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, 2024

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	**Not Applicable**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
Baarerstrasse 14 6300 Zug, Switzerland	**Not Applicable**
(Address of principal executive offices)	**(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
Common Shares, nominal value CHF 0.03	**CRSP**	**The Nasdaq Global Market**

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	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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 1, 2024, there were 85,168,158 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; "our board of directors" refers to the board of directors of CRISPR Therapeutics AG; and we generally refer to CASGEVY (exagamglogene autotemcel [exa-cel]), formerly CTX001, as "CASGEVY".

"CRISPR Therapeutics®" standard character mark and design logo, "CRISPRX™," "CRISPR TX™," "CTX112™," "CTX131™," "CTX310™," "CTX320™," "CTX330™," and "CTX211™" are trademarks and registered trademarks of CRISPR Therapeutics AG. The CASGEVY™ word mark and design are trademarks of Vertex Pharmaceuticals Incorporated. 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:

- our strategic plans to develop and, if approved, subsequently commercialize any product candidates we may develop, including plans and expectations for the commercialization of, and anticipated benefits of, CASGEVY;
- the safety, efficacy and clinical progress of various clinical programs, including those for CASGEVY, CTX112, CTX131, CTX211, CTX310 and CTX320;
- the status of clinical trials, including development timelines and discussions with regulatory authorities related to product candidates under development by us and our collaborators;
- the results of our preclinical studies and clinical trials, including our ongoing clinical trials and any planned clinical trials, and our research and development programs;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- the size and growth potential of the markets for our product candidates and our ability to serve those markets, including our estimates regarding the addressable patient population and potential market opportunity for our current and future product candidates;
- the rate and degree of market acceptance of our product candidates and the success of competing therapies that are or become available;
- our internal manufacturing capabilities and operation of our cell therapy manufacturing facility;
- 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;
- the expected benefits of our collaborations;
- our strategy, goals, anticipated financial performance;
- our anticipated expenses, ability to obtain funding for our operations and the sufficiency of our cash resources; and
- the therapeutic value, development, and commercial potential of CRISPR/Cas9 gene editing technologies and therapies.

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 21, 2024, 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.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

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

	As of	
	June 30, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 484,472	$ 389,477
Marketable securities	1,517,147	1,304,215
Accounts receivable	—	200,000
Prepaid expenses and other current assets	8,788	14,386
Total current assets	2,010,407	1,908,078
Property and equipment, net	143,031	151,945
Marketable securities, non-current	11,216	1,973
Intangible assets, net	—	16
Restricted cash	11,520	11,591
Operating lease assets	148,538	153,993
Other non-current assets	15,141	1,975
Total assets	$ 2,339,853	$ 2,229,571
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable	$ 9,452	$ 38,147
Accrued expenses	91,883	45,335
Deferred revenue, current	4,759	4,105
Accrued tax liabilities	454	438
Operating lease liabilities	16,451	15,625
Other current liabilities	4,824	5,141
Total current liabilities	127,823	108,791
Deferred revenue, non-current	12,583	14,012
Operating lease liabilities, net of current portion	214,852	223,007
Other non-current liabilities	3,646	958
Total liabilities	358,904	346,768
Commitments and contingencies, see Note 7		
Shareholders' equity:		
Common shares, CHF 0.03 nominal value, 132,477,166 and 126,536,183 shares authorized at June 30, 2024 and December 31, 2023, respectively, 85,215,817 and 80,214,694 shares issued at June 30, 2024 and December 31, 2023, respectively, 85,045,501 and 80,044,378 shares outstanding at June 30, 2024 and December 31, 2023, respectively	2,665	2,497
Treasury shares, at cost, 170,316 shares at June 30, 2024 and at December 31, 2023	(62)	(62)
Additional paid-in capital	3,223,924	2,878,155
Accumulated deficit	(1,242,699)	(999,700)
Accumulated other comprehensive (loss) income	(2,879)	1,913
Total shareholders' equity	1,980,949	1,882,803
Total liabilities and shareholders' equity	$ 2,339,853	$ 2,229,571

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Revenue:				
Collaboration revenue	$ —	$ 70,000	$ —	$ 170,000
Grant revenue	517	—	1,021	—
Total revenue	517	70,000	1,021	170,000
Operating expenses:				
Research and development	80,165	101,555	156,338	201,490
General and administrative	19,481	19,032	37,434	41,392
Collaboration expense, net	52,131	44,636	99,097	86,828
Total operating expenses	151,777	165,223	292,869	329,710
Loss from operations	(151,260)	(95,223)	(291,848)	(159,710)
Other income:				
Other income, net	26,139	18,406	50,860	31,148
Total other income, net	26,139	18,406	50,860	31,148
Net loss before income taxes	(125,121)	(76,817)	(240,988)	(128,562)
Provision for income taxes	(1,287)	(923)	(2,011)	(2,243)
Net loss	(126,408)	(77,740)	(242,999)	(130,805)
Foreign currency translation adjustment	2	28	(9)	60
Unrealized (loss) gain on marketable securities	(1,329)	452	(4,783)	6,679
Comprehensive loss	$ (127,735)	$ (77,260)	$ (247,791)	$ (124,066)
Net loss per common share — basic	$ (1.49)	$ (0.98)	$ (2.92)	$ (1.66)
Basic weighted-average common shares outstanding	84,920,929	79,091,061	83,357,780	78,885,168
Net loss per common share — diluted	$ (1.49)	$ (0.98)	$ (2.92)	$ (1.66)
Diluted weighted-average common shares outstanding	84,920,929	79,091,061	83,357,780	78,885,168

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)

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	Common Shares		Treasury Shares					
	Shares	CHF 0.03 Nominal Value	Shares	Amount, at cost	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Gain/(Loss)	Total Shareholders' Equity
Balance at December 31, 2022	78,512,450	$ 2,441	180,316	$ (63)	$ 2,734,838	$ (846,090)	$ (15,647)	$ 1,875,479
Vesting of restricted shares	172,995	5	—	—	—	—	—	5
Exercise of vested options, net of issuance costs of $0.2 million	159,184	6	—	—	4,677	—	—	4,683
Purchase of common stock under ESPP	19,105	—	—	—	660	—	—	660
Stock-based compensation expense	—	—	—	—	20,875	—	—	20,875
Other comprehensive income	—	—	—	—	—	—	6,259	6,259
Net loss	—	—	—	—	—	(53,065)	—	(53,065)
Balance at March 31, 2023	78,863,734	$ 2,452	180,316	$ (63)	$ 2,761,050	$ (899,155)	$ (9,388)	$ 1,854,896
Vesting of restricted shares	97,631	4	—	—	—	—	—	4
Exercise of vested options, net of issuance costs of $0.3 million	411,001	18	—	—	16,605	—	—	16,623
Stock-based compensation expense	—	—	—	—	21,765	—	—	21,765
Other comprehensive income	—	—	—	—	—	—	480	480
Net loss	—	—	—	—	—	(77,740)	—	(77,740)
Balance at June 30, 2023	79,372,366	$ 2,474	180,316	$ (63)	$ 2,799,420	$ (976,895)	$ (8,908)	$ 1,816,028
Balance at December 31, 2023	80,044,378	$ 2,497	170,316	$ (62)	$ 2,878,155	$ (999,700)	$ 1,913	$ 1,882,803
Issuance of common stock, net of issuance costs of $3.8 million	3,929,610	132	—	—	277,015	—	—	277,147
Vesting of restricted shares	214,913	7	—	—	—	—	—	7
Exercise of vested options, net of issuance costs of $0.6 million	632,683	22	—	—	23,844	—	—	23,866
Purchase of common stock under ESPP	16,026	—	—	—	764	—	—	764
Stock-based compensation expense	—	—	—	—	19,405	—	—	19,405
Other comprehensive loss	—	—	—	—	—	—	(3,465)	(3,465)
Net loss	—	—	—	—	—	(116,591)	—	(116,591)
Balance at March 31, 2024	84,837,610	$ 2,658	170,316	$ (62)	$ 3,199,183	$ (1,116,291)	$ (1,552)	$ 2,083,936
Vesting of restricted shares	163,013	6	—	—	—	—	—	6
Exercise of vested options, net of issuance costs of $0.2 million	44,878	1	—	—	1,069	—	—	1,070
Stock-based compensation expense	—	—	—	—	23,672	—	—	23,672
Other comprehensive loss	—	—	—	—	—	—	(1,327)	(1,327)
Net loss	—	—	—	—	—	(126,408)	—	(126,408)
Balance at June 30, 2024	85,045,501	$ 2,665	170,316	$ (62)	$ 3,223,924	$ (1,242,699)	$ (2,879)	$ 1,980,949

