UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10-Q

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OF 1934

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

> For the quarterly period ended March 31, 2024 OR

 \square Transition report pursuant to Section 13 or 15(d) of the Securities exchange act

For the transition period from Commission File Number: 001-38869

HOOKIPA PHARMA INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization)

81-5395687 (I.R.S. Employer Identification No.)

350 Fifth Avenue, 72nd Floor, Suite 7240 New York, New York (Address of principal executive offices)

10118 (Zip Code)

Registrant's telephone number, including area code: +43 1 890 63 60 Securities registered pursuant to Section 12(b) of the Act:

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

Title of each class	Trading Symbol(s) Name of each exchange on which			
Common Stock	HOOK	The Nasdaq Capital 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),

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, smaller reporting company, or an emerging growth company. See the definitions 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	\boxtimes	Smaller reporting company	X
Emerging growth Company	\boxtimes		

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 the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes \Box No \boxtimes

As of May 6, 2024, the registrant had 96,550,590 shares of common stock and 2,399,517 shares of Class A common stock outstanding, each \$0.0001 par value per share.

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements may be identified by such forward-looking terminology as "may," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology. Our forward-looking statements are based on a series of expectations, assumptions, estimates and projections about our company, are not guarantees of future results or performance and involve substantial risks and uncertainty. We may not actually achieve the plans, intentions or expectations disclosed in these forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements. Our business and our forward-looking statements involve substantial known and unknown risks and uncertainties, including the risks and uncertainties inherent in our statements regarding:

- the success, cost and timing of our product development activities and clinical trials;
- the timing, scope or likelihood of regulatory filings and approvals, including timing of Investigational New Drug Application and Biological Licensing Application filings for our current and future product candidates, and final U.S. Food and Drug Administration, European Medicines Agency or other foreign regulatory authority approval of our current and future product candidates;
- our ability to develop and advance our current product candidates and programs into, and successfully complete, clinical studies;
- our manufacturing, commercialization and marketing capabilities and strategy;
- the potential benefits of and our ability to maintain our collaboration with Gilead Sciences, Inc. and establish or maintain future collaborations or strategic relationships or obtain additional funding;
- the rate and degree of market acceptance and clinical utility of our current and future product candidates;
- our intellectual property position, including the scope of protection we are able to establish and maintain for intellectual property rights covering our non-replicating and replicating technologies and the product candidates based on these technologies, the validity of intellectual property rights held by third parties, and our ability not to infringe, misappropriate or otherwise violate any third-party intellectual property rights;
- future agreements with third parties in connection with the commercialization of our product candidates and any other approved product;
- regulatory developments in the United States and foreign countries;
- competitive companies and technologies in our industry and the success of competing therapies that are or may become available;
- our ability to attract and retain key scientific or management personnel;
- our ability to obtain funding for our operations, including funding necessary to complete further development and commercialization of our product candidates;
- the accuracy of our estimates of our annual total addressable market, future revenue, expenses, capital
 requirements and needs for additional financing;
- our expectations about market trends;
- our ability to comply with Nasdaq listing rules; and

 our expectations regarding the period during which we qualify as an emerging growth company under the Jumpstart Our Business Startups Act of 2012, as amended.

All of our forward-looking statements are as of the date of this Quarterly Report on Form 10-Q only. In each case, actual results may differ materially from such forward-looking information. We can give no assurance that such expectations or forward-looking statements will prove to be correct. An occurrence of or any material adverse change in one or more of the risk factors or risks and uncertainties referred to in this Quarterly Report on Form 10-Q or included in our other public disclosures or our other periodic reports or other documents or filings filed with or furnished to the Securities and Exchange Commission could materially and adversely affect our business, prospects, financial condition and results of operations. Except as required by law, we do not undertake or plan to update or revise any such forward-looking statements to reflect actual results, changes in plans, assumptions, estimates or projections or other circumstances affecting such forward-looking statements occurring after the date of this Quarterly Report on Form 10-Q, even if such results, changes or circumstances make it clear that any forward-looking information will not be realized. Any public statements or disclosures by us following this Quarterly Report on Form 10-Q that modify or impact any of the forward-looking statements contained in this Quarterly Report on Form 10-Q will be deemed to modify or supersede such statements in this Quarterly Report on Form 10-Q.

Investors and others should note that we announce material financial information to our investors using our investor relations website (https://ir.hookipapharma.com/), Securities and Exchange Commission filings, press releases, public conference calls and webcasts. We use these channels, as well as social media, to communicate with our members and the public about our company, our services and other issues. 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 U.S. social media channels listed on our investor relations website.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

HOOKIPA PHARMA INC. CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

(In thousands, except share amounts)

	March 31, 2024		December 31, 2023	
Assets				
Current assets:				
Cash and cash equivalents	\$	92,751	\$	117,096
Accounts receivable		10,212		511
Receivable research incentives		20,557		18,760
Prepaid expenses and other current assets		9,190		10,749
Total current assets		132,710		147,116
Non-current assets:				
Restricted cash		204		425
Property, plant and equipment, net		7,332		7,742
Operating lease right of use assets		4,965		5,473
Other non-current assets		660		581
Total non-current assets		13,161		14,221
Total assets	\$	145,871	\$	161,337
Liabilities and Stockholders' Equity				
Current liabilities				
Accounts payable	\$	11,201	\$	12,498
Deferred revenues	φ	4,649	Φ	14.631
Operating lease liabilities, current		1,584		1,638
Accrued expenses and other current liabilities		10,930		12.101
Loans payable, current		1,144		1,120
Total current liabilities		29,508		41,988
Non-current liabilities		29,308		41,700
Operating lease liabilities, non-current		3,354		3,801
Deferred revenues, non-current		2,617		19,674
Other non-current liabilities		5,870		6,017
	_			
Total non-current liabilities		11,841		29,492
Total liabilities	_	41,349		71,480
Commitments and contingencies (Note 13)				
Stockholders' equity:				
Preferred stock, \$0.0001 par value; 10,000,000 shares authorized at March 31, 2024 and December 31, 2023,				
respectively; Series A convertible preferred stock, 2,978 shares designated, 370 shares outstanding at				
March 31, 2024 and December 31, 2023, respectively; Series A-1 convertible preferred stock, 15,800 shares				
designated, 10,800 shares outstanding at March 31, 2024 and December 31, 2023, respectively; Series A-2				
convertible preferred stock, 15,268 shares designated, and 15,268 shares outstanding at March 31, 2024 and				
December 31, 2023, respectively		0		0
Common stock, \$0.0001 par value; 200,000,000 shares authorized at March 31, 2024 and December 31, 2023,		v		
respectively; 96,550,590 shares and 96,550,590 shares issued and outstanding at March 31, 2024 and				
December 31, 2023, respectively		10		10
Class A common stock, \$0.0001 par value; 3,900,000 shares authorized at March 31, 2024 and				- 10
December 31, 2023, respectively; 2,399,517 shares issued and outstanding at March 31, 2024 and				
December 31, 2023, respectively		0		0
Additional paid-in capital		466,792		467,041
Accumulated other comprehensive loss		(7,402)		(7,933
Accumulated deficit		(354,878)		(369,261
Total stockholders' equity		104,522		89,857
1 '				
Total liabilities and stockholders' equity	\$	145,871	\$	161,337

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS) (UNAUDITED)

(In thousands, except share and per share amounts)

		hree months e	nded	March 31, 2023
Revenue from collaboration and licensing	\$	36,599	\$	3,176
Operating expenses:				
Research and development		(20,168)		(20,931)
General and administrative		(4,056)		(4,902)
Restructuring		(1,269)		
Total operating expenses		(25,493)		(25,833)
Income (loss) from operations		11,106		(22,657)
Other income (expense):				
Grant income	\$	2,233	\$	2,353
Interest income		1,331		1,171
Interest expense		(2)		(122)
Other income and (expenses), net		(285)		(220)
	_			
Total other income, net		3,277		3,182
	_			
Net income (loss) before tax		14,383		(19,475)
Income tax expense		(0)		(205)
	_			
Net income (loss)		14,383		(19,680)
Other comprehensive (loss) income:				
Foreign currency translation gain (loss), net of tax		531		(17)
Comprehensive income (loss)	\$	14,914	\$	(19,697)
•				
Net income (loss) per share — basic	\$	0.11	\$	(0.27)
Net income (loss) per share — diluted	\$	0.11	\$	(0.27)

CONDENSED CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (UNAUDITED)

(In thousands, except share amounts)

		ertible ed Stock	Common			mmon Stock	Additional Paid-In	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Loss	Deficit	Equity
Balances as of December 31, 2023	26,438	0	96,550,590	10	2,399,517	0	467,041	(7,933)	(369,261)	89,857
Foreign currency translation adjustment, net of tax		_	_		_		_	531	_	531
Stock-based compensation income	_	_	_	_	_	_	(249)	_	_	(249)
Net income									14,383	14,383
Balances as of March 31, 2024	26,438	\$ 0	96,550,590	\$ 10	2,399,517	\$ 0	\$ 466,792	\$ (7,402)	\$ (354,878)	\$ 104,522
Balances as of December 31, 2022	17,497	0	52,317,138	5	2,399,517	0	397,349	(7,156)	(287,681)	102,517
Issuance of common stock upon										
exercise of stock options	_	_	5,684	0	_	_	1	_	_	1
Foreign currency translation										
adjustment, net of tax	_	_	_	_	_	_	_	(17)	_	(17)
Stock-based compensation expense	_	_	_	_	_	_	658	_	_	658
Net loss									(19,680)	(19,680)
Balances as of March 31, 2023	17,497	\$ 0	52,322,822	\$ 5	2,399,517	\$ 0	\$ 398,008	\$ (7,173)	\$ (307,361)	\$ 83,479

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

(In thousands)

	TI	Three months ended March 31		
		2024		2023
Operating activities:				
Net income (loss)	\$	14,383	\$	(19,680)
Adjustments to reconcile net loss to net cash used in operating activities:				
Stock-based compensation (income) expense		(249)		658
Depreciation and amortization expense		640		921
Other non-cash items		_		4
Changes in operating assets and liabilities:				
Accounts receivable		(9,442)		6,139
Receivable research incentives		(2,233)		(2,202)
Prepaid expenses and other current assets		992		407
Other non-current assets		(93)		(214)
Accounts payable		(669)		1,557
Deferred revenues		(26,300)		7,213
Operating lease liabilities		(330)		(377)
Accrued expenses and other liabilities		(855)		2,933
Other non-current liabilities				(207)
Net cash used in operating activities	<u> </u>	(24,156)	_	(2,848)
Investing activities:				
Purchases of property and equipment		(116)		(274)
Net cash used in investing activities		(116)		(274)
Financing activities:				
Proceeds from issuance of common stock, net of issuance costs		_		1
Payments for deferred offering costs		(135)		(139)
Repayments of borrowings		_		(597)
Net cash used in financing activities		(135)	_	(735)
		(100)	_	
Net decrease in cash, cash equivalents and restricted cash		(24,407)		(3,857)
Cash, cash equivalents and restricted cash at beginning of period		117,521		113,444
Effect of exchange rate changes on cash, cash equivalents and restricted cash		(159)		434
Cash, cash equivalents and restricted cash at end of period	\$	92,955	\$	110,021
Supplemental disclosure of cash flow information:				
Cash paid for interest	\$	_	\$	(1)
Cash paid for income taxes	\$	(0)	\$	(0)
Supplemental disclosure of non-cash financing activities:				
Property and equipment additions in accounts payable and accrued expenses	\$	41	\$	22

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. Nature of the business and organization

HOOKIPA Pharma Inc. ("HOOKIPA" or the "Company") is a clinical stage biopharmaceutical company developing a new class of immunotherapeutics based on its proprietary arenavirus platform that is designed to reprogram the body's immune system.

The Company was incorporated under the name of Hookipa Biotech, Inc. under the laws of the State of Delaware in February 2017 as a fully-owned subsidiary of Hookipa Biotech AG. In June 2018, the Company changed its name from Hookipa Biotech, Inc. to HOOKIPA Pharma Inc. and in order to effectuate the change of the jurisdiction of incorporation, the Company acquired all of the shares of Hookipa Biotech AG, now Hookipa Biotech GmbH. HOOKIPA is headquartered in New York, with European research and preclinical development operations headquartered in Vienna, Austria. In April 2019, the Company closed its initial public offering ("IPO") and its common stock is currently traded on the Nasdaq Capital Market under the ticker symbol "HOOK".

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, development by competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations, the ability to establish clinical-and commercial-scale manufacturing processes and the ability to secure additional capital to fund operations. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel and infrastructure and extensive compliance-reporting capabilities and may not ultimately lead to a marketing approval and commercialization of a product. Even if the Company's drug development efforts are successful, it is uncertain if and when the Company will realize significant revenue from product sales.

2. Summary of significant accounting policies

Basis of presentation

The Company's condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). The accompanying condensed consolidated financial statements include the accounts of the Company and its wholly owned subsidiary. All intercompany accounts and transactions have been eliminated in consolidation.

The consolidated balance sheet as of December 31, 2023 was derived from audited financial statements but does not include all disclosures required by GAAP. The accompanying condensed consolidated balance sheet as of March 31, 2024, the condensed consolidated statements of operations, and comprehensive income (loss) for the three months ended March 31, 2024 and 2023, the condensed consolidated statement of convertible preferred stock and stockholders' equity for the three months ended March 31, 2024 and 2023 and the condensed consolidated statements of cash flows for the three months ended March 31, 2024 and 2023 are unaudited.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement for interim reporting. Certain information and footnote disclosures typically included in annual financial statements prepared in accordance with GAAP have been condensed or omitted. Accordingly, these unaudited interim condensed consolidated financial statements should be read in conjunction with the Company's audited financial statements for the year ended December 31, 2023 included in the Company's Annual Report on Form 10-K, filed with the Securities and Exchange Commission ("SEC"). The results for any interim period are not necessarily indicative of results for any future period.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

Going concern

Since inception, the Company's activities have consisted primarily of performing research and development to advance its technologies. The Company is still in the development phase and has not been marketing its technologies to date. Through March 31, 2024, the Company has funded its operations with proceeds from sales of common stock, sales of convertible preferred stock, collaboration and licensing agreements, grants and borrowings under various agreements with foreign public funding agencies. Since inception, the Company has incurred recurring losses, including a net loss of \$81.6 million for the year ended December 31, 2023. As of March 31, 2024, the Company had an accumulated deficit of \$354.9 million. While the Company had net income of \$14.4 million for the three months ended March 31, 2024, the Company expects to continue to generate operating losses in the foreseeable future. As of the filing date of this Quarterly Report on Form 10-Q, the Company expects that its cash and cash equivalents will be sufficient to fund its operating expenses, capital expenditure requirements and debt service payments through at least 12 months from the issuance date of the condensed consolidated financial statements.

The Company will seek additional funding in order to reach its development and commercialization objectives. The Company may seek funds through further equity financings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. The Company may not be able to obtain financing on acceptable terms, or at all, and the Company may not be able to enter into collaborations or other arrangements. The terms of any financing may adversely affect the holdings or the rights of the Company's stockholders. If the Company is unable to obtain funding, the Company could be forced to delay, reduce or eliminate some or all of its research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect its business prospects.

The accompanying condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The condensed consolidated financial statements do not reflect any adjustments relating to the recoverability and classification of assets or the amounts and classification of liabilities that might be necessary if the Company is unable to continue as a going concern.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue, income and expenses during the reporting periods. Significant estimates and assumptions reflected in these condensed consolidated financial statements include, but are not limited to, the recognition of revenue and income, the accrual of research and development expenses and general and administrative expenses, the present value of lease right of use assets and corresponding liabilities, the valuation of stock-based awards, the valuation of current loans payable and the impairment of long-lived assets. The Company bases its estimates on historical experience, known trends and other market-specific or other relevant factors that it believes to be reasonable under the circumstances. On an ongoing basis, management evaluates its estimates as there are changes in circumstances, facts and experience.

As of the date of issuance of these unaudited condensed consolidated financial statements, the Company is not aware of any specific event or circumstance that would require the Company to update estimates, judgments or revise the carrying value of any assets or liabilities. Actual results may differ from those estimates or assumptions.

Deferred offering costs

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of an equity financing, these costs are recorded in stockholders' equity as a reduction of the additional

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

paid-in capital on a pro-rata basis generated as a result of the offering. Should the in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the condensed consolidated statements of operations and comprehensive loss.

