
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2017

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____.

Commission file number: 001-37923

CRISPR THERAPEUTICS AG

(Exact name of Registrant as specified in its charter)

Switzerland
(State or other jurisdiction of
incorporation or organization)

Not Applicable
(I.R.S. Employer
Identification No.)

Baarerstrasse 14
6300 Zug, Switzerland
(Address of principal executive offices)

Not Applicable
(zip code)

+41 (0)41 561 32 77
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES NO

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 definition 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 smaller reporting company) Smaller Reporting Company

Indicate by check mark whether registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES NO

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

As of November 3, 2017, there were 41,019,352 shares of registrant's common shares outstanding.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

CRISPR Therapeutics AG
Condensed Consolidated Balance Sheets
(unaudited, in thousands, except share and per share data)

	As of	
	September 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash	\$ 253,519	\$ 315,520
Accounts receivable, including related party amounts of \$1,133 and \$752 as of September 30, 2017 and December 31, 2016, respectively	3,211	3,157
Prepaid expenses and other current assets, including related party amounts of \$583 and \$0 as of September 30, 2017 and December 31, 2016, respectively	1,856	1,511
Total current assets	258,586	320,188
Property and equipment, net	19,564	21,027
Intangible assets, net	358	399
Restricted cash	3,154	3,150
Other non-current assets	657	198
Total assets	<u>\$ 282,319</u>	<u>\$ 344,962</u>
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable	\$ 2,116	\$ 4,569
Accrued expenses, including related party amounts of \$0 and \$537 as of September 30, 2017 and December 31, 2016, respectively	8,485	16,320
Accrued tax liabilities	427	23
Deferred rent	1,027	1,027
Other current liabilities	62	59
Total current liabilities	12,117	21,998
Deferred revenue, including related party amounts of \$171 and \$527 as of September 30, 2017 and December 31, 2016, respectively	79,689	77,646
Deferred rent non-current	11,380	12,283
Other non-current liabilities	175	189
Total liabilities	<u>103,361</u>	<u>112,116</u>
Commitments and contingencies (Note 6)		
Shareholders' equity:		
Common shares, CHF 0.03 par value, 40,890,954 and 40,253,674 shares authorized at September 30, 2017 and December 31, 2016, respectively, 40,826,727 and 40,164,307 shares issued at September 30, 2017 and December 31, 2016, respectively, 40,381,854 and 39,719,434 shares outstanding at September 30, 2017 and December 31, 2016, respectively, 16,746,246 and 15,325,607 shares in conditional capital at September 30, 2017 and December 31, 2016, respectively.	1,234	1,216
Treasury shares, at cost, 444,873 shares at September 30, 2017 and December 31, 2016, respectively	-	-
Additional paid-in capital	303,292	288,739
Accumulated deficit	(125,580)	(57,083)
Accumulated other comprehensive income (loss)	12	(26)
Total shareholders' equity	<u>178,958</u>	<u>232,846</u>
Total liabilities and shareholders' equity	<u>\$ 282,319</u>	<u>\$ 344,962</u>

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

CRISPR Therapeutics AG
Condensed Consolidated Statements of Operations and Comprehensive Loss
(unaudited, in thousands, except share and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Collaboration revenue (1)	\$ 2,387	\$ 1,549	\$ 8,672	\$ 2,820
Operating expenses:				
Research and development (2)	17,845	12,052	49,770	26,666
General and administrative	8,112	4,107	24,522	18,974
Total operating expenses	<u>25,957</u>	<u>16,159</u>	<u>74,292</u>	<u>45,640</u>
Loss from operations	<u>(23,570)</u>	<u>(14,610)</u>	<u>(65,620)</u>	<u>(42,820)</u>
Other (expense) income:				
Interest expense	-	(1)	-	(8,051)
Loss from equity method investment	(359)	-	(1,310)	(686)
Gain on extinguishment of convertible loan	-	-	-	11,482
Other expense, net	(71)	(75)	(238)	(141)
Total other (expense) income, net	<u>(430)</u>	<u>(76)</u>	<u>(1,548)</u>	<u>2,604</u>
Net loss before income taxes	<u>(24,000)</u>	<u>(14,686)</u>	<u>(67,168)</u>	<u>(40,216)</u>
Provision for income taxes	(707)	(8)	(1,330)	(84)
Net loss	<u>(24,707)</u>	<u>(14,694)</u>	<u>(68,498)</u>	<u>(40,300)</u>
Foreign currency translation adjustment	8	(1)	38	(18)
Comprehensive loss	<u>\$ (24,699)</u>	<u>\$ (14,695)</u>	<u>\$ (68,460)</u>	<u>\$ (40,318)</u>
Reconciliation of net loss to net loss attributable to common shareholders:				
Net loss	\$ (24,707)	\$ (14,694)	\$ (68,498)	\$ (40,300)
Loss attributable to noncontrolling interest	-	14	-	24
Net loss attributable to common shareholders	<u>\$ (24,707)</u>	<u>\$ (14,680)</u>	<u>\$ (68,498)</u>	<u>\$ (40,276)</u>
Net loss per share attributable to common shareholders—basic and diluted	<u>\$ (0.62)</u>	<u>\$ (2.77)</u>	<u>\$ (1.72)</u>	<u>\$ (7.43)</u>
Weighted-average common shares outstanding used in net loss per share attributable to common shareholders—basic and diluted	<u>40,088,718</u>	<u>5,292,348</u>	<u>39,904,863</u>	<u>5,422,617</u>
(1) Including the following revenue from a related party, see Note 11:	\$ 1,249	\$ 385	\$ 3,888	\$ 385
(2) Including the following research and development expense with a related party, See Note 11:	\$ 1,208	\$ 361	\$ 3,699	\$ 361

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

CRISPR Therapeutics AG
Condensed Consolidated Statements of Cash Flows
(unaudited, in thousands)

	<u>Nine Months Ended September 30,</u>	
	<u>2017</u>	<u>2016</u>
Operating activities:		
Net loss	\$ (68,498)	\$ (40,300)
Reconciliation of net loss to net cash used in operating activities:		
Depreciation and amortization	2,218	513
Equity-based compensation	11,894	6,816
Non-cash interest	-	8,050
Loss from disposal of property and equipment	-	28
Unrealized foreign currency remeasurement loss	(9)	(7)
Gain on extinguishment of convertible loan	-	(11,482)
Loss from equity method investment	1,310	686
Changes in:		
Restricted cash	(4)	(2,453)
Accounts receivable	(54)	(1,753)
Prepaid expenses and other assets	(304)	(694)
Accounts payable and accrued expenses	(2,979)	3,275
Deferred revenue	2,043	1,220
Deferred rent	(903)	196
Other liabilities, net	31	11
Net cash used in operating activities	<u>(55,255)</u>	<u>(35,894)</u>
Investing activities:		
Purchase of property and equipment	(7,609)	(2,788)
Proceeds from contribution of intellectual property to equity method investee	-	20,000
Purchase of available for sale debt security	(500)	(100)
Net cash (used in) provided by investing activities	<u>(8,109)</u>	<u>17,112</u>
Financing activities:		
Proceeds from issuance of common shares	-	16
Proceeds from issuance of Series A-3 preferred shares	-	22,850
Proceeds from issuance of Series B preferred shares	-	38,075
Issuance costs for preferred share financings	-	(1,810)
Payment of public offering costs	-	(2,677)
Proceeds from issuance of convertible loans	-	35,000
Proceeds from exercise of options	1,324	-
Net cash provided by financing activities	<u>1,324</u>	<u>91,454</u>
Effect of exchange rate changes on cash	39	(20)
(Decrease) increase in cash	<u>(62,001)</u>	<u>72,652</u>
Cash, beginning of period	315,520	155,961
Cash, end of period	<u>\$ 253,519</u>	<u>\$ 228,613</u>
Supplemental disclosure of non-cash investing and financing activities		
Property and equipment purchases in accounts payable and accrued expenses	\$ 118	\$ 246
Conversion of Vertex convertible loan and accrued interest	\$ -	\$ 61,929
Noncash contribution of intellectual property to Casebia Therapeutics LLP	\$ -	\$ 36,372
Issuance costs for public offering in accounts payable and accrued expenses	\$ -	\$ 825

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

CRISPR Therapeutics AG
Notes to Condensed Consolidated Financial Statements
(unaudited)

1. Organization and Operations

The Company

CRISPR Therapeutics AG (“CRISPR” or the “Company”) was formed on October 28, 2013 in Basel, Switzerland. The Company was established to translate CRISPR/Cas9, a genome editing technology, into transformative gene-based medicines for the treatment of serious human diseases. The foundational intellectual property underlying the Company’s operations was licensed to the Company and its subsidiaries in April 2014. The Company devotes substantially all of its efforts to product research and development activities, initial market development and raising capital. The Company’s principal offices are located in Zug, Switzerland and its principal research operations are in Cambridge, Massachusetts.

On January 23, 2014, the founders of the Company formed TRACR Hematology Limited (“TRACR”), wholly-owned subsidiary of the Company, in the United Kingdom, to further the development of the CRISPR/Cas9 technology into medicines for the treatment of blood-borne illnesses. As the Company was funding and managing TRACR’s operations in 2014, it has been consolidated by the Company from the date that the Company established a variable interest in TRACR in April 2014. In March 2015, the Company acquired 82.1% of the outstanding equity of TRACR in a share exchange transaction. Concurrent with its initial public offering (“IPO”) in October 2016, the Company acquired the outstanding non-controlling interest in TRACR.

On February 7, 2014, the Company formed a wholly-owned subsidiary in the United Kingdom, CRISPR Therapeutics Limited (“CRISPR Ltd.”), and on February 16, 2015, the Company formed a wholly-owned subsidiary in the United States, CRISPR Therapeutics, Inc. (“CRISPR Inc.”), as its principal research and development operation.

The Company is subject to risks common to companies in the biotechnology industry, including but not limited to, risks of failure of preclinical studies and clinical trials, the need to obtain marketing approval for any drug product candidate that it may identify and develop, the need to successfully commercialize and gain market acceptance of its product candidates, dependence on key personnel, protection of proprietary technology, compliance with government regulations, development by competitors of technological innovations and ability to transition from pilot-scale manufacturing to large-scale production of products.

The Company had an accumulated deficit of \$125.6 million as of September 30, 2017 and has financed its operations to date from proceeds obtained from its IPO, private placements of our preferred and common shares, convertible loans and collaboration agreements with strategic partners. The Company will require substantial additional capital to fund its research and development and ongoing operating expenses.

