

**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 **June 30, 2022**

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)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
<b>Common Shares, nominal value CHF 0.03</b>	<b>CRSP</b>	<b>The Nasdaq Global Market</b>

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 every Interactive Data File required to be submitted 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 such files). YES  NO

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

Large Accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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.

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

As of August 4, 2022, there were 78,009,260 shares of registrant's common shares outstanding.

Throughout this Quarterly Report on Form 10-Q, the “Company,” “CRISPR,” “CRISPR Therapeutics,” “we,” “us,” and “our,” except where the context requires otherwise, refer to CRISPR Therapeutics AG and its consolidated subsidiaries.

“CRISPR Therapeutics®” standard character mark and design logo, “COBALT™,” “CTX001™,” “CTX110®,” “CTX112™,” “CTX120™,” “CTX121™,” “CTX130™,” “CTX131™,” “CRISPR TX™,” “VCTX210™” and “VCTX211™,” are trademarks and registered trademarks of CRISPR Therapeutics AG. All other trademarks and registered trademarks contained in this Quarterly Report on Form 10-Q are the property of their respective owners. Solely for convenience, trademarks, service marks and trade names referred to in this Quarterly Report on Form 10-Q may appear without the ® or ™ symbols and any such omission is not intended to indicate waiver of any such rights.

## FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains “forward-looking statements” that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this Quarterly Report on Form 10-Q are forward-looking statements. These statements are often identified by the use of words such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “potential,” “will,” “would” or the negative or plural of these words or similar expressions or variations, although not all forward-looking statements contain these identifying words. Forward-looking statements in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- the safety, efficacy and clinical progress of our various clinical programs including those for exa-cel (formerly known as CTX001™), CTX110®, CTX130™ and VCTX210™;
- the status of clinical trials, development timelines and discussions with regulatory authorities related to product candidates under development by us and our collaborators;
- the initiation, timing, progress and results of our preclinical studies and clinical trials, including our ongoing clinical trials and any planned clinical trials for exa-cel, CTX110, CTX130 and VCTX210, and our research and development programs, including delays or disruptions in clinical trials, non-clinical experiments and investigational new drug application-enabling studies;
- the actual or potential benefits of U.S. Food and Drug Administration, or FDA, designations, such as orphan drug, fast track and regenerative medicine advanced therapy, or RMAT, or such European equivalents, including PRiority MEdicines, or PRIME, designation;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- our intellectual property coverage and positions, including those of our licensors and third parties as well as the status and potential outcome of proceedings involving any such intellectual property;
- our anticipated expenses, ability to obtain funding for our operations and the sufficiency of our cash resources;
- the therapeutic value, development, and commercial potential of CRISPR/Cas9 gene-editing technologies and therapies; and
- potential impacts due to the ongoing coronavirus pandemic such as delays, interruptions or other adverse effects to clinical trials, delays in regulatory review, manufacturing and supply chain interruptions, adverse effects on healthcare systems and disruption of the global economy, and the overall impact of the coronavirus pandemic on our business, financial condition and results of operations.

Any forward-looking statements in this Quarterly Report on Form 10-Q reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and assumptions that could cause our 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, our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on February 15, 2022, and in other SEC filings. You should not rely upon forward-looking statements as predictions of future events. Such forward-looking statements speak only as of the date of this report. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make or enter into.

You should read this Quarterly Report on Form 10-Q and the documents that we have filed as exhibits to this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results, performance or achievements may be materially different from what we expect. 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.

Investors and others should note that we announce material information to our investors using our investor relations website (<https://crisprtx.gcs-web.com/>), SEC filings, press releases, public conference calls and webcasts. We use these channels as well as social media to communicate with the public about our company, our business, our product candidates and other matters. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in our company to review the information we post on the social media channels listed on our investor relations website.

# Index

	<u>Page Number</u>
<b><u>PART I: FINANCIAL INFORMATION</u></b>	
<u>Item 1. Condensed Consolidated Financial Statements (unaudited)</u>	2
<u>Condensed Consolidated Balance Sheets as of June 30, 2022 and December 31, 2021</u>	2
<u>Condensed Consolidated Statements of Operations and Comprehensive (Loss) Income for the three and six months ended June 30, 2022 and 2021</u>	3
<u>Condensed Consolidated Statements of Shareholders' Equity for the three and six months ended June 30, 2022 and 2021</u>	4
<u>Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2022 and 2021</u>	5
<u>Notes to Condensed Consolidated Financial Statements</u>	6
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	17
<u>Item 3. Quantitative and Qualitative Disclosures about Market Risk</u>	27
<u>Item 4. Controls and Procedures</u>	28
<b><u>PART II: OTHER INFORMATION</u></b>	
<u>Item 1. Legal Proceedings</u>	29
<u>Item 1A. Risk Factors</u>	29
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	29
<u>Item 3. Defaults Upon Senior Securities</u>	29
<u>Item 4. Mine Safety Disclosures</u>	29
<u>Item 5. Other Information</u>	29
<u>Item 6. Exhibits</u>	30
<b><u>SIGNATURES</u></b>	31

---

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	
	June 30, 2022	December 31, 2021
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 496,893	\$ 923,031
Marketable securities	1,568,446	1,456,098
Accounts receivable	66	305
Prepaid expenses and other current assets	41,651	38,079
Total current assets	2,107,056	2,417,513
Property and equipment, net	165,194	137,575
Marketable securities, non-current	8,392	—
Intangible assets, net	98	125
Restricted cash	12,123	16,913
Operating lease assets	166,740	174,460
Other non-current assets	3,760	5,291
Total assets	\$ 2,463,363	\$ 2,751,877
<b>Liabilities and shareholders' equity</b>		
Current liabilities:		
Accounts payable	\$ 25,244	\$ 14,816
Accrued expenses	82,223	91,003
Deferred revenue, current	—	1,011
Accrued tax liabilities	3,953	724
Operating lease liabilities	8,267	12,158
Other current liabilities	270	171
Total current liabilities	119,957	119,883
Deferred revenue, non-current	12,323	12,323
Operating lease liabilities, net of current portion	234,160	212,872
Other non-current liabilities	6,092	7,339
Total liabilities	372,532	352,417
Commitments and contingencies, see Note 6		
Shareholders' equity:		
Common shares, CHF 0.03 par value, 150,347,467 and 145,364,335 shares authorized at June 30, 2022 and December 31, 2021, respectively, 77,972,479 and 77,170,382 shares issued at June 30, 2022 and December 31, 2021, respectively, 77,792,163 and 76,990,066 shares outstanding at June 30, 2022 and December 31, 2021, respectively	2,420	2,391
Treasury shares, at cost, 180,316 shares at June 30, 2022 and at December 31, 2021	(63)	(63)
Additional paid-in capital	2,669,782	2,598,114
Accumulated deficit	(560,966)	(195,915)
Accumulated other comprehensive loss	(20,342)	(5,067)
Total shareholders' equity	2,090,831	2,399,460
Total liabilities and shareholders' equity	\$ 2,463,363	\$ 2,751,877

*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) Income**  
(unaudited, in thousands, except share and per share data)

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2022	2021	2022	2021
<b>Revenue:</b>				
Collaboration revenue	\$ 158	\$ 900,202	\$ 336	\$ 900,404
Grant revenue	—	499	762	836
Total revenue	158	900,701	1,098	901,240
<b>Operating expenses:</b>				
Research and development	123,223	82,332	241,468	153,971
General and administrative	26,273	28,806	54,294	52,303
Collaboration expense, net	33,922	26,945	64,568	46,891
Total operating expenses	183,418	138,083	360,330	253,165
(Loss) income from operations	(183,260)	762,618	(359,232)	648,075
<b>Other income:</b>				
Other income, net	3,544	750	3,907	2,705
Total other income, net	3,544	750	3,907	2,705
Net (loss) income before income taxes	(179,716)	763,368	(355,325)	650,780
Provision for income taxes	(6,118)	(4,143)	(9,726)	(4,718)
Net (loss) income	(185,834)	759,225	(365,051)	646,062
Foreign currency translation adjustment	(69)	5	(95)	10
Unrealized loss on marketable securities	(3,380)	(173)	(15,180)	(556)
Comprehensive (loss) income	\$ (189,283)	\$ 759,057	\$ (380,326)	\$ 645,516
Net (loss) income per common share — basic	\$ (2.40)	\$ 10.01	\$ (4.72)	\$ 8.57
Basic weighted-average common shares outstanding	77,513,327	75,826,594	77,306,970	75,418,160
Net (loss) income per common share — diluted	\$ (2.40)	\$ 9.44	\$ (4.72)	\$ 8.03
Diluted weighted-average common shares outstanding	77,513,327	80,449,956	77,306,970	80,458,855

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

**CRISPR Therapeutics AG**  
**Condensed Consolidated Statements of Shareholders' Equity**  
(unaudited, in thousands, except share and per share data)

	Common Shares		Treasury Shares		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
	Shares	CHF 0.03 Par Value	Shares	Amount, at cost				
<b>Balance at December 31, 2020</b>	73,914,844	\$ 2,277	195,316	\$ (63)	\$ 2,235,679	\$ (573,576)	\$ (83)	\$ 1,664,234
Issuance of common shares, net of issuance costs of \$5.4 million	1,353,121	45	—	—	222,130	—	—	222,175
Vesting of restricted shares	109,355	3	—	—	—	—	—	3
Exercise of vested options, net of issuance costs of \$1.5 million	342,051	15	—	—	9,769	—	—	9,784
Purchase of common stock under ESPP	11,257	—	—	—	751	—	—	751
Stock-based compensation expense	—	—	—	—	22,092	—	—	22,092
Other comprehensive loss	—	—	—	—	—	—	(378)	(378)
Net loss	—	—	—	—	—	(113,163)	—	(113,163)
<b>Balance at March 31, 2021</b>	75,730,628	\$ 2,340	195,316	\$ (63)	\$ 2,490,421	\$ (686,739)	\$ (461)	\$ 1,805,498
Issuance of common shares, net of issuance costs of \$5.4 million	—	—	—	—	—	—	—	—
Vesting of restricted shares	3,667	—	—	—	—	—	—	—
Exercise of vested options, net of issuance costs of \$0.4 million	344,158	12	—	—	10,897	—	—	10,909
Stock-based compensation expense	—	—	—	—	28,331	—	—	28,331
Other comprehensive loss	—	—	—	—	—	—	(168)	(168)
Net income	—	—	—	—	—	759,225	—	759,225
<b>Balance at June 30, 2021</b>	76,078,453	\$ 2,352	195,316	\$ (63)	\$ 2,529,649	\$ 72,486	\$ (629)	\$ 2,603,795
<b>Balance at December 31, 2021</b>	76,990,066	\$ 2,391	180,316	\$ (63)	\$ 2,598,114	\$ (195,915)	\$ (5,067)	\$ 2,399,460
Vesting of restricted shares	123,564	4	—	—	—	—	—	4
Exercise of vested options, net of issuance costs of \$0.2 million	261,280	12	—	—	9,998	—	—	10,010
Purchase of common stock under ESPP	11,495	—	—	—	740	—	—	740
Stock-based compensation expense	—	—	—	—	25,745	—	—	25,745
Other comprehensive loss	—	—	—	—	—	—	(11,826)	(11,826)
Net loss	—	—	—	—	—	(179,217)	—	(179,217)
<b>Balance at March 31, 2022</b>	77,386,405	\$ 2,407	180,316	\$ (63)	\$ 2,634,597	\$ (375,132)	\$ (16,893)	\$ 2,244,916
Vesting of restricted shares	14,705	—	—	—	—	—	—	—
Exercise of vested options, net of issuance costs of \$0.2 million	391,053	13	—	—	10,333	—	—	10,346
Stock-based compensation expense	—	—	—	—	24,852	—	—	24,852
Other comprehensive loss	—	—	—	—	—	—	(3,449)	(3,449)
Net loss	—	—	—	—	—	(185,834)	—	(185,834)
<b>Balance at June 30, 2022</b>	77,792,163	\$ 2,420	180,316	\$ (63)	\$ 2,669,782	\$ (560,966)	\$ (20,342)	\$ 2,090,831

*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)

	Six Months Ended June 30,	
	2022	2021
<b>Operating activities:</b>		
Net (loss) income	\$ (365,051)	\$ 646,062
Reconciliation of net (loss) income to net cash used in operating activities:		
Depreciation and amortization	13,308	6,368
Equity-based compensation	50,597	50,423
Other non-cash items, net	9,671	4,417
Changes in:		
Accounts receivable	239	(6)
Prepaid expenses and other assets	2,032	(9,470)
Accounts payable and accrued expenses	8,303	13,427
Deferred revenue	(1,011)	(271)
Operating lease assets and liabilities	5,865	1,259
Other liabilities, net	(1,148)	(5,870)
Net cash (used in) provided by operating activities	(277,195)	706,339
<b>Investing activities:</b>		
Purchase of property, plant and equipment	(24,980)	(35,473)
Purchases of marketable securities	(597,136)	(715,982)
Maturities of marketable securities	451,529	289,921
Net cash used in investing activities	(170,587)	(461,534)
<b>Financing activities:</b>		
Proceeds from issuance of common shares, net of issuance costs	—	213,267
Proceeds from exercise of options and ESPP contributions, net of issuance costs	21,002	21,167
Net cash provided by financing activities	21,002	234,434
Effect of exchange rate changes on cash	(95)	10
(Decrease) increase in cash	(426,875)	479,249
Cash, cash equivalents and restricted cash, beginning of period	939,944	1,185,468
Cash, cash equivalents and restricted cash, end of period	\$ 513,069	\$ 1,664,717
<b>Supplemental disclosure of non-cash investing and financing activities</b>		
Property and equipment purchases in accounts payable and accrued expenses	\$ 5,016	\$ 7,533
Equity issuance costs in accounts payable and accrued expenses	\$ 241	\$ 402
Leasehold improvements paid directly by landlord	\$ 19,252	\$ —

	As of June 30,	
	2022	2021
<b>Reconciliation to amounts within the condensed consolidated balance sheets</b>		
Cash and cash equivalents	496,893	1,646,646
Prepaid expenses and other current assets	4,053	—
Restricted cash	12,123	18,071
<b>Cash, cash equivalents and restricted cash at end of period</b>	<b>\$ 513,069</b>	<b>\$ 1,664,717</b>

*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. Basis of Presentation and Significant Accounting Policies**

***Basis of Presentation***

The accompanying condensed consolidated financial statements are unaudited and have been prepared by the Company in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP.

