may join such Proceeding as a party plaintiff where necessary for such other Party to seek lost profits with respect to such infringement.

8.6.5 Share of Recoveries. Any damages or other monetary awards recovered with respect to a Proceeding brought pursuant to this Section 8.6 will be shared as follows:

(a) the amount of such recovery will first [***]; then

(b) any remaining proceeds constituting direct or actual damages for acts of infringement occurring prior to the date Vertex is granted the Exclusive License with respect to the relevant Licensed Agent or Product [***];

(c) any remaining proceeds constituting direct or actual damages for acts of infringement occurring after the date Vertex is granted the Exclusive License with respect to the relevant Licensed Agent or Product [***]; and

(d) any remaining proceeds constituting punitive or treble damages will be allocated between the Parties as follows: [***].

Notwithstanding the foregoing, any Out-of Pocket Costs incurred in connection with a Proceeding with respect to a Shared Product shall be included in the Other-Out-of-Pocket Costs (as defined in Schedule G) and the proceeds of such proceeding shall be deemed Net Sales for purposes of determining the Net Profit or Net Loss (each, as defined in Schedule G).

8.6.6 Settlement. Notwithstanding anything to the contrary under this ARTICLE 8, neither Party may enter a settlement, consent judgment or other voluntary final disposition of a suit under this ARTICLE 8 that disclaims, limits the scope of, admits the invalidity or unenforceability of, or grants a license, covenant not to sue or similar immunity under a Patent Controlled by the other Party or its Affiliates without first obtaining the written consent of the Party that Controls the relevant Patent; *provided* that the foregoing limitation shall not apply to CRISPR's rights

with respect to the CRISPR Platform Technology Patents (subject to the restriction set forth in Sections 8.6.2 and 8.6.3).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.7 Other Infringement.

8.7.1 Joint Program Patents. With respect to the infringement of a Joint Program Patent that is not a Competitive Infringement, the Parties will cooperate in good faith to bring suit together against such infringing party or the Parties may decide to permit one Party to solely bring suit. Any damages or other monetary awards recovered with respect to a Proceeding brought pursuant to this Section 8.7.1 will be shared as follows: (a) the amount of such recovery [***]; then (b) any remaining proceeds will be allocated as follows: (i) [***]; and (ii) [***].

8.7.2 Patents Solely Owned by CRISPR. CRISPR will retain all rights to pursue an infringement of any Patent solely owned by CRISPR that is not a Competitive Infringement and CRISPR will retain all recoveries with respect thereto.

8.7.3 Patents Solely Owned by Vertex. Vertex will retain all rights to pursue an infringement of any Patent solely owned by Vertex and Vertex will retain all recoveries with respect thereto.

8.8 Patent Listing. Following Vertex's exercise of the Option for a Collaboration Target, Vertex will have the sole right, but not the obligation, to submit to all applicable Regulatory Authorities patent information pertaining to each applicable Product pursuant to 21 U.S.C. § 355(b)(1)(G) (or any amendment or successor statute thereto), any similar statutory or regulatory requirement enacted in the future regarding biologic products, or any similar statutory or regulatory requirement in any non-U.S. country or other regulatory jurisdiction; *provided* that Vertex shall not be permitted to provide any such information with respect to CRISPR Platform Technology Patents without CRISPR's prior written consent.

8.9 CREATE Act. Notwithstanding anything to the contrary in this ARTICLE 8, neither Party will have the right to make an election under the CREATE Act when exercising its rights under this ARTICLE 8 without the prior written consent of the other Party, which will not be unreasonably withheld, conditioned or delayed. With respect to any such permitted election, the Parties will use reasonable efforts to cooperate and coordinate their activities with respect to any submissions, filings or other activities in support thereof. The Parties acknowledge and agree that this Agreement is a "**joint research agreement**" as defined in the CREATE Act.

8.10 Additional Right and Exceptions. Notwithstanding any provision of this ARTICLE 8, CRISPR retains the sole right to Prosecute and Maintain CRISPR Platform Technology Patents and to control any enforcement of CRISPR Platform Technology Patents, subject to the restrictions set forth in Sections 8.6.2 and 8.6.3.

8.11 Patent Term Extension. The Parties will cooperate with each other in obtaining patent term restoration in any country in the Territory under any statute or regulation equivalent or similar to 35 U.S.C. § 156, where applicable to a Product. After the date Vertex is granted the Exclusive License with respect to a Product, [***] Vertex Background Patents, [***] Patents, Vertex Program Patents, [***] Joint Program Patents, Joint Program Patents and [***] Joint Program Patents [***]. CRISPR will abide by Vertex's determination and cooperate, as reasonably requested by Vertex, in connection with the foregoing (including by providing appropriate information and executing appropriate documents).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.12 Recording. If Vertex deems it necessary or desirable to register or record this Agreement or evidence of this Agreement with any patent office or other appropriate Governmental Authority in one or more jurisdictions in the Territory, CRISPR will reasonably cooperate to execute and deliver to Vertex any documents accurately reflecting or evidencing this Agreement that are necessary or desirable, in Vertex's reasonable judgment, to complete such registration or recordation. Vertex will reimburse CRISPR for all reasonable Out-of-Pocket Costs, including attorneys' fees, incurred by CRISPR in complying with the provisions of this Section 8.12.

ARTICLE 9
REPRESENTATIONS AND WARRANTIES

9.1 Representations and Warranties of Vertex. Vertex hereby represents and warrants to CRISPR, as of the Effective Date, that:

9.1.1 each of Vertex Parent and Vertex UK are duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof;

9.1.2 each of Vertex Parent and Vertex UK (a) has the requisite power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder and (b) has taken all requisite action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

9.1.3 each of Vertex Parent and Vertex UK has the requisite resources and expertise to perform its obligations hereunder;

9.1.4 this Agreement has been duly executed and delivered on behalf of each of Vertex Parent and Vertex UK, and constitutes a legal, valid and binding obligation, enforceable against each of Vertex Parent and Vertex UK in accordance with the terms hereof;

9.1.5 the execution, delivery and performance of this Agreement by each of Vertex Parent and Vertex UK will not constitute a default under or conflict with any agreement, instrument or understanding, oral or written, to which either entity is a party or by which either entity is bound, or violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over Vertex Parent or Vertex UK; and

9.1.6 each of Vertex Parent and Vertex UK has obtained all necessary consents, approvals and authorizations of all Governmental Authorities and other Persons or entities required to be obtained by it in connection with the execution and delivery of this Agreement.

9.2 Representations and Warranties of CRISPR. Each of the CRISPR Entities, jointly and severally, hereby represents and warrants to Vertex, as of the Effective Date, that, except as otherwise set forth on Schedule L:

9.2.1 Each of CRISPR AG, CRISPR Inc., CRISPR UK and Tracr are duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.2.2 Each of CRISPR AG, CRISPR Inc., CRISPR UK and Tracr (a) has the requisite power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder and (b) has taken all requisite action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

9.2.3 [***], each of CRISPR AG, CRISPR Inc., CRISPR UK and Tracr has the requisite resources and expertise to perform its obligations hereunder;

9.2.4 this Agreement has been duly executed and delivered on behalf of CRISPR, and constitutes a legal, valid and binding obligation, enforceable against it in accordance with the terms hereof;

9.2.5 the execution, delivery and performance of this Agreement by CRISPR will not constitute a default under or conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it is bound, or violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it;

9.2.6 CRISPR has obtained all necessary consents, approvals and authorizations of all Governmental Authorities and other Persons or entities required to be obtained by CRISPR in connection with the execution and delivery of this Agreement;

9.2.7 the Licensed Technology constitutes all of the Patents and Know-How Controlled by CRISPR that are necessary to Research, Develop, Manufacture or Commercialize Licensed Agents and Products contemplated under the Collaboration Programs in the Field;

9.2.8 CRISPR is the sole and exclusive owner or exclusive licensee of the [***], all of which are free and clear of any liens, charges and encumbrances, and, as of the Effective Date, neither any license granted by CRISPR to any Third Party, nor any license granted by any Third Party to CRISPR conflicts with the license grants to Vertex hereunder (or the Exclusive License to be granted to Vertex upon Option Exercise) and CRISPR is entitled to grant all rights and licenses (or sublicenses, as the case may be) under such Patents it purports to grant to Vertex under this Agreement and the Exclusive Licenses to be granted to Vertex upon Option Exercise;

9.2.9 Schedule L sets forth a true, correct and complete list of all CRISPR Platform Technology Patents and CRISPR Background Patents as of the Effective Date and indicates (a) whether each such Patent is a [***] or a [***] and (b) whether such Patent is owned by CRISPR or licensed by CRISPR from a Third Party and if so, identifies the licensor or sublicensor from which the Patent is licensed;

9.2.10 CRISPR has independently developed all Licensed Technology or otherwise has a valid right to use, and to permit Vertex, Vertex's Affiliates and Vertex's Sublicensees to use, the Licensed Technology for all permitted purposes under this Agreement;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.2.11 the CRISPR Background Know-How is free and clear of liens, charges or encumbrances other than licenses granted to Third Parties that are not inconsistent with the rights and licenses granted to Vertex hereunder;

9.2.12 the CRISPR Platform Technology Patents and CRISPR Background Patents, are, or, upon issuance, will be, valid and enforceable patents and no Third Party [***], (a) is infringing any such Patents or (b) has challenged the extent, validity or enforceability of such Patents (including by way of example through the institution or written threat of institution of interference, nullity or similar invalidity proceedings before the United States Patent and Trademark Office or any analogous foreign Governmental Authority);

9.2.13 it has complied with all Applicable Laws, including any disclosure requirements of the United States Patent and Trademark Office or any analogous foreign Governmental Authority, in connection with the Prosecution and Maintenance of the CRISPR Platform Technology Patents and CRISPR Background Patents and has timely paid all filing and renewal fees payable with respect to any such Patents for which it controls Prosecution and Maintenance;

9.2.14 it has obtained assignments from the inventors of all inventorship rights relating to the [***] and [***] that it owns, and all such assignments of inventorship rights relating to such Patents are valid and enforceable;

9.2.15 except for the CRISPR In-License Agreements, there is no agreement between CRISPR (or any of its Affiliates) and any Third Party pursuant to which CRISPR has acquired Control of any of the Licensed Technology, and no Third Party has any right, title or interest in or to, or any license under, any of the Licensed Technology. All CRISPR In-License Agreements are in full force and effect and have not been modified or amended (except for amendments provided to Vertex prior to the Effective Date). Neither CRISPR nor, [***], the Third Party licensor in a CRISPR In-License Agreement is in default with respect to a material obligation under such CRISPR In-License Agreement, and neither such party has claimed or has grounds upon which to claim that the other party is in default with respect to a material obligation under, any CRISPR In-License Agreement;

9.2.16 CRISPR and its Affiliates have taken commercially reasonable measures consistent with industry practices to protect the secrecy, confidentiality and value of all CRISPR Background Know-How that constitutes trade secrets under Applicable Law (including requiring all employees, consultants and independent contractors to execute binding and enforceable agreements requiring all such employees, consultants and independent contractors to maintain the confidentiality of such CRISPR Background Know-How) and, [***], such CRISPR Background Know-How has not been used, disclosed to or discovered by any Third Party except pursuant to such confidentiality agreements and there has not been a breach by any party to such confidentiality agreements;

9.2.17 no Licensed Technology is subject to any funding agreement with any government or governmental agency;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.2.18 [***], the Research, Development, Manufacture, use, sale, offer for sale, supply or importation by CRISPR or Vertex (or their respective Affiliates or Sublicensees) of a Licensed Agent or Product does not and will not infringe any issued patent of any Third Party or, if and when issued, any claim within any patent application of any Third Party;

9.2.19 there are no judgments or settlements against or owed by CRISPR [***], [***], pending or threatened claims or litigation, in either case relating to the Licensed Technology;

9.2.20 there is no action, claim, demand, suit, proceeding, arbitration, grievance, citation, summons, subpoena, inquiry or investigation of any nature, civil, criminal, regulatory or otherwise, in law or in equity, pending [***], [***], threatened against CRISPR, any of its Affiliates or any Third Party, in each case in connection with the Licensed Technology or relating to the transactions contemplated by this Agreement; and

9.2.21 CRISPR has not employed (and, [***], has not used a contractor or consultant that has employed) any Person debarred by the FDA (or subject to a similar sanction of EMA or foreign equivalent), or any Person that is the subject of an FDA debarment investigation or proceeding (or similar proceeding of EMA or foreign equivalent), in any capacity in connection with this Agreement.

9.3 CRISPR Covenants. Each of the CRISPR Entities, jointly and severally, hereby covenants to Vertex that, except as expressly permitted under this Agreement:

9.3.1 CRISPR will maintain and not breach any CRISPR In-License Agreements [***] that provide a grant of rights from such Third Party to CRISPR that are Controlled by CRISPR and are licensed or may become subject to a license from CRISPR to Vertex for a Licensed Agent or Product under this Agreement;

9.3.2 CRISPR will promptly notify Vertex of any material breach by one or more CRISPR Entities or a Third Party of any CRISPR In-License Agreements or [***] that provides a grant of rights from such Third Party to one or more CRISPR Entities and are licensed or may become subject to a license from CRISPR to Vertex to conduct Vertex Activities or for a Licensed Agent or Product under this Agreement, and in the event of a breach by [***], will [***]. CRISPR will [***] as soon as possible, but in no event later than the date on which [***];

9.3.3 it will not amend, modify or terminate any CRISPR In-License Agreement or [***] in a manner that would have an adverse effect on Vertex's rights hereunder without first obtaining Vertex's written consent, which consent may be withheld in Vertex's sole discretion;

9.3.4 it will not enter into any new agreement or other obligation with any Third Party, or amend an existing agreement with a Third Party, in each case that adversely restricts, limits or encumbers the rights granted to Vertex under this Agreement or the additional rights or licenses Vertex would acquire upon Option Exercise;

9.3.5 it will not, and will cause its Affiliates not to (a) license, sell, assign or otherwise transfer to any Person any Licensed Technology (or agree to do any of the foregoing), except as provided in Section 8.1.3 or except as will not adversely restrict, limit or encumber the

rights granted to Vertex under this Agreement or the additional rights or licenses Vertex would acquire upon Option Exercise, or (b) incur or permit to exist, with respect to any Licensed Technology, any lien, encumbrance, charge, security interest, mortgage, liability, grant of license to Third Parties or other restriction (including in connection with any indebtedness);

9.3.6 it will use Commercially Reasonable Efforts to obtain and maintain the requisite resources and expertise to perform its obligations hereunder;

9.3.7 all employees and Subcontractors of CRISPR performing Research or Development activities hereunder on behalf of CRISPR will be obligated to assign to CRISPR all right, title and interest in and to any inventions developed by them, whether or not patentable, or, solely with respect to Subcontractors, grant exclusive license rights to CRISPR with a right to grant sublicenses through multiple tiers;

9.3.8 it will not engage, in any capacity in connection with this Agreement any Person who either has been debarred by the FDA, is the subject of a conviction described in Section 306 of the FD&C Act or is subject to any such similar sanction;

9.3.9 CRISPR will inform Vertex in writing promptly if it or any Person engaged by CRISPR or any of its Affiliates who is performing services under this Agreement or any ancillary agreements is debarred or is the subject of a conviction described in Section 306 of the FD&C Act, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, to CRISPR's Knowledge, is threatened, relating to the debarment or conviction of CRISPR, any of its Affiliates or any such Person performing services hereunder or thereunder;

9.3.10 Within [***] after the Effective Date, [***] will take all actions necessary (including, without limitation, [***] to ensure [***], effective [***], which actions may include, without limitation, [***] and executing all documents necessary in connection therewith.

9.3.11 CRISPR shall use Commercially Reasonable Efforts (A) to, within [***] of the Effective Date, [***] directly or indirectly [***] that [***], that have [***] and that [***] and other intellectual property rights or (B) shall otherwise work together [***]. To the extent [***] execute such documents as are necessary to [***] and (ii) CRISPR shall [***] and the [***] shall be [***].

9.4 Vertex Covenants. Vertex hereby covenants to CRISPR that, except as expressly permitted under this Agreement:

9.4.1 it will use Commercially Reasonable Efforts to obtain and maintain the requisite resources and expertise to perform its obligations hereunder;

9.4.2 Vertex will not engage, in any capacity in connection with this Agreement any Person who either has been debarred by the FDA, is the subject of a conviction described in Section 306 of the FD&C Act or is subject to any such similar sanction; and

9.4.3 Vertex will inform CRISPR in writing promptly if it or any Person engaged by Vertex or any of its Affiliates who is performing services under this Agreement or any ancillary agreements is debarred or is the subject of a conviction described in Section 306 of

the FD&C Act, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, [***], is threatened, relating to the debarment or conviction of CRISPR, any of its Affiliates or any such Person performing services hereunder or thereunder.

9.5 Disclaimer. Except as otherwise expressly set forth in this Agreement, neither Party nor its Affiliates makes any representation or extends any warranty of any kind, either express or implied, including any warranty of merchantability or fitness for a particular purpose. Vertex and CRISPR understand that each Product is the subject of ongoing Research and Development and that neither Party can assure the safety, usefulness or commercial or technical viability of any Product.

ARTICLE 10
INDEMNIFICATION; INSURANCE

10.1 Indemnification by Vertex. Vertex will indemnify, defend and hold harmless CRISPR, each of its Affiliates, and each of its and its Affiliates' employees, officers, directors and agents (each, an "**CRISPR Indemnified Party**") from and against any and all liability, loss, damage, expense (including reasonable attorneys' fees and expenses) and cost (collectively, a "**Liability**") that the CRISPR Indemnified Party may be required to pay to one or more Third Parties to the extent resulting from or arising out of:

10.1.1 any claims of any nature arising out of the Research, Development, Manufacture, Commercialization or use of any Licensed Agent or Product by, on behalf of, or under the authority of, Vertex (other than by any CRISPR Indemnified Party), other than (a) claims by Third Parties relating to misappropriation of trade secrets or other intellectual property rights arising out of the exercise of rights under the Licensed Know-How, or (b) claims for which CRISPR is required to indemnify Vertex pursuant to Section 10.2; or

10.1.2 the material breach by Vertex of any of its representations, warranties or covenants set forth in this Agreement, except to the extent caused by the negligence or intentional acts of CRISPR or any CRISPR Indemnified Party.

10.2 Indemnification by CRISPR. Each CRISPR Entity will jointly and severally indemnify, defend and hold harmless Vertex, its Affiliates, Sublicensees, distributors and each of its and their respective employees, officers, directors and agents (each, a "**Vertex Indemnified Party**") from and against any and all Liabilities that the Vertex Indemnified Party may be required to pay to one or more Third Parties to the extent resulting from or arising out of:

10.2.1 the material breach by CRISPR (or any CRISPR Entity(ies)) of any of its representations, warranties or covenants set forth in this Agreement, except to the extent caused by the negligence or intentional acts of Vertex or any Vertex Indemnified Party; or

10.2.2 any claims of any nature arising out of the Research activities performed by CRISPR (or any CRISPR Entity(ies)) with respect to any Licensed Agent or Product prior to the Effective Date or during the Research Term, other than claims for which Vertex is required to indemnify CRISPR pursuant to Section 10.1.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10.3 Procedure. Each Party will notify the other Party in writing if it becomes aware of a claim for which indemnification may be sought hereunder. In case any proceeding (including any governmental investigation) will be instituted involving any Party in respect of which indemnity may be sought pursuant to this ARTICLE 10, such Party (the "**Indemnified Party**") will give prompt written notice of the indemnity claim to the other Party (the "**Indemnifying Party**") and provide a copy to the Indemnifying Party of any complaint, summons or other written or verbal notice that the Indemnified Party receives in connection with any such claim. An Indemnified Party's failure to deliver written notice will relieve the Indemnifying Party of liability to the Indemnified Party under this ARTICLE 10 only to the extent such delay is prejudicial to the Indemnifying Party's ability to defend such claim. Provided that the Indemnifying Party is not contesting the indemnity obligation, the Indemnified Party will permit the Indemnifying Party to control any litigation relating to such claim and the disposition of such claim by negotiated settlement or otherwise and any failure to contest prior to assuming control will be deemed to be an admission of the obligation to indemnify. The Indemnifying Party will act reasonably and in good faith with respect to all matters relating to such claim and will not settle or otherwise resolve such claim without the Indemnified Party's prior written consent which will not be withheld, delayed or conditioned unreasonably other than settlements only involving the payment of monetary awards for which the Indemnifying Party will be fully-responsible. The Indemnified Party will cooperate with the Indemnifying Party in such Party's defense of any claim for which indemnity is sought under this Agreement, at the Indemnifying Party's sole cost and expense.

10.4 Insurance. Each Party will maintain, at its cost, reasonable insurance against liability and other risks associated with its activities contemplated by this Agreement and will furnish to the other Party evidence of such insurance upon request. Notwithstanding the foregoing, Vertex may self-insure to the extent that it self-insures for its other activities.

10.5 Limitation of Consequential Damages. Except for (a) claims of a Third Party that are subject to indemnification under this ARTICLE 10, (b) claims arising out of a Party's willful misconduct, or (c) a Party's breach of Section 2.13 or ARTICLE 12, neither Party nor any of its Affiliates will be liable to the other Party or its Affiliates for any incidental, consequential, special, punitive or other indirect damages or lost or imputed profits or royalties, lost data or cost of procurement of substitute goods or services, whether liability is asserted in contract, tort (including negligence and strict product liability), indemnity or contribution, and irrespective of whether that Party or any representative of that Party has been advised of, or otherwise might have anticipated the possibility of, any such loss or damage.

ARTICLE 11
TERM; TERMINATION

11.1 Agreement Term; Expiration. This Agreement is effective as of the Effective Date and, unless earlier terminated pursuant to the other provisions of this ARTICLE 11, will continue in full force and effect until this Agreement expires as follows:

11.1.1 on a country-by-country and Product-by-Product basis, on the date of expiration of all payment obligations under this Agreement with respect to such Product in such country;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.1.2 in its entirety upon the expiration of all payment obligations under this Agreement with respect to all Products in all countries pursuant to Section 11.1.1; and

11.1.3 in its entirety upon expiration of all Options if Vertex has not exercised any Option as provided in Section 4.1.1.

11.2 Termination of the Agreement.

11.2.1 Vertex's Termination for Convenience. Vertex will be entitled to terminate this Agreement as a whole, or terminate this Agreement in part with respect to a particular Collaboration Program, for convenience by providing CRISPR 90 days' written notice of such termination; *provided*, *however*, that if any termination under this Section 11.2.1 applies to a Product for which Vertex has received Marketing Approval, Vertex will provide CRISPR no less than 270 days' notice of such termination.

11.2.2 Termination Due to Failure to Obtain HSR Clearance. If the Parties make an HSR Filing with respect to a Collaboration Target under Section 4.1.2 and the HSR Clearance Date has not occurred on or prior to [***] after the effective date of the latest HSR Filing made by the Parties with respect to a Collaboration Target, this Agreement will terminate solely with respect to the applicable Collaboration Program at the election of either Party immediately upon notice to the other Party, if (a) the FTC or the DOJ has instituted (or threatened to institute) any action, suit or proceeding including seeking, threatening to seek or obtaining a preliminary injunction under the HSR Act against Vertex and CRISPR to enjoin or otherwise prohibit the transactions contemplated by this Agreement related to such proposed Collaboration Program, or (b) the Parties have not resolved any and all objections of the FTC and DOJ as contemplated by Section 4.1.2(b). Notwithstanding the foregoing, this Section 11.2.2 will not apply if an HSR Filing is not required for Vertex to receive the Exclusive License with respect to a Collaboration Target. If this Agreement is terminated pursuant to this Section 11.2.2 with respect to a particular Collaboration Target, such Collaboration Target will not count towards the Option Cap. If, following termination of this Agreement with respect to a Collaboration Target under this Section 11.2.2, CRISPR or any of its Affiliates or sublicensees Commercializes a Product for the relevant Collaboration Target, [***] of (i) [***] and (ii) [***].

11.2.3 [***]. The terms of Sections 1.117, 7.5.2, 7.5.5, 7.7, 7.8, 7.9 and 7.10 will apply with respect [***], *mutatis mutandis.*

11.2.4 Termination for Material Breach.

(a) Vertex's Right to Terminate. If CRISPR (or any CRISPR Entity(ies)) is in material breach of this Agreement, then Vertex may deliver notice of such material breach to CRISPR. If the breach is curable, CRISPR will have [***] from the receipt of such notice to cure such breach. If either CRISPR fails to cure such breach within such [***] period or the breach is not subject to cure (a "**CRISPR Breach Event**"), Vertex may either (i) terminate this Agreement (A) if such breach relates solely relates to a particular Collaboration Program, with respect to the Collaboration Program affected by such breach (a "**CRISPR Program Breach**") or (B) if such breach relates to multiple Collaboration Programs or this Agreement as a whole (a "**CRISPR Agreement Breach**"), in its entirety, by providing written notice to CRISPR or (ii) elect to exercise the alternate remedy provisions set forth in Section 11.3 (in lieu of termination).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) CRISPR's Right to Terminate.

(i) If Vertex is in material breach of this Agreement, then CRISPR may deliver notice of such material breach to Vertex. If the breach is curable, Vertex will have [***] following receipt of such notice to cure such breach (except to the extent such breach involves the failure to make a payment when due, which breach must be cured within [***] following receipt of such notice). If Vertex fails to cure such breach within the [***] or [***] period, as applicable, or the breach is not subject to cure, CRISPR in its sole discretion may terminate this Agreement (i) if such breach relates solely relates to a particular Collaboration Program, with respect to the Collaboration Program affected by such breach or (ii) if such breach relates to multiple Collaboration Programs or this Agreement as a whole, in its entirety, by providing written notice to Vertex.

(ii) If Vertex (A) commences or actively and voluntarily participates in any action or proceeding (including any patent opposition or re-examination proceeding), or otherwise asserts any claim, challenging or denying the validity or enforceability of any claim of any Patent that is licensed to Vertex under this Agreement or (B) actively and voluntarily assists any other Person in bringing or prosecuting any action or proceeding (including any patent opposition or re-examination proceeding) challenging or denying the validity or enforceability of any claim of any Patent that is licensed to Vertex under this Agreement (each of (A) and (B), a "**Patent Challenge**"), then, to the extent permitted by Applicable Law, CRISPR shall have the right, in its sole discretion, to give notice to Vertex that CRISPR may terminate the license(s) granted under such Patent to Vertex [***] following such notice, and, unless Vertex withdraws or causes to be withdrawn all such challenge(s) (or in the case of *ex-parte* proceedings, multi-party proceedings, or other Patent Challenges that Vertex does not have the power to unilaterally withdraw or cause to be withdrawn), Vertex ceases assisting any other party to such Patent Challenge and, to the extent Vertex is a party to such Patent Challenge, it withdraws from such Patent Challenge within such [***] period, CRISPR shall have the right to terminate this Agreement by providing written notice thereof to Vertex. The foregoing right to terminate shall not apply with respect to any Patent Challenge where the Patent Challenge is made in defense of an assertion of the relevant Patent that is first brought by CRISPR against Vertex. For the avoidance of doubt, any participation by Vertex or its employees in any claim, challenge or proceeding in response to a subpoena or as required under a pre-existing agreement between Vertex's employee(s) or consultant(s) and their prior employer(s) shall not constitute active and voluntary participation or assistance and shall not give rise to CRISPR's right to terminate any license hereunder.

11.2.5 Disputes Regarding Material Breach. Notwithstanding the foregoing, if the Breaching Party in Section 11.2.3 disputes in good faith the existence, materiality, or failure to cure of any such breach that is not a payment breach, and provides notice to the Non-Breaching Party of such dispute within the relevant cure period, the Non-Breaching Party

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

will not have the right to terminate this Agreement in accordance with Section 11.2.3, or the right to exercise the alternative remedy provisions of 11.3, as applicable, unless and until the relevant dispute has been resolved. It is understood and acknowledged that during the pendency of such dispute, all the terms and conditions of this Agreement will remain in effect and the Parties will continue to perform all of their respective obligations hereunder.

11.2.6 Termination for Insolvency. If CRISPR (or any CRISPR Entity(ies)) makes an assignment for the benefit of creditors, appoints or suffers appointment of a receiver or trustee over all or substantially all of its property, files a petition under any bankruptcy or insolvency act or has any such petition filed against it that is not discharged within [***] of the filing thereof (each, an "**Insolvency Event**"), then Vertex may terminate this Agreement in its entirety effective immediately upon written notice to CRISPR. If Vertex terminates this Agreement pursuant to this Section 11.2.5:

(a) All rights and licenses now or hereafter granted by CRISPR to Vertex under or pursuant to this Agreement, including, for the avoidance of doubt, any Exclusive Licenses are, for all purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of rights to "intellectual property" as defined in the U.S. Bankruptcy Code. Upon the occurrence of any Insolvency Event with respect to CRISPR (or any CRISPR Entity(ies)), CRISPR agrees that Vertex, as licensee of such rights under this Agreement, will retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code. CRISPR will, during the term of this Agreement, create and maintain current copies or, if not amenable to copying, detailed descriptions or other appropriate embodiments, to the extent feasible, of all intellectual property licensed under this Agreement. Each Party acknowledges and agrees that "embodiments" of intellectual property within the meaning of Section 365(n) include laboratory notebooks, cell lines, product samples and inventory, research studies and data, all Regulatory Approvals (and all applications for Regulatory Approval) and rights of reference therein, the Licensed Technology and all information related to the Licensed Technology. If (x) a case under the U.S. Bankruptcy Code is commenced by or against CRISPR (or any CRISPR Entity(ies)), (y) this Agreement is rejected as provided in the U.S. Bankruptcy Code, and (z) Vertex elects to retain its rights hereunder as provided in Section 365(n) of the U.S. Bankruptcy Code, CRISPR (in any capacity, including debtor-in-possession) and its successors and assigns (including a trustee) will:

(i) provide to Vertex all such intellectual property (including all embodiments thereof) held by CRISPR and such successors and assigns, or otherwise available to them, immediately upon Vertex's written request. Whenever CRISPR or any of its successors or assigns provides to Vertex any of the intellectual property licensed hereunder (or any embodiment thereof) pursuant to this Section 11.2.5(a)(i), Vertex will have the right to perform CRISPR's obligations hereunder with respect to such intellectual property, but neither such provision nor such performance by Vertex will release CRISPR from liability resulting from rejection of the license or the failure to perform such obligations; and

(ii) not interfere with Vertex's rights under this Agreement, or any agreement supplemental hereto, to such intellectual property (including such embodiments), including any right to obtain such intellectual property (or such embodiments) from another entity, to the extent provided in Section 365(n) of the U.S. Bankruptcy Code.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) All rights, powers and remedies of Vertex provided herein are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including the U.S. Bankruptcy Code) in the event of the commencement of a case under the U.S. Bankruptcy Code with respect to CRISPR. The Parties agree that they intend the following rights to extend to the maximum extent permitted by Applicable Law, and to be enforceable under U.S. Bankruptcy Code Section 365(n):

(i) the right of access to any intellectual property rights (including all embodiments thereof) of CRISPR, or any Third Party with whom CRISPR contracts to perform an obligation of CRISPR under this Agreement, and, in the case of any such Third Party, which is necessary for the Manufacture, use, sale, import or export of Licensed Agents; and

(ii) the right to contract directly with any Third Party to complete the contracted work.

11.3 Alternative Remedies to Termination.

11.3.1 Prior to Option Exercise. If a CRISPR Breach Event occurs prior to Vertex exercising its Option with respect to a particular Collaboration Target, Vertex may elect the alternative remedy provisions of this Section 11.3.1 with respect to each Collaboration Target for which it has not yet exercised the Option and that is subject to such CRISPR Breach Event (in the case of a CRISPR Program Breach), or all such Collaboration Targets (in the case of a CRISPR Agreement Breach), by providing written notice of such election to CRISPR, in which case, this Agreement will continue in full force and effect with the following modifications with respect to each Collaboration Target for which Vertex elects to exercise its rights under this Section 11.3.1. If Vertex exercises its rights under this Section 11.3.1, such exercise shall be Vertex's sole remedy in connection with such CRISPR Breach Event; Vertex shall have no other rights hereunder or at law or in equity with respect to the relevant CRISPR Breach Event; and CRISPR shall have no obligation to cure such CRISPR Breach Event.

(a) if CRISPR has not completed the activities for which it is responsible under the applicable Research Plan, [***], in which case, [***], If [***] for such activities, CRISPR will [***] and Vertex will [***] as provided herein;

(b) Vertex's obligations under [***] will not apply with respect to the applicable Collaboration Target;

(c) CRISPR will provide to Vertex [***] and [***] in [***] under the relevant [***] in an efficient and orderly manner;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(d) in the event that Vertex subsequently elects to obtain the Exclusive License with respect to any such Collaboration Target, such election shall be regarded as an Option pursuant to Section 4.1.1 (subject to the Option Cap), *provided* that [***].

11.3.2 After Option Exercise. If a CRISPR Breach Event occurs after Vertex exercises its Option with respect to a particular Collaboration Target, Vertex may elect the alternative remedy provisions of this Section 11.3.2 with respect to any Collaboration Target for which it has exercised the Option and that is subject to such CRISPR Breach Event (in the case of a CRISPR Program Breach), or all such Collaboration Targets (in the case of a CRISPR Agreement Breach), by providing written notice of such election to CRISPR, in which case, this Agreement will continue in full force and effect with the following modifications with respect to each Collaboration Target for which Vertex elects to exercise its rights under this Section 11.3.2, each at Vertex's election. If Vertex exercises its rights under this Section 11.3.2, such exercise shall be Vertex's sole remedy in connection with such CRISPR Breach Event; Vertex shall have no other rights hereunder or at law or in equity with respect to the relevant CRISPR Breach Event; and CRISPR shall have no obligation to cure such CRISPR Breach Event.

(a) CRISPR's right to [***];

(b) Vertex may [***] required or permitted [***] established pursuant to this Agreement in connection with the [***]; *provided*, *however*, Vertex will not have the right to: (i) [***] of this Agreement; (ii) [***] of the Parties, (iii) [***] under this Agreement; (iv) exercise its [***] would constitute a violation of an Applicable Law; (v) make a determination [***] under this Agreement or (vi) require [***], whether internal or external, including capital expenditures for which [***] as provided herein; and

(c) to the extent CRISPR is then conducting Additional Research, Vertex may, but will not be obligated to, assume responsibility for such Additional Research, in which case, Vertex's obligation to fund such activities as provided in Section 7.4 will terminate. If Vertex does not elect to assume responsibility for such activities, CRISPR will continue to perform such activities and Vertex will continue to reimburse CRISPR for Research Costs arising out of such activities as provided herein.

11.3.3 [***]. If (a) CRISPR (or any CRISPR Entity(ies)) commits a breach or series of breaches of this Agreement, (b) Vertex incurs at least [***] in aggregate losses, damages and expenses as a result of such breach or breaches, (c) Vertex does not terminate this Agreement in its entirety or with respect to a Collaboration Target or Product due to such breach or breaches, and (d) Vertex has not exercised its rights under Section 11.3.1 or 11.3.2, as applicable, with respect to such breach or breaches, then, in addition to any other remedies Vertex may have under this Agreement, at law or in equity or otherwise, [***]. [***] Vertex will provide CRISPR with a written certificate, signed by Vertex's Chief Financial Officer, certifying [***]. Notwithstanding the foregoing, if CRISPR notifies Vertex in writing that it disputes Vertex's assertion that CRISPR (or any CRISPR Entity (ies)) is in breach of this Agreement [***], then (a) Vertex will initiate the dispute resolution process set forth in Section 11.3.4, and (b) pending the Parties' agreement regarding the appropriate [***] or a determination by the mediator [***] in accordance with Section 11.3.4(b), Vertex will [***]. If the Parties cannot settle their dispute by mutual agreement, then, in accordance with Section 11.3.4 (b), the mediator will determine (1) [***], (2) [***] and (3) if [***], in which case Vertex [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.3.4 [***] Dispute Resolution.

(a) Escalation. If Vertex has exercised its [***] rights under Section 11.3.3, and there is a dispute regarding whether CRISPR is in breach of this Agreement [***], either Party may make a written request that [***] be referred for resolution to Executive Officers of each Party (or their designees). Within [***] after such request, the Executive Officers of each Party (or their designees) will meet in person at a mutually acceptable time and location or by means of telephone or video conference to negotiate a settlement of a [***]. Each Party may elect to have such Party's JRC representatives participate in such meeting, if desired, *provided* that it provides the other Party with reasonable advance notice of such intent so as to enable the other Party to have its JRC representatives also participate in such meeting, if desired. In the event that the Executive Officers of each Party (or their designees) fail to resolve the [***] within such [***] the [***] will be referred to mediation under Section 11.3.4(b).