Concentrations of credit risk and of significant suppliers

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash, cash equivalents and short-term bank deposits held with banks in excess of publicly insured limits. For the three months ended March 31, 2024 and March 31, 2023 the net proceeds from the Company's offerings have been deposited in interest-bearing bank accounts with two of the largest investment grade U.S. financial institutions and have been partially invested in money market funds. The money market funds, held in U.S. dollars, are primarily invested in U.S. and foreign short-term debt obligations. As of March 31, 2024 and December 31, 2023, the Company's cash and cash equivalents included smaller amounts of cash balances held in accounts with regional European banks at the Company's Austrian subsidiary, partially in euros. The Company does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

The Company relies, and expects to continue to rely, on a small number of vendors to manufacture supplies and raw materials for its development programs. These programs could be adversely affected by a significant interruption in these manufacturing services or the availability of raw materials.

As of March 31, 2024 F. Hoffmann-La Roche Ltd. and Hoffmann-La Roche Inc. (together "Roche") accounted for the majority of the accounts receivable balance as a result of a \$10.0 million milestone achieved in March 2024. As of December 31, 2023, Gilead Sciences, Inc. ("Gilead") and Roche accounted for the majority of the accounts receivable balance. For the three months ended March 31, 2024 Roche accounted for the majority of the Company's revenues as a result of a contract modifaction and the recognition of upfront and milestone payments previously recorded as deferred revenues. For the three months ended March 31, 2023 Gilead and Roche accounted for the majority of the Company's revenues. Other customers accounted for less than 10.0% of accounts receivable or net revenues. The Company monitors the financial performance of its customers so that it can appropriately respond to changes in their credit worthiness. To date, the Company has not experienced any significant losses with respect to collection of its accounts receivable.

Cash equivalents

The Company considers all highly liquid investments with maturities of three months or less at the date of purchase to be cash equivalents. As of March 31, 2024 and December 31, 2023, cash equivalents consisted of money market funds and short-term deposits.

Fair value measurements

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1 Quoted prices in active markets for identical assets or liabilities.
- Level 2 Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to
determining the fair value of the assets or liabilities, including pricing models, discounted cash flow
methodologies and similar techniques.

The Company's cash equivalents are carried at fair value, determined according to the fair value hierarchy described above (see Note 5).

Property and equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization expense is recognized using the straight-line method over the estimated useful life of each asset as follows:

	Estimated useful life
	shorter of useful life or
Leasehold improvements	term of lease
Laboratory equipment	2 - 10 years
Furniture and fixtures	2 - 10 years
Computer equipment and software	2 - 4 years

Costs for capital assets not yet placed into service are capitalized as construction-in-progress and depreciated once placed into service. Expenditures for repairs and maintenance are charged to expense as incurred. When property and equipment is sold or otherwise disposed of, the cost and related accumulated depreciation are eliminated from the accounts and any resulting gain or loss is reflected in the consolidated statements of operations.

Leases

The determination whether an arrangement qualifies as a lease is made at contract inception. A lease qualifies as a finance lease if any of the following criteria are met at the inception of the lease: (i) there is a transfer of ownership of the leased asset to the Company by the end of the lease term, (ii) the Company holds an option to purchase the leased asset that it is reasonably certain to exercise, (iii) the lease term is for a major part of the remaining economic life of the leased asset, (iv) the present value of the sum of lease payments equals or exceeds substantially all of the fair value of the leased asset, or (v) the nature of the leased asset is specialized to the point that it is expected to provide the lessor no alternative use at the end of the lease term. All other leases are recorded as operating leases and are included in right of use ("ROU") assets and lease liabilities in the consolidated balance sheets. For leases with an initial term of 12 months or less, the Company does not recognize a right of use asset or lease liability. These short-term leases are expensed on a straight-line basis over the lease term.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at the commencement date of the lease based upon the present value of lease payments over the lease term. When determining the lease term, the Company includes options to extend or terminate the lease when it is reasonably certain that the option will be exercised. The Company uses the implicit rate when readily determinable and uses its incremental borrowing rate when the implicit rate is not readily determinable based upon the information available at the commencement date in determining the present value of the lease payments. The incremental borrowing rate is determined using a secured borrowing rate for the same currency and term as the associated lease. The lease payments used to determine ROU assets may include lease incentives, stated rent increases and escalation clauses linked to rates of inflation when determinable and are recognized as ROU asset on the consolidated balance sheet. In addition, certain of the Company's arrangements contain lease and non-lease components. The Company generally separates lease payments from non-lease payments. Operating leases are reflected in operating lease assets, in current operating lease liabilities in the consolidated balance sheets. Finance leases are reflected in finance lease

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

assets, in accrued expenses and other current liabilities and in other non-current operating lease liabilities in the consolidated balance sheets. The ROU asset is tested for impairment in accordance with Accounting Standards Codification ("ASC") 360.

Capitalized Software Development Cost

The Company capitalizes certain implementation costs for internal-use software incurred in a cloud computing agreement that is a service contract. Eligible costs associated with cloud computing arrangements, such as software business applications used in the normal course of business, are capitalized in accordance with ASC 350. These costs are recognized on a straight-line basis in the same line item in the statement of operations and comprehensive loss as the expense for fees for the associated cloud computing arrangement, over the term of the arrangement, plus reasonably certain renewals.

Restructuring

Costs and liabilities associated with restructuring activities are recognized when the actions are probable and estimable, which is when management approves the associated actions. Employee-related severance charges are recognized at the time of communication to employees.

Revenue recognition from collaboration and licensing

The Company recognized revenue from collaboration and license agreements with Gilead and Roche.

Under the collaboration and license agreement with Gilead (as amended and restated, the "Gilead Collaboration Agreement"), the parties agreed to collaborate with respect to two preclinical research programs to evaluate potential vaccine products for the treatment, cure, diagnosis or prevention of the hepatitis B virus ("HBV") and the human immunodeficiency virus ("HIV"). In February 2022, the parties signed an amended and restated collaboration agreement (the "Restated Gilead Collaboration Agreement"), which revised the terms only for the HIV program, whereby the Company took on development responsibilities for the HIV program candidate through a Phase 1b clinical trial. The Company's performance obligations under the terms of the original agreement include one combined performance obligation for each research program (HBV and HIV) comprised of the transfer of intellectual property rights (licenses) and providing research and development services. The terms of the Restated Gilead Collaboration Agreement added an additional performance obligation to perform research and development work for the HIV program. The licenses do not represent distinct performance obligations, because they cannot be used without the research and development services. Payments to the Company under the Restated Gilead Collaboration Agreement include a non-refundable up-front payment, payments for research and development activities, payments based upon the achievement of defined milestones, and if certain future conditions are met, payments for manufacturing services, commercial milestones and royalties on product sales.

Under the research collaboration and license agreement with Roche (the "Roche Collaboration Agreement"), the Company agreed to conduct research and early clinical development through Phase 1b for HB-700, a novel investigational arenaviral immunotherapy for the treatment of KRAS-mutated cancers. The Roche Collaboration Agreement also includes an obligation of the Company to deliver a specified package of preclinical data and results with respect to a second program, targeting undisclosed cancer antigens (collectively "UCAs") and an option for Roche to license the UCA program. The Company's performance obligations under the terms of the Roche Collaboration Agreement include one combined performance obligation for the transfer of intellectual property rights (licenses) and providing research and development services for the HB-700 program, and a second, separate performance obligation to perform research and development services with respect to the UCA program. The UCA Option provides a right to license the program at the standalone selling price and therefore does not constitute a separate performance obligation. Payments to the Company under the Roche Collaboration Agreement include a non-refundable up-front payment,

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

payments based upon the achievement of defined milestones, an additional payment if the option for the UCA program is exercised and royalties on product sales. In January 2024, Roche provided written notice of the termination of the collaboration and licensing agreement to the Company resulting in early recognition of revenue previously recorded as deferred revenue. The termination was made according to Roche's right to terminate without cause, acknowledging that, the Company had met all go-forward criteria under the agreement. Upon the termination effective date of April 25, 2024, the Company regained full control of the associated intellectual property portfolio and has full collaboration and licensing rights for this program.

The Company evaluates its collaboration and licensing arrangements pursuant to ASC 606 Revenue from Contracts with Customers. To determine the recognition of revenue from arrangements that fall within the scope of ASC 606, the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies a performance obligation.

Under ASC 606, the Company applies significant judgement to evaluate whether the promises under the collaboration and licensing arrangements represent separate or one or more combined performance obligations, the allocation of the transaction price to identified performance obligations, the timing of revenue recognition, whether the UCA Option constitutes a material right, and the determination of when milestone payments are probable of being received.

Upfront payment and program initiation fee

The non-refundable upfront-payment received by the Company upon signing of the Gilead Collaboration Agreement, and milestone payments that were linked to future performance obligations, were initially recorded as deferred revenue and allocated between the two research program performance obligations. Such amounts are recognized as revenue over the performance period of the respective services on a percent of completion basis using total estimated research and development labor hours (input method) for each of the obligations. The percent of completion basis using labor hours was considered the best measure of progress in which control of the combined performance obligations transfers to the customer, due to the short time intervals in which research results are shared with the collaboration partner and the nature of the work being performed.

The non-refundable program initiation payment received from Gilead upon signing of the Restated Collaboration Agreement was also initially recorded as deferred revenue and is recognized on a percent of completion basis using total estimated research and development costs (input method) for the performance of the obligations. The percent of completion basis using research and development costs was considered the best measure of progress in which control of the performance obligations transfers to the customer, due to the immediate benefit that it adds to the value of the customer's rights on the program, the short time intervals in which development results are shared and the nature of the work being performed.

The non-refundable upfront-payment received by the Company upon signing of the Roche Collaboration Agreement was initially recorded as deferred revenue and allocated between the HB-700 program and the UCA program. Such amounts are recognized as revenue over the performance period of the respective services on a percent of completion basis using total estimated research and development costs (input method) for each of the obligations during the initial term of the contract. The percent of completion basis using research and development costs was considered the best measure of progress in which control of the performance obligations transfers to the customer.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

Reimbursement for services

Under the Gilead Collaboration Agreement and the Roche Collaboration Agreement, the Company incurs employee expenses as well as external costs for research, manufacturing and clinical trial activities presented as operating expenses or prepaid expenses. Based on the nature of the Company's responsibilities under the collaboration arrangements, reimbursement of those costs are presented as revenue and not deducted from expenses, as the Company controls the research activities. Amounts of consideration allocated to the performance of research or manufacturing services are recognized over the period in which services are performed. Reimbursements for external costs are recognized as revenues as progress is achieved. Unpaid reimbursement amounts are presented as Accounts Receivable.

Research and development milestones

The Gilead Collaboration Agreement and the Roche Collaboration Agreement include contingent milestone payments related to specified preclinical and clinical development milestones. These milestone payments represent variable consideration that are not initially recognized within the transaction price as they are fully constrained under the guidance in ASC 606, due to the scientific uncertainties and the required commitment from Gilead and Roche. While no further milestone payments are expected under the terminated Roche Collaboration Agreement, the Company will continue to assess the probability of significant reversals for any amounts that become likely to be realized under the Gilead Collaboration Agreement prior to including the variable consideration associated with these payments within the transaction price.

Sales-based milestones and royalty payments

The Gilead Collaboration Agreement and the Roche Collaboration Agreement also include certain sales-based milestone and royalty payments upon successful commercialization of a licensed product. In accordance with ASC 606-10-55-65 Sales Based or Usage Based Royalties, the Company recognizes revenues from sales-based milestone and royalty payments at the later of (i) the occurrence of the subsequent sale; or (ii) the performance obligation to which some or all of the sales-based milestone or royalty payments has been allocated has been satisfied. The Company anticipates recognizing these milestones and royalty payments if and when subsequent sales are generated from a licensed product by the collaboration partner.

Cost to fulfill contracts

The Company incurs costs for personnel, supplies and other costs related to its laboratory operations as well as fees from third parties and license expenses in connection with its research and development obligations under collaboration and licensing agreements. These costs are recognized as research and development expenses over the period in which services are performed. Sublicense fees triggered by the receipt of payments are capitalized as an asset when the obligation to pay the fee arises. The capitalized asset is amortized over the period in which the revenue from the triggering payment is recognized.

Recent accounting pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") or other standard setting bodies that the Company adopts as of the specified effective date.

Recently Issued Accounting Pronouncements

In December 2023, the FASB issued final guidance in ASU No. 2023-09, Income Taxes (ASC 740): Improvements to Income Tax Disclosures requiring entities to provide additional information in the rate reconciliation and disclosures about income taxes paid. For public business entities, the guidance is effective for annual periods

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

beginning after December 15, 2024. The Company does not expect this ASU to have a material impact on the consolidated financial statements.

In November 2023, the FASB issued ASU No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures which requires public entities to disclose significant segment expenses regularly provided to the chief operating decision-maker. Public entities with a single reporting segment have to provide all disclosures required by ASC 280, including the significant segment expense disclosures. For public business entities, the guidance is effective for annual periods beginning after December 15, 2024. The Company does not expect this ASU to have a material impact on the consolidated financial statements.

3. Collaboration and Licensing Agreements

Gilead Collaboration and License Agreement

In June 2018, the Company entered into the Gilead Collaboration Agreement whereby the Company and Gilead agreed to collaborate with respect to two preclinical research programs to evaluate potential vaccine products for the treatment, cure, diagnosis or prevention of HBV and HIV. In February 2022, the Company signed the Amended and Restated Collaboration Agreement, which altered key aspects of the collaboration pertaining to the HIV therapeutic. Most importantly, the Amended and Restated Collaboration Agreement allocated additional research and development responsibility to the Company with respect to the Company's HIV candidate and provided for additional funding by Gilead of such research and development activities as well as increased later stage development and commercial milestone payments.

Under the Gilead Collaboration Agreement, the Company granted Gilead an exclusive, royalty-bearing license to the Company's technology platforms. Upon entering into the agreement in June 2018, the Company received a non-refundable \$10.0 million upfront payment from Gilead and upon signing of the Restated Gilead Collaboration Agreement in February 2022, the Company received a program initiation fee of \$15.0 million. Gilead is also obligated to make additional payments to the Company upon the achievement of pre-clinical, development and commercial milestones. The development milestones amount to \$140.0 million for the HBV program, and up to \$172.5 million for the HIV program, inclusive of a \$10.0 million program completion fee, payable upon Gilead's exercise of the option to pursue further development activities post Phase 1b. The commercial milestones amount to a total of \$50.0 million for the HBV program, and \$65.0 million for the HIV program. Additionally, Gilead is obligated to pay royalties on net sales for each program. Payments from Gilead generally have a 60-day payment term.

The \$10.0 million upfront payment, the \$15.0 million initiation fee and \$8.0 million in milestone payments were initially recorded as deferred revenue in the consolidated balance sheet and are recognized as revenue when revenue recognition criteria are met. As of March 31, 2024, \$6.5 million of such payments were still recorded as a liability in deferred revenues, current and non-current. As of December 31, 2023, \$7.5 million of upfront and milestone payments were included as a liability in deferred revenues, current and non-current. Approximately 50% of deferred revenue is expected to be recognized as revenue in the remainder of 2024, 41% in 2025 and the remaining 9% in 2026.

In the three months ended March 31, 2024, the Company recognized \$0.8 million of the milestone and initiation payments that were originally recorded as deferred revenue. Furthermore, the Company recognized \$0.1 million revenue from cost reimbursements for research and development services. In the three months ended March 31, 2023, the Company recognized \$1.2 million of the upfront and milestone payments that were originally recorded as deferred revenue. Furthermore, the Company recognized \$0.5 million revenue from cost reimbursements for research and development services.

Sublicense fees payable to certain licensors of technologies upon the receipt of the deferred upfront and milestone payments, were capitalized as a contract asset and will be amortized over the period in which the revenue from

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

the triggering payment is recognized. As of March 31, 2024 and December 31, 2023, the contract asset relating to the sublicense payment was \$0.1 million and \$0.1 million, respectively, and there was no liability relating to sublicense payment.

Roche Collaboration and License Agreement

In October 2022, the Company entered into the Roche Collaboration Agreement whereby the Company and Roche agreed to collaborate with respect to the development of novel arenaviral immunotherapies for KRAS-mutated cancers and, potentially, a second, novel arenaviral immunotherapeutic program targeting specific undisclosed cancer antigens. In January 2024, Roche provided written notice of the termination of the Roche Collaboration Agreement to the Company. The termination was made according to Roche's right to terminate without cause, acknowledging that the Company had met all go-forward criteria under the agreement. Pursuant to the terms of the Roche Collaboration Agreement, following the termination notice, the Roche Collaboration Agreement terminated on April 25, 2024.

Under the terms of the terminated Roche Collaboration Agreement, the Company granted Roche an exclusive, royalty-bearing license to the Company's technology platforms for KRAS-mutated cancers, and an option right to exclusively license a second, novel arenaviral immunotherapeutic program targeting undisclosed cancer antigens. Upon the termination effective date of April 25, 2024, the Company regained full control of the associated intellectual property portfolio and had full collaboration and licensing rights for this program.