The accompanying condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. The Company views its operations and manages its business in one operating segment, which is the business of discovering, developing and commercializing therapies derived from or incorporating genome-editing technology. Certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. These interim financial statements, in the opinion of management, reflect all normal recurring adjustments necessary for a fair presentation of the financial position and results of operations for the three and six-month interim periods ended June 30, 2022 and 2021.

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full year. These interim financial statements should be read in conjunction with the audited financial statements for the year ended December 31, 2021, which are contained in the 2021 Annual Report on Form 10-K filed with the Securities and Exchange Commission, or the SEC, on February 15, 2022.

Beginning in the first quarter of 2022, collaboration costs under the Vertex Agreements accounted for under ASC 808, *Collaborative Agreements*, or ASC 808, are presented within "collaboration expense, net" in the condensed consolidated statements of operations and comprehensive (loss) income. As a result, collaboration costs under the Vertex Agreements accounted for under ASC 808 for the three and six months ended June 30, 2021 have been reclassified to conform to the current presentation. No subtotals in the prior interim period's consolidated condensed financial statements were impacted. Refer to Note 7 to these condensed consolidated financial statements for further discussion on the Vertex Agreements.

***Use of Estimates***

The preparation of financial statements in conformity with U.S. 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, revenue recognition, equity-based compensation expense and reported amounts of expenses during the period. Significant estimates in these consolidated financial statements have been made in connection with revenue recognition and equity-based compensation expense. 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. Actual results may differ from those estimates or assumptions. Changes in estimates are reflected in reported results in the period in which they become known.

***Significant Accounting Policies***

The significant accounting policies used in preparation of these condensed consolidated financial statements for the three and six months ended June 30, 2022 are consistent with those discussed in Note 2 to the consolidated financial statements in the Company's 2021 Annual Report on Form 10-K filed with the SEC on February 15, 2022.

***New Accounting Pronouncements – Recently Adopted***

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board, or FASB, or other standard setting bodies that the Company adopts as of the specified effective date. The Company does not believe that the adoption of recently issued standards have or may have a material impact on its consolidated financial statements and disclosures.



## 2. Marketable Securities

The following table summarizes cash equivalents and marketable securities held at June 30, 2022 and December 31, 2021 (in thousands), which are recorded at fair value. The table below excludes \$383.3 million and \$405.6 million of cash at June 30, 2022 and December 31, 2021, respectively.

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<b>June 30, 2022</b>				
Cash equivalents:				
Money market funds	\$ 21,287	\$ —	\$ —	\$ 21,287
Corporate debt securities	13,810	3	(7)	13,806
Certificates of deposit	5,007	—	—	5,007
Commercial paper	72,250	—	—	72,250
U.S. Treasury securities	1,207	—	—	1,207
Total cash equivalents	113,561	3	(7)	113,557
Marketable securities:				
U.S. Treasury securities	9,962	—	(16)	9,946
Corporate debt securities	1,144,291	15	(18,852)	1,125,454
Certificates of deposit	45,654	—	—	45,654
Government-sponsored enterprise securities	32,315	—	(634)	31,681
Commercial paper	364,859	—	(756)	364,103
Total marketable securities	1,597,081	15	(20,258)	1,576,838
Total cash equivalents and marketable securities	\$ 1,710,642	\$ 18	\$ (20,265)	\$ 1,690,395
<b>December 31, 2021</b>				
Cash equivalents:				
Money market funds	\$ 507,386	\$ —	\$ —	\$ 507,386
Corporate debt securities	—	—	—	—
Certificates of deposit	—	—	—	—
Commercial paper	9,997	—	(1)	9,996
Total cash equivalents	517,383	—	(1)	517,382
Marketable securities:				
U.S. Treasury securities	16,238	6	(52)	16,192
Corporate debt securities	1,173,659	10	(4,903)	1,168,766
Certificates of deposit	45,164	—	—	45,164
Government-sponsored enterprise securities	13,334	—	(77)	13,257
Commercial paper	212,805	—	(86)	212,719
Total marketable securities	1,461,200	16	(5,118)	1,456,098
Total cash equivalents and marketable securities	\$ 1,978,583	\$ 16	\$ (5,119)	\$ 1,973,480

As of June 30, 2022 and December 31, 2021, the aggregate fair value of marketable securities that were in an unrealized loss position for less than twelve months was \$917.8 million and \$1,311.6 million, respectively. As of June 30, 2022 and December 31, 2021, the aggregate fair value of marketable securities that were in an unrealized loss position for more than twelve months was \$78.5 million and \$4.6 million, respectively. Of this amount, securities totaling \$8.4 million and \$0.0 million as of June 30, 2022 and December 31, 2021, respectively, will mature beyond one year. The Company has recorded a net unrealized loss of \$3.4 million and \$15.2 million during the three and six months ended June 30, 2022 respectively, related to its debt securities, which is included in comprehensive loss on the condensed consolidated statements of operations and comprehensive (loss) income. The Company recorded a net unrealized loss of \$0.2 million and \$0.6 million during the three and six months ended June 30, 2021 respectively, related to its debt securities, which is included in comprehensive loss on the condensed consolidated statements of operations and comprehensive (loss) income.

The Company determined that there is no material credit risk associated with the above investments as of June 30, 2022. The Company has the intent and ability to hold such securities until recovery. As a result, the Company did not record any charges for credit-related impairments for its marketable securities for the three and six months ended June 30, 2022 and 2021. No available-for-sale debt securities held as of June 30, 2022 had remaining maturities greater than thirty months.

### 3. Fair Value Measurements

The following tables present information about the Company's financial assets measured at fair value on a recurring basis and indicate the fair value hierarchy classification of such fair values as of June 30, 2022 and December 31, 2021 (in thousands):

	<b>Fair Value Measurements at June 30, 2022</b>			
	<b>Total</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>Cash and cash equivalents:</b>				
Cash	\$ 383,337	\$ 383,337	\$ —	\$ —
Money market funds	21,287	21,287	—	—
Corporate debt securities	13,806	—	13,806	—
Commercial paper	72,250	—	72,250	—
U.S. Treasury securities	1,207	—	1,207	—
Certificates of deposit	5,007	—	5,007	—
<b>Marketable securities:</b>				
U.S. Treasury securities	9,946	—	9,946	—
Corporate debt securities	1,125,454	—	1,125,454	—
Certificates of deposit	45,654	—	45,654	—
Government-sponsored enterprise securities	31,681	—	31,681	—
Commercial paper	364,103	—	364,103	—
Other non-current assets	2,212	—	—	2,212
<b>Total</b>	<b>\$ 2,075,944</b>	<b>\$ 404,624</b>	<b>\$ 1,669,108</b>	<b>\$ 2,212</b>
<b>Fair Value Measurements at December 31, 2021</b>				
	<b>Total</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>Cash and cash equivalents:</b>				
Cash	\$ 405,648	\$ 405,648	\$ —	\$ —
Money market funds	507,386	507,386	—	—
Corporate debt securities	—	—	—	—
Certificates of deposit	—	—	—	—
Commercial paper	9,997	—	9,997	—
<b>Marketable securities:</b>				
U.S. Treasury securities	16,192	—	16,192	—
Corporate debt securities	1,168,766	—	1,168,766	—
Certificates of deposit	45,164	—	45,164	—
Government-sponsored enterprise securities	13,257	—	13,257	—
Commercial paper	212,719	—	212,719	—
Other non-current assets	2,212	—	—	2,212
<b>Total</b>	<b>\$ 2,381,341</b>	<b>\$ 913,034</b>	<b>\$ 1,466,095</b>	<b>\$ 2,212</b>

Marketable securities classified as Level 2 within the valuation hierarchy generally consist of U.S. treasury securities and government agency securities, corporate bonds, and commercial paper. The Company estimates the fair values of these marketable securities by taking into consideration valuations obtained from third-party pricing sources.

The Company holds equity securities classified as Level 3 which are not material to the Company's financial position.

#### 4. Property and Equipment, net

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

	As of	
	June 30, 2022	December 31, 2021
Computer equipment	\$ 2,798	\$ 1,757
Furniture, fixtures and other	10,926	4,371
Laboratory equipment	35,543	30,123
Leasehold improvements	163,441	86,735
Construction work in process	3,574	52,396
Total property and equipment, gross	216,282	175,382
Accumulated depreciation	(51,088)	(37,807)
Total property and equipment, net	<u>\$ 165,194</u>	<u>\$ 137,575</u>

Depreciation expense for the three and six months ended June 30, 2022 was \$7.3 million and \$13.3 million, respectively. Depreciation expense for the three and six months ended June 30, 2021 was \$3.6 million and \$6.3 million, respectively.

#### 5. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	As of	
	June 30, 2022	December 31, 2021
Payroll and employee-related costs	\$ 13,906	\$ 23,661
Research costs	52,409	47,986
Licensing fees	177	138
Professional fees	4,266	4,720
Intellectual property costs	4,634	6,120
Accrued property and equipment	4,353	7,113
Other	2,478	1,265
Total	<u>\$ 82,223</u>	<u>\$ 91,003</u>

## 6. Commitments and Contingencies

### *Leases*

Refer to Note 7 to the consolidated financial statements in the Company's 2021 Annual Report on Form 10-K filed with the SEC on February 15, 2022 for discussion on the Company's lease arrangements.

### *Litigation*

In the ordinary course of business, the Company is from time to time involved in lawsuits, investigations, proceedings and threats of litigation related to, among other things, the Company's intellectual property estate (including certain in-licensed intellectual property), commercial arrangements and other matters. Such proceedings may include quasi-litigation, inter partes administrative proceedings in the U.S. Patent and Trademark Office and the European Patent Office involving the Company's intellectual property estate including certain in-licensed intellectual property. The outcome of any of the foregoing, regardless of the merits, is inherently uncertain. In addition, litigation and related matters are costly and may divert the attention of Company's management and other resources that would otherwise be engaged in other activities. If the Company is unable to prevail in any such proceedings, the Company's business, results of operations, liquidity and financial condition could be adversely affected.

### *Letters of Credit*

As of June 30, 2022, the Company had restricted cash of \$16.2 million, representing letters of credit securing the Company's obligations under certain leased facilities. The letters of credit are secured by cash held in a restricted depository account, with \$4.1 million included in "Prepaid expenses and other current assets" and \$12.1 million included in "Restricted cash" on the Company's condensed consolidated balance sheets as of June 30, 2022.

### *Research, Manufacturing, License and Intellectual Property Agreements*

The Company has engaged several research institutions and companies to identify new delivery strategies and applications of the Company's gene-editing technology. The Company is also a party to a number of license agreements which require significant upfront payments and may be required to make future royalty payments and potential milestone payments from time to time. In addition, the Company is also a party to intellectual property agreements, which require maintenance and milestone payments from time to time. Further, the Company is a party to a number of manufacturing agreements that require upfront payments for the future performance of services.

In association with these agreements, on a product-by-product basis, the counterparties are eligible to receive up to low eight-digit potential payments upon specified research, development and regulatory milestones. In addition, on a product-by-product basis, the counterparties are eligible to receive potential commercial milestone payments based on specified annual sales thresholds. The potential payments are low-single digit percentages of the specified annual sales thresholds. The counterparties are also eligible to receive low single-digit royalties on future net sales.

Under certain circumstances and if certain contingent future events occur, Vertex Pharmaceuticals Incorporated and certain of its subsidiaries, or Vertex, is eligible to receive up to \$395.0 million in potential specified research, development, regulatory and commercial milestones and tiered single-digit percentage royalties on future net sales related to a specified target under an amendment to the 2015 Collaboration Agreement defined in Note 7 below. In addition, Vertex has the option to conduct research at their own cost in certain defined areas that, if beneficial to the CTX001, now known as exagamglogene autotemcel, or exa-cel, program and ultimately achieves regulatory approval, then the Company could owe Vertex certain milestone payments aggregating to high eight digits, subject to certain limitations on the profitability of the exa-cel program. Refer to Note 7 for further discussion on the Company's arrangements with Vertex.

## 7. Significant Contracts

### *Agreements with Vertex Pharmaceuticals Incorporated and certain of its subsidiaries*

#### *Summary*

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

On December 12, 2017, the Company and Vertex entered into Amendment No. 1 to the 2015 Collaboration Agreement, or Amendment No. 1, and the Joint Development Agreement, or the JDA. Amendment No. 1, among other things, modified certain

definitions and provisions of the 2015 Collaboration Agreement to make them consistent with the JDA and clarified how many options are exercised (or deemed exercised) in connection with certain targets specified under the 2015 Collaboration Agreement. Amendment No. 1 also amended other provisions of the 2015 Collaboration Agreement, including the expiration terms.