(b) Mediation. If a [***] cannot be resolved pursuant to Section 11.3.4(a), the Parties agree to try in good faith to resolve any such [***] by non-binding mediation administered by JAMS End Dispute in accordance with its commercial mediation rules. The mediation will be conducted by a single mediator appointed by agreement of the Parties who will have previous financial experience in the pharmaceutical industry, or failing such agreement by JAMS End Dispute in accordance with its commercial mediation rules. Unless otherwise mutually agreed upon by the Parties, the mediation proceedings will be conducted in Boston, Massachusetts. The Parties agree that [***] the cost of the mediation, including filing and hearing fees, and the cost of the mediator(s). Each Party will bear its own attorneys' fees and associated costs and expenses. If the Parties are unable to resolve a [***] pursuant to such mediation, then at the completion of such mediation the mediator will decide the following issues, which decision will be binding on the Parties pending final resolution of the [***] by a court of competent jurisdiction:

(i) Whether the [***] by Vertex pursuant to Section 11.3.3 exceeds the mediator's objective good faith estimate of [***]; and

(ii) What amount (if any) may Vertex [***] under Section 11.3.3, which [***].

(c) Mediator Resolution.

(i) If the mediator determines that [***] by Vertex pursuant to Section 11.3.3 [***], the Parties will promptly cause [***] as provided for in Section 7.10. The Parties will promptly cause [***].

(ii) If the mediator determines that Vertex may [***] under Section 11.3.3, Vertex may [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(iii) The decisions rendered by mediator with respect to [***] will be binding on the Parties pending resolution of the [***] by the agreement of the Parties or by a court of competent jurisdiction in accordance with this Agreement.

11.4 Consequences of Expiration or Termination of the Agreement.

11.4.1 In General. If this Agreement expires or is terminated by a Party in accordance with this ARTICLE 11 at any time and for any reason, the following terms will apply to any Product in any country that is the subject of such expiration or termination:

(a) The Parties will return (or destroy, as directed by the other Party) all data, files, records and other materials containing or comprising the other Party's Confidential Information, except to the extent such Confidential Information is subject to a license or similar grant of rights that survives such termination or is necessary or useful to conduct activities for a surviving Collaboration Program or Product or country. Notwithstanding the foregoing, the Parties will be permitted to retain one copy of such data, files, records, and other materials for archival and legal compliance purposes.

(b) Termination or expiration of this Agreement for any reason will be without prejudice to any rights or financial compensation that will have accrued to the benefit of a Party prior to such termination or expiration. Such termination or expiration will not relieve a Party from obligations that are expressly indicated to survive the termination or expiration of this Agreement.

(c) The following provisions of this Agreement will survive any expiration or termination of this Agreement: Article 1 (Definitions), Section 5.3 (License Grants to Vertex) (solely in the event of expiration, not termination) Section 5.4 (Licenses to Improvements), Section 5.6 (No Implied Licenses), Article 7 (Financial Provisions), solely to the extent of accrued obligation as contemplated by Section 11.4.1(b), Section 8.1.1 (Ownership; Assignment - CRISPR Technology and Vertex Technology), 8.1.2 (Ownership; Assignment - Agreement Technology), Sections 8.5-8.6 (with respect to proceedings to the extent relating to events occurring prior to the effective date of termination) 8.6.4 (Joinder), Article 10 (Indemnification; Insurance), Section 11.2.5 (Public Announcements; Publications), Section 11.4 (Consequences of Expiration or Termination of the Agreement), Sections 12.1, 12.2, 12.3, 12.4 and 12.6 (Confidentiality) and Article 13 (Miscellaneous)."

11.4.2 Termination Before License Grant. If this Agreement expires or is terminated, in whole or in part with respect to a Collaboration Target, by a Party in accordance with this ARTICLE 11 before Vertex has been granted an Exclusive License for a particular Collaboration Target, then, in addition to the terms set forth in Section 11.4.1, the following terms will apply to each Collaboration Target that is the subject of such expiration or termination:

(a) Vertex's Option under Section 4.1 will expire and CRISPR will be free to Research, Develop, Manufacture and Commercialize the applicable Licensed Agents or Products in the applicable counties on its own or with a Third Party;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) except with respect to (i) any termination by Vertex under Section 11.2.3(a) or (ii) any expiration or termination with respect to a Collaboration Target that is associated with [***], effective upon such termination, Vertex hereby grants to CRISPR a non-exclusive, royalty-free, irrevocable, perpetual, worldwide license, which CRISPR may sublicense through multiple tiers, under all Vertex Program Technology Controlled by Vertex or its Affiliates (A) generated under the applicable Collaboration Program or (B) used in such terminated Collaboration Program to Develop, Manufacture and Commercialize Licensed Agents and Products directed to the relevant Collaboration Target; *provided*, that if the grant of such license to CRISPR with respect to any Know-How or Patent included in the Vertex Program Technology or CRISPR's exercise of such license would [***] or would require compliance with any provision of any license between Vertex and a Third Party, Vertex will so notify CRISPR and such Know-How or Patent will only be included in the foregoing license if, following receipt of such notice, [***] and comply with any such provision; and

(c) except as explicitly set forth in Section 11.4.1, Vertex will have no further rights and CRISPR will have no further obligations with respect to each terminated Collaboration Target.

11.4.3 Termination After License Grant. If this Agreement is terminated, in whole or in part with respect to a Product or Collaboration Target, by a Party in accordance with this ARTICLE 11 (but not if this Agreement expires in accordance with its terms) after Vertex has been granted an Exclusive License for a particular Collaboration Target, then, in addition to the terms set forth in Section 11.4.1, the following terms will apply to any Product or Collaboration Target that is the subject of such termination:

(a) except as set forth in Section 11.4.3(f), the applicable licenses granted by CRISPR to Vertex under this Agreement will terminate and Vertex and its Affiliates will cease all Research, Development, Manufacture and Commercialization activities with respect to the applicable Products;

(b) Vertex will assign back to the CRISPR Entity designated by CRISPR AG any Patents assigned to Vertex under Section 8.1.3 that relate to the applicable Collaboration Target to the extent that such Patents do not also relate to a Collaboration Target for which Vertex is maintaining the Exclusive License;

(c) except with respect to (i) any termination by Vertex under Section 11.2.3(a) or (ii) any expiration or termination with respect to a Collaboration Target that is associated with [***], Vertex shall, as promptly as practicable, transfer to the CRISPR Entity designated by CRISPR AG or such CRISPR Entity's designee possession and ownership of all Regulatory Approvals solely relating to the Development, Manufacture or Commercialization of any terminated Product or Collaboration Target within such terminated Collaboration Program;

(d) except as explicitly set forth in Section 11.4.1, Vertex will have no further rights and CRISPR will have no further obligations with respect to the terminated Products and Collaboration Target(s);

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(e) except with respect to (i) any termination by Vertex under Section 11.2.3(a) or (ii) any termination with respect to a Collaboration Target that is associated with [***], and subject to Section 11.4.3(f), effective upon such termination, Vertex hereby grants to CRISPR a non-exclusive, royalty-free, irrevocable, perpetual, worldwide license, which CRISPR may sublicense through multiple tiers, under all Vertex Program Technology Controlled by Vertex or its Affiliates and (A) generated under the applicable Collaboration Program or (B) used in such terminated Collaboration Program to Develop, Manufacture and Commercialize Licensed Agents and Products directed to the relevant Collaboration Target; *provided*, that if the grant of such license to CRISPR with respect to any Know-How or Patent included in the Vertex Program Technology or CRISPR's exercise of such license would [***] or would require compliance with any provision of any license between Vertex and a Third Party, Vertex will so notify CRISPR and such Know-How or Patent will only be included in the foregoing license if, following receipt of such notice, [***] and comply with any such provision; and

(f) any permitted Sublicense of Vertex will, at the Sublicensee's option, survive such termination; *provided* that the Sublicensee is not in material breach of any of its obligations under such Sublicense. In order to effect this provision, at the request of the Sublicensee, CRISPR will enter into a direct license with the Sublicensee on substantially the same terms as this Agreement (taking into account the scope of the licensee granted under such Sublicense); *provided* that CRISPR will not be required to undertake obligations in addition to those required by this Agreement, and that CRISPR's rights under such direct license will be consistent with its rights under this Agreement, taking into account the scope of the license granted under such direct license. Any such Sublicense would continue to include rights to any Patent assigned to CRISPR pursuant to Section 11.4.3(b) to the extent such rights were included in such Sublicense prior to termination and the license to CRISPR set forth in Section 11.4.3(e), if applicable, would not include rights to any Patent Controlled by Vertex to the extent such license would conflict with any rights granted to the relevant Sublicensee under such Patent.

ARTICLE 12
CONFIDENTIALITY

12.1 Confidentiality. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing, the Parties agree that, during the Agreement Term and for [***] thereafter, each Party (the "**Receiving Party**") receiving any Confidential Information of the other Party (the "**Disclosing Party**") hereunder will: (a) keep the Disclosing Party's Confidential Information confidential; (b) not publish, or allow to be published, and will not otherwise disclose, or permit the disclosure of, the Disclosing Party's Confidential Information in any manner not expressly authorized pursuant to the terms of this Agreement; and (c) not use, or permit to be used, the Disclosing Party's Confidential Information for any purpose other than as expressly authorized pursuant to the terms of this Agreement. Without limiting the generality of the foregoing, to the extent that Vertex provides to CRISPR (or any CRISPR Entity(ies)) any Confidential Information owned by any Third Party, CRISPR will handle such Confidential Information in accordance with the terms and conditions of this ARTICLE 12 applicable to a Receiving Party.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

12.2 Authorized Disclosure. Notwithstanding the foregoing provisions of Section 12.1, each Party may disclose Confidential Information belonging to the other Party to the extent such disclosure is reasonably necessary to:

12.2.1 file or prosecute patent applications as contemplated by this Agreement;

12.2.2 prosecute or defend litigation;

12.2.3 exercise its rights and perform its obligations hereunder; or

12.2.4 comply with Applicable Law.

If a Party deems it reasonably necessary to disclose Confidential Information belonging to the other Party pursuant to this Section 12.2, the Disclosing Party will to the extent possible give reasonable advance written notice of such disclosure to the other Party and take reasonable measures to ensure confidential treatment of such information. In addition to the foregoing, [***] may disclose [***] Confidential Information to Third Parties as reasonably required to facilitate the actual or potential Research, Development, Manufacture or Commercialization of [***] or Products; *provided* that such disclosure is covered by terms of confidentiality and non-use similar to those set forth herein.

Notwithstanding anything to the contrary contained herein, in no event may [***] disclose [***] Confidential Information to any Third Party (including any of CRISPR's investors, collaborators or licensees) engaged in the research, development, manufacture or commercialization of pharmaceutical products.

12.3 SEC Filings and Other Disclosures. Either Party may disclose the terms of this Agreement (i) to the extent required to comply with Applicable Law, including the rules and regulations promulgated by the United States Securities and Exchange Commission or any equivalent governmental agency in any country in the Territory; *provided*, that such Party will reasonably consider the comments of the other Party regarding confidential treatment sought for such disclosure and (ii) to its advisors (including financial advisors, attorneys and accountants), actual or potential acquisition partners, financing sources or investors and underwriters on a need to know basis; *provided* that such disclosure is covered by terms of confidentiality similar to those set forth herein (which may include professional ethical obligations).

12.4 Residual Knowledge Exception. Notwithstanding any provision of this Agreement to the contrary, Confidential Information will not include Residual Knowledge. Any use made by the Receiving Party of Residual Knowledge is on an "as is, where is" basis, with all faults and all representations and warranties disclaimed and at its sole risk.

12.5 Public Announcements; Publications.

12.5.1 Coordination. CRISPR and Vertex will, from time to time and at the request of the other Party, discuss the general information content relating to this Agreement that may be publicly disclosed; *provided*, *however*, that [***] will have no obligation to consult with [***] with respect to any scientific publication or public announcement concerning [***] Research, Development, Manufacture, Commercialization or use of any [***] or Product (except as otherwise expressly set forth in Section 12.5.3).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

12.5.2 Announcements. The Parties will jointly issue a press release, in the form attached hereto as Schedule M, regarding the signing of this Agreement on a date to be determined by Vertex within [***] following the Effective Date. Except as set forth in the preceding sentence and as may be expressly permitted under Section 12.3, or as required to comply with Applicable Law (including the rules and regulations promulgated by the United States Securities and Exchange Commission or any equivalent governmental agency in any country in the Territory), neither Party will make any public announcement regarding this Agreement without the prior written approval of the other Party. For the sake of clarity, nothing in this Agreement will prevent [***] from making any scientific publication or public announcement concerning [***] Research, Development, Manufacture or Commercialization activities with respect to any [***] or Product under this Agreement; *provided, however*, that, except as permitted under Section 12.2, [***] will not disclose any of [***] Confidential Information in any such publication or announcement without obtaining CRISPR's prior written consent to do so.

12.5.3 Publications. During the Agreement Term, each Party will submit to the other Party (the "**Non-Disclosing Party**") for review and approval any proposed academic, scientific and medical publication or public presentation related to any Licensed Agent or Product or any activities conducted pursuant to any Research Plan. In each such instance, such review and approval will be conducted for the purposes of preserving the value of the Licensed Technology and the Vertex Technology, the rights granted to Vertex hereunder and determining whether any portion of the proposed publication or presentation containing the Non-Disclosing Party's Confidential Information should be modified or deleted. Written copies of such proposed publication or presentation required to be submitted hereunder will be submitted to the Non-Disclosing Party no later than [***] before submission for publication or presentation (or five Business Days in advance in the case of an abstract). The Non-Disclosing Party will provide its comments with respect to such publications and presentations within [***] of its receipt of such written copy (or [***] in the case of an abstract). The review period may be extended for an additional [***] if the Non-Disclosing Party reasonably requests such extension including for the preparation and filing of patent applications. Notwithstanding anything to the contrary, the Non-Disclosing Party may require that the other Party redact the Non-Disclosing Party's Confidential Information from any such proposed publication or presentation. CRISPR and Vertex will each comply with standard academic practice regarding authorship of scientific publications and recognition of contribution of other parties in any publication. Notwithstanding the foregoing, Vertex's obligation to submit any publication to CRISPR for review and approval under this Section 12.5.3 will not apply to any publication made with respect to a Collaboration Program following Vertex's exercise of the applicable Option that does not contain CRISPR's Confidential Information or disclose any non-public information included in the Licensed Technology; *provided*, that where reasonably possible, Vertex will provide CRISPR with an advance copy of such publication if such publication is [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

12.6 Vertex Information Rights.

12.6.1 If Vertex determines in good faith that CRISPR (or any CRISPR Entity(ies)) is an entity that is subject to financial consolidation with Vertex for the purposes of its quarterly and annual financial statements (or otherwise requires such information in order to comply with GAAP), CRISPR will make available to Vertex:

(a) as soon as practicable, but in any event within [***] after the end of each Calendar Quarter (i) an unaudited balance sheet as of the end of such Calendar Quarter, (ii) unaudited statements of income and cash flows for such Calendar Quarter, (iii) an unaudited statement of stockholders' equity for such period, and (iv) a detailed trial balance as of the end of such Calendar Quarter, all prepared in accordance with GAAP (except that such financial statements may (x) be subject to year-end audit adjustments and (y) not contain all notes thereto that may be required in accordance with GAAP) and thereafter will promptly provide such other information as Vertex may reasonably request;

(b) as soon as practicable, but in any event within [***] after the end of each Calendar Year (i) an audited balance sheet as of the end of such Calendar Year, (ii) audited statements of income and cash flows for such Calendar Year, (iii) an audited statement of stockholders' equity for such Calendar Year and (iv) a detailed trial balance as of the end of such Calendar Year, together with related footnotes all prepared in accordance with GAAP and audited and certified by a nationally recognized independent public accounting firm; and

(c) on or prior to December 31 of each Calendar Year (other than the Calendar Year ending December 31, 2015), such [***] as of [***] of such year as prepared by [***]

ARTICLE 13
MISCELLANEOUS

13.1 Assignment. Neither this Agreement nor any interest hereunder will be assignable by either Party without the prior written consent of the other Party, except as follows: (a) Vertex, and subject to Section 13.2, CRISPR, may, subject to the terms of this Agreement, assign its rights and obligations under this Agreement by way of sale of itself or the sale of the portion of such Party's business to which this Agreement relates, through merger, sale of assets or sale of stock or ownership interest; *provided* that such sale is not primarily for the benefit of its creditors; and *provided further* that no CRISPR Entity may assign its rights and obligations hereunder unless all CRISPR Entities are assigning their rights and obligations hereunder to the same Third Party; and (b) either Party may assign its rights and obligations under this Agreement to any of its Affiliates; *provided* that such Party will remain liable for all of its rights and obligations under this Agreement. An assigning Party will promptly notify the other Party of any assignment or transfer under the provisions of this Section 13.1. This Agreement will be binding upon the successors and permitted assigns of the Parties and the name of a Party appearing herein will be deemed to include the names of such Party's successors and permitted assigns to the extent necessary to carry out the intent of this Agreement. Any assignment not in accordance with this Section 13.1 will be void.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

13.2 Change of Control of CRISPR.

13.2.1 Notification. CRISPR will notify Vertex in writing promptly (and in any event within [***] Business Days) following the execution of a definitive agreement by any CRISPR Entity, its Affiliates or its equity holders that could reasonably be expected to result in a Change of Control of any CRISPR Entity.

13.2.2 Effects of Change of Control of CRISPR. If during the Agreement Term any CRISPR Entity undergoes a Change of Control to a Competitor, then upon the effective date of such Change of Control (a) Vertex's obligation to provide CRISPR [***] will terminate and (b) Vertex will [***] with respect to the [***].

13.3 Force Majeure. Each Party will be excused from the performance of its obligations under this Agreement to the extent that such performance is prevented by Force Majeure and the nonperforming Party promptly provides notice of the prevention to the other Party. Such excuse will be continued so long as the condition constituting force majeure continues and the nonperforming Party uses Commercially Reasonable Efforts to remove the condition.

13.4 Representation by Legal Counsel. Each Party hereto represents that it has been represented by legal counsel in connection with this Agreement and acknowledges that it has participated in the drafting hereof. In interpreting and applying the terms and provisions of this Agreement, the Parties agree that no presumption will exist or be implied against the Party that drafted such terms and provisions.

13.5 Notices. All notices which are required or permitted hereunder will be in writing and sufficient if delivered personally or sent by nationally-recognized overnight courier, addressed as follows:

If to Vertex:

Vertex Pharmaceuticals Incorporated
Attn: Business Development
50 Northern Avenue
Boston, Massachusetts 02110

with a copy to:

Vertex Pharmaceuticals Incorporated
Attn: Corporate Legal
50 Northern Avenue
Boston, Massachusetts 02110

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

and:

Ropes & Gray LLP
Attn: Marc A. Rubenstein
Prudential Tower
800 Boylston Street
Boston, Massachusetts 02199-3600

If to CRISPR:

CRISPR Therapeutics Ltd.
Attn: Chief Legal Officer
85 Tottenham Court Road
London W1T 4TQ
United Kingdom

with a copy to:

Goodwin Procter LLP
Attn: Christopher Denn
53 State Street
Boston, Massachusetts 02109

or to such other address as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. In addition, each Party will deliver a courtesy copy to the other Party's Alliance Manager concurrently with such notice. Any such notice will be deemed to have been given: (a) when delivered if personally delivered on a Business Day (or if delivered or sent on a non-business day, then on the next Business Day); or (b) on receipt if sent by overnight courier. Any notices required or permitted under this Agreement that are delivered by Vertex to CRISPR AG pursuant to this Section 13.5 shall be deemed properly delivered hereunder to each of CRISPR UK, CRISPR AG, CRISPR Inc. and Tracr.

13.6 Amendment. No amendment, modification or supplement of any provision of this Agreement will be valid or effective unless made in writing and signed by a duly authorized officer of each of Vertex Parent, Vertex UK and CRISPR AG, CRISPR Inc., CRISPR UK and Tracr.

13.7 Waiver. No provision of this Agreement will be waived by any act, omission or knowledge of a Party or its agents or employees except by an instrument in writing expressly waiving such provision and signed by a duly authorized officer of the waiving Party. The waiver by either of Vertex or CRISPR of any breach of any provision hereof by the other Party will not be construed to be a waiver of any succeeding breach of such provision or a waiver of the provision itself. Written waiver of any provision of this Agreement by of any one of the CRISPR Entities in accordance with this Section 13.7 shall be binding upon each of CRISPR UK, CRISPR AG, CRISPR Inc. and Tracr.

13.8 Severability. If any clause or portion thereof in this Agreement is for any reason held to be invalid, illegal or unenforceable, the same will not affect any other portion of this

Agreement, as it is the intent of the Parties that this Agreement will be construed in such fashion as to maintain its existence, validity and enforceability to the greatest extent possible. In any such event, this Agreement will be construed as if such clause of portion thereof had never been contained in this Agreement, and there will be deemed substituted therefor such provision as will most nearly carry out the intent of the Parties as expressed in this Agreement to the fullest extent permitted by Applicable Law.

13.9 Descriptive Headings. The descriptive headings of this Agreement are for convenience only and will be of no force or effect in construing or interpreting any of the provisions of this Agreement.

13.10 Export Control. This Agreement is made subject to any restrictions concerning the export of products or technical information from the United States of America or other countries that may be imposed upon or related to CRISPR or Vertex from time to time. Each Party agrees that it will not export, directly or indirectly, any technical information acquired from the other Party under this Agreement or any products using such technical information to a location or in a manner that at the time of export requires an export license or other governmental approval, without first obtaining the written consent to do so from the appropriate Governmental Authority.

13.11 Governing Law. This Agreement, and all claims arising under or in connection therewith, will be governed by and interpreted in accordance with the substantive laws of The Commonwealth of Massachusetts, without regard to conflict of law principles thereof.

13.12 Entire Agreement. This Agreement constitutes and contains the complete, final and exclusive understanding and agreement of the Parties and cancels and supersedes any and all prior negotiations, correspondence, understandings and agreements, whether oral or written, between the Parties respecting the subject matter hereof and thereof, including that certain Confidentiality Agreement between Vertex Parent and CRISPR dated May 6, 2015, which is hereby superseded and replaced in its entirety as of the Effective Date, and any Confidential Information disclosed by the Parties under such agreement will be treated in accordance with the provisions of ARTICLE 12.

13.13 Independent Contractors. Both Parties are independent contractors under this Agreement. Nothing herein contained will be deemed to create an employment, agency, joint venture or partnership relationship between the Parties hereto or any of their agents or employees, or any other legal arrangement that would impose liability upon one Party for the act or failure to act of the other Party. Neither Party will have any express or implied power to enter into any contracts or commitments or to incur any liabilities in the name of, or on behalf of, the other Party, or to bind the other Party in any respect whatsoever.

13.14 Interpretation. Except where the context expressly requires otherwise, (a) the use of any gender herein will be deemed to encompass references to either or both genders, and the use of the singular will be deemed to include the plural (and vice versa), (b) the words “include,” “includes” and “including” will be deemed to be followed by the phrase “without limitation,” (c) the word “will” will be construed to have the same meaning and effect as the word “shall,” (d) any definition of or reference to any agreement, instrument or other document herein will be

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), (e) any reference herein to any Person will be construed to include the Person's successors and assigns, (f) the words "herein," "hereof" and "hereunder," and words of similar import, will be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (g) all references herein to Sections, Schedules or Exhibits will be construed to refer to Sections, Schedules or Exhibits of this Agreement, and references to this Agreement include all Schedules and Exhibits hereto, (h) the word "notice" will mean notice in writing (whether or not specifically stated) and will include notices, consents, approvals and other written communications contemplated under this Agreement, (i) provisions that require that a Party, the Parties or any committee hereunder "agree," "consent" or "approve" or the like will require that such agreement, consent or approval be specific and in writing, whether by written agreement, letter, approved minutes or otherwise (but excluding e-mail and instant messaging), (j) references to any specific law, rule or regulation, or article, section or other division thereof, will be deemed to include the then-current amendments thereto or any replacement or successor law, rule or regulation thereof, (k) any definition of or reference to any agreement, instrument or other document herein will be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), and (l) the term "or" will be interpreted in the inclusive sense commonly associated with the term "and/or."

13.15 No Third Party Rights or Obligations. No provision of this Agreement will be deemed or construed in any way to result in the creation of any rights or obligations in any Person not a Party to this Agreement.

13.16 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

13.17 Counterparts. This Agreement may be executed in two counterparts, each of which will be an original and both of which will constitute together the same document. Counterparts may be signed and delivered by facsimile or digital transmission (.pdf), each of which will be binding when received by the applicable Party.

13.18 CRISPR Entities. Notwithstanding anything to the contrary in this Agreement:

13.18.1 CRISPR UK, CRISPR AG, CRISPR Inc. and Tracr shall be jointly and severally liable to Vertex for all obligations of CRISPR under this Agreement;

13.18.2 Breach or violation of any representation, warranty covenant or other obligation of CRISPR under this Agreement may result from, be caused by or arise from the act or omission of any one or more of the CRISPR Entities;

13.18.3 Any particular right or interest of CRISPR under this Agreement shall only be exercisable once by the first CRISPR Entity to exercise such right or interest hereunder on behalf of CRISPR (*i.e.*, Vertex shall not be liable to more than one CRISPR Entity with respect to any particular right or interest of CRISPR hereunder, including, without limitation, any payment obligations of Vertex hereunder); and

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

13.18.4 Any consent or approval of CRISPR permitted or required under this Agreement by any one of CRISPR UK, CRISPR AG, CRISPR Inc. or Tracr shall be binding upon all of the CRISPR Entities.

[*SIGNATURE PAGE FOLLOWS*]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their representatives thereunto duly authorized as of the Effective Date.

VERTEX PHARMACEUTICALS INCORPORATED

By: /s/ Ian Smith
Name: Ian Smith
Title: Chief Financial Officer

CRISPR THERAPEUTICS AG

By: /s/ Rodger Novak
Name: Rodger Novak
Title: CEO

VERTEX PHARMACEUTICALS LIMITED

By: /s/ Ian Smith
Name: Ian Smith
Title: Director

CRISPR THERAPEUTICS LIMITED

By: /s/ Rodger Novak
Name: Rodger Novak
Title: CEO

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule A

CRISPR Reserved Targets

Following are the CRISPR Reserved Targets:

1. The following Targets:

a. [***]

b. [***]

c. [***]

d. [***]

e. [***]

f. [***]

h. [***]

i. [***]

j. [***]

2. All Targets that are, [***] (a) [***] or (b) [***] or (c) [***].

3. All Targets that are, at the time Vertex has proposed to add such a Target to the Vertex Target List, [***].

4. All Targets that are, at the time Vertex has proposed to add such a Target to the Vertex Target List, Targets that are [***].

All Targets that are, at the time Vertex has proposed to add such a Target to the Vertex Target List, Targets that are [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule B

Initial Vertex Targets

1) CFTR (cystic fibrosis transmembrane conductance regulator)

2) [***]

3) [***]

4) [***]

5) [***]

6) [***]

7) [***]

8) [***]

9) [***]

10) [***]

11) [***]

12) [***]

13) [***]

Initial Collaboration Targets

1) CFTR (cystic fibrosis transmembrane conductance regulator)

2) [***]

[***]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule C

Option Exercise Data Package

- Option Exercise Data Package. All data for the Option Exercise Data Package is pre-specified by the Collaboration Program Working Group and is reviewed and endorsed by the JRC.
- The responsibilities below would be specified on a program by program basis and endorsed by the JRC ahead of beginning any Research Plan.
- Upon completion of the work, the data for each item is presented to the JRC and compared to the pre-specification. The JRC endorses the interpretation that the data are or are not consistent with the pre-specification.

Item	Party Responsible for Generating Item/Data
[***]	CRISPR & Vertex
[***]	CRISPR
[***]	CRISPR
[***]	CRISPR and Vertex
[***]	Vertex and CRISPR
[***]	Vertex
[***]	Vertex
[***]	CRISPR

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule D

Initial Research Plan Components

The following are key elements for the Research Plans. A full Research Plan will be created by the Collaboration Program Working Group utilizing these elements in accordance with Section 2.2. The provisions will be approved by the JRC in accordance with ARTICLE 3.

Target Name	Description	
Work Plan Items	Listing of all items required to complete the work plan. This should include all of the items in Schedule C	Listing of responsible parties for each of the work items.
Key milestones	Listing of key waypoints on the way to a transition agreement.	Listing of key dates for each of the milestones.
Budget	Out of Pocket Spend - CRISPR FTE - CRISPR FTE - Vertex	Listing of dollar amounts
Key pieces of data and required values	Listing of key pieces of data expected in the Option Exercise Data Package. This is a critical element and will have to be carefully considered. E.g. for a [***] etc. are other possible values. These will be highly Target specific.	Minimum acceptable values for each of these data. These should be prospective and objective wherever possible.
Key dependencies	List key dependencies on various elements.	
Assumptions	List project assumptions.	
Risks	Listing of key risks, probabilities and impacts	Describe mitigation/ contingency/ avoidance plan

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule E

Subcontractors

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE E

Schedule F

CRISPR Background Know-How
(as of 26 October 2015)

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. A total of 1 page was omitted. [***]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE F

Schedule G

Terms of Joint Development & Commercialization Agreement

ARTICLE 1
DEFINITIONS

1.1 "**Audited Party**" has the meaning set forth in Section 7.6.

1.2 "**Auditing Party**" has the meaning set forth in Section 7.6.

1.3 "**Baseball Arbitration**" means "**baseball**" style arbitration in accordance with the arbitration procedure set forth on Schedule I of the Agreement.

1.4 "**Commercialization Budget**" has the meaning set forth in Section 5.1.

1.5 "**Commercialization Costs**" means the sum of the following costs and expenses incurred by the Parties or their respective Affiliates, in Commercializing the Shared Products (and related Manufacturing activities) in the Territory, in each case, to the extent incurred in accordance with the Commercialization Plan and Commercialization Budget:

(a) Expenses incurred in connection with the [***];

(b) Expenses incurred to conduct [***];

(c) [***] representing the [***] as defined in the [***], in each case, to the extent directly attributable to [***];

(d) Expenses identifiable to the [***], in each case, to the extent incurred specifically with respect [***];

(e) Expenses incurred in connection with the [***];

(f) Expenses directly associated with [***], in each case, that are incurred with respect to a [***];

(g) [***];

(h) Expenses reasonably necessary and identifiable to the [***] with respect to: [***];

(i) [***] and

(j) any other Expenses approved by the JCC and included in the Commercialization Budget that are not otherwise included in any other Commercialization Cost category.

Commercialization Costs will exclude [***].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.6 "**Commercialization Plan**" has the meaning set forth in Section 5.1.

1.7 "**Development Budget**" has the meaning set forth in Section 3.1.

1.8 "**Development Costs**" means the sum of the following costs and expenses incurred by the Parties and their respective Affiliates in Developing the Shared Product (and related Manufacturing activities) in the Territory, in each case, to the extent incurred in accordance with the Global Development Plan and the Development Budget, including:

(a) Expenses incurred in [***];

(b) [***];

(c) [***] incurred in connection with [***];

(d) Expenses associated with [***], to the extent incurred with respect to [***];

(e) Expenses incurred in connection with [***], including the Parties' [***];

(f) Expenses associated with [***]; and

(g) any other Expenses incurred for [***] and included in the [***].

Development Costs will exclude [***].

1.9 "**Expenses**" means Out-of-Pocket Costs and FTE Costs.

1.10 "**FTE Costs**" means the product of (a) the number of FTEs (proportionately, on a per-FTE basis) used by a Party or its Affiliates in directly performing activities assigned to such Party under and in accordance with the Global Development Plan, Commercialization Plan or Medical Affairs Plan, as applicable, and (b) the FTE Rate.

1.11 "**FTE**" means one employee full-time for one year or more than one person working the equivalent of a full-time person, working directly on performing activities under the Global Development Plan, Medical Affairs Plan or Commercialization Plan, as applicable, where "**full-time**" is considered [***] hours for one Calendar Year. No additional payment will be made with respect to any individual who works more than [***] hours per Calendar Year and any individual who devotes less than [***] hours per Calendar Year will be treated as an FTE on a pro rata basis based upon the actual number of hours worked divided by [***].

1.12 "**Global Development Plan**" has the meaning set forth in Section 3.1.

1.13 "**Global Branding Strategy**" has the meaning set forth in Section 5.2.2.

1.14 "**JCC**" has the meaning set forth in Section 2.1.

1.15 "**JDC**" has the meaning set forth in Section 2.1.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE G

1.16 "**JSC**" has the meaning set forth in Section 2.1.

1.17 "**Lead Commercialization Party**" has the meaning set forth in Section 5.1.

1.18 "**Licensed Vertex Know-How**" means (a) [***], that (i) [***] and (ii) [***], (b) [***] and (c) [***].

1.19 "**Licensed Vertex Background Patents**" means (a) [***] that (i) [***] and (ii) [***], (b) [***] and (c) the [***].

1.20 "**Manufacturing Costs**" means the costs of Manufacturing Shared Product, which (a) to the extent such Shared Product is Manufactured by a Party or its Affiliates, [***] and (b) to the extent such Shared Product is Manufactured by a Third Party in an arms-length transaction, [***].

1.21 "**Manufacturing Working Group**" has the meaning set forth in Section 6.1.

1.22 "**Medical Affairs Activities**" means responding to external inquiries or complaints, the planning for and conduct of investigator sponsored Clinical Trials not included in the Global Development Plan, medical education, speaker programs, advisory boards, thought leader activities, educational grants and fellowships, local country government affairs, Phase 3b Clinical Trials, phase IV/post-Regulatory Approval Clinical Trials, generating health economics and outcomes research data from patient reported outcomes, prospective observational studies and retrospective observational studies, and economic models and reimbursement dossiers, deployment of MSLs, medical affairs clinical trial management, doctors in field (other than MSLs), scientific publications and medical communications.

1.23 "**Medical Affairs Budget**" has the meaning set forth in ARTICLE 4.

1.24 "**Medical Affairs Costs**" means all Expenses incurred by the Parties in connection with the conduct of Medical Affairs Activities in accordance with the Medical Affairs Plan and the Medical Affairs Budget;

1.25 "**Medical Affairs Plan**" has the meaning set forth in ARTICLE 4.

1.26 "**MSL**" means medical science liaisons.

1.27 "**Net Loss**" means, for a given period, Net Sales (including deemed Net Sales under Section 8.6.5 of the Agreement) in the Territory less Program Expenses, where the result is a negative number.

1.28 "**Net Profit**" means, for a given period, Net Sales (including deemed Net Sales under Section 8.6.5 of the Agreement) in the Territory less Program Expenses, where the result is a positive number.

1.29 "**Opt-Out Royalty**" has the meaning set forth in Section 11.4.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE G

1.30 "**Other Out-of-Pocket Costs**" means:

(a) Expenses associated with [***] pursuant to the [***];

(b) [***];

(c) [***], in each case, that are [***]; and

(d) Expenses incurred in connection with the [***].

1.31 "**Patent Costs**" means all Expenses reasonably allocated to the Shared Products for the prosecution, maintenance and enforcement of Patents that Cover the Shared Products.

1.32 "**Pharmacovigilance Agreement**" has the meaning set forth in Section 8.1.

1.33 "**Program Expenses**" means Development Costs, Commercialization Costs, Medical Affairs Costs, Patent Costs and Other Out-of-Pocket Costs.

1.34 "**Project Leader**" has the meaning set forth in Section 3.1.

1.35 "**Project Team**" has the meaning set forth in Section 3.1.

1.36 "**Reconciliation Report**" has the meaning set forth in Section 7.4.

1.37 "**Subcontract**" has the meaning set forth in ARTICLE 9.

1.38 "**Subcontractor**" has the meaning set forth in ARTICLE 9.

1.39 "**Summary Statement**" has the meaning set forth in Section 7.3.

1.40 "**Trademark**" means all trademarks, service marks, trade names, brand names, sub-brand names, trade dress rights, product configuration rights, certification marks, collective marks, logos, taglines, slogans, designs or business symbols and all words, names, symbols, colors, shapes, designations or any combination thereof that function as an identifier of source or origin or quality, whether or not registered, and all statutory and common law rights therein, and all registrations and applications therefor, together with all goodwill associated with, or symbolized by, any of the foregoing.

ARTICLE 2
GOVERNANCE

2.1 Committees. Within [***] after execution of the Joint Development & Commercialization Agreement, the Parties will establish a joint steering committee (the "**JSC**") to provide high-level oversight and decision-making regarding the activities of the Parties under the Joint Development & Commercialization Agreement. The JSC's responsibilities will include (a) reviewing and overseeing the overall global Development, Manufacture and Commercialization of the Shared Products in the Field, (b) overseeing the JDC, JCC and any other committees and working groups established with respect to the Shared Product and resolving matters on which the JDC, JCC or such committees and working groups are unable to reach consensus and (c) performing such other functions as may be established in the Joint

Development & Commercialization Agreement. The JSC will oversee a joint development committee (the "**JDC**") and a joint commercialization committee (the "**JCC**") and such other committees and working groups as the JSC may determine are appropriate from time to time.

2.2 Decision-Making. The JSC, JDC, JCC and all other committees and working groups [***] with the goal being to maximize the chance of successfully developing and commercializing a [***] in a manner consistent with Applicable Laws and the Joint Development & Commercialization Agreement. Disputes arising out of the JDC, JCC or any other committee or working group will be escalated to the JSC for resolution. Disputes arising at the JSC will be referred to senior executives of each Party for resolution. whereupon the Parties' senior executives will meet in person if requested by either such senior executive and attempt in good faith to resolve such dispute by negotiation and consultation for a [***] period following such referral. If the senior executives do not resolve such dispute within such [***] period, such dispute shall be submitted to [***].