Upon signing the Roche Collaboration Agreement in October 2022, the Company received a non-refundable upfront payment of \$25.0 million. This upfront payment, a \$10.0 million milestone payment received in the three months ended March 31, 2023, and a \$10.0 million milestone achieved in March 2024 were considered as part of the transaction price and are recognized as revenue when revenue recognition criteria are met over the period in which services are performed. The \$10.0 million milestone achieved in March 2024 was associated with an IND submission for the HB-700 program and the payment was received in April 2024. As of March 31, 2024, \$0.7 million of such payments were included as a liability in deferred revenues, current. As of December 31, 2023, \$26.8 million of such payments were included as a liability in deferred revenues, current and non-current. The deferred revenues related to the upfront payment and the two milestone payments are subject to foreign currency exchange rate fluctuations in the second quarter of 2024.

The Company considered the termination by Roche as a contract modification of the combined performance obligations and the transaction price. The modification was accounted for on a cumulative catch-up basis, applying the revised percent of completion to the revised transaction price, resulting in an immediate increase of revenue in the period of the modification. The transaction price is recognized as revenue over the remaining performance period using updated total estimated research and development costs. The remaining liability included in deferred revenues will be recognized in the period through to the effective date of the termination on April 25, 2024.

In the three months ended March 31, 2024, the Company recognized revenues of \$35.6 million. Revenue recognized includes \$25.7 million of the upfront and milestone payments that were originally recorded as deferred revenue and \$9.9 million of a \$10.0 million milestone achieved in March 2024 and received in April 2024. Following the termination of the Roche Collaboration Agreement the remaining performance obligations will be completed and the remaining deferred revenues of \$0.7 million will be recognized in the second quarter of 2024. Furthermore, the Company recognized \$0.1 million revenue from cost reimbursements for activities related to the preparation of a first in human trial of HB-700. In the three months ended March 31, 2023, the Company recognized \$1.5 million of the upfront and milestone payments that were originally recorded as deferred revenue.

Sublicense fees payable to certain licensors of technologies upon the receipt of the deferred upfront and milestone payments, were capitalized as a contract asset and will be amortized over the period in which the revenue from the triggering payment is recognized. As of March 31, 2024 the contract asset and the liability relating to the sublicense

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

payment were \$0.1 million and \$0.7 million, respectively. As of December 31, 2023 the contract asset was \$2.0 million and there was no liability relating to sublicense payment.

4. Restructuring

On January 29, 2024, the Company announced and began implementing its decision to prioritize the clinical development of its HB-200 program for the treatment of HPV16+ head and neck cancers and its two Gilead-partnered infectious disease programs and to pause development activities related to HB-300 and most of its preclinical research activities. In connection with this strategic refocus, the Company's board of directors approved a restructuring plan to rebalance the Company's cost structure, which includes a reduction of the Company's workforce by approximately 30% and the discontinuation of the Company's GMP manufacturing facility project. The Company substantially completed the restructuring plan in the three months ended March 31, 2024.

As a result of the restructuring plan, the Company incurred the following charges which were included within Restructuring in the condensed consolidated statements of operations and comprehensive income (loss).

The following table summarizes the effect of the restructuring charges (in thousands):

	Three months en 2024	nded March 31, 2023
Severance and other personnel expenses	1,223	
Professional fees and other related charges	46	_
Total	\$ 1,269	\$ —

The following table summarizes a roll-forward of cash restructuring-related liabilities, which are included within Accrued expenses and other current liabilities in the Consolidated Balance Sheets (in thousands):

	erance and r personnel costs	and	fessional fees other related charges	Total
Balance as of December 31, 2023	\$ 	\$		\$ _
Severance and other personnel costs, professional fees and other				
related charges	1,223		46	1,269
Total cash charges	(644)		(35)	(679)
Balance as of March 31, 2024	\$ 579	\$	11	\$ 590

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

5. Fair Value of Financial Assets

The following tables present information about the Company's financial assets measured at fair value on a recurring basis and indicating the level of the fair value hierarchy utilized to determine such fair values (in thousands):

	Fa	Fair Value Measurement at March 31, 2024						
	Level 1	Level 2	Level 3	Total				
Cash equivalents:								
Money market funds	\$ 86,673	\$ —	\$ —	\$ 86,673				
Total	\$ 86,673	\$ —	\$ —	\$ 86,673				
	Fair	Fair Value Measurement at December 31, 2023						
	Level 1	Level 2	Level 3	Total				
Cash equivalents:								
Money market funds	\$ 91,084	\$ —	\$ —	\$ 91,084				
Total	\$ 91,084	<u>s</u> —	<u>e</u>	\$ 91,084				

During the three months ended March 31, 2024, there were no transfers between Level 1, Level 2 and Level 3.

6. Property, plant and equipment, net

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

	March 31, 2024		December 31, 2023	
Land	\$	1,976	\$	2,025
Leasehold improvements		3,219		3,300
Construction in progress		48		212
Laboratory equipment		8,596		8,722
Furniture and fixtures		638		654
Computer equipment and software		2,691		2,652
Property and equipment, gross		17,168		17,565
Less: Accumulated depreciation		(9,836)		(9,823)
Property and equipment, net	\$	7,332	\$	7,742

7. Receivable research incentive

The Company participates in a research incentive program provided by the Austrian government under which it is entitled to reimbursement of a percentage of qualifying research and development expenses and capital expenditures incurred in Austria. Submissions for reimbursement under the program are submitted annually. Incentive amounts are generally paid out during the calendar year that follows the year of the expenses but remain subject to subsequent examinations by the responsible authority. Reimbursements received in excess of the recognized receivable research incentive for a certain period are recorded within other long-term liabilities for potential repayment until such time that an audit has taken place, upon expiration of the potential reclaim period, or when it is no longer probable that a reclaim will happen. The years 2018 to present remain open to examination by the authorities.

Furthermore, the Company participated in the life sciences research and development program provided by the New York State government under which it was entitled to reimbursement of a percentage of qualifying research and development expenses in New York State up to \$0.5 million per year for the years 2019 to 2021. The Company also participates in the New York City biotechnology tax credit program, according to which certain expenses for business in

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

the biotechnology field in New York City limited to \$0.25 million per year for three consecutive years from January 1, 2023 to December 31, 2025 are incentivized.

As of March 31, 2024, the Company recognized receivables of \$20.6 million from the research incentive programs, which are reported in receivable research incentive in the Company's condensed consolidated balance sheet. \$19.1 million relate to the Austrian research incentive program, \$1.4 million relate to the New York State life sciences research and development program and \$0.1 million relate to the New York City biotechnology tax credit program. As of December 31, 2023, the receivables from the research incentive programs were \$18.8 million. \$17.3 million relate to the Austrian research incentive program, \$1.4 million relate to the New York State life sciences research and development program and \$0.1 million relate to the New York City biotechnology tax credit program

During each of the three months ended March 31, 2024 and 2023, the Company recorded \$2.2 million, of income related to the incentive program within the Company's condensed consolidated statements of operations and comprehensive loss as part of the grant income related to the Austrian incentive program. Research incentives depend on the eligible research and development expenses of the respective period.

8. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	March 31,	December 31,
	2024	2023
Salaries and bonuses	3,384	5,665
Social security contributions	785	340
Unearned grant income (current)	_	52
Sublicense fees	667	_
Accrued external research and development expenses	3,909	4,594
Accrued external general and administration expenses	444	292
Accrued for property and equipment acquisitions	_	14
Accrued for restructuring expenses	590	_
Income taxes	367	367
Other accruals and liabilities	784	777
	\$ 10,930	\$ 12,101

9. Loans payable

As of March 31, 2024 and December 31, 2023, loans payable consisted of the following (in thousands):

	<u>N</u>	1arch 31, 2024	December 31, 2023		
Loans from FFG	\$	1,144	\$	1,172	
Unamortized debt discount		_		(52)	
Total loans payable, net	\$	1,144	\$	1,120	

In connection with the funding agreements with the Austrian Research Promotion Agency, (*Österreichische Forschungsförderungsgesellschaft*, or "FFG"), the Company has received various loans ("FFG Loans"). The FFG Loans were made on a project-by-project basis.

The FFG Loans bear interest at rates that are below market rates of interest. The Company accounted for the imputed benefit arising from the difference between an estimated market rate of interest and the rate of interest charged

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

by FFG as grant income from FFG. On the date that FFG loan proceeds are received, the Company recognized the portion of the loan proceeds allocated to grant funding as a discount to the carrying value of the loan and as unearned income, which was recognized as grant income over the term of the funding agreement.

No principal repayment was made in the three months ended March 31, 2024. A principal repayment of \$0.6 million was made in the three months ended March 31, 2023.

As of March 31, 2024, the aggregate minimum future principal payments due in connection with the FFG Loans are summarized as follows (in thousands):

Payments Due by Calendar Year	Ar	nount
2024 (remaining 9 months)		1,144
2025		_
2026		_
2027		_
2028		_
Thereafter		_
Total	\$	1,144

The final maturity of the FFG Loans was as of March 31, 2024. The principal repayments are made through direct debit order. The final principal repayment was transferred on April 2, 2024.

10. Common stock, Class A common stock and convertible preferred stock

The Company's capital structure consists of common stock, Class A common stock and preferred stock. As of March 31, 2024, the Company was authorized to issue 200,000,000 shares of common stock, 3,900,000 shares of Class A common stock and 10,000,000 shares of preferred stock. The Company has designated 2,978 of the 10,000,000 authorized shares of preferred stock as non-voting Series A convertible preferred stock, 15,800 of the 10,000,000 authorized shares of preferred stock as non-voting Series A-1 convertible preferred stock and 15,268 of the 10,000,000 authorized shares of preferred stock as non-voting Series A-2 convertible preferred stock. As of March 31, 2024, the Company had 96,550,590 shares of common stock, 2,399,517 shares of Class A common stock, 370 shares of Series A convertible preferred stock, 10,800 shares of Series A-1 convertible preferred stock and 15,268 shares of Series A-2 convertible preferred stock outstanding and issued.

On June 5, 2023, the Company closed a public offering of 22,900,768 shares of its common stock and 15,268 shares of Series A-2 convertible preferred stock at a public offering price of \$1.31 and \$1,310.00 per share, respectively, for net proceeds of \$46.2 million after deducting underwriting discounts and commissions and offering expenses.

On February 15, 2022, the Company entered into a stock purchase agreement with Gilead ("Stock Purchase Agreement"), that requires Gilead, at the Company's option, to purchase up to \$35.0 million of the Company's common stock. On February 15, 2022, Gilead purchased an initial amount of 1,666,666 shares of the Company's common stock in exchange for \$5.0 million in cash at a purchase price per share equal to \$3.00. On December 20, 2023, the parties amended and restated the Stock Purchase Agreement (the "Amended Stock Purchase Agreement") and Gilead purchased 15,000,000 shares of the Company's common stock in exchange for approximately \$21.3 million in cash at a purchase price per share equal to \$1.4167. Pursuant to the terms of the Amended Stock Purchase Agreement, the Company may require Gilead to purchase the balance of the \$8.75 million of common stock as pro-rata participation in potential future equity raises. The Company's right to sell shares of its common stock to Gilead is subject to specified limitations, including a limitation that prevents the Company from requesting purchases of shares of common stock by

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

Gilead that would result in a beneficial ownership of more than 19.9% of the total number of outstanding shares of common stock by Gilead.

The Company has three series of preferred stock authorized, issued and outstanding as of March 31, 2024: Series A convertible preferred stock, Series A-1 convertible preferred stock and Series A-2 convertible preferred stock. Shares of Series A, Series A-1 and Series A-2 convertible preferred stock may be independently converted into common stock. Holders of Series A, Series A-1 and Series A-2 convertible preferred stock have equal rights, powers and privileges.

Holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of Class A common stock and Series A, Series A-1 and Series A-2 convertible preferred stock are not entitled to vote, except as required by law. The holders of common stock and Class A common stock do not have any cumulative voting rights.

Each holder of Class A common stock has the right to convert each share of Class A common stock into one share of common stock at such holder's election. Each holder of Series A, Series A-1 and Series A-2 convertible preferred stock has the right to convert each share of Series A, Series A-1 and Series A-2 convertible preferred stock into 1,000 shares of common stock at any time at the holder's option, provided that the holder will be prohibited, subject to certain exceptions, from converting Series A, Series A-1 and Series A-2 preferred stock into shares of our common stock if, as a result of such conversion, the holder, together with its affiliates, would own more than 9.99% of the total number of shares of the Company's common stock then issued and outstanding.

Holders of common stock and Class A common stock are entitled to receive ratably any dividends declared by the board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Holders of Series A, Series A-1 and Series A-2 preferred stock will be entitled to receive dividends at a rate equal to (on an as-if-converted-to-common stock basis), and in the same form and manner as, dividends actually paid on shares of the Company's common stock. Holders of common stock and Class A common stock have no preemptive rights, conversion rights, or other subscription rights or redemption or sinking fund provisions.

In the event of a liquidation, dissolution, or winding up of the Company, holders of our Series A, Series A-1 and Series A-2 preferred stock will receive a payment equal to \$0.001 per share of Series A, Series A-1 and Series A-2 preferred stock before any proceeds are distributed to the holders of common stock. Then, holders of common stock and Class A common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities.

There were 370 shares of Series A convertible preferred stock, 10,800 shares of Series A-1 convertible preferred stock and 15,268 shares of Series A-2 convertible preferred stock outstanding as of March 31, 2024 and December 31, 2023, respectively. In May 2023 certain of the Company's stockholders elected to convert an aggregate of 1,327 shares of Series A convertible preferred stock and an aggregate of 5,000 shares of Series A-1 convertible preferred stock owned by such holders into an aggregate of 6,327,000 shares of the Company's common stock.

11. Stock-based compensation

2018 Stock Option and Grant Plan

In June 2018, the Company's board of directors approved the 2018 Stock Option and Grant Plan. Options granted under the 2018 Stock Option and Grant Plan generally vest over four years, with 25% of the options vesting upon the first anniversary of the grant date and the remaining 75% of the options vesting in 12 equal quarterly installments following the first anniversary of the grant date, provided the option holder continues to have an employment or service relationship with the Company on each vesting date. The options expire on the 10th anniversary

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

of the grant date. As of March 31, 2024, 782,176 options granted under the 2018 Stock Option and Grant Plan remained outstanding. Any authorization to issue new options under the 2018 Stock Option and Grant Plan was cancelled upon the effectiveness of the 2019 Stock Option and Incentive Plan and no further awards will be granted under the 2018 Plan.

2019 Stock Option and Incentive Plan

On April 1, 2019, the Company's stockholders approved the 2019 Stock Option and Incentive Plan, which became effective as of the effective date of the registration statement in connection with the Company's IPO. The plan provides for the grant of shares of restricted stock, long term incentive awards, stock options or other equity-based awards. As of March 31, 2024, the maximum number of shares of the Company's common stock that may be issued under the Company's 2019 Stock Option and Incentive Plan was 12,025,484 shares which shall be cumulatively increased on January 1 of each year by up to 4.0% of the then outstanding number of shares of common stock and Class A common stock. Options granted under the 2019 Stock Option and Incentive Plan generally vest over four years, with 25% of the options vesting upon the first anniversary of the grant date and the remaining 75% of the options vesting in 12 equal quarterly installments following the first anniversary of the grant date, provided the option holder continues to have an employment or service relationship with the Company on each vesting date. Initial options granted to non-executive directors upon their election generally vest over a three-year term with 33% of the options vesting upon the first anniversary of the grant date and the remaining 67% of the options vesting in eight equal quarterly installments following the first anniversary of the grant date. Option re-grants to non-executive directors generally vest on the first anniversary of the grant date. The options expire on the 10th anniversary of the grant date. For each option, the beneficiary is entitled to receive one share of common stock upon the exercise of the option.

On August 7, 2023, the Company's board of directors approved a one-time offer to eligible non-executive, non-director employees to exchange certain outstanding stock options for new stock options with modified terms. Under the stock option exchange program (the "Offer"), the Company offered to exchange certain out-of-the-money stock options for new stock options at an exchange ratio of between 1.75 and 2.50 surrendered options for one new option exercisable for shares of common stock with a lower exercise price and extended vesting terms. Pursuant to the Offer, a total of 82 eligible participants tendered, and the Company accepted for cancellation, stock options to purchase an aggregate of 543,228 shares of the Company's common stock with exercise prices between \$6.90 and \$14.00. The eligible options that were accepted for cancellation represented approximately 86.6% of the total shares of common stock underlying all of the eligible options. In accordance with the terms and conditions of the Offer, on September 12, 2023, the Company issued new options to purchase an aggregate of 274,485 shares of common stock in exchange for the cancellation of the tendered eligible options. The exercise price per share of each new option granted in the Offer is \$1.00. New options issued for previously vested stock options vest over a three-year term in twelve equal quarterly installments. The stock option exchange offer resulted in incremental stock-based compensation expense of \$0.1 million, which will be recognized using the graded-vesting method over the remaining requisite service period of the new stock options.