Liquidity

The Company expects its cash of \$253.5 million at September 30, 2017 to be sufficient to fund its current operating plan through at least the next 24 months. Thereafter, the Company may be required to obtain additional funding. There can be no assurance that the Company will be able to obtain additional debt or equity financing or generate product revenue or revenues from collaborative partners, on terms acceptable to the Company, on a timely basis or at all. The failure of the Company to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on the Company’s business, results of operations, and financial condition.

2. Summary of Significant Accounting Policies

The Company’s significant accounting policies are described in Note 2, “Summary of Significant Accounting Policies,” in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (the “Annual Report”). There have been no material changes to the significant accounting policies during the nine months ended September 30, 2017.

Unaudited Interim Financial Information

The condensed consolidated financial statements of the Company included herein have been prepared, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”). Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) have been condensed or omitted from this report, as is permitted by such rules and regulations. Accordingly, these condensed consolidated financial statements should be read in conjunction with the financial statements and notes thereto included in the Annual Report.

Basis of Presentation and Use of Estimates

The accompanying condensed consolidated financial statements have been prepared in conformity with GAAP, and include the accounts of (i) the Company, and (ii) its wholly-owned subsidiaries, CRISPR Ltd., CRISPR Inc., and TRACR. All intercompany accounts and transactions have been eliminated. The Company considers events or transactions that occur after the balance sheet date but before the financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification (“ASC”) and Accounting Standards Updates (“ASUs”) of the Financial Accounting Standards Board (“FASB”). The Company accounts for its 50% interest in Casebia Therapeutics LLP (“Casebia”) under the equity method of accounting. See Note 7 for further details.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, the Company’s management evaluates its estimates, which include, but are not limited to, equity-based compensation expense, revenue recognition, equity method investments, fair value of intangible assets, the provision for or benefit from income taxes and reported amounts of research and development expenses during the period. The Company bases its estimates on historical experience and other market-specific or other relevant assumptions that it believes to be reasonable under the circumstances. The consolidated statements reflect all adjustments which are of a normal recurring nature necessary for presentation. Actual results may differ from those estimates or assumptions.

Net Loss Per Share Attributable to Common Shareholders

Basic net income (loss) per share is calculated by dividing net income (loss) attributable to common shareholders by the weighted-average number of common shares outstanding during the period. Diluted net income per share is calculated by dividing the net income attributable to common shareholders by the weighted-average number of common equivalent shares outstanding for the period, including any dilutive effect from outstanding stock options and warrants using the treasury stock method.

The following common share equivalents, presented on an as converted basis, were excluded from the calculation of net loss per share for the periods presented, due to their anti-dilutive effect (in common stock equivalent shares):

	As of	
	September 30, 2017	December 31, 2016
Outstanding options	5,778,629	4,535,371
Unvested unissued restricted common shares	64,227	89,367
Total	<u>5,842,856</u>	<u>4,624,738</u>

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606) (“ASU 2014-09”). Subsequently, the FASB also issued ASU 2015-14, *Revenue from Contracts with Customers* (Topic 606), which adjusted the effective date of ASU 2014-09; ASU No. 2016-08, *Revenue from Contracts with Customers* (Topic 606): *Principal versus Agent Considerations* (Reporting Revenue Gross versus Net), which amends the principal-versus-agent implementation guidance and illustrations in ASU 2014-09; ASU No. 2016-10, *Revenue from Contracts with Customers* (Topic 606): *Identifying Performance Obligations and Licensing*, which clarifies identifying performance obligation and licensing implementation guidance and illustrations in ASU 2014-09; and ASU No. 2016-12, *Revenue from Contracts with Customers* (Topic 606): *Narrow-Scope Improvements and Practical Expedients*, which addresses implementation issues and is intended to reduce the cost and complexity of applying the new revenue standard in ASU 2014-09 (collectively, the “Revenue ASUs”).

The Revenue ASUs noted above provide an accounting standard for a single comprehensive model for use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance. The accounting standard is effective for interim and annual periods beginning after December 15, 2017, with an option to early adopt for interim and annual periods beginning after December 15, 2016. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (the full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method). The Company currently anticipates adopting the new standard effective January 1, 2018 under the modified retrospective method.

The Company is in the process of evaluating its two revenue generating collaboration arrangements to determine the impact, if any, resulting from the adoption of the new revenue recognition standard. The Company expects that under the new standard, the Company will continue to recognize revenue allocated to R&D services overtime with the recognition of amounts allocated to certain licenses at a point in time, which is consistent with our current revenue recognition model. The Company is still evaluating the impact of the new standard will have on the accounting for costs to obtain and fulfill its contracts, as well as changes to the Company's disclosures. The actual impact of adoption may change until the Company has finalized its evaluation.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* ("ASU 2016-02"), which applies to all leases and will require lessees to record most leases on the balance sheet, but recognize expense in a manner similar to the current standard. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 and interim periods within those years, which is the year ended December 31, 2019 for the Company. Entities are required to use a modified retrospective approach of adoption for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Full retrospective application is prohibited. The Company is evaluating the new guidance and the impact on its consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718)* ("ASU 2016-09"). The guidance changes how companies account for certain aspects of equity-based payments to employees. Entities will be required to recognize income tax effects of awards in the income statement when the awards vest or are settled. The guidance also allows an employer to repurchase more of an employee's shares than it can under current guidance for tax withholding purposes providing for withholding at the employee's maximum rate as opposed to the minimum rate without triggering liability accounting and to make a policy election to account for forfeitures as they occur. The Company adopted the new standard January 1, 2017. The Company made an accounting policy election to account for the impact of pre-vesting forfeitures as they occur rather than applying an estimated forfeiture rate, as previously required. Adoption did not materially impact the consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"), to improve the accounting for the income tax consequences of intra-entity transfers of assets other than inventory. Current guidance prohibits the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party, which is an exception to the principle of comprehensive recognition of current and deferred income taxes. The amendments in this update eliminate the exception for an intra-entity transfer of an asset other than inventory. The amendments should be applied on a modified retrospective transition basis, and are effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years, and early adoption is permitted. The Company is evaluating the new guidance and the expected effect on its consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* ("ASU 2016-18"). ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning and ending balances shown on the statement of cash flows. The guidance is effective in the first quarter of fiscal 2018 and early adoption is permitted. ASU 2016-18 must be applied retrospectively to all periods presented. Upon adoption, the Company's 2016 statement of cash flows will reflect an increase in operating cash flows resulting from the adoption of this new standard. The Company does not expect any additional impact on its financial statements.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805)* ("ASU 2017-01"). ASU 2017-01 clarifies whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The purpose of the guidance is to narrow the definition of a business at it relates recording transactions as business acquisitions or asset acquisitions. The guidance is effective in annual periods beginning after December 15, 2017, including interim periods within those years, with early adoption permitted under certain circumstances. The Company does not expect any additional impact on its financial statements.

3. Property and Equipment, net

Property and equipment, net, consists of the following (in thousands):

	As of	
	September 30, 2017	December 31, 2016
Computer equipment and software	\$ 285	\$ 110
Furniture, fixtures, and other	2,104	2,044
Laboratory equipment	6,392	2,970
Leasehold improvements	13,774	15,780
Construction work in process	127	1,065
	22,682	21,969
Accumulated Depreciation	(3,118)	(942)
Property and equipment, net	<u>\$ 19,564</u>	<u>\$ 21,027</u>

Depreciation expense for the three and nine months ended September 30, 2017 was \$0.8 million and \$2.2 million respectively. Depreciation expense for the three and nine months ended September 30, 2016 was \$0.2 million and \$0.5 million, respectively.

4. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	As of	
	September 30, 2017	December 31, 2016
Payroll and employee-related costs	\$ 4,126	\$ 2,585
Research costs	1,580	996
Licensing fees	651	492
Professional fees	1,281	2,715
Intellectual property costs	731	3,372
Accrued property and equipment	-	5,081
Other	116	1,079
Total	<u>\$ 8,485</u>	<u>\$ 16,320</u>

5. Convertible Loans

2015 Convertible Loan Agreement with Vertex and certain existing shareholders

On October 26, 2015, the Company entered into a convertible loan agreement with Vertex Pharmaceuticals Incorporated (“Vertex”) and certain existing shareholders (the “Vertex Convertible Loan”) under which the Company borrowed \$38.2 million. The Vertex Convertible Loan accrued interest at 2.5% per annum and had an initial maturity date of April 26, 2016 subject to acceleration upon the occurrence of certain conditions. The Vertex Convertible Loan included various embedded conversion, redemption and other features, none of which required separate accounting from the host instrument under ASC Topic 815: *Derivatives and Hedging* (“ASC 815”).

The conversion terms, redemption terms, and other features of the Vertex Convertible Loan are included in the Annual Report.

Convertible Loan with Bayer Global Investments B.V.

On January 29, 2016, in connection with a Joint Venture (“JV”) with Bayer HealthCare LLC (“Bayer HealthCare”), the Company entered into a Convertible Loan Agreement (the “Bayer Convertible Loan”) with Bayer Global Investments B.V. (“Bayer BV”) under which the Company borrowed \$35.0 million. The Bayer Convertible Loan accrued interest at 2.0% per annum and matured on January 29, 2016. The Bayer Convertible Loan included various embedded conversion, redemption and other features, none of which required separate accounting from the host instrument under ASC 815.

The conversion terms, redemption terms, and other features of the Bayer Convertible Loan are included in the Annual Report.

Conversion of Convertible Loans to Series B Preferred Shares

On January 29, 2016, concurrent with the issuance of the Bayer Convertible Loan, all of the outstanding principal under the \$35.0 million Bayer Convertible Loan automatically converted into 2,605,330 Series B Redeemable Convertible Preferred Shares (“Series B Preferred Shares”) at \$13.43 per share. The Company determined the fair value of the Bayer Convertible Loan to be \$24.5 million based on the fair value of the underlying Series B Preferred Shares that were exchanged as part of the immediate conversion. As the Bayer Convertible Loan was executed in contemplation of the joint venture agreement with Bayer, the Company evaluated the Bayer Convertible Loan as part of one multiple-element arrangement and, using a relative fair value allocation method, allocated \$27.0 million of aggregate arrangement consideration to the Bayer Convertible Loan upon issuance. Upon conversion, the Company accreted the Bayer Convertible Loan to its face value of \$35.0 million through a charge to interest expense of \$8.0 million and converted the \$35.0 million to Series B Preferred Shares under the conversion model.

The receipt of \$35.0 million in proceeds under the Bayer Convertible Loan in exchange for equity securities, combined with the \$38.2 million in proceeds from Vertex Convertible Loan, triggered an automatic conversion provision of the Vertex Convertible Loan Agreement. Accordingly, on January 29, 2016, the Vertex Convertible Loan, including loans from existing shareholders, plus accrued interest also converted into 2,859,278 of Series B Preferred Shares at \$13.43 per share. The Company determined the fair value of the Vertex Convertible Loan to be \$26.9 million based on the fair value of the underlying Series B Preferred Shares that were exchanged as part of the conversion. Upon extinguishment, the Company recorded a gain on extinguishment of \$11.5 million for the difference between the carrying value of the debt and the fair value of the Series B Preferred Shares issued to settle the debt under the general extinguishment model.