ARTICLE 3
DEVELOPMENT

3.1 Global Development Plan. The JDC will oversee the Development of Shared Products by the Parties in the Field in the Territory. Each Shared Product will be Developed in accordance with a global development plan (the "**Global Development Plan**"). The Global Development Plan will include a plan for the Development of the Shared Product in the Territory through Regulatory Approval, including a regulatory strategy, high-level study design criteria, an allocation of responsibilities between the Parties, timelines and a budget for activities conducted under the Global Development Plan (the "**Development Budget**"). The JDC will update the Global Development Plan [***] (or more frequently as needed) and submit it to the JSC for approval. The Parties will establish a project team (the "**Project Team**") to oversee and coordinate activities under the Global Development Plan. The Project Team be formed with an experienced team leader ("**Project Leader**"), and the composition of the Project Team will be determined by the Project Leader based on available personnel from each Party across functions. The Project Team will conduct its responsibilities under the Global Development Plan in good faith and with reasonable care and diligence. The Project Team will provide the JDC with periodic updates regarding the progress of activities pursuant to the Global Development Plan.

3.2 Development Activities.

3.2.1 Regulatory Matters. Regulatory activities will be jointly carried out by the Project Team under the guidance of the JDC. All Regulatory Filings and Regulatory Approvals that relate to Shared Products shall be filed by and held in the name of [***] or its relevant Affiliates. [***] shall use Commercially Reasonable Efforts, in consultation with [***] to seek to obtain and maintain Regulatory Approval for the Shared Product in the Field. [***] will oversee, monitor and manage all regulatory interactions, communications and filings with, and submissions to, Regulatory Authorities with respect to the Shared Products. [***], in consultation with [***], will control all regulatory activities with respect to the Shared Products, including determining the labeling strategy and the content of submissions; *provided* that [***] may review and comment on such strategies and submissions. Vertex will prepare all regulatory submissions and provide [***] with advance drafts of any material documents or other material

correspondence pertaining to the Shared Products, including any proposed labeling, that [***] plans to submit to any Regulatory Authority. [***] may provide comments regarding such documents and other correspondence prior to their submission, which comments [***] will consider in good faith. [***] will provide [***] with copies of all material submissions it makes to, and all material correspondence it receives from, a Regulatory Authority pertaining to a Regulatory Approval of a Shared Product within [***] after receipt. [***] will provide [***] with reasonable advance notice of any meeting or teleconference with any Regulatory Authority with respect to the Shared Products. Subject to Applicable Law, [***] will have the right to participate as an observer in all material meetings, conferences and discussions by [***] with Regulatory Authorities pertaining to Development of the Shared Products or Regulatory Approval of the Shared Products.

3.2.2 Clinical Trials. The JDC will allocate responsibility between the Parties for the conduct of Clinical Trials and the various other Development activities addressed in the Global Development Plan. [***] will have final decision-making authority with respect to the protocol for any Clinical Trial conducted under the Global Development Plan and the statistical analysis plan for any such Clinical Trial. The Party that has responsibility for conducting the Clinical Trial will have the responsibility for the packaging and labeling of clinical drug supplies, unless otherwise agreed by the Parties.

3.2.3 Independent Activities. The Joint Development & Commercialization Agreement will include a mechanism for each Party to propose additional Clinical Trials for inclusion in the Global Development Plan. If the other Party does not agree to include such additional Clinical Trial in the Global Development Plan, the requesting Party may conduct such Clinical Trial at its sole expense (*i.e.* such expenses will not be included as Development Costs); *provided* that neither Party may conduct any Clinical Trial that [***]. The non-requesting Party will not have the right to use the data resulting from such Clinical Trial in a substantive manner as the basis for obtaining new or expanded Regulatory Approval for a Product in the Field or for commercial purposes for a Product in the Field unless and until such Party reimburses the requesting Party for [***] of the Development Costs.

3.3 Diligence. Each Party will use Commercially Reasonable Efforts to execute and to perform, or cause to be performed, the activities assigned to it in the Global Development Plan, and to cooperate with the other Party in carrying out the Global Development Plan in accordance with the timelines therein. Each Party and its Affiliates will conduct its Development activities in good scientific manner and in compliance with Applicable Law. Notwithstanding anything to the contrary contained herein, a Party or its Affiliates will not be obligated to undertake or continue any Development activities with respect to the Shared Products if such Party (or any of its Affiliates) reasonably determines that performance of such Development activity would violate Applicable Law or infringe or misappropriate a Third Party's intellectual property.

ARTICLE 4
MEDICAL AFFAIRS ACTIVITIES

The Parties, acting through the JSC, will develop and agree upon a global medical affairs plan for the Shared Product that describes the Medical Affairs Activities to be conducted in the

Territory, key tactics and strategies for implementing those activities, the relative responsibilities of the Parties and the associated budget for such activities (such plan, the "**Medical Affairs Plan**" and such budget, the "**Medical Affairs Budget**"). CRISPR will lead and manage Medical Affairs Activities in the United States and Vertex will lead and manage Medical Affairs Activities outside of the United States, in each case, in accordance with the Medical Affairs Plan. The number of MSLs to be deployed in each jurisdiction will be determined by the JSC at least [***] prior to potential launch.

ARTICLE 5
COMMERCIALIZATION

5.1 Commercialization Plan. The JCC will oversee the Commercialization of Shared Products by the Parties in the Field in the Territory. No later than [***] prior to the anticipated launch of the Shared Product in the first country in the Territory, the JCC will develop and submit to the JSC for approval, a Commercialization plan (the "**Commercialization Plan**") that sets forth the Commercialization activities to be undertaken by the Parties with respect to the Commercialization of the Shared Product in the Territory. The Commercialization Plan may include activities on a region-by-region or country-by-country basis, as determined by the JCC. The JCC will update the Commercialization Plan on [***] (or more frequently as needed) and submit it to the JSC for approval. The Commercialization Plan will include (a) the Global Branding Strategy, (b) a marketing strategy, (c) a communications strategy that includes plans for public relations, conferences and exhibitions and other external meetings, internal meetings and communications, publications and symposia, internet activities and core brand package, (d) a high level operating plan for the implementation of such strategies on [***], including information related to Shared Product positioning, core messages to be communicated and pricing strategies, (e) a detailing strategy, (f) a pricing strategy, (g) all other material activities to be conducted in connection with the Commercialization of the Shared Product in the Field in the Territory and (h) a budget for activities conducted under the Commercialization Plan (the "**Commercialization Budget**"). The Commercialization Plan will include a meaningful role for both Parties. In allocating responsibilities between the Parties, the JCC will take into consideration each Party's expertise, capabilities, staffing and available resources to take on such activities, as well as the Parties' intention to provide CRISPR an opportunity to build and expand its expertise, capabilities, staffing and available resources in connection with performing Commercialization activities allocated to it. CRISPR shall be the Commercializing lead for Shared Products in the United States and Vertex shall be the Commercializing lead for Shared Products outside of the United States. The Commercializing lead, with respect to the United States or outside of the United States, respectively, shall be referred to herein as the "**Lead Commercialization Party**" for such jurisdiction (as applicable, the "**Lead Commercialization Party**" Unless otherwise specified in the Commercialization Plan, the Parties will jointly be responsible for conducting all Commercialization activities outside of the United States, such activities to be determined by the JSC.

5.2 Commercialization Activities.

5.2.1 Training. The Parties will jointly prepare training programs and materials for employees and sales representatives with respect to the Shared Product, with the goal of ensuring compliance with all Applicable Laws and each Party's compliance policies. Each Party will be solely responsible for training its employees and sales representatives in accordance with such training program.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2.2 Global Branding Strategy. The JCC will develop a global branding strategy for Shared Products in the Territory, including, with respect to each Shared Product, a life cycle plan, brand vision, positioning, key messaging, concept and imagery, Trademarks (including name and logos), brand public relations and supporting market research (the "**Global Branding Strategy**") and submit such strategy to the JSC for approval.

5.2.3 Trademarks. The JCC will select a product Trademark for each Shared Product throughout the world consistent with the Global Branding Strategy. Each Shared Product will be promoted and sold in the Territory under the applicable Trademarks.

5.2.4 Marketing. The JCC will agree upon a marketing strategy for the Shared Product, including Shared Product positioning, messaging, appearance and launch sequencing, consistent with the Global Branding Strategy. Marketing activities and responsibilities for each Party will be determined by the JCC.

5.2.5 Managed Markets and Market Access. The JCC will agree upon a strategy for the managed markets and market access for the Shared Product, including, without limitation, payer strategy and account management. Such activities and responsibilities for each Party will be determined by the JCC.

5.2.6 Pricing. The JCC will establish a global pricing strategy for the Shared Product (including list price, targeted net pricing, sales-weighted average discounts and rebates, the approach to pricing with different types of accounts and plans, types of discounts and rebates) in the Territory. The responsibility of each Party regarding the implementation of such global pricing strategy, including negotiating pricing and reimbursement with governments and private payers will be determined by the JCC.

5.2.7 Field Sales. The Parties will jointly promote the Shared Product (including performing sales calls) in the Territory in accordance with the Commercialization Plan. CRISPR will lead and manage the promotion of the Shared Product in the United States. Vertex will have the right provide [***] of the FTES with respect to the Shared Product in the United States. Vertex will lead and manage promotion of the Shared Product outside of the United States and CRISPR will have the right to provide [***] of the FTES with respect to the Shared Product in the Major Market Countries (outside of United States). CRISPR and Vertex will each ensure that its and its Affiliates' sales representatives do not make any representation, statement, warranty or guaranty with respect to the Shared Product that is not consistent with the applicable current package insert of prescribing information or other documentation accompanying or describing a Shared Product, including mutually approved limited warranty and disclaimers, if any. CRISPR and Vertex will each ensure that its and its Affiliates' sales representatives do not make any statements, claims or undertakings to any person with whom they discuss or promote the Shared Products that are not consistent with, or provide or use any labeling, literature or other materials other than those promotional materials currently approved for use by the JCC.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE G

5.2.8 Distribution and Patient Services. The Parties will jointly be responsible for distribution and patient services for the Shared Product in the Territory, including contracting with applicable service providers, such activities to be determined by the JCC [***] prior to launch of the Shared Product.

5.2.9 Booking Sales; Distribution. CRISPR will invoice, sell and book all sales of Shared Products in the United States and be responsible for warehousing and distributing such Shared Products in the United States. Vertex will invoice, sell and book all sales of Shared Products outside of the United States and be responsible for warehousing and distributing such Shared Products outside of the United States.

5.3 Diligence. Each Party will use Commercially Reasonable Efforts to execute and to perform, or cause to be performed, the activities assigned to it under the Commercialization Plan. Each Party and its Affiliates will conduct its Commercialization activities in compliance with Applicable Law. Notwithstanding anything to the contrary contained herein, a Party or its Affiliates will not be obligated to undertake or continue any Commercialization activities with respect to the Shared Products if such Party (or any of its Affiliates) reasonably determines that performance of such Commercialization activity would violate Applicable Law or infringe or misappropriate a Third Party's intellectual property.

ARTICLE 6
MANUFACTURING

6.1 Quality Agreement. The Parties will meet to negotiate in good faith and agree on quality analysis and control criteria for the Manufacture of the Shared Product within [***] after the effective date of the Joint Development & Commercialization Agreement. The agreed upon criteria will be set forth in a quality agreement containing mutually agreed terms and conditions that are customary for agreements of this type.

6.2 Working Group. The Parties will establish a manufacturing working group (the "**Manufacturing Working Group**") to oversee matters relating to the Manufacture of the Shared Product. The Manufacturing Working Group will report to the JDC for Development-related Manufacturing matters and will report to the JCC for Commercialization-related Manufacturing matters. The Manufacturing Working Group's responsibilities will include: (a) developing plans to transfer Manufacturing-related Know-How between the Parties as needed to facilitate the Manufacture of the Shared Product; (b) establishing standards applicable to each Party's Manufacturing activities and reviewing each Party's performance against such standards; conducting technical reviews, and (c) sharing planning and budgeting information with the JDC and JCC.

6.3 Responsibility. The Parties will share responsibility for Manufacturing clinical supplies of Shared Product as determined by the Manufacturing Working Group. Unless otherwise agreed by the Parties, Vertex will be responsible for Manufacturing commercial supplies of Shared Product.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE G

ARTICLE 7
ALLOCATION OF NET PROFIT AND NET LOSS

7.1 Allocation. Each Party will be entitled to 50% of the Net Profits or will bear 50% of the Net Loss, as applicable, during the term of the Joint Development & Commercialization Agreement. If either Party elects to Opt-Out (as defined below), the other Party shall pay royalties in accordance with Section 11.4.

7.2 Calculation. Net Profit or Net Loss will be calculated for each Calendar Quarter by determining the [***] and subtracting [***].

7.3 Payment of Expenses; Summary Statements. Subject to reconciliation as provided in Section 7.4, the Party initially incurring Program Expenses will be responsible for and pay for all such Program Expenses so incurred. Each Party will maintain the books and records referred to in Section 7.6 and will accrue all Program Expenses and Net Sales) in accordance with the terms and conditions hereof and in accordance with GAAP. Within [***] after the end of each [***], each Party will submit to the other a non-binding, good faith estimate of the Program Expenses accrued and Net Sales during the just-ended [***]. Within [***] after the end of each [***], each Party will submit to the other a written report reflecting the accrual of Program Expenses and Net Sales during the just-ended [***], except that each Party's submission for the last month of such [***] will be a good faith estimate and not actual amounts (each, a "**Summary Statement**"). Each Summary Statement (after the initial Summary Statement) will reflect an adjustment for the actual amount of the previous [***] as needed. Any reporting and reconciliation of variances between estimated and actual costs and expenses may be delayed by a [***] as reasonably necessary in light of a Party's internal reporting procedures. The Parties' respective Summary Statements will serve as the basis of the Reconciliation Reports prepared by the Parties pursuant to Section 7.4. Upon the request of either Party from time to time, the Parties' respective finance departments, coordinated by the JDC, or JCC, as appropriate, will discuss any questions or issues arising from the Summary Statements, including the basis for the accrual of specific Program Expenses.

7.4 Reconciliation. Vertex will prepare a reconciliation report, as soon as practicable after the receipt of CRISPR's Summary Statement, but in any event within [***] after the end of each [***], accompanied by reasonable supporting documents and calculations sufficient to support each Party's financial reporting obligations, independent auditor requirements and obligations under the Sarbanes-Oxley Act, which reconciles the amounts accrued and reported in each Party's Summary Statement during such [***] and the share of the Net Profits and Net Losses to be allocated to each of the Parties for such [***] in accordance with Section 7.1 (such report, the "**Reconciliation Report**"). Payment to reconcile Net Profit or Net Loss shall be made by the owing Party to the other Party within [***] after such Reconciliation Report is complete.

7.5 Cost Overruns. If a Party's aggregate Development Costs, Medical Affairs Costs or Commercialization Costs in any Calendar Year are likely to exceed or exceed those set forth in the Development Budget, Medical Affairs Budget or Commercialization Budget, as applicable, for all of its activities under the Development Plan, Medical Affairs Plan or Commercialization Plan, as applicable, in such Calendar Year by up to [***] of the aggregate

amount set forth in the Development Budget, Medical Affairs Budget or Commercialization Budget, as applicable, such Party will provide the other Party with an explanation for such excess costs and expenses, and such excess costs and expenses will be included in the Development Costs, Medical Affairs Cost or Commercialization Costs, as applicable, and shared by the Parties as provided herein. To the extent a Party's aggregate Development Costs, Medical Affairs Costs or Commercialization Costs, as applicable, exceed those set forth in the Development Budget, Medical Affairs Budget or Commercialization Budget, as applicable, by more than [***], unless otherwise agreed by the Parties, such Expenses will not be shared by the Parties and the Party incurring such Expenses will be solely responsible for such Expenses.

7.6 Books and Records. Each Party will keep and maintain accurate and complete records regarding Program Expenses and Net Sales, during the [***] preceding Calendar Years. Upon [***] prior written notice from the other Party (the "**Auditing Party**"), the Party required to maintain such records (as applicable, the "**Audited Party**") will permit an independent certified public accounting firm of internationally recognized standing, selected by the Auditing Party and reasonably acceptable to the Audited Party, to examine the relevant books and records of the Audited Party and its Affiliates, as may be reasonably necessary to verify the Summary Statements and Reconciliation Reports. An examination by the Auditing Party under this Section 7.6 will occur not more than [***] in any Calendar Year and will be limited to the pertinent books and records for any Calendar Year ending not more than [***] before the date of the request. The accounting firm will be provided access to such books and records at the Audited Party's facility or facilities where such books and records are normally kept and such examination will be conducted during the Audited Party's normal business hours. The Audited Party may require the accounting firm to sign a customary non-disclosure agreement before providing the accounting firm access to its facilities or records. Upon completion of the audit, the accounting firm will provide both the Auditing Party and the Audited Party a written report disclosing whether the applicable Summary Statements and Reconciliation Reports are correct or incorrect and the specific details concerning any discrepancies. No other information will be provided to the Auditing Party. If the report or information submitted by the Audited Party results in an underpayment or overpayment, the Party owing underpaid or overpaid amount will promptly pay such amount to the other Party, and, if, as a result of such inaccurate report or information, such amount is more than [***] of the amount that was owed the Audited Party will reimburse the Auditing Party for the reasonable expense incurred by the Auditing Party in connection with the audit.

ARTICLE 8
ADVERSE EVENTS

8.1 Pharmacovigilance Agreement. The Parties will meet to negotiate in good faith and agree on processes and procedures for sharing safety information within [***] after the effective date of the Joint Development & Commercialization Agreement. The agreed upon processes and procedures will be set forth in a pharmacovigilance agreement (the "**Pharmacovigilance Agreement**") containing mutually agreed terms and conditions that are customary for agreements of this type. The Pharmacovigilance Agreement will include provisions establishing a joint safety oversight working group to oversee the conduct of the Parties' activities under the Pharmacovigilance Agreement and to coordinate the Parties' interactions with respect to pharmacovigilance activities.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE G

8.2 Global Safety Database. The JCC will establish pharmacovigilance and safety strategy for the Shared Product. Pursuant to such strategy, Vertex will establish the global safety database for such Shared Product. Vertex will maintain a global database of safety information including, but not limited to, adverse events and pregnancy reports for such Shared Product, which will be used for regulatory reporting and responses to safety queries from Regulatory Authorities by both Parties. CRISPR will, and will cause its Affiliates to, transfer all adverse events information in its or their possession or control to the global safety database within a mutually agreed period of time that provides Vertex with sufficient time to enter all of the data and to obtain validation of the database.

8.3 Risk Management and Signal Detection Activities. Vertex shall be primarily responsible for all signal detection and risk management activities for Shared Products. These signal detection activities shall include, but are not limited to, proactive review and evaluation of all safety information from the Global Safety Database (including by way of example, Individual Case Safety Reports, aggregate safety information, literature reports, and non-clinical data).

ARTICLE 9
SUBCONTRACTING

Each Party may subcontract the performance of any activities undertaken by such Party in accordance with the Global Development Plan, Medical Affairs Plan or Commercialization Plan to one or more Third Parties (each such Third Party, a "**Subcontractor**") pursuant to a written agreement (a "**Subcontract**"). Notwithstanding the foregoing, if either Party desires to subcontract any such activities, it will first discuss the matter with the other Party and reasonably consider using the other Party for such subcontracted activities, taking into account the capabilities of the other Party and potential impact on costs, as a potential alternative to subcontracting such activities to a Third Party. If, following such discussion a Party still desires to subcontract the performance of any such activity to one or more Third Parties, it may proceed to do so; *provided*, that prior to entering into any Subcontract which the subcontracting Party reasonably anticipates will entail payments to the Subcontractor in excess of [***] with respect to subcontracted activities under the Joint Development & Commercialization Agreement, the subcontracting Party will obtain the JSC's approval, not to be unreasonably withheld, of use of the proposed Subcontractor to conduct the activities proposed to be subcontracted prior to execution of the applicable Subcontract.

ARTICLE 10
LICENSES; IP

10.1 License Grants. Vertex will grant CRISPR a co-exclusive (with Vertex) license under Vertex's and its Affiliates' interest in the Licensed Vertex Know-How and Licensed Vertex Patents, with the right to Sublicense through multiple tiers (subject to Section 10.2), to Research, Develop, Manufacture, have Manufactured, use, keep, sell, offer for sale, import, export and Commercialize Shared Products in the Field in the Territory. Additionally, the license rights granted by CRISPR to Vertex under Section 5.3.1 of the Agreement will be modified to be co-exclusive (with CRISPR) for Shared Products in the Territory.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10.2 Sublicensing. Subject to the rights granted or retained by the Parties under the Joint Development & Collaboration Agreement, either Party may Sublicense (through multiple tiers) to its Affiliates or Third Parties any and all rights granted to it by the other Party or retained by such Party with respect to the Research, Development, Manufacture and Commercialization of the Shared Products; *provided*, that neither Party may grant any such Sublicense in a Major Market Country without the prior written consent of the other Party; and *provided*, *further*, that if either Party intends to Sublicense any such rights in any country, it will discuss the matter with the Other Party and in good faith consider using the Other Party to conduct any sublicensed activities. If a Party grants any such Sublicense it will remain responsible for its obligations under the Joint Development & Commercialization Agreement and will be responsible for the performance of the relevant sublicensee.

10.3 [***]. If a Party believes, in its reasonable judgment, that it may be necessary to obtain rights under any [***] in order to Research, Develop, Manufacture or Commercialize a Shared Product in the Field, such Party will promptly notify the other Party and the Parties will discuss such matter in good faith. Unless otherwise agreed, [***] will have the first right to enter into a license with the relevant Third Party to acquire rights to the [***]. If the Parties are unable to agree on whether any Know-How or Patents are [***], the Party that believes such rights are necessary may enter into a license with the relevant Third Party; *provided*, that [***] unless and until the other Party agrees, or as determined by arbitration or other dispute resolution mechanisms to [***].

10.4 Trademarks. The Lead Commercialization Party will own and retain all rights to Trademarks for Shared Products in their respective jurisdiction, and all goodwill associated with or attached thereto arising out of the use thereof by the Parties, their Affiliates and Sublicensees will inure to the benefit of such Lead Commercialization Party. Each non-Lead Commercialization Party, on behalf of itself and its Affiliates, will assign to the Lead Commercialization Party or its relevant Affiliate all right, title and interest in and to such Shared Product Trademarks and goodwill in the relevant jurisdiction. The non-Lead Commercialization Party will not contest, oppose or challenge the Lead Commercialization Party's ownership of such Shared Product Trademarks in the relevant jurisdiction. The Lead Commercialization Party will own rights to any Internet domain names incorporating any Trademark for the Shared Product, or any variation or part of any such Trademark, as its URL address or any part of such address in the applicable jurisdiction. The Lead Commercialization Party will use Commercially Reasonable Efforts to register, maintain and enforce the Trademarks for the Shared Product in the relevant jurisdiction.

ARTICLE 11
TERM; TERMINATION

11.1 Term. The term of the Joint Development & Commercialization Agreement will commence on the execution of the Joint Development & Commercialization Agreement and continue in full force and effect until there is no longer a Global Development Plan or Commercialization Plan contemplating Development or Commercialization of a Shared Product in the Territory, unless earlier terminated as provided below.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE G

11.2 Termination Generally. The provisions of Sections 11.2.1, 11.2.3, 11.2.4 and 11.2.5 of the Agreement will apply to the Joint Development & Commercialization Agreement, *mutatis mutandis.*

11.3 Alternative Remedies. The alternative remedy provisions of Section 11.3 of the Agreement will not apply to Hemoglobinopathy Targets or [***] or to the Joint Development & Commercialization Agreement.

11.4 Opt-Out. After [***] for a Shared Product directed to a particular Collaboration Target, either Party may opt out of the Joint Development & Commercialization Agreement for all Shared Products directed to such Collaboration Target upon [***] notice to the other Party ("**Opt-Out**"). The other Party shall pay such opting out Party royalties ("**Opt-Out Royalties**") in accordance with this Section 11.4 and the terms of Sections 7.5.2, 7.5.3, 7.5.4 and 7.5.5 of the Strategic Collaboration Option and License Agreement shall apply to such royalties, *mutatis mutandis*. The applicable royalty rates shall be determined in accordance with the table set forth below based on the timing of the Opt-out Notice. Upon the other Party's receipt of such notice, all rights and obligations under the Joint Development & Commercialization Agreement with respect to Shared Products directed to such Collaboration Target shall terminate. If the opting out Party is CRISPR, such Shared Product(s) shall be deemed Product(s) directed to a Collaboration Target other than a Hemoglobinopathy Target [***] under the Strategic Collaboration, Option and License Agreement, and the terms and conditions of such agreement shall apply with respect to all Products directed to the opted out Collaboration Target; provided, that in lieu of the royalty rates payable under Section 7.5.1 of such agreement Vertex shall pay royalties at the rates set forth in this Section 11.4. If the opting out Party is Vertex, the Parties shall negotiate in good faith a termination agreement for all Products directed to such opted out Collaboration Target, including, without limitation, reasonable diligence obligations and obligations of CRISPR for sharing of information regarding such Products with Vertex, which obligations will be substantially similar to the obligations imposed by Vertex under the Joint Development & Commercialization Agreement. For the avoidance of doubt, the allocation of Net Profits and Net Loss pursuant to Section 7.1 shall terminate upon the Opt-Out.

Timing of Opt Out	**Net Sales (in Dollars) for such Shared Products in the Territory**	**Opt-Out Royalty Rates as a Percentage (%) of Net Sales of such Shared Products**
[***]	[***]	[***]
	[***]	[***]
	[***]	[***]
	[***]	[***]
[***]	[***]	[***]
	[***]	[***]
	[***]	[***]
	[***]	[***]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE G

ARTICLE 12
INDEMNITY

The Joint Development & Commercialization Agreement will include commercially reasonable indemnity provisions, which will include (but not be limited to) an obligation for each Party to indemnify the other Party from, against and in respect of any and all Liability incurred or suffered by the other Party to the extent resulting from: (a) any breach of, or inaccuracy in, any representation or warranty made by the indemnifying Party, or any breach or violation by the indemnifying Party of any covenant or agreement in the Joint Development & Commercialization Agreement; or (b) the negligence or intentional misconduct of, or violation of Applicable Law (including off-label promotion) by, the indemnifying Party, any of its Affiliates or Sublicensees, or any of their respective directors, officers, employees and agents, in performing its obligations or exercising its rights under the Joint Development & Commercialization Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE G

Schedule H

CRISPR In-License Agreements

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. A total of 1 page was omitted. [***]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE H

Schedule I

Baseball Arbitration Procedures

Selection of Baseball Expert and Submission of Positions. The Parties will select and agree upon a mutually acceptable independent Third Party expert who is neutral, disinterested and impartial, and has the experience specified in Schedule G for the applicable dispute (the "**Baseball Expert**"). If the Parties are unable to mutually agree upon a Baseball Expert within [***] following the delivery of the request for Baseball Arbitration, then upon request by either Party, the Baseball Expert will be an arbitrator appointed by Judicial and Mediation Services ("**JAMS**"), which arbitrator need not have the above-described experience. Once the Baseball Expert has been selected, each Party will within [***] following selection of the Baseball Expert provide the Baseball Expert and the other Party with a written report setting forth its position with respect to the substance of the dispute and may submit a revised or updated report and position to the Baseball Expert within [***] of receiving the other Party's report. If so requested by the Baseball Expert, each Party will make oral submissions to the Baseball Expert based on such Party's written report, and each Party will have the right to be present during any such oral submissions.

JAMS Supervision. In the event the Baseball Expert is a JAMS arbitrator selected by JAMS as provided in this Schedule I, the matter will be conducted as a binding arbitration in accordance with JAMS procedures, as modified by this Schedule I (including that the arbitrator will adopt as his or her decision the position of one Party or the other, as described below). In such event, the arbitrator may retain a Third Party expert with the same experience specified in Schedule F for the Baseball Expert to assist in rendering such decision, and the expenses of any such expert will be shared by the Parties as costs of the arbitration as provided in this Schedule I.

Determination by the Baseball Expert. The Baseball Expert will, no later than [***] after the last submission of the written reports and, if any, oral submissions, select one of the Party's positions as his or her final decision, and will not have the authority to modify either Party's position or render any substantive decision other than to so select the position of either Party as set forth in their respective written report (as initially submitted, or as revised in accordance with this Schedule I, as applicable). The decision of the Baseball Expert will be the sole, exclusive and binding remedy between them regarding the dispute submitted to such Baseball Expert.

Location; Costs. Unless otherwise mutually agreed upon by the Parties, the in-person portion (if any) of such proceedings will be conducted in Boston, Massachusetts. [***].

Timetable for Completion in [***]. The Parties will use, and will direct the Baseball Expert to use, commercially reasonable efforts to resolve a dispute within [***] after the selection of the Baseball Expert, or if resolution within [***] is not reasonably achievable, as determined by the Baseball Expert, then as soon thereafter as is reasonably practicable.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule J

Identified Third Party IP

U.S. Patent No.	U.S. Patent Application No.	Filing Data
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule K

Patent Costs

	Prior to Option Exercise	After Option Exercise
CRISPR Platform Technology Patents	[***]	[***]
CRISPR Background Patents	[***]	[***]
CRISPR Program Patent	[***]	[***]
[***] Patents	[***]	[***]
[***] Patents	[***]	[***]
[***] Joint Program Patents	[***]	[***]
Other Joint Program Patent	[***]	[***]
[***] Joint Program Patents	[***]	[***]

* Either Party may decline to pay its share of costs for Prosecuting and Maintaining any Other Joint Program Patents in a particular country or particular countries, in which case, the declining Party will, and will cause its Affiliates to, assign to the other Party (or, if such assignment is not possible, grant a fully-paid exclusive license in) all of their rights, titles and interests in and to such Other Joint Program Patents.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Schedule L

CRISPR Disclosures

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. A total of 6 pages were omitted. [***]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE L

Schedule M

Press Release

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE M

Vertex and CRISPR Therapeutics Establish Collaboration to Use CRISPR-Cas9 Gene Editing Technology to Discover and Develop New Treatments for Genetic Diseases

-Gene editing technology to be used to discover treatments to address the mutations and genes known to cause and contribute to cystic fibrosis-

-Vertex and CRISPR to utilize gene editing approach to discover treatments for genetic diseases, including sickle cell disease-

-Companies establish four-year research collaboration; CRISPR to receive $105 million up- front payment, of which $30 million is an equity investment, with potential for additional milestones and royalty payments-

BOSTON AND CAMBRIDGE, MASS - October XX, 2015 - Vertex Pharmaceuticals Incorporated (Nasdaq: VRTX) and CRISPR Therapeutics today announced that the two companies have entered into a strategic research collaboration focused on the use of CRISPR's gene editing technology, known as CRISPR-Cas9, to discover and develop potential new treatments aimed at the underlying genetic causes of human disease. The collaboration will evaluate the use of CRISPR-Cas9 across multiple diseases where targets have been validated through human genetics. Vertex and CRISPR will focus their initial gene editing research on discovering treatments to address the mutations and genes known to cause and contribute to cystic fibrosis and sickle cell disease. Vertex and CRISPR will also evaluate a specified number of other genetic targets as part of the collaboration. Vertex will have exclusive rights to license up to six new CRISPR-Cas9-based treatments that emerge from the collaboration. As part of the collaboration, Vertex made an up-front commitment of $105 million to CRISPR, including $75 million in cash and a $30 million equity investment. CRISPR is also eligible to receive future development, regulatory and sales milestones and royalty payments on future sales.

"CRISPR-Cas9 is an important scientific and technological breakthrough that holds significant promise for the future discovery of potentially transformative treatments for many genetic diseases," said David Altshuler, M.D., Ph.D., Vertex's Executive Vice President, Global Research and Chief Scientific Officer. "As a company founded on innovative science, we're excited to begin this collaboration with CRISPR, as it puts us at the forefront of what we believe may be a fundamental change in the future treatment of disease — using gene editing technologies to address the underlying genetic causes of many diseases."

"Vertex has a track record of developing innovative medicines for cystic fibrosis and other serious diseases, making them a great partner to accelerate the therapeutic promise of gene editing," said Rodger Novak, M.D., Chief Executive Officer of CRISPR Therapeutics. "For CRISPR, this collaboration validates the potential for gene editing in human therapeutics and provides important financial support for continued investment in our platform and proprietary pipeline of programs."

About the Collaboration

Under the terms of the collaboration, Vertex and CRISPR will jointly use the CRISPR-Cas9 technology to discover and develop potential new treatments that correct defects in specific gene targets known to cause or contribute to particular diseases. The initial focus of the collaboration

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE M

will be on the use of CRISPR-Cas9 to potentially correct the mutations in the cystic fibrosis transmembrane conductance regulator (CFTR) gene known to result in the defective protein that causes CF and to edit other genes that contribute to the disease. Additionally, the companies will seek to discover and develop gene-based treatments for hemoglobinopathies, including sickle cell disease. Additional discovery efforts focused on a specified number of other genetic targets will also be conducted under the collaboration. Discovery activities will be conducted primarily by CRISPR, and the related expenses will be fully funded by Vertex. Vertex has the option to an exclusive license for up to six gene-based treatments that emerge from the four-year research collaboration. Vertex will fund 100 percent of the development expenses of licensed treatments. For each of the up to six treatments in-licensed for development, Vertex will pay future development, regulatory and sales milestones of up to $420 million as well as royalty payments on future sales.

Vertex and CRISPR will collaborate on the research, development and commercialization of treatments for hemoglobinopathies that emerge from the collaboration. Specifically for hemoglobinopathies, including treatments for sickle cell disease, Vertex and CRISPR will equally share all research and development costs and sales, with CRISPR Therapeutics leading commercialization efforts in the U.S. For all other diseases, Vertex will lead all development and global commercialization activities.

Vertex will pay CRISPR $75 million in cash as part of its up-front commitment. Vertex will also provide a $30 million investment in CRISPR, which is a private company. The investment will provide Vertex with an ownership stake in CRISPR. The collaboration also provides Vertex with an observer seat on the CRISPR Board of Directors, which will be filled by Dr. Altshuler.

About Gene Editing with CRISPR-Cas9

"**CRISPR**" refers to Clustered Regularly Interspaced Short Palindromic Repeats that occur in the genome of certain bacteria, from which the system was discovered. Cas9 is a CRISPR- associated endonuclease (an enzyme) known to act as the "**molecular scissors**" that cut and edit, or correct, disease-associated DNA in a cell. A guide RNA directs the Cas9 molecular scissors to the exact site of the disease-associated mutation. Once the molecular scissors make a cut in the DNA, additional cellular mechanisms and exogenously added DNA will use the cell's own machinery and other elements to specifically 'repair' the DNA. This technology may offer the ability to directly modify or correct the underlying disease-associated changes in the human genome for the potential treatment of a large number of both rare and common diseases.

Emmanuelle Charpentier, Ph.D., one of CRISPR Therapeutics' scientific founders, co-invented the CRISPR-Cas9 technology and is the recipient of multiple prestigious awards in recognition of the potential contribution that the CRISPR-Cas9 technology may have on global health. The other scientific co-founders of CRISPR are Craig Mello, Ph.D., Chad Cowan, Ph.D., Matthew Porteus, M.D., Ph.D., and Daniel Anderson, Ph.D.

About Vertex

Vertex is a global biotechnology company that aims to discover, develop and commercialize innovative medicines so people with serious diseases can lead better lives. In addition to our clinical development programs focused on cystic fibrosis, Vertex has more than a dozen ongoing research programs aimed at other serious and life-threatening diseases.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE M

Founded in 1989 in Cambridge, Mass., Vertex today has research and development sites and commercial offices in the United States, Europe, Canada and Australia. For five years in a row, *Science* magazine has named Vertex one of its Top Employers in the life sciences. For additional information and the latest updates from the company, please visit www.vrtx.com.

About CRISPR Therapeutics

The mission of CRISPR Therapeutics is to develop transformative gene-based medicines for patients with serious diseases. Our therapeutic approach aims to cure diseases at the molecular level using the breakthrough gene editing technology called CRISPR-Cas9. With our multi- disciplinary team of world-renowned academics, drug developers and clinicians, we are uniquely positioned to translate CRISPR-Cas9 technology into human therapeutics. We have licensed the foundational CRISPR-Cas9 patent estate for human therapeutic use from our scientific founder, Dr. Emmanuelle Charpentier. We are headquartered in Basel, Switzerland, our R&D operations are in Cambridge, Massachusetts and we have corporate offices in London, United Kingdom. www.crisprtx.com

Special Note Regarding Forward-looking Statements

This press release contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, including, without limitation, Dr. Altshuler's statements in the second paragraph of the press release, Dr. Novak's statements in the third paragraph of the press release and the information provided regarding the future development of treatments for genetic diseases using the CRISPR-Cas9 technology. While Vertex believes the forward-looking statements contained in this press release are accurate, these forward-looking statements represent the company's beliefs only as of the date of this press release and there are a number of factors that could cause actual events or results to differ materially from those indicated by such forward-looking statements. Those risks and uncertainties include, among other things, that data may not support further development of the gene-based treatments subject to the collaboration due to safety, efficacy or other reasons, and other risks listed under Risk Factors in Vertex's annual report and quarterly reports filed with the Securities and Exchange Commission and available through the company's website at www.vrtx.com. Vertex disclaims any obligation to update the information contained in this press release as new information becomes available.