2023 Inducement Plan

On April 7, 2023, the Company's board of directors adopted the Company's 2023 Inducement Plan (the "2023 Inducement Plan") pursuant to which the Company reserved 500,000 shares of common stock for issuance under the 2023 Inducement Plan. The 2023 Inducement Plan provides for the grant of non-statutory stock options to eligible individuals. In accordance with Nasdaq Marketplace Rule 5635(c)(4), awards under the 2023 Inducement Plan may only be made to individuals not previously employees or directors of the Company (or following such individuals' bona fide period of non-employment with the Company), as an inducement material to the individuals' entry into employment with the Company. Awards granted under the 2023 Inducement Plan must be approved by either a majority of the Company's independent directors or the compensation committee of the Company's board of directors. As of March 31, 2024, the Company had 300,000 shares of its common stock available for future issuance under the 2023 Inducement Plan.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

The following table presents a summary of awards outstanding:

	As of March 31, 2024						
	2018 Plan	2019 Plan	Inducement Awards	Total			
Granted and outstanding awards:							
Stock options	782,176	6,375,896	200,000	7,358,072			
Total	782,176	6,375,896	200,000	7,358,072			

Stock option activity

The following table summarizes the Company's stock option activity since January 1, 2024 (in thousands, except share and per share amounts):

	Number of Shares	A E	eighted verage xercise Price	Weighted Average Remaining Contractual Term (in years)	In	gregate trinsic Value
Outstanding as of December 31, 2023	8,111,575	\$	4.28	7.4	\$	486
Granted	_		_			
Exercised	_		_			
Forfeited	(753,503)		1.50			
Outstanding as of March 31, 2024	7,358,072	\$	4.56	7.0	\$	419
		-				
Options exercisable as of March 31, 2024	4,650,138	\$	6.26	6.2	\$	419
Options unvested as of March 31, 2024	2,707,934	\$	1.64	8.5	\$	_

The aggregate intrinsic value of stock options was calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had exercise prices lower than the fair value of the Company's common stock. The fair value per common stock used for calculating the intrinsic values as of March 31, 2024 and December 31, 2023, was \$0.71 and \$0.81, respectively.

No cash was received from stock option exercise under share-based payment arrangements for the three months ended March 31, 2024. Cash received from stock option exercises under share-based payment arrangements for the three months ended March 31, 2023 was \$1 thousand.

Stock-based compensation

Stock-based compensation expense was classified in the condensed consolidated statements of operations and comprehensive loss as follows (in thousands):

T	Three months ended March 31,			
	2024	2023		
\$	(153)	\$	240	
	(96)		418	
\$	(249)	\$	658	
		\$ (153) (96)	\$ (153) \$ (96)	

⁽¹⁾ The negative stock-based compensation expense for the three months ended March 31, 2024 for Research and development expenses as well as General and administrative expenses was due to forfeitures.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

12. Income taxes

Income tax expense during the three months ended March 31, 2024 and March 31, 2023 resulted from minimum tax obligations in Austria, and U.S. federal and state income tax as well as minimum tax obligations in Austria, respectively. During the three months ended March 31, 2024, the Company recorded no income taxes for the net operating income incurred due to the Company's history of losses. During the three months ended March 31, 2023, the Company recorded no income tax benefits for the net operating losses incurred due to its uncertainty of realizing a benefit from those items. The Company's losses before income taxes were generated in the United States and Austria. The Company has evaluated the positive and negative evidence bearing upon its ability to realize the deferred tax assets resulting from its net operating loss carryforwards. Management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of its deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets as of March 31, 2024 and December 31, 2023. Management reevaluates the positive and negative evidence at each reporting period.

13. Commitments and contingencies

Operating and Finance Leases

The Company leases real estate, including office and laboratory space and has entered into various other agreements with respect to assets used in conducting its business. The Company is required to maintain a cash balance of \$0.2 million to secure letters of credit associated with real estate leases. This amount was classified as non-current restricted cash in the Company's condensed consolidated balance sheet as of March 31, 2024.

As of March 31, 2024 and December 31, 2023, the Company's operating lease right-of-use assets were \$5.0 million and \$5.5 million, respectively, which are reported in operating lease right-of-use assets in the Company's condensed consolidated balance sheets. As of March 31, 2024, the Company had outstanding operating lease obligations of \$5.0 million, of which \$1.6 million is reported in operating lease liabilities, current portion and \$3.4 million is reported in operating lease liabilities, non-current portion in the Company's condensed consolidated balance sheets. As of December 31, 2023, the Company had outstanding operating lease obligations of \$5.4 million, of which \$1.6 million is reported in operating lease liabilities, current portion and \$3.8 million is reported in operating lease liabilities, non-current portion in the Company's condensed consolidated balance sheets. The Company's weighted average discount rate and weighted average lease term remaining on operating lease liabilities is approximately 4.1% and 3.5 years.

Contract manufacturing arrangements

The Company has entered into arrangements with contract manufacturing organizations ("CMOs") for manufacturing of materials for research and development purposes, including manufacturing of clinical trial materials. These contracts generally provide for non-cancellable obligations or cancellation penalties depending on the time of cancellation. As of March 31, 2024, the Company's total non-cancellable obligations under contracts with CMOs were \$6.8 million, of which \$1.2 million relate to 2024 (remaining nine months) deliverables, and \$5.6 million relate to 2025 deliverables.

Intellectual property licenses

The Company has entered into certain license agreements under which it is obligated to make milestone payments upon the achievement of certain development and regulatory milestones, to pay royalties on net sales of licensed products, and to pay a percentage of the sublicense fees which the Company receives from its sublicensees.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

In the three months ended March 31, 2024, the Company recorded \$2.7 million in licensing fees related to intellectual property licenses as research and development expenses. The amount is mainly related to the upfront payment and milestone payments received by the Company under the Gilead Collaboration Agreement and the Roche Collaboration Agreement. The amount recognized as expenses has been agreed to by the licensors but calculation of sublicensing fees on future payments may be subject to interpretation and may change until agreed to by the receiving party.

Indemnification agreements

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its board of directors and senior management that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company is not aware of any claims under indemnification arrangements, and it has not accrued any liabilities related to such obligations in its condensed consolidated financial statements as of March 31, 2024 or December 31, 2023.

Legal proceedings

The Company is not currently a party to any material legal proceedings. From time to time, the Company may become involved in litigation or legal proceedings relating to claims arising in the ordinary course of business. At each reporting date, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses the costs related to such legal proceedings as incurred.

14. Net income (loss) per share

Basic net income (loss) per share is calculated by dividing the net income (loss) by the weighted-average number of common shares (common stock and Class A common stock) for the period. Diluted net income (loss) per share is calculated using the weighted-average number of common shares outstanding, plus potential dilutive common stock during the period. Diluted net loss per share in the three months ended March 31, 2023 is the same as basic net loss per share since the effect of the potentially dilutive securities is anti-dilutive. The different series of convertible preferred stock are included in both the basic and diluted net income (loss) per share calculation.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

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

	7	Three months e	ded March 31, 2023		
Numerator:			_		
Net income (loss)	\$	14,383	\$	(19,680)	
Denominator:					
Basic					
Weighted-average common shares outstanding, basic and diluted		98,950,107		54,720,823	
Weighted-average Series A convertible preferred shares outstanding, basic and					
diluted, presented as if converted into common stock ⁽¹⁾		370,000		1,697,000	
Weighted-average Series A-1 convertible preferred shares outstanding, basic				4.5.000.000	
and diluted, presented as if converted into common stock(1)		10,800,000		15,800,000	
Weighted-average Series A-2 convertible preferred shares outstanding, basic					
and diluted, presented as if converted into common stock ⁽¹⁾		15,268,000		_	
Weighted-average number of shares used to calculate basic net income (loss) per					
share	12	25,388,107		72,217,823	
Diluted					
Weighted-average number of shares used to calculate basic net income (loss) per					
share	12	25,388,107		72,217,823	
Effect of potentially dilutive securities:					
Stock options		587,947		_	
Weighted-average number of shares used to calculate diluted net income (loss) per					
share	13	25,976,054		72,217,823	
Net income (loss) per share					
Basic	\$	0.11		(0.27)	
Diluted	\$	0.11	\$	(0.27)	

⁽¹⁾ Class A common stock, Series A, Series A-1 and Series A-2 convertible preferred stock are participating securities that have substantially the same terms and features as the Company's common stock. The Class A common stock, Series A, Series A-1 and Series A-2 convertible preferred stock is therefore included in the weighted-average number of shares outstanding to calculate net income (loss) per share, basic and diluted as if converted in common stock. Each share of Class A common stock and each share of Series A, Series A-1 and Series A-2 convertible preferred stock is independently convertible into one and 1,000 shares of common stock, respectively. In the three months ended March 31, 2024 2,399,517 shares of the Company's common stock are issuable upon conversion of the Class A common stock, 370,000 shares of the Company's common stock are issuable upon conversion of Series A convertible preferred stock, 10,800,000 shares of the Company's common stock are issuable upon conversion of Series A-1 convertible preferred stock and 15,268,000 shares of the Company's common stock are issuable upon conversion of Series A-2 convertible preferred stock (see Note 10).

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) (continued)

The following weighted-average outstanding shares of potentially dilutive securities are excluded from the computation of diluted net income (loss) per share for the periods presented, because including them would have been anti-dilutive:

	Three months end	ded March 31,	
	2024 2023		
Options issued and outstanding	6,674,021	6,483,312	
Total	6,674,021	6,483,312	

15. Related Parties

Effective September 15, 2023, Malte Peters, a member of the Company's board of directors, agreed to lead the Company's clinical activities as ad interim Senior Clinical Advisor. During the three months ended March 31, 2024, the Company recorded expense of \$0.2 million related to a consultancy services agreement entered into with Dr. Peters, effective September 15, 2023. The consultancy services agreement was terminated on March 31, 2024.

16. Subsequent Events

Stock option grants

In April 2024, the Company granted stock options to purchase an aggregate of 3,857,032 shares of common stock at an exercise price of \$0.76 per share option to employees. All options granted vest over four years, with 25% of the options vesting on April 15, 2025 and the remaining 75% of the options vesting in 12 equal quarterly installments following the first anniversary of the vesting date, provided the option holder continues to have a service relationship with the Company on each vesting date. The grant includes 250,000 stock options issued as an inducement grant to a new employee pursuant to Nasdaq Marketplace Rule 5635(c)(4).

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 our unaudited condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and our audited consolidated financial statements and related notes for the year ended December 31, 2023 included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC"). As a result of many factors, including those factors set forth in the "Risk Factors" section of our Annual Report on Form 10-K for the year end December 31, 2023, our actual results could differ materially from the results described in, or implied by, the forward-looking statements contained in the following discussion and analysis.

Overview

We are a clinical-stage biopharmaceutical company developing a new class of immunotherapeutics based on our proprietary arenavirus platform that is designed to target and amplify T cell and immune responses to fight diseases. Our replicating and non-replicating technologies are engineered to induce robust and durable antigen-specific CD8+ T cell responses and pathogen-neutralizing antibodies. We believe that our technologies can meaningfully leverage the human immune system for prophylactic and therapeutic purposes by inducing CD8+ T cell response levels previously not achieved by other immune therapy approaches.

We are building a proprietary immuno-oncology pipeline utilizing our replicating technology. Our oncology portfolio targets oncoviral cancer antigens and next-generation antigens and includes two primary programs in development: HB-200 and HB-700. HB-200 is in clinical development for the treatment of Human Papillomavirus 16-positive ("HPV16+") head and neck cancers in a Phase 1/2 clinical trial. In April 2024, we received Investigational New Drug ("IND") clearance from the U.S. Food and Drug Administration ("FDA") for HB-700 for the treatment of KRAS mutated cancers, including, lung, colorectal and pancreatic cancers.

Our strategic priority is the development of our oncology portfolio, most importantly the advancement of our HB-200 program, and we expect to initiate a randomized Phase 2/3 trial in 2024. Additionally, we are developing infectious disease therapies in partnership with other companies. Our Hepatitis B ("HBV") program, HB-400, and our Human Immunodeficiency Virus ("HIV") program, HB-500, are developed in a partnership with Gilead Sciences Inc. ("Gilead").

HB-200, our first program in oncology, is being evaluated in an ongoing Phase 1/2 clinical trial for the treatment of HPV16+ cancers. This trial is currently enrolling participants in Phase 2, evaluating HB-200 therapy in combination with pembrolizumab in the first line setting of HPV16+ PD-L1+ oropharynx cancer. Preliminary Phase 2 data presented in October 2023 for patients treated with the combination showed a 42% confirmed objective response rate ("ORR") and disease control rate ("DCR") of 74% across 19 evaluable patients, doubling the historical 19% ORR for pembrolizumab alone. The totality of the data from our clinical trials of HB-200, both as a monotherapy and in combination with pembrolizumab, give us conviction to proceed with a randomized Phase 2/3 trial to evaluate HB-200 in combination with pembrolizumab in the first line setting for patients with HPV16+ oropharyngeal squamous cell carcinoma ("OPSCC"). The Phase 2/3 trial design and protocol are based on alignment with the FDA, and we anticipate the first patient to be enrolled in the fourth quarter of 2024.

HB-700 was designed for treatment of cancers encoding mutated KRAS, especially KRAS-mutated pancreatic, colorectal, and lung cancers. By simultaneously targeting the five most common mutations, we believe HB-700 has the potential to benefit more patients than single mutation inhibitors. The IND application for HB-700 was cleared by the FDA in April 2024.

In October 2022, we entered into a Research Collaboration and License Agreement (the "Roche Collaboration Agreement"), with Roche to (i) grant Roche an exclusive license to research, develop, manufacture and commercialize our pre-clinical HB-700 cancer program, an arenaviral immunotherapeutic for KRAS-mutated cancers, and (ii) grant Roche an option right to exclusively license for research, development manufacturing and commercialization, a second, novel arenaviral immunotherapeutic program targeting undisclosed cancer antigens. We announced in January 2024 that we received notification from Roche of their decision to terminate the collaboration and licensing agreement for our HB-

700 program in KRAS mutated cancers. We have met all go-forward criteria under the agreement. Effective April 25, 2024, we regained full control of the associated intellectual property portfolio and have full collaboration and licensing rights for this program. Pursuant to the Roche Collaboration Agreement, we received a non-refundable upfront payment of \$25.0 million, a first \$10.0 million milestone payment, and a final milestone payment of another \$10.0 million, triggered by the HB-700 IND submission in the first quarter of 2024.

We are collaborating with Gilead Sciences, Inc. ("Gilead") to research arenavirus functional cures for chronic Hepatitis B and HIV infections under a Collaboration and License Agreement signed in 2018 (the "Gilead Collaboration Agreement"). Both programs have completed preclinical research, and in April 2023 the first participant in a Phase 1 clinical trial of the Hepatitis B product candidate being conducted by Gilead has been dosed. Gilead is solely responsible for further development and commercialization of the Hepatitis B product candidate and we are eligible for up to a further \$185.0 million in development and commercialization milestone payments, plus tiered royalties. According to the amendment to the Gilead Collaboration Agreement, signed in February 2022, we have taken on development responsibilities for the HIV program candidate through a Phase 1b clinical trial and Gilead will provide funding through a combination of an initiation payment of \$15.0 million, a milestone payment of \$5.0 million and equity contributions of up to \$35.0 million. In November 2023, we received FDA clearance of our IND application for HB-500 and expect to begin the Phase 1 trial in the second quarter of 2024. Gilead retains the exclusive option right, to further develop and commercialize the HIV program, in which case we are eligible for up to a further \$232.5 million in developmental and commercialization milestone payments, inclusive of a \$10.0 million option exercise payment, plus tiered royalties.

On January 29, 2024, we announced our decision to prioritize the clinical development of our HB-200 program for the treatment of HPV16+ head and neck cancers and our two Gilead-partnered infectious disease programs and to pause development activities related to HB-300, targeting self-antigens for the treatment of prostate cancer, and most of our preclinical research activities. In connection with this strategic refocus, our Board of Directors approved a plan to reduce our workforce by 55 fulltime employees, or approximately 30% of the then-current employee base, and to rebalance our cost structure in alignment with the new prioritization of research and development programs. The prioritization of our HB-200 program and our two Gilead-partnered programs also included the discontinuation of our GMP manufacturing facility project. The restructuring was implemented and substantially completed by the end of the first quarter of 2024.

We have funded our operations to date primarily from public offerings of common stock and convertible preferred stock, including our initial public offering, as well as private placements of our redeemable convertible preferred stock, grant funding and loans from an Austrian government agency, and upfront, milestone and initiation payments from Gilead and Roche in connection with our respective collaboration and license agreements. As of March 31, 2024 we had cash, cash equivalents and restricted cash of \$93.0 million.