6. Commitments and Contingencies

Research Agreements

The Company is party to a number of research license agreements which require upfront payments, future royalty payments and potential milestone payments from time to time which could be significant. In connection with these agreements, the Company has made upfront payments of \$1.2 million and milestone payments of \$0.6 million to date.

Operating Leases

In March 2017, the Company subleased a portion of one research and office facility to a third party effective April 1, 2017. The sublease term is less than the remaining term under the original lease, and as a result, the Company does not believe it has met a cease use date as it may re-enter the space following the sublease. Payments to be received from the sublessee are approximately \$2.8 million and will offset scheduled rent payments due to the landlord under the original lease for the sublease term.

Litigation

The Company licenses a U.S. patent application that is currently subject to interference proceedings declared by the Patent Trial and Appeal Board (“PTAB”) of the U.S. Patent and Trademark Office. Following motions by the parties and other procedural matters, the PTAB concluded in February 2017 that the declared interference should be dismissed because the claim sets of the two parties were not directed to the same patentable invention in accordance with the PTAB’s two-way test for patent interferences. In April 2017, the regents of the University of California (“California”) appealed the PTAB decision to the U.S. Court of Appeals for the Federal Circuit. In the appeal, California is seeking review and reversal of the PTAB’s February 2017 decision, which terminated the interference without determining which inventors actually invented the use of the CRISPR/Cas9 genome editing technology in eukaryotic cells.

Under the Invention Management Agreement signed on December 15, 2016, the Company is obligated to share costs related to patent maintenance, defense and prosecution. During the three and nine months ended September 30, 2017, the Company incurred \$0.1 million and \$1.1 million, respectively, in shared costs. During the three and nine months ended September 30, 2016, the Company incurred \$0.2 million, and \$1.0 million, respectively, in shared costs. The Company had accrued legal costs from the cost sharing of \$0.5 million and \$2.8 million as of September 30, 2017 and December 31, 2016, respectively.

7. Significant Contracts

Intellectual Property Agreements

CRISPR Therapeutics AG—Charpentier License Agreement

In April 2014, the Company entered into a technology license agreement with Dr. Charpentier pursuant to which the Company licensed certain intellectual property rights under joint ownership from Dr. Charpentier to develop and commercialize products for the

treatment or prevention of human diseases other than hemoglobinopathies (“CRISPR—Charpentier License Agreement”). In consideration for the granting of the license, the Company paid Dr. Charpentier an upfront fee of CHF 0.1 million (\$0.1 million), and agreed to pay an immaterial annual license maintenance fee if Dr. Charpentier is not otherwise engaged in a service arrangement with the Company. During the years ended December 31, 2016 and 2015, and three months ended September 30, 2017 and 2016, Dr. Charpentier has been in a consulting arrangement with the Company, as such, no annual payments have been made under this provision. Dr. Charpentier is entitled to receive nominal clinical milestone payments. The Company is also obligated to pay Dr. Charpentier a low single digit percentage of sublicensing payments received under any sublicense agreement with a third party. In addition, the Company is also obligated to pay to Dr. Charpentier a low single-digit percentage royalty based on annual net sales of licensed products and licensed services by the Company and its affiliates and sublicensees.

During the three and nine months ended September 30, 2017, the Company did not record any sublicensing fees due to Dr. Charpentier. During the three and nine months ended September 30, 2016, the Company recorded \$0 and \$0.3 million, respectively, of sublicensing fees due to Dr. Charpentier. These expenses were under the terms of the CRISPR—Charpentier License Agreement that was triggered by the execution of the JV agreement with Bayer Healthcare (“Bayer Agreement”).

TRACR Hematology Limited—Charpentier License Agreement

In April 2014, TRACR entered into a technology license agreement (“TRACR—Charpentier License Agreement”) with Dr. Charpentier pursuant to which TRACR licensed certain intellectual property rights under joint ownership from Dr. Charpentier to develop and commercialize products for the treatment or prevention of human diseases related to hemoglobinopathies. In consideration for the granting of the license, Dr. Charpentier is entitled to receive nominal clinical milestone payments. TRACR is also obligated to pay Dr. Charpentier a low single digit percentage of sublicensing payments received under any sublicense agreement with a third party. In addition, TRACR is obligated to pay to Dr. Charpentier low single digit percentage royalties based on annual net sales of licensed products and licensed services by the Company and its affiliates and sublicensees.

During the three and nine months ended September 30, 2017 and 2016, the Company did not record any sublicensing fees due to Dr. Charpentier under the terms of the TRACR—Charpentier License Agreement.

Patent Assignment Agreement

In November 2014, the Company entered into a patent assignment agreement (“Patent Assignment Agreement”) with Dr. Charpentier, Dr. Ines Fonfara, and the University of Vienna (collectively, the “Assignors”), pursuant to which the Company received from the Assignors all rights, title and interest in and to certain patent rights claimed in the U.S. Patent Application No.61/905,835. In consideration for the assignment of such rights, the Assignors are entitled to receive clinical milestone payments totaling up to €0.3 million (approximately \$0.4 million) in the aggregate for the first human therapeutic product. The Company is also obligated to pay to the Assignors low single digit royalties based on annual net sales of certain products and services by the Company and its affiliates and sublicensees.

During the three and nine months ended September 30, 2017 and 2016, the sublicensing fees due to the Assignors under the terms of the Patent Assignment Agreement that was triggered under the collaboration agreement with Vertex and by the execution of the Bayer Agreement were immaterial.

Collaboration Agreement with Vertex Pharmaceuticals, Incorporated

On October 26, 2015, the Company entered into a strategic collaboration, option, and license agreement (“Collaboration Agreement”) with Vertex, focused on the use of CRISPR’s gene editing technology, CRISPR/Cas9, to discover and develop potential new treatments aimed at the underlying genetic causes of human disease.

During the three and nine months ended September 30, 2017, the Company recognized \$1.2 million and \$4.8 million of revenue related to the collaboration with Vertex. During the three and nine months ended September 30, 2016, the Company recognized \$1.2 million and \$2.4 million of revenue related to the collaboration with Vertex. Research and development expense incurred by the Company in relation to its performance under the Collaboration Agreement for the three and nine months ended September 30, 2017 was \$2.1 million and \$8.0 million, respectively. Research and development expense incurred by the Company in relation to its performance under the Collaboration Agreement for the three and nine months ended September 30, 2016 was \$1.7 million and \$4.5 million, respectively. As of September 30, 2017, and December 31, 2016, there was \$79.5 million and \$77.1 million of non-current deferred revenue related to the Collaboration Agreement, respectively.

Joint Venture with Bayer Healthcare LLC

On December 19, 2015, the Company entered into an agreement with Bayer HealthCare LLC to establish a joint venture to discover, develop and commercialize new therapeutics to cure blood disorders, blindness, and congenital heart disease. On February 12, 2016, the Company and Bayer HealthCare completed the formation of the joint venture entity, Casebia Therapeutics LLP (“Casebia”). CRISPR contributed its proprietary CRISPR/Cas9 gene editing technology and intellectual property for selected disease indications to Casebia and Bayer HealthCare contributed its protein engineering expertise and relevant disease know-how to Casebia.

At September 30, 2017 and December 31, 2016, the value of the Company’s equity method investment in Casebia was zero.

During the three and nine months ended September 30, 2017, the Company recognized \$1.2 million and \$3.9 million of revenue, respectively, related to the collaboration with Casebia. During the three and nine months ended September 30, 2017, the Company recognized \$1.2 million and \$3.7 million of research and development expense, respectively, in relation to its performance under the agreement. During the three and nine months ended September 30, 2017, the Company recognized \$0.4 million and \$1.3 million respectively, of stock-based compensation expense related to Casebia employees. During the three and nine months ended September 30, 2016, the Company recognized \$0.4 million and \$0.4 million of revenue, respectively, related to the collaboration with Casebia. During the three and nine months ended September 30, 2016, the Company recognized \$0.4 million and \$0.4 million of research and development expense, respectively, in relation to its performance under the agreement. During the three and nine months ended September 30, 2016, the Company recognized \$6.0 thousand of stock-based compensation expense related to the collaboration with Casebia. Non-current deferred revenue related to the Company’s collaboration with Casebia was \$0.2 million and \$0.5 million as of September 30, 2017 and December 31, 2016, respectively. Unrecognized equity method losses in excess of the Company’s equity investment in Casebia was \$15.7 million and \$4.0 million as of September 30, 2017 and December 31, 2016, respectively.

Total operating expenses, and net loss of Casebia for the three and nine months ended September 30, 2017 was \$10.2 million and \$24.7 million, respectively. Total operating expenses, and net loss of Casebia for the three and nine months ended September 30, 2016 was \$3.0 million and \$77.1 million, respectively, which included research and development expenses of \$71.4 million for the fair value of the CRISPR license contributed to Casebia in the formation of the joint venture.

8. Share Capital

The Company had 40,890,954 registered common shares as of September 30, 2017, with a par value of CHF 0.03 per share, which includes 64,227 shares of unvested unissued restricted common stock and 444,873 treasury shares which are legally outstanding but not considered outstanding for accounting purposes.

Conditional Capital Reserved for Future Issuance

The Company had the following conditional capital reserved for future issuance:

Conditional Capital	As of	
	September 30, 2017	December 31, 2016
Unvested unissued restricted stock	166,667	166,667
Outstanding stock options	5,778,629	4,535,371
Reserved for future issuance under stock option plans (1)	5,468,024	5,290,643
Shares available for bonds and similar debt instruments	4,919,700	4,919,700
Shares available for employee purchase plans	413,226	413,226
Total	<u>16,746,246</u>	<u>15,325,607</u>

(1) The Company’s Board of Directors approved an increase to the option pool of 2,012,684 options in May 2017.