(VRTX-GEN)

Vertex Pharmaceuticals Incorporated

Investors:

Michael Partridge, 617-341-6108 or
Kelly Lewis, 617-961-7530 or
Eric Rojas, 617-961-7205

or

Media: mediainfo@vrtx.com
Zach Barber: 617-341-6992

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE M

CRISPR MEDIA CONTACTS:

MacDougall Biomedical Communications
Kari Watson in US - kwatson@macbiocom.com +1 (781) 235-3060
Anca Alexandra in Europe - aalexandru@macbiocom.com +49 (89) 2424-3494

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SCHEDULE M

SPECIFIC TERMS IN THIS EXHIBIT HAVE BEEN REDACTED BECAUSE CONFIDENTIAL TREATMENT FOR THOSE TERMS HAS BEEN REQUESTED. THESE REDACTED TERMS HAVE BEEN MARKED IN THIS EXHIBIT WITH THREE ASTERISKS [***]. AN UNREDACTED VERSION OF THIS EXHIBIT HAS BEEN SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

Exhibit 10.5

LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("***Agreement***") is entered into and effective as of April 15, 2014 (the "***Effective Date***"), by and between **EMMANUELLE MARIE CHARPENTIER**, an individual residing at Böcklerstrasse 18, 38102 Braunschweig, Germany ("***EC***"), and **CRISPR THERAPEUTICS AG**, a company organized under the laws of Switzerland having a principal place of business at Aeschenvorstadt 36, CH-4051 Basel, Switzerland ("***CRISPR***").

BACKGROUND

WHEREAS, EC and CRISPR are parties to that certain Option Agreement dated October 28, 2013 (the "***Option Agreement***"), pursuant to which EC granted CRISPR an exclusive option to obtain an exclusive license or other exclusive rights under EC's joint ownership interest in and to the Technology (defined below);

WHEREAS, CRISPR desires to obtain from EC, and EC desires to grant to CRISPR, an exclusive license under EC's joint ownership interest in and to the Technology (defined below) to develop and commercialize products for the treatment or prevention of human diseases other than hemoglobinopathies, on the terms and subject to the conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and the mutual promises and covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, EC and CRISPR hereby agree as follows:

1. DEFINITIONS

1.1 "**Affiliate**" shall mean:

(a) any business entity which controls, is controlled by, or is under common control with CRISPR; and for this purpose, a business entity shall be deemed to "control" another business entity, if it owns, directly or indirectly, more than 50% of the outstanding voting securities, capital stock, or other comparable equity or ownership interest of such business entity having the power to vote on or direct the affairs of such business entity; or

(b) any business entity that CRISPR, at CRISPR's sole option and upon written notice to EC, designates as an "Affiliate" for purposes of this Agreement, provided that, as of the date of such designation, EC is the holder of […***…] percent or more of the equity securities of such business entity on a fully-diluted and as-converted basis.

1.2 "**Affiliated Sublicensee**" shall mean any Affiliate to which CRISPR or its Affiliate directly or indirectly (*i.e.*, through multiple tiers of sublicense) grants a sublicense under any or all of the Patent Rights, for purposes of clarification, if, at any time after the grant of a sublicense to an entity that is an Affiliate at the lime of such grant, such entity ceases to be an Affiliate within the meaning of Section 1.1(a) or Section 1.1(b) (as applicable), such entity shall nevertheless continue to be considered an "Affiliated Sublicensee" (and shall not be considered a "Third Party Sublicensee") for purposes of this Agreement, including, without limitation, Article 3 hereof.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.3 "**Companion Diagnostic**" shall mean any companion diagnostic tool and/or diagnostic assay developed and used to (i) identify patients who are most likely to benefit from a Therapeutic Product, (ii) identify patients likely to be at increased risk for serious adverse reactions as a result of treatment with a Therapeutic Product, and/or (iii) monitor a patient's response to a Therapeutic Product for the purpose of adjusting treatment (*e.g.*, schedule, dose, discontinuation) to achieve improved safety or effectiveness.

1.4 "**Confidential Information**" shall have the meaning provided in Section 7.1.

1.5 "**Covered Animal**" shall mean an animal (including a microorganism), the genome of which (i) has been altered using a Covered Product or Covered Method or (ii) incorporates a Covered Product.

1.6 "**Covered Animal-Derived Product**" shall mean any tissue or organ that, in each case, is extracted or harvested from a Covered Animal but that is not itself a Covered Product. Any monoclonal antibody or other protein molecule that is first created in a Covered Animal but that is not itself a Covered Product shall not be considered a Covered Animal-Derived Product.

1.7 "**Covered Method**" shall mean any process or method, the use or practice of which in a country would, in the absence of the license granted under this Agreement (or a sublicense granted thereunder, as applicable), infringe a Valid Claim of the Patent Rights in such country.

1.8 "**Covered Product**" shall mean any product, the manufacture, use, sale or importation of which is covered by the Patent Rights, or which is based on, uses or incorporates any Technology.

1.9 "**CRISPR Field**" shall mean researching, developing, making, using or selling: (a) Therapeutic Products for the treatment or prevention of any human disease, disorder or condition, but excluding any Tracr Indication; and (b) Diagnostic Products for use with such Therapeutic Products.

1.10 "**CRISPR Improvement**" shall mean any improvement to the Invention made solely by or on behalf of CRISPR, and owned solely by CRISPR: (a) that is useful in the Tracr Field (whether or not also useful in the CRISPR field); and (b) the practice of which either (i) is within the scope of the claims of the Patent Rights or (ii) requires the practice of the Invention.

1.11 "**CRISPR Improvement IP**" shall have the meaning provided in Section 2.9.

1.12 "**CRISPR Improvement License**" shall have the meaning provided in Section 2.9.

1.13 "**CRISPR Patent Rights**" shall mean EC's joint ownership interest in Patent Rights (or, as applicable, those claims of Patent Rights) that claim inventions having applicability or utility exclusively in the […***…].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.14 "**Diagnostic Product**" shall mean a Companion Diagnostic for use with a Therapeutic Product, which Companion Diagnostic contains or incorporates a Covered Product or a Covered Animal-Derived Product or uses a Covered Method.

1.15 "**ERS**" shall mean ERS Genomics Limited, a company organized under the law s of Ireland having a principal place of business at 88 Harcourt Street, Dublin 2, Ireland.

1.16 "**ERS Field**" shall mean all fields of use except the […***…].

1.17 "**ERS License**" shall have the meaning provided in Section 5.2(a)(i).

1.18 "**ERS Patent Rights**" shall mean EC's joint ownership interest in Patent Rights (or, as applicable, those claims of Patent Rights) that claim inventions having applicability or utility exclusively in […***…].

1.19 "**Invention**" shall mean the invention entitled "*Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription*" as described in the Patent Application, including all improvements thereto that arc disclosed in the Patent Application.

1.20 "**Joint Owners**" means Regents, Vienna and any other person other than EC who is a proprietor of the Patent Rights.

1.21 "**Know-How**" shall mean the additional information and materials listed in **Exhibit A** […***…].

1.22 "**Major Market**" shall mean any of the following: […***…].

1.23 "**Materials**" shall mean biological materials within the Know-How that are […***…].

1.24 "**NDA/BLA**" shall mean: (a) in the United States, a Biologies License Application (as more fully defined in 21 CFR § 601.2) or a New Drug Application (as more fully defined in 21 CFR § 314.5 *et seq.*), as applicable, tiled with the FDA, or any successor application thereto; (b) in the European Union, a Marketing Approval Authorization filed with the EMA, or any successor application thereto; or (c) in any other regulatory jurisdiction, the equivalent application for approval to market a drug filed with the governing regulatory authority in such jurisdiction.

1.25 "**Net Sales**" shall mean the gross amounts invoiced by CRISPR and its Sublicensees to Third Parties (other than Third Party Sublicensees) from sales of Therapeutic Products or Diagnostic Products, less the following items, to the extent allocable to such Therapeutic Products or Diagnostic Products and either included in the invoice, or otherwise actually granted, allowed, taken or incurred (if not previously deducted from the amount invoiced): […***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[…***…].

[…***…].

1.26 "**Overlapping Patent Rights**" shall mean EC's joint ownership interest in Patent Rights (or, as applicable, those claims of Patent Rights) that claim inventions having applicability or utility […***…].

1.27 "**Patent Application**" shall mean […***…], filed on […***…].

1.28 "**Patent Rights**" shall mean the Patent Application and other patent applications and patents listed in **Exhibit B** attached to this Agreement; any and all patent applications that claim priority to any of the foregoing patents or patent applications listed in **Exhibit B** hereto, including, without limitation, continuations, continuations-in-part (but only to the extent the claims of any such continuation-in-part are specifically directed to subject matter disclosed in the specifications in, and entitled to the priority date of, the parent application), divisional applications and substitute applications; any and all patents issuing on any of the foregoing patent applications, including registrations, renewals, reexaminations, reissues, extensions, term restorations and supplementary protection certificates; and any and all foreign counterparts of any of the foregoing; in each case, whether now existing or hereafter filed or issued.

1.29 "**Phase I Trial**" shall mean a human clinical trial that would satisfy the requirements for a Phase I study as defined in 21 CFR § 312.21(a) (or its successor regulation), regardless of where such trial is conducted.

1.30 "**Phase 2 Trial**" shall mean a human clinical trial that would satisfy the requirements for a Phase 2 study as defined in 21 CFR § 3 12.21(b) (or its successor regulation), regardless of w here such trial is conducted.

1.31 "**Phase 3 Trial**" shall mean a human clinical trial that would satisfy the requirements for a Phase 3 study as defined in 21 CFR § 312.21(c) (or its successor regulation), regardless of where such trial is conducted.

1.32 "**Regents**" shall mean The Regents of the University of California, a California corporation having its corporate offices located at 1111 Franklin Street, Oakland, California 94607-5200, acting through The Office of Technology Licensing of the University of California, Berkeley, located at 2150 Shattuck Avenue, Suite 510, Berkeley, CA 94704-1347.

1.33 "**Revenue-Sharing Payments**" shall have the meaning provided in Section 4.1.

1.34 "**Services Relationship**" shall have the meaning provided in Section 3.2(a).

1.35 "**Sublicensee**" shall mean an Affiliated Sublicensee and/or Third Party Sublicensee, as applicable.

1.36 "**Sublicensing Revenues**" shall mean all amounts received by CRISPR or any of its Affiliated Sublicensees from any Third Party Sublicensee in consideration of the grant by

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

CRISPR or its Affiliated Sublicensee of a Sublicense under any or all of the Patent Rights, including, […***…], and any other payments with respect to such sublicense; but excluding:

(a) […***…]

(b) […***…]

(c) […***…]

(d) […***…]

(e) […***…].

[…***…].

1.37 "**Technology**" shall mean the Invention, Patent Rights and Know-How.

1.38 "**Term**" shall have the meaning provided in Section 8.1.

1.39 "**Therapeutic Product**" shall mean […***…].

1.40 "**Third Party**" shall mean any entity other than EC, CRISPR and any Affiliate of CRISPR.

1.41 "**Third Party Sublicensee**" shall mean any Third Party to which CRISPR or its Affiliated Sublicensee has directly or indirectly (*i.e.*, through multiple tiers of sublicense) granted a sublicense under any or all of the Patent Rights. For clarification, a Third Party service provider that has the right to make, have made, use or sell Therapeutic Products or Diagnostic Products solely on behalf of CRISPR or its Affiliated Sublicensee and not for its own account shall not be considered a Third Party Sublicensee.

1.42 "**Tracr**" shall mean Tracr Hematology Ltd. a UK limited company having its registered office at 90 Fetter Lane, London EC1A UP. United Kingdom.

1.43 "**Tracr Field**" shall mean researching, developing, making, using or selling: (a) Therapeutic Products for any Tracr Indication; and (b) Diagnostic Products for use with such Therapeutic Products.

1.44 "**Tracr Improvement IP**" shall have the meaning provided in the Tracr License,

1.45 "**Tracr Indication**" shall mean the treatment or prevention of any hemoglobinopathy in humans, including, without limitation, sickle cell disease and thalassemia.

1.46 "**Tracr License**" shall have the meaning provided in Section 5.2(a)(ii).

1.47 "**Valid Claim**" shall mean a claim contained in: (a) an issued and unexpired patent which has not been held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through abandonment, reissue, disclaimer or otherwise; or (b) a patent application that has not been irretrievably cancelled, withdrawn or abandoned and that has been pending for less than […***…].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.48 "**Vienna**" shall mean the University of Vienna, having a principal place of business at Universitatsring 1, 1010, Vienna, Austria.

2. LICENSE

2.1 Grant. Subject to the terms and conditions of this Agreement, including without limitation the provisions of Section 2.2, EC hereby grants to CRISPR:

(a) an exclusive (even as to EC, except as set forth in Section 2.8), worldwide, royalty-bearing license, including the right to sublicense through multiple tiers, tinder F.C's joint ownership interest in and to the Technology, to research, develop, make, have made, use, sell, have sold, offer for sale and import Therapeutic Products in the CRISPR Field and Diagnostic Products for use with such Therapeutic Products:

(b) a non-exclusive, worldwide, royalty-free license, including the right to sublicense through multiple tiers (but only together with the license in Section 2.1(a) above), under EC's joint ownership interest in and to the Technology, to carry out internal pharmaceutical research in relation to products which are not Therapeutic Products; and

(c) an exclusive (even as to EC), worldwide, royalty-free sublicense, including the right to sublicense through multiple tiers, under Tracr Improvement IP which is licensed to EC under the Tracr License, to research, develop, make, have made, use, sell, have sold, offer for sale and import Therapeutic Products in the CRISPR Field and Diagnostic Products for use with such Therapeutic Products but without prejudice to CRISPR's payment obligations in respect of Therapeutic Products and Diagnostic Products under Article 3.

2.2 License Exclusions. For the avoidance of doubt, CRISPR shall not have any license under EC's joint ownership interest in and […***…].

2.3 Acknowledgment of Joint Ownership. CRISPR acknowledges that as at the Effective Date, it has not obtained any right or license under the joint ownership interest of any Joint Owner in and to the Technology and, as such CRISPR's exclusivity under Section 2.1(a) is limited to EC's joint ownership interest and consequently CRISPR does not have the exclusive right to exploit the Technology in the CRISPR Field. CRISPR also acknowledges that EC has not obtained the consent of any Joint Owner in respect of the grant of the licenses under Section 2.1 and that, as such, EC gives no representation or warranty as to the validity, enforceability or effect of the licenses in any country in the Territory .

2.4 Sublicensing. Any and all sublicenses of the license granted to CRISPR under Section 2.1 shall be in writing and shall be subject to, and consistent with, the terms and conditions of this Agreement. CRISPR shall be responsible for the compliance of its Sublicensees with the terms and conditions of this Agreement. Within 30 days after execution, CRISPR shall provide EC with a full and complete copy of each sublicense agreement (provided that CRISPR may redact any confidential information contained therein that is not necessary to ascertain compliance with this Agreement).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

2.5 Technology Transfer. Promptly following the Effective Date, EC shall disclose to CRISPR (to the extent not previously disclosed) all Know-How available in written, electronic or other recorded form. In addition, during the 12-month period beginning on the Effective Date, EC shall transfer to CRISPR, upon CRISPR's request from time to time, samples of the Materials, subject to availability.

2.6 Diligence; Progress Reports.

(a) CRISPR shall use commercially reasonable efforts and due diligence, itself and/or through one or more Sublicensees, to develop, and to obtain regulatory approval to market, at least one Therapeutic Product in the CRISPR Field, as promptly as is reasonably and commercially feasible. Without limiting the generality of the foregoing, CRISPR, itself and/or through one or more Affiliated Sublicensees, shall:

(i) use commercially reasonable efforts […***…]

(ii) use commercially reasonable efforts to commercially exploit the Technology in the CRISPR Field (including, without limitation, by sublicensing) within […***…] years of the Effective Date; and

(iii) use commercially reasonable efforts to file, or cause to be filed, a U.S. Investigational New Drug application (or the equivalent thereof in another Major Market) for a Therapeutic Product in the CRISPR Field within seven years after the Effective Date; and

(iv) file, or cause to be filed, a U.S. Investigational New Drug application (or the equivalent thereof in another Major Market) for a Therapeutic Product in the CRISPR Field within ten years after the Effective Date.

(b) CRISPR shall keep EC informed as to progress with respect to the development of Therapeutic Products and Diagnostic Products in the CRISPR Field (whether by CRISPR or its Sublicensees), including, without limitation, the conduct of clinical trials, regulatory submissions and approvals, manufacturing arrangements, marketing activities and sublicensing, and shall deliver to EC a written annual report summarizing such progress by […***…] of each year, beginning […***…]. For clarification, CRISPR's reporting obligations under this Section 2.6(b) are in addition to CRISPR's reporting obligations under Section 4.1. The contents of CRISPR's progress reports to EC shall be deemed to be CRISPR's Confidential Information.

2.7 No Implied License. This Agreement confers no license or rights by implication, estoppel, or otherwise under any patent rights of EC other than the Patent Rights regardless of whether such patent rights are dominant or subordinate to the Patent Rights.

2.8 Reservation of Rights. EC reserves the non-transferable right, without the right to license or sublicense, to use the Technology for her own research purposes and in research collaborations with academic or non-profit partners provided such research is not funded in

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

whole or in part by any commercial sponsor except where EC has discussed any commercial funding with CRISPR and CRISPR has confirmed in writing that it does not object to EC pursing the relevant research or research collaboration with the disclosed commercial funding. For clarity, as between EC and CRISPR, and except as expressly set forth in Section 2.1(b), EC retains all rights to the Technology outside of the CRISPR Field.

2.9 CRISPR Improvement License Grant-Back in Tracr Field. Subject to the terms and conditions of this Agreement, CRISPR hereby grants to EC an exclusive (even as to CRISPR), worldwide, royalty-free license, including the right and obligation to sublicense exclusively and solely to Tracr (and which Tracr may further sublicense through multiple tiers of sublicense), under CRISPR's patent and other intellectual property rights in CRISPR Improvements ("***CRISPR Improvement IP***"), to research, develop, make, have made, use, sell, have sold, offer for sale and import Therapeutic Products solely for Tracr Indications and Diagnostic Products for use with such Therapeutic Products ("***CRISPR Improvement License***"). EC shall have the right and the obligation to grant to Tracr (and only to Tracr) an exclusive (even as to EC), worldwide, royalty-free sublicense of the CRISPR Improvement License pursuant to the Tracr License, and shall not have the right to grant any other sublicense under the CRISPR Improvement License or CRISPR Improvement IP or to practice the CRISPR Improvement License or CRISPR Improvement IP herself. For clarity, CRISPR retains the exclusive right to practice and grant licenses under CRISPR Improvements and the CRISPR Improvement IP for all uses other than research, development, manufacture, use, sale, offer for sale and import of Therapeutic Products for Tracr Indications and Diagnostic Products for use with such Therapeutic Products, including, without limitation, all uses in the CRISPR Field. EC shall not acquire any right to prosecute, maintain, enforce and defend the CRISPR Improvement IP.

3. PAYMENTS

3.1 Technology Transfer Fee. Within […***…] of the Effective Date, CRISPR shall pay to EC a non-creditable, non-refundable, one-time technology transfer fee of CHF […***…].

3.2 Services Relationship; License Maintenance Fees.

(a) For so long as any one or more consulting, advisory board, employment or similar services agreements or arrangements is in effect between CRISPR or any of its Affiliated Sublicensees and EC that, either individually or in the aggregate, provide for annual cash compensation to EC of at least CHF […***…] per calendar year, pro-rated on the basis of a 365-day year for any partial calendar year (a "***Services Relationship***"). CRISPR shall have no obligation to pay to EC annual license maintenance fees, except as expressly set forth in Section 3.2(b).

(b) On or before January 1 of each calendar year during the Term, beginning […***…], unless a Services Relationship is in effect between CRISPR and EC as of such date, CRISPR shall pay to EC an annual license maintenance fee of CHF […***…]covering the calendar year beginning on such date. If, during any calendar year for which CRISPR was not obligated to pay an annual license maintenance fee due to the existence of a Services Relationship as of the beginning of such calendar year, any and all Services Relationships

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

terminate, and, as of termination of the last to be terminated of such Service Relationships, the total compensation received or earned by EC during such calendar year under such Services Relationship(s) as of such termination is less than CHF […***…], then, within 30 days after the termination. CRISPR shall pay to EC the difference between CHF […***…] and the total compensation received or earned by EC under such Services Relationship(s) during such calendar year (in addition to paying to EC all earned but unpaid compensation under such Services Relationship(s) for such calendar year).

3.3 Milestone Payments. Within […***…] after the first achievement by CRISPR or a Sublicensee of each of the following milestone events by any Therapeutic Product. CRISPR shall provide written notice to EC of the occurrence of such event. Where the milestone event is achieved by CRISPR, CRISPR shall pay to EC the corresponding milestone payment set forth below. Where the milestone event is achieved by a Sublicensee, CRISPR shall pay to EC the difference between the corresponding payment set forth below and the amount payable by CRISPR to EC in accordance with Section 3.5 below as a result of CRISPR's receipt of any milestone payment from the Sublicensee for the achievement of that milestone event, if the amount payable under Section 3.5 is lower.

Milestone Event	**Payment**
Initiation of first Phase 1 Trial	CHF [***]
Initiation of first Phase 2 Trial	CHF [***]
Initiation of first Phase 3 Trial	CHF [***]
Approval of first NDA/BLA in first Major Market	CHF [***]

Each of the foregoing milestone payments shall be payable only one time per Therapeutic Product (regardless of the number of times any Therapeutic Product achieves such milestone or the number of indications for which such Therapeutic Product is developed).

3.4 Royalties. CRISPR shall pay to EC a royalty equal to […***…] of Net Sales of Therapeutic Products and Diagnostic Products by CRISPR and its Sublicensees. Only one royalty payment shall be due under this Agreement with respect to a sale of a Therapeutic Product or Diagnostic Product, regardless of the number of Valid Claims covering such Therapeutic Product or Diagnostic Product. Royalties will be payable on a Therapeutic Product-by-Therapeutic Product or Diagnostic Product-by-Diagnostic Product and country-by-country basis from the date of first commercial sale of a Therapeutic Product or Diagnostic Product in a country until the expiration of the last-to-expire Valid Claim of the Patent Rights covering such Therapeutic Product or Diagnostic Product in that country .

3.5 Sharing of Sublicensing Revenues. CRISPR shall pay to EC […***…] of Sublicensing Revenues. Payments under this Section 3.5 with respect to Sublicensing Revenues received under a sublicense agreement with a given Third Party Sublicensee shall be payable until the expiration of the last-to-expire Valid Claim of the Patent Rights in all countries in which the sublicense under such Patent Rights has been granted.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.6 Payment by Affiliated Sublicensees. At CRISPR's option, any sublicense agreement between CRISPR and an Affiliated Sublicensee may provide for such Affiliated Sublicensee to pay directly to EC: (a) milestone payments in the amounts specified in Section 3.3 with respect to the achievement of the corresponding milestone events set forth in Section 3.3 by Therapeutic Products developed by or on behalf of such Affiliated Sublicensee; (b) royalties on Net Sales by such Affiliated Sublicensee (and its Sublicensees) of Therapeutic Products and Diagnostic Products at the rate set forth in Section 3.4; and (c) […***…] of the total Sublicensing Revenues received by such Affiliated Sublicensee; in each case, provided that CRISPR shall remain responsible and liable to EC for compliance with CRISPR's obligations under Sections 3.3, 3.4 and 3.5, respectively, with respect to such Affiliated Sublicensee.

3.7 Licenses Under Other EC Technology. The parties acknowledge that CRISPR may, in the future, wish to obtain from EC licenses to one or more other inventions and discoveries (whether or not patentable) made by EC, either solely or with one or more co-inventors, including patent and other intellectual property rights covering such inventions and discoveries (collectively, "***New EC Technology***"). The parties also acknowledge that EC is not under any obligation to grant licenses or any other right, title or interest in or to any New EC Technology to CRISPR but shall consider any request from CRISPR to obtain a license on a case by case basis, […***…]. CRISPR and EC hereby agree that in the event that CRISPR or its Sublicensees develops or commercializes any Therapeutic Product in the CRISPR Field that is also covered by New EC Technology licensed by EC directly to CRISPR under one or more separate license agreements (each, a "***New License Agreement***").

(a) in the case of a Therapeutic Product covered by New EC Technology, […***…] milestone payments shall be due and payable to EC with respect to such Therapeutic Product, which shall be the […***…]; and

(b) only […***…] shall be due and payable to EC with respect to any sale of a Therapeutic Product covered by any New EC Technology, which shall be calculated […***…].

Similarly, if CRISPR or an Affiliated Sublicensee grants any sublicense under both the Technology and the New EC Technology, […***…] shall be due and payable to EC with respect to any item of sublicensing revenues received by CRISPR or an Affiliated Sublicensee for such sublicense, which shall be calculated at the higher of (i) the rate set forth in Section 3.5 and (ii) the rate set forth in the New License Agreement(s).

Notwithstanding the foregoing, CRISPR acknowledges that, to the extent EC is obligated to assign any or all of her rights in or to New EC Technology to a Third Party (*e.g*., the institution of which she is an employee at the time such New EC Technology is created). EC may not have the right to grant CRISPR a license (or an exclusive license) under such New EC Technology. CRISPR further acknowledges that in such event, if CRISPR wishes to obtain a license under such Third Party assignee's interest in such New EC Technology, the amounts payable by CRISPR to such Third Party assignee would be negotiated between CRISPR and such Third Party assignee and, if such Third Party assignee were willing to grant CRISPR a license, such license would not be subject to the foregoing provisions of this Section 3.7.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4. PAYMENTS; REPORTS; AUDITS

4.1 Payment; Reports. Royalties under Section 3.4 and payments with respect to Sublicensing Revenues under Section 3.5 (collectively, "***Revenue-Sharing Payments***"), including in each case any such Revenue-Sharing Payments made by an Affiliated Sublicensee to EC pursuant to Section 3.6, shall be calculated and reported for each calendar quarter and shall be paid within […***…] after the end of the calendar quarter. No later than the date any Revenue-Sharing Payments for a calendar quarter are due in accordance with the preceding sentence, CRISPR and/or one or more Affiliated Sublicensees shall deliver to EC a report of (a) Net Sales of Therapeutic Products and Diagnostic Products by CRISPR and Sublicensees and (b) Sublicensing Revenues received by CRISPR and Affiliated Sublicensees in sufficient detail to permit confirmation of the accuracy of the Revenue-Sharing Payments made, including (i) gross sales and Net Sales of Therapeutic Products on a Therapeutic Product-by-Therapeutic Product and country-by-country basis, (ii) gross sales and Net Sales of Diagnostic Products on a Diagnostic Products on a Diagnostic Product-by-Diagnostic Product and country-by-country basis, (iii) the royalty payable, (iv) Sublicensing Revenues received on a Third Party Sublicensee-by-Third Party Sublicensee basis, and (v) the exchange rates used to calculate Revenue-Sharing Payments. All reports delivered to EG pursuant to this Section 4.1 shall be deemed Confidential Information of CRISPR.

4.2 Manner and Place of Payment; Exchange Rate. All payment amounts specified in this Agreement are stated, and all payments hereunder shall be payable, in Swiss francs (CHF). With respect to each quarter, whenever conversion of payments from any foreign currency into CHF shall be required, such conversion shall be made using the applicable exchange rate for such currency used throughout CRISPR's or the applicable Affiliated Sublicensee's accounting system for the applicable quarter. All payments owed under this Agreement shall be made by wire transfer to a bank and account designated in writing by EC, unless otherwise specified in writing by EC.

4.3 Income Tax Withholding. EC will pay any and all taxes levied on account of any payments made to her under this Agreement. If any taxes are required to be withheld by CRISPR or an Affiliated Sublicensee from any payment made to EC under this Agreement, CRISPR or such Affiliated Sublicensee shall (a) deduct such taxes from the payment made to EC, (b) timely pay the taxes to the proper taxing authority, and (c) send proof of payment to EC and certify its receipt by the taxing authority within […***…] following such payment.

4.4 Audits. During the Term and for a period of […***…] thereafter, CRISPR shall keep, and shall cause Sublicensees to keep, complete and accurate records pertaining to the sale or other disposition of Therapeutic Products and Diagnostic Products by CRISPR and Sublicensees, and shall keep, and shall cause its Affiliated Sublicensees to keep, complete and accurate records pertaining to the receipt of Sublicensing Revenues by CRISPR and its Affiliated Sublicensees, each in sufficient detail to permit EC to confirm the accuracy of all Revenue-Sharing Payments. EC shall have the right to cause an independent, certified public accountant reasonably acceptable to CRISPR to audit such records to confirm Net Sales, Sublicensing

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Revenues and Revenue-Sharing Payments for a period covering not more than the preceding […***…] years. CRISPR (or the Affiliated Sublicensee to be audited) may require such accountant to execute a reasonable confidentiality agreement prior to commencing the audit. Such audits may be conducted during normal business hours upon reasonable prior written notice to CRISPR, but no more frequently than once per year. No accounting period shall be subject to audit more than […***…] by EC. Prompt adjustments (including remittances of underpayments or overpayments disclosed by such audit) shall be made by the parties to reflect the results of such audit. […***…] shall bear the full cost of such audit unless such audit discloses an underpayment of […***…] or more of the amount of Revenue-Sharing Payments due under this Agreement, in which case CRISPR shall bear the full cost of such audit. All records, documentation and other information made available by CRISPR or an audited Affiliated Sublicensee to such independent auditor, or by CRISPR, an audited Affiliated Sublicensee or such independent auditor to EC, pursuant to this Section 4.4 shall be deemed Confidential Information of CRISPR.

4.5 Late Payments. In the event that any payment due under this Agreement is not made when due, such payment shall accrue interest, calculated on a daily basis, at the […***…] for the period from the due date for payment until the date of actual payment; *provided however*, that in no event shall such rate exceed the maximum legal annual interest rate. The payment of such interest shall not limit EC from exercising any other rights she may have as a consequence of the lateness of any payment.

5. PATENT MATTERS

5.1 Joint Owners' Rights.

(a) The parties acknowledge that the Joint Owners and EC share rights to prosecute and maintain the Patent Rights, as confirmed by that certain letter from the U.S. Patent and Trademark Office ("***USPTO***") to Regents and Regents' outside patent counsel dated June 17, 2013, granting EC's petition, filed on June 7, 2013, requesting that the USPTO accept a power of attorney appointing the attorneys of Goodwin Procter LLP as EC's own representatives and attorneys of record with respect to the Patent Application.

(b) Accordingly, the parties further acknowledge and agree that the following provisions of this Article 5 pertain only to the allocation between EC and CRISPR of EC's rights to prosecute and maintain the Patent Rights, and not to the Joint Owners" rights to prosecute and maintain the Patent Rights and are granted by EC only to the extent that EC is able to grant such rights. The parties also acknowledge that EC and the Joint Owners have not, as at the Effective Date, reached any agreement between them concerning the prosecution, maintenance and/or enforcement of the Patent Rights and that the Joint Owners have not given EC any authority to undertake any of these activities independently.

5.2 ERS and Tracr.

(a) CRISPR acknowledges that concurrently with the execution of this Agreement:

(i) EC and ERS are entering into a license agreement pursuant to which EC has granted to ERS […***…];

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(ii) EC and Tracr are entering into a license agreement pursuant to which EC has granted to Tracr an exclusive license under EC's joint ownership interest in and to the Technology to research, develop, make, have made, use, sell, have sold, offer for sale and import Therapeutic Products in the Tracr Field and Diagnostic Products for use with such Therapeutic Products in the form attached hereto as **Exhibit E**, (the "***Truer License***"), and has delegated to Tracr certain of her rights as joint owner of the Patent Rights with respect to prosecution, maintenance, defense and enforcement of the Patent Rights thereunder; and

(iii) the terms of this Agreement, the ERS License and the Tracr License do not conflict, including, without limitation, the respective license grants.

(b) Subject to EC's compliance with Section 5.2(c) below, ERS and Tracr shall be intended third party beneficiaries of the rights conferred on ERS and Tracr, respectively, under Sections 5.3, 5.4 and 5.5 (excluding Sections 5.5(b) and 5.5(c)) of this Agreement with the right under the Contracts (Rights of Third Parties) Act 1999 to exercise such rights under the provisions of such Sections to the extent permitted by the ERS License or Tracr License (as applicable) and standing to enforce the provisions of such Sections against CRISPR.

(c) EC shall neither amend nor modify the ERS License in any manner that would diminish the rights or interests of CRISPR under the ERS License as set forth therein as of the Effective Date, or the Tracr License in any manner that would diminish the rights or interests of CRISPR under the Tracr License as set forth therein as of the Effective Date; except, in each case, with the prior written consent of CRISPR.

5.3 Patent Prosecution and Maintenance. For purposes of this Section 5.3, a party's right to prosecute and maintain a patent application or patent shall be deemed to include, without limitation, the right to control any interference, reexamination, reissue, opposition, derivation, *inter partes* review, post-grant review, revocation, nullification, cancellation or other post-grant proceeding (each, a "***Patent Proceeding***") with respect to such patent application or patent, and the right to seek patent term restorations, supplementary protection certificates and other forms of patent term extensions with respect thereto.

(a) CRISPR shall have the first right, but not the obligation, to control and manage the preparation, filing, prosecution and maintenance of the CRISPR Patent Rights and Overlapping Patent Rights, at its sole cost and expense and by counsel of its own choice. Although CRISPR shall have the right, but not the obligation, to engage Goodwin Procter LLP to manage the preparation, filing, prosecution and maintenance of the CRISPR Patent Rights and Overlapping Patent Rights, an engagement to which F.C hereby consents, CRISPR shall at all times have the right to use any counsel of its choosing, with or without the consent of EC, ERS or Tracr. CRISPR shall keep EC, ERS and Tracr reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of such Patent Rights and shall consult with, and consider in good faith the requests and suggestions of EC and Tracr with respect to the CRISPR Patent Rights and each of EC, ERS and Tracr with respect to Overlapping Patent Rights. CRISPR shall incorporate the reasonable requests and suggestions of each of EC and

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ERS with respect to claims of the Patent Rights covering inventions having applicability or utility exclusively in the ERS Field and not having applicability or utility in the CRISPR Field or the Tracr Field, EC and ERS shall each have the right to request the filing of continuation or divisional applications containing claims of the Patent Rights covering inventions having applicability or utility exclusively in the ERS Field and not having applicability or utility in the CRISPR Field or the Tracr Field, to the extent reasonably possible, and CRISPR shall bear the cost of preparing, filing, and prosecuting such claims and recover such costs from ERS. If it is not reasonably possible to file such continuation or divisional applications. EC or ERS shall have the right to request the reasonable addition of such claims to Overlapping Patent Rights, and CRISPR shall bear the cost of preparing, filing, and prosecuting such claims and recover such costs from ERS.

(b) If CRISPR desires to abandon or cease prosecution or maintenance of any patent application or patent within the Patent Rights in any country, CRISPR shall provide reasonable prior written notice to EC, ERS and Tracr of such intention to abandon (which notice shall, to the extent possible, be given no later than […***…] prior to the next deadline for any action that must be taken with respect to any such patent application or patent in the relevant patent office). In such case:

(i) EC or ERS may, by written notice to CRISPR, elect to continue prosecution and/or maintenance of any such patent application or patent within the Overlapping Patent Rights, at her/its cost and expense and choice of counsel, and CRISPR's license under Section 2.1 solely with respect to such patent application or patent in such country shall terminate; and

(ii) EC or Tracr may, by written notice to CRISPR, elect to continue prosecution and/or maintenance of any such patent application or patent within the CRISPR Patent Rights, at her/its cost and expense and choice of counsel, and CRISPR's license under Section 2.1 solely with respect to such patent application or patent in such country shall terminate.

5.4 Cooperation.

(a) Each party agrees to cooperate fully in the preparation, tiling, prosecution and maintenance of Patent Rights under Section 5.3. Such cooperation includes, but is not limited to: (i) executing all papers and instruments, or requiring its employees or contractors, to execute such papers and instruments, so as to enable the other party to apply for and to prosecute patent applications in any country as permitted by Section 5.3, including, without limitation, any power of attorney or similar instrument appointing the attorneys of any law firm selected by CRISPR as EC's representatives and attorneys of record with respect to the Patent Rights and any petition or submission to the USPTO or any foreign patent office requesting that the USPTO or such foreign patent office accept the attorneys of such CRISPR-selected law firm as EC's representatives and attorney s of record with respect to the Patent Rights; (ii) promptly informing the other party of any matters coming to such party's attention that may affect the preparation, filing, prosecution or maintenance of Patent Rights; and (iii) providing, at the expense of the party controlling and managing the preparation, filing, prosecution and maintenance of the Patent Rights, any requested evidence or testimony, whether oral or written, in connection with the prosecution and maintenance of the Patent Rights, including any Patent Proceedings. CRISPR shall be responsible for paying all EC's costs in assisting and cooperating with CRISPR under this Section 5.4(a).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) CRISPR agrees to cooperate fully with ERS: (i) in the preparation, filing, prosecution and maintenance of Patent Rights under Section 5.3; and (ii) in connection with ERS' preparation, filing, prosecution and maintenance of ERS Patent Rights. CRISPR shall be responsible for paying all ERS's costs in assisting and cooperating with CRISPR under clause (i) of this Section 5.4(b).