We do not expect to generate revenue from any product candidates that we develop until we obtain regulatory approval for one or more of such product candidates, if at all, and commercialize our products or enter into additional collaboration agreements with third parties. Substantially all of our net losses have resulted from costs incurred in connection with our research and development programs and from general and administrative costs associated with our operations.

All of our product candidates, including our most advanced oncology product candidate, HB-200, will require substantial additional development time and resources before we would be able to apply for and receive regulatory approvals and begin generating revenue from product sales. Before launching our first products, if approved, we plan to establish our own manufacturing facility to reduce or eliminate our reliance on contract manufacturing organizations ("CMOs") which will require substantial capital expenditures and cause additional operating expenses. We currently have no marketing and sales organization and have no experience in marketing products; accordingly, we will incur significant expenses to develop a marketing organization and sales force in advance of generating any commercial product sales. As a result, we will need substantial additional capital to support our operating activities. In addition, we expect to continue to incur legal, accounting and other expenses in operating our business, including the costs associated with operating as a public company.

We currently anticipate that we will seek to fund our operations through equity or debt financings or other sources, such as government grants and additional collaboration agreements with third parties. Adequate funding may not be available to us on acceptable terms, or at all. If sufficient funds on acceptable terms are not available when needed, we will be required to significantly reduce our operating expenses and delay, reduce the scope of, or eliminate one or more of our development programs.

Since our inception, we have incurred recurring losses. As of March 31, 2024, we had an accumulated deficit of \$354.9 million and we do not expect positive cash flows from operations in the foreseeable future, if ever. While we had net income of \$14.4 million for the three months ended March 31, 2024, we expect to continue to incur net operating losses for at least the next several years as we advance our product candidates through clinical development, seek regulatory approval, prepare for and, if approved, proceed to commercialization, continue our research and development efforts and invest to establish further commercial manufacturing capacity.

Impacts of Market Conditions on Our Business

Unfavorable conditions in the economy in the United States, Austria and elsewhere may negatively affect the growth of our business and our results of operations. Macroeconime events and conditions such as heightened inflation, increased interest rates, disruptions to global financial markets or a recession or other market correction, including as a result of the ongoing military conflict between Russia and Ukraine and the related sanctions imposed against Russia, any escalation of the conflict in Israel and the Gaza Strip, and other global macroeconomic factors, could reduce our ability to access capital, which could materially impact our business and the value of our common stock.

Components of Our Results of Operations

Revenue from collaboration and licensing

To date, we have not generated any revenue from product sales and do not expect to do so in the near future, if at all. All of our revenue to date has been derived from research collaboration and license agreements with Gilead and Roche.

Gilead Collaboration Agreement

On June 4, 2018, we entered into the Gilead Collaboration Agreement to evaluate potential vaccine products using or incorporating our replicating technology and non-replicating technology for the treatment, cure, diagnosis or prevention of HBV and HIV.

Under the Gilead Collaboration Agreement, we granted Gilead an exclusive, royalty-bearing license to our technology platform for researching, developing, manufacturing and commercializing products for HIV or HBV. We received a non-refundable \$10.0 million upfront payment upon entering the Gilead Collaboration Agreement. In February 2022, we signed an amended and restated collaboration agreement (the "Restated Gilead Collaboration Agreement") which revised the terms only for the HIV program, whereby we will take on development responsibilities for the HIV program candidate through a Phase 1b clinical trial. Pursuant to the Restated Gilead Collaboration Agreement, Gilead will retain an exclusive right, the Option, to take back the development responsibilities, thus keeping the rights for the HIV program, including further development and commercialization in return for an option exercise payment of \$10.0 million. Pursuant to the Restated Gilead Collaboration Agreement, we are eligible for up to \$140.0 million in developmental milestone payments for the HBV program and \$50.0 million in commercialization milestone payments. If Gilead exercises the Option, we are eligible for up to \$172.5 million in developmental milestone payments for the HIV program, inclusive of the \$10.0 million Option exercise payment, and \$65.0 million in commercialization milestone payments for the HIV program. Upon the commercialization of a product, we are eligible to receive tiered royalties of a high single-digit to mid-teens percentage on the worldwide net sales of each HBV product, and royalties of a mid-singledigit to 10% of worldwide net sales of each HIV product. Gilead is obligated to reimburse us for our costs, including all benefits, travel, overhead, and any other expenses, relating to performing research and development activities under the Restated Gilead Collaboration Agreement with respect to the HBV program, and if the Option is exercised, any manufacturing costs related to the HIV program. Through March 31, 2024,

we have received a non-refundable upfront payment of \$10.0 million, a program initiation fee of \$15.0 million and \$21.2 million in milestone payments for the achievement of pre-clinical research milestones from Gilead. In addition, we have recognized \$42.3 million of cost reimbursements for research and development services performed under the Restated Gilead Collaboration Agreement.

We determined that our performance obligations under the terms of the original Gilead Collaboration Agreement included one combined performance obligation for each of the HBV and HIV research programs, comprised of the transfer of intellectual property rights and providing research and development services. Accordingly, we recognized these amounts as revenue over the performance period of the respective services on a percent of completion basis using total estimated research and development labor hours for each of the performance obligations. The terms of the Restated Gilead Collaboration Agreement added an additional performance obligation to us to perform research and development work for the HIV program. We recognize the amounts of revenue allocated to the performance obligation resulting from the Restated Gilead Collaboration Agreement on a percent of completion basis over the performance period, using total estimated research and development costs as the measure of progress.

Roche Collaboration Agreement

On October 18, 2022, we entered into the Roche Collaboration Agreement to (i) grant Roche an exclusive license to research, develop, manufacture and commercialize our pre-clinical HB-700 cancer program, an arenaviral immunotherapeutic for KRAS-mutated cancers, and (ii) grant Roche an exclusive option right to exclusively license for research, development manufacturing and commercialization, a second, novel arenaviral immunotherapeutic program targeting undisclosed cancer antigens. In January 2024, Roche provided us with written notice of the termination of the collaboration and licensing agreement.

Under the terms of the terminated Roche Collaboration Agreement, we granted Roche an exclusive, royalty-bearing license to our technology platforms for KRAS-mutated cancers, and an option right to exclusively license a second, novel arenaviral immunotherapeutic program targeting undisclosed cancer antigens. Pursuant to the terms of the Roche Collaboration Agreement, following the termination notice, the Roche Collaboration Agreement was terminated on April 25, 2024. Effective April 25, 2024, we regained full control of the associated intellectual property portfolio and have full collaboration and licensing rights for the KRAS program.

Through March 31, 2024, we have received from Roche the non-refundable upfront payment of \$25.0 million and \$10.0 million in milestone payments for the achievement of a GMP manufacturing milestone under the HB-700 program. In addition, we have recognized \$0.6 million of cost reimbursements for research and development activities related to a first human trial. We also achieved a milestone in March 2024 associated with an IND submission for the HB-700 program resulting in a \$10.0 million milestone payment received in April 2024.

We determined that our performance obligations under the terms of the Roche Collaboration Agreement included one combined performance obligation for the transfer of intellectual property rights (licenses) and providing research and development services for the HB-700 program, and a second, separate performance obligation during the UCA Option period to perform research and development services with respect to the UCA Program. Accordingly, we allocated the non-refundable upfront payment of \$25.0 million between the two performance obligations. Milestone payments that are contingent on future events were added to the transaction price when the triggering event has become probable. The consideration allocated to a performance obligation has been recognized as revenue over the performance period of the respective services on a percent of completion basis using total estimated research and development costs for each of the performance obligations. Milestone payments, or parts thereof, that relate to completed services will be reflected via a cumulative catch up for past performance.

Operating Expenses

Our operating expenses since inception have only consisted of research and development costs, general and administrative costs and restructuring and impairment expenses.

Research and Development Expenses

Since our inception, we have focused significant resources on our research and development activities, including establishing our arenavirus platform, conducting preclinical studies, developing a manufacturing process, conducting Phase 1 and Phase 2 clinical trials, including the ongoing HB-200 Phase 1/2 trial, and progressing investigational new drug ("IND") applications, including for HB-500 and HB-700. Research and development activities account for a significant portion of our operating expenses. Research and development costs are expensed as incurred. These costs include:

- salaries, benefits and other related costs, including stock-based compensation, for personnel engaged in research and development functions;
- expenses incurred in connection with the preclinical development of our programs and clinical trials of our product candidates, including under agreements with third parties, such as consultants, contractors, academic institutions and contract research organizations ("CROs");
- the cost of manufacturing drug products for use in clinical trials, including under agreements with third parties, such as CMOs, consultants and contractors;
- laboratory costs;
- leased facility costs, equipment depreciation and other expenses, which include direct and allocated expenses; and
- third-party license fees.

The majority of our research and development costs are external costs, which we track on a program-by-program basis. We do not track our internal research and development expenses on a program-by-program basis as they primarily relate to shared costs deployed across multiple projects under development.

We expect our research and development expenses to increase substantially in the future as we advance our existing and future product candidates into and through clinical trials and pursue regulatory approval. The process of conducting the necessary clinical studies to obtain regulatory approval is costly and time-consuming. Clinical trials generally become larger and more costly to conduct as they advance into later stages and, in the future, we will be required to make estimates for expense accruals related to clinical trial expenses.

At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the development of any product candidates that we develop from our programs. We are also unable to predict when, if ever, material net cash inflows will commence from sales of product candidates we develop, if at all. This is due to the numerous risks and uncertainties associated with developing product candidates, including the uncertainty of:

- successful completion of preclinical studies and clinical trials;
- sufficiency of our financial and other resources to complete the necessary preclinical studies and clinical trials;
- acceptance of INDs for our planned clinical trials or future clinical trials;
- successful enrollment and completion of clinical trials;
- successful data from our clinical program that support an acceptable risk-benefit profile of our product candidates in the intended populations;

- receipt and maintenance of regulatory and marketing approvals from applicable regulatory authorities;
- scaleup of our manufacturing processes and formulation of our product candidates for later stages of development and commercialization;
- establishing our own manufacturing capabilities or agreements with third-party manufacturers for clinical supply for our clinical trials and commercial manufacturing, if our product candidate is approved;
- entry into collaborations to further the development of our product candidates;
- obtaining and maintaining patent and trade secret protection or regulatory exclusivity for our product candidates;
- successfully launching commercial sales of our product candidates, if approved;
- acceptance of the product candidates benefits and uses, if approved, by patients, the medical community and third-party payors;
- the prevalence and severity of adverse events experienced with our product candidates;
- maintaining a continued acceptable safety profile of the product candidates following approval;
- effectively competing with other therapies;
- obtaining and maintaining healthcare coverage and adequate reimbursement from third-party payors; and
- qualifying for, maintaining, enforcing and defending intellectual property rights and claims.

A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those that we anticipate will be required for the completion of clinical development of a product candidate, or if we experience significant delays in our clinical trials due to patient enrollment or other reasons, we would be required to expend significant additional financial resources and time on the completion of clinical development.

The following table summarizes our research and development expenses by product candidate or program (in thousands):

	Three months ended March 3				
		2024	2023		
HB-200 program	\$	12,450	\$	9,733	
HB-300 program		1,625		3,647	
Gilead partnered programs		1,612		3,584	
Roche partnered programs		4,049		1,993	
Other and earlier-stage programs		383		1,562	
Other unallocated research and development expenses		49		412	
Total research and development expenses	\$	20,168	\$	20,931	

Other unallocated research and development expenses include stock-based compensation expense, certain lease expenses and other operating expenses that we do not track on a program-by-program basis, since our research and development employees and infrastructure resources are utilized across our programs.

General and Administrative Expenses

Our general and administrative expenses consist primarily of personnel costs in our executive, finance and investor relations, business development and administrative functions. Other general and administrative expenses include consulting fees and professional service fees for auditing, tax and legal services, lease expenses related to our offices, premiums for directors and officers liability insurance, intellectual property costs incurred in connection with filing and prosecuting patent applications, depreciation and other costs. We expect our general and administrative expenses to continue to increase in the future as we expand our operating activities and prepare for potential commercialization of our current and future product candidates, increase our headcount and investor relations activities and maintain compliance with requirements of the Nasdaq Capital Market and the Securities and Exchange Commission.

Restructuring Expenses

Restructuring expenses consist of severance and other personnel costs and professional services and consulting costs associated with exit and disposal activities.

Grant Income

Since inception, we have received grants from the Austrian Research Promotions Agency, either under funding agreements or under research incentive programs. In addition, we have received loans under funding agreements that bear interest at below market interest rate. We account for the grants received as other income and for the imputed benefits arising from the difference between a market rate of interest and the rate of interest as additional grant income, and record interest expense for the loans at a market rate of interest.

We participate in a research incentive program provided by the Austrian government under which we are entitled to reimbursement of a percentage of qualifying research and development expenses and capital expenditures incurred in Austria. Submissions for reimbursement under the program are submitted annually. Incentive amounts are generally paid out during the calendar year that follows the year of the expenses but remain subject to subsequent examinations by the responsible authority.

Furthermore, we participated in the life sciences research and development program provided by the New York State government under which we were entitled to reimbursement of a percentage of qualifying research and development expenses in New York State up to \$0.5 million per year for the years 2019 to 2021. Submissions for reimbursement under the program were submitted in the fourth quarter of 2023 and certificates of tax credits were received. Incentive amounts are generally paid out six to nine months after amended tax returns including a certificate of tax credit issued by Empire State Development are filed. We account for the grants received as other income.

We also participate in the New York City biotechnology tax credit program, according to which certain expenses for business in the biotechnology field in New York City limited to \$0.25 million per year for three consecutive years from January 1, 2023 to December 31, 2025 are incentivized. We account for the grants received as other income.

Interest Income

Interest income results of interest earned on our cash, cash equivalents, and restricted cash.

Interest Expense

Interest expense results primarily from loans under funding agreements with the Austrian Research Promotion Agency, recorded at a market rate of interest. The difference between interest payments payable pursuant to the loans, which rates are at below market interest rates, and the market interest rate, is accounted for as grant income.

Income Taxes

Income tax expense results from U.S. federal and state income tax as well as foreign minimum income tax and profit on a legal entity basis. The losses that we have incurred since inception result primary from the losses of our Austrian subsidiary. We have considered that, at this point in time, it is uncertain whether we will ever be able to realize the benefits of the deferred tax asset, and accordingly, have established a full valuation allowance as of March 31, 2024.

Results of Operations

Comparison of the Three Months Ended March 31, 2024 and 2023

The following table summarizes our results of operations for the three months ended March 31, 2024 and 2023 (in thousands):

	 Three months ended March 31,					
	2024 202			Change		
Revenue from collaboration and licensing	\$ 36,599	\$	3,176	\$	33,423	
Operating expenses:	 					
Research and development	(20,168)		(20,931)		763	
General and administrative	(4,056)		(4,902)		846	
Restructuring	(1,269)		_		(1,269)	
Total operating expenses	 (25,493)		(25,833)		340	
Income (loss) from operations	 11,106		(22,657)		33,763	
Other income (expense):						
Grant income	2,233		2,353		(120)	
Interest income	1,331		1,171		160	
Interest expense	(2)		(122)		120	
Other income and expenses, net	(285)		(220)		(65)	
Total other income (expense), net	 3,277		3,182		95	
Net income (loss) before tax	 14,383	-	(19,475)		33,858	
Income tax expense	 (0)		(205)		205	
Net income (loss)	\$ 14,383	\$	(19,680)	\$	34,063	

Revenue from Collaboration and Licensing

Revenue was \$36.6 million for the three months ended March 31, 2024, compared to \$3.2 million for the three months ended March 31, 2023.

During the three months ended March 31, 2024, revenue increased by \$33.4 million compared to the three months ended March 31, 2023. This increase was primarily due to higher partial recognition of the upfront and milestone payments under the Roche Collaboration as a result of the termination of the Roche Collaboration Agreement leading to accelerated recognition of the upfront and milestone payments that were initially recorded as deferred revenue, including the partial recognition of revenue from a \$10.0 million milestone achieved in March 2024.

For the three months ended March 31, 2024 and 2023, revenue included \$0.2 million and \$0.5 million, respectively, from reimbursement of research and development expenses, and \$36.4 million and \$2.7 million, respectively, from partial recognition of upfront, milestone and initiation payments that were initially recorded as deferred revenue.