9. Equity-based Compensation

The Company uses the straight-line attribution method to recognize stock-based compensation expense for stock options and restricted stock awards. Stock options and restricted stock awards generally vest over four years with 25% vesting on the first anniversary of service commencement and the remaining 75% vesting monthly thereafter. Effective January 1, 2017, the Company adopted ASU 2016-09, and made an accounting policy election to account for the impact of pre-vesting forfeitures as they occur rather than applying an estimated forfeiture rate, as previously required. The following table presents stock-based compensation expense included in the Company's Condensed Consolidated Statements of Operations and Comprehensive Loss:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Research and development	\$ 2,420	\$ 1,343	\$ 6,095	\$ 2,834
General and administrative	2,448	950	5,799	3,982
Loss from equity method investment	359	-	1,310	-
Total	<u>\$ 5,227</u>	<u>\$ 2,293</u>	<u>\$ 13,204</u>	<u>\$ 6,816</u>

Grant-Date Fair Value

The Company estimated the fair value of each employee and non-employee stock option award on the grant date using the Black-Scholes option-pricing model based on the following assumptions:

	Nine Months Ended September 30,	
	2017	2016
Employees:		
Weighted average expected volatility	72.6%	81.8%
Expected term (in years)	6.0	6.0
Risk free interest rate	1.8 - 2.3%	1.1 - 1.5%
Expected dividend yield	0.0%	0.0%
Non-employees:		
Weighted average expected volatility	82.7%	93.6%
Expected term (in years)	9.6	10.0
Risk free interest rate	2.3%	1.6%
Expected dividend yield	0.0%	0.0%

The fair value of the restricted stock awards was determined based on the fair value of the common shares on the grant date. Non-employee stock options and restricted stock awards, including those granted to employees of Casebia, are marked-to-market at each reporting period.

Share Based Payment Activity

Stock Option Awards

The following table summarizes stock option activity for employees and non-employees (intrinsic value in thousands):

	Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at December 31, 2016	<u>4,535,371</u>	<u>\$ 8.38</u>	<u>9.1</u>	<u>\$ 53,966</u>
Granted	2,240,347	\$ 16.45		
Exercised	(645,365)	\$ 2.28		
Cancelled or forfeited	(351,724)	\$ 5.25		
Outstanding at September 30, 2017	<u>5,778,629</u>	<u>\$ 12.36</u>	<u>8.9</u>	<u>\$ 34,230</u>
Exercisable at September 30, 2017	<u>1,411,943</u>	<u>\$ 8.34</u>	<u>8.5</u>	<u>\$ 13,486</u>
Vested or expected to vest at September 30, 2017 (1)	<u>5,771,129</u>	<u>\$ 12.35</u>	<u>8.9</u>	<u>\$ 34,230</u>

(1) Represents the number of vested options at September 30, 2017 plus the number of unvested options expected to vest in the future.

As of September 30, 2017, total unrecognized compensation expense related to stock options was \$37.0 million which the Company expects to recognize over a remaining weighted-average period of 3.1 years.

During the nine months ended September 30, 2017 and 2016, the Company granted options to purchase 60,000 and 429,998 common shares, respectively, subject to performance-based vesting conditions. As of September 30, 2017, options to purchase 347,872 common shares subject to performance-based vesting conditions have vested, as performance conditions were achieved, and 7,500 options to purchase common shares subject to performance-based vesting conditions were deemed probable of vesting.

Restricted Stock Awards

The following table summarizes restricted stock activity for employees and non-employees during the nine months ended September 30, 2017:

	Reflected as outstanding upon vesting	Reflected as outstanding upon grant date	Total	Weighted- Average Grant Date Fair Value
Unvested restricted common shares as of December 31, 2016	89,367	650,856	740,223	\$ 3.84
Granted	-	75,000	75,000	16.90
Vested	(25,140)	(314,941)	(340,081)	6.22
Cancelled or forfeited	-	(23,938)	(23,938)	1.72
Unvested restricted common shares as of September 30, 2017	<u>64,227</u>	<u>386,977</u>	<u>451,204</u>	<u>\$ 7.30</u>

During the nine months ended September 30, 2017, the total fair value of vested restricted common shares was \$6.2 million. As of September 30, 2017, total unrecognized compensation expense related to unvested restricted common shares was \$4.0 million which the Company expects to recognize over a remaining weighted-average period of one year.

The Company did not grant any restricted common shares subject to performance-based vesting conditions during the nine months ended September 30, 2017. As of September 30, 2017, 50,000 restricted common shares subject to performance-based vesting conditions were vested.

During the year ended December 31, 2016, the Company and Fay Corp. transferred 290,400 common shares to a founder, 268,093 of which were subject to vesting conditions with a weighted average grant date fair value of \$12.65 per share. The unvested common shares are subject to repurchase by the Company upon termination of the holder's service relationship with the Company as well as upon certain triggering events such as termination for cause, material breach of agreement and insolvency of the holder. During the three and nine months ended September 30, 2017, the Company recognized expense related to these common shares in the amount of \$0.2 million and \$0.6 million respectively. During the three and nine months ended September 30, 2016, the Company recognized expense related to these common shares in the amount of \$0.2 million and \$2.4 million respectively.

10. Income Taxes

During the three and nine months ended September 30, 2017, the Company recorded an income tax provision of \$0.7 million and \$1.3 million, respectively, representing an effective tax rate of -2.9%, and -2.0%, respectively. During the three and nine months ended September 30, 2016, the Company recorded an income tax provision of \$8.0 thousand and \$0.1 million, respectively, representing an effective tax rate of -0.1% and -0.2%, respectively. The income tax provision is primarily attributable to the year-to-date pre-tax income earned by the Company's U.S. and U.K. subsidiaries. The difference in the statutory tax rate and effective tax rate is primarily a result of the jurisdictional mix of earnings and losses that are not benefited. The Company maintains a valuation allowance against certain deferred tax assets that are not more-likely-than-not realizable. As a result, the Company has not recognized a tax benefit related to losses generated in Switzerland in the current periods.

11. Related Party Transactions

The Company is a party to intellectual property license agreements with Dr. Charpentier. As of September 30, 2017, and December 31, 2016, the Company owed Dr. Charpentier approximately \$0 and \$0.5 million, respectively, of sublicense fees primarily related to the Bayer Agreement. During the three and nine months ended September 30, 2017, the Company did not record any sublicensing fees due to Dr. Charpentier in research and development expense related to the Bayer Agreement. During the three and nine months ended September 30, 2016, the Company recorded sublicensing fees of \$17.0 thousand and \$1.0 million, respectively, due to Dr. Charpentier in research and development expense related to the Bayer Agreement.

The Company is a party to the JV with Bayer HealthCare. During the three and nine months ended September 30, 2017, the Company recognized revenue of \$1.2 million, and \$3.9 million, respectively, related to the collaboration with Casebia. During the three and nine months ended September 30, 2017, the Company recognized research and development expense of \$1.2 million and \$3.7 million, respectively, related to the performance of services for Casebia. During the three and nine months ended September 30, 2017, the Company received payments of \$0.9 million and \$1.6 million, respectively, in connection with research agreements with Casebia that the Company recognized as contra research and development expense. During the three and nine months ended September 30, 2016 the Company recognized \$0.4 million in revenue and \$0.4 million in research and development expenses related to the collaboration with Casebia. As of September 30, 2017, and December 31, 2016, the Company had accounts receivable of \$1.1 million and \$0.8 million, respectively, other current assets related to receivables associated with shared license research arrangements of \$0.6 million and \$0, respectively, and deferred revenue of \$0.2 million and \$0.5 million, respectively, related to Casebia.

12. Subsequent Events

As of November 8, 2017, the Company is not aware of any events have occurred that have a material effect on the financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with (i) our condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and (ii) our audited consolidated financial statements and related notes and management's discussion and analysis of financial condition and results of operations included in our annual report on Form 10-K for the year ended December 31, 2016 filed with the Securities and Exchange Commission on March 10, 2017. This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements are often identified by the use of words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "project," "will," "would" or the negative or plural of these words or similar expressions or variations. Such forward-looking statements are subject to a number of risks, uncertainties, assumptions and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified herein, and those discussed in the section titled "Risk Factors", set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q, if any, and in our other SEC filings. You should not rely upon forward-looking statements as predictions of future events. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

We are a leading gene editing company focused on the development of CRISPR/Cas9-based therapeutics. CRISPR/Cas9 stands for Clustered, Regularly Interspaced Short Palindromic Repeats (CRISPR) Associated Protein 9 and is a revolutionary gene editing technology that allows for precise, directed changes to genomic DNA. The application of CRISPR/Cas9 for gene editing was co-invented by one of our scientific founders, Dr. Charpentier, who, along with her collaborators, published work elucidating how CRISPR/Cas9, a naturally occurring viral defense mechanism found in bacteria, can be adapted for use in gene editing. We are applying this technology to potentially treat a broad set of rare and common diseases by disrupting, correcting or regulating the genes related to the disease. We believe that our scientific expertise, together with our approach, may enable an entirely new class of highly active and potentially curative treatments for patients for whom current biopharmaceutical approaches have had limited success.

Since our inception in October 2013, we have devoted substantially all of our resources to initiating the conduct of our research and development efforts, identifying potential product candidates, undertaking drug discovery and preclinical development activities, building and protecting our intellectual property portfolio, organizing and staffing our company, business planning, raising capital, and providing general and administrative support for these operations. To date, we have primarily financed our operations through the initial public offering ("IPO") of our common shares, private placements of our preferred and common shares, convertible loans and collaboration agreements with strategic partners. From our inception through September 30, 2017, we raised an aggregate of \$398.4 million of which \$53.7 million consisted of proceeds from our IPO, \$35.0 million from a concurrent private placement of our common shares, \$125.2 million of gross proceeds from private placements of preferred shares, \$73.2 million from the issuance of convertible loans, \$75.0 million from an upfront payment under our collaboration with Vertex Pharmaceuticals, Incorporated, or Vertex, \$35.0 million from a technology access fee related to our license of technology to Casebia Therapeutics LLP, our joint venture, or JV, with Bayer HealthCare LLC, or Bayer HealthCare and \$1.3 million from the exercise of stock options.

In October 2016, we issued 4,429,311 of our common shares, including 429,311 common shares sold pursuant to the underwriters' partial exercise of their option to purchase additional common shares, in our IPO, at a public offering price of \$14.00 per share, for aggregate gross proceeds of approximately \$62.0 million. Concurrent with the IPO, we issued an aggregate of 2,500,000 common shares to Bayer Global Investments BV, or Bayer BV, in a private placement, at the IPO price of \$14.00 a share, for aggregate net proceeds of \$35.0 million.

All of our revenue to date has been collaboration revenue. We have incurred significant net operating losses in every year since our inception and expect to continue to incur net operating losses for the foreseeable future. As of September 30, 2017, we had \$253.5 million in cash and an accumulated deficit of \$125.6 million. We expect to continue to incur significant expenses and increasing operating losses for the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase significantly as we continue our current research programs and development activities; seek to identify additional research programs and additional product candidates, conduct preclinical studies enabling clinical trial applications and initiate clinical trials for our most advanced product candidates which are from our hemoglobinopathy program targeting both beta thalassemia and sickle cell disease; initiate preclinical testing and clinical trials for any other product candidates we identify and develop, maintain, expand and protect our intellectual property portfolio, further develop our gene editing platform; hire additional research, clinical and scientific personnel; acquire or in license other technologies; and incur additional costs associated with operating as a public company.