(c) CRISPR acknowledges that any preparation, filing, prosecution and maintenance of Patent Rights will require co-operation between CRISPR and the Joint Owners.

5.5 Infringement by Third Parties.

(a) In the event that either EC or CRISPR becomes aware of any infringement or threatened infringement in the CRISPR Field or Tracr Field by a Third Party of any Patent Right, such party shall promptly notify the other party in writing to that effect. To the extent that it is legally permitted to do so, CRISPR shall have the first right to bring and control any action or proceeding with respect to infringement of any Patent Right within the CRISPR Field or the Tracr Field, at its own expense and by counsel of its own choice. EC will at CRISPR's expense join and cooperate fully in such action if EC is required to do so by CRISPR and shall request that ERS and Tracr shall join and cooperate fully in such action if and to the extent appropriate, all at CRISPR's expense. CRISPR shall keep EC fully informed and up to date with respect to such infringement actions and shall take into account any reasonable suggestions made by EC. EC shall have the right if she chooses, to join the proceedings on her own accord, at her own expense, to be represented in any such action by counsel of her own choice, and to review and comment on any papers filed during such action. In addition, if the infringement relates to both the CRISPR Field and the ERS Field, ERS shall have the right if it chooses, to join the proceedings on its own accord, at its own expense, to be represented in any such action by counsel of its own choice, and to review and comment on any papers filed during such action, and if the infringement relates to both the CRISPR Field and the Tracr Field. Tracr shall have the right if it chooses, to join the proceedings on its own accord, at its own expense, to be represented in any such action by counsel of its own choice, and to review and comment on any papers filed during such action. EC may, if she wishes, delegate the performance of any participation rights and activities under this Section 5.5(a) to ERS.

(b) If CRISPR fails to bring am such action or proceeding within (i) […***…] following the notice of alleged infringement or (ii) […***…] before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such actions, whichever comes first, then EC shall have the right to bring and control any such action at her own expense and by counsel of her own choice. CRISPR shall join and cooperate fully in such action, at EC's expense. CRISPR shall have the right, at its own expense, to be represented by counsel of its own choice in any such action brought by EC. and to review and comment on any papers filed during such action. Notwithstanding any other provision of this Article 5 to the contrary, EC's rights under this Section 5.5(b) shall be exercisable only by EC and may not be extended to ERS or Tracr.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(c) In the event EC brings any infringement action in accordance with Section 5.5(b), CRISPR shall cooperate fully, including, if required to bring such action, the furnishing of a power of attorney or being named as a party.

(d) Neither party shall have the right to settle any patent infringement litigation under this Section 5.5 without the prior written consent of the other party, which shall not be unreasonably withheld. Except as otherwise agreed by the parties in connection with a cost-sharing arrangement, any recovery realized by a party as a result of any action or proceeding pursuant to this Section 5.5, whether by way of settlement or otherwise, after reimbursement of any litigation expenses of the parties, shall be retained by the party that brought and controlled such action for purposes of this Agreement; *provided, however,* that any recovery realized by CRISPR as a result of any action brought and controlled by CRISPR pursuant to this Section 5.5, after reimbursement of the parties' litigation expenses, shall be treated as Sublicensing Revenues for purposes of Section 3.5.

(e) To the extent that any infringement relates to both the CRISPR field and the ERS Field, CRISPR shall agree a coordinated approach with ERS, and CRISPR and ERS shall cooperate with respect to any enforcement proceedings. To the extent that any infringement relates to both the CRISPR Field and the Tracr Field, CRISPR shall agree a coordinated approach with Tracr, and CRISPR and Tracr shall cooperate with respect to any enforcement proceedings. In addition, to the extent that any enforcement proceedings relate to Overlapping Patent Rights, CRISPR shall consult with ERS and take reasonable account of ERS' comments. In respect of any proceedings brought by CRISPR as referred to in this Section 5.5(e), CRISPR shall keep EC fully informed and up to date and shall take into account any reasonable suggestions made by EC.

(f) Defense of the validity or enforceability of any claim of the Patent Rights asserted in an infringement action under this Section 5.5 shall be at the sole expense and control of the party bringing the infringement action, subject to the provisions of Article 9; and *provided, however*, that each party shall reasonably inform and consider the other's input and, in addition, CRISPR shall consider the input of ERS to the extent ERS' interest in the Patent Rights could be affected.

5.6 Third Party Infringement Claims. Each party shall promptly notify the other party in writing of any allegation by a Third Party that the activity of either of the parties pursuant to this Agreement infringes or may infringe the intellectual property rights of such Third Party. EC shall have the sole right to control any defense of any such claim involving alleged infringement of Third Party rights by EC's activities at her own expense and by counsel of her own choice. CRISPR shall have the sole right to control any defense of any such claim involving alleged infringement of Third Party rights by CRISPR's activities at its own expense and by counsel of its own choice. Neither party shall have the right to settle any patent infringement litigation under this Section 5.6 in a manner that diminishes the rights or interests of the other party without the written consent of such other party (which shall not be unreasonably withheld).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.7 CRISPR Affiliates and Assignees. The parties agree that, at CRISPR's discretion, CRISPR's rights under this Article 5 may be exercised on behalf of CRISPR by any Affiliated Sublicensee designated by CRISPR from time to time.

5.8 Legal Inability to Exercise Rights. CRISPR acknowledges that EC shall not be liable to CRISPR if CRISPR is unable as a matter of law to control filing, prosecution, maintenance, enforcement and defense of one or more of the Patent Rights in any country.

6. REPRESENTATIONS AND WARRANTIES; DISCLAIMER; LIMITATION OF LIABILITY

6.1 Mutual Representations and Warranties. CRISPR represents and warrants to EC that: (a) CRISPR is duly authorized to execute and deliver this Agreement and to perform CRISPR's obligations hereunder; and (b) this Agreement is legally binding upon CRISPR. enforceable in accordance with its terms, and does not conflict with any agreement, instrument or understanding, oral or written, to which CRISPR is a party or by which CRISPR may be bound, EC represents and warrants that this Agreement is legally binding upon EC, enforceable in accordance with its terms (subject to and without prejudice to the limitations in Section 2.3 and Section 5.1(b)) and does not conflict with any agreement, instrument or understanding, oral or written, to which EC is a party or by which EC may be bound.

6.2 EC Representations and Warranties. EC represents and warrants to CRISPR as of the Effective Date that: (a) EC has not assigned, or agreed to assign, to Regents, Vienna or any other Third Party her interest in the Patent Rights; (b) EC has not licensed, assigned, transferred or Otherwise disposed, or offered or agreed to assign, transfer or otherwise dispose, of any of her interest in or to, nor entered or agreed to enter into any contracts in relation to her interest in or to, any Patent Rights in the CRISPR field, and EC has not created or allowed to be created any lien or encumbrance on her interest in any Patent Rights in the CRISPR Field (other than any of the foregoing that has expired or been terminated prior to the Effective Date and is of no further force or effect); and (c) EC has not received any notice alleging that the practice of the Technology infringes or misappropriates, or may infringe or misappropriate, any intellectual property rights of any Third Party. EC further represents and warrants to CRISPR that she has obtained legal advice of independent legal counsel as to the legal effect of signing this Agreement and as regards the extent of her liability and the obligations which she is undertaking by signing this Agreement. In evidence of the foregoing. EC shall have delivered to CRISPR, on or before the Effective Date, a Certificate of Independent Legal Advice in substantially the form set forth in **Exhibit C** hereto, executed by EC's legal advisor.

6.3 EC Covenants. During the Term, EC hereby covenants: (a) not to assign, transfer or otherwise dispose, or offer or agree to assign, transfer or otherwise dispose, of any interest in or to, and not to enter, or offer or agree to enter, into any contract in relation to, any Technology in the CRISPR Field, other than this Agreement and any Services Relationship with CRISPR; and (b) not to create any lien or encumbrance on any Technology in the CRISPR Field.

6.4 Disclaimer. Except as expressly set forth in this Agreement, EACH PARTY EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

PATENTS, NON-INFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICES. Without limiting the generality of the foregoing, EC specifically disclaims any express or implied warranty:

(a) as to the validity, enforceability or scope of any Patent Right; or

(b) that the exploitation of the Patent Rights or Technology will be successful.

6.5 Limitation of Liability.

(a) IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION DAMAGES FOR LOST PROFITS OR EXPECTED SAVINGS) ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR ITS SUBJECT MATTER; *provided*, *however*, that this Section 6.5 shall not be construed to limit CRISPR's indemnification obligations under Article 9. No provision of this Agreement shall limit a party's liability for death or personal injury caused by its negligence or for fraud.

(b) THE TOTAL AGGREGATE LIABILITY OF EC IN RESPECT OF ANY CLAIM AND ALL CLAIMS ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT AND OR ITS SUBJECT MATTER. INCLUDING TORTIOUS CLAIMS. WHICH ARE BROUGHT AGAINST EC IN ANY CALENDAR YEAR SHALL NOT EXCEED AN AMOUNT EQUAL TO THE TOTAL AMOUNT THAT EC RECEIVES FROM CRISPR UNDER ARTICLE 3 OF THIS AGREEMENT AND UNDER ANY SERVICES RELATIONSHIP IN THE CALENDAR YEAR IN WHICH THE CLAIM OR CLAIMS ARE BROUGHT AGAINST EC.

7. CONFIDENTIALITY

7.1 Confidential Information. "***Confidential Information***" shall mean all scientific, regulatory, marketing, financial, and commercial information or data, whether communicated in written, oral, graphic, electronic or visual form, that is provided by one party (the "***Disclosing Party***") to the other party (the "***Receiving Party***") in connection with this Agreement. Except as expressly set forth in this Agreement or as otherwise agreed in writing by the parties, the Receiving Party shall keep strictly confidential, in accordance with the terms and conditions of this Article 7, the Disclosing Party's Confidential Information, shall use the Disclosing Party's Confidential Information solely as expressly authorized by this Agreement, and shall not disclose the Confidential Information to any Third Party without the prior written consent of the Disclosing Party. The Receiving Party shall use at least the same degree of care to protect the Disclosing Party's Confidential Information as the Receiving Party would use to protect the Receiving Party's own Confidential Information, but no less than reasonable care.

7.2 Exceptions. Confidential Information of the Disclosing Party shall not include information that the Receiving Party can demonstrate by competent evidence: (a) was in the public domain at the time of disclosure by the Disclosing Party; (b) later became part of the public domain through no act or omission of the Receiving Party in breach of this Agreement;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(c) is lawfully disclosed to the Receiving Party on a non-confidential basis by a Third Party having the right to disclose it; or (d) was already known by the Receiving Party at the time of receiving such information from the Disclosing Party, as evidenced by the Receiving Party's pre-existing written records.

7.3 Authorized Disclosure. The Receiving Party may disclose Confidential Information as expressly permitted by this Agreement, or if and to the extent such disclosure is reasonably necessary in the following instances:

(a) filing, prosecuting or maintaining the Patent Rights in accordance with this Agreement;

(b) enforcing the Receiving Party's rights under this Agreement;

(c) prosecuting or defending litigation:

(d) complying with applicable court orders or governmental regulations:

(e) disclosure to the Receiving Party's financial, legal and other advisors on a need-to-know basis as necessary for such advisors to provide financial, legal or business advice to the Receiving Party regarding this Agreement or its subject matter, provided that such advisors are bound by non-use and non-disclosure obligations no less restrictive than those set forth in this Agreement, whether by written agreement or by applicable professional ethical obligations;

(f) in the case of CRISPR, disclosure to CRISPR's Affiliates (including, without limitation, Affiliated Sublicensees), provided that Confidential Information so disclosed shall remain subject to this Article 7;

(g) in the case of CRISPR and Affiliated Sublicensees, disclosure to Third Party Sublicensees and *bona fide* potential Third Party Sublicensees, on the condition that each such Third Party agrees to be bound by confidentiality and non-use obligations that are no less stringent than the terms of this Agreement;

(h) in the case of CRISPR (and Sublicensees), practicing the license granted hereunder or preparing and submitting regulatory filings with respect to Therapeutic Products and/or Diagnostic Products; and

(i) in the case of CRISPR and Affiliated Sublicensees, disclosure to Third Parties in connection with due diligence or similar investigations by such Third Parties and disclosure to potential Third Party investors in confidential financing documents, provided, in each case, that any such Third Party agrees to be bound by reasonable obligations of confidentiality and non-use.

Notwithstanding the foregoing, in the event the Receiving Party is required to make a disclosure of the other party's Confidential Information pursuant to Section 7.3(c) or Section 7.3(d), the Receiving Party shall, except where impracticable, give reasonable advance notice to the Disclosing Party of such disclosure and use efforts to secure confidential treatment

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

of such information at least as diligent as such party would use to protect such party's own confidential information, but in no event less than reasonable efforts. In any event, the Receiving Party agrees to take all reasonable action to avoid unauthorized disclosure and unauthorized use of Confidential Information.

7.4 Confidentiality of Agreement. Except as otherwise provided in this Article 7, each party agrees not to disclose to any Third Party the terms or existence of this Agreement without the prior written consent of the other party hereto, except that each party may make such disclosure to the extent permitted under Section 7.3 and, after the initial announcement of this Agreement pursuant to Section 7.6, each party may disclose the terms of this Agreement that have previously been made public as contemplated by Section 7.6. CRISPR acknowledges that EC is entitled to disclose the provisions of this Agreement to ERS and to Tracr, on the condition that each of them agrees to be bound by confidentiality and non-use obligations that are no less stringent than the terms of this Agreement.

7.5 Publications. EC shall be free to make publications and presentations regarding the Technology, including oral presentations and abstracts, provided such publications and presentations do not contain or disclose Confidential Information of CRISPR. Solely during the five-year period beginning on the Effective Date:

(a) in the case of any proposed oral presentation by EC regarding the Technology, EC shall inform CRISPR of EC's proposed oral presentation in advance thereof; and

(b) CRISPR shall have the right to review any written material proposed for publication by EC, such as by manuscript or abstract. Before any such written material is submitted for publication, EC shall deliver a reasonably complete draft to CRISPR a reasonable period (at least […***…], but, in any event, no fewer than […***…]) prior to submitting the material to a publisher or initiating any other disclosure. If CRISPR identifies any Confidential Information of CRISPR contained in such written material, EC shall comply with CRISPR's request to delete references to CRISPR's Confidential Information in any such material.

CRISPR (and its Sublicensees) shall at all times be free to make publications and presentations, including oral presentations and abstracts, relating to the development and commercialization of Therapeutic Products in the CRISPR Field and Diagnostic Products for use with such Therapeutic Products and other commercial exploitation of the Technology by or on behalf of CRISPR and its Sublicensees.

7.6 Publicity. At CRISPR's option, CRISPR may issue an initial press release announcing this Agreement in form and substance reasonably acceptable to EC. It is further acknowledged that a party may desire or be required to issue one or more subsequent press releases relating to this Agreement or activities hereunder. The parties agree to consult with each other reasonably and in good faith with respect to the text and timing of any such press release prior to the issuance thereof, provided that EC may not unreasonably withhold consent to such releases, and that CRISPR may issue such press releases as it determines, based on advice of counsel, are reasonably necessary to comply with applicable law or with the requirements of any stock exchange on which securities issued by CRISPR or its Affiliated Sublicensees are traded.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

In the event of a required public announcement, to the extent practicable under the circumstances, the party making such announcement shall use commercially reasonable efforts to provide the other party with a copy of the proposed text of such announcement sufficiently in advance of the scheduled release to afford such other party a reasonable opportunity to review and comment upon the proposed text.

8. TERM; TERMINATION

8.1 Term. The term of this Agreement (the "***Term***") shall begin on the Effective Date and, unless earlier terminated in accordance with this Article 8, shall expire upon expiration of all Revenue-Sharing Payment obligations of CRISPR under this Agreement.

8.2 Termination by CRISPR At Will. CRISPR shall have the right to terminate this Agreement at will at any time upon […***…] written notice to EC.

8.3 Termination for Breach. A party shall have the right to terminate this Agreement upon written notice to the other party if such other party is in material breach of this Agreement and, if capable of remedy, has not cured such breach within […***…] after notice from the terminating party requesting cure of the breach. Any such termination shall become effective at the end of such […***…] unless the breaching party has cured such breach prior to the end of such period. Any right to terminate under this Section 8.3 shall be stayed and the cure period tolled in the event that, during any cure period, the party alleged to have been in material breach shall have initiated dispute resolution in accordance with Article 10 with respect to the alleged breach, which stay and tolling shall continue until such dispute has been resolved in accordance with Article 10.

8.4 Termination for Patent Challenge. EC shall have the right to terminate this Agreement immediately upon written notice to CRISPR if CRISPR commences any interference or opposition proceeding with respect to, challenges the validity or enforceability of, or opposes any extension of, or the grant of a supplementary protection certificate with respect to, any of the Patent Rights.

8.5 Consequences of Expiration or Termination.

(a) Expiration. Upon expiration of this Agreement pursuant to Section 8.1, the license granted to CRISPR under Section 2.1 shall survive such expiration and become royalty-free, fully-paid, non-exclusive, irrevocable and perpetual.

(b) Termination. Upon any termination of this Agreement pursuant to Section 8.2, Section 8.3 or Section 8.4, the license granted to CRISPR under Section 2.1 shall terminate and revert to EC. Notwithstanding the foregoing, solely in the event of termination of this Agreement by CRISPR or EC pursuant to Section 8.3 or by EC pursuant to Section 8.4 (but not termination of this Agreement by CRISPR pursuant to Section 8.2):

(i) any sublicense granted by CRISPR to any Affiliated Sublicensee in accordance with Section 2.4 that is then in effect (together with any and all further sublicenses granted by such Affiliated Sublicensee to any Third Party Sublicensee thereunder) shall remain in full force and effect, provided that such Affiliated Sublicensee: (A) is not then in material

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

breach of its sublicense agreement; and (B) agrees to be bound to EC as such Affiliated Sublicensee's direct licensor under the terms and conditions of this Agreement (and not such sublicense agreement) as applicable to the Therapeutic Products and Diagnostic Products which are the subject of the sublicense agreement; provided that such Affiliated Sublicensee shall agree in writing that in no event shall EC be liable to such Affiliated Sublicensee for any actual or alleged breach of such sublicense agreement by CRISPR. In addition, to the extent that any such Affiliated Sublicensee was exercising CRISPR's rights under Article 5 at the time of termination of this Agreement as contemplated by Section 5.7, such Affiliated Sublicensee may continue to exercise such rights after such termination subject to the terms and conditions of this Agreement; and

(ii) any sublicense granted by CRISPR directly to any Third Party Sublicensee in accordance with Section 2.4 that is then in effect (together with any and all further sublicenses granted by such Third Party Sublicensee to any further Third Party Sublicensee thereunder) shall remain in full force and effect, provided that such Third Party Sublicensee: (A) is not then in material breach of its sublicense agreement; and (B) agrees to be bound to EC as such Third Party Sublicensee's direct licensor under the terms and conditions of the sublicense agreement; provided that (1) such Third Party Sublicensee shall agree in writing that in no event shall EC be liable to such Third Party Sublicensee for any actual or alleged breach of such sublicense agreement by CRISPR, (2) such sublicense agreement shall be subordinate and comply in all respects to the applicable provisions of this Agreement, and (3) EC shall not have any obligations to such Third Party Sublicensee other than EC's obligations to CRISPR as set forth herein.

(c) Inventory. Upon any termination of this Agreement pursuant to Section 8.2, Section 8.3, Section 8.4, or Section 8.5, CRISPR, and any Sublicensee whose sublicense was in effect as of immediately prior to such termination but did not remain in effect after termination as contemplated by Section 8.5(b)(i) or Section 8.5(b)(ii), as applicable, shall be entitled to finish any work-in-progress and to sell any completed inventory of Therapeutic Products and Diagnostic Products which remain on hand as of the date of the termination, for up to six (6) months after termination, subject to payment of royalties to EC in accordance with Section 3.4.

(d) Return of Confidential Information. Within […***…] following the expiration or termination of this Agreement, each party shall return to the other party, or destroy, upon the written request of the other party, any and all Confidential Information of the other party in such party's possession; *provided*, *however* that each party may retain one copy of the other party's Confidential Information in such party's legal archives for the sole purpose of monitoring compliance with such party's obligations, enforcing such party's rights hereunder, and exercising such party's surviving rights hereunder.

8.6 Surviving Obligations. Neither expiration nor termination of this Agreement shall relieve either party of any obligation accruing prior to such expiration or termination. In addition, Section 3.4 (for the period specified in Section 8.5(c)) and Sections 2.1(c), 2.9, 4.3, 4.4, 4.5, 5.8, 6.4, 6.5, 7.1, 7.2, 7.3, 7.4, 8.5 and 8.6 and Articles 9, 10 and 11 shall survive any expiration or termination of this Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9. INDEMNIFICATION

9.1 Indemnification by CRISPR. CRISPR hereby agrees to save, defend, indemnify and hold harmless EC from and against any and all losses, damages, liabilities, expenses and costs, including reasonable legal expense and attorneys' fees ("***Losses***"), to which she may become subject as a result of any claim, demand, action or other proceeding by any person to the extent such Losses arise out of: (a) the gross negligence or willful misconduct of CRISPR, its Affiliates and/or their respective officers, directors, employees, consultants and agents; (b) the breach by CRISPR of any warranty, representation, covenant or agreement made by CRISPR in this Agreement; (c) the practice by CRISPR or Sublicensees of the license granted hereunder; or (d) the development, manufacture, use, handling, storage, sale or other disposition of any Therapeutic Product or Diagnostic Product by or on behalf of CRISPR or Sublicensees; in each case, except to the extent such Losses result from the gross negligence or willful misconduct of EC or the breach by EC of any warranty, representation, covenant or agreement made by EC in this Agreement.

To the extent not already covered by CRISPR's indemnification obligations under the first paragraph of this Section 9.1, CRISPR further agrees hereby to save, defend, indemnify and hold harmless EC from and against any and all Losses to which she may become subject as a result of any claim, demand, action or other proceeding by any person (including without limitation Regents, Vienna or any person to whom either of them may have granted, or purported to grant, rights under the Patent Rights) relating to or arising out of: (i) EC entering into this License Agreement with CRISPR and her grant of rights to CRISPR; (ii) the exercise by CRISPR of any of its rights under this Agreement; (iii) the filing, prosecution, maintenance, enforcement and/or defense by CRISPR of the Patent Rights in relation to the CRISPR Field; or (iv) EC bringing an infringement action under the Patent Rights or other Patent Proceedings at the request, under the direction, and in accordance with the instructions, of CRISPR; in each case, except to the extent such Losses result from the gross negligence or willful misconduct of EC or the breach by EC of any warranty, representation, covenant or agreement made by EC in this Agreement.

9.2 Control of Defense. In the event EC seeks indemnification under Section 9.1, EC shall inform CRISPR of a claim as soon as reasonably practicable after EC receives notice of the claim (it being understood and agreed, however, that the failure by EC to give notice of a claim as provided in this Section 9.2 shall not relieve CRISPR of CRISPR's indemnification obligation under this Agreement except and only to the extent that CRISPR is actually damaged as a result of such failure to give notice), shall permit CRISPR to assume direction and control of the defense of the claim (including the right to settle the claim solely for monetary consideration) using counsel reasonably satisfactory to EC, and shall cooperate as requested (at the expense of CRISPR) in the defense of the claim. If CRISPR does not assume control of such defense within […***…] after receiving notice of the claim from EC, EC shall control such defense and, without limiting CRISPR's indemnification obligations, CRISPR shall reimburse EC for all costs, including reasonable attorney fees, incurred by EC in defending herself within […***…] after receipt of any invoice therefor from EC. The party not controlling such defense may participate therein at such party's own expense. The party controlling such defense shall keep the other party advised of the status of such action, suit, proceeding or claim and the defense thereof and shall consider recommendations made by the other party with respect thereto. EC

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

shall not agree to any settlement of such action, suit, proceeding or claim without the prior written consent of CRISPR, which shall not be unreasonably withheld, delayed or conditioned. CRISPR shall not agree to any settlement of such action, suit, proceeding or claim or consent to any judgment in respect thereof that does not include a complete and unconditional release of EC from all liability with respect thereto, that imposes any liability or obligation on EC, that acknowledges fault by EC or that affects the rights of EC in the Patents Rights without the prior written consent of EC.

9.3 Insurance. During the term of this Agreement, CRISPR shall maintain, and shall require Sublicensees to maintain, insurance of such types and in such amounts as are commercially reasonable in light of their respective activities hereunder.

9.4 English Law. No provision of this Agreement shall operate to:-

(a) exclude any provision implied into this Agreement by English law and which may not be excluded by English law; or

(b) limit or exclude any liability, right or remedy to a greater extent than is permissible under English law including in relation to (I) death or personal injury caused by the negligence of a party to this Agreement or (2) fraudulent misrepresentation or deceit.

10. DISPUTE RESOLUTION

10.1 Dispute Resolution. It is the desire of the parties that any dispute arising under or relating to the parties" rights and obligations under this Agreement be resolved amicably by good faith discussions between the parties. If a party delivers written notice to the other party of any such dispute, the parties shall promptly convene a meeting (either in person or by telephone conference or videoconference) to attempt in good faith to resolve such dispute.

10.2 Arbitration.

(a) LC1A Rules. Except as expressly set forth in Section 10.3, any dispute arising out of or in connection with this Agreement, including any question regarding its existence, validity or termination, that is not resolved by the parties within […***…] after a party's delivery to the other party of notice of such dispute shall, upon the written request of either party, be referred to and finally resolved by arbitration under the arbitration rules of the London Court of International Arbitration (the "***Rules***"), which Rules are deemed to be incorporated by reference into this clause, except to the extent any such Rule conflicts with the express provisions of this Article 10. The arbitration shall be determined by a single, independent, impartial arbitrator. The seat, or legal place, of arbitration shall be London, England. The language to be used in the arbitral proceedings shall be English. The governing law of the contract shall be the substantive law of England, excluding its conflicts of laws principles.

(b) Expedited Binary Arbitration. Within […***…] following appointment of the arbitrator in accordance with the Rules, each party shall submit to the arbitrator so appointed a written proposal setting forth a complete resolution of the applicable dispute that such party believes is reasonable under the circumstances, including, without

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

limitation, any economic remedy such party believes is justified. Within […***…] following submission of the parties' written proposals to the arbitrator, the arbitrator shall select the proposal that such arbitrator determines to be the more reasonable of the two. The decision of the arbitrator shall be final, binding and non-appealable, except in the case of manifest error and judgment may be entered upon it in any court of competent jurisdiction, and subject to the aforesaid, the parties hereby exclude any rights of application or appeal to any court to the extent that they may validly so agree and in particular in connection with any question of law.

(c) Arbitration Costs. The arbitrator shall determine the proportions in which the parties shall pay the costs of the arbitration procedure. The arbitrator shall have the authority to order that all or a part of the legal or other costs of a party incurred in relation to the arbitration shall be paid by the other party.

10.3 Court Actions. Nothing contained in this Agreement shall deny either party the right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a *bona fide* emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding am ongoing discussions between the parties or any ongoing arbitration proceeding. In addition, either party may bring an action in any court of competent jurisdiction to resolve disputes pertaining to the validity, construction, scope, enforceability, infringement or other violations of patent rights or other intellectual property rights, and no such claim shall be subject to arbitration pursuant to Section 10.2.

10.4 ERS and Tracr. Notwithstanding any other provision of this Agreement:

(a) in the event that any dispute arises concerning (i) the scope of the licenses granted to CRISPR as opposed to the scope of any licenses granted to ERS under the ERS License or (ii) the rights and obligations of CRISPR under Article 5 as opposed to the rights and obligations of ERS under the ERS License, then CRISPR shall not bring any action with EC as a party but instead CRISPR and ERS shall each have the right to refer the dispute together to arbitration in order for the arbitrator to determine the extent of CRISPR's and ERS's respective rights and obligations; and

(b) in the event that any dispute arises concerning (i) the scope of the licenses granted to CRISPR as opposed to the scope of any licenses granted to Tracr under the Tracr License or (ii) the rights and obligations of CRISPR under Article 5 as opposed to the rights and obligations of Tracr under the Tracr License, then CRISPR shall not bring any action with EC as a party but instead CRISPR and Tracr shall each have the right to refer the dispute together to arbitration in order for the arbitrator to determine the extent of CRISPR's and Tracr's respective rights and obligations.

Any such arbitration shall be conducted in accordance with the principles set out in Section 10.2 above, subject to Section 10.3 above, save that Section 10.3 may not be used by CRISPR to bring any action against EC. EC shall be entitled, but shall not be obliged, to participate as a party to any such arbitration, at her expense. ERS and Tracr shall be intended third party beneficiaries under this Section 10.4 with the right under the Contracts (Rights of Third Parties) Act 1999 to enforce the provisions of this Section 10.4 against CRISPR.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11. MISCELLANEOUS

11.1 Bankruptcy Code. All rights and licenses granted under or pursuant to this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11 of the United States Code and other similar laws in any jurisdiction outside the U.S. (collectively, the "***Bankruptcy Laws***"), licenses of rights to be "intellectual property" as defined under the Bankruptcy Laws. All rights, powers and remedies of the non-bankrupt party as provided herein are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including, without limitation, the Bankruptcy Laws) in the event of the commencement of a case by or against a party under the Bankruptcy Laws.

11.2 Notices. All notices required or permitted to be given under this Agreement must be in writing and delivered by any method of mail (postage prepaid) requiring return receipt, by overnight courier, or by email, to the party to be notified at such party's address(es) given below, or at any address such party has previously designated by prior written notice to the other. Notice shall be deemed sufficiently given for all purposes upon the earliest of: (a) the date of actual receipt; (b) if mailed, three (3) days after the date of postmark; or (c) if delivered by overnight courier, the next business day the overnight courier regularly makes deliveries.

If to CRISPR, notices must be addressed to:

CRISPR Therapeutics AG
Aeschenvorstadt 36
CH-4051 Basel
Switzerland
Attention: Rodger Novak
Email: […***…]

With a copy to:

Vischer AG
Aeschenvorstadt 4
Postfach 526
4010 Basel
Switzerland
Attention: Mathias Staehlin
Email: mstaehelin@vischer.com

If to EC, notices must be addressed to:

Emmanuelle Charpentier
[…***…]

With a copy to:

Bristows LLP
100 Victoria Embankment
London EC4Y 0DH
United Kingdom
Attention: Laura Anderson
Email: laura.andersonrtbristows.com

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.3 Entire Agreement; Amendment. This Agreement, and the Exhibits attached hereto, contain the entire agreement and understanding between the parties with respect to the subject matter hereof, and merge all prior discussions, representations, and negotiations with respect to the subject matter of this Agreement, including, without limitation, the Option Agreement, but excluding that certain Shareholders Agreement dated October 28, 2013, to which EC and CRISPR are parties, and that certain Consulting Agreement between CRISPR and EC dated as of the Effective Date, each of which shall continue in full force and effect in accordance with its terms. The Option Agreement shall be of no further force or effect and all rights of either party under the Option Agreement shall be extinguished on the Effective Date including (notwithstanding the provisions of Section 4.3 of the Option Agreement) any and all accrued rights or causes of action in respect of any representation, warranty or undertaking given in the Option Agreement. No amendment or modification hereof shall be valid or binding upon the parties hereto unless made in writing and signed by all parties hereto. The headings of clauses contained in this Agreement preceding the text of the sections, subsections and paragraphs hereof are inserted for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against any party, irrespective of which party may be deemed to have caused the ambiguity or uncertainty to exist.

11.4 Non-Waiver. The failure of a party to insist upon strict performance of any provision of this Agreement or to exercise any right or remedy arising out of this Agreement shall neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. Any waiver by a party of a particular provision, right or remedy shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time, and shall be signed by such party.

11.5 Assignment. Neither this Agreement nor any rights or obligations hereunder may be assigned or otherwise transferred by either party without the prior written consent of the other party; *provided*, *however*, that CRISPR may assign this Agreement and its rights and obligations hereunder without EC's consent: (a) in connection with the transfer or sale of all or substantially all of CRISPR's business to which this Agreement relates to a Third Party, whether by merger, sale of stock, sale of assets or otherwise; or (b) to an Affiliate. The rights and obligations of the parties under this Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties, and the name of a party appearing herein will be deemed to include the name of such party's successors and permitted assigns to the extent necessary to carry out the intent of this section. Any assignment not in accordance with this Agreement shall be void.

11.6 Severability. In the event any provision of this Agreement is held to be illegal, invalid or unenforceable to any extent, the legality, validity and enforceability of the remainder of this Agreement shall not be affected thereby and shall remain in full force and effect and shall be enforced to the greatest extent permitted by law.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.7 Choice of Law. This Agreement and any disputes arising out of or in connection with it including non-contractual disputes shall be governed by, and construed and enforced in accordance with, the laws of England, excluding its conflicts of laws principles.

11.8 Counterparts. This Agreement may be executed in any number of counterparts (including by electronic copy, facsimile or electronic signature), each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

11.9 Contracts (**Rights of Third Parties**) **Act**. Subject to the remaining provisions of this Section a person who is not a party to this Agreement has no rights (whether under the Contracts (Rights of Third Parties) Act 1999 or otherwise) to enforce any provision of this Agreement, ERS and Tracr may enforce the provisions of Sections 5.3, 5.4 and 5.5 (excluding Sections 5.5(b) and 5.5(c)) of this Agreement to the extent set forth in, and subject to the terms of, such Sections and may enforce the provisions of Section 10.4 to the extent set forth in, and subject to the terms of, Section 10.4 and the provisions of the Contracts (Rights of Third Parties) Act 1999, Tracr may enforce the provisions of Section 2.9 of this Agreement to the extent set forth in, and subject to the terms of, such Section. Affiliated Sublicensees and Third Party Sublicensees may enforce the applicable provisions of Section 8.5(b) subject to the terms of Section 8.5(b) and the Contracts (Rights of Third Parties) Act 1999. The rights of the parties to terminate, rescind or agree any variation, waiver or settlement under this Agreement are not subject to the consent of any person that is not a party to this Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the parties have executed this License Agreement as of Effective Date.

EMMANUELLE MARIE CHARPENTIER

By: /s/ Emmanuelle Marie Charpentier

CRISPR Therapeutics AG

By: /s/ Shaun Foy
Name: Shaun Foy
Title: CFO

By: /s/ Rodger Novak
Name: Rodger Novak
Title: CEO

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit A

Know-How

Protocols for carrying out the methods described in the Patent Rights.

[…***…] embodying any of the inventions claimed, or necessary or useful for carrying out the methods described, in the Patent Rights.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit B

Patent Rights

[…***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit C

[…***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit D

ERS License

Attached.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit E

Tracr License

Attached.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SPECIFIC TERMS IN THIS EXHIBIT HAVE BEEN REDACTED BECAUSE CONFIDENTIAL TREATMENT FOR THOSE TERMS HAS BEEN REQUESTED. THESE REDACTED TERMS HAVE BEEN MARKED IN THIS EXHIBIT WITH THREE ASTERISKS [***]. AN UNREDACTED VERSION OF THIS EXHIBIT HAS BEEN SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

Exhibit 10.6

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (***"Agreement"***) is entered into and effective as of April 10, 2014 (the ***"Effective Date"***), by and between **EMMANUELLE MARIE CHARPENTIER**, an individual residing at Böcklerstrasse 18, 38102 Braunschweig, Germany (***"EC"***), and **TRACR HEMOGLOBINOPATHIES LTD**, a UK limited company having its registered office at 90 Fetter Lane, London EC1A 1JP, United Kingdom (***"Tracr"***).

BACKGROUND

WHEREAS, Tracr desires to obtain from EC, and EC desires to grant to Tracr, an exclusive license under EC's joint ownership interest in and to the Technology (defined below) to develop and commercialize products for the treatment or prevention of hemoglobinopathies, on the terms and subject to the conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and the mutual promises and covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, EC and Tracr hereby agree as follows:

1. DEFINITIONS

1.1 "Affiliate" shall mean:

(a) any business entity which controls, is controlled by, or is under common control with Tracr; and for this purpose, a business entity shall be deemed to "control" another business entity, if it owns, directly or indirectly, more than 50% of the outstanding voting securities, capital stock, or other comparable equity or ownership interest of such business entity having the power to vote on or direct the affairs of such business entity; or

(b) any business entity that Tracr, at Tracr's sole option and upon written notice to EC, designates as an "Affiliate" for purposes of this Agreement, provided that, as of the date of such designation, EC is the holder of […***…] percent or more of the equity securities of such business entity on a fully-diluted and as-converted basis.

1.2 "Affiliated Sublicensee" shall mean any Affiliate to which Tracr or its Affiliate directly or indirectly (*i.e.*, through multiple tiers of sublicense) grants a sublicense under any or all of the Patent Rights. For purposes of clarification, if, at any time after the grant of a sublicense to an entity that is an Affiliate at the time of such grant, such entity ceases to be an Affiliate within the meaning of Section 1.1(a) or Section 1.1(b) (as applicable), such entity shall nevertheless continue to be considered an "Affiliated Sublicensee" (and shall not be considered a "Third Party Sublicensee") for purposes of this Agreement, including, without limitation, Article 3 hereof.