For the three months ended March 31, 2024, revenue included \$0.9 million related to the Restated Gilead Collaboration Agreement, of which \$0.1 million resulted from reimbursement of research and development expenses and \$0.8 million resulted from partial recognition of milestone and initiation payments that were initially recorded as deferred revenue. In addition, revenue included \$35.7 million related to the Roche Collaboration Agreement, of which \$0.1 million resulted from reimbursement of expenses and \$35.6 million of revenue recognized. Revenue recognized

includes \$25.7 million of the upfront and milestone payments that were originally recorded as deferred revenue and \$9.9 million of a \$10.0 million milestone achieved in March 2024 and received in April 2024 associated with an IND submission for the HB-700 program.

For the three months ended March 31, 2023, revenue included \$1.7 million related to the Restated Gilead Collaboration Agreement, of which \$0.5 million resulted from reimbursement of research and development expenses and \$1.2 million from partial recognition of milestone and initiation payments that were initially recorded as deferred revenue. In addition, revenue included \$1.5 million from partial recognition of upfront and milestone payments under the Roche Collaboration Agreement that were initially recorded as deferred revenue.

Research and Development Expenses

For the three months ended March 31, 2024, our research and development expenses were \$20.2 million, compared to \$20.9 million for the three months ended March 31, 2023.

The decrease of \$0.8 million for the three months ended March 31, 2024 compared to the three months ended March 31, 2023 was attributable to a decrease in indirect research and development expenses of \$1.2 million, partially offset by an increase in direct research and development expenses of \$0.4 million. Indirect research and development expenses decreased mainly because of lower personnel-related expenses of \$0.6 million and lower expenses for laboratory consumables of \$0.4 million. The decrease in personnel-related expenses mainly resulted from the effects of our workforce reduction, including the effects of stock option forfeitures. The increase in direct research and development expenses was primarily driven by amortization expenses related to capitalized sublicense payments following the termination of the Roche Collaboration, as well as higher clinical study expenses for our HB-200 program, partially offset by lower manufacturing expenses and decreased spending for our Gilead partnered programs.

General and Administrative Expenses

General and administrative expenses for the three months ended March 31, 2024 were \$4.1 million, compared to \$4.9 million for the three months ended March 31, 2023.

The decrease of \$0.8 million for the three months ended March 31, 2024 compared to the three months ended March 31, 2023 was primarily due to a decrease in personnel-related expenses of \$0.6 million, a decrease in other expenses of \$0.3 million, partially offset by an increase in professional and consulting fees of \$0.1 million. The decrease in personnel-related expenses resulted primarily from negative stock-based compensation expense due to forfeitures.

Restructuring Expenses

Restructuring expenses for the three months ended March 31, 2024 were \$1.3 million. Restructuring expenses consisted of \$1.2 million of severance and other personnel costs and less than \$0.1 million of professional fees and consulting costs associated with exit and disposal activities. There were no restructuring expenses for the three months ended March 31, 2023.

Grant Income

In the three months ended March 31, 2024, we recorded grant income of \$2.2 million, compared to \$2.4 million in the three months ended March 31, 2023. Income from grants mainly included research incentives and imputed benefits from below market interest rates on loans from governmental agencies. The decrease of \$0.2 million was primarily due to lower imputed benefits associated with the FFG Loans.

Interest Income and Expense

Interest income was \$1.3 million for the three months ended March 31, 2024, compared to interest income of \$1.2 million for the three months ended March 31, 2023. The increase in interest income for the three months ended March 31, 2024 was a result of the rising U.S. dollar and euro interest rates. Interest income represents interest from cash

and cash equivalents held in U.S. dollars and euros resulting from the proceeds from the issuance of common and preferred stock as well as payments received under our Gilead and Roche collaborations. During the three months ended March 31, 2024 our cash, cash equivalents and restricted cash were mainly held in dollars at U.S. investment grade financial institutions or in money market funds. In addition, smaller amounts were held in euros and dollars at our Austrian subsidiary.

Interest expenses for loans from government agencies were less than \$0.1 million for the three months ended March 31, 2024, compared to \$0.1 million for the three months ended March 31, 2023. Interest expense was recorded at the market rate of interest, which exceeded the contractual interest rate.

Other Income and Expenses

Other expenses were \$0.3 million for the three months ended March 31, 2024, compared to \$0.2 million for the three months ended March 31, 2023. The change in the three months ended March 31, 2024 resulted primarily from exchange rate differences and foreign currency remeasurements.

Liquidity and Capital Resources

Since our inception in 2011, we have funded our operations primarily from public offerings and private placements of common stock and convertible preferred stock, including our initial public offering, as well as private placements of our redeemable convertible preferred stock, grant funding and loans from an Austrian government agency, and upfront, milestone and initiation payments from Gilead and Roche in connection with research collaboration agreements.

Prior to our IPO, we raised gross proceeds of approximately \$142.5 million from the issuance of our redeemable convertible preferred stock. In April 2019, we completed our IPO in which we issued and sold 6,000,000 shares of our common stock, at \$14.00 per share, for gross proceeds of \$84.0 million, or net proceeds of \$74.6 million. In December 2020, we completed a follow-on public offering in which we issued 3,910,000 shares of our common stock, at \$11.75 per share, and 2,978 shares of our Series A convertible preferred stock, at \$11,750.00 per share, for net proceeds of \$75.0 million after deducting underwriting discounts and commissions and offering expenses. In March 2022, we completed a follow-on public offering in which we issued 21,700,000 shares of our common stock, at \$2.00 per share, and 15,800 shares of our Series A-1 convertible preferred stock, at \$2,000.00 per share, for net proceeds of \$70.2 million after deducting underwriting discounts and commissions and offering expenses. In June 2023, we completed a follow-on public offering in which we issued 22,900,768 shares of our common stock, at \$1.31 per share, and 15,268 shares of our Series A-2 convertible preferred stock, at \$1,310.00 per share, for net proceeds of \$46.2 million after deducting underwriting discounts and commissions and offering expenses. In addition, in February 2022, Gilead purchased 1,666,666 shares of our common stock for \$5.0 million, at a purchase price of \$3.00 per share, and in December 2023, Gilead purchased 15,000,000 shares of our common stock, at \$1.4167 per share, for net proceeds of approximately \$21.1 million after deducting offering expenses. Pursuant to the terms of the Amended Stock Purchase Agreement, we may require Gilead to purchase the balance of the \$8.75 million of common stock as pro-rata participation in potential future equity raises (see "Note 10. Common stock, Class A common stock and convertible preferred stock" to our consolidated financial statements appearing elsewhere in this Quarterly Report). We also received \$46.2 million from non-refundable upfront, milestone and initiation payments pursuant to the Restated Gilead Collaboration Agreement and \$35.0 million from non-refundable upfront and milestone payments related to the Roche Collaboration Agreement. In the second quarter of 2024 we received a \$10.0 million milestone payment related to the Roche collaboration. As of March 31, 2024, we had cash, cash equivalents and restricted cash of \$93.0 million.

On July 12, 2022, we filed a registration statement on Form S-3 (the "Registration Statement"), with the SEC, which was declared effective on July 21, 2022. The Registration Statement registers the offering, issuance and sale of an unspecified amount of common stock, preferred stock, debt securities, warrants and/or units of any combination thereof. We simultaneously entered into a Sales Agreement with SVB Securities LLC, as sales agent, to provide for the issuance and sale by us of up to \$50.0 million of common stock from time to time in "at-the-market" offerings under the Registration Statement and related prospectus filed with the Registration Statement, or the ATM Program. As of March 31, 2024, no sales had been made pursuant to the ATM Program.

We entered into various funding agreements with the Austrian Research Promotion Agency (Österreichische Forschungsförderungsgesellschaft, or "FFG"). The loans by FFG (the "FFG Loans") were made on a project-by-project basis and bear interest at a rate of 0.75% per annum. In the event that the underlying program research results in a scientific or technical failure, the principal then outstanding under any loan may be forgiven by FFG and converted to non-repayable grant funding on a project-by-project basis. The FFG Loans contain no financial covenants and are not secured by any of our assets. The remaining debt obligation under the FFG loan is \$1.1 million, which is due for repayment upon final maturity in 2024 and was repaid in April 2024.

Because the FFG Loans bear interest at below market rates we account for the imputed benefit arising from the difference between an estimated market rate of interest and the contractual interest rate as grant funding from FFG, which is included in grant income. On the date that FFG Loan proceeds are received, we recognize the portion of the loan proceeds allocated to grant funding as a discount to the carrying value of the loan and as unearned income. As of March 31, 2024, the unamortized debt discount related to FFG Loans was zero due to the final maturity on March 31 2024 and the final repayment on April 2, 2024.

We have entered into arrangements with contract manufacturing organizations. As of March 31, 2024, we had total non-cancellable obligations under such contracts of \$6.8 million.

We do not expect positive cash flows from operations in the foreseeable future, if at all. Historically, we have incurred operating losses as a result of ongoing efforts to develop our arenavirus technology platform and our product candidates, including conducting ongoing research and development, preclinical studies, clinical trials, providing general and administrative support for these operations and developing our intellectual property portfolio. We expect to continue to incur net operating losses for at least the next several years as we progress clinical development, seek regulatory approval, prepare for and, if approved, proceed to commercialization of our most advanced oncology product candidate HB-200, continue our research and development efforts relating to our other and future product candidates, and invest in our manufacturing capabilities and our own manufacturing facility.

Future Funding Requirements

We have no products approved for commercial sale. To date, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, undertaking preclinical studies and clinical trials of our product candidates. As a result, we are not profitable and have incurred losses in each period since our inception in 2011, except for the first quarter of 2024 in which we reported net income of \$14.4 million. As of March 31, 2024, we had an accumulated deficit of \$354.9 million. We expect to continue to incur significant losses for the foreseeable future. We anticipate that our expenses will increase substantially as we:

- pursue the clinical and preclinical development of our current and future product candidates;
- leverage our technologies to advance product candidates into preclinical and clinical development;
- seek regulatory approvals for product candidates that successfully complete clinical trials, if any;
- attract, hire and retain additional clinical, quality control and scientific personnel;
- establish our manufacturing capabilities through third parties or by ourselves and scale-up manufacturing to provide adequate supply for clinical trials and commercialization;
- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development, manufacturing and commercialization efforts and our operations as a public company;
- expand and protect our intellectual property portfolio;

- establish a sales, marketing, medical affairs and distribution infrastructure to commercialize any products for which we may obtain marketing approval and intend to commercialize on our own or jointly;
- acquire or in-license other product candidates and technologies; and
- incur additional legal, accounting and other expenses in operating our business, including ongoing costs associated with operating as a public company.

Even if we succeed in commercializing one or more of our product candidates, we will continue to incur substantial research and development and other expenditures to develop and market additional product candidates. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

We will require substantial additional financing and a failure to obtain this necessary capital could force us to delay, limit, reduce or terminate our product development programs, commercialization efforts or other operations.

Since our inception, we have invested a significant portion of our efforts and financial resources in research and development activities for our non-replicating and replicating technologies and our product candidates derived from these technologies. Preclinical studies and clinical trials and additional research and development activities will require substantial funds to complete. We believe that we will continue to expend substantial resources for the foreseeable future in connection with the development of our current product candidates and programs as well as any future product candidates we may choose to pursue, as well as the gradual gaining of control over our required manufacturing capabilities and other corporate uses. These expenditures will include costs associated with conducting preclinical studies and clinical trials, obtaining regulatory approvals, and manufacturing and supply, as well as marketing and selling any products approved for sale. In addition, other unanticipated costs may arise. Because the outcome of any preclinical study or clinical trial is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our current or future product candidates.

Our future capital requirements depend on many factors, including:

- the scope, progress, results and costs of researching and developing our current and future product candidates and programs, and of conducting preclinical studies and clinical trials;
- the number and development requirements of other product candidates that we may pursue, and other indications for our current product candidates that we may pursue;
- the stability, scale and yields of our future manufacturing process as we scale-up production and formulation of our product candidates for later stages of development and commercialization;
- the timing of, and the costs involved in, obtaining regulatory and marketing approvals and developing our ability
 to establish sales and marketing capabilities, if any, for our current and future product candidates we develop if
 clinical trials are successful;
- the success of our collaboration with Gilead:
- our ability to establish and maintain collaborations, strategic licensing or other arrangements and the financial terms of such agreements;
- the cost of commercialization activities for our current and future product candidates that we may develop, whether alone or with a collaborator;

- the costs involved in preparing, filing, prosecuting, maintaining, expanding, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- the timing, receipt and amount of sales of, or royalties on, our future products, if any; and
- the emergence of competing oncology and infectious disease therapies and other adverse market developments.

A change in the outcome of any of these or other variables with respect to the development of any of our current and future product candidates could significantly change the costs and timing associated with the development of that product candidate. Furthermore, our operating plans may change in the future, and we will need additional funds to meet operational needs and capital requirements associated with such operating plans.

We do not have any committed external source of funds or other support for our development efforts. Until we can generate sufficient product and royalty revenue to finance our cash requirements, which we may never do, we expect to finance our future cash needs through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing or distribution arrangements as well as grant funding. Based on our research and development plans, we expect that our existing cash and cash equivalents, including the funds received under the Restated Gilead Collaboration Agreement, and the funds received under the Roche Collaboration Agreement, will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months. These estimates are based on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect.

If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish certain valuable rights to our product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable to us. If we raise additional capital through public or private equity offerings, the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. Further, to the extent that we raise additional capital through the sale of common stock or securities convertible or exchangeable into common stock, the ownership interest of our shareholders will be diluted. If we raise additional capital through debt financing, we would be subject to fixed payment obligations and may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable to obtain additional funding on favorable terms when needed, we may have to delay, reduce the scope of or terminate one or more of our research and development programs or clinical trials.

Cash Flows

The following table sets forth a summary of the primary sources and uses of cash (in thousands):

	 Three months ended March 31,		
	2024		2023
Net cash used in operating activities	\$ (24,156)	\$	(2,848)
Net cash used in investing activities	(116)		(274)
Net cash used in financing activities	(135)		(735)
Net decrease in cash and cash equivalents	(24,407)		(3,857)

Cash Used in Operating Activities

During the three months ended March 31, 2024, cash used in operating activities was \$24.2 million, which consisted of a net income of \$14.4 million, adjusted by non-cash charges of \$0.4 million and cash used due to changes in our operating assets and liabilities of \$38.9 million. The non-cash charges consisted primarily of depreciation and amortization expense of \$0.6 million, partially offset by stock-based compensation effects resulting from forfeitures of \$0.2 million. The change in our operating assets and liabilities was primarily due to a decrease in deferred revenues of \$26.3 million, primarily resulting from the early-recognition of deferred revenues related to the terminated Roche Collaboration Agreement, an increase in accounts receivable of \$9.4 million, primarily resulting from a \$10.0 million

milestone achieved and invoiced in March 2024 under the terminated Roche Collaboration Agreement, an increase in receivable research incentives of \$2.2 million, a decrease in accrued expenses and other current liabilities of \$0.9 million, a decrease in accounts payable of \$0.7 million, a decrease in operating lease liabilities of \$0.3 million, and an increase in other non-current assets of \$0.1 million, partially offset by a decrease in prepaid expenses and other current assets of \$1.0 million.

During the three months ended March 31, 2023, cash used in operating activities was \$2.8 million, which consisted of a net loss of \$19.7 million, adjusted by non-cash charges of \$1.6 million and cash provided due to changes in our operating assets and liabilities of \$15.2 million. The non-cash charges consisted primarily of stock-based compensation of \$0.7 million and depreciation and amortization expense of \$0.9 million. The change in our operating assets and liabilities was primarily due an increase in deferred revenues of \$7.2 million, resulting from the receipt of a \$10.0 million milestone payment less recognition of deferred revenue in the period, a decrease in accounts receivable of \$6.1 million, primarily resulting from the collection of a \$5.0 million milestone payment and cost reimbursements from Gilead, an increase in other current liabilities of \$2.9 million, an increase in accounts payable of \$1.6 million, and a decrease in prepaid expenses and other current assets of \$0.4 million, partially offset by an increase in receivable research incentives of \$2.2 million, a decrease in operating lease liabilities of \$0.4 million, a decrease in other non-current liabilities of \$0.2 million, and an increase in other non-current assets of \$0.2 million.

Cash Used in Investing Activities

During the three months ended March 31, 2024, cash used in investing activities was \$0.1 million. The decrease of \$0.2 million compared to the three months ended March 31, 2023 resulted from ceased capital expenditures in connection with our GMP manufacturing facility project and lower expenditures for purchase of equipment.

During the three months ended March 31, 2023, cash used in investing activities was \$0.3 million and resulted primarily from capital expenditures in connection with our GMP manufacturing facility project as well as expenditures for laboratory and office space extension and purchase of equipment.

Cash Used in Financing Activities

During the three months ended March 31, 2024, cash used in financing activities was \$0.1 million and consisted mainly of costs related to Gilead's purchase of common stock in December 2023.