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,	
	2024	**2023**
Operating activities:		
Net loss	$ (242,999)	$ (130,805)
Reconciliation of net loss to net cash used in operating activities:		
Depreciation and amortization	9,678	10,012
Equity-based compensation	43,077	42,640
Other non-cash items, net	(16,566)	(5,620)
Acquired in-process research and development	—	1,500
Changes in:		
Accounts receivable	200,000	(70,000)
Prepaid expenses and other assets	5,297	15,952
Accounts payable and accrued expenses	18,724	13,637
Deferred revenue	(775)	—
Operating lease assets and liabilities	(1,874)	(1,277)
Other liabilities, net	(392)	(485)
Net cash provided by (used in) operating activities	14,170	(124,446)
Investing activities:		
Purchase of property, plant and equipment	(1,428)	(6,614)
Purchase of in-process research and development	—	(1,500)
Investment in equity securities	(12,885)	—
Purchases of marketable securities	(797,509)	(452,363)
Maturities of marketable securities	587,117	795,229
Net cash (used in) provided by investing activities	(224,705)	334,752
Financing activities:		
Proceeds from issuance of common shares, net of issuance costs	279,733	—
Proceeds from exercise of options and ESPP contributions, net of issuance costs	25,735	22,169
Net cash provided by financing activities	305,468	22,169
Effect of exchange rate changes on cash	(9)	60
Increase in cash	94,924	232,535
Cash, cash equivalents and restricted cash, beginning of period	401,068	224,060
Cash, cash equivalents and restricted cash, end of period	$ 495,992	$ 456,595
Supplemental disclosure of non-cash investing and financing activities		
Property and equipment purchases in accounts payable and accrued expenses	$ 20	$ 1,029
Equity issuance costs in accounts payable, accrued expenses, and other long-term liabilities	$ 3,029	$ 293

	As of June 30,	
Reconciliation to amounts within the condensed consolidated balance sheets	**2024**	**2023**
Cash and cash equivalents	$ 484,472	$ 444,796
Restricted cash	11,520	11,799
Cash, cash equivalents and restricted cash at end of period	$ 495,992	$ 456,595

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

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, 2024 and 2023.

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, 2023, which are contained in the 2023 Annual Report on Form 10-K filed with the Securities and Exchange Commission, or the SEC, on February 21, 2024.

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, 2024 are consistent with those discussed in Note 2 to the consolidated financial statements in the Company's 2023 Annual Report on Form 10-K filed with the SEC on February 21, 2024.

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 has or may have a material impact on its condensed consolidated financial statements and disclosures.

2. Marketable Securities

The following table summarizes cash equivalents and marketable securities held at June 30, 2024 and December 31, 2023 (in thousands), which are recorded at fair value. The table below excludes $188.0 million and $197.8 million of cash at June 30, 2024 and December 31, 2023, respectively.

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
June 30, 2024				
Cash equivalents:				
Money market funds	$ 139,868	$ —	$ —	$ 139,868
Certificates and term deposits	25,351	—	—	25,351
Commercial paper	125,953	—	(58)	125,895
Corporate debt securities	1,424	—	—	1,424
U.S. Treasury securities	3,974	—	—	3,974
Total cash equivalents	296,570	—	(58)	296,512
Marketable securities:				
U.S. Treasury securities	11,883	—	(9)	11,874
Corporate debt securities	1,013,028	669	(2,517)	1,011,180
Certificates and term deposits	132,499	—	—	132,499
Government-sponsored enterprise securities	243,521	22	(927)	242,616
Commercial paper	130,273	—	(79)	130,194
Total marketable securities	1,531,204	691	(3,532)	1,528,363
Total cash equivalents and marketable securities	$ 1,827,774	$ 691	$ (3,590)	$ 1,824,875
December 31, 2023				
Cash equivalents:				
Money market funds	$ 185,990	$ —	$ —	$ 185,990
U.S. Treasury securities	5,731	—	—	5,731
Total cash equivalents	191,721	—	—	191,721
Marketable securities:				
U.S. Treasury securities	22,963	45	—	23,008
Corporate debt securities	883,550	3,367	(1,559)	885,358
Certificates and term deposits	47,282	—	—	47,282
Government-sponsored enterprise securities	195,106	377	(352)	195,131
Commercial paper	155,403	32	(26)	155,409
Total marketable securities	1,304,304	3,821	(1,937)	1,306,188
Total cash equivalents and marketable securities	$ 1,496,025	$ 3,821	$ (1,937)	$ 1,497,909

As of June 30, 2024, marketable securities were in a net unrealized loss position of $2.9 million. As of December 31, 2023, marketable securities were in a net unrealized gain position of $1.9 million. The Company has recorded a net unrealized loss of $1.3 million and $4.8 million during the three and six months ended June 30, 2024, respectively, related to its debt securities, which is included in comprehensive loss on the condensed consolidated statements of operations and comprehensive loss. The Company recorded a net unrealized gain of $0.5 million and $6.7 million during the three and six months ended June 30, 2023, respectively, related to its debt securities, which is included in comprehensive loss on the condensed consolidated statements of operations and comprehensive loss.

As of June 30, 2024 and December 31, 2023, the aggregate fair value of marketable securities that were in an unrealized loss position for less than twelve months was $995.5 million and $463.5 million, respectively. As of June 30, 2024 and December 31, 2023, the aggregate fair value of marketable securities that were in an unrealized loss position for more than twelve months was $229.2 million and $138.4 million, respectively. As of June 30, 2024, securities in an unrealized loss position for more than twelve months totaling $11.2 million had maturities beyond one year, which is included in marketable securities, non-current, on the condensed consolidated balance sheet. As of December 31, 2023, securities in an unrealized loss position for more than twelve months totaling $2.0 million had maturities beyond one year, which is included in marketable securities, non-current, on the condensed consolidated balance sheet.

The Company determined that there is no material credit risk associated with the above investments as of June 30, 2024. 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, 2024 and 2023. No available-for-sale debt securities held as of June 30, 2024 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, 2024 and December 31, 2023 (in thousands):

	Fair Value Measurements at June 30, 2024			
	Total	Level 1	Level 2	Level 3
Cash and cash equivalents:				
Cash	$ 187,960	$ 187,960	$ —	$ —
Money market funds	139,868	139,868	—	—
Certificates and term deposits	25,351	—	25,351	—
Commercial paper	125,895	—	125,895	—
Corporate debt securities	1,424	—	1,424	—
U.S. Treasury securities	3,974	—	3,974	—
Marketable securities:				
U.S. Treasury securities	11,874	—	11,874	—
Corporate debt securities	1,011,180	—	1,011,180	—
Certificates and term deposits	132,499	—	132,499	—
Government-sponsored enterprise securities	242,616	—	242,616	—
Commercial paper	130,194	—	130,194	—
Total	$ 2,012,835	$ 327,828	$ 1,685,007	$ —

	Fair Value Measurements at December 31, 2023			
	Total	Level 1	Level 2	Level 3
Cash and cash equivalents:				
Cash	$ 197,756	$ 197,756	$ —	$ —
Money market funds	185,990	185,990	—	—
U.S. Treasury securities	5,731	—	5,731	—
Marketable securities:				
U.S. Treasury securities	23,008	—	23,008	—
Corporate debt securities	885,358	—	885,358	—
Certificates and term deposits	47,282	—	47,282	—
Government-sponsored enterprise securities	195,131	—	195,131	—
Commercial paper	155,409	—	155,409	—
Total	$ 1,695,665	$ 383,746	$ 1,311,919	$ —

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

4. Property and Equipment, net

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

	As of	
	June 30, 2024	December 31, 2023
Computer equipment	$ 3,739	$ 3,739
Furniture, fixtures and other	8,545	8,109
Laboratory equipment	41,903	41,411
Leasehold improvements	143,260	143,260
Construction work in process	8,654	8,859
Total property and equipment, gross	206,101	205,378
Accumulated depreciation	(63,070)	(53,433)
Total property and equipment, net	$ 143,031	$ 151,945

Depreciation expense for the three and six months ended June 30, 2024 was $4.8 million and $9.6 million, respectively. Depreciation expense for the three and six months ended June 30, 2023 was $5.0 million and $10.0 million, respectively.

5. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	As of	
	June 30, 2024	December 31, 2023
Payroll and employee-related costs	$ 14,373	$ 17,347
Research and development costs	19,182	16,962
Collaboration costs	51,455	2,395
Licensing fees	2,325	3,143
Professional fees	2,661	2,515
Intellectual property costs	1,379	1,642
Accrued property and equipment	—	630
Other	508	701
Total	$ 91,883	$ 45,335

6. Significant Contracts

Agreements with Vertex

2015 collaboration

In 2015, the Company entered into a strategic collaboration, option and license agreement, or the 2015 Collaboration Agreement, with Vertex Pharmaceuticals Incorporated, or 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. The Company and Vertex amended the 2015 Collaboration Agreement in 2017 and 2019 with Amendment No. 1 and Amendment No. 2, respectively, namely to clarify Vertex's option rights under the 2015 Collaboration Agreement and to modify certain definitions and provisions of the 2015 Collaboration Agreement to make them consistent with the JDA (as defined below) and the 2019 Collaboration Agreement (as defined below). In 2017, Vertex exercised an option granted to it under the 2015 Collaboration Agreement to obtain a co-exclusive license to develop and commercialize hemoglobinopathy and beta-globin targets, and in 2019, Vertex exercised the remaining options granted to it under the 2015 Collaboration Agreement to exclusively license certain collaboration targets developed under the 2015 Collaboration Agreement.

Hemoglobinopathies collaboration

In 2017, following Vertex's exercise of its option to obtain a co-exclusive license to develop and commercialize hemoglobinopathy and beta-globin targets, the Company and Vertex entered into a joint development and commercialization agreement, or the JDA, and agreed for potential hemoglobinopathy treatments, including CASGEVY, the Company and Vertex would share equally all research and development costs and worldwide revenues. In 2021, the Company and Vertex amended and restated the JDA, or the A&R Vertex JDCA (as amended and in effect, from time to time), 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 leads and has all decision making (i.e., control) in relation to the CASGEVY program prospectively; (b) adjust the allocation of net profits and net losses between the parties with respect to CASGEVY 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 CASGEVY) that may be researched, developed, manufactured and commercialized on a worldwide basis under the A&R Vertex JDCA. 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 CASGEVY program exceeds specified amounts through 2024. In December 2023, the Company entered into an amendment to the A&R Vertex JDCA, or Amendment No. 1 to the A&R Vertex JDCA, with Vertex related to the global development, manufacturing, and commercialization of CASGEVY. Pursuant to Amendment No. 1 to the A&R Vertex JDCA, among other things, the Company and Vertex agreed to (a) allocate certain costs arising from a license agreement with a third party, resulting in a current payment due to Vertex by the Company of $20.0 million upon an event specified in Amendment No. 1 to the A&R Vertex JDCA, and (b) adjust, under certain specified circumstances, the timing of and portion of the Company's share of costs it is permitted to defer under the agreement. Any deferred amounts under the A&R Vertex JDCA, as amended, are only payable to Vertex as an offset against future profitability of the CASGEVY program and the amounts payable are capped at a specified maximum amount per year.

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, in December 2023, the Company and Vertex received approval of CASGEVY by the U.S. Food and Drug Administration, or the FDA. The FDA's approval of CASGEVY triggered Vertex's obligation to make a $200.0 million milestone payment to the Company, which was recognized in December 2023 and for which payment was received in January 2024 and was included in accounts receivable in the accompanying condensed consolidated balance sheets as of December 31, 2023.

Letter Agreement

In May 2024, Vertex and the Company entered into a letter agreement, or the Letter Agreement, with respect to the priority review voucher issued by the FDA to Vertex as the sponsor of the rare pediatric disease product application for CASGEVY. Vertex and the Company agreed that if Vertex utilizes or transfers the priority review voucher prior to the first calendar year in which the CASGEVY program generates a net profit, Vertex will pay the Company $43.0 million or an amount equal to 42% of the net proceeds from such transfer, as applicable. If the CASGEVY program begins generating calendar-year net profits prior to such utilization or transfer, Vertex will instead pay the Company up to $43.0 million set-off by deductions Vertex would otherwise be eligible to take against the CASGEVY program's net profits due to the Company related to amounts deferred previously by the Company.

DMD and DM1 exclusive license

In 2019, the Company and Vertex entered into a series of agreements, 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. For the DMD and DM1 programs, Vertex is responsible for all research, development, manufacturing and commercialization activities and all related costs. Upon IND 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.

Collaboration in the field of diabetes

In 2021, the Company and ViaCyte, Inc., or ViaCyte, entered into a joint development and commercialization agreement, or the ViaCyte JDCA, to jointly develop and commercialize product candidates and shared products for the diagnosis, treatment or prevention of diabetes type 1, diabetes type 2 or insulin dependent / requiring diabetes throughout the world. In the third quarter of 2022, Vertex acquired ViaCyte, and ViaCyte became a wholly-owned subsidiary of Vertex. In March 2023, (1) the Company and ViaCyte entered into an amendment to the ViaCyte JDCA, or the ViaCyte JDCA Amendment, and adjusted certain rights and obligations of the Company and ViaCyte under the ViaCyte JDCA, and (2) the Company and Vertex entered into a non-exclusive license agreement, or the Non-Ex License Agreement, pursuant to which the Company agreed to license to Vertex, on a non-exclusive basis, certain of its gene editing intellectual property to exploit certain products for the diagnosis, treatment or prevention of diabetes type 1, diabetes type 2 or insulin dependent / requiring diabetes throughout the world. Subsequently, ViaCyte elected to opt-out of the ViaCyte JDCA. Per the opt-out terms, the on-going collaboration assets are now wholly owned by the Company, subject to a royalty on future sales owed to ViaCyte. The opt-out became effective in early February 2024.

In connection with entering into the Non-Ex License Agreement, the Company received a $100.0 million up front payment from Vertex in the first quarter of 2023 and subsequently received a $70.0 million research milestone achieved in the second quarter of 2023. The Company is eligible to receive additional milestone payments of up to $160.0 million in aggregate, which are dependent on the achievement of pre-determined research, development and commercial milestones for certain products utilizing the licensed intellectual property. Additionally, the Company is eligible to receive tiered royalties on the sales of certain products in the low to mid-single digits.

Accounting Analysis

For purposes of this Note 6, the 2015 Collaboration Agreement, Amendment No. 1, Amendment No. 2, A&R Vertex JDCA, Amendment No. 1 to the A&R Vertex JDCA and 2019 Collaboration Agreement are collectively referred to as the "Vertex Agreements" and the Non-Ex License Agreement and ViaCyte JDCA Amendment are collectively referred to as the "March 2023 Agreements."

The Vertex Agreements and the March 2023 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. Specifically, with regards to the March 2023 Agreements, the Company concluded that the non-exclusive license is a performance obligation under ASC 606 and the ongoing research and development services under the ViaCyte JDCA Amendment are a unit of account under ASC 808.