1.3 "Companion Diagnostic" shall mean any companion diagnostic tool and/or diagnostic assay developed and used to (i) identify patients who are most likely to benefit from a Therapeutic Product, (ii) identify patients likely to be at increased risk for serious adverse reactions as a result of treatment with a Therapeutic Product, and/or (iii) monitor a patient's response to a Therapeutic Product for the purpose of adjusting treatment (*e.g.*, schedule, dose, discontinuation) to achieve improved safety or effectiveness.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.4 "Confidential Information" shall have the meaning provided in Section 7.1.

1.5 "Covered Animal" shall mean an animal (including a microorganism), the genome of which (i) has been altered using a Covered Product or Covered Method or (ii) incorporates a Covered Product.

1.6 "Covered Animal-Derived Product" shall mean any tissue or organ that, in each case, is extracted or harvested from a Covered Animal but that is not itself a Covered Product. Any monoclonal antibody or other protein molecule that is first created in a Covered Animal but that is not itself a Covered Product shall not be considered a Covered Animal-Derived Product.

1.7 "Covered Method" shall mean any process or method, the use or practice of which in a country would, in the absence of the license granted under this Agreement (or a sublicense granted thereunder, as applicable), infringe a Valid Claim of the Patent Rights in such country.

1.8 "Covered Product" shall mean any product, the manufacture, use, sale or importation of which is covered by the Patent Rights, or which is based on, uses or incorporates any Technology.

1.9 "CRISPR" shall mean CRISPR Therapeutics AG, a company organized under the laws of Switzerland having a principal place of business at Aeschenvorstadt 36, CH-4051 Basel, Switzerland.

1.10 "CRISPR Field" shall mean researching, developing, making, using or selling: (a) Therapeutic Products for the treatment or prevention of any human disease, disorder or condition, but excluding any Tracr Indication; and (b) Diagnostic Products for use with such Therapeutic Products.

1.11 "CRISPR License" shall have the meaning provided in Section 5.2(a)(ii).

1.12 "CRISPR Patent Rights" shall mean EC's joint ownership interest in Patent Rights (or, as applicable, those claims of Patent Rights) that claim inventions having applicability or utility exclusively in the […***…]**.**

1.13 "Diagnostic Product" shall mean a Companion Diagnostic for use with a Therapeutic Product, which Companion Diagnostic contains or incorporates a Covered Product or a Covered Animal-Derived Product or uses a Covered Method.

1.14 "ERS" shall mean ERS Genomics Limited, a company organized under the laws of Ireland having a principal place of business at 88 Harcourt Street, Dublin 2, Ireland.

1.15 "ERS Field" shall mean all fields of use except the […***…].

1.16 "ERS License" shall have the meaning provided in Section 5.2(a)(i).

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.17 "ERS Patent Rights" shall mean EC's joint ownership interest in Patent Rights (or, as applicable, those claims of Patent Rights) that claim inventions having applicability or utility exclusively […***…].

1.18 "Invention" shall mean the invention entitled "*Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription*" as described in the Patent Application, including all improvements thereto that are disclosed in the Patent Application.

1.19 "**Joint Owners"** means Regents, Vienna and any other person other than EC who is a proprietor of the Patent Rights.

1.20 "Know-How" shall mean the additional information and materials listed in **Exhibit A** […***…].

1.21 "Major Market" shall mean any of the following: […***…].

1.22 "Materials" shall mean biological materials within the Know-How that are […***…].

1.23 "NDA/BLA" shall mean: (a) in the United States, a Biologics License Application (as more fully defined in 21 CFR § 601.2) or a New Drug Application (as more fully defined in 21 CFR § 314.5 *et seq.*), as applicable, filed with the FDA, or any successor application thereto; (b) in the European Union, a Marketing Approval Authorization filed with the EMA, or any successor application thereto; or (c) in any other regulatory jurisdiction, the equivalent application for approval to market a drug filed with the governing regulatory authority in such jurisdiction.

1.24 "Net Sales" shall mean the gross amounts invoiced by Tracr and its Sublicensees to Third Parties (other than Third Party Sublicensees) from sales of Therapeutic Products or Diagnostic Products, less the following items, to the extent allocable to such Therapeutic Products or Diagnostic Products and either included in the invoice, or otherwise actually granted, allowed, taken or incurred (if not previously deducted from the amount invoiced): […***…].

[…***…].

1.25 "Overlapping Patent Rights" shall mean EC's joint ownership interest in Patent Rights (or, as applicable, those claims of Patent Rights) that claim inventions having applicability or utility […***…].

1.26 "Patent Application" shall mean […***…], filed on […***…].

1.27 "Patent Rights" shall mean the Patent Application and other patent applications and patents listed in **Exhibit B** attached to this Agreement; any and all patent applications that claim priority to any of the foregoing patents or patent applications listed in **Exhibit B** hereto, including, without limitation, continuations, continuations-in-part (but only to the extent the claims of any such continuation-in-part are specifically directed to subject matter disclosed in the specifications in, and entitled to the priority date of, the parent application), divisional

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

applications and substitute applications; any and all patents issuing on any of the foregoing patent applications, including registrations, renewals, reexaminations, reissues, extensions, term restorations and supplementary protection certificates; and any and all foreign counterparts of any of the foregoing; in each case, whether now existing or hereafter filed or issued.

1.28 "Phase 1 Trial" shall mean a human clinical trial that would satisfy the requirements for a Phase 1 study as defined in 21 CFR § 312.21(a) (or its successor regulation), regardless of where such trial is conducted.

1.29 "Phase 2 Trial" shall mean a human clinical trial that would satisfy the requirements for a Phase 2 study as defined in 21 CFR § 312.21(b) (or its successor regulation), regardless of where such trial is conducted.

1.30 "Phase 3 Trial" shall mean a human clinical trial that would satisfy the requirements for a Phase 3 study as defined in 21 CFR § 312.21(c) (or its successor regulation), regardless of where such trial is conducted.

1.31 "Regents" shall mean The Regents of the University of California, a California corporation having its corporate offices located at 1111 Franklin Street, Oakland, California 94607-5200, acting through The Office of Technology Licensing of the University of California, Berkeley, located at 2150 Shattuck Avenue, Suite 510, Berkeley, CA 94704-1347.

1.32 "Revenue-Sharing Payments" shall have the meaning provided in Section 4.1.

1.33 "Sublicensee" shall mean an Affiliated Sublicensee and/or Third Party Sublicensee, as applicable.

1.34 "Sublicensing Revenues" shall mean all amounts received by Tracr or any of its Affiliated Sublicensees from any Third Party Sublicensee in consideration of the grant by Tracr or its Affiliated Sublicensee of a Sublicense under any or all of the Patent Rights, including, […***…], and any other payments with respect to such sublicense; but excluding:

(a) […***…]

(b) […***…]

(c) […***…]

(d) […***…]

(e) […***…].

[…***…].

1.35 "Technology" shall mean the Invention, Patent Rights and Know-How.

1.36 "Term" shall have the meaning provided in Section 8.1.

1.37 "Therapeutic Product" shall mean […***…].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.38 "Third Party" shall mean any entity other than EC, Tracr and any Affiliate of Tracr.

1.39 "Third Party Sublicensee" shall mean any Third Party to which Tracr or its Affiliated Sublicensee has directly or indirectly (*i.e.*, through multiple tiers of sublicense) granted a sublicense under any or all of the Patent Rights. For clarification, a Third Party service provider that has the right to make, have made, use or sell Therapeutic Products or Diagnostic Products solely on behalf of Tracr or its Affiliated Sublicensee and not for its own account shall not be considered a Third Party Sublicensee.

1.40 "Tracr Field" shall mean researching, developing, making, using or selling: (a) Therapeutic Products for any Tracr Indication; and (b) Diagnostic Products for use with such Therapeutic Products.

1.41 "Tracr Improvement" shall mean any improvement to the Invention made solely by or on behalf of Tracr, and owned solely by Tracr: (a) that is useful in the CRISPR Field (whether or not also useful in the Tracr Field); and (b) the practice of which either (i) is within the scope of the claims of the Patent Rights or (ii) requires the practice of the Invention.

1.42 "Tracr Improvement IP" shall have the meaning provided in Section 2.9.

1.43 "Tracr Improvement License" shall have the meaning provided in Section 2.9.

1.44 "Tracr Indication" shall mean the treatment or prevention of any hemoglobinopathy in humans, including, without limitation, sickle cell disease and thalassemia.

1.45 "Valid Claim" shall mean a claim contained in: (a) an issued and unexpired patent which has not been held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through abandonment, reissue, disclaimer or otherwise; or (b) a patent application that has not been irretrievably cancelled, withdrawn or abandoned and that has been pending for less than […***…].

1.46 "Vienna" shall mean the University of Vienna, having a principal place of business at Universitatsring 1, 1010, Vienna, Austria.

2. LICENSE

2.1 Grant. Subject to the terms and conditions of this Agreement, including without limitation the provisions of Section 2.2, EC hereby grants to Tracr:

(a) an exclusive (even as to EC, except as set forth in Section 2.8), worldwide, royalty-bearing license, including the right to sublicense through multiple tiers, under EC's joint ownership interest in and to the Technology, to research, develop, make, have made, use, sell, have sold, offer for sale and import Therapeutic Products in the Tracr Field and Diagnostic Products for use with such Therapeutic Products;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) a non-exclusive, worldwide, royalty-free license, including the right to sublicense through multiple tiers (but only together with the license in Section 2.1(a) above), under EC's joint ownership interest in and to the Technology, to carry out internal pharmaceutical research in relation to products which are not Therapeutic Products; and

(c) an exclusive (even as to EC), worldwide, royalty-free sublicense, including the right to sublicense through multiple tiers, under CRISPR Improvement IP which is licensed to EC under the CRISPR License, to research, develop, make, have made, use, sell, have sold, offer for sale and import Therapeutic Products in the Tracr Field and Diagnostic Products for use with such Therapeutic Products but without prejudice to Tracr's payment obligations in respect of Therapeutic Products and Diagnostic Products under Article 3.

2.2 License Exclusions. For the avoidance of doubt, Tracr shall not have any license under EC's joint ownership interest in and […***…].

2.3 Acknowledgment of Joint Ownership. Tracr acknowledges that as at the Effective Date, it has not obtained any right or license under the joint ownership interest of any Joint Owner in and to the Technology and, as such Tracr's exclusivity under Section 2.1(a) is limited to EC's joint ownership interest and consequently Tracr does not have the exclusive right to exploit the Technology in the Tracr Field. Tracr also acknowledges that EC has not obtained the consent of any Joint Owner in respect of the grant of the licenses under Section 2.1 and that, as such, EC gives no representation or warranty as to the validity, enforceability or effect of the licenses in any country in the Territory.

2.4 Sublicensing. Any and all sublicenses of the license granted to Tracr under Section 2.1 shall be in writing and shall be subject to, and consistent with, the terms and conditions of this Agreement. Tracr shall be responsible for the compliance of its Sublicensees with the terms and conditions of this Agreement. Within 30 days after execution, Tracr shall provide EC with a full and complete copy of each sublicense agreement (provided that Tracr may redact any confidential information contained therein that is not necessary to ascertain compliance with this Agreement).

2.5 Technology Transfer. Promptly following the Effective Date, EC shall disclose to Tracr (to the extent not previously disclosed) all Know-How available in written, electronic or other recorded form. In addition, during the 12-month period beginning on the Effective Date, EC shall transfer to Tracr, upon Tracr's request from time to time, samples of the Materials, subject to availability.

2.6 Diligence; Progress Reports.

(a) Tracr shall use commercially reasonable efforts and due diligence, itself and/or through one or more Sublicensees, to develop, and to obtain regulatory approval to market, at least one Therapeutic Product in the Tracr Field, as promptly as is reasonably and commercially feasible. Without limiting the generality of the foregoing, Tracr, itself and/or through one or more Affiliated Sublicensees, shall:

(i) use commercially reasonable efforts […***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(ii) use commercially reasonable efforts to commercially exploit the Technology in the Tracr Field (including, without limitation, by sublicensing) within […***…] years of the Effective Date; and

(iii) use commercially reasonable efforts to file, or cause to be filed, a U.S. Investigational New Drug application (or the equivalent thereof in another Major Market) for a Therapeutic Product in the Tracr Field within seven years after the Effective Date; and

(iv) file, or cause to be filed, a U.S. Investigational New Drug application (or the equivalent thereof in another Major Market) for a Therapeutic Product in the Tracr Field within ten years after the Effective Date.

(b) Tracr shall keep EC informed as to progress with respect to the development of Therapeutic Products and Diagnostic Products in the Tracr Field (whether by Tracr or its Sublicensees), including, without limitation, the conduct of clinical trials, regulatory submissions and approvals, manufacturing arrangements, marketing activities and sublicensing, and shall deliver to EC a written annual report summarizing such progress by […***…] of each year, beginning […***…]. For clarification, Tracr's reporting obligations under this Section 2.6(b) are in addition to Tracr's reporting obligations under Section 4.1. The contents of Tracr's progress reports to EC shall be deemed to be Tracr's Confidential Information.

2.7 No Implied License. This Agreement confers no license or rights by implication, estoppel, or otherwise under any patent rights of EC other than the Patent Rights regardless of whether such patent rights are dominant or subordinate to the Patent Rights.

2.8 Reservation of Rights. EC reserves the non-transferable right, without the right to license or sublicense, to use the Technology for her own research purposes and in research collaborations with academic or non-profit partners provided such research is not funded in whole or in part by any commercial sponsor except where EC has discussed any commercial funding with Tracr and Tracr has confirmed in writing that it does not object to EC pursing the relevant research or research collaboration with the disclosed commercial funding. For clarity, as between EC and Tracr, and except as expressly set forth in Section 2.1(b), EC retains all rights to the Technology outside of the Tracr Field.

2.9 Tracr Improvement License Grant-Back in CRISPR Field. Subject to the terms and conditions of this Agreement, Tracr hereby grants to EC an exclusive (even as to Tracr), worldwide, royalty-free license, including the right and obligation to sublicense exclusively and solely to CRISPR (and which CRISPR may further sublicense through multiple tiers of sublicense), under Tracr's patent and other intellectual property rights in Tracr Improvements (***"Tracr Improvement IP"***), to research, develop, make, have made, use, sell, have sold, offer for sale and import Therapeutic Products solely in the CRISPR Field and Diagnostic Products for use with such Therapeutic Products (***"Tracr Improvement License"***). EC shall have the right and the obligation to grant to CRISPR (and only to CRISPR) an exclusive (even as to EC), worldwide, royalty-free sublicense of the Tracr Improvement License pursuant to the CRISPR License, and shall not have the right to grant any other sublicense under the Tracr Improvement License or Tracr Improvement IP or to practice the Tracr Improvement License or Tracr Improvement IP herself. For clarity, Tracr retains the exclusive right to practice

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

and grant licenses under Tracr Improvements and the Tracr Improvement IP for all uses other than research, development, manufacture, use, sale, offer for sale and import of Therapeutic Products in the CRISPR Field and Diagnostic Products for use with such Therapeutic Products, including, without limitation, all uses in the Tracr Field. EC shall not acquire any right to prosecute, maintain, enforce and defend the Tracr Improvement IP.

3. PAYMENTS

3.1 Milestone Payments. Within […***…] after the first achievement by Tracr or a Sublicensee of each of the following milestone events by any Therapeutic Product, Tracr shall provide written notice to EC of the occurrence of such event. Where the milestone event is achieved by Tracr, Tracr shall pay to EC the corresponding milestone payment set forth below. Where the milestone event is achieved by a Sublicensee, Tracr shall pay to EC the difference between the corresponding payment set forth below and the amount payable by Tracr to EC in accordance with Section 3.3 below as a result of Tracr's receipt of any milestone payment from the Sublicensee for the achievement of that milestone event, if the amount payable under Section 3.3 is lower.

Milestone Event	Payment
Initiation of first Phase 1 Trial	CHF […***…]
Initiation of first Phase 2 Trial	CHF […***…]
Initiation of first Phase 3 Trial	CHF […***…]
Approval of first NDA/BLA in first Major Market	CHF […***…]

Each of the foregoing milestone payments shall be payable only one time per Therapeutic Product (regardless of the number of times any Therapeutic Product achieves such milestone or the number of indications for which such Therapeutic Product is developed).

3.2 Royalties. Tracr shall pay to EC a royalty equal to […***…] of Net Sales of Therapeutic Products and Diagnostic Products by Tracr and its Sublicensees. Only one royalty payment shall be due under this Agreement with respect to a sale of a Therapeutic Product or Diagnostic Product, regardless of the number of Valid Claims covering such Therapeutic Product or Diagnostic Product. Royalties will be payable on a Therapeutic Product-by-Therapeutic Product or Diagnostic Product-by-Diagnostic Product and country-by-country basis from the date of first commercial sale of a Therapeutic Product or Diagnostic Product in a country until the expiration of the last-to-expire Valid Claim of the Patent Rights covering such Therapeutic Product or Diagnostic Product in that country.

3.3 Sharing of Sublicensing Revenues. Tracr shall pay to EC […***…] of Sublicensing Revenues. Payments under this Section 3.3 with respect to Sublicensing Revenues received under a sublicense agreement with a given Third Party Sublicensee shall be payable until the expiration of the last-to-expire Valid Claim of the Patent Rights in all countries in which the sublicense under such Patent Rights has been granted.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.4 Payment by Affiliated Sublicensees. At Tracr's option, any sublicense agreement between Tracr and an Affiliated Sublicensee may provide for such Affiliated Sublicensee to pay directly to EC: (a) milestone payments in the amounts specified in Section 3.1 with respect to the achievement of the corresponding milestone events set forth in Section 3.1 by Therapeutic Products developed by or on behalf of such Affiliated Sublicensee; (b) royalties on Net Sales by such Affiliated Sublicensee (and its Sublicensees) of Therapeutic Products and Diagnostic Products at the rate set forth in Section 3.2; and (c) […***…] of the total Sublicensing Revenues received by such Affiliated Sublicensee; in each case, provided that Tracr shall remain responsible and liable to EC for compliance with Tracr's obligations under Sections 3.1, 3.2 and 3.3, respectively, with respect to such Affiliated Sublicensee.

3.5 Licenses Under Other EC Technology. The parties acknowledge that Tracr may, in the future, wish to obtain from EC licenses to one or more other inventions and discoveries (whether or not patentable) made by EC, either solely or with one or more co-inventors, including patent and other intellectual property rights covering such inventions and discoveries (collectively, ***"New EC Technology"***). The parties also acknowledge that EC is not under any obligation to grant licenses or any other right, title or interest in or to any New EC Technology to Tracr but shall consider any request from Tracr to obtain a license on a case by case basis, […***…]. Tracr and EC hereby agree that in the event that Tracr or its Sublicensees develops or commercializes any Therapeutic Product in the Tracr Field that is also covered by New EC Technology licensed by EC directly to Tracr under one or more separate license agreements (each, a ***"New License Agreement"***):

(a) in the case of a Therapeutic Product covered by New EC Technology, […***…] milestone payments shall be due and payable to EC with respect to such Therapeutic Product, which shall be the […***…]; and

(b) only […***…] shall be due and payable to EC with respect to any sale of a Therapeutic Product covered by any New EC Technology, which shall be calculated […***…].

Similarly, if Tracr or an Affiliated Sublicensee grants any sublicense under both the Technology and the New EC Technology, […***…] shall be due and payable to EC with respect to any item of sublicensing revenues received by Tracr or an Affiliated Sublicensee for such sublicense, which shall be calculated at the higher of (i) the rate set forth in Section 3.3 and (ii) the rate set forth in the New License Agreement(s).

Notwithstanding the foregoing, Tracr acknowledges that, to the extent EC is obligated to assign any or all of her rights in or to New EC Technology to a Third Party (*e.g.*, the institution of which she is an employee at the time such New EC Technology is created), EC may not have the right to grant Tracr a license (or an exclusive license) under such New EC Technology. Tracr further acknowledges that in such event, if Tracr wishes to obtain a license under such Third Party assignee's interest in such New EC Technology, the amounts payable by Tracr to such Third Party assignee would be negotiated between Tracr and such Third Party assignee and, if such Third Party assignee were willing to grant Tracr a license, such license would not be subject to the foregoing provisions of this Section 3.5.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4. PAYMENTS; REPORTS; AUDITS

4.1 Payment; Reports. Royalties under Section 3.2 and payments with respect to Sublicensing Revenues under Section 3.3 (collectively, ***"Revenue-Sharing Payments"***), including in each case any such Revenue-Sharing Payments made by an Affiliated Sublicensee to EC pursuant to Section 3.4, shall be calculated and reported for each calendar quarter and shall be paid within […***…] after the end of the calendar quarter. No later than the date any Revenue-Sharing Payments for a calendar quarter are due in accordance with the preceding sentence, Tracr and/or one or more Affiliated Sublicensees shall deliver to EC a report of (a) Net Sales of Therapeutic Products and Diagnostic Products by Tracr and Sublicensees and (b) Sublicensing Revenues received by Tracr and Affiliated Sublicensees in sufficient detail to permit confirmation of the accuracy of the Revenue-Sharing Payments made, including (i) gross sales and Net Sales of Therapeutic Products on a Therapeutic Product-by-Therapeutic Product and country-by-country basis, (ii) gross sales and Net Sales of Diagnostic Products on a Diagnostic Products on a Diagnostic Product-by-Diagnostic Product and country-by-country basis, (iii) the royalty payable, (iv) Sublicensing Revenues received on a Third Party Sublicensee-by-Third Party Sublicensee basis, and (v) the exchange rates used to calculate Revenue-Sharing Payments. All reports delivered to EC pursuant to this Section 4.1 shall be deemed Confidential Information of Tracr.

4.2 Manner and Place of Payment; Exchange Rate. All payment amounts specified in this Agreement are stated, and all payments hereunder shall be payable, in Swiss Francs (CHF). With respect to each quarter, whenever conversion of payments from any foreign currency into CHF shall be required, such conversion shall be made using the applicable exchange rate for such currency used throughout Tracr's or the applicable Affiliated Sublicensee's accounting system for the applicable quarter. All payments owed under this Agreement shall be made by wire transfer to a bank and account designated in writing by EC, unless otherwise specified in writing by EC.

4.3 Income Tax Withholding. EC will pay any and all taxes levied on account of any payments made to her under this Agreement. If any taxes are required to be withheld by Tracr or an Affiliated Sublicensee from any payment made to EC under this Agreement, Tracr or such Affiliated Sublicensee shall (a) deduct such taxes from the payment made to EC, (b) timely pay the taxes to the proper taxing authority, and (c) send proof of payment to EC and certify its receipt by the taxing authority within […***…] following such payment.

4.4 Audits. During the Term and for a period of […***…] thereafter, Tracr shall keep, and shall cause Sublicensees to keep, complete and accurate records pertaining to the sale or other disposition of Therapeutic Products and Diagnostic Products by Tracr and Sublicensees, and shall keep, and shall cause its Affiliated Sublicensees to keep, complete and accurate records pertaining to the receipt of Sublicensing Revenues by Tracr and its Affiliated Sublicensees, each in sufficient detail to permit EC to confirm the accuracy of all Revenue-Sharing Payments. EC shall have the right to cause an independent, certified public accountant reasonably acceptable to Tracr to audit such records to confirm Net Sales, Sublicensing Revenues and Revenue-Sharing Payments for a period covering not more than the preceding […***…] years. Tracr (or the Affiliated Sublicensee to be audited) may require such accountant to execute a reasonable confidentiality agreement prior to commencing the audit. Such audits may be conducted during

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

normal business hours upon reasonable prior written notice to Tracr, but no more frequently than once per year. No accounting period shall be subject to audit more than […***…] by EC. Prompt adjustments (including remittances of underpayments or overpayments disclosed by such audit) shall be made by the parties to reflect the results of such audit. […***…] shall bear the full cost of such audit unless such audit discloses an underpayment of […***…] or more of the amount of Revenue-Sharing Payments due under this Agreement, in which case Tracr shall bear the full cost of such audit. All records, documentation and other information made available by Tracr or an audited Affiliated Sublicensee to such independent auditor, or by Tracr, an audited Affiliated Sublicensee or such independent auditor to EC, pursuant to this Section 4.4 shall be deemed Confidential Information of Tracr.

4.5 Late Payments. In the event that any payment due under this Agreement is not made when due, such payment shall accrue interest, calculated on a daily basis, at the […***…] for the period from the due date for payment until the date of actual payment; *provided, however,* that in no event shall such rate exceed the maximum legal annual interest rate. The payment of such interest shall not limit EC from exercising any other rights she may have as a consequence of the lateness of any payment.

5. PATENT MATTERS

5.1 Joint Owners' Rights.

(a) The parties acknowledge that the Joint Owners and EC share rights to prosecute and maintain the Patent Rights, as confirmed by that certain letter from the U.S. Patent and Trademark Office (***"USPTO"***) to Regents and Regents' outside patent counsel dated June 17, 2013, granting EC's petition, filed on June 7, 2013, requesting that the USPTO accept a power of attorney appointing the attorneys of Goodwin Procter LLP as EC's own representatives and attorneys of record with respect to the Patent Application.

(b) Accordingly, the parties further acknowledge and agree that the following provisions of this Article 5 pertain only to the allocation between EC and Tracr of EC's rights to prosecute and maintain the Patent Rights, and not to the Joint Owners' rights to prosecute and maintain the Patent Rights and are granted by EC only to the extent that EC is able to grant such rights. The parties also acknowledge that EC and the Joint Owners have not, as at the Effective Date, reached any agreement between them concerning the prosecution, maintenance and/or enforcement of the Patent Rights and that the Joint Owners have not given EC any authority to undertake any of these activities independently.

5.2 ERS and CRISPR.

(a) Tracr acknowledges that concurrently with the execution of this Agreement:

(i) EC and ERS are entering into a license agreement pursuant to which EC has granted to ERS […***…];

(ii) EC and CRISPR are entering into a license agreement pursuant to which EC has granted to CRISPR an exclusive license under EC's joint ownership interest in and

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

to the Technology to research, develop, make, have made, use, sell, have sold, offer for sale and import Therapeutic Products in the CRISPR Field and Diagnostic Products for use with such Therapeutic Products, in the form attached hereto as **Exhibit D** (the ***"CRISPR License"***), and has delegated to CRISPR certain of her rights as joint owner of the Patent Rights with respect to prosecution, maintenance, defense and enforcement of the Patent Rights thereunder; and

(iii) the terms of this Agreement, the ERS License and the CRISPR License do not conflict, including, without limitation, the respective license grants.

(b) Subject to EC's compliance with Section 5.2(c) below, CRISPR shall be an intended third party beneficiary of the rights conferred on CRISPR under Sections 5.3, 5.4 and 5.5 (excluding Section 5.5(d)) of this Agreement with the right under the Contracts (Rights of Third Parties) Act 1999 to exercise such rights under the provisions of such Sections to the extent permitted by the CRISPR License and standing to enforce the provisions of such Sections against Tracr.

(c) EC shall neither amend nor modify the CRISPR License in any manner that would diminish the rights or interests of Tracr under the CRISPR License as set forth therein as of the Effective Date; except with the prior written consent of Tracr.

5.3 Patent Prosecution and Maintenance. For purposes of this Section 5.3, a party's right to prosecute and maintain a patent application or patent shall be deemed to include, without limitation, the right to control any interference, reexamination, reissue, opposition, derivation, *inter partes* review, post-grant review, revocation, nullification, cancellation or other post-grant proceeding (each, a ***"Patent Proceeding"***) with respect to such patent application or patent, and the right to seek patent term restorations, supplementary protection certificates and other forms of patent term extensions with respect thereto.

(a) Tracr acknowledges that EC has granted CRISPR the first right, but not the obligation, to control and manage the preparation, filing, prosecution and maintenance of the CRISPR Patent Rights and Overlapping Patent Rights, at its sole cost and expense and by counsel of its own choice.

(b) If CRISPR notifies EC and Tracr that CRISPR desires to abandon or cease prosecution or maintenance of any patent application or patent within the CRISPR Patent Rights in any country, Tracr may, by written notice to EC and CRISPR, elect to continue prosecution and/or maintenance of any such patent application or patent, at its cost and expense and choice of counsel.

5.4 Cooperation. Each party agrees to cooperate fully in the preparation, filing, prosecution and maintenance of CRISPR Patent Rights and Overlapping Patent Rights under Section 5.3. Such cooperation includes, but is not limited to: (i) executing all papers and instruments, or requiring its employees or contractors, to execute such papers and instruments, so as to enable the other party or CRISPR to apply for and to prosecute patent applications in any country as permitted by Section 5.3, including, without limitation, any power of attorney or similar instrument appointing the attorneys of any law firm selected by CRISPR as EC's representatives and attorneys of record with respect to the CRISPR Patent Rights or Overlapping

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Patent Rights and any petition or submission to the USPTO or any foreign patent office requesting that the USPTO or such foreign patent office accept the attorneys of such CRISPR-selected law firm as EC's representatives and attorneys of record with respect to the Patent Rights; (ii) promptly informing the other party and CRISPR of any matters coming to such party's attention that may affect the preparation, filing, prosecution or maintenance of Patent Rights; and (iii) providing, at the expense of the party (or CRISPR, if applicable) controlling and managing the preparation, filing, prosecution and maintenance of the Patent Rights any requested evidence or testimony, whether oral or written, in connection with the prosecution and maintenance of the Patent Rights, including any Patent Proceedings. Tracr shall be responsible for paying all EC's costs in assisting and cooperating with Tracr under this Section 5.4. Tracr acknowledges that any preparation, filing, prosecution and maintenance of Patent Rights will require co-operation between Tracr and the Joint Owners.

5.5 Infringement by Third Parties.

(a) In the event that either EC or Tracr becomes aware of any infringement or threatened infringement of the CRISPR Patent Rights in the CRISPR Field or Tracr Field by a Third Party of any Patent Right, such party shall promptly notify the other party in writing to that effect. Tracr acknowledges that, to the extent that it is legally permitted to do so, CRISPR has the first right to bring and control any action or proceeding with respect to infringement of any CRISPR Patent Right within the CRISPR Field or the Tracr Field, at its own expense and by counsel of its own choice, subject to Section 5.5(f) of this Agreement and Section 5.5(e) of the CRISPR License. If the infringement of the CRISPR Patent Rights relates to the Tracr Field, Tracr shall have the right if it chooses, to join the proceedings on its own accord, at its own expense, to be represented in any such action by counsel of its own choice, and to review and comment on any papers filed during such action. EC may, if she wishes, delegate the performance of any participation rights and activities under this Section 5.5(a) to ERS.

(b) If the infringement of the CRISPR Patent Rights is solely in the Tracr Field and not in the CRISPR Field, and CRISPR fails to bring any such action or proceeding with respect to infringement in the Tracr Field within (i) […***…] following the notice of alleged infringement or (ii) […***…] before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such actions, whichever comes first, then Tracr shall have the right to bring and control any such action solely with respect to such infringement in the Tracr Field at its own expense and by counsel of its own choice. EC will at Tracr's expense join and cooperate fully in such action if EC is required to do so by Tracr and shall request that CRISPR shall join and cooperate fully in such action if and to the extent appropriate, all at Tracr's expense. Tracr shall keep EC and CRISPR fully informed and up to date with respect to such infringement actions and shall take into account any reasonable suggestions made by EC or CRISPR. EC shall have the right if she chooses, to join the proceedings on her own accord, at her own expense, to be represented in any such action by counsel of her own choice, and to review and comment on any papers filed during such action. EC may, if she wishes, delegate the performance of any participation rights and activities under this Section 5.5(b) to ERS.

(c) Tracr shall notify EC within […***…] of becoming entitled to bring an action or proceeding pursuant to Section 5.5(b) as to whether or not Tracr will bring such action or proceeding. If Tracr notifies EC that Tracr will not bring such an action, or if Tracr fails to

provide any notice to EC within such period, then EC shall have the right to bring and control any such action at her own expense and by counsel of her own choice. Tracr will at EC's expense join and cooperate fully in such action if Tracr is required to do so by EC. EC shall keep Tracr and CRISPR fully informed and up to date with respect to such infringement actions and shall take into account any reasonable suggestions made by Tracr or CRISPR. Each of Tracr and CRISPR shall have the right if it chooses, to join the proceedings on its own accord, at its own expense, to be represented in any such action by counsel of its own choice, and to review and comment on any papers filed during such action. Notwithstanding any other provision of this Article 5 to the contrary, EC's rights under this Section 5.5(c) shall be exercisable only by EC and may not be extended to ERS.

(d) In the event EC brings any infringement action in accordance with Section 5.5(c), Tracr shall cooperate fully, including, if required to bring such action, the furnishing of a power of attorney or being named as a party.

(e) Neither party shall have the right to settle any patent infringement litigation under this Section 5.5 without the prior written consent of the other party, which shall not be unreasonably withheld. Except as otherwise agreed by the parties in connection with a cost-sharing arrangement, any recovery realized by a party as a result of any action or proceeding pursuant to this Section 5.5, whether by way of settlement or otherwise, after reimbursement of any litigation expenses of the parties, shall be retained by the party that brought and controlled such action for purposes of this Agreement; *provided, however,* that any recovery realized by Tracr as a result of any action brought and controlled by Tracr pursuant to Section 5.5(b) with respect to infringement in the Tracr Field, after reimbursement of the parties' litigation expenses, shall be treated as Sublicensing Revenues for purposes of Section 3.3.

(f) To the extent that any infringement of the CRISPR Patent Rights or the Overlapping Patent Rights relates to both the CRISPR Field and the Tracr Field, Tracr shall agree a coordinated approach with CRISPR, and Tracr and CRISPR shall cooperate with respect to any enforcement proceedings. In respect of any proceedings brought by Tracr and CRISPR in cooperation as referred to in this Section 5.5(f), Tracr shall keep EC fully informed and up to date and shall take into account any reasonable suggestions made by EC.

(g) Defense of the validity or enforceability of any claim of the CRISPR Patent Rights asserted in an infringement action under this Section 5.5 shall be at the sole expense and control of the party bringing the infringement action, subject to the provisions of Article 9; and *provided, however,* that each party shall reasonably inform the other and CRISPR and consider the other's and CRISPR's input.

(h) For clarity, except as expressly set forth in Section 5.5(f), Tracr's enforcement rights under this Section 5.5 apply solely to CRISPR Patent Rights, and Tracr shall have no right to enforce Overlapping Patent Rights (other than in cooperation with CRISPR pursuant to Section 5.5(f)) or ERS Patent Rights.

5.6 Third Party Infringement Claims. Each party shall promptly notify the other party in writing of any allegation by a Third Party that the activity of either of the parties pursuant to this Agreement infringes or may infringe the intellectual property rights of such

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Third Party. EC shall have the sole right to control any defense of any such claim involving alleged infringement of Third Party rights by EC's activities at her own expense and by counsel of her own choice. Tracr shall have the sole right to control any defense of any such claim involving alleged infringement of Third Party rights by Tracr's activities at its own expense and by counsel of its own choice. Neither party shall have the right to settle any patent infringement litigation under this Section 5.6 in a manner that diminishes the rights or interests of the other party or of CRISPR without the written consent of such other party and CRISPR (which shall not be unreasonably withheld).

5.7 Tracr Affiliates and Assignees. The parties agree that, at Tracr's discretion, Tracr's rights under this Article 5 may be exercised on behalf of Tracr by any Affiliated Sublicensee designated by Tracr from time to time.

5.8 Legal Inability to Exercise Rights. Tracr acknowledges that EC shall not be liable to Tracr if Tracr is unable as a matter of law to control filing, prosecution, maintenance, enforcement and defense of one or more of the Patent Rights in any country.

6. REPRESENTATIONS AND WARRANTIES; DISCLAIMER; LIMITATION OF LIABILITY

6.1 Mutual Representations and Warranties. Tracr represents and warrants to EC that: (a) Tracr is duly authorized to execute and deliver this Agreement and to perform Tracr's obligations hereunder; and (b) this Agreement is legally binding upon Tracr, enforceable in accordance with its terms, and does not conflict with any agreement, instrument or understanding, oral or written, to which Tracr is a party or by which Tracr may be bound. EC represents and warrants that this Agreement is legally binding upon EC, enforceable in accordance with its terms (subject to and without prejudice to the limitations in Section 2.3 and Section 5.1(b)) and does not conflict with any agreement, instrument or understanding, oral or written, to which EC is a party or by which EC may be bound.

6.2 EC Representations and Warranties. EC represents and warrants to Tracr as of the Effective Date that: (a) EC has not assigned, or agreed to assign, to Regents, Vienna or any other Third Party her interest in the Patent Rights; (b) EC has not licensed, assigned, transferred or otherwise disposed, or offered or agreed to assign, transfer or otherwise dispose, of any of her interest in or to, nor entered or agreed to enter into any contracts in relation to her interest in or to, any Patent Rights in the Tracr Field, and EC has not created or allowed to be created any lien or encumbrance on her interest in any Patent Rights in the Tracr Field (other than any of the foregoing that has expired or been terminated prior to the Effective Date and is of no further force or effect); and (c) EC has not received any notice alleging that the practice of the Technology infringes or misappropriates, or may infringe or misappropriate, any intellectual property rights of any Third Party. EC further represents and warrants to Tracr that she has obtained legal advice of independent legal counsel as to the legal effect of signing this Agreement and as regards the extent of her liability and the obligations which she is undertaking by signing this Agreement. In evidence of the foregoing, EC shall have delivered to Tracr, on or before the Effective Date, a Certificate of Independent Legal Advice in substantially the form set forth in **Exhibit E** hereto, executed by EC's legal advisor.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.3 EC Covenants. During the Term, EC hereby covenants: (a) not to assign, transfer or otherwise dispose, or offer or agree to assign, transfer or otherwise dispose, of any interest in or to, and not to enter, or offer or agree to enter, into any contract in relation to, any Technology in the Tracr Field, other than this Agreement and any Services Relationship with Tracr; and (b) not to create any lien or encumbrance on any Technology in the Tracr Field.