During the three months ended March 31, 2023, cash used in financing activities was \$0.7 million and consisted mainly of the principal repayment of a loan of \$0.6 million and the payment of deferred offering costs related to our ATM of \$0.1 million.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which we have prepared in accordance with the rules and regulations of the SEC, and generally accepted accounting principles in the United States ("GAAP"). The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses during the reporting periods. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are 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. Our actual results may differ from these estimates under different assumptions or conditions.

Our critical accounting policies and the methodologies and assumptions we apply under them have not materially changed, as compared to those disclosed in "Management's Discussion and Analysis of Financial Condition

and Results of Operations - Critical Accounting Policies" in our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the Securities and Exchange Commission ("SEC") on March 22, 2024.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 to our condensed consolidated financial statements appearing in this Ouarterly Report on Form 10-O.

Emerging Growth Company Status and Smaller Reporting Company

As an "emerging growth company," the Jumpstart Our Business Startups Act of 2012 allows us to delay adoption of new or revised accounting standards applicable to public companies until such standards are made applicable to private companies. However, we have irrevocably elected not to avail ourselves of this extended transition period for complying with new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We are also a "smaller reporting company" meaning that the market value of our stock held by non-affiliates is less than \$700 million and our annual revenue was less than \$100 million during our most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than \$250 million or (ii) our annual revenue was less than \$100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than \$700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. For so long as we remain a smaller reporting company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to other public companies that are not smaller reporting companies.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk from changes in interest rates, foreign exchange rates and inflation. All of these market risks arise in the ordinary course of business, as we do not engage in speculative trading activities. The following analysis provides additional information regarding these risks.

Foreign Currency and Exchange Risk

We are subject to the risk of fluctuations in foreign currency exchange rates, specifically with respect to the euro. Our functional currency is the U.S. dollar and the functional currency of our wholly owned foreign subsidiary, Hookipa Biotech GmbH, is the euro. Our cash, cash equivalents and restricted cash as of March 31, 2024 included small amounts of cash balances held by Hookipa Biotech GmbH in euro. Assets and liabilities of Hookipa Biotech GmbH are translated into U.S. dollars at the exchange rate in effect on the balance sheet date. Income items and expenses are translated at the average exchange rate in effect during the period. Unrealized translation gains and losses are recorded as a cumulative translation adjustment, which is included in the condensed consolidated Statements of Convertible Preferred Stock and Stockholders' Equity as a component of accumulated other comprehensive loss. Adjustments that arise from exchange rate changes on transactions denominated in a currency other than the local currency are included in other income and expenses, net in the condensed consolidated Statements of Operations and Comprehensive Loss as incurred. A significant portion of our operating costs are in Austria, which are denominated in the euro. This foreign currency exposure gives rise to market risk associated with exchange rate movements of the U.S. dollar against the euro. Furthermore, we anticipate that a significant portion of our expenses will continue to be denominated in the euro. A hypothetical 10% weakening of the U.S. dollar compared to the euro would have increased our net income for the three months ended March 31, 2024, by approximately \$1.3 million and decreased our currency translation adjustment by approximately \$2.4 million. A hypothetical 10% strengthening of the U.S. dollar compared to the euro would have an equal and opposite effect on our financial statements.

Interest Rate Risk

We are exposed to market risk related to changes in interest rates. We had cash, cash equivalents and restricted cash of \$93.0 million as of March 31, 2024, which included account balances with foreign banks. Interest income is sensitive to changes in the general level of interest rates; however, due to the nature of these investments, we do not believe that we have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates.

Impacts of Inflation

While it is difficult to accurately measure the impact of inflation due to the imprecise nature of the estimates required, we do not believe inflation has had a material effect on our historical results of operations and financial condition. However, inflation, has had, and may continue to have, an impact on the labor costs we incur to attract and retain qualified personnel, costs to conduct clinical trials and other operational costs. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset higher costs through raising funds or other corrective measures, and our inability or failure to do so could adversely affect our business, financial condition, and results of operations. In addition, increased inflation has had, and may continue to have, an effect on interest rates. Increased interest rates may adversely affect our borrowing rate and our ability to obtain, or the terms under which we can obtain, any potential additional funding.

Item 4. Controls and Procedures.

The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, refers to controls and procedures that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Evaluation of Disclosure Controls and Procedures

As of March 31, 2024, management, with the participation of our Principal Executive Officer and Principal Financial and Accounting Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including the Chief Executive Officer and the Chief Financial and Accounting Officer, to allow timely decisions regarding required disclosures.

Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, our Principal Executive Officer and Principal Financial and Accounting Officer concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of March 31, 2024.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a 15(f) and 15d 15(f) under the Exchange Act) identified that occurred during the quarter ended March 31, 2024 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.

We are not currently a party to any material legal proceedings. From time to time, we may become involved in litigation or legal proceedings relating to claims arising in the ordinary course of business.

Item 1A. Risk Factors.

There have been no material changes to the Company's risk factors as disclosed in Part I, Item 1A. Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2023. Careful consideration should be given to these risk factors, in addition to the other information set forth in this Quarterly Report on Form 10-Q and in other documents that we file with the SEC, in evaluating our company and our business. Investing in our common shares involves a high degree of risk. If any of these risks actually occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected.

Item 5. Other Information.

During the three months ended March 31, 2024, none of the Company's directors or officers (as defined in Rule 16a-1(f) of the Securities Exchange Act) adopted, terminated or modified a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K).

Item 6. Exhibits.

The exhibits listed on the Exhibit Index immediately preceding such exhibits, which is incorporated herein by reference, are filed or furnished as part of this Quarterly Report on Form 10-Q.

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of the Company (filed as Exhibit 3.1 to the Company's Annual Report on Form 10-K filed on March 24, 2022 (File No. 001-38869) and incorporated herein by reference)
3.1.1	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 1, 2022 (File No. 001-38869) and incorporated herein by reference)
3.1.2	Certificate of Designation of Preferences, Rights and Limitations of the Series A Preferred Stock of the Company (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on December 11, 2020 (File No. 001-38869) and incorporated herein by reference)
3.1.3	Certificate of Designation of Preferences, Rights and Limitations of the Series A-1 Preferred Stock of the Company (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 3, 2022 (File No. 001-38869) and incorporated herein by reference)
3.1.4	Certificate of Designation of Preferences, Rights and Limitations of the Series A-2 Preferred Stock of the Company (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 2, 2023 (File No. 001-38869) and incorporated herein by reference)
3.2	Amended and Restated Bylaws of the Company (filed as Exhibit 3.2 to the Company's Current Report on Form 8-K filed on April 23, 2019 (File No. 001-38869) and incorporated herein by reference)
10.1*#	Employment Agreement between Mark Winderlich and HOOKIPA Biotech GmbH, dated November 30, 2023
10.2*#	Amendment No.1 to Employment Agreement between Mark Winderlich and HOOKIPA Biotech GmbH, dated December 30, 2023
10.3*#	Termination of Consultancy Service Agreement between Hookipa Biotech GmbH and Malte Peters, effective March 31, 2024
31.1*	Certificate of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certificate of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	<u>Certificate of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes Oxley Act of 2002</u>
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document

101.PRE* Inline XBRL Taxonomy Extension Presentation Linkbase Document

104* Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)

- * Filed herewith.
- ** The certification furnished in Exhibit 32.1 hereto is deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference. Such certification will not be deemed to be incorporated by reference into any filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.
- # Indicates a management contract or any compensatory plan, contract or arrangement.

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.

HOOKIPA Pharma Inc.

Date: May 9, 2024 By:/s/ Joern Aldag

Joern Aldag

Chief Executive Officer (Principal Executive Officer)

By:/s/ Reinhard Kandera

Reinhard Kandera

Chief Financial Officer (Principal Financial and

Accounting Officer)

EMPLOYMENT AGREEMENT

This Employment Agreement ("Agreement") is made between HOOKIPA Biotech GmbH (the "Company"), and Mark Winderlich (the "Executive") and is made effective as of June 1, 2024 (the "Effective Date").

WHEREAS, the Company desires to employ the Executive and the Executive desires to be employed by the Company on the terms and conditions contained herein.

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. <u>Employment</u>.

(a) <u>Term</u>. The term of this Agreement shall commence on the Effective Date and continue until terminated in accordance with the provisions hereof (the "Term").

Position and Duties. During the Term, the Executive shall serve as the Chief Development Officer of HOOKIPA Pharma Inc. ("Parent") and the Company, and shall have supervision and control over and responsibility for the day-to-day business and affairs of Parent and the Company and shall have such other powers and duties as may from time to time be prescribed by the Chief Executive Officer of Parent or the Board of Directors of Parent (the "Board"). His responsibilities shall entail the following areas: Therapeutic Area Oncology, Therapeutic Area Infectious Diseases, Clinical Operations, Regulatory Affairs, Pharmacovigilance, Biostatistics and Data Management. The executive shall report to the Chief Executive Officer. The Executive shall devote his full working time and efforts to the business and affairs of the Company. Notwithstanding the foregoing, the Executive may serve on other boards of directors, with the approval of the Board, or engage in religious, charitable or other community activities as long as such services and activities are disclosed to the Board and do not materially interfere with the Executive's performance of his duties to the Company as provided in this Agreement.

(b) <u>Place of Employment</u>. The place of employment of the Executive is Vienna. The Company reserves the right to change the place of employment due to business reasons. The Executive shall work no less than 60% from his place of employment in Vienna or any other agreed teleworking place in Austria.

2. <u>Compensation and Related Matters</u>.

(a) <u>Base Salary</u>. During the Term, the Executive's initial annual base salary shall be gross EUR 430.000 (in words: four-hundred thirty-thousand Euros) payable in 14 equal monthly instalments. The Executive's base salary shall be re-determined

annually by the Compensation Committee of the Board (the "Compensation Committee"). The base salary in effect at any given time is referred to herein as "Base Salary." The Base Salary shall be payable in a manner that is consistent with the Company's usual payroll practices for senior executives.

- (b) <u>Incentive Compensation</u>. During the Term, the Executive shall be eligible to receive cash incentive compensation as determined by the Compensation Committee from time to time. The Executive's target annual incentive compensation shall be 40 percent of his Base Salary.
- (c) <u>Expenses</u>. The Executive shall be entitled to receive prompt reimbursement for all reasonable expenses incurred by him during the Term in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for its senior executive officers.
- (d) Other Benefits. During the Term, the Executive shall be eligible to participate in or receive benefits under the Company's employee benefit plans in effect from time to time, subject to the terms of such plans.
- (e) <u>Equity Compensation</u>. The Executive shall also be eligible to participate in Parent's 2019 Stock Option and Incentive Plan on such terms and conditions as determined by the Compensation Committee.
- (f) The compensation provided for in (a) to (e) compensates the Executive for all services performed by him under this Agreement also outside the regular working hours. It is well understood that the Executive will render such extra services, as well as additional services on Saturdays, Sundays and holidays if required.
- (g) <u>Vacations</u>. During the Term, the Executive shall be entitled to vacation of 25 paid working days in each year. The Executive shall also be entitled to all paid holidays given by the Company to its executives. The Austrian Leave Entitlement Act (*Urlaubsgesetz*) applies in its currently valid version.
- (h) <u>Company phone and laptop.</u> The Company agrees to provide the Executive with a company mobile phone and a company laptop at its own expense and agrees to pay for reasonable related costs incurred, for both business and reasonable private use. Upon termination of his employment, the Executive shall return his company laptop, company mobile phone and any other assets supplied by the Company in the course of his employment.
- 3. <u>Termination</u>. During the Term, the Executive's employment hereunder may be terminated without any breach of this Agreement under the following circumstances:
 - (a) <u>Death</u>. The Executive's employment hereunder shall terminate upon his death.
- (b) <u>Disability</u>. For the termination of the Agreement in case of disability of the Executive, the Austrian Act on the Employment of Disabled Persons (*Behinderteneinstellungsgesetz*) as amended from time to time shall apply.
- (c) <u>Termination by Company for Cause</u>. The Company may terminate the Executive's employment hereunder with immediate effect for Cause. For purposes of this Agreement, "Cause" shall mean in particular: (i) conduct by the Executive constituting a

material act of severe misconduct in connection with the performance of his duties, including, without limitation, misappropriation of funds or property of Parent or any of its subsidiaries or affiliates other than the occasional, customary and de minimis use of Parent or Company property for personal purposes; (ii) the commission by the Executive of any felony or a misdemeanor involving moral turpitude, deceit, dishonesty or fraud, or any conduct by the Executive that would reasonably be expected to result in material injury or reputational harm to Parent or any of its subsidiaries and affiliates if he were retained in his position; (iii) a breach by the Executive of any of the provisions contained in Section 6 of this Agreement; (v) a material violation by the Executive of Parent or the Company's written employment policies, including without limitation, Parent or Company policies concerning substance abuse or sexual harassment; or (v) willful failure to cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by Parent or 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. Sec 27 of the Austrian Salaried Employees Act (*Angestelltengesetz*) applies in its currently valid version. Any minor or non-material misconduct or breach do not justify a termination for Cause.

- (d) <u>Termination Without Cause</u>. The Agreement, which runs for an indefinite period, may be terminated by either party at the end of each calendar month by giving six months' prior notice.
- (e) Termination by the Executive for Cause. The Executive may terminate his employment hereunder for cause without respecting the notice period and notice date mentioned under (d) for the following reasons: (i) a material reduction in the Executive's responsibilities, authority or duties; (ii) withdrawal of the title Chief Development Officer or change of reporting line to CEO; (iii) a material reduction in the Executive's Base Salary except for across-the-board salary reductions based on the Company's financial performance similarly affecting all or substantially all senior management employees of the Company; (iv) a material change in the geographic location (outside of Austria) at which the Executive provides services to the Company; or (v) the material breach of this Agreement by the Company. Sec 26 of the Austrian Salaried Employees Act (Angestelltengesetz) applies in its currently valid version.
- (f) <u>Notice of Termination</u>. Except for termination as specified in Section 3(a), any termination of the Executive's employment by the Company or any such termination by the Executive shall be communicated by written Notice of Termination to the other party hereto.
- (g) <u>Date of Termination</u>. "Date of Termination" shall mean: (i) if the Executive's employment is terminated by his death, the date of his death; (ii) if the Executive's employment is terminated on account of disability according to the Austrian Act on the Employment of Disabled Persons (*Behinderteneinstellungsgesetz*), the date respecting the notice period and notice date; (iii) if the Executive's employment is terminated by the Company or the Executive under Section 3(d), the date respecting the notice period and notice date; (iv) if the Executive's employment is terminated for cause by the Company the date Notice of Termination is given and received, and (v) if the Executive's employment is terminated by the Executive for cause the date Notice of Termination is given and received.

4. <u>Compensation Upon Termination</u>.

- (a) <u>Termination Generally</u>. If the Executive's employment with the Company is terminated for any reason, the Company shall pay or provide to the Executive (or to his authorized representative or estate) any Base Salary earned until the Date of Termination and unpaid expense reimbursements (subject to, and in accordance with, Section 2(c) of this Agreement). Unused vacation that accrued until the Date of Termination will be paid according to the Austrian Leave Entitlement Act (*Urlaubsgesetz*). Any vested benefits the Executive may have under any employee benefit plan of the Company through the Date of Termination shall be paid and/or provided in accordance with the terms of such employee benefit plans (collectively, the "Accrued Benefit").
- (b) <u>Termination by the Executive for Cause</u>. During the Term, if the Executive terminates his employment for cause as provided in Section 3(e), then the Company shall pay the Executive his Accrued Benefit. In addition, subject to the Executive signing a separation agreement containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property and non-disparagement, in a form and manner satisfactory to the Company (the "Separation Agreement and Release") and the Separation Agreement and Release becoming irrevocable within the time period set forth in the Separation Agreement and Release, and in no event longer than 60 days after the Date of Termination:
 - (i) the Company shall pay the Executive an amount equal to 100 percent of the annual Executive's Base Salary (the "Severance Amount"); provided that the Severance Amount shall be reduced by the amount of any payment Executive receives in lieu of the notice period specified in Section 3(d) above. Notwithstanding the foregoing, if the Executive breaches any of the provisions contained in this Agreement or the Separation Agreement and Release, all payments of the Severance Amount shall immediately cease; and
 - (ii) continued participation at active employee rates in the benefit plans set forth under Section 2(d) for the 12-month period following the Date of Termination; and
 - (iii) the amounts payable under this Section 4(b) shall be paid out in 6 equal installments in accordance with the Company's payroll practice over 6 months commencing within 30 days after the Date of Termination.
- 5. <u>Change in Control Payment</u>. The provisions of this Section 5 set forth certain terms of an agreement reached between the Executive and the Company regarding the Executive's rights and obligations upon the occurrence of a Change in Control. These provisions are intended to assure and encourage in advance the Executive's continued attention and dedication to his assigned duties and his objectivity during the pendency and after the occurrence of any such event. These provisions shall apply in lieu of, and expressly supersede, the provisions of Section 4(b) regarding severance pay and benefits upon a termination of

employment, if such termination of employment occurs within 12 months after the occurrence of the first event constituting a Change in Control. These provisions shall terminate and be of no further force or effect beginning 12 months after the occurrence of a Change in Control.