In connection with the 2015 Collaboration Agreement, Vertex made a nonrefundable upfront payment of \$75.0 million. Under the 2015 Collaboration Agreement, Vertex agreed to fund the discovery activities conducted pursuant to the agreement while retaining options to co-exclusive and exclusive licenses. In December 2017, upon execution of the JDA and Amendment No. 1, Vertex exercised its option to obtain a co-exclusive license to develop and commercialize hemoglobinopathy and beta-globin targets. As such, for potential hemoglobinopathy treatments, including treatments for sickle cell disease, the Company and Vertex agreed to share equally all research and development costs and worldwide revenues. In connection with the JDA, the Company received a \$7.0 million up-front payment from Vertex and subsequently received a one-time low seven-digit milestone payment upon the dosing of the second patient in a clinical trial with the initial product candidate. In addition, upon execution of the JDA and Amendment No. 1, it was clarified that Vertex may elect to license up to four remaining targets, for which it will lead global development and commercialization activities, and the Company received the right to receive up to \$420.0 million in development, regulatory and commercial milestones and royalties on net product sales for each of the targets (inclusive of \$10 million due upon exercise of each exclusive option).

In June 2019, the Company and Vertex entered into a series of agreements, which closed in the second quarter of 2019, including a strategic collaboration and license agreement, or the 2019 Collaboration Agreement, for the development and commercialization of products for the treatment of Duchenne muscular dystrophy, or DMD, and Myotonic Dystrophy Type 1, or DM1. Under the terms of the 2019 Collaboration Agreement, the Company received an upfront, nonrefundable payment of \$175.0 million. In addition, the Company was initially eligible to receive potential aggregate payments of up to \$825.0 million based upon the successful achievement of specified research, development, regulatory and commercial milestones for the DMD and DM1 programs.

The Company is also eligible to receive tiered royalties on future net sales on any products that may result from the 2019 Collaboration Agreement. For the DMD program, Vertex is responsible for all research, development, manufacturing and commercialization activities and all related costs. For the DM1 program, the Company performed specified guide RNA research and Vertex is responsible for all other research, development, manufacturing and commercialization costs. Upon Investigational New Drug, or IND, application filing, the Company has the option to forego the DM1 milestones and royalties, and instead, co-develop and co-commercialize all DM1 products globally in exchange for payment of 50% of research and development costs incurred by Vertex from the effective date of the agreement through IND filing.

In connection with the execution of the 2019 Collaboration Agreement, the Company and Vertex entered into a second amendment to the 2015 Collaboration Agreement, or Amendment No. 2. Among other things, Amendment No. 2 modified certain definitions and provisions of the 2015 Collaboration Agreement to make them consistent with the 2019 Collaboration Agreement and set forth the number and identity of the collaboration targets under the 2015 Collaboration Agreement. The Company and Vertex agreed that one of the four remaining options under the 2015 Collaboration Agreement, as amended, would not be exercised; instead, the Company reacquired the exclusive rights and agreed to conduct research and development activities for the specified target. Vertex will have the option to co-develop and co-commercialize the specified target upon IND filing in exchange for payment of 50% of research and development costs incurred by the Company from the effective date of the agreement through IND filing. If Vertex does not exercise its option to co-develop and co-commercialize the specified target, Vertex is eligible to receive up to \$395.0 million in potential specified research, development, regulatory and commercial milestones and tiered single-digit royalties on future net sales.

In October 2019, Vertex exercised the remaining three options granted to it under the 2015 Collaboration Agreement to exclusively license the collaboration targets developed under the 2015 Collaboration Agreement, resulting in a payment of \$30.0 million to the Company in the fourth quarter of 2019. In addition, the Company achieved the first milestone under the 2019 Collaboration Agreement in the first quarter of 2020 and, in connection therewith, received a payment of \$25.0 million in April 2020. The Company achieved the second milestone under the 2019 Collaboration Agreement in the fourth quarter of 2021 and, in connection therewith, received a payment of \$12.5 million in December 2021. As of June 30, 2022, the Company is eligible to receive remaining potential future milestones of \$775.0 million under the 2019 Collaboration Agreement.

In April 2021, the Company and Vertex agreed to amend and restate the JDA and entered into an Amended and Restated Joint Development and Commercialization Agreement, or the "A&R Vertex JDCA," pursuant to which the parties agreed to, among other things, (a) adjust the governance structure for the collaboration and adjust the responsibilities of each party thereunder, whereby Vertex shall lead and have all decision making (i.e., control) in relation to the exa-cel program prospectively; (b) adjust the allocation of net profits and net losses between the parties with respect to exa-cel only, which will be allocated 40% to the Company and 60% to Vertex, prospectively; and (c) exclusively license (subject to the Company's reserved rights to conduct certain activities) certain intellectual property rights to Vertex relating to the specified product candidates and products (including exa-cel) that may be researched, developed, manufactured and commercialized on a worldwide basis under such agreement. The transaction contemplated by the A&R Vertex JDCA closed in the second quarter of 2021. The Company is providing certain specified transition services to Vertex in connection with the agreement.

In connection with the closing of the transaction contemplated by the A&R Vertex JDCA, the Company received a \$900.0 million up-front payment from Vertex. Additionally, the Company is eligible to receive a one-time \$200.0 million milestone payment upon receipt by Vertex of the first marketing approval of the initial product candidate from the U.S. Food and Drug Administration or the European Commission. With respect to exa-cel only, the net profits and net losses, as applicable, incurred under the A&R Vertex JDCA through July 1, 2021 in connection with the initial shared product (i.e., exa-cel) were shared equally between the Company and Vertex, and beginning July 1, 2021, the net profits and net losses, as applicable, incurred under the A&R Vertex JDCA are allocated 40% to the Company and 60% to Vertex. Additionally, the A&R Vertex JDCA allows the Company to defer a portion of its share of costs under the arrangement if spending on the exa-cel program exceeds specified amounts. Any deferred amounts are only payable to Vertex as an offset against future profitability of the exa-cel program and the amounts payable are capped at a specified maximum amount per year.

#### *Accounting for the Vertex Agreements*

The 2015 Collaboration Agreement, Amendment No. 1, and JDA are collectively the “2015 Agreements” and the 2019 Collaboration Agreement and Amendment No. 2. are collectively the “2019 Agreements.” The 2015 Collaboration Agreement, Amendment No. 1, Amendment No. 2, JDA, A&R Vertex JDCA and 2019 Collaboration Agreement are collectively the “Vertex Agreements.”

The Vertex Agreements include components of a customer-vendor relationship as defined under ASC 606, *Revenue from Contracts with Customers*, or ASC 606, collaborative arrangements as defined under ASC 808, *Collaborative Agreements*, or ASC 808, and research and development costs as defined under ASC 730, *Research and Development*, or ASC 730. Additionally, the A&R Vertex JDCA allows the Company to defer a portion of its share of costs under the arrangement if spending on the exa-cel program exceeds specified amounts, which are only payable to Vertex as an offset against future profitability of the exa-cel program up to a maximum amount per year.

#### **Accounting Analysis Under ASC 606**

##### *Accounting for the A&R Vertex JDCA*

##### *Identification of the Contract*

The A&R Vertex JDCA represented a contractual modification to the JDA. For accounting purposes, the A&R Vertex JDCA was treated as a separate contract.

##### *Identification of Performance Obligations*

The Company concluded the A&R Vertex JDCA contained a single material promise, an exclusive worldwide license granting Vertex an additional 10% economic interest in the exa-cel program and the right to control development and commercialization of exa-cel, or the “Exa-cel Exclusive License.” The Company concluded the Exa-cel Exclusive License was both capable of being distinct and distinct within the context of the A&R Vertex JDCA, and the Exa-cel Exclusive License was sold at its estimated standalone selling price, or “ESSP.” As such, the Exa-cel Exclusive License represented a separate performance obligation.

##### *Determination of Transaction Price*

The transaction price was comprised of the upfront payment of \$900.0 million. The Company determined that all other possible variable consideration resulting from milestones and royalties discussed above was fully constrained at the time of the transaction. The Company will reevaluate the transaction price in each reporting period.

##### *Allocation of Transaction Price to Performance Obligations*

The selling price of the performance obligation was determined based on the Company’s ESSP. The Company developed the ESSP for the Exa-cel Exclusive License with the objective of determining the price at which it would sell such an item if it were to be sold regularly on a standalone basis.

The ESSP for the Exa-cel Exclusive License was determined to be approximately \$900.0 million. The ESSP was determined based on 10% of the probability and present value adjusted cash flows from projected worldwide net profit for exa-cel based on probability assessments, projections based on internal forecasts, industry data, and information from other guideline companies within the same industry and other relevant factors. As the Company determined the Exa-cel Exclusive License was the only performance obligation, the entire transaction price was allocated to the Exa-cel Exclusive License. The aforementioned ESSP reflects the level of risk and expected probability of success inherent in the nature of the associated research area.

### *Recognition of Revenue*

The Company determined that the Exa-cel Exclusive License represented functional intellectual property, as the intellectual property provides Vertex with the ability to perform a function or task in the form of research and development, manufacturing and commercialization. As such, the revenue related to the Exa-cel Exclusive License was recognized at the point in time, which was upon transfer in the second quarter of 2021.

### *Accounting for the 2019 Agreements*

The 2019 Agreements represented a contract modification to the 2015 Agreements. As a result, the 2019 Agreements and the 2015 Agreements are combined for accounting purposes and treated as a single arrangement. Transactions under the 2019 Agreements were not material for the three and six months ended June 30, 2022 and 2021.

The Company determined that all possible variable consideration remaining under the 2019 Agreements resulting from milestones and royalties discussed above was fully constrained as of June 30, 2022. The Company will re-evaluate the transaction price in each reporting period.

### *Revenue recognized in connection with the Vertex Agreements*

Revenue recognized under the Vertex Agreements for the three and six months ended June 30, 2022, respectively, was not material. Revenue recognized under the Vertex Agreements for the three and six months ended June 30, 2021, respectively, was \$900.2 million and \$900.4 million, respectively.

As of June 30, 2022 and December 31, 2021, there was no current deferred revenue related to the collaboration with Vertex. As of June 30, 2022, there was \$12.3 million of non-current deferred revenue related to the collaboration with Vertex, which is unchanged from December 31, 2021. The transaction price allocated to the remaining performance obligations was \$12.3 million.

### *Future Milestones under the Vertex Agreements*

The Company has evaluated the milestones that may be received in connection with the Vertex Agreements. As discussed above, the Company is eligible to receive up to \$410.0 million in additional development, regulatory and commercial milestones and royalties on net product sales for each of the three collaboration targets that Vertex licensed in the fourth quarter of 2019. Each milestone is payable only once per collaboration target, regardless of the number of products directed to such collaboration target that achieve the relevant milestone event.

The Company is eligible to receive additional potential future payments of up to \$775.0 million based upon the successful achievement of specified development, regulatory and commercial milestones for the DMD and DM1 programs. The Company is also eligible to receive tiered royalties on future net sales on any products that may result from this collaboration; however, the Company has the option to forego the DM1 milestones and royalties to co-develop and co-commercialize all DM1 products globally.

The Company is eligible to receive additional potential future payments of up to \$200.0 million upon receipt by Vertex of the first marketing approval of the initial product candidate from the U.S. Food and Drug Administration or the European Commission. In addition, the Company has the option to conduct research at their own cost in certain defined areas that, if beneficial to the exa-cel program and exa-cel ultimately achieves regulatory approval in such areas, then the Company could be entitled to certain milestone payments aggregating to high eight digits from Vertex.

Each of the remaining milestones are fully constrained as of June 30, 2022. There is uncertainty that the events to obtain the research and developmental milestones will be achieved given the nature of clinical development and the stage of the CRISPR/Cas9 technology. The remaining research, development and regulatory milestones will be constrained until it is probable that a significant revenue reversal will not occur. Commercial milestones and royalties relate predominantly to a license of intellectual property and are determined by sales or usage-based thresholds. The commercial milestones and royalties are accounted for under the royalty recognition constraint and will be accounted for as constrained variable consideration. The Company applies the royalty recognition constraint for each commercial milestone and will not recognize revenue for each until the subsequent sale of a licensed product (achievement of each) occurs.

In connection with the Vertex Agreements, the Company identified the following collaborative elements, which are accounted for under ASC 808: (i) development and commercialization services for shared products, including any transition services related to exa-cel under the A&R Vertex JDCA; (ii) R&D Services for follow-on products; and (iii) committee participation. The related impact of the cost sharing is included within collaboration expense, net, in the condensed consolidated statements of operations and comprehensive (loss) income.

During the three and six months ended June 30, 2022, the Company recognized \$33.9 million and \$64.6 million of collaboration expense, net, related to the Vertex Agreements, respectively. Collaboration expense, net, was net of \$9.1 million and \$16.5 million of reimbursements from Vertex, respectively. During the three and six months ended June 30, 2021, the Company recognized \$26.9 million and \$46.9 million of collaboration expense, net, related to the Vertex Agreements, respectively. Collaboration expense, net, was net of \$12.6 million and \$23.2 million of reimbursements from Vertex, respectively.

## 8. Share Capital

The Company had 150,347,467 authorized common shares as of June 30, 2022, with a par value of CHF 0.03 per share. Share Capital consisted of the following:

Type of Share Capital	Conditional Capital	As of	
		June 30, 2022	December 31, 2021
Common shares	Registered share capital	82,028,328	80,321,227
Common shares	Authorized share capital	39,316,975	39,316,975
Common shares	Conditional share capital - Bonds or similar debt instruments	8,202,832	4,919,700
Common shares	Conditional share capital - Employee benefit plans	20,799,332	20,806,433
	Total	150,347,467	145,364,335

## Common Share Issuances

### At-the-Market Offering

In August 2019, the Company entered into an Open Market Sale Agreement<sup>SM</sup> with Jefferies LLC, or Jefferies, under which the Company was able to offer and sell, from time to time at its sole discretion through Jefferies, as its sales agent, its common shares, or the August 2019 Sales Agreement.