The Company has determined that recognition criteria for the Letter Agreement has not been met and will not be met until the priority review voucher is (i) utilized or (ii) there is sufficient profitability such that Vertex is obligated to pay the Company under the Letter Agreement.

Accounting Analysis Under ASC 606

March 2023 Agreements

Identification of the Contract

The March 2023 Agreements were negotiated as a package with a single commercial objective and, as such, the March 2023 Agreements were combined for accounting purposes and treated as a single arrangement. The Company determined for accounting purposes that the combined contract terminates the original ViaCyte JDCA and created a new contract.

Identification of Performance Obligations

The Company concluded the transfer of the non-exclusive license, including certain modified rights and obligations provided as part of the ViaCyte JDCA Amendment to support the delivery of the license, was both capable of being distinct and distinct within the context of the contract.

Determination of Transaction Price

The initial transaction price was comprised of the upfront payment of $100.0 million.

In the second quarter of 2023, the Company adjusted the transaction price to include $70.0 million in previously constrained variable consideration related to a research milestone which was achieved in the second quarter of 2023. The Company determined that all other possible variable consideration resulting from milestones and royalties discussed below was fully constrained as of June 30, 2024. The Company will re-evaluate the transaction price in each reporting period.

Allocation of Transaction Price to Performance Obligations

The Company identified one performance obligation for the March 2023 Agreements and, as a result, no allocation of the transaction price was required.

Recognition of Revenue

The Company determined the non-exclusive license, including certain modified rights and obligations provided as part of the ViaCyte JDCA Amendment to support the delivery of the 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 in the field of diabetes. In 2023, the Company recognized revenue of $100.0 million for the non-exclusive license at the onset of the arrangement, as this was the point in time in which the non-exclusive license was delivered.

In 2023, revenue from variable consideration of $70.0 million was recognized related to a research milestone that was achieved during the second quarter of 2023. Revenue recognized under the March 2023 Agreements for year ended December 31, 2023 was $170.0 million in aggregate.

No revenue was recognized under the March 2023 Agreements for the three and six months ended June 30, 2024. Revenue recognized under the March 2023 Agreements for the three and six months ended June 30, 2023 was $70.0 million and $170.0 million, respectively.

Milestones under the Non-Ex License Agreement

As of June 30, 2024, the Company is eligible to receive potential future milestone payments from Vertex of up to $160.0 million in the aggregate under the Non-Ex License Agreement depending on the achievement of pre-determined research, development and commercial milestones for certain products utilizing the licensed intellectual property. Additionally, the Company is eligible to receive tiered royalties on the sales of certain products in the low to mid-single digits.

Each of the remaining milestones under the Non-Ex License Agreement are fully constrained as of June 30, 2024. There is uncertainty as to whether 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.

Vertex Agreements

Deferred revenue

As of June 30, 2024 and December 31, 2023, there was no current deferred revenue related to the Vertex Agreements. As of June 30, 2024, there was $12.3 million of non-current deferred revenue related to the Vertex Agreements, which is unchanged from December 31, 2023. The transaction price allocated to the remaining performance obligations was $12.3 million.

Milestones

The Company has evaluated the milestones that may be received in connection with the Vertex Agreements.

Under the 2015 Collaboration Agreement and subsequent amendments, 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 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 potential future payments of up to $775.0 million under the 2019 Collaboration Agreement 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 has the option to conduct research at its own cost in certain defined areas. If such research is beneficial to the CASGEVY program and CASGEVY ultimately achieves regulatory approval in such areas, the Company could be entitled to receive from Vertex certain milestone payments aggregating to high eight digits.

Each of the remaining milestones described above are fully constrained as of June 30, 2024. 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.

Accounting Analysis under ASC 808

Vertex Agreements

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 CASGEVY 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. During the three and six months ended June 30, 2024, the Company recognized $52.1 million and $99.1 million of collaboration expense, net, related to the CASGEVY program, respectively. Collaboration expense, net, during the three and six months ended June 30, 2024 was net of $0.5 million and $1.3 million of reimbursements from Vertex related to the CASGEVY program, respectively. During the three and six months ended June 30, 2023, the Company recognized $44.6 million and $86.8 million of collaboration expense, net, related to the CASGEVY program, respectively. Collaboration expense, net, during the three

and six months ended June 30, 2023 was net of $2.4 million and $5.2 million of reimbursements from Vertex related to the CASGEVY program, respectively.

7. Commitments and Contingencies

Leases

Refer to Note 7 to the consolidated financial statements in the Company's 2023 Annual Report on Form 10-K filed with the SEC on February 21, 2024 for discussion of 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, 2024, the Company had restricted cash of $11.5 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 and included in "Restricted cash" on the Company's condensed consolidated balance sheets as of June 30, 2024.

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 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 (as such term is defined in Note 6 above). In addition, Vertex has the option to conduct research at its own cost in certain defined areas that, if beneficial to the CASGEVY program and ultimately achieves regulatory approval, could result in the Company owing Vertex certain milestone payments aggregating to high eight digits, subject to certain limitations on the profitability of the CASGEVY program.

Under the A&R Vertex JDCA, the Company has an option to defer specified costs on the CASGEVY program in excess of $110.3 million for the years ended December 31, 2022, 2023 and 2024. Additionally, the Company is permitted, under certain specified circumstances as set forth in Amendment No. 1 to the A&R Vertex JDCA, to adjust the timing of and portion of the Company's share of costs it is permitted to defer under the agreement.

The Company exercised its option to defer its share of costs incurred in 2022 and 2023 on the CASGEVY program in excess of the deferral limit under the A&R Vertex JDCA, which resulted in a deferral of $36.1 million and $80.9 million, respectively. As of June 30, 2024, $4.0 million of costs incurred in 2024 under the A&R Vertex JDCA, as amended, have been deferred. Any deferred amounts are only payable to Vertex as an offset against future profitability of the CASGEVY program and the amounts payable are capped at a specified maximum amount per year, subject to potential specified offsets. These deferred costs on the CASGEVY program will be accrued for when it is probable that a liability has been incurred and the amount can be reasonably estimated. As of June 30, 2024, no contingent payments have been accrued to date.

8. Share Capital

All of the Company's common shares are authorized under Swiss corporate law with a nominal value of 0.03 CHF per share. Though the nominal value of common shares is stated in Swiss francs, the Company continues to use U.S. dollars as its reporting currency for preparing the condensed consolidated financial statements.

As of June 30, 2024, the Company's share capital consists of 88,517,810 registered common shares with a nominal value of CHF 0.03 per share, 8,202,832 registered common shares reserved for potential issuance of bonds or similar instruments and 20,925,932 registered common shares reserved for the Company's employee equity incentive plans. In addition, the Board of Directors is authorized to conduct one or more increases of the share capital at any time until June 8, 2028, or the expiration of the capital band if earlier, up to an upper limit of CHF 3,100,452.06 by issuing a corresponding number of registered shares with a nominal value of CHF 0.03 each to be fully paid in. As of June 30, 2024, the number of shares that may be issued under the capital band is 14,830,592 registered common shares.

Common Share Issuances

At-the-Market Offering

In August 2019, the Company entered into an Open Market Sale Agreement[SM] 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, 2024, the Company has issued and sold an aggregate of 1.5 million common shares under the 2021 ATM at an average price of $139.28 per share for aggregate proceeds of $212.4 million, which were net of equity issuance costs of $2.9 million, excluding stamp taxes. As of June 30, 2024, common shares having aggregate gross proceeds up to $384.7 million remain under the 2021 ATM.

Registered Direct Offering

In February 2024, the Company entered into an investment agreement for the sale of approximately $280.0 million of its common shares to a group of institutional investors in a registered direct offering, at a price per share of $71.50. The Company received net proceeds of $279.0 million, excluding stamp taxes due of $2.8 million.