- (a) <u>Change in Control</u>. During the Term, if within 12 months after a Change in Control, the Executive's employment is terminated by the Company without cause as provided in Section 3(d) or the Executive terminates his employment for cause as provided in Section 3(e), then, subject to the signing of the Separation Agreement and Release by the Executive and the Separation Agreement and Release becoming irrevocable, within the time period set forth in the Separation Agreement and Release, and in no event longer than 60 days after the Date of Termination,
 - (i) the Company shall pay the Executive a lump sum in cash in an amount equal to 1.0 times the sum of (A) the Executive's current annual Base Salary (or the Executive's annual Base Salary in effect immediately prior to the Change in Control, if higher) plus (B) the Executive's target annual incentive compensation; provided that any amounts payable under this Section 5(a)(i) shall be reduced by the amount of any payment Executive receives in lieu of the notice period specified in Section 3(d) above; and
 - (ii) continued participation at active employee rates in the benefit plans set forth under Section 2(d) for the 12-month period following the Date of Termination; and
 - (iii) notwithstanding anything to the contrary in any applicable option agreement or stock-based award agreement, all stock options and other stock-based awards held by the Executive shall immediately accelerate and become fully exercisable or non-forfeitable as of the Date of Termination; and
 - (iv) The amounts payable under this Section 5(a) shall be paid or commence to be paid within 60 days after the Date of Termination; provided, however, that if the 60-day period begins in one calendar year and ends in a second calendar year, such payment shall be paid or commence to be paid in the second calendar year by the last day of such 60-day period.
- (b) <u>Definitions</u>. For purposes of this Section 5, the following terms shall have the following meanings:

"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 the Company 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 Parent'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 Parent 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).

6. <u>Confidential Information, Noncompetition and Cooperation</u>.

- (a) Confidential Information. As used in this Agreement, "Confidential Information" means information belonging to Parent or the Company which is of value to Parent or the Company in the course of conducting its business and the disclosure of which could result in a competitive or other disadvantage to Parent or the Company. Confidential Information includes, without limitation, financial information, reports, and forecasts; inventions, improvements and other intellectual property; trade secrets; know-how; designs, processes or formulae; software; market or sales information or plans; customer lists; and business plans, prospects and opportunities (such as possible acquisitions or dispositions of businesses or facilities) which have been discussed or considered by the management of Parent and/or the Company. Confidential Information includes information developed by the Executive in the course of the Executive's employment by the Company or function as an executive of Parent, as well as other information to which the Executive may have access in connection with the Executive's employment. Confidential Information also includes the confidential information of others with which Parent or the Company has a business relationship. Notwithstanding the foregoing, Confidential Information does not include information in the public domain, unless due to breach of the Executive's duties under Section 6 (b).
- (b) <u>Confidentiality</u>. The Executive understands and agrees that the Executive's employment creates a relationship of confidence and trust between the Executive and the Company with respect to all Confidential Information. At all times, both during the Executive's employment with the Company and after its termination, the Executive will keep

in confidence and trust all such Confidential Information and will not use or disclose any such Confidential Information without the written consent of Parent, except as may be necessary in the ordinary course of performing the Executive's duties to the Company. For avoidance of doubt, nothing in this Agreement shall be interpreted or applied to prohibit the Executive from making any good faith report to any governmental agency or other governmental entity concerning any act or omission that the Executive reasonably believes constitutes a possible violation of law or making other disclosures that are protected under the anti-retaliation or whistleblower provisions of applicable law.

- (c) <u>Documents, Records, etc.</u> All documents, records, data, apparatus, equipment and other physical property, whether or not pertaining to Confidential Information, which are furnished to the Executive by Parent or the Company or are produced by the Executive in connection with the Executive's employment will be and remain the sole property of Parent or the Company, as applicable. The Executive will return to the Company all such materials and property as and when requested by the Company. In any event, the Executive will return all such materials and property immediately upon termination of the Executive's employment for any reason. The Executive will not retain with the Executive any such material or property or any copies thereof after such termination.
- Noncompetition and Nonsolicitation. During the Executive's employment with the (d) Company and for 12 months thereafter (subject to automatic extension for an additional period equal to the period of any breach of the covenants in this Section 6 (d), within the framework of Sec 7, 36 to 38 Austrian Salaried Employees Act (Angestelltengesetz), the Executive (i) will not, directly or indirectly, whether as owner, partner, shareholder, consultant, agent, employee, co-venturer or otherwise, engage, participate, assist or invest in any Competing Business (as hereinafter defined); (ii) will refrain from directly or indirectly employing, attempting to employ, recruiting or otherwise soliciting, inducing or influencing any person to leave employment with Parent or the Company (other than terminations of employment of subordinate employees undertaken in the course of the Executive's employment with the Company); and (iii) will refrain from soliciting or encouraging any customer or supplier to terminate or otherwise modify adversely its business relationship with Parent or the Company. The Executive understands that the restrictions set forth in this Section 6 (d) are intended to protect Parent's and the Company's interest in its Confidential Information and established employee, customer and supplier relationships and goodwill, and agrees that such restrictions are reasonable and appropriate for this purpose. For purposes of this Agreement, the term "Competing Business" shall mean a business conducted anywhere in the world which is primarily engaged in viral immunotherapy (for prophylactic or therapeutic use) in indication areas in which the Company is active at the time of termination of the Executive's employment. Notwithstanding the foregoing, the Executive may own (i) up to one percent (1%) of the outstanding stock of a publicly held corporation which constitutes or is affiliated with a Competing Business, and (ii) up to five percent (5%) in companies which do not directly compete with the Company.
- (e) <u>Third-Party Agreements and Rights</u>. The Executive hereby confirms that the Executive is not bound by the terms of any agreement with any previous employer or other party which restricts in any way the Executive's use or disclosure of information or the Executive's engagement in any business. The Executive represents to the Company that the Executive's execution of this Agreement, the Executive's employment with the Company and the performance of the Executive's proposed duties for the Company will not violate any obligations the Executive may have to any such previous employer or other party. In the

Executive's work for the Company, the Executive will not disclose or make use of any information in violation of any agreements with or rights of any such previous employer or other party, and the Executive will not bring to the premises of the Company any copies or other tangible embodiments of non-public information belonging to or obtained from any such previous employment or other party.

- (f) <u>Litigation and Regulatory Cooperation</u>. During and after the Executive's employment, the Executive shall cooperate fully with Parent or the Company in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of Parent or the Company which relate to events or occurrences that transpired while the Executive was employed by the Company. The Executive's full 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 Parent or the Company at mutually convenient times. During and after the Executive's employment, the Executive also shall cooperate fully with Parent and the Company in connection with any investigation or review of any authority as any such investigation or review relates to events or occurrences that transpired while the Executive was employed by the Company. The Parent and 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 6 (f).
- (g) <u>Injunction</u>. The Executive agrees that it would be difficult to measure any damages caused to the Company which might result from any breach by the Executive of the promises set forth in this Section 6. In event of violation of the provision 6 (d) Noncompetition and Nonsolicitation, the Executive shall be obliged to pay the Company a contractual penalty in the amount of his last net monthly remuneration multiplied by six. The contractual penalty is due at the time of the violation of the contractual provision. The agreement to pay a contractual penalty does not eliminate any claim to cease and desist such actions or any other damage.

7. Inventions.

The Executive assigns to the Company the exclusive right of use and exploitation, unrestricted in time, territory and content, for all work output which is capable of copy right protection or of protection under trademark, patent, registered design and utility model and other intellectual property rights, which the Executive produces during the period of his relationship with the Company, insofar as they relate to his duties under this Agreement. The Executive is obliged to notify the Company immediately of any invention. The provisions of the Austrian Patent Act (*Patentgesetz*), as amended from time to time, apply to inventions made by the Executive.

The assignment of the use and exploitation rights includes the authorization to further modify and issue licenses and is fully compensated for by the remuneration set out in this Agreement. The Executive expressly waives all other rights as holder of copyright or other intellectual property rights in the work output, in particular the right to determining a name and to make the work accessible.

This applies mutatis mutandis to all inventions, discoveries, designs, developments and improvements that are not capable of copyright protection or of protection under a trademark, patent, registered design and/or utility model or any other intellectual property rights.

8. <u>Data Protection.</u>

The Executive acknowledges that the Company will process the Executive's personal data electronically in order to manage the employment relationship and fulfill legal obligations. Furthermore, the Company is obliged by law to transfer certain personal data of the Company to authorities or legal entities. Such communications are made only to the extent required by law.

In the context of his work for the Company as well as for Parent personal data (Art 4 Paragraph 1 General Data Protection Regulation) will become accessible to the Executive. He therefore is obliged to data protection and data security (Art 32 General Data Protection Regulation), whether data is processed automatically or not. He must always carefully store user IDs, passwords and other access authorizations available to him. He is obliged to follow the data protection rules in the currently applicable version (Art 5 General Data Protection Regulation) for each processing of personal data. Additionally, he must comply with all company regulations concerning the use of personal data in the currently applicable version. Personal data may only be processed for the legitimate performance of official duties.

The Executive is also obliged to maintain data secrecy in accordance with the data protection laws in force at the time, currently Sec 6 DSG 2018 (*Datenschutzgesetz*). He will treat all personal data as confidential for an unlimited period of time, even after the end of the employment relationship, and will keep it secret from everyone. This applies also to data regarding his executive function of Parent.

The Executive is prohibited from making personal data available to unauthorized bodies or third parties or from making it possible or easier for them to gain knowledge of it. He is also prohibited from using data for any purpose other than required for the lawful performance of his or her duties. He will only disclose accessible personal data as a result of his work, if expressly ordered to do so by the Company or its representative verbally or in writing. Only if there is a legal obligation for the processing of personal data by the Executive, an explicit order from the Company is not required.

The violation of data secrecy can make the Executive liable for damages and/or have consequences under Austrian labor law.

- 9. <u>Section 409A.</u> This Section 9 shall apply only to the extent the Executive is subject to U.S. income tax.
- (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 otherwise 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 sixmonth period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

- (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 (except for any lifetime or other aggregate limitation applicable to medical expenses). 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. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). 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.
- 10. <u>Consent to Jurisdiction</u>. The locally competent courts in Austria shall have jurisdiction over any disputes arising from this Agreement.
- 11. <u>Integration</u>. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements between the parties concerning such subject matter. For the avoidance of doubt, the Executive shall remain entitled to all benefits, including holiday entitlement, accrued through the Executive's ongoing employment with the Company up until the effective date of this Agreement.
- 12. <u>Withholding</u>. All payments made by the Company to the Executive under this Agreement shall be net.
- 13. <u>Successor to the Executive</u>. 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 his termination of employment but prior to the completion by the Company of all payments due him under this Agreement, the Company shall continue such payments to the Executive's beneficiary

designated in writing to the Company prior to his death (or to his estate, if the Executive fails to make such designation).

- 14. <u>Enforceability</u>. 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 of Austria, 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.
- 15. <u>Waiver</u>. 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. <u>Notices</u>. 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 Board.
- 17. <u>Amendment</u>. 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. In addition, the Company requires approval by resolution of the Board. This provision shall also apply to any waiver of the requirement of written form.
 - 18. <u>Governing Law.</u> This Agreement is exclusively governed by Austrian law.
- 19. <u>Counterparts</u>. 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. <u>Successor to Company</u>. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and agree to perform this Agreement to the same extent that the Company would be required to perform it if no succession had taken place. Failure of the Company to obtain an assumption of this Agreement at or prior to the effectiveness of any succession shall be a material breach of this Agreement.
- 21. <u>D&O Insurance.</u> The Parent has concluded a directors and officers insurance policy (D&O insurance) at its own expense for the benefit of the Executive, which includes civil and criminal defense coverage.
- 22. <u>Gender Neutral</u>. Wherever used herein, a pronoun in the masculine gender shall be considered as including the feminine gender unless the context clearly indicates otherwise.

[SIGNATURE PAGE FOLLOWS]

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

HOOKIPA Biotech GmbH.

By:Joern Aldag
Its: CEO

Date signature: Nov. 28, 2023

EXECUTIVE

Mark Winderlich, PhD MSc

Date signature: Nov. 30, 2023

AMENDMENT NO. 1 TO THE EMPLOYMENT AGREEMENT

This Amendment No. 1 ("Amendment") is a modification of the Employment Agreement by and between HOOKIPA Biotech GmbH (the "Company"), and Mark Winderlich, PhD MSc (the "Executive"), effective as of June 1, 2024 ("Agreement").

The parties wish to have the Agreement enter into effect two months earlier, so that the new Effective Date shall be April 1, 2024.

Accordingly, the parties hereby agree to change the Effective Date from June 1, 2024 to April 1, 2024.

This Amendment is made according to Section 17 of the Agreement. This Amendment is to be construed consistently insofar as possible with the Agreement, but in the event of a conflict, this Amendment shall control. Any capitalized terms used herein shall have the same meaning as set forth for such terms in the Agreement.

All other terms and conditions of the Agreement remain unchanged and in full force.

IN WITNESS WHEREOF, the parties hereby have executed this Amendment the day and year written below.

HOOKIPA Biotech GmbH		EXECU	EXECUTIVE		
By:		By:			
Name:	Jörn Aldag	Name:	Mark Winderlich, PhD MSc		
Title:	Chief Executive Officer				
Date:	December 13, 2023	Date:	December 30, 2023		

MUTUAL TERMINATION AGREEMENT

THIS MUTUAL TERMINATION AGREEMENT is made this March 31, 2024 (the "Effective Date"), by and between Hookipa Biotech GmbH, an Austrian corporation, having its principal place of business at St Marx Vienna BioCenter: Helmut-Qualtinger-Gasse 2, 1030 Vienna, Austria ("HOOKIPA"), and Malte Peters, M.D., having its principal place of business at [ADDRESS] ("CONSULTANT"), (each Party hereinafter referred to as a "Party" and both Parties collectively referred to as the "Parties").

WHEREAS, HOOKIPA and the CONSULTANT entered into the consultancy service agreement effective as of September 15, 2023 (hereinafter, the "Agreement"); and

WHEREAS, in accordance with this Mutual Termination Agreement, the Parties now wish to terminate the Agreement as of the Effective Date.

NOW THEREFORE, in consideration of the mutual covenants and promises herein and therein, HOOKIPA and the CONSULTANT agree as follows:

- 1. The Agreement shall be terminated effective as of **March 31, 2024**.
- 2. Neither Party hereby releases the other from its obligations under the Agreement to hold in confidence the confidential information provided by the other Party or its agents or representatives in accordance with the terms of the Agreement. In addition, the Parties acknowledge and agree that the provisions of the Agreement relating to the ownership and use of intellectual property shall survive its termination.
- 3. This Mutual Termination Agreement constitutes the entire agreement between the Parties regarding the subject matter hereof and merges and supersedes all prior representation and communications, whether oral or written, between the Parties relating thereto.
- 4. Any dispute arising hereunder shall be resolved in accordance with the dispute resolution provisions in the Agreement.
- 5. All capitalised words and expressions used in this Mutual Termination Agreement that are not expressly defined shall have the meaning given to them in the Agreement.

IN WITNESS WHEREOF, HOOKIPA and the CONSULTANT have executed this Mutual Termination Agreement on the Effective Date.

HOOKI	PA Biotech GmbH	Malte	Peters, M.D.	
By:		By:		
NAME:	Joern Aldag		NAME: Malte Peters, M.D.	
TITLE: Date:	13/03/2024	Date:	13/03/2024	
		CONFIDENTIAL		Page 1 of 1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Joern Aldag, certify that:
- 1. I have reviewed this Quarterly Report on Form 10-Q of HOOKIPA Pharma Inc.;
- 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.

Dated: May 9, 2024 /s/ Joern Aldag

Joern Aldag Chief Executive Officer (Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Reinhard Kandera, certify that:
- 1. I have reviewed this Quarterly Report on Form 10-Q of HOOKIPA Pharma Inc.;
- 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.

Dated: May 9, 2024 /s/ Reinhard Kandera

Reinhard Kandera Chief Financial Officer (Principal Financial and Accounting Officer)

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

In connection with the Quarterly Report of HOOKIPA Pharma Inc. (the "Company") on Form 10-Q for the quarterly period ended March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of their 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.

Dated: May 9, 2024 /s/ Joern Aldag

Joern Aldag

Chief Executive Officer (Principal Executive Officer)

Dated: May 9, 2024 /s/ Reinhard Kandera

Reinhard Kandera Chief Financial Officer

(Principal Financial and Accounting Officer)