In January 2021, in connection with the August 2019 Sales Agreement, the Company filed a prospectus supplement with the SEC to offer and sell, from time to time, common shares having aggregate gross proceeds of up to \$600.0 million. In July 2021, the Company filed a new prospectus supplement with the SEC, which replaced the previous prospectus supplement filed in January 2021, to offer and sell, from time to time, the common shares remaining under the original prospectus supplement having aggregate gross proceeds of up to \$419.8 million, or, together with the January 2021 prospectus supplement, the 2021 ATM. As of June 30, 2022, the Company has issued and sold an aggregate of 1.1 million common shares under the 2021 ATM at an average price of \$169.82 per share for aggregate proceeds of \$177.8 million, which were net of equity issuance costs of \$2.4 million. No shares were issued and sold under the 2021 ATM for the three and six months ended June 30, 2022.

## 9. Stock-based Compensation

During the three and six months ended June 30, 2022 and 2021, the Company recognized the following stock-based compensation expense (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Research and development	\$ 13,829	\$ 16,195	\$ 28,419	\$ 29,040
General and administrative	11,023	12,136	22,178	21,383
Total	\$ 24,852	\$ 28,331	\$ 50,597	\$ 50,423



### Stock option activity

The following table summarizes stock option activity for the six months ended June 30, 2022:

	Shares	Weighted- average exercise price per share
Outstanding at December 31, 2021	7,812,982	\$ 58.07
Granted	1,110,439	59.67
Exercised	(652,333)	31.92
Cancelled or forfeited	(469,439)	76.85
Outstanding at June 30, 2022	7,801,649	\$ 59.36
Exercisable at June 30, 2022	4,746,997	\$ 47.11
Vested and expected to vest at June 30, 2022	7,801,649	\$ 59.36

As of June 30, 2022, total unrecognized compensation expense related to stock options was \$142.7 million, which the Company expects to recognize over a remaining weighted-average period of 2.6 years.

### Restricted stock activity

The following table summarizes restricted stock activity for the six months ended June 30, 2022:

	Restricted Stock	Weighted- Average Grant Date Fair Value
Unvested balance as of December 31, 2021	934,175	\$ 100.14
Granted	419,726	58.38
Vested	(138,269)	85.19
Cancelled or forfeited	(129,763)	92.71
Unvested balance as of June 30, 2022	1,085,869	\$ 86.79

As of June 30, 2022, total unrecognized compensation expense related to unvested restricted common shares was \$69.9 million, which the Company expects to recognize over a remaining weighted-average vesting period of 2.6 years.

## 10. Net (Loss) Income Per Share Attributable to Common Shareholders

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

The following table sets forth the computation of basic and diluted net (loss) income per share for the periods indicated (in thousands, except for share and per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Net (loss) income	\$ (185,834)	\$ 759,225	\$ (365,051)	\$ 646,062
Basic weighted-average common shares outstanding	77,513,327	75,826,594	77,306,970	75,418,160
Effect of potentially dilutive securities:				
Outstanding options	—	4,149,901	—	4,519,827
Unvested restricted common shares	—	473,461	—	520,868
Diluted weighted-average common shares outstanding	77,513,327	80,449,956	77,306,970	80,458,855
Basic net (loss) income per common share	(2.40)	10.01	(4.72)	8.57
Diluted net (loss) income per common share	(2.40)	9.44	(4.72)	8.03

The following common stock equivalents were excluded from the calculation of diluted net (loss) income per share for the periods indicated because including them would have had an anti-dilutive effect (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Outstanding options	7,801,649	1,936,503	7,801,649	1,483,205
Unvested restricted common shares	1,085,869	385,550	1,085,869	203,335
ESPP	24,947	10,594	24,947	7,946
Total	8,912,465	2,332,647	8,912,465	1,694,486

## 11. Income Taxes

During the three and six months ended June 30, 2022, the Company recorded an income tax provision of \$6.1 million and \$9.7 million, respectively, representing an effective tax rate of -3.4% and -2.7%, respectively. During the three and six months ended June 30, 2021, the Company recorded an income tax provision of \$4.1 million and \$4.7 million, respectively, representing an effective tax rate of 0.5% and 0.7%, respectively. The income tax provision is primarily attributable to the Company's U.S. subsidiaries. The decrease in the rate for the three and six months ended June 30, 2022 is primarily attributable to the requirement to capitalize research and development costs for tax purposes under the 2017 "Tax Cuts and Jobs Act" (TCJA) which impacts the Company's permanent tax adjustments and the Company's valuation allowance assessment. The difference in the statutory tax rate and effective tax rate is primarily a result of the jurisdictional mix of earnings, research credits generated, and the valuation allowance recorded against certain deferred tax assets. The Company maintains a valuation allowance against certain deferred tax assets that are not more-likely-than-not realizable.

## 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 unaudited 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, 2021 filed with the Securities and Exchange Commission, or the SEC, on February 15, 2022. Some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report on Form 10-Q, including information with respect to our plans and strategy for our business and impact and potential impacts on our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including, without limitation, those factors set forth in the “Risk Factors” section of our Annual Report on Form 10-K for the year ended December 31, 2021 and the “Risk Factors” section of subsequent Quarterly Reports on Form 10-Q, our actual results or timing of certain events could differ materially from the results or timing described in, or implied by, these forward-looking statements.

### Overview

We are a leading gene editing company focused on the development of CRISPR/Cas9-based therapeutics. CRISPR/Cas9 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. Emmanuelle Charpentier. Dr. Charpentier and 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. We believe that our scientific expertise, together with our gene-editing approach, may enable an entirely new class of highly active and potentially curative therapies for patients, including those for whom current biopharmaceutical approaches have had limited success.

We have established a portfolio of therapeutic programs in a broad range of disease areas across four core franchises: hemoglobinopathies, oncology, regenerative medicine and *in vivo* approaches.

### Hemoglobinopathies

Our lead product candidate, CTX001, now known as exagamglogene autotemcel, or exa-cel, is an investigational, autologous, gene-edited hematopoietic stem cell therapy that is being evaluated for the treatment of transfusion-dependent beta thalassemia, or TDT, and severe sickle cell disease, or SCD. Exa-cel is being developed under a joint development and commercialization agreement between us and Vertex Pharmaceuticals Incorporated and certain of its subsidiaries, or Vertex. We and Vertex are investigating exa-cel in two ongoing Phase 3 open-label clinical trials that are designed to assess the safety and efficacy of a single dose of exa-cel in patients ages 12 to 35 with TDT (CLIMB-111) or SCD (CLIMB-121), respectively. Enrollment is complete for both CLIMB-111 and CLIMB-121. We and Vertex have also initiated two additional Phase 3 open-label clinical trials of exa-cel in pediatric patients with TDT (CLIMB-141) and SCD (CLIMB-151). Patients who received exa-cel in CLIMB-111, CLIMB-121, CLIMB-141 or CLIMB-151 will be asked to participate in a long-term, open-label follow-up trial, CLIMB-131, to evaluate the safety and efficacy of exa-cel. CLIMB-131 is designed to follow participants for up to 15 years after exa-cel infusion. In the second quarter of 2022, at the European Hematology Association Congress, we presented updated clinical data from CLIMB-111 and CLIMB-121 for 44 patients with TDT and 31 patients with SCD treated with exa-cel. Exa-cel has been granted a number of regulatory designations from the FDA, including RMAT, Fast Track, Orphan Drug, and Rare Pediatric Disease designations for the treatment of both TDT and SCD. Exa-cel has also been granted Orphan Drug Designation from the European Commission, as well as PRIME designation from the European Medicines Agency, for the treatment of both TDT and SCD.

In addition, building upon exa-cel, we have next-generation efforts in targeted conditioning and *in vivo* editing of hematopoietic stem cells, either of which could broaden the number of patients that can benefit from our therapies.

### Immuno-Oncology

We are developing a portfolio of wholly-owned CAR-T cell product candidates based on our gene-editing technology.

*CTX110.* Our lead immuno-oncology product candidate, CTX110, is a healthy donor-derived gene-edited allogeneic CAR-T investigational therapy targeting Cluster of Differentiation 19, or CD19. CTX110 is being investigated in an ongoing Phase 1 single-arm, multi-center, open-label clinical trial, CARBON, that is designed to assess the safety and efficacy of several dose levels of CTX110 in adult patients with relapsed or refractory B-cell malignancies who have received at least two prior lines of therapy. CTX110 has been granted RMAT designation by the FDA. In the fourth quarter of 2021, we released updated clinical data from the ongoing CARBON trial for 26 patients treated with CTX110 who had reached at least 28 days of follow-up.

*CTX130.* CTX130 is a healthy donor-derived gene-edited allogeneic CAR-T investigational therapy targeting Cluster of Differentiation 70, or CD70, an antigen expressed on various solid tumors and hematologic malignancies. CTX130 is being

investigated in two ongoing independent Phase 1 single-arm, multi-center, open-label clinical trials that are designed to assess the safety and efficacy of several dose levels of CTX130 in adult patients. The COBAL™-LYM trial is evaluating the safety and efficacy of CTX130 for the treatment of relapsed or refractory T or B cell malignancies. The COBAL™-RCC trial is evaluating the safety and efficacy of CTX130 for the treatment of relapsed or refractory renal cell carcinoma. CTX130 for the treatment of T cell lymphoma has received Orphan Drug Designation from the FDA. In the second quarter of 2022, at the European Hematology Association Congress, we released initial clinical data from the ongoing COBAL™-LYM trial for 18 patients with T cell lymphoma treated with CTX130 who had reached at least 28 days of follow-up. Also in the second quarter of 2022, we released preliminary clinical data from the COBAL™-RCC trial for 14 patients.

#### *Next-generation candidates*

Our CRISPR/Cas9 platform enables us to innovate continuously by incorporating incremental edits into next-generation products. We are advancing multiple next-generation CAR-T product candidates, including CTX112™ targeting CD19 and CTX131™ targeting CD70, which incorporate additional edits designed to enhance CAR-T potency. In addition, as we previously disclosed, following our June 2022 disclosure of high-level data from our Phase 1 clinical trial investigating CTX120™, a healthy donor-derived gene-edited allogeneic CAR-T investigational therapy targeting B-cell maturation antigen, or BCMA, for the treatment of relapsed or refractory multiple myeloma, we announced plans to pivot to a next-generation allogeneic CAR-T targeting BCMA, CTX121™, which incorporates proprietary edits to enhance the potency of the CAR-T cells.

#### *Regenerative Medicine*

Regenerative medicine, or the use of stem cells to repair or replace tissue or organ function lost due to disease, damage or age, holds the potential to treat both rare and common diseases. We are pursuing allogeneic stem cell-derived therapies using CRISPR/Cas9 gene editing to enable immune evasion, improve cell function, and direct cell fate. Our first major effort in this area is in diabetes, and we and ViaCyte, Inc., or ViaCyte, are advancing a series of programs as part of a strategic collaboration for the discovery, development, and commercialization of gene-edited stem cell therapies for the treatment of diabetes.

We have a multi-staged product strategy that leverages our CRISPR/Cas9 platform to advance multiple product candidates incorporating incremental edits designed to increase benefit. Our initial product candidate, VCTX210, is an investigational, allogeneic, gene-edited, immune-evasive, stem cell-derived product candidate for the treatment of type 1 diabetes, or T1D, developed by applying our gene-editing technology to ViaCyte's proprietary stem cell capabilities. VCTX210 has gene edits designed to promote immune evasion and cell fitness. We and ViaCyte are investigating VCTX210 in an ongoing Phase 1 clinical trial that is designed to assess VCTX210's safety, tolerability, and immune evasion in patients with T1D. Our next product candidate, VCTX211™, incorporates additional gene edits that aim to further enhance cell fitness.

#### *In Vivo*

Our *in vivo* gene editing strategy focuses on gene disruption and whole gene correction – the two technologies required to address ~90% of the most prevalent severe monogenic diseases. We have established a leading platform for *in vivo* gene disruption, starting in the liver. We plan to advance a broad portfolio of programs across both rare and common diseases with this platform, starting with cardiovascular diseases. Gene editing has the potential to shift the treatment paradigm for cardiovascular diseases by recapitulating the proven benefit of natural human genetic variants in a single-dose format. In addition, we continue to develop an expansive whole gene correction platform, starting with lipid nanoparticles, or LNP, plus adeno-associated viral vectors, or AAV, in the liver and advancing to AAV-free, HDR-independent methodologies.

#### *Partnerships*

Given the numerous potential therapeutic applications for CRISPR/Cas9, we have partnered strategically to broaden the indications we can pursue and accelerate development of programs by accessing specific technologies and/or disease-area expertise. We maintain broad partnerships to develop gene editing-based therapeutics in specific disease areas.

*Vertex.* We established our initial collaboration agreement in 2015 with Vertex, which focused on TDT, SCD, cystic fibrosis and select additional indications. In December 2017, we entered into a joint development and commercialization agreement with Vertex pursuant to which, among other things, we are co-developing and preparing to co-commercialize exa-cel for TDT and SCD. In April 2021, we and Vertex agreed to amend and restate our existing joint development and commercialization agreement, pursuant to which, among other things, we will continue to develop and prepare to commercialize exa-cel for TDT and SCD in partnership with Vertex. We also entered into a strategic collaboration and license agreement with Vertex in June 2019 for the development and commercialization of products for the treatment of Duchenne muscular dystrophy and myotonic dystrophy type 1.

*ViaCyte.* We entered into a research and collaboration agreement in September 2018 with ViaCyte to pursue the discovery, development and commercialization of gene-edited allogeneic stem cell therapies for the treatment of diabetes, and in July 2021, we entered into a joint development and commercialization agreement with ViaCyte, or the ViaCyte JDCA. In connection with entering into the ViaCyte JDCA, our existing research collaboration agreement with ViaCyte expired in accordance with its terms. Under the ViaCyte JDCA, we and ViaCyte are jointly developing and will commercialize product candidates and shared products for use in the treatment of diabetes type 1, diabetes type 2 and insulin dependent/requiring diabetes, or the ViaCyte Collaboration Field, throughout the world. The ViaCyte JDCA includes, among other things, provisions relating to collaboration and program governance, clinical activities for the product candidates and shared products under the agreement and continuing research by the parties in the ViaCyte Collaboration Field. Unless otherwise mutually agreed, research costs incurred by a party will be solely borne by such party. The program expenses, as originally set forth in the research and collaboration agreement, as applicable, incurred through the date of first commercial sale of a shared product will be allocated 60% to us and 40% to ViaCyte. Following first commercial sale of a shared product, such program expenses will be shared equally between us and ViaCyte. Shared product revenues will be shared equally by us and ViaCyte.