Collaboration Agreement and Joint Venture Agreement

In October 2015, we entered into a strategic research collaboration agreement with Vertex focused on the development of CRISPR/Cas9-based therapies. Under the terms of our agreement, we received an upfront, nonrefundable payment of \$75.0 million and proceeds from a convertible loan of \$30.0 million.

In December 2015, we entered into a joint venture agreement, or the JV Agreement, with Bayer HealthCare to create a joint venture, Casebia, to discover, develop and commercialize new breakthrough therapeutics to cure blood disorders, blindness and heart disease. We and Bayer HealthCare each have a 50% interest in the JV. Under the JV Agreement, Bayer HealthCare is making available its protein engineering expertise and relevant disease know-how and we are contributing our proprietary CRISPR/Cas9 gene editing technology and intellectual property. Bayer HealthCare will also provide up to \$300.0 million in research and development investments to the JV over the first five years, subject to specified conditions.

In connection with the JV Agreement, the JV was required to pay us a technology access fee of \$35.0 million consisting of an upfront payment of \$20.0 million, which was paid at the closing of the JV Agreement in March 2016, and another payment of \$15.0 million for specified intellectual property rights relating to our CRISPR/Cas9 technology outside of the United States, which was paid in December 2016. In January 2016, we also issued a convertible note to Bayer BV (the "Bayer Convertible Loan") for gross proceeds of \$35.0 million which was immediately converted to Series B Preferred Shares at a conversion price of \$13.43 per share. Concurrent with the IPO in October 2016, we issued 2,500,000 common shares to Bayer BV, at the IPO price of \$14.00 per share resulting in aggregate net proceeds of \$35.0 million.

Financial Overview

Revenue

We have not generated any revenue to date from product sales and do not expect to do so in the next several years. During the three and nine months ended September 30, 2017, we recognized revenue related to our collaboration agreements with Vertex and Casebia in the aggregate amount of \$2.4 million and \$8.7 million respectively. During the three and nine months ended September 30, 2016, we recognized revenue related to our collaboration agreements with Vertex and Casebia in the aggregate amount \$1.6 million and \$2.8 million, respectively. As of September 30, 2017, we had not received any milestone or royalty payments under the Collaboration Agreement with Vertex. For additional information about our revenue recognition policy, see the "Critical Accounting Policies and Estimates—Revenue" in our Annual Report.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our product discovery efforts and the development of our product candidates, which include:

- employee-related expenses, including salaries, benefits and equity-based compensation expense;
- costs of services performed by third parties that conduct research and development and preclinical activities on our behalf;
- costs of purchasing lab supplies and non-capital equipment used in our preclinical activities and in manufacturing preclinical study materials;
- consultant fees;
- facility costs, including rent, depreciation and maintenance expenses; and
- fees and other payments related to acquiring and maintaining licenses under our third-party licensing agreements.

Research and development costs are expensed as incurred. Nonrefundable advance payments for research and development goods or services to be received in the future are deferred and capitalized. The capitalized amounts are expensed as the related goods are delivered or the services are performed. At this time, we cannot reasonably estimate or know the nature, timing or estimated costs of the efforts that will be necessary to complete the development of any product candidates we may develop. This is due to the numerous risks and uncertainties associated with developing such product candidates, including the uncertainty of:

- successful completion of preclinical studies and Investigational New Drug-enabling studies;
- successful enrollment in, and completion of, clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;

- obtaining and maintaining patent and trade secret protection and non-patent exclusivity;
- launching commercial sales of the product, if and when approved, whether alone or in collaboration with others;
- acceptance of the product, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies and treatment options;
- a continued acceptable safety profile following approval;
- enforcing and defending intellectual property and proprietary rights and claims; and
- achieving desirable medicinal properties for the intended indications.

A change in the outcome of any of these variables with respect to the development of any product candidates or the subsequent commercialization of any product candidates we may successfully develop could significantly change the costs, timing and viability associated with the development of that product candidate.

Except for activities we perform in connection with our collaborations with Vertex and Casebia, we do not track research and development costs on a program-by-program basis. We plan to track research and development costs for individual development programs when we identify a product candidate from the program that we believe we can advance into clinical trials.

Research and development activities are central to our business model. We expect research and development costs to increase significantly for the foreseeable future as our current development programs progress and new programs are added.

General and Administrative Expenses

General and administrative expenses consist primarily of employee related expenses, including salaries, benefits, and equity-based compensation for personnel in executive, finance, accounting, business development and human resources functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters, and fees for accounting and consulting services.

We anticipate that our general and administrative expenses will increase in the future to support continued research and development activities, potential commercialization of our product candidates and increased costs of operating as a public company. We anticipate increased costs associated with being a public company, including expenses related to services associated with maintaining compliance with exchange listing and SEC requirements, insurance costs and investor relations costs, the hiring of additional personnel and fees to outside consultants, lawyers and accountants, among other expenses. We also anticipate increased expenses related to the reimbursements of third-party patent related expenses with respect to certain of our in-licensed intellectual property.

Results of Operations

Comparison of three Months Ended September 30, 2017 and 2016

The following table summarizes our results of operations for the three months ended September 30, 2017 and 2016, together with the dollar change in those items:

	Three Months Ended September 30,		Period to Period Change
	2017	2016	
	(in thousands)		
Collaboration revenue	\$ 2,387	\$ 1,549	\$ 838
Operating expenses:			
Research and development	17,845	12,052	5,793
General and administrative	8,112	4,107	4,005
Total operating expenses	<u>25,957</u>	<u>16,159</u>	<u>9,798</u>
Loss from operations	(23,570)	(14,610)	(8,960)
Other expense, net	(430)	(76)	(354)
Net loss before income taxes	(24,000)	(14,686)	(9,314)
Provision for income taxes	(707)	(8)	(699)
Net loss	<u>\$ (24,707)</u>	<u>\$ (14,694)</u>	<u>\$ (10,013)</u>

Collaboration Revenue

Collaboration revenue for the three months ended September 30, 2017 was \$2.4 million, compared to \$1.5 million for the three months ended September 30, 2016. The increase of \$0.8 million was due to an increase in research and development service revenue from our collaboration agreements with Vertex and Casebia.

Research and Development Expenses

Research and development expenses were \$17.8 million for the three months ended September 30, 2017, compared to \$12.1 million for the three months ended September 30, 2016. The increase of \$5.8 million was primarily attributable to the following increases: \$2.3 million of variable research and development costs including significant toxicology studies, \$1.7 million of employee-related costs, \$1.1 million of employee stock based compensation costs and the remainder primarily of facilities costs including rent and utilities at our new research facility.

General and Administrative Expenses

General and administrative expenses were \$8.1 million for the three months ended September 30, 2017, compared to \$4.1 million for the three months ended September 30, 2016. The increase of \$4.0 million was primarily attributable to the following increases: \$1.5 million of employee stock based compensation costs, \$1.3 million of employee-related costs to support our overall growth, \$1.0 million of professional and consulting expenses and \$1.0 million in facilities costs including rent and utilities at our new facility. These increases were partially offset by a decrease of \$0.8 million in legal and intellectual property fees.

Other Expense, Net

Other expense, net, was \$0.4 million of expense for the three months ended September 30, 2017, compared to \$0.1 million of expense for the three months ended September 30, 2016. The increase was primarily due to the loss from equity method investment.

Comparison of nine months Ended September 30, 2017 and 2016

The following table summarizes our results of operations for the nine months ended September 30, 2017 and 2016, together with the dollar change in those items:

	Nine Months Ended September 30,		Period to Period
	2017	2016	Change
	(in thousands)		
Collaboration revenue	\$ 8,672	\$ 2,820	\$ 5,852
Operating expenses:			
Research and development	49,770	26,666	23,104
General and administrative	24,522	18,974	5,548
Total operating expenses	74,292	45,640	28,652
Loss from operations	(65,620)	(42,820)	(22,800)
Other (expense) income, net	(1,548)	2,604	(4,152)
Net loss before income taxes	(67,168)	(40,216)	(26,952)
Provision for income taxes	(1,330)	(84)	(1,246)
Net loss	\$ (68,498)	\$ (40,300)	\$ (28,198)

Collaboration Revenue

Collaboration revenue for the nine months ended September 30, 2017 was \$8.7 million, compared to \$2.8 million for the nine months ended September 30, 2016. The increase of \$5.9 million was due to an increase in research and development service revenue from our collaboration agreements with Vertex and Casebia.

Research and Development Expenses

Research and development expenses were \$49.8 million for the nine months ended September 30, 2017, compared to \$26.7 million for the nine months ended September 30, 2016. The increase of \$23.1 million was primarily attributable to the following increases: \$5.5 million of facilities costs including rent and utilities at our new research facility, \$8.3 million of variable research and development program costs with toxicology studies, \$6.4 million of employee-related costs and \$3.3 million of employee stock based compensation costs. These increases were primarily offset by a decrease in professional services costs.

General and Administrative Expenses

General and administrative expenses were \$24.5 million for the nine months ended September 30, 2017, compared to \$19.0 million for the nine months ended September 30, 2016. The increase of \$5.5 million was primarily due to the following increases: \$3.1 million of employee-related costs to support our overall growth, \$2.9 million in facilities costs including rent and utilities at our new research facility, \$1.8 million of employee stock based compensation costs and \$0.5 million in professional services costs. The increases were offset by a reduction of our 2016 Passive Foreign Investment Company tax obligation and franchise taxes on the convertible preferred stock financings.

Other (Expense) Income, Net

Other (expense) income, net was \$1.5 million of expense for the nine months ended September 30, 2017, compared to \$2.6 million of income for the nine months ended September 30, 2016. The increase of \$4.2 million was primarily due to an increase in the loss from equity method investment of \$0.6 million in the nine months ended September 30, 2017 as compared to a gain of \$11.5 million on the extinguishment of the convertible loan with Vertex, and an increase of \$0.1 million due to currency transaction and translation losses. The increases were partially offset by a decrease in interest expense of \$8.1 million on the convertible loan with Bayer recognized in the nine months ended September 30, 2016.

Liquidity and Capital Resources

From our inception through September 30, 2017, we raised an aggregate of \$398.4 million, of which \$53.7 million consisted of proceeds from our IPO, \$35.0 million from a concurrent private placement of our common shares, \$125.2 million of gross proceeds from private placements of preferred shares, \$73.2 million from the issuance of convertible notes, an up-front payment under our collaboration agreement with Vertex of \$75.0 million, technology access fee of \$35.0 million from Casebia, pursuant to our JV Agreement with Bayer HealthCare and \$1.3 million from the exercise of stock options.