9. Stock-based Compensation

During the three and six months ended June 30, 2024 and 2023, the Company recognized the following stock-based compensation expense (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Research and development	$ 13,411	$ 13,322	$ 24,593	$ 24,998
General and administrative	10,261	8,443	18,484	17,642
Total	$ 23,672	$ 21,765	$ 43,077	$ 42,640

Stock option activity

The following table summarizes stock option activity for the six months ended June 30, 2024:

	Shares	Weighted-average exercise price per share
Outstanding at December 31, 2023	7,204,372	$ 55.05
Granted	1,056,224	68.76
Exercised	(677,561)	37.92
Cancelled or forfeited	(278,612)	72.96
Outstanding at June 30, 2024	7,304,423	$ 57.94
Exercisable at June 30, 2024	4,714,519	$ 56.50
Vested and expected to vest at June 30, 2024	7,304,423	$ 57.94

As of June 30, 2024, total unrecognized compensation expense related to stock options was $95.1 million, which the Company expects to recognize over a remaining weighted-average period of 2.7 years.

Restricted stock activity

The following table summarizes restricted stock activity for the six months ended June 30, 2024:

	Shares	Weighted-Average Grant Date Fair Value
Unvested balance at December 31, 2023	1,781,415	$ 61.00
Granted	706,844	70.50
Vested	(377,926)	71.41
Cancelled or forfeited	(120,319)	54.48
Unvested balance at June 30, 2024	1,990,014	$ 62.79

As of June 30, 2024, total unrecognized compensation expense related to unvested restricted common shares was $96.2 million, which the Company expects to recognize over a remaining weighted-average vesting period of 2.8 years.

10. Net Loss Per Share Attributable to Common Shareholders

Basic net loss per share is calculated by dividing net loss attributable to common shareholders by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is calculated by dividing the net loss 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 is net loss attributable to common shareholders for all periods presented.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Outstanding options	7,304,423	7,328,032	7,304,423	7,328,032
Unvested restricted common shares	1,990,014	1,524,987	1,990,014	1,524,987
ESPP	21,219	34,177	21,219	34,177
Total	9,315,656	8,887,196	9,315,656	8,887,196

11. Income Taxes

During the three and six months ended June 30, 2024, the Company recorded an income tax provision of $1.3 million and $2.0 million, respectively, representing an effective tax rate of (1.1%) and (0.9%), respectively. During the three and six months ended June 30, 2023, the Company recorded an income tax provision of $0.9 million and $2.2 million, respectively, representing an effective tax rate of (1.2%) and (1.7%), respectively. The income tax provision for the three and six months ended June 30, 2024 is primarily attributable to the income generated by the Company's U.S. subsidiaries. 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, 2023 filed with the Securities and Exchange Commission, or the SEC, on February 21, 2024. 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, 2023 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 technology for gene editing, the process of precisely altering specific sequences of genomic DNA. We aim to apply this technology to disrupt, delete, correct and insert genes to treat diseases and to engineer advanced cellular therapies. We have advanced this technology from discovery to an approved medicine with unparalleled speed, culminating in the landmark first approval of a CRISPR-based therapy, CASGEVY (exagamglogene autotemcel [exa-cel]), in 2023 with our collaborators at Vertex Pharmaceuticals Incorporated, or Vertex. We believe that the combination of our technology, research and development capabilities, and proven ability to execute may enable us to create an entirely new class of highly effective and potentially curative therapies for patients with both rare and common diseases for whom current biopharmaceutical approaches have had limited success.

We have established a portfolio of therapeutic programs spanning four core franchises: hemoglobinopathies, immuno-oncology and autoimmune, i*n vivo* approaches and type 1 diabetes. Our most advanced program, CASGEVY, has received approval in the United States and other countries for the treatment of eligible patients with severe sickle cell disease, or SCD, or transfusion-dependent beta thalassemia, or TDT, two genetic disorders of hemoglobin, or hemoglobinopathies, with high unmet medical need. In addition, we have further research efforts on targeted conditioning and *in vivo* editing of hematopoietic stem cells that have the potential to expand the number of patients that could benefit significantly. We are also progressing multiple next-generation gene-edited cell therapy programs, including allogeneic chimeric antigen receptor T cell, or CAR T, candidates for the treatment of hematological and solid tumor cancers and autoimmune diseases. In addition, we are advancing a portfolio of programs leveraging *in vivo* editing for both common and rare diseases, starting with the treatment and prevention of cardiovascular disease. Further, we have multiple parallel efforts using allogeneic, gene-edited, hypoimmune, stem cell-derived beta cells to address type 1 diabetes, or T1D, without the need for chronic immunosuppression.

Hemoglobinopathies

CASGEVY

CASGEVY is a non-viral, *ex vivo* CRISPR/Cas9 gene-edited cell therapy, in which a patient's own hematopoietic stem and progenitor cells are edited at the erythroid specific enhancer region of the *BCL11A* gene through a precise double-strand break. This edit results in the production of high levels of fetal hemoglobin in red blood cells, which can compensate for the defective adult hemoglobin in patients with SCD and TDT. CASGEVY is the first therapy to emerge from our strategic partnership with Vertex and is being advanced under a joint development and commercialization agreement between us and Vertex and certain of its affiliates.

In 2023, CASGEVY became the first-ever approved CRISPR-based gene-editing therapy in the world. To date, CASGEVY has been approved in the United States, European Union, Great Britain, Kingdom of Saudi Arabia and Kingdom of Bahrain for the treatment of eligible patients 12 years and older with SCD or TDT. We and Vertex continue to investigate CASGEVY, including (1) three clinical trials designed to assess the safety and efficacy of a single dose of CASGEVY in patients 12 to 35 years of age with severe SCD and TDT, respectively, (2) two clinical trials in patients 5 to 11 years of age, one in severe SCD and a second in TDT, and (3) long-term follow-up clinical trials designed to follow participants for up to 15 years after CASGEVY infusion. CASGEVY safety data presented to date is generally consistent with an autologous stem cell transplant and myeloablative conditioning. Efficacy data presented to date support the profile of this therapy as a potential one-time functional cure for people with severe SCD and TDT.

Additional candidates

Building upon CASGEVY, 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 could benefit from our hemoglobinopathies product candidates.

Immuno-Oncology and Autoimmune

We believe CRISPR/Cas9 has the potential to create the next generation of CAR T cell therapies that may have a superior product profile and allow broader patient access compared to current autologous therapies. We are advancing several cell therapy programs for oncology and/or autoimmune indications, including two next-generation allogeneic CAR T programs, CTX112 targeting Cluster of Differentiation 19, or CD19, and CTX131 targeting Cluster of Differentiation 70, or CD70. These product candidates incorporate two novel gene edits—knock-out of Regnase-1 and knock-out of transforming growth factor-beta receptor type 2, or TGFBR2—designed to enhance CAR T potency and reduce CAR T exhaustion. Emerging pharmacology data, including pharmacokinetics, from ongoing clinical trials of CTX112 and CTX131, indicate that the novel potency gene edits lead to significantly higher CAR T cell expansion and functional persistence in patients compared to our first-generation candidates that did not incorporate these edits. In addition, the next-generation candidates exhibit increased manufacturing robustness, with a higher and more consistent number of CAR T cells produced per batch. We are producing CTX112 and CTX131 for clinical trials at our internal GMP manufacturing facility.

CD19 Candidates

CTX112 is being developed for both oncology and autoimmune indications. It is being investigated in an ongoing clinical trial designed to assess the safety and efficacy of the candidate in adult patients with relapsed or refractory CD19-positive B-cell malignancies who have received at least two prior lines of therapy. In addition, we have opened a clinical trial of CTX112 in systemic lupus erythematosus. Early clinical studies conducted by third parties have shown that CD19-directed autologous CAR T therapy can produce long-lasting remissions in multiple autoimmune indications by deeply depleting B cells. Our first generation allogeneic CD19-directed CAR T program has demonstrated effective depletion of B cells in oncology settings, which supports the potential for CTX112 in autoimmune diseases.