6.4 Disclaimer. Except as expressly set forth in this Agreement, EACH PARTY EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF PATENTS, NON-INFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICES. Without limiting the generality of the foregoing, EC specifically disclaims any express or implied warranty:

(a) as to the validity, enforceability or scope of any Patent Right; or

(b) that the exploitation of the Patent Rights or Technology will be successful.

6.5 Limitation of Liability.

(a) IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION DAMAGES FOR LOST PROFITS OR EXPECTED SAVINGS) ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR ITS SUBJECT MATTER; *provided, however,* that this Section 6.5 shall not be construed to limit Tracr's indemnification obligations under Article 9. No provision of this Agreement shall limit a party's liability for death or personal injury caused by its negligence or for fraud.

(b) THE TOTAL AGGREGATE LIABILITY OF EC IN RESPECT OF ANY CLAIM AND ALL CLAIMS ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT AND/OR ITS SUBJECT MATTER, INCLUDING TORTIOUS CLAIMS, WHICH ARE BROUGHT AGAINST EC IN ANY CALENDAR YEAR SHALL NOT EXCEED AN AMOUNT EQUAL TO THE TOTAL AMOUNT THAT EC RECEIVES FROM TRACR UNDER ARTICLE 3 OF THIS AGREEMENT AND UNDER ANY SERVICES RELATIONSHIP IN THE CALENDAR YEAR IN WHICH THE CLAIM OR CLAIMS ARE BROUGHT AGAINST EC.

7. CONFIDENTIALITY

7.1 Confidential Information. ***"Confidential Information"*** shall mean all scientific, regulatory, marketing, financial, and commercial information or data, whether communicated in written, oral, graphic, electronic or visual form, that is provided by one party (the ***"Disclosing Party"***) to the other party (the ***"Receiving Party"***) in connection with this Agreement. Except as expressly set forth in this Agreement or as otherwise agreed in writing by the parties, the Receiving Party shall keep strictly confidential, in accordance with the terms and conditions of this Article 7, the Disclosing Party's Confidential Information, shall use the Disclosing Party's

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Confidential Information solely as expressly authorized by this Agreement, and shall not disclose the Confidential Information to any Third Party without the prior written consent of the Disclosing Party. The Receiving Party shall use at least the same degree of care to protect the Disclosing Party's Confidential Information as the Receiving Party would use to protect the Receiving Party's own Confidential Information, but no less than reasonable care.

7.2 Exceptions. Confidential Information of the Disclosing Party shall not include information that the Receiving Party can demonstrate by competent evidence: (a) was in the public domain at the time of disclosure by the Disclosing Party; (b) later became part of the public domain through no act or omission of the Receiving Party in breach of this Agreement; (c) is lawfully disclosed to the Receiving Party on a non-confidential basis by a Third Party having the right to disclose it; or (d) was already known by the Receiving Party at the time of receiving such information from the Disclosing Party, as evidenced by the Receiving Party's pre-existing written records.

7.3 Authorized Disclosure. The Receiving Party may disclose Confidential Information as expressly permitted by this Agreement, or if and to the extent such disclosure is reasonably necessary in the following instances:

(a) filing, prosecuting or maintaining the Patent Rights in accordance with this Agreement;

(b) enforcing the Receiving Party's rights under this Agreement;

(c) prosecuting or defending litigation;

(d) complying with applicable court orders or governmental regulations;

(e) disclosure to the Receiving Party's financial, legal and other advisors on a need-to-know basis as necessary for such advisors to provide financial, legal or business advice to the Receiving Party regarding this Agreement or its subject matter, provided that such advisors are bound by non-use and non-disclosure obligations no less restrictive than those set forth in this Agreement, whether by written agreement or by applicable professional ethical obligations;

(f) in the case of Tracr, disclosure to Tracr's Affiliates (including, without limitation, Affiliated Sublicensees), provided that Confidential Information so disclosed shall remain subject to this Article 7;

(g) in the case of Tracr and Affiliated Sublicensees, disclosure to Third Party Sublicensees and *bona fide* potential Third Party Sublicensees, on the condition that each such Third Party agrees to be bound by confidentiality and non-use obligations that are no less stringent than the terms of this Agreement;

(h) in the case of Tracr (and Sublicensees), practicing the license granted hereunder or preparing and submitting regulatory filings with respect to Therapeutic Products and/or Diagnostic Products; and

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(i) in the case of Tracr and Affiliated Sublicensees, disclosure to Third Parties in connection with due diligence or similar investigations by such Third Parties and disclosure to potential Third Party investors in confidential financing documents, provided, in each case, that any such Third Party agrees to be bound by reasonable obligations of confidentiality and non-use.

Notwithstanding the foregoing, in the event the Receiving Party is required to make a disclosure of the other party's Confidential Information pursuant to Section 7.3(c) or Section 7.3(d), the Receiving Party shall, except where impracticable, give reasonable advance notice to the Disclosing Party of such disclosure and use efforts to secure confidential treatment of such information at least as diligent as such party would use to protect such party's own confidential information, but in no event less than reasonable efforts. In any event, the Receiving Party agrees to take all reasonable action to avoid unauthorized disclosure and unauthorized use of Confidential Information.

7.4 Confidentiality of Agreement. Except as otherwise provided in this Article 7, each party agrees not to disclose to any Third Party the terms or existence of this Agreement without the prior written consent of the other party hereto, except that each party may make such disclosure to the extent permitted under Section 7.3 and, after the initial announcement of this Agreement pursuant to Section 7.6, each party may disclose the terms of this Agreement that have previously been made public as contemplated by Section 7.6. Tracr acknowledges that EC is entitled to disclose the provisions of this Agreement to ERS and to CRISPR, on the condition that each of them agrees to be bound by confidentiality and non-use obligations that are no less stringent than the terms of this Agreement.

7.5 Publications. EC shall be free to make publications and presentations regarding the Technology, including oral presentations and abstracts, provided such publications and presentations do not contain or disclose Confidential Information of Tracr. Solely during the five-year period beginning on the Effective Date:

(a) in the case of any proposed oral presentation by EC regarding the Technology, EC shall inform Tracr of EC's proposed oral presentation in advance thereof; and

(b) Tracr shall have the right to review any written material proposed for publication by EC, such as by manuscript or abstract. Before any such written material is submitted for publication, EC shall deliver a reasonably complete draft to Tracr a reasonable period (at least […***…], but, in any event, no fewer than […***…]) prior to submitting the material to a publisher or initiating any other disclosure. If Tracr identifies any Confidential Information of Tracr contained in such written material, EC shall comply with Tracr's request to delete references to Tracr's Confidential Information in any such material.

Tracr (and its Sublicensees) shall at all times be free to make publications and presentations, including oral presentations and abstracts, relating to the development and commercialization of Therapeutic Products in the Tracr Field and Diagnostic Products for use with such Therapeutic Products and other commercial exploitation of the Technology by or on behalf of Tracr and its Sublicensees.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

7.6 Publicity. At Tracr's option, Tracr may issue an initial press release announcing this Agreement in form and substance reasonably acceptable to EC. It is further acknowledged that a party may desire or be required to issue one or more subsequent press releases relating to this Agreement or activities hereunder. The parties agree to consult with each other reasonably and in good faith with respect to the text and timing of any such press release prior to the issuance thereof, provided that EC may not unreasonably withhold consent to such releases, and that Tracr may issue such press releases as it determines, based on advice of counsel, are reasonably necessary to comply with applicable law or with the requirements of any stock exchange on which securities issued by Tracr or its Affiliated Sublicensees are traded. In the event of a required public announcement, to the extent practicable under the circumstances, the party making such announcement shall use commercially reasonable efforts to provide the other party with a copy of the proposed text of such announcement sufficiently in advance of the scheduled release to afford such other party a reasonable opportunity to review and comment upon the proposed text.

8. TERM; TERMINATION

8.1 Term. The term of this Agreement (the ***"Term"***) shall begin on the Effective Date and, unless earlier terminated in accordance with this Article 8, shall expire upon expiration of all Revenue-Sharing Payment obligations of Tracr under this Agreement.

8.2 Termination by Tracr At Will. Tracr shall have the right to terminate this Agreement at will at any time upon […***…] written notice to EC.

8.3 Termination for Breach. A party shall have the right to terminate this Agreement upon written notice to the other party if such other party is in material breach of this Agreement and, if capable of remedy, has not cured such breach within […***…] after notice from the terminating party requesting cure of the breach. Any such termination shall become effective at the end of such […***…] unless the breaching party has cured such breach prior to the end of such period. Any right to terminate under this Section 8.3 shall be stayed and the cure period tolled in the event that, during any cure period, the party alleged to have been in material breach shall have initiated dispute resolution in accordance with Article 10 with respect to the alleged breach, which stay and tolling shall continue until such dispute has been resolved in accordance with Article 10.

8.4 Termination for Patent Challenge. EC shall have the right to terminate this Agreement immediately upon written notice to Tracr if Tracr commences any interference or opposition proceeding with respect to, challenges the validity or enforceability of, or opposes any extension of, or the grant of a supplementary protection certificate with respect to, any of the Patent Rights.

8.5 Consequences of Expiration or Termination.

(a) Expiration. Upon expiration of this Agreement pursuant to Section 8.1, the license granted to Tracr under Section 2.1 shall survive such expiration and become royalty-free, fully-paid, non-exclusive, irrevocable and perpetual.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) Termination. Upon any termination of this Agreement pursuant to Section 8.2, Section 8.3 or Section 8.4, the license granted to Tracr under Section 2.1 shall terminate and revert to EC. Notwithstanding the foregoing, solely in the event of termination of this Agreement by Tracr or EC pursuant to Section 8.3 or by EC pursuant to Section 8.4 (but not termination of this Agreement by Tracr pursuant to Section 8.2):

(i) any sublicense granted by Tracr to any Affiliated Sublicensee in accordance with Section 2.4 that is then in effect (together with any and all further sublicenses granted by such Affiliated Sublicensee to any Third Party Sublicensee thereunder) shall remain in full force and effect, provided that such Affiliated Sublicensee: (A) is not then in material breach of its sublicense agreement; and (B) agrees to be bound to EC as such Affiliated Sublicensee's direct licensor under the terms and conditions of this Agreement (and not such sublicense agreement) as applicable to the Therapeutic Products and Diagnostic Products which are the subject of the sublicense agreement; provided that such Affiliated Sublicensee shall agree in writing that in no event shall EC be liable to such Affiliated Sublicensee for any actual or alleged breach of such sublicense agreement by Tracr. In addition, to the extent that any such Affiliated Sublicensee was exercising Tracr's rights under Article 5 at the time of termination of this Agreement as contemplated by Section 5.7, such Affiliated Sublicensee may continue to exercise such rights after such termination subject to the terms and conditions of this Agreement; and

(ii) any sublicense granted by Tracr directly to any Third Party Sublicensee in accordance with Section 2.4 that is then in effect (together with any and all further sublicenses granted by such Third Party Sublicensee to any further Third Party Sublicensee thereunder) shall remain in full force and effect, provided that such Third Party Sublicensee: (A) is not then in material breach of its sublicense agreement; and (B) agrees to be bound to EC as such Third Party Sublicensee's direct licensor under the terms and conditions of the sublicense agreement; provided that (1) such Third Party Sublicensee shall agree in writing that in no event shall EC be liable to such Third Party Sublicensee for any actual or alleged breach of such sublicense agreement by Tracr, (2) such sublicense agreement shall be subordinate and comply in all respects to the applicable provisions of this Agreement, and (3) EC shall not have any obligations to such Third Party Sublicensee other than EC's obligations to Tracr as set forth herein.

(c) Inventory. Upon any termination of this Agreement pursuant to Section 8.2, Section 8.3, Section 8.4, or Section 8.5, Tracr, and any Sublicensee whose sublicense was in effect as of immediately prior to such termination but did not remain in effect after termination as contemplated by Section 8.5(b)(i) or Section 8.5(b)(ii), as applicable, shall be entitled to finish any work-in-progress and to sell any completed inventory of Therapeutic Products and Diagnostic Products which remain on hand as of the date of the termination, for up to six (6) months after termination, subject to payment of royalties to EC in accordance with Section 3.2.

(d) Return of Confidential Information. Within […***…] following the expiration or termination of this Agreement, each party shall return to the other party, or destroy, upon the written request of the other party, any and all Confidential Information of the other party in such party's possession; *provided, however* that each party may retain one copy of the

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

other party's Confidential Information in such party's legal archives for the sole purpose of monitoring compliance with such party's obligations, enforcing such party's rights hereunder, and exercising such party's surviving rights hereunder.

8.6 Surviving Obligations. Neither expiration nor termination of this Agreement shall relieve either party of any obligation accruing prior to such expiration or termination. In addition, Section 3.2 (for the period specified in Section 8.5(c)) and Sections 2.1(c), 2.9, 4.3, 4.4, 4.5, 5.8, 6.4, 6.5, 7.1, 7.2, 7.3, 7.4, 8.5 and 8.6 and Articles 9, 10 and 11 shall survive any expiration or termination of this Agreement.

9. INDEMNIFICATION

9.1 Indemnification by Tracr. Tracr hereby agrees to save, defend, indemnify and hold harmless EC from and against any and all losses, damages, liabilities, expenses and costs, including reasonable legal expense and attorneys' fees (***"Losses"***), to which she may become subject as a result of any claim, demand, action or other proceeding by any person to the extent such Losses arise out of: (a) the gross negligence or willful misconduct of Tracr, its Affiliates and/or their respective officers, directors, employees, consultants and agents; (b) the breach by Tracr of any warranty, representation, covenant or agreement made by Tracr in this Agreement; (c) the practice by Tracr or Sublicensees of the license granted hereunder; or (d) the development, manufacture, use, handling, storage, sale or other disposition of any Therapeutic Product or Diagnostic Product by or on behalf of Tracr or Sublicensees; in each case, except to the extent such Losses result from the gross negligence or willful misconduct of EC or the breach by EC of any warranty, representation, covenant or agreement made by EC in this Agreement.

To the extent not already covered by Tracr's indemnification obligations under the first paragraph of this Section 9.1, Tracr further agrees hereby to save, defend, indemnify and hold harmless EC from and against any and all Losses to which she may become subject as a result of any claim, demand, action or other proceeding by any person (including without limitation Regents, Vienna or any person to whom either of them may have granted, or purported to grant, rights under the Patent Rights) relating to or arising out of: (i) EC entering into this License Agreement with Tracr and her grant of rights to Tracr; (ii) the exercise by Tracr of any of its rights under this Agreement; (iii) the filing, prosecution, maintenance, enforcement and/or defense by Tracr of the Patent Rights in relation to the Tracr Field; or (iv) EC bringing an infringement action under the Patent Rights or other Patent Proceedings at the request, under the direction, and in accordance with the instructions, of Tracr; in each case, except to the extent such Losses result from the gross negligence or willful misconduct of EC or the breach by EC of any warranty, representation, covenant or agreement made by EC in this Agreement.

9.2 Control of Defense. In the event EC seeks indemnification under Section 9.1, EC shall inform Tracr of a claim as soon as reasonably practicable after EC receives notice of the claim (it being understood and agreed, however, that the failure by EC to give notice of a claim as provided in this Section 9.2 shall not relieve Tracr of Tracr's indemnification obligation under this Agreement except and only to the extent that Tracr is actually damaged as a result of such failure to give notice), shall permit Tracr to assume direction and control of the defense of the claim (including the right to settle the claim solely for monetary consideration) using counsel reasonably satisfactory to EC, and shall cooperate as requested (at the expense of Tracr) in the

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

defense of the claim. If Tracr does not assume control of such defense within […***…] after receiving notice of the claim from EC, EC shall control such defense and, without limiting Tracr's indemnification obligations, Tracr shall reimburse EC for all costs, including reasonable attorney fees, incurred by EC in defending herself within […***…] after receipt of any invoice therefor from EC. The party not controlling such defense may participate therein at such party's own expense. The party controlling such defense shall keep the other party advised of the status of such action, suit, proceeding or claim and the defense thereof and shall consider recommendations made by the other party with respect thereto. EC shall not agree to any settlement of such action, suit, proceeding or claim without the prior written consent of Tracr, which shall not be unreasonably withheld, delayed or conditioned. Tracr shall not agree to any settlement of such action, suit, proceeding or claim or consent to any judgment in respect thereof that does not include a complete and unconditional release of EC from all liability with respect thereto, that imposes any liability or obligation on EC, that acknowledges fault by EC or that affects the rights of EC in the Patents Rights without the prior written consent of EC.

9.3 Insurance. During the term of this Agreement, Tracr shall maintain, and shall require Sublicensees to maintain, insurance of such types and in such amounts as are commercially reasonable in light of their respective activities hereunder.

9.4 English Law. No provision of this Agreement shall operate to:-

(a) exclude any provision implied into this Agreement by English law and which may not be excluded by English law; or

(b) limit or exclude any liability, right or remedy to a greater extent than is permissible under English law including in relation to (1) death or personal injury caused by the negligence of a party to this Agreement or (2) fraudulent misrepresentation or deceit.

10. DISPUTE RESOLUTION

10.1 Dispute Resolution. It is the desire of the parties that any dispute arising under or relating to the parties' rights and obligations under this Agreement be resolved amicably by good faith discussions between the parties. If a party delivers written notice to the other party of any such dispute, the parties shall promptly convene a meeting (either in person or by telephone conference or videoconference) to attempt in good faith to resolve such dispute.

10.2 Arbitration.

(a) LCIA Rules. Except as expressly set forth in Section 10.3, any dispute arising out of or in connection with this Agreement, including any question regarding its existence, validity or termination, that is not resolved by the parties within […***…] after a party's delivery to the other party of notice of such dispute shall, upon the written request of either party, be referred to and finally resolved by arbitration under the arbitration rules of the London Court of International Arbitration (the ***"Rules"***), which Rules are deemed to be incorporated by reference into this clause, except to the extent any such Rule conflicts with the express provisions of this Article 10. The arbitration shall be determined by a single, independent, impartial arbitrator. The seat, or legal place, of arbitration shall be London, England. The language to be used in the arbitral proceedings shall be English. The governing law of the contract shall be the substantive law of England, excluding its conflicts of laws principles.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) Expedited Binary Arbitration. Within […***…] following appointment of the arbitrator in accordance with the Rules, each party shall submit to the arbitrator so appointed a written proposal setting forth a complete resolution of the applicable dispute that such party believes is reasonable under the circumstances, including, without limitation, any economic remedy such party believes is justified. Within […***…] following submission of the parties' written proposals to the arbitrator, the arbitrator shall select the proposal that such arbitrator determines to be the more reasonable of the two. The decision of the arbitrator shall be final, binding and non-appealable, except in the case of manifest error and judgment may be entered upon it in any court of competent jurisdiction, and subject to the aforesaid, the parties hereby exclude any rights of application or appeal to any court to the extent that they may validly so agree and in particular in connection with any question of law.

(c) Arbitration Costs. The arbitrator shall determine the proportions in which the parties shall pay the costs of the arbitration procedure. The arbitrator shall have the authority to order that all or a part of the legal or other costs of a party incurred in relation to the arbitration shall be paid by the other party.

10.3 Court Actions. Nothing contained in this Agreement shall deny either party the right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a *bona fide* emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding any ongoing discussions between the parties or any ongoing arbitration proceeding. In addition, either party may bring an action in any court of competent jurisdiction to resolve disputes pertaining to the validity, construction, scope, enforceability, infringement or other violations of patent rights or other intellectual property rights, and no such claim shall be subject to arbitration pursuant to Section 10.2.

10.4 ERS and CRISPR. Notwithstanding any other provision of this Agreement:

(a) in the event that any dispute arises concerning (i) the scope of the licenses granted to Tracr as opposed to the scope of any licenses granted to ERS under the ERS License or (ii) the rights and obligations of Tracr under Article 5 as opposed to the rights and obligations of ERS under the ERS License, then Tracr shall not bring any action with EC as a party but instead Tracr and ERS shall each have the right to refer the dispute together to arbitration in order for the arbitrator to determine the extent of Tracr's and ERS's respective rights and obligations; and

(b) in the event that any dispute arises concerning (i) the scope of the licenses granted to Tracr as opposed to the scope of any licenses granted to CRISPR under the CRISPR License or (ii) the rights and obligations of Tracr under Article 5 as opposed to the rights and obligations of CRISPR under the CRISPR License, then Tracr shall not bring any action with EC as a party but instead Tracr and CRISPR shall each have the right to refer the dispute together to arbitration in order for the arbitrator to determine the extent of Tracr's and CRISPR's respective rights and obligations.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Any such arbitration shall be conducted in accordance with the principles set out in Section 10.2 above, subject to Section 10.3 above, save that Section 10.3 may not be used by Tracr to bring any action against EC. EC shall be entitled, but shall not be obliged, to participate as a party to any such arbitration, at her expense. ERS and CRISPR shall be intended third party beneficiaries under this Section 10.4 with the right under the Contracts (Rights of Third Parties) Act 1999 to enforce the provisions of this Section 10.4 against Tracr.

11. MISCELLANEOUS

11.1 Bankruptcy Code. All rights and licenses granted under or pursuant to this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11 of the United States Code and other similar laws in any jurisdiction outside the U.S. (collectively, the ***"Bankruptcy Laws"***), licenses of rights to be "intellectual property" as defined under the Bankruptcy Laws. All rights, powers and remedies of the non-bankrupt party as provided herein are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including, without limitation, the Bankruptcy Laws) in the event of the commencement of a case by or against a party under the Bankruptcy Laws.

11.2 Notices. All notices required or permitted to be given under this Agreement must be in writing and delivered by any method of mail (postage prepaid) requiring return receipt, by overnight courier, or by email, to the party to be notified at such party's address(es) given below, or at any address such party has previously designated by prior written notice to the other. Notice shall be deemed sufficiently given for all purposes upon the earliest of: (a) the date of actual receipt; (b) if mailed, three (3) days after the date of postmark; or (c) if delivered by overnight courier, the next business day the overnight courier regularly makes deliveries.

If to Tracr, notices must be addressed to:

Tracr Hemoglobinopathies Ltd
15 Fetter Lane
London EC4A 1JP
United Kingdom
Attention: Sally Shorthose
Email: […***…]

With a copy to:

Vischer AG
Aeschenvorstadt 4
Postfach 526
4010 Basel
Switzerland
Attention: Mathias Staehlin
Email: mstaehelin@vischer.com

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

If to EC, notices must be addressed to:

Emmanuelle Charpentier
[…***…]

With a copy to:

Bristows LLP
100 Victoria Embankment
London EC4Y 0DH
United Kingdom
Attention: Laura Anderson
Email: laura.anderson@bristows.com

11.3 Entire Agreement; Amendment. This Agreement, and the Exhibits attached hereto, contain the entire agreement and understanding between the parties with respect to the subject matter hereof, and merge all prior discussions, representations, and negotiations with respect to the subject matter of this Agreement. No amendment or modification hereof shall be valid or binding upon the parties hereto unless made in writing and signed by all parties hereto. The headings of clauses contained in this Agreement preceding the text of the sections, subsections and paragraphs hereof are inserted for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against any party, irrespective of which party may be deemed to have caused the ambiguity or uncertainty to exist.

11.4 Non-Waiver. The failure of a party to insist upon strict performance of any provision of this Agreement or to exercise any right or remedy arising out of this Agreement shall neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. Any waiver by a party of a particular provision, right or remedy shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time, and shall be signed by such party.

11.5 Assignment. Neither this Agreement nor any rights or obligations hereunder may be assigned or otherwise transferred by either party without the prior written consent of the other party; *provided*, *however*, that Tracr may assign this Agreement and its rights and obligations hereunder without EC's consent: (a) in connection with the transfer or sale of all or substantially all of Tracr's business to which this Agreement relates to a Third Party, whether by merger, sale of stock, sale of assets or otherwise; or (b) to an Affiliate. The rights and obligations of the parties under this Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties, and the name of a party appearing herein will be deemed to include the name of such party's successors and permitted assigns to the extent necessary to carry out the intent of this section. Any assignment not in accordance with this Agreement shall be void.

11.6 Severability. In the event any provision of this Agreement is held to be illegal, invalid or unenforceable to any extent, the legality, validity and enforceability of the remainder of this Agreement shall not be affected thereby and shall remain in full force and effect and shall be enforced to the greatest extent permitted by law.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.7 Choice of Law. This Agreement and any disputes arising out of or in connection with it including non-contractual disputes shall be governed by, and construed and enforced in accordance with, the laws of England, excluding its conflicts of laws principles.

11.8 Counterparts. This Agreement may be executed in any number of counterparts (including by electronic copy, facsimile or electronic signature), each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

11.9 Contracts (Rights of Third Parties) Act. Subject to the remaining provisions of this Section a person who is not a party to this Agreement has no rights (whether under the Contracts (Rights of Third Parties) Act 1999 or otherwise) to enforce any provision of this Agreement. CRISPR may enforce the provisions of Sections 2.9, 5.3, 5.4 and 5.5 (excluding Section 5.5(d)) of this Agreement to the extent set forth in, and subject to the terms of, such Sections and may enforce the provisions of Section 10.4 to the extent set forth in, and subject to the terms of, Section 10.4 and the provisions of the Contracts (Rights of Third Parties) Act 1999. Affiliated Sublicensees and Third Party Sublicensees may enforce the applicable provisions of Section 8.5(b) subject to the terms of Section 8.5(b) and the Contracts (Rights of Third Parties) Act 1999**.** The rights of the parties to terminate, rescind or agree any variation, waiver or settlement under this Agreement are not subject to the consent of any person that is not a party to this Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the parties have executed this License Agreement as of the Effective Date.

EMMANUELLE MARIE CHARPENTIER

By: /s/ Emmanuelle Marie Charpentier

TRACR HEMOGLOBINOPATHIES LTD

By: /s/ Shaun Foy
Name: Shaun Foy
Title: Director

By: /s/ Rodger Novak
Name: Rodger Novak
Title: Director

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit A

Know-How

Protocols for carrying out the methods described in the Patent Rights.

[…***…] embodying any of the inventions claimed, or necessary or useful for carrying out the methods described, in the Patent Rights.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit B

Patent Rights

[…***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit C

ERS License

Attached.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit D

CRISPR License

Attached.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit E

[…***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

SPECIFIC TERMS IN THIS EXHIBIT HAVE BEEN REDACTED BECAUSE CONFIDENTIAL TREATMENT FOR THOSE TERMS HAS BEEN REQUESTED. THESE REDACTED TERMS HAVE BEEN MARKED IN THIS EXHIBIT WITH THREE ASTERISKS [***]. AN UNREDACTED VERSION OF THIS EXHIBIT HAS BEEN SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

Exhibit 10.7

Execution Copy

PATENT ASSIGNMENT AGREEMENT

THIS PATENT ASSIGNMENT AGREEMENT ("**Agreement**") is entered into and effective as of 7th November 2014 (the "**Effective Date**"), by and between **EMMANUELLE MARIE CHARPENTIER**, an individual residing at Böcklerstrasse 18, 38102 Braunschweig, Germany ("**Ms Charpentier**"), **THE UNIVERSITY OF VIENNA**, having a principal place of business at Universitätsring 1, 1010 Vienna, Austria ("**Vienna**"), and **Ines Fonfara**, an individual residing at Helmstedter Strasse 144, 38102 Braunschweig, Germany ("**Ms Fonfara**") (collectively "**Assignor**"), and **CRISPR THERAPEUTICS AG**, a company organized under the laws of Switzerland having a principal place of business at Aeschenvorstadt 36, CH-4051 Basel, Switzerland ("**Assignee**").

BACKGROUND

WHEREAS, Assignee desires to obtain from Assignor, and Assignor desires to grant to Assignee, an assignment of the Patent Rights (defined below) on the terms and subject to the conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and the mutual promises and covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee hereby agree as follows:

1. DEFINITIONS

1.1 "**Affiliate**" shall mean:

(a) any business entity which controls, is controlled by, or is under common control with Assignee; and for this purpose, a business entity shall be deemed to "control" another business entity, if it owns, directly or indirectly, more than 50% of the outstanding voting securities, capital stock, or other comparable equity or ownership interest of such business entity having the power to vote on or direct the affairs of such business entity; or

(b) any business entity that Assignee, at Assignee's sole option and upon written notice to Assignor, designates as an "Affiliate" for purposes of this Agreement, provided that, as of the date of such designation:

(i) Assignee has granted a sublicence to such entity under its licence from Ms Charpentier dated 15 April 2014; and

(ii) Ms Charpentier is the holder of […***…] percent or more of the equity securities of such business entity on a fully-diluted and as-converted basis.

1.2 "**Affiliated Licensee**" shall mean any Affiliate to which Assignee or its Affiliate directly or indirectly (*i.e.*, through multiple tiers of license) grants a license under any or all of the Patent Rights. For purposes of clarification, if, at any time after the grant of a license to an entity that is an Affiliate at the time of such grant, such entity ceases to be an Affiliate within the meaning of Section 1.1(a) or Section 1.1(b) (as applicable), such entity shall nevertheless continue to be considered an "Affiliated Licensee" (and shall not be considered a "Third Party Licensee") for purposes of this Agreement, including, without limitation, Article 3 hereof.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.3 "**Confidential Information**" shall have the meaning provided in Section 7.1.

1.4 "**Human Therapeutic Product**" means a Product for the treatment or prevention of any disease, disorder or condition in humans (including, without limitation, any such Product comprising human or animal cells for transplantation into a human to replace or repair damaged tissue).

1.5 "**Investigational New Drug Application**" means an investigational new drug application made to the U.S. Food and Drug Administration ("**FDA**"), or an equivalent application made in any other country.

1.6 "**Licensee**" shall mean an Affiliated Licensee and/or Third Party Licensee, as applicable.

1.7 "**Licensing Revenues**" shall mean all amounts received by Assignee or any of its Affiliated Licensees from any Third Party Licensee in consideration of the grant by Assignee or its Affiliated Licensee of a license under any or all of the Patent Rights, including, […***…], and any other payments with respect to such license; but excluding:

[…***…].

[…***…]

1.8 "**Net Sales**" shall mean the gross amounts invoiced by Assignee and its Licensees to Third Parties (other than Third Party Licensees) from sales of Products, less the following items, to the extent allocable to such Products and either included in the invoice, or otherwise actually granted, allowed, taken or incurred (if not previously deducted from the amount invoiced): […***…].

[…***…]

1.9 "**Other Product**" means any Product which is not a Human Therapeutic Product.

1.10 "**Patent Application**" shall mean U.S. Patent Application No. 61/905,835, filed on November 18, 2013.

1.11 "**Patent Rights**" shall mean the Patent Application; any and all patent applications that claim priority to the Patent Application, including, without limitation, continuations, continuations-in-part (but only to the extent the claims of any such continuation-in-part are specifically directed to subject matter disclosed in the specifications in, and entitled to the priority date of, the parent application), divisional applications and substitute applications; any and all patents issuing on any of the foregoing patent applications, including registrations, renewals, reexaminations, reissues, extensions, term restorations and supplementary protection certificates; and any and all foreign counterparts of any of the foregoing; in each case, whether now existing or hereafter filed or issued.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.12 "**Phase 2 Trial**" shall mean a human clinical trial that would satisfy the requirements for a Phase 2 study as defined in 21 CFR § 312.21(b) (or its successor regulation), regardless of where such trial is conducted.

1.13 "**Phase 3 Trial**" shall mean a human clinical trial that would satisfy the requirements for a Phase 3 study as defined in 21 CFR § 312.21(c) (or its successor regulation), regardless of where such trial is conducted.

1.14 "**Product**" shall mean any product which:

(a) contains or incorporates any product, the manufacture, use, sale or importation of which in a country would, in the absence of the assignment of the Patent Rights under this Agreement (or a license granted thereunder, as applicable), infringe a Valid Claim of the Patent Rights in such country; or

(b) uses any process or method, the use or practice of which in a country would, in the absence of the assignment of the Patent Rights under this Agreement (or a license granted thereunder, as applicable), infringe a Valid Claim of the Patent Rights in such country.

1.15 "**Regulatory Approval**" means with respect to any Human Therapeutic Product in any regulatory jurisdiction, approval from the applicable regulatory authority sufficient for the manufacture, distribution, use and sale of the Human Therapeutic Product in such regulatory jurisdiction in accordance with applicable laws (including any necessary pricing and reimbursement approvals required for sale).

1.16 "**Revenue-Sharing Payments**" shall have the meaning provided in Section 4.1.

1.17 "**Term**" shall have the meaning provided in Section 8.1.

1.18 "**Third Party**" shall mean any entity other than Assignor, Assignee and any Affiliate.

1.19 "**Third Party Licensee**" shall mean any Third Party to which Assignee or its Affiliated Licensee has directly or indirectly *(i.e.*, through multiple tiers of sublicense) granted a license under any or all of the Patent Rights. For clarification, a Third Party service provider that has the right to make, have made, use or sell Products solely on behalf of Assignee or its Affiliated Licensee and not for its own account shall not be considered a Third Party Licensee.

1.20 "**Valid Claim**" shall mean a claim contained in: (a) an issued and unexpired patent which has not been held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through abandonment, reissue, disclaimer or otherwise; or (b) a patent application that has not been irretrievably cancelled, withdrawn or abandoned and that has been pending for less than […***…].

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

2. ASSIGNMENT

2.1 Pursuant to and for the consideration set out in Section 3 below, Assignor hereby assigns to Assignee, absolutely with full title guarantee, all right, title and interest in and to the Patent Rights, and in and to all and any inventions claimed in the Patent Application, including:

(a) in respect of any and each application in the Patent Rights:

(i) the right to claim priority from and to prosecute and obtain grant of patent; and

(ii) the right to file divisional applications based thereon and to prosecute and obtain grant of patent on each and any such divisional application;

(b) in respect of each and any invention disclosed in the Patent Rights, the right to file an application, claim priority from such application, and prosecute and obtain grant of patent or similar protection in or in respect of any country or territory in the world;

(c) the right to extend to or register in or in respect of any country or territory in the world each and any of the Patent Rights, and each and any of the applications comprised in the Patent Rights or filed as aforesaid, and to extend to or register in, or in respect of, any country or territory in the world any patent or like protection granted on any of such applications;

(d) the absolute entitlement to any patents granted pursuant to any of the applications comprised in the Patent Rights or filed as aforesaid; and

(e) the right to bring, make, oppose, defend, appeal proceedings, claims or actions and obtain relief (and to retain any damages recovered) in respect of any infringement, or any other cause of action arising from ownership, of any of the Patent Rights or any patents granted on any of the applications in the Patent Rights or filed as aforesaid, whether occurring before on or after the date of this agreement, at its own expense and by counsel of its own choice.

2.2 For avoidance of doubt, the Assignment does not relate to any rights in US patent applications 61/652,086, 61/716,256, 61/757,640, 61/765,576, 13/842,859 or any patents claiming priority from those applications.

2.3 Diligence; Progress Reports.

(a) Assignee shall use commercially reasonable efforts and due diligence, itself and/or through one or more Licensees, to develop, and to obtain regulatory approval to market, at least one Product, as promptly as is reasonably and commercially feasible.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Without limiting the generality of the foregoing, Assignee, itself and/or through one or more Affiliated Licensees, shall:

(i) use commercially reasonable efforts to commercially exploit the Patent Rights (including, without limitation, by licensing); and

(ii) use commercially reasonable efforts to file, or cause to be filed, an Investigational New Drug Application for a Human Therapeutic Product within seven years after the Effective Date.

(b) Assignee shall keep Assignor informed as to progress with respect to the development of Products (whether by Assignee or its Licensees), including, without limitation, the conduct of clinical trials, regulatory submissions and approvals, manufacturing arrangements, marketing activities and sublicensing, and shall deliver to Assignor a written annual report summarizing such progress by January 31 of each year, beginning January 31, 2016. For clarification, Assignee's reporting obligations under this Section 2.3(b) are in addition to Assignee's reporting obligations under Section 4.1. The contents of Assignee's progress reports to Assignor shall be deemed to be Assignee's Confidential Information.

2.4 Reservation of Rights. Assignor reserves the non-transferable right, without the right to license or sublicense, to use the Patent Rights for its own non-commercial, educational and research purposes and in research collaborations with academic or non-profit partners.

3. PAYMENTS

3.1 Signature Payment. Within […***…] of the Effective Date, Assignee shall pay to Assignor a non-creditable, non-refundable, one-time fee of €[…***…].