As of September 30, 2017, we had \$253.5 million in cash of which approximately \$252.8 million was held outside of the United States.

Funding Requirements

Our primary uses of capital are, and we expect will continue to be, research and development activities, compensation and related expenses, laboratory and related supplies, legal and other regulatory expenses, patent prosecution filing and maintenance costs for our licensed intellectual property and general overhead costs. We expect our expenses to increase compared to prior periods in connection with our ongoing activities, particularly as we continue research and development and preclinical activities, including preclinical studies to support clinical trial applications, and we initiate clinical trial.

Because our research programs are still in preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of any future product candidates or whether, or when, we may achieve profitability. Until such time as we can generate substantial product revenues, if ever, we expect to finance our cash needs through a combination of equity or debt financings and collaboration arrangements. We are entitled to research payments under our collaboration with Vertex. Additionally, we are eligible to earn payments, in each case, on a per-product basis under the JV Agreement with Casebia and our collaboration with Vertex. Except for these sources of funding, we do not have any committed external source of liquidity. To the extent that we raise additional capital through the future sale of equity or convertible debt securities, the ownership interest of our shareholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing shareholders. If we raise additional funds through collaboration arrangements in the future, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Outlook

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect that the net proceeds from our IPO, including the proceeds from the concurrent private placement with Bayer BV, together with our existing cash, will enable us to fund our operating expenses and capital expenditures through at least the next 24 months, without giving effect to any additional proceeds we may receive under our collaboration agreement with Vertex and the JV. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect.

Our ability to generate revenue and achieve profitability depends significantly on our success in many areas, including: developing our delivery technologies and our CRISPR/Cas9 technology platform; selecting appropriate product candidates to develop; completing research and preclinical and clinical development of selected product candidates; obtaining regulatory approvals and marketing authorizations for product candidates for which we complete clinical trials; developing a sustainable and scalable manufacturing process for product candidates; launching and commercializing product candidates for which we obtain regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor; obtaining market acceptance of our product candidates; addressing any competing technological and market developments; negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter; maintaining good relationships with our collaborators and licensors; maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and attracting, hiring and retaining qualified personnel.

Cash Flows

The following table provides information regarding our cash flows for each of the period below:

	Nine Months Ended September 30,		Period to Period Change
	2017	2016	
	(in thousands)		
Net cash used in operating activities	\$ (55,255)	\$ (35,894)	\$ (19,361)
Net cash (used in) provided by investing activities	(8,109)	17,112	(25,221)
Net cash provided by financing activities	1,324	91,454	(90,130)
Effect of exchange rate changes on cash	39	(20)	59
Net (decrease) increase in cash	\$ (62,001)	\$ 72,652	\$ (134,653)

Net Cash Used in Operating Activities

Net cash used in operating activities was \$55.3 million for the nine months ended September 30, 2017 as compared to \$35.9 million for the nine months ended September 30, 2016. The net cash used in operating activities for the nine months ended September 30, 2017 primarily consisted of a net loss of \$68.5 million adjusted for non-cash items (including equity-based compensation expense of \$11.9 million, depreciation and amortization expense of \$2.2 million and a loss from an equity method investment of \$1.3 million), an increase in accounts receivable of \$0.1 million, an increase in prepaid expenses and other assets of \$0.3 million and a decrease in accounts payable and accrued expenses of \$3.0 million, and a decrease of \$0.9 million in deferred rent, partially offset by an increase in deferred revenue of \$2.0 million.

Net Cash (Used in) Provided by Investing Activities

Net cash used in investing activities for the nine months ended September 30, 2017 was \$8.1 million as compared with net cash provided by investing activities for the nine months ended September 30, 2016 of \$17.1 million. The net cash used in investing activities for the nine months ended September 30, 2017 and 2016 consisted primarily of purchases of property and equipment for use in research and development activities. Net cash provided by investing activities during the nine months ended September 30, 2016 consisted primarily of proceeds of \$20.0 million from the contribution of intellectual property to the JV.

Net Cash Provided by Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2017 was \$1.3 million, compared with \$91.5 million for the nine months ended September 30, 2016. The net cash provided by financing activities for the nine months ended September 30, 2017 consisted of proceeds from the exercise of stock options. The cash provided by financing activities for the nine months ended September 30, 2016 consisted of the proceeds from our issuances of common shares, Series A-3 preferred shares, Series B preferred shares and convertible loans.

Contractual Obligations

The disclosure of our contractual obligations and commitments was reported in our Annual Report on Form 10-K for the year ended December 31, 2016. There have been no material changes from the contractual commitments and obligations previously disclosed in our Annual Report on Form 10-K other than the changes described below and in Note 6 to the accompanying financial statements.

We have long-term liabilities associated with uncertain tax positions recorded under ASC 740, *Income Taxes* totaling \$13.0 thousand. Due to the complexity associated with tax uncertainties, we cannot reasonably make a reliable estimate of the period in which we expect to settle these non-current liabilities. See Note 10 of the unaudited condensed consolidated financial statements contained in Item 1 of this interim report for more information on our unrecognized tax benefits.

Under the Invention Management Agreement signed on December 15, 2016, we are obligated to share costs related to patent maintenance, defense and prosecution for the CRISPR/Cas9 gene editing intellectual property with California, Vienna and their licensees including Caribou Biosciences, Inc. and Caribou's licensee Intellia Therapeutics, Inc.

Off-Balance Sheet Arrangements

As of September 30, 2017, we do not have any off-balance sheet arrangements as defined under applicable SEC rules.

Critical Accounting Policies and Significant Judgments and Estimates

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with U.S. generally accepted accounting principles. We believe that several accounting policies are important to understanding our historical and future performance. We refer to these policies as critical because these specific areas generally require us to make judgments and estimates about matters that are uncertain at the time we make the estimate, and different estimates—which also would have been reasonable—could have been used. On an ongoing basis, we evaluate our estimates and judgments, including those described in greater detail below. We base our estimates on historical experience and other market-specific or other relevant assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe that our most critical accounting policies are those relating to revenue recognition, variable interest entities and equity-based compensation, and there have been no significant changes to our accounting policies discussed in the Annual Report.

Recent Accounting Pronouncements

Refer to Note 2, "Summary of Significant Accounting Policies," in the accompanying notes to the consolidated financial statements for a discussion of recent accounting pronouncements. There were no new accounting pronouncements adopted during 2017 that had a material effect on our financial statements.

Item 3. Qualitative and Quantitative Disclosures about Market Risk

Foreign Exchange Market Risk

As a result of our foreign operations, we face exposure to movements in foreign currency exchange rates, primarily the Swiss Franc and British Pound, against the U.S. dollar. The current exposures arise primarily from cash, accounts payable, and intercompany receivables and payables. Changes in foreign exchange rates affect our consolidated statement of operations and distort comparisons between periods. We do not engage in any foreign exchange rate hedging activities and therefore we are subject to foreign currency impacts.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We have established disclosure controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and is accumulated and communicated to management, including the principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

Our management, with the participation of our Principal Executive Officer and Principal Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2017. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures

designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of September 30, 2017, our Chief Executive Officer and Principal Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15(d)-15(f) under the Exchange Act) that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we may become involved in litigation or other legal proceedings relating to claims arising from the ordinary course of business. Except as described below, there are currently no claims or actions pending against us that, in the opinion of our management, are likely to have a material adverse effect on our business.

In January 2016, the U.S. Patent and Trademark Office, or USPTO, declared an interference between one of the pending U.S. patent applications we have licensed from Dr. Charpentier and twelve issued U.S. patents owned jointly by the Broad Institute and Massachusetts Institute of Technology and, in some instances, the President and Fellows of Harvard College, which we refer to individually and collectively as Broad. The interference was redeclared in March 2016 to add a U.S. patent application owned by Broad. An interference is a proceeding conducted at the USPTO by the Patent Trial and Appeal Board, or PTAB, to determine which party was the first to invent subject matter claimed by at least two parties. There were two parties to this interference being Dr. Charpentier, the regents of the University of California, and the University of Vienna (collectively, "UC") and Broad.

Following motions by the parties and other procedural matters, in February 2017 the PTAB concluded that the declared interference should be dismissed. In its decision, the PTAB concluded that, although the claims overlap, the respective scope of UC and Broad's claim sets as presented did not define the same patentable invention and, accordingly, terminated the interference.

In April 2017, UC appealed the PTAB decision to the U.S. Court of Appeals for the Federal Circuit, or the Federal Circuit. In the appeal, UC is seeking review and reversal of the PTAB's February 2017 decision, which terminated the interference without determining which inventors actually invented the use of the CRISPR/Cas9 genome editing technology in eukaryotic cells.

In addition to the appeal of the PTAB decision to the Federal Circuit, in parallel, either party can also pursue existing or new patent applications in the U.S. and elsewhere. Going forward, either party and other parties could seek a new interference related to the uses of the technology in eukaryotic cells or other aspects of the technology, and any existing or new patents could be the subject of other challenges to their validity of enforceability. If there is a second interference, either party could again appeal an adverse decision to the U.S. Court of Appeals for the Federal Circuit.

In any case, it may be years before there is a final determination on priority. Pursuant to the terms of the license agreement with Dr. Charpentier, we are responsible for covering or reimbursing Dr. Charpentier's patent prosecution, defense and related costs associated with our in-licensed technology.

Item 1A. Risk Factors.

There have been no material changes from the risk factors previously disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2016.

Item 2. Unregistered Sales of Equity Securities.

During the period between July 1, 2017 and September 30, 2017, we issued to certain of our employees options to purchase an aggregate of 465,300 common shares at a weighted-average exercise price of \$17.49 per share. We deemed these issuances to be exempt from registration under the Securities Act either in reliance on Rule 701 of the Securities Act as sales and offers 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. All recipients either received adequate information about our Company or had access, through employment or other relationships, to such information. No underwriters were involved in the foregoing issuances of securities. Total forfeitures during the period between July 1, 2017 and September 30, 2017 amounted to 7,264.

During the period between July 1, 2017 and September 30, 2017, we issued to Casebia employees options to purchase an aggregate of 24,999 common shares at a weighted-average exercise price of \$19.04 per share. We deemed these issuances to be exempt from registration under the Securities Act either in reliance on Rule 701 of the Securities Act as sales and offers 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. All recipients either received adequate information about our Company or had access, through employment or other relationships, to such information. No underwriters were involved in the foregoing issuances of securities.