CD70 Candidates

CTX131 is being developed for both solid tumors and hematologic malignancies, including T cell lymphomas, or TCL. It is being investigated in an ongoing clinical trial designed to assess the safety and efficacy of the candidate in adult patients with relapsed or refractory solid tumors. In addition, we have opened a clinical trial of CTX131 in hematologic malignancies, including TCL. We believe allogeneic CAR T approaches for TCL may have greater potential to meet the unmet need in this patient population given the patients' own T cells are not suitable for autologous manufacturing.

Additional candidates

Our CRISPR/Cas9 platform enables us to innovate continuously by incorporating incremental edits into next-generation products. We are advancing several additional investigational CAR T product candidates.

In Vivo

Our *in vivo* gene editing strategy focuses on gene disruption and whole gene correction – the two technologies required to address the vast majority of the most prevalent severe monogenic diseases as well as many common diseases. We have established a leading platform for *in vivo* gene editing and are rapidly advancing a broad portfolio of *in vivo* programs. Our first *in vivo* programs target the liver, taking advantage of validated lipid nanoparticle, or LNP, delivery technologies, and aim to treat diseases where we can produce a strong therapeutic effect by safely disrupting a gene with well-understood genetic association

Cardiovascular disease

Our first two *in vivo* programs utilizing our proprietary LNP platform, CTX310 and CTX320, are directed towards validated therapeutic targets associated with cardiovascular disease. CTX310 is being investigated in an ongoing clinical trial targeting ANGPTL3 in patients with heterozygous familial hypercholesterolemia, homozygous familial hypercholesterolemia, mixed dyslipidemias, or severe hypertriglyceridemia. Natural loss-of-function mutations in ANGPTL3 are associated with reduced low-density lipoprotein, triglycerides and atherosclerotic cardiovascular disease risk without any negative impact on overall health. In addition, CTX320 is being investigated in an ongoing clinical trial targeting LPA, the gene encoding apo(a), a critical component of lipoprotein(a), or Lp(a), in patients with elevated Lp(a), which has shown to have an independent association with major adverse cardiovascular events. Up to 20% of the global population has elevated Lp(a) levels.

Additional candidates

Building upon CTX310 and CTX320, we have a number of earlier stage investigational *in vivo* programs leveraging gene disruption in the liver for both rare and common diseases. In addition, we have programs focused on gene correction in the liver, including programs leveraging technologies developed by our CRISPR-X research team. Finally, we are pursuing additional delivery technologies, including further advancements to nanoparticle technology and adeno-associated virus, or AAV, vectors, for delivery to tissues beyond the liver, including hematopoietic stem cells.

Type 1 Diabetes

We are developing gene-edited stem cell-derived therapies for the treatment of T1D. We believe our gene editing capabilities have the potential to enable a beta-cell replacement product candidate that may deliver durable benefit to patients without the need for long-term immunosuppression. We have three parallel efforts to achieve this goal. First, our most advanced product candidate, CTX211, is an allogeneic, gene-edited, hypoimmune, stem cell derived product candidate in a device that is implanted into patients and intended to produce insulin in a glucose-dependent manner. This program, formerly known as VCTX211, originated from our collaboration with ViaCyte, Inc., or ViaCyte, a subsidiary of Vertex, and was developed by applying our gene editing technology to ViaCyte's proprietary stem cell capabilities. CTX211 is being investigated in an ongoing Phase 1/2 clinical trial designed to assess the safety, tolerability and efficacy of CTX211 in adult patients with T1D. Second, we have research efforts focused on a deviceless beta cell replacement approach consisting of unencapsulated beta cells derived from edited stem cells. Third, we have granted a non-exclusive license to certain of our CRISPR/Cas9 intellectual property to Vertex to accelerate Vertex's development of hypoimmune cell therapies for T1D, for which we received $170 million in upfront and milestone payments in 2023 and remain eligible to receive additional research and development milestones and royalties on future products.

CRISPR-X

While we have made significant progress with our current portfolio of programs, we recognize that we need to continue to innovate to unlock the full power of gene editing and bring potentially transformative therapies to even more patients. We have a dedicated early-stage research team called CRISPR-X that focuses on innovating next-generation editing modalities. CRISPR-X is developing technologies to enable whole gene correction and insertion without requiring homology-directed repair or viral delivery of DNA, such as all-RNA gene correction, non-viral delivery of DNA and novel gene insertion techniques.

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 co-commercializing CASGEVY for TDT and SCD. In April 2021, we and Vertex amended and restated our existing joint development and commercialization agreement, pursuant to which, among other things, we will continue to develop and commercialize CASGEVY 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, or DMD, and myotonic dystrophy type 1, or DM1 and, in March 2023, we entered into a non-exclusive license agreement with Vertex for Vertex to utilize our gene editing technology in diabetes.

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. In the third quarter of 2022, Vertex announced it had acquired ViaCyte and the rights to the ViaCyte Collaboration Field, and in March 2023, we entered into an amendment to the ViaCyte JDCA pursuant to which, among other things, we adjusted certain rights and obligations of the parties thereunder. In December 2023, ViaCyte elected to opt-out of the collaboration with us for the co-development and co-commercialization of gene-edited stem cell therapies for the treatment of diabetes. Per the opt-out terms, once the opt-out is complete, the on-going collaboration assets will be wholly owned by us, subject to a royalty on future sales owed to ViaCyte. The opt-out became effective in early February 2024. The ViaCyte collaboration assets include CTX211 (formerly VCTX211), an allogeneic, gene-edited, hypoimmune, stem cell derived product candidate in a device that is implanted into patients and intended to produce insulin in a glucose-dependent manner. A Phase 1 clinical trial for CTX211 for the treatment of T1D is ongoing.

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 and auto-immune, *in vivo* and T1D programs and platform, including agreements with: Nkarta, Inc. to develop and commercialize products leveraging donor-derived, gene-edited CAR-NK cells; Capsida Biotherapeutics, Inc. to develop *in vivo* gene editing therapies delivered with engineered AAV vectors; Roswell Park Comprehensive Cancer Center to advance a gene-edited autologous CAR T program against a new target; 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.

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, establishing internal manufacturing capabilities, 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 license and collaboration agreements with strategic partners.

While we were in a net income position in certain previous years due to certain 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; seek regulatory approval for our product candidates; 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 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, 2024 was not material. Revenue recognized for the three and six months ended June 30, 2023 was $70.0 million and $170.0 million, respectively, related to our receipt of an upfront payment from Vertex in connection with entering into agreements with Vertex and ViaCyte relating to the research, development, manufacture and commercialization of therapeutic products in the diabetes field in the first quarter of 2023, as well as revenue recognized in the second quarter of 2023 related to a research milestone achieved in the second quarter of 2023. 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, 2023 filed with the SEC on February 21, 2024, as well as Note 6 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, human resources and other general and administrative 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 general and administrative functions at research and development 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.

Collaboration Expense, Net

Collaboration expense, net, consists of operating expense related to the CASGEVY program under our collaboration with Vertex. Under the A&R Vertex JDCA, we have an option to defer our portion of specified costs on the CASGEVY program in excess of $110.3 million for the years ended December 31, 2022, 2023 and 2024. Any deferred amounts are only payable to Vertex as an offset against future profitability of the CASGEVY program and the amounts payable are capped at a specified maximum amount per year. Additionally, we are permitted, under certain specified circumstances as set forth in Amendment No. 1 to the A&R Vertex JDCA, to adjust the timing of and portion of our share of costs it is permitted to defer under the agreement.