3.2 Milestone Payments. Within […***…] after the first achievement by Assignee or a Licensee of each of the following milestone events by the first Human Therapeutic Product, Assignee shall provide written notice to Assignor of the occurrence of such event. Where the milestone event is achieved by Assignee, Assignee shall pay to Assignor the corresponding milestone payment set forth below. Where the milestone event is achieved by a Licensee, Assignee shall pay to Assignor the difference between the corresponding payment set forth below and the amount payable by Assignee to Assignor in accordance with Section 3.5 below as a result of Assignee's receipt of any milestone payment from the Licensee for the achievement of that milestone event, if the amount payable under Section 3.5 is lower.

Milestone Event	Payment
Filing of an Investigational New Drug Application	€[…***…]
Enrollment of the first patient into a Phase 2 Trial	€[…***…]
Enrollment of the first patient into a Phase 3 Trial	€[…***…]
Regulatory Approval by the U.S. FDA	€[…***…]
Regulatory Approval by the European Medicines Agency	€[…***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Each of the foregoing milestone payments shall be payable only one time (regardless of the number of Human Therapeutic Products developed and the number of times the first Human Therapeutic Product achieves such milestone).

3.3 Minimum Annual Royalty. For the period comprising the first four calendar quarters commencing after the Effective Date and for each subsequent period comprising the first four calendar quarters commencing after every anniversary of the Effective Date during the Term, Assignee shall pay to Assignor a minimum annual royalty payment of €[…***…]provided that Assignee may deduct from such minimum annual royalty payment any royalty payments paid to Assignor pursuant to Section 3.4 on sales in such four calendar quarters. Each minimum annual royalty payment, to the extent not reduced to zero by the deductions above shall be due and payable within […***…] after the end of the fourth calendar quarter for each period, together with any royalty due pursuant to Section 3.4 on sales in the fourth calendar quarter.

3.4 Royalties. Assignee shall pay to Assignor a royalty equal to:

(a) […***…] of Net Sales of Other Products by Assignee and its Affiliates and Licensees, provided that, solely in respect of Net Sales made by a Third Party Licensee, if the royalty rate at which such Third Party Licensee is obligated to pay royalties to Assignee or an Affiliated Licensee (as applicable) is less than […***…], then, in lieu of paying a […***…] royalty Assignee shall pay […***…] of the royalty payments that Assignee or its Affiliated Licensee (as applicable) receives from such Third Party Licensee.

(b) […***…] of Net Sales of Human Therapeutic Products by Assignee and its Affiliates and Licensees until such time as annual Net Sales first exceeds […***…], and […***…] on Net Sales thereafter. For the avoidance of doubt, for the year in which Net Sales first exceeds […***…], the Assignee shall pay a royalty of […***…] on the first […***…], and […***…] on the remaining Net Sales during that year.

Only one royalty payment shall be due under this Agreement with respect to a sale of a Product, regardless of the number of Valid Claims covering such Product. Royalties will be payable on a Product-by-Product and country-by-country basis from the date of first commercial sale of a Product in a country until the expiration of the last-to-expire Valid Claim of the Patent Rights covering such Product in that country.

3.5 Sharing of Licensing Revenues. Assignee shall pay to Assignor […***…] of Licensing Revenues. Payments under this Section 3.5 with respect to Licensing Revenues received under a license agreement with a given Third Party Licensee shall be payable until the expiration of the last-to-expire Valid Claim of the Patent Rights in all countries in which the license under such Patent Rights has been granted.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.6 Payment by Affiliated Licensees. At Assignee's option, any license agreement between Assignee and an Affiliated Licensee may provide for such Affiliated Licensee to pay directly to Assignor: (a) milestone payments in the amounts specified in Section 3.2 with respect to the achievement of the corresponding milestone events set forth in Section 3.2 by Human Therapeutic Products developed by or on behalf of such Affiliated Licensee; (b) royalties on Net Sales by such Affiliated Licensee (and its sublicensees) of Products at the rate set forth in Section 3.4; and (c) […***…] of the total Licensing Revenues received by such Affiliated Licensee; in each case, provided that Assignee shall remain responsible and liable to Assignor for compliance with Assignee's obligations under Sections 3.2, 3.4 and 3.5, respectively, with respect to such Affiliated Licensee.

3.7 Credit for Third Party Royalties. If Assignee or a Licensee is required to obtain a license under patent rights of a Third Party in order to manufacture, use, sell or import a Product, […***…] of the royalties actually paid to such Third Party shall be creditable, on a country-by-country basis, against the royalties on Net Sales due by Assignee to Assignor provided, however, that in no event shall the amounts owed by Assignee to Assignor with respect to Net Sales in a country be reduced by more than […***…]. Furthermore, the Minimum Annual Royalty payable under Section 3.3 will not be affected by anything in this Section.

3.8 Licenses Under Other Assignor Technology. The parties acknowledge that Assignee has in the past obtained a license from Ms Charpentier and may, in the future, wish to obtain from Assignor licenses or assignments of Assignor's interest in […***…] ("**Other Assignor Technology**"). The parties also acknowledge that Assignor is not under any obligation to grant licenses or any other right, title or interest in or to Other Assignor Technology to Assignee but shall consider any request from Assignee to obtain a license or assignment on a case by case basis, in its absolute discretion. Assignee and Assignor hereby agree that in the event that Assignee or its Licensees develops or commercializes any Product that is also covered by the Other Assignor Technology licensed or assigned by Assignor or any of Ms Charpentier, Ms Fonfara or Vienna directly to Assignee under a separate license agreement (an "**Other License Agreement**"):

(a) in the case of a Human Therapeutic Product covered by Other Assignor Technology, only one set of milestone payments shall be due and payable to Assignor (and Ms Charpentier, Ms Fonfara and Vienna shall be due their individual share of only one such payment) with respect to such Human Therapeutic Product, which shall be the higher (in the aggregate) of (i) the milestone payments set forth Section 3.2 (if applicable) and (ii) the milestone payments set forth in the Other License Agreement;

(b) only one royalty payment shall be due and payable to Assignor (and Ms Charpentier, Ms Fonfara and Vienna shall be due their individual share of only one such payment) with respect to any sale of a Product covered by any Other Assignor Technology, which shall be calculated at the higher of (i) the royalty rate set forth in Section 3.4 and (ii) the royalty rate set forth in the Other License Agreement;

(c) if Assignee or an Affiliated Licensee grants any license under both the Patent Rights and the Other Assignor Technology, only one payment shall be due and

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

payable to Assignor (and Ms Charpentier, Ms Fonfara and Vienna shall be due their individual share of only one such payment) with respect to any item of licensing revenues received by Assignee or an Affiliated Licensee for such license, which shall be calculated at the higher of (i) the rate set forth in Section 3.5 and (ii) the rate set forth in the Other License Agreement.

Where any of (a) to (c) above applies and a payment has been made to any of Ms Charpentier, Ms Fonfara or Vienna under the Other License Agreement, the amount already paid will be deducted from that party's share of the payments owed to Assignor under this Agreement. For the avoidance of doubt, nothing in this Section 3.8 shall increase the amount due to Assignor under Section 3.3.

4. PAYMENTS; REPORTS; AUDITS

4.1 Payment; Reports. Royalties under Section 3.4 and payments with respect to Licensing Revenues under Section 3.5 (collectively, "**Revenue-Sharing Payments**"), including in each case any such Revenue-Sharing Payments made by an Affiliated Licensee to Assignor pursuant to Section 3.6 (and taking into account any credit for third party royalties pursuant to Section 3.7), shall be calculated and reported for each calendar quarter and shall be paid within […***…] after the end of the calendar quarter. No later than the date any Revenue-Sharing Payments for a calendar quarter are due in accordance with the preceding sentence, Assignee and/or one or more Affiliated Licensees shall deliver to Assignor a report of (a) Net Sales of Products by Assignee and Licensees and (b) Licensing Revenues received by Assignee and Affiliated Licensees in sufficient detail to permit confirmation of the accuracy of the Revenue-Sharing Payments made, including (i) gross sales and Net Sales of Products on a Product-by-Product and country-by-country basis, (ii) the royalty payable, (iii) Licensing Revenues received on a Third Party Licensee-by-Third Party Licensee basis, and (iv) the exchange rates used to calculate Revenue-Sharing Payments. All reports delivered to Assignor pursuant to this Section 4.1 shall be deemed Confidential Information of Assignee. At the same time, the Assignee shall deliver to Assignor a report listing the identity of Affiliated Licensees and Third Party Licensees with whom a license agreement was signed or terminated in the preceding quarter.

4.2 Manner and Place of Payment; Exchange Rate. All payment amounts specified in this Agreement are stated, and all payments hereunder shall be payable, in Euros (€) and net of (i) any fees or charges associated with bank transfers; and (ii) any sales, value added, or equivalent taxes. With respect to each quarter, whenever conversion of payments from any foreign currency into Euros shall be required, such conversion shall be made using the applicable exchange rate for such currency used throughout Assignee's or the applicable Affiliated Licensee*s accounting system for the applicable quarter. All payments owed under this Agreement shall be split equally among Ms Charpentier, Vienna, and Ms Fonfara, and made by wire transfer to the banks and accounts designated in writing by Assignor, unless otherwise specified in writing by Assignor.

4.3 Income Tax Withholding. Assignor will pay any and all taxes levied on account of any payments made to it under this Agreement. If any taxes are required by law to be withheld by Assignee or an Affiliated Licensee from any payment made to Assignor under this Agreement, Assignee or such Affiliated Licensee shall notify Assignor in writing giving details

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

of the proposed withholding and shall cooperate with the Assignor in order to reduce or eliminate any such proposed withholding to the extent reasonably possible. If despite such cooperation any taxes are required by law to be withheld by Assignee or an Affiliated Licensee from any payment made to Assignor under this Agreement, Assignee or such Affiliated Licensee shall (a) deduct such taxes from the payment made to Assignor, (b) timely pay the taxes to the proper taxing authority, and (c) send proof of payment to Assignor and certify its receipt by the taxing authority within […***…] following such payment.

4.4 Audits. During the Term and for a period of […***…] thereafter, Assignee shall keep, and shall cause Licensees to keep, complete and accurate records pertaining to the sale or other disposition of Products by Assignee and Licensees, and shall keep, and shall cause its Affiliated Licensees to keep, complete and accurate records pertaining to the receipt of Licensing Revenues by Assignee and its Affiliated Licensees, each in sufficient detail to permit Assignor to confirm the accuracy of all Revenue-Sharing Payments. Assignor shall have the right to cause an independent, certified public accountant reasonably acceptable to Assignee to audit such records to confirm Net Sales, Licensing Revenues and Revenue-Sharing Payments for a period covering not more than the preceding […***…]. Assignee (or the Affiliated Licensee to be audited) may require such accountant to execute a reasonable confidentiality agreement prior to commencing the audit. Such audits may be conducted during normal business hours upon reasonable prior written notice to Assignee, but no more frequently than […***…]. If Assignor discovers an underpayment of more than […***…] in the course of an audit, Assignor will thereafter be entitled to conduct audits more frequently than once per year. Prompt adjustments (including remittances of underpayments or overpayments disclosed by such audit) shall be made by the parties to reflect the results of such audit. […***…] shall bear the full cost of such audit unless such audit discloses an underpayment of […***…] or more of the amount of Revenue-Sharing Payments due under this Agreement, in which case Assignee shall bear the full cost of such audit. All records, documentation and other information made available by Assignee or an audited Affiliated Licensee to such independent auditor, or by Assignee, an audited Affiliated Licensee or such independent auditor to Assignor, pursuant to this Section 4.4 shall be deemed Confidential Information of Assignee.

4.5 Late Payments. In the event that any payment due under this Agreement is not made when due, such payment shall accrue interest, calculated on a daily basis, at the […***…] for the period from the due date for payment until the date of actual payment; *provided, however,* that in no event shall such rate exceed the maximum legal annual interest rate. The payment of such interest shall not limit Assignor from exercising any other rights it may have as a consequence of the lateness of any payment.

5. PATENT MATTERS

5.1 Patent Prosecution and Maintenance. For the avoidance of doubt Assignee shall have the sole right to control and manage the preparation, filing, prosecution and maintenance of the Patent Rights at its sole cost and expense and by counsel of its own choice. Assignee shall keep Assignor reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of such Patent Rights and shall consult with, and consider in good faith its requests and suggestions with respect to strategies for filing and prosecuting the Patent Rights.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2 Further Assurance. At Assignee's expense, the Assignor shall, and shall use all reasonable endeavours to procure that any necessary third party shall, promptly execute such documents and perform such acts as may reasonably be required for the purpose of giving full effect to this Agreement, including:

(a) registration of the Assignee as applicant for, or proprietor of, the Patent Rights; and

(b) assisting the Assignee in obtaining, defending and enforcing the Patent Rights, and assisting with any other proceedings which may be brought by or against the Assignee against or by any Third Party relating to the rights assigned by this Agreement.

5.3 Infringement by **Third Parties**. Assignee shall have the sole right to bring and control any action or proceeding with respect to infringement of any Patent Rights, at its own expense and by counsel of its own choice. Each party shall promptly notify the other party in writing of any allegation by a Third Party that the activity of either of the parties pursuant to this Agreement infringes or may infringe the intellectual property rights of such Third Party.

5.4 Registration. The parties shall enter into the confirmatory assignments attached to this Agreement at Schedule 1 for the purpose of recording the assignment of the Patent Rights at relevant patent offices throughout the world.

6. REPRESENTATIONS AND WARRANTIES; DISCLAIMER; LIMITATION OF LIABILITY

6.1 Mutual Representations and Warranties. Assignee represents and warrants to Assignor that: (a) Assignee is duly authorized to execute and deliver this Agreement and to perform Assignee's obligations hereunder; and (b) this Agreement is legally binding upon Assignee, enforceable in accordance with its terms, and does not conflict with any agreement, instrument or understanding, oral or written, to which Assignee is a party or by which Assignee may be bound. Assignor represents and warrants that this Agreement is legally binding upon Assignor, enforceable in accordance with its terms and does not conflict with any agreement, instrument or understanding, oral or written, to which Assignor is a party or by which Assignor may be bound.

6.2 Assignor Warranties.

(a) Vienna represents and warrants that:

(i) Vienna is the sole legal and beneficial owner of its rights under the Patent Rights;

(ii) Vienna has not assigned or licensed any of its rights under the Patent Rights;

(iii) so far as it is aware, each of the Patent Rights is free from any security interest, option, mortgage, charge or lien with respect to the Assignor;

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(iv) it is unaware of any infringement or likely infringement of, or any challenge or likely challenge to the validity of, any of the Patent Rights or of anything that might render any of the Patent Rights invalid or subject to a compulsory licence order or prevent any application in the Patent Rights proceeding to grant; and

(v) so far as it is aware, all previous assignments of the Patent Rights are valid and were registered within applicable time limits.

(b) Ms Charpentier represents and warrants that:

(i) She is the sole legal and beneficial owner of her rights under the Patent Rights;

(ii) She has not assigned or licensed any of her rights under the Patent Rights;

(iii) so far as she is aware, each of the Patent Rights is free from any security interest, option, mortgage, charge or lien with respect to the Assignor;

(iv) she is unaware of any infringement or likely infringement of, or any challenge or likely challenge to the validity of, any of the Patent Rights or of anything that might render any of the Patent Rights invalid or subject to a compulsory licence order or prevent any application in the Patent Rights proceeding to grant; and

(v) so far as she is aware, all previous assignments of the Patent Rights are valid and were registered within applicable time limits.

(c) Ms Fonfara represents and warrants that:

(i) She is the sole legal and beneficial owner of her rights under the Patent Rights;

(ii) She has not assigned or licensed any of her rights under the Patent Rights;

(iii) so far as she is aware, each of the Patent Rights is free from any security interest, option, mortgage, charge or lien with respect to the Assignor;

(iv) she is unaware of any infringement or likely infringement of, or any challenge or likely challenge to the validity of, any of the Patent Rights or of anything that might render any of the Patent Rights invalid or subject to a compulsory licence order or prevent any application in the Patent Rights proceeding to grant; and

(v) so far as she is aware, all previous assignments of the Patent Rights are valid and were registered within applicable time limits.

6.3 Disclaimer. Except as expressly set forth in this Agreement, EACH PARTY EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES OF ANY KIND,

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF PATENTS, NON-INFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICES. Without limiting the generality of the foregoing, Assignor specifically disclaims any express or implied warranty:

(a) as to the validity, enforceability or scope of any Patent Right; or

(b) that the exploitation of the Patent Rights will be successful.

6.4 Limitation of Liability. IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION DAMAGES FOR LOST PROFITS OR EXPECTED SAVINGS) ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR ITS SUBJECT MATTER; *provided, however,* that this Section 6.4 shall not be construed to limit Assignee's indemnification obligations under Article 9. No provision of this Agreement shall limit a party's liability for death or personal injury caused by its negligence or for fraud.

7. Confidentiality

7.1 Confidential Information. "**Confidential Information**" shall mean all scientific, regulatory, marketing, financial, and commercial information or data, whether communicated in written, oral, graphic, electronic or visual form, that is provided by one party (the "**Disclosing Party**") to the other party (the "**Receiving Party**") in connection with this Agreement. Except as expressly set forth in this Agreement or as otherwise agreed in writing by the parties, the Receiving Party shall keep strictly confidential, in accordance with the terms and conditions of this Article 7, the Disclosing Party's Confidential Information, shall use the Disclosing Party's Confidential Information solely as expressly authorized by this Agreement, and shall not disclose the Confidential Information to any Third Party without the prior written consent of the Disclosing Party. The Receiving Party shall use at least the same degree of care to protect the Disclosing Party's Confidential Information as the Receiving Party would use to protect the Receiving Party's own Confidential Information, but no less than reasonable care. For the avoidance of doubt, any Confidential Information relating to the Patent Rights, and any inventions disclosed in the Patent Rights, shall be deemed to be Assignee's Confidential Information.

7.2 Exceptions. Confidential Information of the Disclosing Party shall not include information that the Receiving Party can demonstrate by competent evidence: (a) was in the public domain at the time of disclosure by the Disclosing Party; (b) later became part of the public domain through no act or omission of the Receiving Party in breach of this Agreement; (c) is lawfully disclosed to the Receiving Party on a non-confidential basis by a Third Party having the right to disclose it; or (d) was already known by the Receiving Party at the time of receiving such information from the Disclosing Party, as evidenced by the Receiving Party's pre-existing written records.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

7.3 Authorized Disclosure. The Receiving Party may disclose Confidential Information as expressly permitted by this Agreement, or if and to the extent such disclosure is reasonably necessary in the following instances:

(a) filing, prosecuting or maintaining the Patent Rights in accordance with this Agreement;

(b) enforcing the Receiving Party's rights under this Agreement;

(c) prosecuting or defending litigation;

(d) complying with applicable court orders or governmental regulations;

(e) disclosure to the Receiving Party's financial, legal and other advisors on a need-to-know basis as necessary for such advisors to provide financial, legal or business advice to the Receiving Party regarding this Agreement or its subject matter, provided that such advisors are bound by non-use and non-disclosure obligations no less restrictive than those set forth in this Agreement, whether by written agreement or by applicable professional ethical obligations;

(f) in the case of Assignee, disclosure to Assignee's Affiliates (including, without limitation, Affiliated Licensees), provided that Confidential Information so disclosed shall remain subject to this Article 7;

(g) in the case of Assignee and Affiliated Licensees, disclosure to Third Party Licensees and *bona fide* potential Third Party Licensees, on the condition that each such Third Party agrees to be bound by confidentiality and non-use obligations that are no less stringent than the terms of this Agreement;

(h) in the case of Assignee (and Licensees), preparing and submitting regulatory filings with respect to Products; and

(i) in the case of Assignee and Affiliated Licensees, disclosure to Third Parties in connection with due diligence or similar investigations by such Third Parties and disclosure to potential Third Party investors in confidential financing documents, provided, in each case, that any such Third Party agrees to be bound by reasonable obligations of confidentiality and non-use.

Notwithstanding the foregoing, in the event the Receiving Party is required to make a disclosure of the other party's Confidential Information pursuant to Section 7.3(c) or Section 7.3(d), the Receiving Party shall, except where impracticable, give reasonable advance notice to the Disclosing Party of such disclosure and use efforts to secure confidential treatment of such information at least as diligent as such party would use to protect such party's own confidential information, but in no event less than reasonable efforts. In any event, the Receiving Party agrees to take all reasonable action to avoid unauthorized disclosure and unauthorized use of Confidential Information.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

7.4 Confidentiality of Agreement. Except as otherwise provided in this Article 7, each party agrees not to disclose to any Third Party the terms of this Agreement without the prior written consent of the other party hereto, except that each party may make such disclosure to the extent permitted under Section 7.3 and, after the initial announcement of this Agreement pursuant to Section 7.6, each party may disclose the terms of this Agreement that have previously been made public as contemplated by Section 7.6.

7.5 Publications. Assignor shall be free to make publications and presentations regarding the subject matter of the Patent Rights, including oral presentations and abstracts, provided such publications and presentations do not contain or disclose Confidential Information of Assignee. In the case of any proposed oral presentation by Assignor regarding the Patent Rights and taking place before publication of any of the Patent Rights, Assignor shall inform Assignee of Assignor's proposed oral presentation in advance thereof. Assignee shall have the right to review any written material proposed for publication by Assignor, such as by manuscript or abstract. Before any such written material is submitted for publication, Assignor shall deliver a reasonably complete draft to Assignee a reasonable period (at least […***…], but, in any event, no fewer than […***…]) prior to submitting the material to a publisher or initiating any other disclosure. If Assignee identifies any Confidential Information of Assignee contained in such written material, Assignor shall comply with Assignee's request to delete references to Assignee's Confidential Information in any such material.

For the avoidance of doubt, Assignee (and its Licensees) shall at all times be free to make publications and presentations, including oral presentations and abstracts, relating to the development and commercialization of Products and other commercial exploitation of the Patent Rights by or on behalf of Assignee and its Licensees.

7.6 Publicity. At Assignee's option, Assignee may issue an initial press release announcing this Agreement in form and substance reasonably acceptable to Assignor. It is further acknowledged that a party may desire or be required to issue one or more subsequent press releases relating to this Agreement or activities hereunder. The parties agree to consult with each other reasonably and in good faith with respect to the text and timing of any such press release prior to the issuance thereof, provided that Assignor may not unreasonably withhold consent to such releases, but may withhold consent to the use of the inventors' names or the contribution of the Assignor more generally in such releases. Notwithstanding the previous sentence, Assignee may issue such press releases as it determines, based on advice of counsel, are reasonably necessary to comply with applicable law or with the requirements of any stock exchange on which securities issued by Assignee or its Affiliated Licensees are traded. In the event of a required public announcement, to the extent practicable under the circumstances, the party making such announcement shall use commercially reasonable efforts to provide the other party with a copy of the proposed text of such announcement sufficiently in advance of the scheduled release to afford such other party a reasonable opportunity to review and comment upon the proposed text.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8. TERM; TERMINATION

8.1 Term. The term of this Agreement (the "**Term**") shall begin on the Effective Date and, unless earlier terminated in accordance with this Article 8, shall expire upon expiration of all Patent Rights.

8.2 Termination by Assignee At Will. Assignee shall have the right to terminate this Agreement at will at any time upon […***…] written notice to Assignor.

8.3 Termination for Breach. Assignor shall have the right to terminate this Agreement upon written notice to Assignee if Assignee is in material breach of this Agreement and, if capable of remedy, has not cured such breach within […***…] after notice from the terminating party requesting cure of the breach. Any such termination shall become effective at the end of such […***…] period unless Assignee has cured such breach prior to the end of such period. Any right to terminate under this Section 8.3 shall be stayed and the cure period tolled in the event that, during any cure period, Assignee shall have initiated dispute resolution in accordance with Article 10 with respect to the alleged breach, which stay and tolling shall continue until such dispute has been resolved in accordance with Article 10.

8.4 Consequences of Expiration or Termination.

(a) **Termination**. Upon any termination of this Agreement pursuant to Section 8.2 or Section 8.3, the Patent Rights shall automatically be reassigned to Assignor, and Assignee will assist Assignor in formally transferring the Patent Rights to the Assignor, at Assignee's cost. Notwithstanding the foregoing, solely in the event of termination of this Agreement by Assignor pursuant to Section 8.3 (but not termination of this Agreement by Assignee pursuant to Section 8.2):

(i) any license granted by Assignee to any Affiliated Licensee that is then in effect (together with any and all further sublicenses granted by such Affiliated Licensee to any Third Party Licensee thereunder) shall remain in full force and effect, provided that: (A) such Affiliated Licensee is not then in material breach of its license agreement; (B) such Affiliated Licensee agrees to be bound to Assignor as such Affiliated Licensee's direct licensor under the terms and conditions of this Agreement (and not such license agreement) as applicable to the Products which are the subject of the license agreement; (C) Assignee does not own, directly or indirectly, […***…] of the outstanding voting securities, capital stock, or other comparable equity or ownership interest of such Affiliated Licensee having the power to vote on or direct the affairs of such Affiliated Licensee; and (D) such Affiliated Licensee's licence agreement is not exclusive in all fields in any particular territory; provided that such Affiliated Licensee shall agree in writing that: (a) in no event shall Assignor be liable to such Affiliated Licensee for any actual or alleged breach of such license agreement by Assignee; and (b) such Affiliated Licensee shall not sublicense any rights under the licence agreement to Assignee. In addition, to the extent that any such Affiliated Licensee was exercising Assignee's rights in respect of the filing, prosecution or maintenance of the Patent Rights or any action or proceeding with respect to infringement of the Patent Rights, including but not limited to those rights detailed under Article 5 at the time of termination of this Agreement, such Affiliated Licensee may continue to exercise such rights after such termination subject to the terms and conditions of this Agreement; and

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(ii) any license granted by Assignee directly to any Third Party Licensee that is then in effect (together with any and all further sublicenses granted by such Third Party Licensee to any further Third Party Licensee thereunder) shall remain in full force and effect, provided that such Third Party Licensee: (A) is not then in material breach of its license agreement; and (B) agrees to be bound to Assignor as such Third Party Licensee's direct licensor under the terms and conditions of the license agreement; provided that (1) such Third Party Licensee shall agree in writing that in no event shall Assignor be liable to such Third Party Licensee for any actual or alleged breach of such license agreement by Assignee, (2) such license agreement shall be subordinate and comply in all respects to the applicable provisions of this Agreement, and (3) Assignor shall not have any obligations to such Third Party Licensee other than Assignor's obligations to Assignee as set forth herein.

(b) **Inventory**. Upon any termination of this Agreement pursuant to Section 8.2 or Section 8.3, Assignee, and any Licensee whose license was in effect as of immediately prior to such termination but did not remain in effect after termination as contemplated by Section 8.4(a)(i) or Section 8.4(a)(ii), as applicable, shall be entitled to finish any work-in-progress and to sell any completed inventory of Products which remain on hand as of the date of the termination, for up to six (6) months after termination, subject to payment of royalties to Assignor in accordance with Section 3.4.

(c) **Return of Confidential Information**. Within […***…] following the expiration or termination of this Agreement, each party shall return to the other party, or destroy, upon the written request of the other party, any and all Confidential Information of the other party in such party's possession; *provided, however* that each party may retain one copy of the other party's Confidential Information in such party's legal archives for the sole purpose of monitoring compliance with such party's obligations, enforcing such party's rights hereunder, and exercising such party's surviving rights hereunder.

8.5 Surviving Obligations. Neither expiration nor termination of this Agreement shall relieve either party of any obligation accruing prior to such expiration or termination. In addition, Sections 4.3, 4.4, 4.5, 6.3, 6.4, 7.1, 7.2, 7.3, 7.4, 8.4, 8.5, 9, 10 and 11 shall survive any expiration or termination of this Agreement.

9. INDEMNIFICATION

9.1 Indemnification by Assignee. Assignee hereby agrees to save, defend, indemnify and hold harmless Assignor from and against any and all losses, damages, liabilities, expenses and costs, including reasonable legal expense and attorneys' fees ("**Losses**"), to which it may become subject as a result of any claim, demand, action or other proceeding by any person to the extent such Losses arise out of: (a) the negligence or willful misconduct of Assignee, its Affiliates, Licensees and/or their respective officers, directors, employees, consultants and agents; (b) the breach by Assignee of any warranty, representation, covenant or agreement made by Assignee in this Agreement; or (c) the development, manufacture, use, handling, storage, sale or other disposition of any Product by or on behalf of Assignee or Licensees; in each case, except to the extent such Losses result from the gross negligence or willful misconduct of Assignor or the breach by Assignor of any warranty, representation, covenant or agreement made by Assignor in this Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.2 Control of Defense. In the event Assignor seeks indemnification under Section 9.1, Assignor shall inform Assignee of a claim as soon as reasonably practicable after Assignor receives notice of the claim (it being understood and agreed, however, that the failure by Assignor to give notice of a claim as provided in this Section 9.2 shall not relieve Assignee of Assignee's indemnification obligation under this Agreement except and only to the extent that Assignee is actually damaged as a direct result of such failure to give notice), shall permit Assignee to assume direction and control of the defense of the claim (including the right to settle the claim solely for monetary consideration) using counsel reasonably satisfactory to Assignor, and shall cooperate as requested (at the expense of Assignee) in the defense of the claim. If Assignee does not assume control of such defense within […***…] after receiving notice of the claim from Assignor, Assignor shall control such defense and, without limiting Assignee's indemnification obligations, Assignee shall reimburse Assignor for all costs, including reasonable attorney fees, incurred by Assignor in defending itself within […***…] after receipt of any invoice therefor from Assignor. The party not controlling such defense may participate therein at such party's own expense. The party controlling such defense shall keep the other party advised of the status of such action, suit, proceeding or claim and the defense thereof and shall consider recommendations made by the other party with respect thereto. Assignor shall not agree to any settlement of such action, suit, proceeding or claim without the prior written consent of Assignee, which shall not be unreasonably withheld, delayed or conditioned. Assignee shall not agree to any settlement of such action, suit, proceeding or claim or consent to any judgment in respect thereof that does not include a complete and unconditional release of Assignor from all liability with respect thereto, that imposes any liability or obligation on Assignor, that acknowledges fault by Assignor without the prior written consent of Assignor.

9.3 Insurance. During the term of this Agreement, Assignee shall maintain, and shall require Licensees to maintain, insurance of such types and in such amounts as are commercially reasonable in light of their respective activities hereunder.

9.4 English Law. No provision of this Agreement shall operate to:-

(a) exclude any provision implied into this Agreement by English law and which may not be excluded by English law; or

(b) limit or exclude any liability, right or remedy to a greater extent than is permissible under English law including in relation to (1) death or personal injury caused by the negligence of a party to this Agreement or (2) fraudulent misrepresentation or deceit.

10. DISPUTE RESOLUTION

10.1 Dispute Resolution. It is the desire of the parties that any dispute arising under or relating to the parties' rights and obligations under this Agreement be resolved amicably by good faith discussions between the parties. If a party delivers written notice to the other party of any such dispute, the parties shall promptly convene a meeting (either in person or by telephone conference or videoconference) to attempt in good faith to resolve such dispute.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10.2 Arbitration.

(a) **LCIA Rules**. Except as expressly set forth in Section 10.3, any dispute arising out of or in connection with this Agreement, including any question regarding its existence, validity or termination, that is not resolved by the parties within […***…] after a party's delivery to the other party of notice of such dispute shall, upon the written request of either party, be referred to and finally resolved by arbitration under the arbitration rules of the London Court of International Arbitration (the "**Rules**"), which Rules are deemed to be incorporated by reference into this Section, except to the extent any such Rule conflicts with the express provisions of this Article 10. The arbitration shall be determined by a single, independent, impartial arbitrator. The seat, or legal place, of arbitration shall be London, England. The language to be used in the arbitral proceedings shall be English. The governing law of the contract shall be the substantive law of England, excluding its conflicts of laws principles.

(b) **Expedited Binary Arbitration**. Within […***…] following appointment of the arbitrator in accordance with the Rules, each party shall submit to the arbitrator so appointed a written proposal setting forth a complete resolution of the applicable dispute that such party believes is reasonable under the circumstances, including, without limitation, any economic remedy such party believes is justified. Within […***…] following submission of the parties' written proposals to the arbitrator, the arbitrator shall select the proposal that such arbitrator determines to be the more reasonable of the two. The decision of the arbitrator shall be final, binding and non-appealable, except in the case of manifest error and judgment may be entered upon it in any court of competent jurisdiction, and subject to the aforesaid, the parties hereby exclude any rights of application or appeal to any court to the extent that they may validly so agree and in particular in connection with any question of law.

(c) **Arbitration Costs**. The arbitrator shall determine the proportions in which the parties shall pay the costs of the arbitration procedure. The arbitrator shall have the authority to order that all or a part of the legal or other costs of a party incurred in relation to the arbitration shall be paid by the other party.

10.3 Court Actions. Nothing contained in this Agreement shall deny either party the right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a *bona fide* emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding any ongoing discussions between the parties or any ongoing arbitration proceeding. In addition, either party may bring an action in any court of competent jurisdiction to resolve disputes pertaining to the validity, construction, scope, enforceability, infringement or other violations of patent rights or other intellectual property rights, and no such claim shall be subject to arbitration pursuant to Section 10.2.

11. Miscellaneous

11.1 Notices. All notices required or permitted to be given under this Agreement must be in writing and delivered by any method of mail (postage prepaid) requiring return receipt, by overnight courier, or by email, to the party to be notified at such party's address(es) given below, or at any address such party has previously designated by prior written

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

notice to the other. Notice shall be deemed sufficiently given for all purposes upon the earliest of: (a) the date of actual receipt; (b) if mailed, three (3) days after the date of postmark; or (c) if delivered by overnight courier, the next business day the overnight courier regularly makes deliveries.

If to Assignee, notices must be addressed to:

CRISPR Therapeutics AG
Aeschenvorstadt 36
CH-4051 Basel
Switzerland
Attention: Shaun Foy
Email: […***…]

With a copy to:

Vischer AG
Aeschenvorstadt 4
Postfach 526
4010 Basel
Switzerland
Attention: Mathias Staehlin
Email: […***…]

If to Assignor, notices must be addressed to:

The University of Vienna
Universitätsring 1
1010 Vienna
Austria
Attention: Ingrid Kelly, Technology Transfer Manager
Email: […***…]

With a copy to:

Emmanuelle Charpentier
Böcklerstrasse 18
38102 Braunschweig
Germany
Email: […***…]

and:

Ines Fonfara
Helmstedter Strasse 144
38102 Braunschweig
Germany
Email: […***…]

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.2 Entire Agreement; Amendment. This Agreement contains the entire agreement and understanding between the parties with respect to the subject matter hereof, and merge all prior discussions, representations, and negotiations with respect to the subject matter of this Agreement. No amendment or modification hereof shall be valid or binding upon the parties hereto unless made in writing and signed by all parties hereto. The headings of clauses contained in this Agreement preceding the text of the sections, subsections and paragraphs hereof are inserted for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against any party, irrespective of which party may be deemed to have caused the ambiguity or uncertainty to exist.

11.3 Non-Waiver. The failure of a party to insist upon strict performance of any provision of this Agreement or to exercise any right or remedy arising out of this Agreement shall neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. Any waiver by a party of a particular provision, right or remedy shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time, and shall be signed by such party.

11.4 Assignment. Neither this Agreement nor any rights or obligations hereunder may be assigned or otherwise transferred by either party without the prior written consent of the other party; *provided, however,* that Assignee may assign this Agreement and its rights and obligations hereunder without Assignor's consent: (a) in connection with the transfer or sale of all or substantially all of Assignee's business to which this Agreement relates to a Third Party, whether by merger, sale of stock, sale of assets or otherwise; or (b) to an Affiliate. The rights and obligations of the parties under this Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties, and the name of a party appearing herein will be deemed to include the name of such party's successors and permitted assigns to the extent necessary to carry out the intent of this section. Any assignment not in accordance with this Agreement shall be void.

11.5 Severability. In the event any provision of this Agreement is held to be illegal, invalid or unenforceable to any extent, the legality, validity and enforceability of the remainder of this Agreement shall not be affected thereby and shall remain in full force and effect and shall be enforced to the greatest extent permitted by law.

11.6 Choice of Law. This Agreement and any disputes arising out of or in connection with it or its subject matter or formation, including non-contractual disputes shall be governed by, and construed and enforced in accordance with, the laws of England, excluding its conflicts of laws principles.

11.7 Counterparts. This Agreement may be executed in any number of counterparts (including by electronic copy, facsimile or electronic signature), each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

11.8 Contracts (Rights of Third Parties) Act. A person who is not a party to this Agreement has no rights (whether under the Contracts (Rights of Third Parties) Act 1999 or otherwise) to enforce any provision of this Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the parties have executed this Patent Assignment Agreement as of the Effective Date.

UNIVERSITY OF VIENNA

By: /s/ Susanne Weigelin-Schwiedrzik
Name: Susanne Weigelin-Schwiedrzik
Title: Vice Rector for Research and Career Development

By: _____
Name: _____
Title: _____

EMMANUELLE MARIE CHARPENTIER

By: /s/ Emmanuelle Marie Charpentier

INES FONFARA

By: /s/ Ines Fonfara

CRISPR THERAPEUTICS AG

By: /s/ Shaun Foy
Name: Shaun Foy
Title: CFO

By: /s/ Rodger Novak
Name: Rodger Novak
Title: CEO

[***] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.