*Bayer.* We entered into an option agreement in the fourth quarter of 2019 with Bayer pursuant to which Bayer has an option to co-develop and co-commercialize two products that we advance for the diagnosis, treatment or prevention of certain autoimmune disorders, eye disorders, or hemophilia A disorders for a specified period of time, or, under certain circumstances, exclusively license such optioned products.

*Other Partnerships.* We have entered into a number of additional collaborations and license agreements to support and complement our hematopoietic stem cell, immuno-oncology, regenerative medicine and *in vivo* programs and platform, including agreements with: Nkarta, Inc. to co-develop and co-commercialize two donor-derived, gene-edited CAR-NK cell product candidates and a product candidate combining NK and T cells; Capsida Biotherapeutics, Inc. to develop *in vivo* gene editing therapies delivered with engineered AAV vectors for the treatment of amyotrophic lateral sclerosis and Friedreich's ataxia; Moffitt Cancer Center and Roswell Park Comprehensive Cancer Center to advance autologous CAR-T programs against new targets; MaxCyte, Inc. on *ex vivo* delivery for our hemoglobinopathy and immuno-oncology programs; CureVac AG on optimized mRNA constructs and manufacturing for certain *in vivo* programs; and KSQ Therapeutics, Inc. on intellectual property for our allogeneic immuno-oncology programs.

### ***Special Note About Coronavirus (COVID-19)***

The ongoing COVID-19 pandemic is having widespread, rapidly-evolving, and unpredictable impacts on global societies, economies, financial markets, and business practices. Since March 2020, we have been evaluating the actual and potential business impacts related to the spread of COVID-19, and we continue to closely monitor actual and potential business impacts as a result of the periodic resurgence of known variants of the COVID-19 virus, identification of new variants of the COVID-19 virus, and related developments. As a result of the ongoing COVID-19 pandemic, we have experienced, and may further experience, disruptions, pauses and/or delays that have and could further adversely impact our business operations, and/or associated timelines. We maintain temporary work-from-home procedures for all employees other than for those personnel and contractors who perform essential activities that must be completed on-site. Our focus remains on promoting employee health and safety while continuing to advance the research and development of our programs and pipeline of product candidates. If negative developments relating to the COVID-19 pandemic continue, we may be required to restrict on-site staff at our offices and laboratories again and at times have limited access to our offices on a temporary and intermittent basis. The ultimate impact of the COVID-19 pandemic on our business operations, including on our ongoing and planned clinical trials, remains uncertain and subject to change and will depend on future developments, which cannot be accurately predicted. We will continue to work closely with our third-party vendors, collaborators, and other parties in order to seek to advance our programs and pipeline of product candidates, while keeping the health and safety of our employees and their families, partners, third-party vendors, healthcare providers, patients and communities a top priority. Please refer to our Risk Factors in Part II, Item IA of our Annual Report on Form 10-K for further discussion of risks related to the COVID-19 pandemic.

### ***Financial Overview***

Since our inception in October 2013, we have devoted substantially all of our resources to our research and development efforts, identifying potential product candidates, undertaking drug discovery and preclinical development activities, building and protecting our intellectual property estate, 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 private placements of our preferred shares, common share issuances, convertible loans and collaboration agreements with strategic partners.

While we were in a net income position in certain previous years due to upfront payments associated with our collaborations with Vertex, we have a history of recurring losses and expect to continue to incur losses for the foreseeable future. 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 initial drug application supporting preclinical studies and initiate clinical trials for our product candidates; initiate preclinical testing and clinical trials for any other product candidates we identify and develop; maintain, defend, protect and expand our intellectual property estate; further develop our gene editing platform; hire additional research, clinical and scientific personnel; incur facilities costs associated with such personnel growth; develop manufacturing infrastructure and conduct related regulatory validation activities; and incur additional costs associated with operating as a public company.

#### *Revenue Recognition*

We have not generated any revenue to date from product sales and do not expect to do so in the near future. Revenue recognized for the three and six months ended June 30, 2022 was not material. Revenue recognized for the three and six months ended June 30, 2021 was \$900.7 million and \$901.2 million, respectively. For additional information about our revenue recognition policy, see Note 2, “Summary of Significant Accounting Policies,” in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 15, 2022, as well as Note 7 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

#### *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 and clinical activities on our behalf;
- costs of purchasing lab supplies and non-capital equipment used in our preclinical activities and in manufacturing preclinical and clinical 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.

Our external research and development expenses support our various preclinical and clinical programs, and as such we do not break down external research and development expenses further. Our internal research and development expenses consist of payroll and benefits expenses, facilities expense, and other indirect research and development expenses incurred in support of overall research and development activities and as such are not allocated to a specific development stage or therapeutic area. 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 identify and 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 IND-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.

Research and development activities are central to our business model. We expect to continue to incur research and development costs consistent with research and development at companies of our size and stage of development, which may increase in the foreseeable future as our current development programs progress, new programs are added and we continue to prepare regulatory filings. These increases will likely include the costs related to the implementation and expansion of clinical trial sites and related patient enrollment, monitoring, program management and manufacturing expenses for current and future clinical trials.

#### *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 expect to continue to incur general and administrative expenses consistent with research and development at companies of our size and stage of development, which may increase in the future to support continued research and development activities, and potential commercialization of our product candidates. In addition, we anticipate ongoing expenses related to the reimbursements of third-party patent related expenses in connection with certain of our in-licensed intellectual property, including related to the appeal of the U.S. Patent and Trademark Office's Patent and Trial Appeal Board's February 2022 Decision of Priority and Judgment in an interference declared in June 2019 between Dr. Emmanuelle Charpentier, the University of Vienna and the Regents of the University of California, or collectively, the CVC Group, and the Broad Institute, Massachusetts Institute of Technology and, in some instances, the President and Fellows of Harvard College, or collectively, the Broad, finding that Broad has priority over CVC Group with respect to the subject matter of the interference.

#### *Collaboration Expense, Net*

Collaboration expense, net, consists of operating expenses under our collaboration with Vertex. We will continue to incur operating expenses under our collaboration with Vertex in 2022. However, we anticipate that our operating expenses will exceed the specified maximum amount per year set forth in the A&R Vertex JDCA before year end, at which time we may defer a portion of our share of current year operating expenses on the exa-cel program under our collaboration with Vertex.

#### *Other Income (Expense), Net*

Other income (expense), net consists primarily of interest income earned on investments.

## Results of Operations

Comparison of three months ended June 30, 2022 and 2021 (in thousands):

	Three Months Ended June 30,		Period to Period Change
	2022	2021	
<b>Revenue:</b>			
Collaboration revenue	\$ 158	\$ 900,202	\$ (900,044)
Grant revenue	—	499	(499)
Total revenue	158	900,701	(900,543)
<b>Operating expenses:</b>			
Research and development	123,223	82,332	40,891
General and administrative	26,273	28,806	(2,533)
Collaboration expense, net	33,922	26,945	6,977
Total operating expenses	183,418	138,083	45,335
(Loss) income from operations	(183,260)	762,618	(945,878)
Other income, net	3,544	750	2,794
Net (loss) income before income taxes	(179,716)	763,368	(943,084)
Provision for income taxes	(6,118)	(4,143)	(1,975)
Net (loss) income	<u>\$ (185,834)</u>	<u>\$ 759,225</u>	<u>\$ (945,059)</u>

### Collaboration Revenue

Collaboration revenue for the three months ended June 30, 2022 was not material. Collaboration revenue for the three months ended June 30, 2021 was \$900.2 million which was primarily associated with the \$900.0 million upfront payment from Vertex in connection with the A&R JDCA. Please refer to Note 7 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for further information.

### Research and Development Expenses

Research and development expenses were \$123.2 million for the three months ended June 30, 2022, compared to \$82.3 million for the three months ended June 30, 2021. The following table summarizes our research and development expenses for the three months ended June 30, 2022 and 2021, together with the changes in those items in dollars (in thousands):

	Three Months Ended June 30,		Period to Period Change
	2022	2021	
External research and development expenses	\$ 55,990	\$ 29,906	\$ 26,084
Employee related expenses	21,681	14,440	7,241
Facility expenses	29,998	20,522	9,476
Stock-based compensation expenses	13,829	16,195	(2,366)
Other expenses	853	588	265
Sublicense and license fees	872	681	191
Total research and development expenses	<u>\$ 123,223</u>	<u>\$ 82,332</u>	<u>\$ 40,891</u>

The increase of approximately \$40.9 million was primarily attributable to the following:

- \$26.1 million of increased external research and development costs, primarily associated with production of drug product and increased clinical trial expense associated with our oncology programs;
- \$9.5 million of increased facility-related expenses, primarily related to our new U.S. research and development headquarters located in Boston, Massachusetts; and
- \$7.2 million of increased employee-related expenses primarily due to an increase in headcount to support overall growth.



### General and Administrative Expenses

General and administrative expenses were \$26.3 million for the three months ended June 30, 2022, consistent with general and administrative expenses of \$28.8 million for the three months ended June 30, 2021.

### Collaboration Expense, Net

Collaboration expense, net, was \$33.9 million for the three months ended June 30, 2022, compared to \$26.9 million for the three months ended June 30, 2021. The increase of approximately \$7.0 million was primarily attributable to the following:

- \$4.2 million of increased manufacturing costs; and
- \$3.4 million of increased pre-commercial expenses associated with our collaboration with Vertex.

### Other Income, Net

Other income was \$3.5 million for the three months ended June 30, 2022, compared to \$0.8 million of income for the three months ended June 30, 2021. The change was primarily due to interest income earned on cash, cash equivalents and marketable securities for the three months ended June 30, 2022.

### Comparison of six months ended June 30, 2022 and 2021 (in thousands):

	Six Months Ended June 30,		Period to Period Change
	2022	2021	
<b>Revenue:</b>			
Collaboration revenue	\$ 336	\$ 900,404	\$ (900,068)
Grant revenue	762	836	(74)
Total revenue	1,098	901,240	(900,142)
<b>Operating expenses:</b>			
Research and development	241,468	153,971	87,497
General and administrative	54,294	52,303	1,991
Collaboration expense, net	64,568	46,891	17,677
Total operating expenses	360,330	253,165	107,165
(Loss) income from operations	(359,232)	648,075	(1,007,307)
Other income, net	3,907	2,705	1,202
Net (loss) income before income taxes	(355,325)	650,780	(1,006,105)
Provision for income taxes	(9,726)	(4,718)	(5,008)
Net (loss) income	<u>\$ (365,051)</u>	<u>\$ 646,062</u>	<u>\$ (1,011,113)</u>

### Collaboration Revenue

Collaboration revenue for the six months ended June 30, 2022 was not material. Collaboration revenue for the six months ended June 30, 2021 was \$900.4 million which was primarily associated with the \$900.0 million upfront payment from Vertex in connection with the A&R JDCA. Please refer to Note 7 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for further information.

### Research and Development Expenses

Research and development expenses were \$241.5 million for the six months ended June 30, 2022, compared to \$154.0 million for the six months ended June 30, 2021. The following table summarizes our research and development expenses for the six months ended June 30, 2022 and 2021, together with the changes in those items in dollars (in thousands):

	Six Months Ended June 30,		Period to Period
	2022	2021	Change
External research and development expenses	\$ 101,628	\$ 52,336	\$ 49,292
Employee related expenses	42,872	29,197	13,675
Facility expenses	60,778	40,908	19,870
Stock-based compensation expenses	28,419	29,040	(621)
Other expenses	1,230	845	385
Sublicense and license fees	6,541	1,645	4,896
Total research and development expenses	<u>\$ 241,468</u>	<u>\$ 153,971</u>	<u>\$ 87,497</u>

The increase of approximately \$87.5 million was primarily attributable to the following:

- \$49.3 million of increased external research and development costs, primarily associated with production of drug product and increased clinical trial expense associated with our oncology programs;
- \$19.9 million of increased facility-related expenses, primarily related to our new U.S. research and development headquarters located in Boston, Massachusetts; and
- \$13.7 million of increased employee-related expenses primarily due to an increase in headcount to support overall growth.

### General and Administrative Expenses

General and administrative expenses were \$54.3 million for the six months ended June 30, 2022, compared to \$52.3 million for the six months ended June 30, 2021. The increase of approximately \$2.0 million was primarily attributable to \$1.5 million of increased employee-related expenses and an increase of \$0.8 million in stock compensation expense.

### Collaboration Expense, Net

Collaboration expense, net, was \$64.6 million for the six months ended June 30, 2022, compared to \$46.9 million for the six months ended June 30, 2021. The increase of approximately \$17.7 million was primarily attributable to the following:

- \$10.5 million of increased manufacturing costs; and
- \$5.7 million of increased pre-commercial expenses associated with our collaboration with Vertex.

### Other Income, Net

Other income was \$3.9 million for the six months ended June 30, 2022, compared to \$2.7 million of income for the six months ended June 30, 2021. The change was primarily due to interest income earned on cash, cash equivalents and marketable securities for the six months ended June 30, 2022.

### Liquidity and Capital Resources

As of June 30, 2022, we had cash, cash equivalents and marketable securities of approximately \$2,073.7 million, of which approximately \$16.0 million was held outside of the United States.