Item 6. Exhibits

Exhibit Number	Description of Document
3.1	Amended and Restate Articles of Association of CRISPR Therapeutics AG, dated May 31, 2017 (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 25, 2017).
10.1	CRISPR Therapeutics AG Amended and Restated 2016 Stock Option and Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 2, 2017).
10.2	Form of Incentive Stock Option Agreement under CRISPR Therapeutics AG's Amended and Restated 2016 Stock Option and Incentive Plan.
10.3	Form of Non-Qualified Stock Option Agreement for Company Employees under Registrant's Amended and Restated 2016 Stock Option and Incentive Plan.
10.4	Form of Non-Qualified Stock Option Agreement for Non-Employee Directors under CRISPR Therapeutics AG's Amended and Restated 2016 Stock Option and Incentive Plan.
10.5	Form of Restricted Stock Award Agreement under CRISPR Therapeutics AG's Amended and Restated 2016 Stock Option and Incentive Plan.
10.6	Form of Restricted Stock Award Agreement for Company Employees under Registrant's Amended and Restated 2016 Stock Option and Incentive Plan.
10.7	Form of Restricted Stock Award Agreement for Non-Employee Directors under CRISPR Therapeutics AG's Amended and Restated 2016 Stock Option and Incentive Plan.
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	Financials in XBRL format.

* The certification attached as Exhibit 32.1 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the SEC and are not to be incorporated by reference into any filing of CRISPR Therapeutics AG under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-Q, irrespective of any general incorporation language contained in such filing.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

CRISPR Therapeutics AG

Dated: November 8, 2017

By: /s/ Rodger Novak
Rodger Novak
Chief Executive Officer
(Principal Executive Officer)

Dated: November 8, 2017

By: /s/ Samarth Kulkarni
Samarth Kulkarni
President and Chief Business Officer
(Principal Financial Officer)

**INCENTIVE STOCK OPTION AGREEMENT
UNDER THE CRISPR THERAPEUTICS AG
AMENDED AND RESTATED 2016 STOCK OPTION AND INCENTIVE PLAN**

Name of Optionee: _____

No. of Option Shares: _____

Option Exercise Price per Share: \$ _____

Grant Date: _____

Expiration Date: _____

Pursuant to the CRISPR Therapeutics AG Amended and Restated 2016 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), CRISPR Therapeutics AG (the "Company") hereby grants to the Optionee named above an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value CHF 0.03 per share (the "Stock"), of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable with respect to the following number of Option Shares on the dates indicated so long as the Optionee remains an employee of the Company or a Subsidiary on such dates:

<u>Incremental Number of Option Shares Exercisable*</u>	<u>Exercisability Date</u>
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

* Max. of \$100,000 per yr.

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; or (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; or (iv) a combination of (i), (ii) and (iii) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws, and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) The minimum number of shares with respect to which this Stock Option may be exercised at any one time shall be 100 shares, unless the number of shares with respect to which this Stock Option is being exercised is the total number of shares subject to exercise under this Stock Option at the time.

(d) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination of Employment. If the Optionee's employment by the Company or a Subsidiary (as defined in the Plan) is terminated, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's employment terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of 12 months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Termination Due to Disability. If the Optionee's employment terminates by reason of the Optionee's disability (as determined by the Administrator), any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of such termination of employment, may thereafter be exercised by the Optionee for a period of 12 months from the date of disability or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of disability shall terminate immediately and be of no further force or effect.

(c) Termination for Cause. If the Optionee's employment terminates for Cause, any portion of this Stock Option outstanding on such date shall terminate immediately and be of no further force and effect. For purposes hereof, "Cause" shall mean, unless otherwise provided in an employment agreement between the Company and the Optionee, a determination by the Administrator that the Optionee shall be dismissed as a result of (i) any material breach by the Optionee of any agreement between the Optionee and the Company; (ii) the conviction of, indictment for or plea of nolo contendere by the Optionee to a felony or a crime involving moral turpitude; or (iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Optionee of the Optionee's duties to the Company.

(d) Other Termination. If the Optionee's employment terminates for any reason other than the Optionee's death, the Optionee's disability, or Cause, and unless otherwise determined by the Administrator, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date of termination, for a period of three months from the date of termination or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of termination shall terminate immediately and be of no further force or effect.

The Administrator's determination of the reason for termination of the Optionee's employment shall be conclusive and binding on the Optionee and his or her representatives or legatees.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. Status of the Stock Option. This Stock Option is intended to qualify as an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), but the Company does not represent or warrant that this Stock Option qualifies as such. The Optionee should consult with his or her own tax advisors regarding the tax effects of this Stock Option and the requirements necessary to obtain favorable income tax treatment under Section 422 of the Code, including, but not limited to, holding period requirements. To the extent any portion of this Stock Option does not so qualify as an "incentive stock option," such portion shall be deemed to be a non-qualified stock option. If the Optionee intends to dispose or does dispose (whether by sale, gift, transfer or otherwise) of any Option Shares within the one-year period beginning on the date after the transfer of such shares to him or her, or within the two-year period beginning on the day after the grant of this Stock Option, he or she will so notify the Company within 30 days after such disposition.

7. Tax Withholding. The Optionee shall, not later than the date as of which the exercise of this Stock Option becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state, and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the minimum required tax withholding obligation to be satisfied, in whole or in part, by withholding from shares of Stock to be issued to the Optionee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the minimum withholding amount due.

8. No Obligation to Continue Employment. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Optionee in employment and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the employment of the Optionee at any time.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

10. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the “Relevant Companies”) may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the “Relevant Information”). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

11. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

CRISPR THERAPEUTICS AG

By: _____

Title: _____

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company’s instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

Optionee’s Signature

Optionee’s name and address:

**NON-QUALIFIED STOCK OPTION AGREEMENT
FOR COMPANY EMPLOYEES
UNDER THE CRISPR THERAPEUTICS AG
AMENDED AND RESTATED 2016 STOCK OPTION AND INCENTIVE PLAN**

Name of Optionee: _____

No. of Option Shares: _____

Option Exercise Price per Share: \$ _____

Grant Date: _____

Expiration Date: _____

Pursuant to the CRISPR Therapeutics AG Amended and Restated 2016 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), CRISPR Therapeutics AG (the "Company") hereby grants to the Optionee named above an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value CHF 0.03 per share (the "Stock") of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan. This Stock Option is not intended to be an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable with respect to the following number of Option Shares on the dates indicated so long as Optionee remains an employee of the Company or a Subsidiary on such dates:

<u>Incremental Number of Option Shares Exercisable</u>	<u>Exercisability Date</u>
_____ (%)	_____
_____ (%)	_____
_____ (%)	_____
_____ (%)	_____
_____ (%)	_____

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; or (v) a combination of (i), (ii), (iii) and (iv) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws, and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) The minimum number of shares with respect to which this Stock Option may be exercised at any one time shall be 100 shares, unless the number of shares with respect to which this Stock Option is being exercised is the total number of shares subject to exercise under this Stock Option at the time.

(d) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination of Employment. If the Optionee's employment by the Company or a Subsidiary (as defined in the Plan) is terminated, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's employment terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of 12 months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Termination Due to Disability. If the Optionee's employment terminates by reason of the Optionee's disability (as determined by the Administrator), any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of such termination of employment, may thereafter be exercised by the Optionee for a period of 12 months from the date of disability or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of disability shall terminate immediately and be of no further force or effect.

(c) Termination for Cause. If the Optionee's employment terminates for Cause, any portion of this Stock Option outstanding on such date shall terminate immediately and be of no further force and effect. For purposes hereof, "Cause" shall mean, unless otherwise provided in an employment agreement between the Company and the Optionee, a determination by the Administrator that the Optionee shall be dismissed as a result of (i) any material breach by the Optionee of any agreement between the Optionee and the Company; (ii) the conviction of, indictment for or plea of nolo contendere by the Optionee to a felony or a crime involving moral turpitude; or (iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Optionee of the Optionee's duties to the Company.

(d) Other Termination. If the Optionee's employment terminates for any reason other than the Optionee's death, the Optionee's disability or Cause, and unless otherwise determined by the Administrator, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date of termination, for a period of three months from the date of termination or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of termination shall terminate immediately and be of no further force or effect.

The Administrator's determination of the reason for termination of the Optionee's employment shall be conclusive and binding on the Optionee and his or her representatives or legatees.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. Tax Withholding. The Optionee shall, not later than the date as of which the exercise of this Stock Option becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state, and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the minimum required tax withholding obligation to be satisfied, in whole or in part, by withholding from shares of Stock to be issued to the Optionee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the minimum withholding amount due.

7. No Obligation to Continue Employment. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Optionee in employment and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the employment of the Optionee at any time.

8. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

9. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

10. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

CRISPR THERAPEUTICS AG

By: _____
Title: _____

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

Optionee's Signature

Optionee's name and address:

**NON-QUALIFIED STOCK OPTION AGREEMENT
FOR NON-EMPLOYEE DIRECTORS
UNDER THE CRISPR THERAPEUTICS AG
AMENDED AND RESTATED 2016 STOCK OPTION AND INCENTIVE PLAN**

Name of Optionee: _____

No. of Option Shares: _____

Option Exercise Price per Share: \$ _____

Grant Date: _____

Expiration Date: _____

Pursuant to the CRISPR Therapeutics AG Amended and Restated 2016 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), CRISPR Therapeutics AG (the "Company") hereby grants to the Optionee named above, who is a Director of the Company but is not an employee of the Company, an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value CHF 0.03 per share (the "Stock"), of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan. This Stock Option is not intended to be an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable with respect to the following number of Option Shares on the dates indicated so long as the Optionee remains in service as a member of the Board on such dates:

<u>Incremental Number of Option Shares Exercisable</u>	<u>Exercisability Date</u>
_____ (___ %)	_____
_____ (___ %)	_____
_____ (___ %)	_____
_____ (___ %)	_____
_____ (___ %)	_____

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; or (v) a combination of (i), (ii), (iii) and (iv) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws, and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a

holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) The minimum number of shares with respect to which this Stock Option may be exercised at any one time shall be 100 shares, unless the number of shares with respect to which this Stock Option is being exercised is the total number of shares subject to exercise under this Stock Option at the time.

(d) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination as Director. If the Optionee ceases to be a Director of the Company, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's service as a Director terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of 12 months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Other Termination. If the Optionee ceases to be a Director for any reason other than the Optionee's death, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date the Optionee ceased to be a Director, for a period of six months from the date the Optionee ceased to be a Director or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date the Optionee ceases to be a Director shall terminate immediately and be of no further force or effect.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. No Obligation to Continue as a Director. Neither the Plan nor this Stock Option confers upon the Optionee any rights with respect to continuance as a Director.

7. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

8. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

9. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

CRISPR THERAPEUTICS AG

By: _____
Title: _____

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____
Optionee's Signature

Optionee's name and address:

**RESTRICTED STOCK AWARD AGREEMENT
UNDER THE CRISPR THERAPEUTICS AG
AMENDED AND RESTATED 2016 STOCK OPTION AND INCENTIVE PLAN**

Name of Grantee: _____

No. of Shares: _____

Grant Date: _____

Pursuant to the CRISPR Therapeutics AG Amended and Restated 2016 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), CRISPR Therapeutics AG (the "Company") hereby grants a Restricted Stock Award (an "Award") to the Grantee named above. Upon acceptance of this Award, the Grantee shall receive the number of shares of Common Stock, par value CHF 0.03 per share (the "Stock") of the Company specified above, subject to the restrictions and conditions set forth herein and in the Plan. The Company acknowledges the receipt from the Grantee of consideration with respect to the par value of the Stock in the form of cash, past or future services rendered to the Company by the Grantee or such other form of consideration as is acceptable to the Administrator.

1. Award. The shares of Restricted Stock awarded hereunder shall be issued and held by the Company's transfer agent in book entry form, and the Grantee's name shall be entered as the stockholder of record on the books of the Company. Thereupon, the Grantee shall have all the rights of a stockholder with respect to such shares, including voting and dividend rights, subject, however, to the restrictions and conditions specified in Paragraph 2 below. The Grantee shall (i) sign and deliver to the Company a copy of this Award Agreement and (ii) deliver to the Company a stock power endorsed in blank.

2. Restrictions and Conditions.

(a) Any book entries for the shares of Restricted Stock granted herein shall bear an appropriate legend, as determined by the Administrator in its sole discretion, to the effect that such shares are subject to restrictions as set forth herein and in the Plan.

(b) Shares of Restricted Stock granted herein may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of by the Grantee prior to vesting.

(c) If the Grantee's employment with the Company and its Subsidiaries is voluntarily or involuntarily terminated for any reason (including death) prior to vesting of shares of Restricted Stock granted herein, all shares of Restricted Stock shall immediately and automatically be forfeited and returned to the Company.

3. Vesting of Restricted Stock. The restrictions and conditions in Paragraph 2 of this Agreement shall lapse on the Vesting Date or Dates specified in the following schedule so long as the Grantee remains an employee of the Company or a Subsidiary on such Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 2 shall lapse only with respect to the number of shares of Restricted Stock specified as vested on such date.

<u>Incremental Number of Shares Vested</u>	<u>Vesting Date</u>
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____
_____ (___%)	_____

Subsequent to such Vesting Date or Dates, the shares of Stock on which all restrictions and conditions have lapsed shall no longer be deemed Restricted Stock. The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 3.

4. Dividends. Dividends on shares of Restricted Stock shall be paid currently to the Grantee.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Award shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Transferability. This Agreement is personal to the Grantee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution.

7. Tax Withholding. The Grantee shall, not later than the date as of which the receipt of this Award becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state, and local taxes required by law to be withheld on account of such taxable event. Except in the case where an election is made pursuant to Paragraph 8 below, the Company shall have the authority to cause the required minimum tax withholding obligation to be satisfied, in whole or in part, by withholding from shares of Stock to be issued or released by the transfer agent a number of shares of Stock with an aggregate Fair Market Value that would satisfy the minimum withholding amount due.

8. Election Under Section 83(b). The Grantee and the Company hereby agree that the Grantee may, within 30 days following the Grant Date of this Award, file with the Internal Revenue Service and the Company an election under Section 83(b) of the Internal Revenue Code. In the event the Grantee makes such an election, he or she agrees to provide a copy of the election to the Company. The Grantee acknowledges that he or she is responsible for obtaining the advice of his or her tax advisors with regard to the Section 83(b) election and that he or she is relying solely on such advisors and not on any statements or representations of the Company or any of its agents with regard to such election.

9. No Obligation to Continue Employment. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Grantee in employment and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the employment of the Grantee at any time.

10. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

11. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

12. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

CRISPR THERAPEUTICS AG

By:

_____ Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

Grantee's Signature

Grantee's name and address:

**RESTRICTED STOCK UNIT AWARD AGREEMENT
FOR COMPANY EMPLOYEES
UNDER THE CRISPR THERAPEUTICS AG
AMENDED AND RESTATED 2016 STOCK OPTION AND INCENTIVE PLAN**

Name of Grantee: _____

No. of Restricted Stock Units: _____

Grant Date: _____

Pursuant to the CRISPR Therapeutics AG Amended and Restated 2016 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), CRISPR Therapeutics AG (the "Company") hereby grants an award of the number of Restricted Stock Units listed above (an "Award") to the Grantee named above. Each Restricted Stock Unit shall relate to one share of Common Stock, par value CHF 0.03 per share (the "Stock") of the Company.

1. Restrictions on Transfer of Award. This Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of by the Grantee, and any shares of Stock issuable with respect to the Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of until (i) the Restricted Stock Units have vested as provided in Paragraph 2 of this Agreement and (ii) shares of Stock have been issued to the Grantee in accordance with the terms of the Plan and this Agreement.

2. Vesting of Restricted Stock Units. The restrictions and conditions of Paragraph 1 of this Agreement shall lapse on the Vesting Date or Dates specified in the following schedule so long as the Grantee remains an employee of the Company or a Subsidiary on such Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 1 shall lapse only with respect to the number of Restricted Stock Units specified as vested on such date.

<u>Incremental Number of Restricted Stock Units Vested</u>	<u>Vesting Date</u>
_____ (___ %)	_____
_____ (___ %)	_____
_____ (___ %)	_____
_____ (___ %)	_____

The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 2.

3. Termination of Employment. If the Grantee's employment with the Company and its Subsidiaries terminates for any reason (including death or disability) prior to the satisfaction of the vesting conditions set forth in Paragraph 2 above, any Restricted Stock Units that have not vested as of such date shall automatically and without notice terminate and be forfeited, and neither the Grantee nor any of his or her successors, heirs, assigns, or personal representatives will thereafter have any further rights or interests in such unvested Restricted Stock Units.

4. Issuance of Shares of Stock. As soon as practicable following each Vesting Date (but in no event later than two and one-half months after the end of the year in which the Vesting Date occurs), the Company shall issue to the Grantee the number of shares of Stock equal to the aggregate number of Restricted Stock Units that have vested pursuant to Paragraph 2 of this Agreement on such date and the Grantee shall thereafter have all the rights of a stockholder of the Company with respect to such shares.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Agreement shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Tax Withholding. The Grantee shall, not later than the date as of which the receipt of this Award becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state, and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the required minimum tax withholding obligation to be satisfied, in whole or in part, by withholding from shares of Stock to be issued to the Grantee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due.

7. Section 409A of the Code. This Agreement shall be interpreted in such a manner that all provisions relating to the settlement of the Award are exempt from the requirements of Section 409A of the Code as "short-term deferrals" as described in Section 409A of the Code.

8. No Obligation to Continue Employment. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Grantee in employment and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the employment of the Grantee at any time.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

10. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

11. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

CRISPR THERAPEUTICS AG

By: _____

Title: _____

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

Grantee's Signature

Grantee's name and address:

**RESTRICTED STOCK UNIT AWARD AGREEMENT
FOR NON-EMPLOYEE DIRECTORS
UNDER THE CRISPR THERAPEUTICS AG
AMENDED AND RESTATED 2016 STOCK OPTION AND INCENTIVE PLAN**

Name of Grantee: _____

No. of Restricted Stock Units: _____

Grant Date: _____

Pursuant to the CRISPR Therapeutics AG Amended and Restated 2016 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), CRISPR Therapeutics AG (the "Company") hereby grants an award of the number of Restricted Stock Units listed above (an "Award") to the Grantee named above. Each Restricted Stock Unit shall relate to one share of Common Stock, par value CHF 0.03 per share (the "Stock") of the Company.

1. Restrictions on Transfer of Award. This Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of by the Grantee, and any shares of Stock issuable with respect to the Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of until (i) the Restricted Stock Units have vested as provided in Paragraph 2 of this Agreement and (ii) shares of Stock have been issued to the Grantee in accordance with the terms of the Plan and this Agreement.

2. Vesting of Restricted Stock Units. The restrictions and conditions of Paragraph 1 of this Agreement shall lapse on the Vesting Date or Dates specified in the following schedule so long as the Grantee remains in service as a member of the Board on such Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 1 shall lapse only with respect to the number of Restricted Stock Units specified as vested on such date.

<u>Incremental Number of Restricted Stock Units Vested</u>	<u>Vesting Date</u>
_____ (___ %)	_____
_____ (___ %)	_____
_____ (___ %)	_____
_____ (___ %)	_____

The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 2.

3. Termination of Service. If the Grantee's service with the Company and its Subsidiaries terminates for any reason (including death or disability) prior to the satisfaction of the vesting conditions set forth in Paragraph 2 above, any Restricted Stock Units that have not vested as of such date shall automatically and without notice terminate and be forfeited, and neither the Grantee nor any of his or her successors, heirs, assigns, or personal representatives will thereafter have any further rights or interests in such unvested Restricted Stock Units.

4. Issuance of Shares of Stock. As soon as practicable following each Vesting Date (but in no event later than two and one-half months after the end of the year in which the Vesting Date occurs), the Company shall issue to the Grantee the number of shares of Stock equal to the aggregate number of Restricted Stock Units that have vested pursuant to Paragraph 2 of this Agreement on such date and the Grantee shall thereafter have all the rights of a stockholder of the Company with respect to such shares.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Agreement shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Section 409A of the Code. This Agreement shall be interpreted in such a manner that all provisions relating to the settlement of the Award are exempt from the requirements of Section 409A of the Code as "short-term deferrals" as described in Section 409A of the Code.

7. No Obligation to Continue as a Director. Neither the Plan nor this Award confers upon the Grantee any rights with respect to continuance as a Director.

8. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

9. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

10. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

CRISPR THERAPEUTICS AG

By: _____
Title: _____

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

Grantee's Signature

Grantee's name and address:

CERTIFICATION

I, Rodger Novak, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of CRISPR Therapeutics AG;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2017

By: /s/ Rodger Novak
Rodger Novak
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

I, Samarth Kulkarni, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of CRISPR Therapeutics AG;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2017

By: /s/ Samarth Kulkarni
Samarth Kulkarni
President and Chief Business Officer
(Principal Financial Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of CRISPR Therapeutics AG (the "Company") for the period ended September 30, 2017 as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), the undersigned officers of the Company hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his or her knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

/s/ Rodger Novak
Rodger Novak
Chief Executive Officer
(Principal Executive Officer)

November 8, 2017

/s/ Samarth Kulkarni
Samarth Kulkarni
President and Chief Business Officer
(Principal Financial Officer)

November 8, 2017