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, 2024 and 2023 (in thousands):

	Three Months Ended June 30,		Period to Period Change
	2024	2023	
Revenue:			
Collaboration revenue	$ —	$ 70,000	$ (70,000)
Grant revenue	517	—	517
Total revenue	517	70,000	(69,483)
Operating expenses:			
Research and development	80,165	101,555	(21,390)
General and administrative	19,481	19,032	449
Collaboration expense, net	52,131	44,636	7,495
Total operating expenses	151,777	165,223	(13,446)
Loss from operations	(151,260)	(95,223)	(56,037)
Other income, net	26,139	18,406	7,733
Loss before income taxes	(125,121)	(76,817)	(48,304)
Provision for income taxes	(1,287)	(923)	(364)
Net loss	$ (126,408)	$ (77,740)	$ (48,668)

Collaboration Revenue

There was no collaboration revenue for the three months ended June 30, 2024. Collaboration revenue for the three months ended June 30, 2023 was $70.0 million related to a research milestone that was achieved during the second quarter of 2023. Please refer to Note 6 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 $80.2 million for the three months ended June 30, 2024, compared to $101.6 million for the three months ended June 30, 2023. The following table summarizes our research and development expenses for the three months ended June 30, 2024 and 2023, together with the changes in those items in dollars (in thousands):

	Three Months Ended June 30,		Period to Period Change
	2024	2023	
External research and development expenses	$ 18,633	$ 37,483	$ (18,850)
Employee related expenses	18,975	21,002	(2,027)
Facility expenses	25,065	27,606	(2,541)
Stock-based compensation expenses	13,411	13,322	89
Other expenses	503	764	(261)
Sublicense and license fees	3,578	1,378	2,200
Total research and development expenses	$ 80,165	$ 101,555	$ (21,390)

The decrease of approximately $21.4 million was primarily attributable to $18.9 million of decreased external research and development costs, primarily associated with a decrease in variable external research and manufacturing costs.

General and Administrative Expenses

General and administrative expenses were $19.5 million for the three months ended June 30, 2024, compared to general and administrative expenses of $19.0 million for the three months ended June 30, 2023.

Collaboration Expense, Net

Collaboration expense, net, was $52.1 million for the three months ended June 30, 2024, compared to $44.6 million for the three months ended June 30, 2023. The increase of approximately $7.5 million in collaboration expense, net, was primarily attributable to commercial and manufacturing costs related to the CASGEVY program under our collaboration with Vertex.

Other Income, Net

Other income was $26.1 million for the three months ended June 30, 2024, compared to $18.4 million of income for the three months ended June 30, 2023. The increase of approximately $7.7 million was primarily due to interest income earned on cash, cash equivalents and marketable securities for the three months ended June 30, 2024.

Comparison of six months ended June 30, 2024 and 2023 (in thousands):

	Six Months Ended June 30,		Period to Period Change
	2024	2023	
Revenue:			
Collaboration revenue	$ —	$ 170,000	$ (170,000)
Grant revenue	1,021	—	1,021
Total revenue	1,021	170,000	(168,979)
Operating expenses:			
Research and development	156,338	201,490	(45,152)
General and administrative	37,434	41,392	(3,958)
Collaboration expense, net	99,097	86,828	12,269
Total operating expenses	292,869	329,710	(36,841)
Loss from operations	(291,848)	(159,710)	(132,138)
Other income, net	50,860	31,148	19,712
Loss before income taxes	(240,988)	(128,562)	(112,426)
Provision for income taxes	(2,011)	(2,243)	232
Net loss	$ (242,999)	$ (130,805)	$ (112,194)

Collaboration Revenue

There was no collaboration revenue for the six months ended June 30, 2024. Collaboration revenue for the six months ended June 30, 2023 was $170.0 million due to an upfront payment from Vertex in the first quarter of 2023, as well as revenue recognized in the second quarter of 2023 related to a research milestone which was achieved in the second quarter of 2023. Please refer to Note 6 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 $156.3 million for the six months ended June 30, 2024, compared to $201.5 million for the six months ended June 30, 2023. The following table summarizes our research and development expenses for the six months ended June 30, 2024 and 2023, together with the changes in those items in dollars (in thousands):

	Six Months Ended June 30,		Period to Period Change
	2024	2023	
External research and development expenses	$ 37,708	$ 71,974	$ (34,266)
Employee related expenses	39,571	43,560	(3,989)
Facility expenses	47,835	56,006	(8,171)
Stock-based compensation expenses	24,593	24,998	(405)
Other expenses	860	1,458	(598)
Sublicense and license fees	5,771	3,494	2,277
Total research and development expenses	$ 156,338	$ 201,490	$ (45,152)

The decrease of approximately $45.2 million was primarily attributable to the following:

- $34.3 million of decreased external research and development costs, primarily associated with a decrease in variable external research and manufacturing costs;
- $8.2 million of decreased facility-related expenses, primarily driven by lower laboratory-related costs; and
- $4.0 million of decreased employee-related expenses.

General and Administrative Expenses

General and administrative expenses were $37.4 million for the six months ended June 30, 2024, compared to general and administrative expenses of $41.4 million for the six months ended June 30, 2023. The decrease of approximately $4.0 million was primarily attributable to decreased employee-related expenses and consulting and professional services-related expenses.

Collaboration Expense, Net

Collaboration expense, net, was $99.1 million for the six months ended June 30, 2024, compared to $86.8 million for the six months ended June 30, 2023. The increase of approximately $12.3 million in collaboration expense, net, was primarily attributable to commercial and manufacturing costs related to the CASGEVY program under our collaboration with Vertex.

Other Income, Net

Other income was $50.9 million for the six months ended June 30, 2024, compared to $31.1 million of income for the six months ended June 30, 2023. The increase of approximately $19.8 million was primarily due to interest income earned on cash, cash equivalents and marketable securities for the six months ended June 30, 2024.

Liquidity and Capital Resources

We have predominantly incurred losses and cumulative negative cash flows from operations since our inception. As of June 30, 2024, we had $2,012.8 million in cash, cash equivalents and marketable securities, of which approximately $154.1 million was held outside of the United States, and an accumulated deficit of $1,242.7 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 costs associated 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.

In August 2019, we entered into the August 2019 Sales Agreement with Jefferies and filed our current prospectus supplement for $419.8 million in July 2021. As of June 30, 2024, we have issued and sold an aggregate of 1.5 million common shares under the current prospectus supplement at an average price of $139.28 per share for aggregate proceeds of $212.4 million, which were net of equity issuance costs of $2.9 million.

In February 2024, the Company entered into an investment agreement for the sale of approximately $280.0 million of its common shares to a group of institutional investors in a registered direct offering, at a price per share of $71.50. The Company received net proceeds of $279.0 million, excluding stamp taxes due of $2.8 million.

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 costs associated 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.

Although we and our partner, Vertex, received marketing approval of CASGEVY in 2023 in certain jurisdictions, and have received a subsequent approval in 2024, most of our 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 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 continued spread of the coronavirus or the recent failure of certain banks and financial institutions in the United States and globally, 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, cash equivalents and marketable securities 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, either directly or with a collaborator or distributor, if approved, including for CASGEVY; 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
	2024	2023	
Net cash provided by operating activities	$ 14,170	$ (124,446)	$ 138,616
Net cash (used in) provided by investing activities	(224,705)	334,752	(559,457)
Net cash provided by financing activities	305,468	22,169	283,299
Effect of exchange rate changes on cash	(9)	60	(69)
Net increase in cash	$ 94,924	$ 232,535	$ (137,611)

Operating Activities

Net cash provided by operating activities was $14.2 million for the six months ended June 30, 2024, compared to cash used in operating activities of $124.4 million for the six months ended June 30, 2023. The increase in net cash provided by operating activities of approximately $138.6 million was primarily driven by an increase in net changes of accounts receivable by $270.0 million, while non-cash expense decreased by $12.3 million. Additionally, the increase was offset by an increase in our net loss position of $112.2 million, from a net loss of $130.8 million for the six months ended June 30, 2023 to a net loss of $243.0 million for the six months ended June 30, 2024 driven by revenue recognized in the connection with an upfront payment from Vertex in the first quarter of 2023 as well as a research milestone achieved in the second quarter of 2023, that did not recur to date in 2024.