In August 2019, we entered into an Open Market Sale Agreement<sup>SM</sup> with Jefferies LLC, or Jefferies, under which we are able to offer and sell, from time to time at our sole discretion through Jefferies, as our sales agent, our common shares, par value of CHF 0.03 per share, or the August 2019 Sales Agreement. In January 2021, in connection with the August 2019 Sales Agreement, we filed a prospectus supplement with the SEC to offer and sell from time to time common shares having aggregate gross proceeds of up to \$600.0 million. In July 2021, we filed a new prospectus supplement with the SEC, which replaced the previous prospectus supplement filed in January 2021, to offer and sell, from time to time, the common shares remaining under the original prospectus supplement having aggregate gross proceeds of up to \$419.8 million, or, together with the January 2021 prospectus supplement, the 2021 ATM. No shares were issued and sold under the 2021 ATM for the six months ended June 30, 2022.

We have predominantly incurred losses and cumulative negative cash flows from operations since our inception. As of June 30, 2022, we had \$2,073.7 million in cash, cash equivalents and marketable securities and an accumulated deficit of \$561.0 million. We anticipate that we will continue to incur losses for at least the next several years. We expect to continue to incur research and development costs and general and administrative expenses consistent with research and development at companies of our size and stage of development, and, as a result, we will need additional capital to fund our operations, which we may raise through public or private equity or debt financings, strategic collaborations, or other sources.

### *Funding Requirements*

Our primary uses of capital are, and we expect will continue to be, research and development activities, manufacturing activities, compensation and related expenses, laboratory and related supplies, legal and other regulatory expenses, patent prosecution filing, defense and intellectual property maintenance costs, and general overhead costs, including costs associated with operating as a public company. We expect to continue to incur operating expenses consistent with research and development at companies of our size and stage of development, which may increase in the future to support continued research and development activities, and potential commercialization of our product candidates.

Because our research programs are still in early stages of development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development, manufacture and commercialization of any current or future product candidates, if approved, 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 financings, debt financings and payments received in connection with our collaboration agreements. We are eligible to earn payments, in each case, on a per-product basis under our collaboration with Vertex. Except for this source of funding, we do not have any committed external source of liquidity. We intend to consider opportunities to raise additional funds through the sale of equity or debt securities when market conditions are favorable to us to do so. However, the trading prices for our common shares and other biopharmaceutical companies have been highly volatile. As a result, we may face difficulties raising capital through sales of our common shares or such sales may be on unfavorable terms. In addition, a recession, depression or other sustained adverse market event, including resulting from the spread of the coronavirus, could materially and adversely affect our business and the value of our common shares. To the extent that we raise additional capital through the future sale of equity or debt securities, the ownership interests 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 our existing cash will enable us to fund our operating expenses and capital expenditures for at least the next 24 months without giving effect to any additional proceeds we may receive under our collaboration with Vertex and any other capital raising transactions we may complete. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. Given our need for additional financing to support the long-term clinical development of our programs, we intend to consider additional financing opportunities when market terms are favorable to us.

Our ability to generate revenue and achieve profitability depends significantly on our success in many areas, including: developing our delivery technologies and our gene-editing 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, if approved; 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, defending, protecting and expanding our estate 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 periods below (in thousands):

	Six Months Ended June 30,		Period to Period Change
	2022	2021	
Net cash (used in) provided by operating activities	\$ (277,195)	\$ 706,339	\$ (983,534)
Net cash used in investing activities	(170,587)	(461,534)	290,947
Net cash provided by financing activities	21,002	234,434	(213,432)
Effect of exchange rate changes on cash	(95)	10	(105)
Net (decrease) increase in cash	<u>\$ (426,875)</u>	<u>\$ 479,249</u>	<u>\$ (906,124)</u>

## Operating Activities

Net cash used in operating activities was \$277.2 million for the six months ended June 30, 2022, compared to cash provided by operating activities of \$706.3 million for the six months ended June 30, 2021. The increase in cash used in operating activities of \$983.5 million was primarily driven by an increase in net loss of \$1,011.1 million, from net income of \$646.1 million for the six months ended June 30, 2021 to net loss of \$365.1 million for the six months ended June 30, 2022. The increase in cash used in operations was offset by an increase in non-cash expense of \$12.4 million, primarily related to an increase in stock compensation, fixed asset depreciation and amortization of premiums and discounts on marketable securities, as well as a \$15.2 million increase in net changes of operating assets and liabilities.

## Investing Activities

Net cash used in investing activities for the six months ended June 30, 2022 was \$170.6 million, compared to \$461.5 million for the six months ended June 30, 2021. The decrease in net cash used in investing activities consisted primarily of an increase in marketable securities maturities, in addition to a reduction of purchases of marketable securities and property and equipment.

## Financing Activities

Net cash provided by financing activities for the six months ended June 30, 2022 was \$21.0 million, compared with \$234.4 million for the six months ended June 30, 2021. Net cash provided by financing activities for the six months ended June 30, 2022 consisted of option exercise proceeds, net of issuance costs. Net cash provided by financing activities for the six months ended June 30, 2021 consisted primarily of \$219.9 million in net proceeds from the sale of 1.4 million common shares issued in connection with our 2021 ATM, which was net of \$3.1 million of equity issuance costs and \$2.2 million of stamp taxes, as well as option exercise proceeds, net of issuance costs. No shares were issued and sold under the 2021 ATM for the six months ended June 30, 2022.

### ***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. GAAP. 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 changes to our accounting policies discussed in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 15, 2022.

### ***Recent Accounting Pronouncements***

Refer to Note 1 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for a discussion of recent accounting pronouncements.

### **Item 3. Qualitative and Quantitative Disclosures about Market Risk**

#### *Interest Rate Sensitivity*

We are exposed to market risk related to changes in interest rates. As of June 30, 2022, we had cash, cash equivalents and marketable securities of \$2,073.7 million, primarily invested in U.S. treasury securities and government agency securities, corporate bonds, commercial paper and money market accounts invested in U.S. government agency securities. Due to the conservative nature of these instruments, we do not believe that we have a material exposure to interest rate risk. If interest rates were to increase or decrease by 1%, the fair value of our investment portfolio would increase or decrease by an immaterial amount.

#### *Foreign Currency Exchange Rate 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. To date, foreign currency transaction gains and losses have not been material to our financial statements, and we have not engaged in any foreign currency hedging transactions.

#### *Inflation*

Inflation generally affects us by increasing our cost of labor, clinical trial and manufacturing costs. We do not believe that inflation had a material effect on our business, financial condition or results of operations during the three and six months ended June 30, 2022 and 2021.

**Item 4. Controls and Procedures.*****Management's Evaluation of our Disclosure Controls and Procedures***

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities and Exchange Act of 1934 is (1) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and (2) accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

As of June 30, 2022, our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934). 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 management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our principal executive officer and principal financial officer have concluded based upon the evaluation described above that, as of June 30, 2022, our disclosure controls and procedures were effective at the reasonable assurance level.

***Changes in Internal Control over Financial Reporting***

During the quarter ended June 30, 2022, there were no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Securities Exchange Act of 1934, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## **PART II—OTHER INFORMATION**

### **Item 1. Legal Proceedings.**

In the ordinary course of business, we are from time to time involved in lawsuits, investigations, proceedings and threats of litigation related to, among other things, our intellectual property estate (including certain in-licensed intellectual property), commercial arrangements and other matters. Such proceedings may include quasi-litigation, inter partes administrative proceedings in the U.S. Patent and Trademark Office and the European Patent Office involving our intellectual property estate including certain in-licensed intellectual property. 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.

There have been no material developments with respect to the legal proceedings previously disclosed in “Item 3. Legal Proceedings” of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed with the SEC on February 15, 2022.

### **Item 1A. Risk Factors.**

In addition to the risks described in our Annual Report on Form 10-K, you should carefully consider the other information set forth in this Form 10-Q and the information in our other filings with the SEC, as they could materially affect our business, financial condition or future results of operations. There have been no material changes to the risk factors previously disclosed in Part I, Item 1A (Risk Factors) of our Annual Report on Form 10-K.

### **Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.**

None.

### **Item 3. Defaults Upon Senior Securities.**

Not applicable.

### **Item 4. Mine Safety Disclosures.**

Not applicable.

### **Item 5. Other Information.**

None.

## Item 6. Exhibits

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth in the Exhibit Index below.

<u>Exhibit Number</u>	<u>Description of Document</u>
10.1*	<a href="#"><u>Employment Agreement, dated May 23, 2022, by and between CRISPR Therapeutics AG and Phuong Khanh Morrow</u></a>
10.2*	<a href="#"><u>Lease Commencement Date Agreement, dated May 1, 2022, by and between CRISPR Therapeutics AG and 105 W First Street Owner, L.L.C.</u></a>
31.1*	<a href="#"><u>Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u></a>
31.2*	<a href="#"><u>Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u></a>
32.1*+	<a href="#"><u>Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u></a>
101.INS*	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101.)

\* Filed herewith.

+ The certification attached as Exhibit 32.1 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission 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: August 8, 2022

By: /s/ Samarth Kulkarni  
Samarth Kulkarni  
Chief Executive Officer  
(Principal Executive Officer)

Dated: August 8, 2022

By: /s/ Brendan Smith  
Brendan Smith  
Chief Financial Officer  
(Principal Financial Officer)

## EMPLOYMENT AGREEMENT

This Employment Agreement (“Agreement”) is made as of the 23<sup>rd</sup> day of May, 2022 between CRISPR Therapeutics, Inc., a Delaware corporation (the “Company”), and Phuong Khanh Morrow (the “Executive” and, together with the Company, the “Parties” or each individually, a “Party”).

WHEREAS, this Employment Agreement shall become effective upon the later of the (i) full execution by both Parties; or (ii) ten (10) business days after the Company provided Executive with notice of this Agreement and the Exhibits (the “Effective Date”).

WHEREAS, the Company is a wholly owned subsidiary of CRISPR Therapeutics AG (“Parent” or “CRISPR AG”);

WHEREAS, Parent and the Company are each subject to the Swiss Ordinance act against excessive compensation in listed companies as a result of the of listing of the common shares of Parent on the NASDAQ Global Market; and

WHEREAS, the Company and the Executive are parties to that certain offer letter dated on or about May 6, 2022 (the “Prior Agreement”).

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Position and Duties. The employment of the Executive by the Company will commence on the date hereof. The Executive will serve as the Chief Medical Officer of the Company. The Executive shall have responsibilities and duties consistent with such position and such other responsibilities and duties as may from time to time be prescribed by the Chief Executive Officer of the Company (the “CEO”) which are not inconsistent with the Executive’s skills and experience or her ability to discharge her responsibilities in the positions noted above. The Executive shall devote the Executive’s full working time and efforts to the business and affairs of the Company except as otherwise permitted under Section 3(b)(i). Notwithstanding the foregoing, the Executive may engage in charitable or other community activities, as long as such services and activities are disclosed to the Board of Directors of Parent (the “Board”) and do not materially interfere with the Executive’s performance of the Executive’s duties to the Company as provided in this Agreement. During the period which the Executive is employed pursuant to this Agreement (the “Employment Period”), the Executive’s principal place of employment will be in the Greater Boston, Massachusetts area; however, the Company may require the Executive to travel temporarily to other locations in connection with the Company’s business.

2. Compensation and Related Matters.

(a) Base Salary. During the Employment Period, the Company shall pay the Executive, as compensation for the performance of the Executive’s duties and obligations under this Agreement, an annual base salary of \$510,000, payable in a manner that is consistent with the Company’s usual payroll practices for senior executives. The Executive’s base salary shall

---

be reviewed annually by each of the Compensation Committee of the Board or any successor to such committee (the "Committee") and the Board or for adjustment. Such adjustment, if any, shall be within the sole discretion of the Board. The annual base salary in effect at any given time is referred to herein as "Base Salary."

(b) Annual Bonus. During the Employment Period, the Executive shall be eligible to receive an annual target bonus (a "Bonus") if, as reasonably determined by the Board or, to the extent delegated by the Board, the Committee one or more of the performance targets annually determined by the Board or the Committee ("Performance Targets") is achieved. If all of the Performance Targets are achieved, the Bonus will equal not less than 45 percent of the Executive's Base Salary (the "Target Bonus"). In the event that less than all of the Performance Targets are met by Executive, the Bonus paid in respect of this paragraph may be less than the Target Bonus. Except as set forth in Section 5(a) hereof, the Executive must be employed by the Company on the day any such earned Bonus is paid which shall be not later than 2½ months after the end of each calendar year. The Executive's target bonus opportunity as a percentage of Base Salary may be reviewed periodically and adjusted in the sole discretion of the Board. After any such adjustment, the term "Target Bonus" shall refer to the increased amount.

(c) Equity Compensation. The Executive shall be eligible to participate in Parent's equity incentive plan according to its terms and conditions, as defined by Parent from time to time in its sole discretion. Both entitlement to any equity awards and the amount shall be determined by Parent in its sole discretion.

(d) Expenses. During the Employment Period, the Executive shall be entitled to receive reimbursement for all reasonable expenses incurred by her in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for its senior executive officers.

(e) Other Benefits. During the Employment Period, the Executive shall be entitled to participate in or receive benefits under any employee benefit plan or arrangement currently maintained or which may, in the future, be made available by the Company generally to its executives and key management employees, subject to and on a basis consistent with the terms, conditions and overall administration of such plan or arrangement. Any payments or benefits payable to the Executive under a plan or arrangement referred to in this Section 2(e) in respect of any calendar year during which the Executive is employed by the Company for less than the whole of such year shall, unless otherwise provided in the applicable plan or arrangement, be prorated in accordance with the number of days in such calendar year during which the Executive is so employed. Should any such payments or benefits accrue on a fiscal (rather than calendar) year, then the proration in the preceding sentence shall be on the basis of a fiscal year rather than calendar year.

(f) Vacations. The Executive shall be entitled to accrue up to 20 paid vacation days in each year, which shall be accrued ratably. In other respects, the Company's vacation policy as the same may then be in effect shall apply to vacations.

(g) Approval by Shareholders' Meeting and Mandatory Law. Any compensation (including bonus, equity awards and fringe benefits) to be paid under this Agreement, is, to the

extent required by Swiss laws and the Parent's Article of Association, subject to approval by the general meeting of shareholders' of Parent. In the event of a conflict between this Agreement and applicable mandatory Swiss law, the Company shall have the right to unilaterally modify the Agreement to the extent necessary to comply with mandatory law with immediate effect.

(h) Lost Opportunity Compensation. To offset losses the Executive incurred in connection with the transitioning of her employment to the Company, the Company will make a one-time payment to the Executive in the amount of \$200,000 in the first payroll following 30 days of employment with the Company (usually within the first 60 days of employment). This payment is subject to the usual required withholdings. The Executive understands and agrees that, in the event her employment with the Company is terminated for any reason prior the first anniversary of the Effective Date, she will reimburse the Company, within one (1) month after such employment termination, for this full amount (\$200,000). The Executive further agrees that amount may be collected by the Company, either directly or indirectly, from (i) payment of any kind due to the Executive from the Company or any affiliate thereof including, without limitation, accrued wages, vacation, final wages, and expense reimbursements to the fullest extent permitted by applicable law; and/or (ii) the forfeiture or cancellation of any equity interest owned by you in CRISPR AG, the Company or any subsidiary or affiliate thereof, whether now existing or hereafter formed, and regardless of the form such equity interest (e.g., common shares, options to acquire common shares or otherwise).

### 3. Termination.

(a) General. The Executive's employment shall continue until it is terminated in accordance with this Agreement. Upon service of a Notice of Termination (as defined below), the Executive shall resign from all offices and functions assumed in relation to this Agreement effective upon first request of the Company.

(b) Termination by the Company without Cause or by Executive for Good Reason; Notice Period. In the event that the Company elects to terminate the Executive's employment without Cause (as defined below) or the Executive elects to resign from Executive's employment with Good Reason (as defined below) (in either case an "Involuntary Departure"), the Party electing to end the employment relationship shall provide the other Party with a Notice of Termination (as defined below) of the Involuntary Departure specifying a notice period (the "Notice Period") of six (6) months, effective as per the end of a calendar month; provided that, in the case that the Notice of Termination of an Involuntary Departure is provided within the 12 month period following a Change in Control (the "Change in Control Period" or "CIC Period"), then the Notice Period shall be 12 months.

(i) During the Notice Period following a Notice of Termination of an Involuntary Departure, the Executive shall continue to be available to provide services to the extent requested by the Company or the Board, provided at any time during the Notice Period the Company may replace the Executive's position and/or direct the Executive to perform other or reduced work; provided further that, upon the 15<sup>th</sup> day following such Notice of Termination (or such earlier date as the Company shall determine in its sole discretion), the Company shall release the Executive from the Executive's working obligations pursuant to Section 3(b)(i) (except to the extent the

parties otherwise agree) and place the Executive on administrative leave for the remainder of the Notice Period (“Administrative Leave”). During such Administrative Leave, the Executive (A) may enter into consulting arrangements and accept board positions provided such outside business activities do not interfere with Executive’s obligations under this Agreement including without limitation, pursuant to Section 7 and (B) shall be free to engage in other employment provided that such employment does not interfere with Executive’s obligations under this Agreement including without limitation, pursuant to Section 7. The Company shall be prohibited during the Administrative Leave from reducing any compensation to which the Executive is entitled to receive during the remainder of the Notice Period pursuant to Section 3(b)(ii).

(ii) With respect to compensation during the Notice Period following a Notice of Termination of an Involuntary Departure, and subject to (i) the Executive signing, within 30 days following the date that the Notice of Termination is given, a Release of Claims in a form reasonably required by the Company containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property and non-disparagement, a reaffirmation of all of the Executive’s Continuing Obligations and, in the Company’s sole discretion, a one-year post-employment noncompetition agreement, and shall provide that if the Executive breaches any of the Executive’s Continuing Obligations, all payments under this Agreement shall immediately cease (the “Release”) and (ii) Section 6, the Executive: (A) shall continue to receive the Base Salary and employee benefits consistent with the Company’s then existing benefits plans and programs; (B) shall be entitled to receive an amount equal to the Target Bonus with respect to the Notice Period (i.e., a prorated Target Bonus based upon the number of days in the applicable Notice Period), which amount shall be payable no more than 60 days after the Notice of Termination (provided that if the 60-day period begins in one calendar year and ends in a second calendar year, such Target Bonus shall be paid in the second calendar year); (C) shall continue to vest through the last day of the Notice Period in any [time based] equity awards outstanding as of the date the Notice of Termination is given; provided, and notwithstanding the foregoing, Section 5(a) may apply if the Notice of Termination of an Involuntary Departure occurs during a CIC Period, and (D) shall not continue to accrue vacation under Section 2(f).

(iii) If during the Notice Period following a Notice of Termination of an Involuntary Departure, the Company terminates the Executive’s employment for Cause, then the Company shall provide a restated Notice of Termination and the Notice Period shall end on the earlier date set forth in the restated Notice of Termination.

(c) Death. The Executive’s employment hereunder shall terminate upon her death.

(d) Disability. The Company may terminate the Executive’s employment if the Executive is disabled and unable to perform the essential functions of the Executive’s then existing position or positions with or without reasonable accommodation for a period of 180 days (which need not be consecutive) in any 12-month period. If any question shall arise as to whether during any period the Executive is disabled so as to be unable to perform the essential

functions of the Executive's then existing position or positions with or without reasonable accommodation, the Executive may, and at the request of the Company shall, submit to the Company a certification in reasonable detail by a physician selected by the Company to whom the Executive or the Executive's guardian shall have no reasonable objection as to whether the Executive is so disabled or how long such disability is expected to continue, and such certification shall for the purposes of this Agreement be conclusive of the issue. The Executive shall cooperate with any reasonable request of the physician in connection with such certification. If such question shall arise and the Executive shall fail to submit such certification, the Company's determination of such issue shall be binding on the Executive. Nothing in this Section 3(d) shall be construed to waive the Executive's rights, if any, under existing law including, without limitation, the Family and Medical Leave Act of 1993, 29 U.S.C. §2601 *et seq.* and the Americans with Disabilities Act, 42 U.S.C. §12101 *et seq.*

(e) Termination by Company for Cause. The Company may terminate the Executive's employment hereunder for Cause.

(f) Termination by the Executive Without Good Reason. The Executive may terminate her employment hereunder at any time without Good Reason.

(g) Definitions:

(i) Cause. For purposes of this Agreement, "Cause" shall mean: (i) the Executive's commission of any felony or commission of any crime involving fraud, dishonesty or moral turpitude; (ii) the Executive's commission or attempted commission of or participation in a fraud or act of dishonesty against the Company; (iii) the Executive's material breach of any contract or agreement between the Executive and the Company or the Executive's material breach of any legal duty she owes to the Company; (iv) conduct by the Executive that constitutes insubordination, incompetence or neglect of duties; (v) the Executive's failure to perform the duties, functions and responsibilities of the Executive's position; or (vi) the Executive's failure to cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by the Company to cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation; provided, however, the actions or conduct described in clauses (iv) and (v) above shall only constitute Cause if the Company provides the Executive with written notice thereof and the Executive has not, within 30 days of receipt such written notice, discontinued the cited conduct or remedied the failure to perform and further provided that lawful actions taken by the Executive in the exercise of her rights under the United States Constitution shall not constitute a breach of subsection (vi) above.

(ii) Good Reason. For purposes of this Agreement, "Good Reason" shall mean that the Executive has complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events: (i) a material diminution in the Executive's responsibilities, authority and function, an adverse change to Executive's job title, or a change in Executive's reporting relationship that results in

the Executive no longer reporting directly to the CEO; (ii) a material reduction in Base Salary except pursuant to a salary reduction program affecting substantially all of the employees of the Company, provided that it does not adversely affect the Executive to a greater extent than other similarly situated employees; (iii) a material change in the principal geographic location at which the Executive provides services to the Company outside of the Greater Boston, Massachusetts area; or (iv) the material breach of this Agreement by the Company (each a “Good Reason Condition”). Good Reason Process shall mean that (i) the Executive reasonably determines in good faith that a Good Reason Condition has occurred; (ii) the Executive notifies the Company in writing of the first occurrence of the Good Reason Condition within 60 days of the occurrence of such condition; (iii) the Executive cooperates in good faith with the Company’s efforts, for a period not less than 30 days following such notice (the “Cure Period”), to remedy the Good Reason Condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) the Executive terminates employment within 60 days after the end of the Cure Period. If the Company cures the Good Reason Condition during the Cure Period, Good Reason shall be deemed not to have occurred.

(iii) Notice of Termination. Except for termination as specified in Section 3(c), any termination of the Executive’s employment by either the Company or the Executive shall be communicated by written Notice of Termination to the other party hereto. For purposes of this Agreement, a “Notice of Termination” shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

(iv) Date of Termination. For purposes of this Agreement, “Date of Termination” shall mean: (i) if the Executive’s employment is terminated by death, the date of death; (ii) if the Executive’s employment is terminated on account of disability under Section 3(d) or by the Company for Cause under Section 3(e), the date on which Notice of Termination is given; (iii) if the Executive’s employment terminates as a result of an Involuntary Departure under Section 3(b), the last day of the Notice Period; (iv) if the Executive’s employment is terminated by the Executive under Section 3(f) without Good Reason, 30 days after the date on which a Notice of Termination is given (unless the Company waives all or part of the thirty (30) day period).

4. Compensation Upon Termination. If the Executive’s employment with the Company is terminated for any reason, the Company shall pay or provide to the Executive (or to the Executive’s authorized representative or estate) (i) any Base Salary earned through the Date of Termination; (ii) unpaid expense reimbursements (subject to, and in accordance with Section 2(d) of this Agreement); (iii) subject to Section 3(b)(ii)(D), unused vacation that accrued through the Date of Termination; and (iv) any vested benefits the Executive may have under any employee benefit plan of the Company through the Date of Termination, which vested benefits shall be paid and/or provided in accordance with the terms of such employee benefit plans (together, the “Accrued Benefit”) on or before the time required by law but in no event more than 30 days after the Executive’s Date of Termination.

5. Change in Control.

(a) Acceleration of Vesting. In the event a Notice of Termination of an Involuntary Termination occurs during the CIC Period, and subject to the Executive signing, within 60 days following the Notice of Termination, a Release and the Release becoming effective and non-revocable within such 60-day period, all time based stock options and time based stock-based awards held by the Executive as of the date of the Notice of Termination, shall vest and become exercisable or nonforfeitable. Notwithstanding the foregoing, if, at the time of a Change in Control, the Company determines in its sole discretion, in reliance upon an opinion of counsel in form and substance satisfactory to the Company, that the acceleration in the prior sentence would not be permissible under applicable law, then in lieu of the acceleration in the prior sentence, all time based stock options and time based stock-based awards held by the Executive as of the date of such Change in Control, shall vest and become exercisable or nonforfeitable as of the date of such Change in Control.

(b) Excise Tax.

(i) Anything in this Agreement to the contrary notwithstanding, in the event that any compensation, payment or distribution by the Company to or for the benefit of the Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (the "Parachute Payments"), would be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), the following provisions shall apply:

(A) If the Parachute Payments, reduced by the sum of (1) the Excise Tax and (2) the total of the Federal, state, and local income and employment taxes payable by the Executive on the amount of the Parachute Payments which are in excess of the Threshold Amount, are greater than or equal to the Threshold Amount, the Executive shall be entitled to the full benefits payable under this Agreement.

(B) If the Threshold Amount is less than (x) the Parachute Payments, but greater than (y) the Parachute Payments reduced by the sum of (1) the Excise Tax and (2) the total of the Federal, state, and local income and employment taxes on the amount of the Parachute Payments which are in excess of the Threshold Amount, then the Parachute Payments shall be reduced (but not below zero) to the extent necessary so that the sum of all Parachute Payments shall not exceed the Threshold Amount. In such event, the Parachute Payments shall be reduced in the following order: (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A of the Code; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits. To the extent any payment is to be made over time (*e.g.*, in installments, etc.), then the payments shall be reduced in reverse chronological order.

(ii) For the purposes of this Section 5(b), "Threshold Amount" shall mean three times the Executive's "base amount" within the meaning of Section 280G(b)(3) of the Code and the regulations promulgated thereunder less one dollar (\$1.00); and "Excise Tax" shall mean the excise tax imposed by Section 4999 of the Code, and any interest or penalties incurred by the Executive with respect to such excise tax.



(iii) All calculations and determinations under Sections 5(c)(i) and 5(c)(ii) shall be made by an independent accounting firm or independent tax counsel appointed by the Company (the “Tax Counsel”) whose determinations shall be conclusive and binding on the Company and the Executive for all purposes. For purposes of making the calculations and determinations required by Sections 5(c)(i) and 5(c)(ii), the Tax Counsel may rely on reasonable, good faith assumptions and approximations concerning the application of Section 280G and Section 4999 of the Code. The Company and the Executive shall furnish the Tax Counsel with such information and documents as the Tax Counsel may reasonably request in order to make its determinations under Sections 5(c)(i) and 5(c)(ii). The Company shall bear all costs the Tax Counsel may reasonably incur in connection with its services.

(b) Definitions. For purposes of Section 3(b) and this Section 5, “Change in Control” shall mean any of the following:

(i) any “person,” as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the “Act”) (other than Parent, any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of Parent or any of its subsidiaries), together with all “affiliates” and “associates” (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the “beneficial owner” (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of Parent representing 50 percent or more of the combined voting power of the Company’s then outstanding securities having the right to vote in an election of the Board (“Voting Securities”) (in such case other than as a result of an acquisition of securities directly from Parent); or

(ii) the date a majority of the members of the Board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or

(iii) the consummation of (A) any consolidation or merger of Parent where the stockholders of Parent, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than 50 percent of the voting shares of the company issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (B) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of Parent.