Investing Activities

Net cash used in investing activities for the six months ended June 30, 2024 was $224.7 million, compared to net cash provided by investing activities of $334.8 million for the six months ended June 30, 2023. The change to a net cash used in investing activities from a net cash provided by investing activities was primarily driven by a net increase in purchases of our marketable securities.

Financing Activities

Net cash provided by financing activities for the six months ended June 30, 2024 was $305.5 million, compared with $22.2 million for the six months ended June 30, 2023. Net cash provided by financing activities for the six months ended June 30, 2024 consisted of proceeds from the sale of approximately $280.0 million of its common shares to a group of institutional investors in a registered direct offering, at a price per share of $71.50. The Company received net proceeds of $279.0 million, excluding stamp taxes due of $2.8 million. Additionally, net cash provided by financing activities consisted of option exercise proceeds, net of issuance costs.

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 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, 2023 filed with the SEC on February 21, 2024.

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, 2024, we had cash, cash equivalents and marketable securities of $2,012.8 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, 2024 and 2023.

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, 2024, 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, 2024, 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, 2024, 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, 2023 filed with the SEC on February 21, 2024.

Item 1A. Risk Factors.

In addition to the risks described in our Annual Report on Form 10-K and any quarterly report on Form 10-Q, 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.

From time to time, our officers (as defined in Rule 16a–1(f)) and directors may enter into Rule 10b5-1 or non-Rule 10b5-1 trading arrangements (as each such term is defined in Item 408 of Regulation S-K). During the three months ended June 30, 2024, our officers and directors took the following actions with respect to 10b5-1 trading arrangements:

On June 11, 2024, Raju Prasad, Ph.D., our Chief Financial Officer, adopted a Rule 10b5-1 trading arrangement with respect to the sale of up to an aggregate of 30,476 common shares of the Company pursuant to the terms of such trading plan. Dr. Prasad's Rule 10b5-1 trading arrangement is active through December 4, 2025.

On June 13, 2024, Samarth Kulkarni, Ph.D., our Chief Executive Officer, adopted a Rule 10b5-1 trading arrangement with respect to the sale of up to an aggregate of 90,000 common shares of the Company pursuant to the terms of such trading plan. Dr. Kulkarni's Rule 10b5-1 trading arrangement is active through March 31, 2025.

Item 6. Exhibits

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

Exhibit Number	Description of Document
10.1	Employment Agreement, dated May 23, 2024, by and between CRISPR Therapeutics, Inc. and Julianne Bruno (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 23, 2024).
10.2*	Employment Agreement, dated May 28, 2024, by and between CRISPR Therapeutics, Inc. and Naimish Patel, M.D.
31.1*	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*+	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.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 With Embedded Linkbase Documents
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 5, 2024

By: /s/ Samarth Kulkarni
Samarth Kulkarni, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Dated: August 5, 2024

By: /s/ Raju Prasad
Raju Prasad, Ph.D.
Chief Financial Officer
(Principal Financial Officer)

Exhibit 10.2

EMPLOYMENT AGREEMENT

This Employment Agreement ("Agreement") is made as of the 28th day of May, 2024 between CRISPR Therapeutics, Inc., a Delaware corporation (the "Company"), and Naimish Patel (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 May 17, 2024 (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 Executive's ability to discharge Executive's 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 trade association, advisory board, business, 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 $535,000, 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." The Base Salary shall not be reduced at any time without the express written consent of the Executive.

(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 (and may exceed) forty-five 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 Sections 4 and 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. The Target Bonus shall not be reduced at any time without the express prior written consent of the Executive.

(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. Without limiting the generality of the foregoing, Executive will be granted on the Start Date (as defined in the Prior Agreement) the equity awards set forth in the Prior Agreement.

(d) Expenses. During the Employment Period, the Executive shall be entitled to receive reimbursement for all reasonable expenses incurred by Executive in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for its senior executive officers. The Company shall reimburse the Executive up to $5,000 for the reasonable and documented legal fees incurred in connection with the negotiation and execution of this Agreement and any related agreements.

(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 his 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 (such final amount so paid to the Execuitve under this Section 2(h) is referred to as the "After-Tax Section 2(h) Payment"). The Executive understands and agrees that, in the event Executive's employment with the Company is terminated by the Company for Cause or the Executive resigns without Good Reason, in each case, prior the first anniversary of the Effective Date, Executive will reimburse the Company, within one (1) month after such employment termination, the product of (x) the After-Tax Section 2(h) Payment and (y) a fraction, the numerator of which is the number of days from the termination date through the first anniversary of the Effective Date and the denominator of which is 365. 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).

(i) Indemnification and D&O Insurance. CRISPR AG shall indemnify the Executive (including the advance of expenses) to the maximum extent permitted by applicable law and shall provide directors and officers insurance coverage on the same basis as all other directors and officers of CRISPR AG and its affiliates.

(j) Non-US Taxes. If the Executive is subject to taxes outside the United States in connection with any compensatory payments made to the Executive for services performed under this Agreement, the Company will pay on the Executive's behalf the costs of professional

tax preparation in the applicable jurisdiction by a nationally recognized firm experienced in preparing personal income tax returns in the applicable non-U.S. jurisdiction and in the United States (the "Tax Professional") selected by the Company and acceptable to the Executive (such acceptance not to be unreasonably withheld, conditioned or delayed) for each year during which the Executive is subject to such non-U.S. taxes. The Company will further pay the Executive an amount sufficient to leave the Executive in a net after-tax position equivalent to what the Executive would experience if the Executive were subject only to U.S. Federal, state and local income taxes and had not provided the services of the Tax Professional during any such year (an "Equalization Payment"). The Company will engage the Tax Professional at the Company's cost to determine the amount of any Equalization Payment due to the Executive. Any Equalization Payment will be made as soon as reasonably promptly following such determination but in any event not later than the end of the year following the year in which the Executive pays the relevant taxes.

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 15th 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 (subject to customary exclusions including Executive's rights under this Agreement, rights relating to outstanding equity awards granted under the various equity plans maintained by CRISPR AG, rights under the Company's 401(k) plan, rights to indemnification and D&O insurance as described in Section 2(i) above and claims that cannot be waived as a matter of law), 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 as set forth in Section 7(c) below, 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 (without regard to any reduction in Base Salary that would provide a basis for the Executive to resign for Good Reason) 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 (without regard to any reduction in Target Bonus that would provide a basis for the Executive to resign for Good Reason) 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 Executive's 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 Executive's 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 Executive 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 Executive's 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(c), "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.

(c) Definitions. For purposes of this Agreement, "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."

(b) 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).

(c) 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 anything to the contrary in this Agreement, 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.

(d) 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(d) and pay the Executive an hourly rate based on the Executive's annual base salary rate in effective immediately prior to the Executive's last day of employment with the Company. In no event shall the services under this Section exceed five (5) hours per month or 20 hours in any year and in no event shall the Executive be required to provide such services beyond the second anniversary of Executive's last day of employment with the Company.

(e) 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.

(f) 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 (except as expressly set forth herein), 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 Executive's termination of employment but prior to the completion by the Company of all payments due Executive under this Agreement, the Company shall continue such payments to the Executive's beneficiary designated in writing to the Company prior to Executive's death (or to Executive's 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.

By: /s/ Megan Menner
Megan Menner
Head of Human Resources

EXECUTIVE

/s/ Naimish Patel
Naimish Patel

EXHIBIT A

Proprietary Information and Inventions Agreement

Exhibit 31.1

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 5, 2024

By: /s/ Samarth Kulkarni

Samarth Kulkarni, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATIONS

I, Raju Prasad, 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 5, 2024

By: /s/ Raju Prasad

Raju Prasad, Ph.D.
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

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, 2024 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, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

August 5, 2024

/s/ Raju Prasad

Raju Prasad, Ph.D.
Chief Financial Officer
(Principal Financial and Accounting Officer)

August 5, 2024