Notwithstanding the foregoing, a “Change in Control” shall not be deemed to have occurred for purposes of the foregoing clause (i) solely as the result of an acquisition of securities by Parent which, by reducing the number of shares of Voting Securities outstanding, increases the proportionate number of Voting Securities beneficially owned by any person to 50 percent or more of the combined voting power of all of the then outstanding Voting Securities; provided, however, that if any person referred to in this sentence shall thereafter become the beneficial owner of any additional shares of Voting Securities (other than pursuant to a stock split, stock dividend, or similar transaction or as a result of an acquisition of securities directly

from Parent) and immediately thereafter beneficially owns 50 percent or more of the combined voting power of all of the then outstanding Voting Securities, then a “Change in Control” shall be deemed to have occurred for purposes of the foregoing clause (i). For the avoidance of doubt, a migratory merger of Parent for the principal purpose of redomiciling Parent shall not constitute a Change in Control.

6. Section 409A.

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of the Executive’s separation from service within the meaning of Section 409A of the Code, the Company determines that the Executive is a “specified employee” within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that the Executive becomes entitled to under this Agreement on account of the Executive’s separation from service would be considered deferred compensation subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after the Executive’s separation from service, or (B) the Executive’s death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule. Solely for purposes of Section 409A of the Code, each installment payment under this Agreement is considered a separate payment.

(b) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by the Executive during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year. Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(c) To the extent that any payment or benefit described in this Agreement constitutes “non-qualified deferred compensation” under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Executive’s termination of employment, then such payments or benefits shall be payable only upon the Executive’s “separation from service.” The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(d) The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be

necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) The Company makes no representation or warranty and shall have no liability to the Executive or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

7. Proprietary Information, Noncompetition and Cooperation.

(a) Confidentiality and Assignment Agreement. The Executive has entered into the Proprietary Information and Inventions Agreement (the "Confidentiality and Assignment Agreement"), attached hereto as Exhibit A, the terms of which are incorporated by reference as material terms of this Agreement. For purposes of this Agreement, the obligations in this Section 7 and those that arise in the Confidentiality and Assignment Agreement, and any other agreement relating to confidentiality, assignment of inventions, or other restrictive covenants shall collectively be referred to as the "Continuing Obligations."

(c) Non-Solicitation. In order to protect the Company's proprietary information and good will, during the Executive's employment with the Company and for a period of twelve (12) months following the (i) the delivery of a Notice of Termination, in the case of an Involuntary Departure or (ii) the termination of the Executive's employment for any other reason (the "Restricted Period.") the Executive will not, directly or indirectly, in any manner, other than for the benefit of the Company (i) divert or take away customers of the Company or any of its suppliers; and/or (ii) solicit, entice, attempt to persuade any other employee or consultant of the Company to leave the Company for any reason (other than the termination of subordinate employees undertaken in the course of the Executive's employment with the Company). The Executive acknowledges and agrees that if the Executive violates any of the provisions of this paragraph 7(b), the running of the Restricted Period will be extended by the time during which the Executive engages in such violation(s).

(a) Noncompetition. The Executive acknowledges and agrees that in consideration and as a condition of the Executive's employment by the Company and in exchange for, among other things, the benefits contained in this Agreement, including without limitation the opportunity to receive enhanced post-employment severance benefits, which the Executive acknowledges and agrees is fair and reasonable consideration that is independent from the continuation of the Executive's employment, during the Restricted Period the Executive will not directly or indirectly, whether as owner, partner, shareholder, director, manager, consultant, agent, employee, co-venturer or otherwise, engage, participate or invest in any Competing Business anywhere in the world. For purposes hereof, the term "Competing Business" shall mean any entity engaged in the discovery, development or commercialization of gene editing technology for human therapeutics. Notwithstanding the foregoing, nothing contained hereinabove or hereinbelow shall be deemed to prohibit the Executive from (i) acquiring, solely as an investment, shares of capital stock (or other interests) of any corporation (or other entity) not exceeding 2% of such corporation's (or other entity's) then outstanding shares of capital stock (or equity interest), or (ii) working for a line of business, division or unit of a larger entity

that competes with the Company as long as the Executive's activities for such line of business, division or unit do not involve work by the Executive on matters that are directly competitive with the Company's business. Notwithstanding the foregoing, this Section 7(c) shall not be enforceable during the post-employment portion of the Restricted Period if the Executive is terminated by the Company without Cause, is laid off from employment or if the Company elects to waive the restrictions set forth in this Section 7(c). If Section 7(c) is enforced during the post-employment portion of the Restricted Period, the Company shall pay the Executive at the rate of 50% of the highest annualized base salary paid to the Executive within the two year period preceding the last day of Executive's employment (the "Garden Leave Pay") during the post-employment portion of the Restricted Period. During the Restricted Period Executive will promptly (and immediately upon request) notify the Company of any change in address and each subsequent employer or business activity including the name and address of employer or other post-Company plans and the nature of Executive's activities. The Company's election not to provide post-employment Garden Leave Pay shall be deemed a waiver of Executive's post-employment noncompetition obligations under this Section 7(c). In no event will Garden Leave Pay be duplicative of other pay and the Executive agrees that any Garden Leave Pay received pursuant to this Section 7(c) shall reduce (and shall not be in addition to) any other pay that the Executive may be entitled to receive during the post-employment portion of the Restricted Period. The Executive acknowledges having been advised by the Company of the right to consult with counsel regarding the noncompetition restrictions contained in this Section 7(c) prior to executing this Agreement.

(b) Litigation and Regulatory Cooperation. During and after the Executive's employment, the Executive shall use reasonable efforts to cooperate with the Company in the defense or prosecution of any claims or actions now in existence or that may be brought in the future against or on behalf of the Company that relate to events or occurrences that transpired while the Executive was employed by the Company. The Executive's cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after the Executive's employment, the Executive shall use reasonable efforts to cooperate with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while the Executive was employed by the Company. The Company shall reimburse the Executive for any reasonable out-of-pocket expenses incurred in connection with the Executive's performance of obligations pursuant to this Section 7(c).

(c) Injunction. The Executive agrees that it would be difficult to measure any damages caused to the Company that might result from any breach by the Executive of the promises set forth in this Section 7 and the Confidentiality and Assignment Agreement, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, subject to Section 8 of this Agreement, the Executive agrees that if the Executive breaches, or proposes to breach, any portion of this Agreement and the Confidentiality and Assignment Agreement, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company.

(d) Protected Reporting; Defend Trade Secrets Act Immunity. Nothing in this Agreement or the Confidentiality and Assignment Agreement, and nothing in any policy or procedure, in any other confidentiality, employment, separation agreement or in any other document or communication from the Company limits the Executive's ability to file a charge or complaint with any government agency concerning any acts or omissions that the Executive may believe constitute a possible violation of federal or state law or making other disclosures that are protected under the whistleblower provisions of applicable federal or state law regulation or affects the Executive's ability to communicate with any government agency or otherwise participate in any investigation or proceeding that may be conducted by a government agency, including by providing documents or other information, without notice to the Company. In addition, for the avoidance of doubt, pursuant to the federal Defend Trade Secrets Act of 2016, the Executive shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

8. Arbitration of Disputes. Any controversy or claim arising out of or relating to this Agreement or the breach thereof or otherwise arising out of the Executive's employment or the termination of that employment (including, without limitation, any claims of unlawful employment discrimination whether based on age or otherwise) shall, to the fullest extent permitted by law, be settled by arbitration in any forum and form agreed upon by the parties or, in the absence of such an agreement, under the auspices of the American Arbitration Association ("AAA") in Boston, Massachusetts in accordance with the Employment Arbitration Rules of the AAA, including, but not limited to, the rules and procedures applicable to the selection of arbitrators. In the event that any person or entity other than the Executive or the Company may be a party with regard to any such controversy or claim, such controversy or claim shall be submitted to arbitration subject to such other person or entity's agreement. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. This Section 8 shall be specifically enforceable. Notwithstanding the foregoing, this Section 8 shall not preclude either party from pursuing a court action for the sole purpose of obtaining a temporary restraining order or a preliminary injunction in circumstances in which such relief is appropriate; provided that any other relief shall be pursued through an arbitration proceeding pursuant to this Section 8.

9. Consent to Jurisdiction. To the extent that any court action is permitted consistent with or to enforce Section 8 of this Agreement, the parties hereby agree that the Middlesex County Superior Court of The Commonwealth of Massachusetts shall have exclusive jurisdiction of such dispute, provided that the Company and the Executive agree that all civil actions related to Section 7(c) of this Agreement shall be brought in the county of Suffolk, Massachusetts and that the superior court or the business litigation session of the superior court shall have exclusive jurisdiction. Accordingly, with respect to any such court action, the Executive submits to the personal jurisdiction of such courts.

10. Integration. This Agreement and the Confidentiality and Assignment Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and

supersedes all prior agreements, including the Prior Agreement, between the Parties concerning such subject matter.

11. Withholding. All payments made by the Company to the Executive under this Agreement shall be net of any tax or other amounts required to be withheld by the Company under applicable law.

12. Successor to the Executive. This Agreement shall inure to the benefit of and be enforceable by the Executive's personal representatives, executors, administrators, heirs, distributees, devisees and legatees. In the event of the Executive's death after her termination of employment but prior to the completion by the Company of all payments due her under this Agreement, the Company shall continue such payments to the Executive's beneficiary designated in writing to the Company prior to her death (or to her estate, if the Executive fails to make such designation).

13. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

14. Survival. The provisions of this Agreement and the Confidentiality and Assignment Agreement shall survive the termination of this Agreement and/or the termination of the Executive's employment to the extent necessary to effectuate the terms contained herein.

15. Waiver. Except as otherwise provided in Section 7(c), no waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

16. Notices. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by a nationally recognized overnight courier service or by registered or certified mail, postage prepaid, return receipt requested, to the Executive at the last address the Executive has filed in writing with the Company or, in the case of the Company, at its main offices, attention of the CEO and a copy of such notice shall be sent to Crispr AG, Attention: General Counsel, at the main offices of Crispr AG.

17. Amendment. This Agreement may be amended or modified only by a written instrument signed by the Executive and by a duly authorized representative of the Company.

18. Governing Law. This is a Massachusetts contract and shall be construed under and be governed in all respects by the laws of the Commonwealth of Massachusetts, without giving effect to the conflict of laws principles of such Commonwealth. With respect to any

disputes concerning federal law, such disputes shall be determined in accordance with the law as it would be interpreted and applied by the United States Court of Appeals for the First Circuit.

19. Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be taken to be an original; but such counterparts shall together constitute one and the same document.

20. Assignment and Transfer by the Company. The Company will have the right to assign and/or transfer this Agreement to its affiliates, successors and assigns. The Executive expressly consents to be bound by the provisions of this Agreement for the benefit of the Company or any parent, subsidiary or affiliate to whose employ the Executive may be transferred without the necessity that this Agreement be re-signed at the time of such transfer.

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, the parties have executed this Agreement effective on the date and year first above written.

**CRISPR THERAPEUTICS, INC.**

/s/ Samarth Kulkarni, Ph.D.  
By: Samarth Kulkarni, Ph.D.  
Its: Chief Executive Officer

**EXECUTIVE**

/s/ Phuong Khanh Morrow  
Phuong Khanh Morrow



**EXHIBIT A**

**Proprietary Information and Inventions Agreement**

Lease Commencement Date Agreement

THIS LEASE COMMENCEMENT DATE AGREEMENT, made as of this 1st day of May, 2022, by and between 105 W FIRST STREET OWNER, L.L.C., a Delaware limited liability company ("Landlord"), and CRISPR THERAPEUTICS, INC. ("Tenant").

WITNESSETH:

THAT, WHEREAS, Landlord and Tenant have entered into that certain Lease (as amended, the "Lease") dated as of July 24, 2020, for certain premises located at 105 West First Street in Boston, Massachusetts; and

WHEREAS, all capitalized words and phrases used in this Agreement and not otherwise defined herein shall have the meanings described to them in the Lease; and

WHEREAS, Landlord and Tenant have agreed to amend the definition of the "Outside Delivery Date", and to confirm the Commencement Date, the Rent Commencement Date and the Expiration Date, pursuant to and in accordance with **Section 2.2** thereof;

NOW, THEREFORE, for \$10.00 and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree that (i) notwithstanding any provision to the contrary contained in the Lease, the Outside Delivery Date shall be May 1, 2022, and (ii) the Commencement Date of the Term of the Lease shall be May 1, 2022, the Rent Commencement Date shall be January 1, 2023, and the Expiration Date shall be December 31, 2034.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease Commencement Date Agreement as a sealed instrument as of the day and year first above written.

LANDLORD:

105 W FIRST STREET OWNER, L.L.C.,  
a Delaware limited liability company

By: /s/ Daniel Beldegrun  
Name: Daniel Beldegrun  
Its: Chief Executive Officer

TENANT:

CRISPR THERAPEUTICS, INC.,  
a Delaware corporation

By: /s/ Brendan Smith  
Name: Brendan Smith  
Its: Chief Financial Officer

---

## CERTIFICATIONS

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(s) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (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(s) 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: August 8, 2022

By: /s/ Samarth Kulkarni  
Samarth Kulkarni  
Chief Executive Officer  
(Principal Executive Officer)

---

## CERTIFICATIONS

I, Brendan Smith, 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(s) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (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(s) 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: August 8, 2022

By: /s/ Brendan Smith

Brendan Smith  
Chief Financial Officer  
(Principal Financial and Accounting 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 June 30, 2022 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/ Samarth Kulkarni  
Samarth Kulkarni  
Chief Executive Officer  
(Principal Executive Officer)

August 8, 2022

/s/ Brendan Smith  
Brendan Smith  
Chief Financial Officer  
(Principal Financial and Accounting Officer)

August 8, 2022

---

